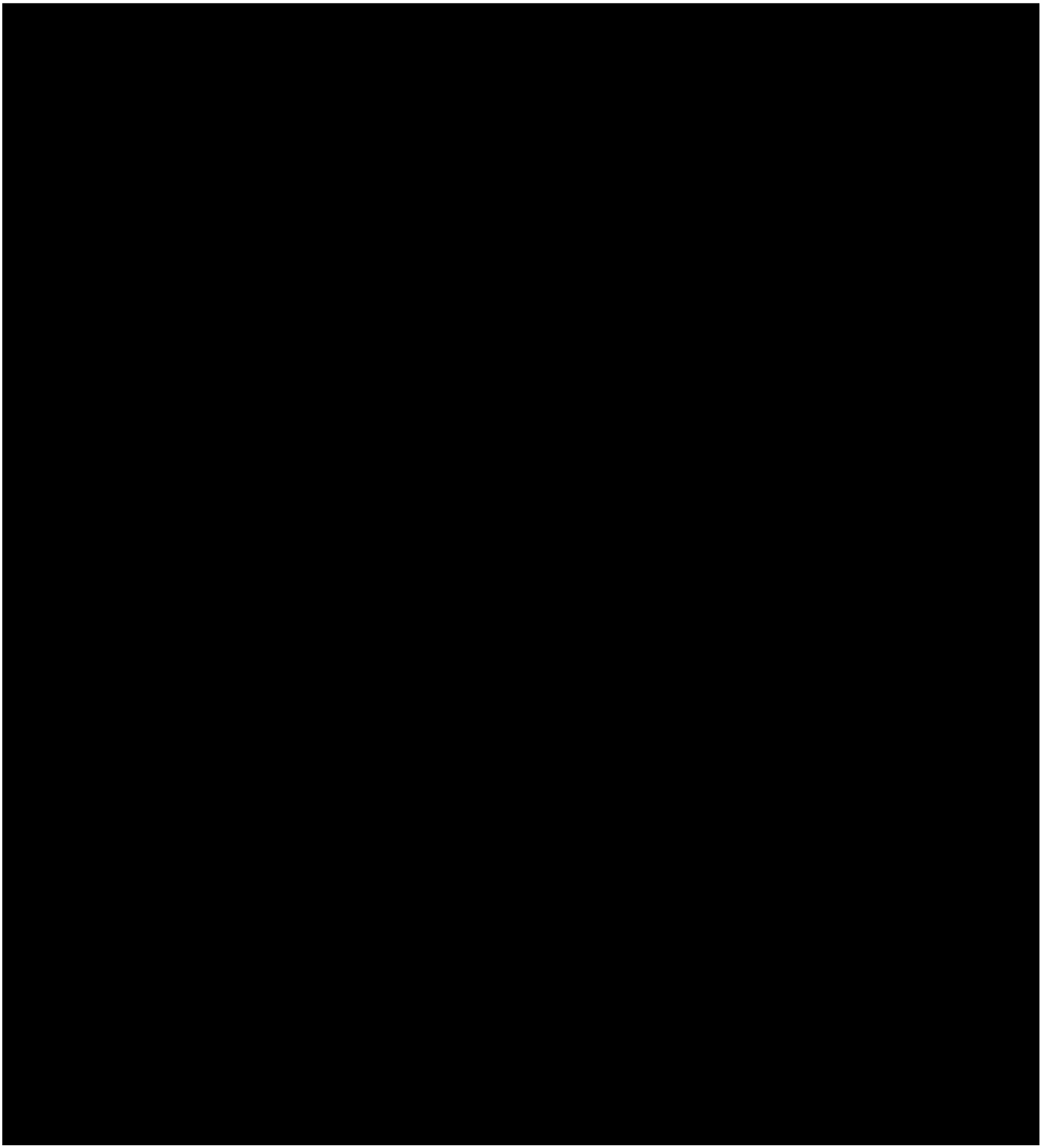
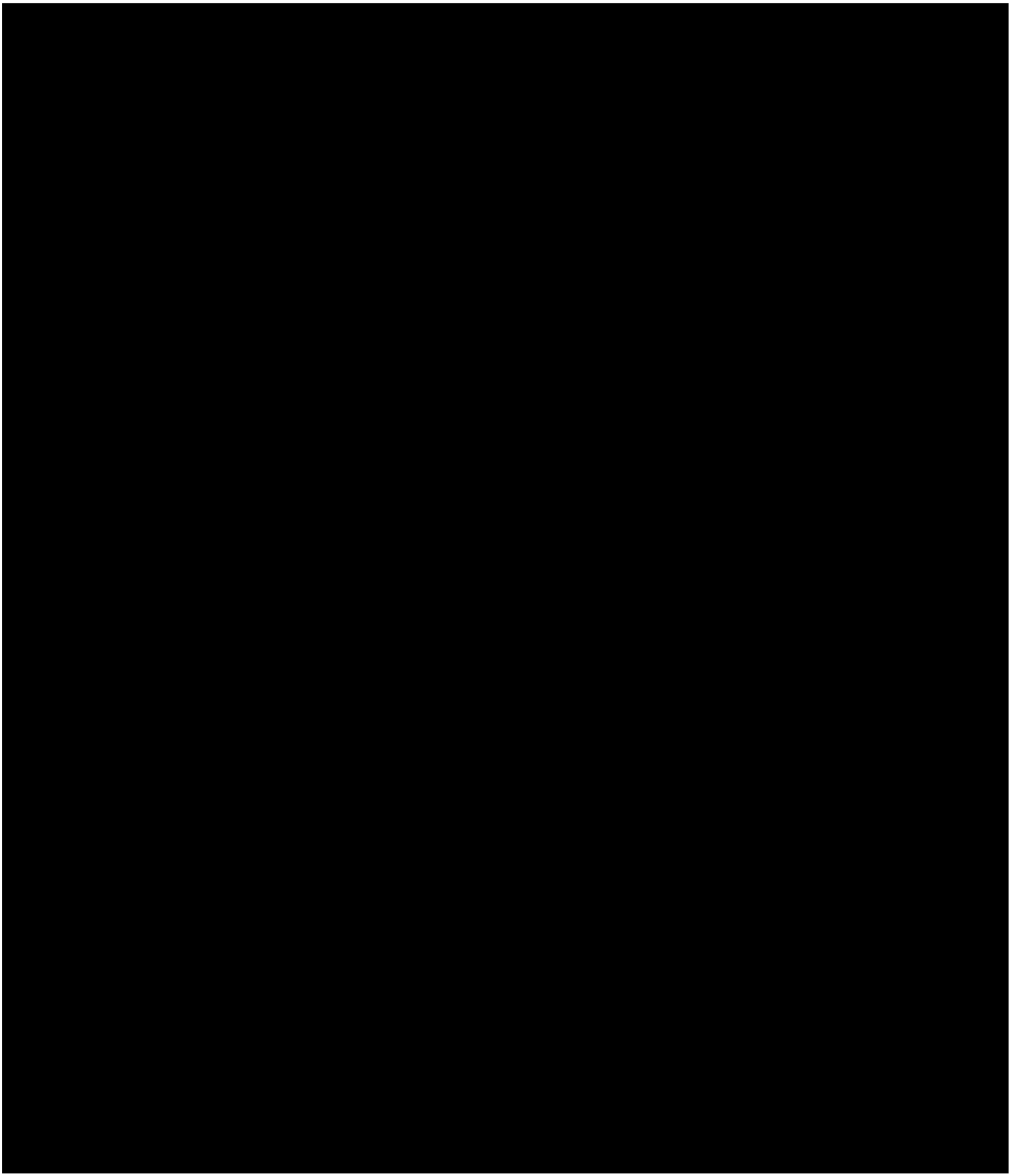
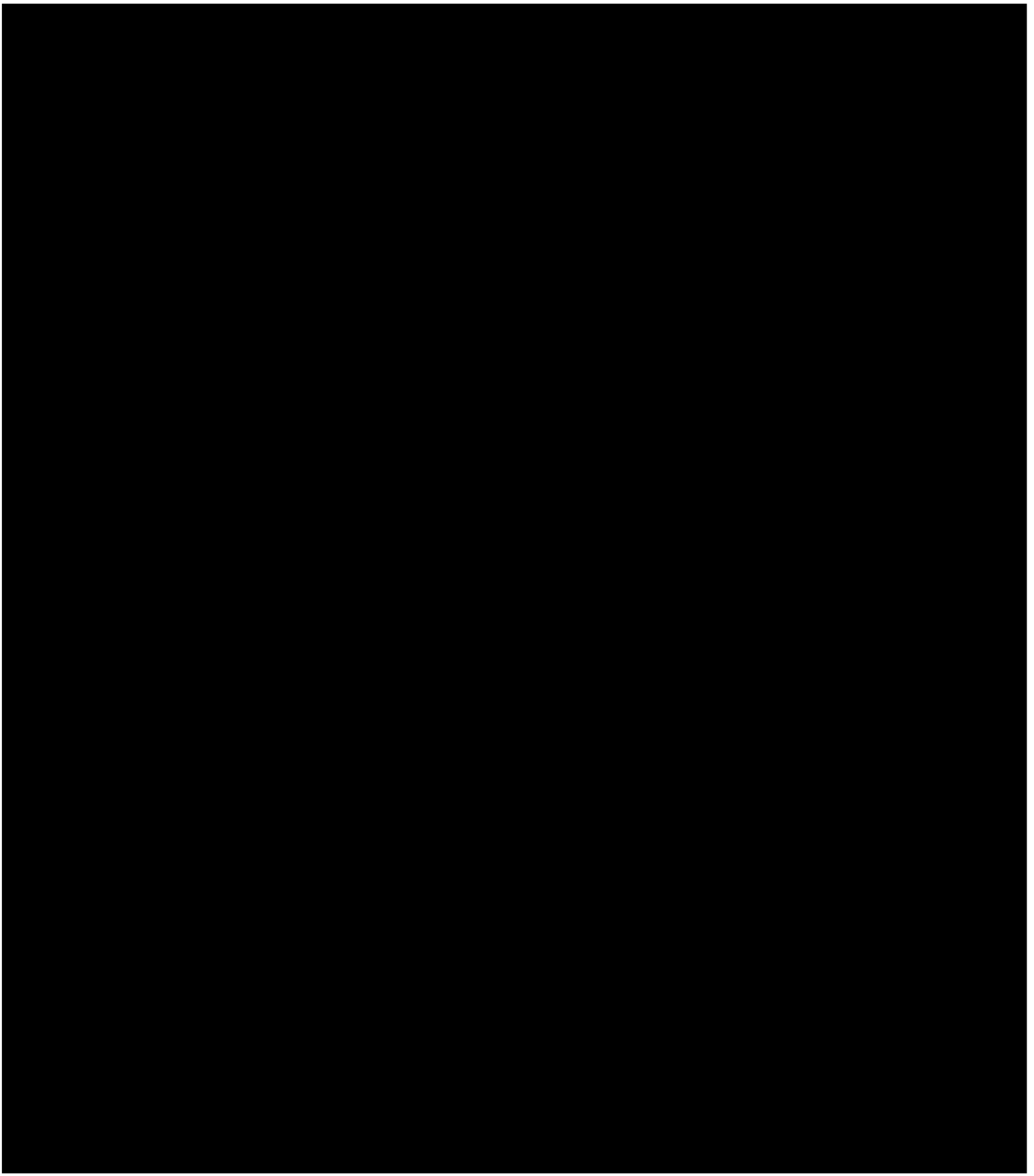
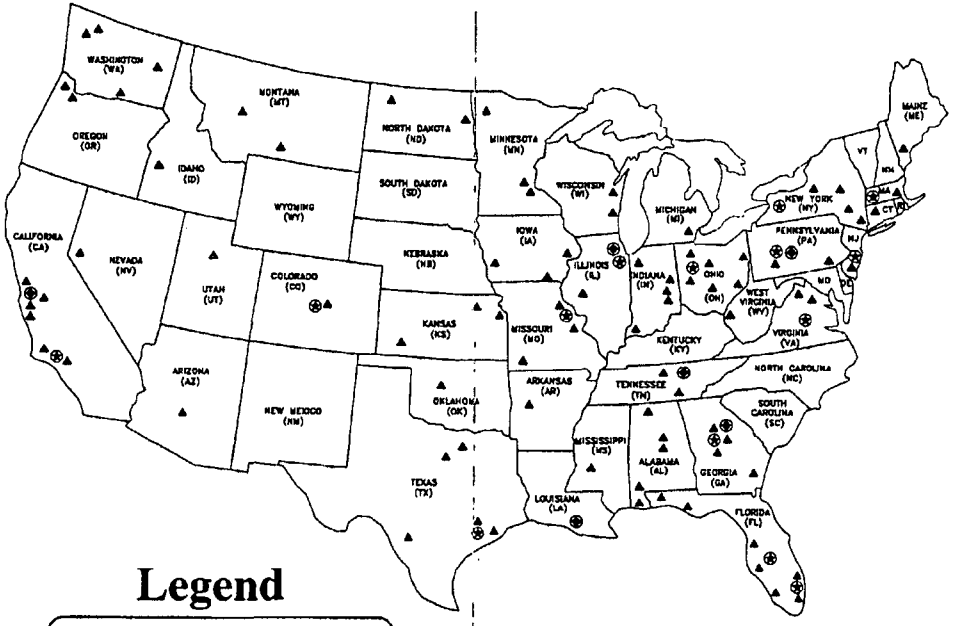






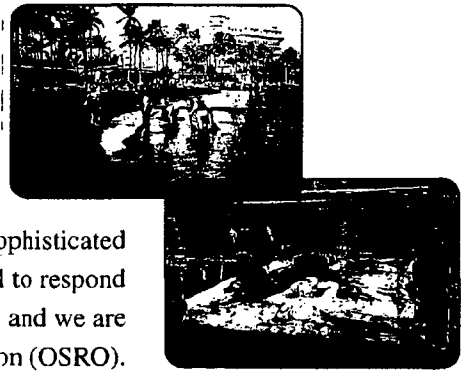
24 - Hour Nationwide Emergency Response Hotline
1-800-537-9540

OHM/IT Specialty Services and Emergency Response Network Locations



Legend

- OHM/IT Other Offices
- OHM/IT Response Centers
- Team Contractor



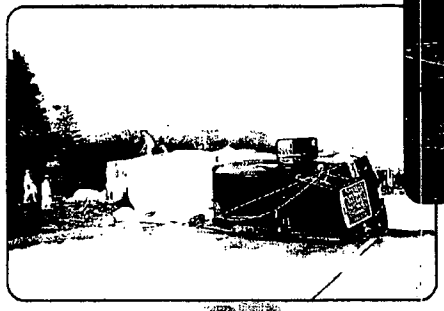
The company has established a sophisticated network of equipment and personnel to respond effectively to any nationwide emergency, and we are a certified Oil Spill Response Organization (OSRO).

Providing Specialty Services And Emergency Response

The Merger of OHM and IT

As a result of the merger between International Technology Corporation (IT) and OHM Remediation Services Corp. (OHM), we have more than 100 years of combined experience with over 4,400 associates located in offices nationwide. OHM/IT has grown by strengthening its core businesses and diversifying its capabilities to better anticipate and respond to clients' needs.

OHM/IT is a major emergency response contractor, having responded to more than 6,000 incidents involving transportation accidents, fires, spills and leaks. Many have occurred in remote locations and in varying weather conditions.



OHM/IT serves many private-sector clients, including Fortune 500 companies and government agencies. This work is performed using a variety of contract vehicles, including partnering agreements with established rates and conditions. Through this partnering approach, we gain a complete understanding of clients' concerns and develop strategic environmental management approaches designed to reduce total environmental compliance costs. Private-sector clients include chemical, petroleum, solid waste and other manufacturing firms; utilities, real estate, transportation service companies and law firms.

SERVICES...

- Chemical Emergency Response
- Oil Spill Emergency Response
- Health and Safety Support and Training
- Product Transfers
- On- and Off-Site Air Monitoring
- Soil, Water, and Air Sampling
- Environmental Modeling: Air and Water
- OSRA Classified (USCG Oil Spill Response Organization)
- On- and Off-Site Analytical Services
- Oil Spill Act of 1990 (OPA 90) Services
- Nationwide Preparedness for Response Exercise Program (OSRO)
- Established an Emergency Response Subcontractor Network
- Soil Remediation
- Structure and Equipment Decontamination

Kopper5004008

Portland, OR

KOPPERS INDUSTRIES

INTEROFFICE CORRESPONDENCE

To:	ALL PLANT MANAGERS	From:	JACK STEPHENSON
Location:	VARIOUS	Location:	K-1950, PITTSBURGH
Subject:	EMERGENCY SERVICES AGREEMENT	Date:	April 22, 1999

NOTE: New phone: 412/227-2265 New Fax: 412/227-2935

Koppers Industries, Inc. has entered into a renewed agreement with IT Corporation (formerly OH Materials) for the services required in the event of an environmental emergency.

As before, the procedure to be followed in the event of an emergency is to do the following:

1. **CALL:** 1/800/537-9540
2. **ASK** for an "Emergency Response Manager"

Also, included with this communication is a copy of the signed agreement for your environmental file and documentary needs.

CC: J. Dietz K-1650
J. Heller K-2050
C. Mitchell K-2000

cc: T. J. Turner
File
Spcc plan file

EMERGENCY SERVICE AGREEMENT

Between

IT CORPORATION

and

KoppersIndustries

March 17, 1999

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EMERGENCY SERVICE AGREEMENT

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EXHIBIT A - DAILY REPORT FORM

EXHIBIT B - IT PRICE LIST

EXHIBIT C - CHANGE ORDER FORM

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EMERGENCY SERVICE AGREEMENT

THIS AGREEMENT, effective this__ day of,_____ 199_, by and between IT Corporation, duly organized and existing by virtue of the laws of the State of California (" IT Corporation "), and Koppers Industries, ("CLIENT").

IT Corporation is engaged in the business of providing environmental services according to the precise nature of the Work requirements represented to IT Corporation by CLIENT. IT Corporation represents that it is capable of providing environmental services which include, emergency services reasonably required to mitigate oil and hazardous substances released into the environment on an as-called basis, twenty-four (24) hours per day, seven days per week.

CLIENT desires to engage IT Corporation to perform such emergency services on an as-needed basis to mitigate hazardous conditions caused by the release of oil or hazardous substances (as defined by the United States Environmental Protection Agency) into the environment. For valuable consideration, the parties agree as follows:

ARTICLE 1. SCOPE OF WORK

1.1 The scope of the work to be performed by IT Corporation (herein referred to as the "Work") shall be determined by the parties at the time CLIENT requests services as further defined in Article 2. Administration and as authorized by CLIENT's on-scene representative.

1.2 As used herein, the term "Project Site" shall mean the location, other than any of IT Corporation 's permanent facilities, at which the Work is performed, whether or not such location is owned by CLIENT.

ARTICLE 2. ADMINISTRATION

2.1 CLIENT shall request services by telephone during any 24 hour period at 1-800-537-9540 (In Ohio 1-800-537-5660).

2.2 CLIENT, at time of request, shall provide IT with such information as is reasonably requested; such information to include without limitation substance released, chemical name, trade name, location, amount, and name of CLIENT's on-scene representative.

2.3 CLIENT shall issue to IT Corporation, a confirming purchase order or other writing within five (5) days of the date such services were requested referencing this Agreement in its entirety and also confirming the date emergency services were requested, location of the Project Site and the individual authorized to act for CLIENT in connection with such emergency work. A separate purchase order or other writing shall be issued for each emergency service requested.

ARTICLE 3. IT CORPORATION'S RESPONSIBILITIES

3.1 IT Corporation will provide all supervision, labor, materials, tools, equipment and subcontracted items necessary for the performance and completion of the Work, unless otherwise specified herein or agreed to between the parties.

3.2 IT Corporation shall be responsible for the payment of all taxes, except those set forth in Section 4.6 covering the Work, including the payment of all applicable taxes covering its employees. Should any taxes enacted following execution of the Agreement increase IT Corporation 's charges and expenses, IT Corporation 's compensation hereunder shall be adjusted to reflect the increase.

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3.3 IT Corporation shall at all times keep the Project Site free from the accumulation of debris and rubbish that may result from its performance of the Work. At the completion of the Work, IT Corporation shall remove all of its tools, vehicles, equipment, machinery, surplus materials, debris and rubbish from and around the Project Site.

3.4 IT Corporation shall take necessary precautions for the safety of its employees, and shall comply with all applicable provisions of Federal, state and local safety laws. IT Corporation shall erect and properly maintain, as required by the conditions and progress of the Work, necessary safeguards for the protection of its employees. It is understood and agreed, however, that IT Corporation shall have no responsibility for the elimination or abatement of safety hazards created or otherwise resulting from Work at the Project Site carried on by other persons or firms directly employed by CLIENT as separate contractors or by CLIENT's employees and agents. CLIENT agrees to cause any such separate contractors, employees and/or agents to abide by and fully adhere to all applicable provisions of Federal, state and local safety laws and regulations and to comply with all reasonable requests and directions of IT Corporation for the elimination or abatement of any such safety hazard at the Project Site.

3.5 IT Corporation shall keep such full and detailed records as may be necessary to reflect: (a) proper financial management under this Agreement; (b) the Work performed at the Project Site, including, when applicable, all testing, sampling and investigatory services performed by IT Corporation. All such records will be subject to review by CLIENT on the condition that CLIENT identifies, in writing, those documents requested.

3.6 IT Corporation make take hazardous waste or other samples in connection with the Work and IT Corporation will maintain all samples for thirty (30) calendar days from the date the analysis is performed. After thirty (30) days, at CLIENT's direction, such samples will be returned to CLIENT or such samples will be properly disposed of with CLIENT paying IT Corporation for all charges and expenses associated with such disposal.

3.7 IT Corporation shall provide insurance for its potential liabilities as provided in Section 7.1.

ARTICLE 4. CLIENT'S RESPONSIBILITIES

4.1 CLIENT shall provide full and complete information regarding its requirements for the Work and shall immediately transmit to IT Corporation any new information which becomes available or any change in plans subsequent to any such providing of information.

4.1.1 CLIENT shall furnish, at no cost to IT Corporation, when applicable and if available, information on the Project Site describing: physical characteristics, soil reports and subsurface investigations, legal limitations, legal description, and other reports or documents that may be reasonably requested by IT Corporation.

4.1.2 CLIENT shall be responsible for the location of any installations and locating underground utilities for IT Corporation.

4.2 CLIENT shall designate to IT Corporation, prior to the commencement of the Work, in writing, a representative who shall be fully acquainted with the Work, and has authority on behalf of CLIENT to approve changes in the Work, execute Change Orders in the form set forth in EXHIBIT C, approve daily reports submitted by IT Corporation setting forth the daily charges in the form set forth in EXHIBIT A, render decisions promptly, and furnish information expeditiously and in time to meet the time schedule for completion of the Work.

4.3 CLIENT shall secure and pay for all necessary approvals, easements, assessments, permits and charges required for the Work to be performed and any access agreements and judicial and/or administrative orders necessary to insure IT Corporation 's legal access to the Project Site.

4.4 CLIENT warrants that it holds clear title to all wastes to be treated, stored and/or disposed and is under no legal restraint or order which would prohibit the treatment, storage and/or disposal of such wastes to any transporter or disposal facility.

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4.5 CLIENT shall communicate to IT Corporation those special hazard risks involved in the excavation and/or removal of the wastes of which it is or becomes aware. Such information shall include, but not be limited to, any relevant notification of substantial risk given by CLIENT pursuant to the Toxic Substances Control Act.

4.6 CLIENT shall be responsible for payments of any taxes for which CLIENT claims it is exempt or for which CLIENT issues IT Corporation direct-pay permits and shall be responsible for reimbursing IT Corporation for any gross receipts, sales taxes, use or similar taxes incurred in the performance of the Work hereunder.

4.7 For projects involving underground storage tanks performed within the states requiring the reporting of "confirmed releases", CLIENT shall be responsible for the reporting of any "confirmed release" to the appropriate local health agency and to the appropriate state agency in accordance with any applicable regulations and the CLIENT shall indemnify and hold harmless IT Corporation from any and all fines, penalties, assessments and costs resulting from any failure of CLIENT to report such release.

4.8 The services and information required by the above Sections 4.1 to 4.7 shall be furnished with reasonable promptness at CLIENT's expense and IT Corporation shall be entitled to rely upon the accuracy and the completeness thereof.

ARTICLE 5. COMPENSATION

5.1 For the Work performed pursuant to Article 1., IT Corporation shall charge CLIENT on a time and materials basis in accordance with the terms and rates set forth in EXHIBIT B.

5.1.2 The rates set forth in EXHIBIT B, Price List, shall be firm from the date of execution through April 1 of each year. IT Corporation reserves the right to increase such rates on April 1 of each succeeding year for the term of this Agreement.

5.2 CLIENT shall pay IT Corporation for the services hereinabove described at the rates specified. Terms of payment shall be as follows:

a. all invoices will be due upon receipt. Balances outstanding more than thirty (30) days after the invoice date shall be deemed delinquent and subject to a finance charge of one and one-half percent (1-1/2%) per month or the highest amount of interest allowed by law, whichever is less, and any and all costs associated with the collection of such delinquent invoices, including, but not limited to, collection agency costs, attorney fees and court costs.

b. bills setting forth the charges incurred will be submitted to the CLIENT for payment weekly or upon completion of the project, whichever time is the lesser.

c. the CLIENT shall furnish reasonable evidence satisfactory to IT Corporation, prior to the commencement of the work by IT Corporation and/or at such future times as IT Corporation may require, that sufficient funds are available and committed for the entire cost of the Work. Unless such reasonable evidence is furnished, IT Corporation is not required to commence or continue any Work, or may, if such evidence is not presented within a reasonable time, stop work upon forty-eight (48) hours' written notice to the CLIENT. The failure of IT Corporation to insist upon the provisions of this evidence at any one time shall not be a waiver of the CLIENT's obligation to make payments pursuant to this Agreement, nor shall it be a waiver of IT Corporation 's right to request or insist that such evidence be provided at a later date.

d. CLIENT shall send payment to IT Corporation at the following address:

IT Corporation.
P.O. Box 2483
Carol Stream, IL 60132-2483

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5.3 CLIENT has specified that all invoices are to be submitted for payment to the address shown below (or if no address is shown, to the address for notices):

Koppers Industries, Inc.
436 7th Ave
Room 1950 Koppers Bldg
Pgh, PA 15219 - Att: Jack L. Stephenson

5.4 Jack Stephenson has the authority on behalf of CLIENT to approve all invoices. CLIENT shall, within fifteen (15) days of receipt of invoice, communicate in writing to IT Corporation any invoice errors, discrepancies or disputes. If such communication is not made within this 15-day period, the invoice will be deemed to be approved and shall be paid pursuant to Section 5.2(a). If an error, discrepancy or dispute is identified, then the parties will endeavor to resolve same within fifteen (15) days. If no resolution is made within this time frame, the disputed amount will be excepted from the total invoice amount, with the parties endeavoring to resolve same within thirty (30) days. The balance of the invoice shall be deemed approved and shall be paid pursuant to Section 5.2 (a).

ARTICLE 6. CHANGES IN THE WORK

6.1 CLIENT and IT Corporation, without invalidating this Agreement, may order or request, respectively, changes in the Work within the general scope of this Agreement. All such changes in the Work shall be authorized by CLIENT by execution of a Change Order in the form set forth in EXHIBIT C, as attached hereto.

6.2 In the event changes in the Work result in increased work, unless otherwise negotiated between the parties, IT Corporation will invoice CLIENT for hours worked, equipment used, and materials expended in accordance with IT Corporation 's Price List, EXHIBIT B. IT Corporation shall also be entitled to a schedule adjustment in the event the change increases or impacts the project schedule.

6.3 In any emergency affecting the safety of persons or property, IT Corporation shall act, at its discretion, to prevent threatened damage, injury or loss. Any increase in the Agreement price or extension of time claimed by IT Corporation on account of emergency Work shall be compensated in accordance with Section 5.1.2.

ARTICLE 7. INSURANCE

7.1 IT Corporation shall carry at its expense, during the term of this Agreement, the minimum insurance coverages set forth below:

	COVERAGE	LIMITS
(a)	Worker's Compensation	Statutory
(b)	Employer's Liability	$1,000,000 each occurrence
(c)	General Liability (Bodily Injury & Property Damage)	$1,000,000 combined single limit
(d)	Automobile Liability (Bodily Injury & Property Damage)	$1,000,000 combined single limit

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7.2 Should CLIENT require additional insurance, special endorsements, or increased coverage, IT Corporation will use best efforts to secure same with CLIENT bearing the expense of such additions. General Liability Insurance shall include coverage for completed operations, contractual liability, and independent contractor coverage under this Agreement. IT Corporation agrees to furnish to CLIENT, upon CLIENT's request, insurance certificate(s) reflecting IT Corporation 's compliance with the requirements of this Article. The providing of insurance as set forth shall not be construed as IT Corporation 's assumption of any liability arising out of any act or omission of CLIENT.

7.3 CLIENT shall be responsible for purchasing and maintaining its own liability insurance and, at its option, may purchase and maintain such insurance as will protect CLIENT against claims which may arise from operations under this Agreement.

ARTICLE 8. INDEMNIFICATION

8.1 IT Corporation agrees to indemnify and save harmless CLIENT from and against any and all liabilities, claims, demands and causes of action for bodily injury to or death of any person or destruction of or damage to any property to the extent that occurred as a result of the negligence of IT Corporation, its agents, employees or subcontractors in the performance of the Work. This indemnity does not apply to the extent such liabilities, claims, demands and causes of action occurred as a result of CLIENT's failure to comply with and fulfill its obligations under this Agreement, or as a result of the negligent or intentional acts of CLIENT, or of CLIENT's other contractor's or of any other third party. IT Corporation 's liability under this Section shall not exceed the insurance limits specified in Article 7.1 Insurance.

8.2 In consideration of the final payment due and received by IT Corporation for Work performed under this Agreement, IT Corporation hereby agrees to indemnify and hold CLIENT harmless against any lien arising out of or resulting in any way from IT Corporation 's or its subcontractors performance of that Work.

8.3 CLIENT shall indemnify and hold harmless IT Corporation, its directors, officers, employees, agents and subcontractors against any and all liabilities, claims, demands and causes of action which they, individually or collectively, may suffer by reason of the negligent or intentional acts of CLIENT, or, the failure of CLIENT or any of its employees or agents to observe or comply with any of CLIENT's duties and obligations under this Agreement, including, without limitation, any bodily injury to or death of any person or destruction of or property damage to any property.

8.3.1 CLIENT shall indemnify and hold harmless IT Corporation, its directors, officers, employees, agents and subcontractors against any and all liabilities, costs, or expenses, including reasonable attorney's fees, for claims, demands and/or causes of action asserted and/or filed by third persons not parties to this Agreement, arising out of or as a result of: (i) the presence of IT Corporation or its subcontractors on the site; and/or, (ii) the completed Work by IT Corporation, except to the extent that such liabilities, claims, demands, causes of action, costs and expenses are caused by the negligence of IT Corporation, its directors, officers, agents, employees or subcontractors.

8.4 CLIENT acknowledges that IT Corporation has neither created nor contributed to the creation or existence of any hazardous or toxic material or any other type of environmental hazard, contamination or pollution, whether latent or patent or to the release thereof or the violation of any law or regulation relating thereto, at the Project Site prior to the date on which the performance of the Work is commenced (collectively "Pre-existing Conditions"). Accordingly, CLIENT shall defend (with counsel approved by IT Corporation), protect, indemnify and hold IT Corporation, its directors, officers, agents and employees free from harm against all claims, demands, losses, penalties, fines and causes of action of every kind and character (including reasonable attorney fees and court costs) arising from or relating to Pre-existing Conditions.

ARTICLE 9. CONFIDENTIALITY

9.1 IT Corporation and CLIENT (including both parties' employees, officers, agents, and directors) shall treat as confidential and proprietary and not disclose to others during or for a period of three (3) years after the term of this Agreement, *except as is necessary to perform* Work under this Agreement (and then only on a confidential basis satisfactory to both parties),

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any written information of any description whatsoever, (including any technical information, experience or data) which is designated on its face in writing as "confidential" or "proprietary" and which regards either party's plans, programs, plants, processes, products, costs, equipment, operations or customers which may come within the knowledge of the parties, their officers or their employees in the performance of this Agreement, without in each instance securing the prior written consent of the other party.

9.2 Neither CLIENT nor IT Corporation shall release, or cause or allow the release of, information concerning the existence of the terms of this Agreement and its Exhibits without securing the prior written consent of the other party.

9.3 Nothing contained within this Article shall prevent either IT Corporation or CLIENT from disclosing to others or using in any manner information which either party can show:

a. has been published and has become part of the public domain other than by acts, omissions, or fault of IT Corporation or CLIENT or their employees;

b. has been furnished or made known to IT Corporation or CLIENT by third parties (other than those acting directly or indirectly for or on behalf of IT Corporation or CLIENT) as a matter of legal right without restrictions on its disclosure; or,

c. was in either party's possession prior to the disclosure thereof by CLIENT or IT Corporation to each other.

9.4 In the event that either party shall be required by subpoena, court, or administrative order (hereinafter "The Order") to disclose any of the information deemed by this Agreement to be confidential and/or proprietary, that party shall give immediate written notice to the other party. Upon receipt of same, the party whose information may be the subject of The Order expressly reserves the right to interpose all objections it may have to the disclosure of its information. The foregoing obligation shall survive the termination or expiration of this Agreement and shall continue until a specific written release is given by either party.

9.5 For purposes of this Article, information means any verbal, handwritten, typewritten, printed, recorded or graphic matter including computer-generated mediums, however produced or reproduced and regardless of whether created by IT Corporation, CLIENT or some other entity.

ARTICLE 10. WORK ON PROJECT SITE

10.1 The performance of the Work as requested by CLIENT is, by its nature, inherently dangerous; accordingly, while IT Corporation 's employees or subcontractors are on the Project Site IT Corporation will maintain strict work discipline and effect performance of the Work in compliance with governmental laws or regulations pertaining to occupational safety and health.

ARTICLE 11. INSPECTIONS

11.1 CLIENT shall have the right to inspect and obtain copies of all applicable written licenses, permits or approvals issued by any governmental entity or agency to IT Corporation for its performance of Work under this Agreement.

ARTICLE 12. EXCUSE OF PERFORMANCE

12.1 The performance of this Agreement, except for the payment of money for services already rendered, may be suspended by either party in the event performance of this Agreement is prevented by a cause or causes beyond the reasonable control of either party. Such causes shall include, but not be limited to: acts of God; acts of war; riot; fire; explosion; accident; flood; or sabotage; lack of adequate fuel; power; raw materials; labor or transportation facilities; Governmental laws; regulations; requirements; orders or actions; breakage or failure of machinery or apparatus; national defense requirements; injunctions or restraining orders; labor trouble, strike, lockout or injunction (provided that neither party shall be required to settle a labor dispute against its own best judgment).

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12.2 The party asserting a right to suspend performance under this Agreement must, within a reasonable time after it has knowledge of the effective cause, notify the other party of the cause for suspension, the performance suspended, and the anticipated duration of suspension.

12.3 Upon receipt of notice as set forth in 12.2, advising the other party of a suspension of performance, the parties shall mutually agree on one of the following:

a. termination of all or any part of the Work affected;
b. demobilization of affected personnel and equipment from the project site with remobilization to the Project Site occurring at a mutually agreeable time after the end of the suspending event; or,
c. placement of affected personnel and equipment in a standby mode until the end of the suspending event.

If the parties agree to option a. above, CLIENT shall compensate IT Corporation, unless otherwise agreed to, as set forth in Section 14.4. If the parties agree to either option b. or c. above, the parties shall agree to schedule adjustments and adjustment to compensation in the manner as set forth in Article 6. Changes in the Work.

12.4 The party asserting a right to suspend performance hereunder shall advise the other party when the suspending event was ended, at which time the parties shall agree to a date when performance shall be resumed.

ARTICLE 13. DIFFERING SITE CONDITIONS

13.1 IT Corporation shall promptly, within a reasonable time after it has knowledge of the following conditions, notify CLIENT of:

a. physical, structural, subsurface, soil or other conditions uncovered, revealed or discovered, at the site differing from those indicated, reflected or referred to in this Agreement or which were provided or represented to IT Corporation; or

b. physical, structural, subsurface, soil or other conditions at the site differing from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this Agreement.

13.2 Upon receipt of notice as set forth in Section 19.5, the parties shall agree to revise the Work in accordance with Article 6. Changes in the Work.

13.3 IT Corporation shall not be required to continue performance of the Work upon notification to CLIENT of such differing site conditions as provided in Section 13.1, and IT shall not be required to resume performance until the terms of Section 13.2 are met.

ARTICLE 14. TERMINATION

14.1 Terminations, as provided herein, or as allowed under Article 12. Excuse of Performance, shall be by notice in conformance with Article 19., Section 19.5, Notice, from the terminating party to the other party, specifying the reason(s) therefor and the effective date thereof.

14.2 This Agreement, or work being performed under this Agreement, may be terminated with or without cause by either party upon thirty (30) days written notice to the other party.

14.3 This Agreement, or work being performed under this Agreement, may be terminated by either party upon forty-eight (48) hours written notice should the other party fail substantially to perform in accordance with its terms through no fault of the party initiating the termination, provided the party initiating the termination notice has given the other party notice of the deficiency and allowed that party a reasonable period of time to cure same before notice of termination is issued.

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14.4 In the event of termination not the fault of IT Corporation, CLIENT shall compensate IT Corporation for all Work performed prior to termination as well as its charges for demobilization in accordance with EXHIBIT B.

ARTICLE 15. DELEGATION AND ASSIGNMENT

15.1 IT Corporation may subcontract or otherwise delegate, the performance of the Work, or any portion thereof. Provided, any such delegation shall not operate to relieve IT of its responsibilities hereunder; and, notwithstanding any such delegation, IT shall remain obligated to CLIENT for the Work.

ARTICLE 16. INDEPENDENT CONTRACTOR

16.1 The provisions of this Agreement shall not be construed as authorizing or reserving to CLIENT, unless agreed to in writing by IT Corporation, any right to exercise any control or direction over the employees or agents of IT Corporation in connection with this Agreement. Neither party to this Agreement shall have any authority to employ any person as agent or employee for or on behalf of the other party to this Agreement for any purpose. CLIENT shall not have any right or authority to make any representations, or to assume or create any obligation, expressed or implied, on behalf of IT Corporation.

ARTICLE 17. RCRA COMPLIANCE

17.1 Nothing contained within this Agreement shall be construed or interpreted as requiring IT Corporation to assume the status of a generator, storer, treater or disposal facility as those terms appear within the Resource Conservation and Recovery Act, 42 USCA, Section 6901. et seq., as amended, (hereinafter "RCRA"), Comprehensive Environmental Response Compensation and Liability Act, 42 USCA, Section 9601. et seq., as amended (hereinafter "CERCLA"), or within any state statute governing the treatment, storage and disposal of solid or hazardous waste (herein collectively referred to as "Regulations").

17.2 CLIENT shall assume the responsibility for compliance with the provisions of such Regulations governing the treatment, storage and disposal of solid or hazardous waste.

17.3 In the event CLIENT requests IT Corporation 's assistance in meeting its obligations, as set forth within this Article, then, IT Corporation, as requested and directed by CLIENT, will provide the following:

a. perform analytical testing to assist CLIENT in the proper characterization of the waste for manifest preparation;

b. identify potential transporters and disposal facilities which may be used in the transportation and disposal of wastes collected;

c. enter into subcontract or purchase order arrangements with transporters and/or disposal facilities selected by CLIENT; and,

d. prepare manifests for CLIENT's approval and execution.

ARTICLE 18. REMEDIES

18.1 In addition to any remedies the parties may have at law, equity, or otherwise, the parties may, by mutual agreement, choose to resolve any dispute arising under this Agreement through alternative dispute resolution procedures, or, through arbitration.

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18.2 Notwithstanding the foregoing, the parties agree that neither party shall be liable to the other for any indirect or consequential damages of any kind including, but not limited to, lost profits or loss of use.

ARTICLE 19. ADDITIONAL GENERAL PROVISIONS

19.1 Waiver - Any waiver by either party of any provision or condition of this Agreement shall not be construed or deemed to be a waiver of any other provision or condition of this Agreement, nor a waiver of a subsequent breach of the same provision or condition, unless such waiver be so expressed in writing and signed by the party to be bound.

19.2 Construction - The validity and interpretation of this Agreement shall be governed and construed in accordance with the laws of the state in which the Work is performed. All paragraph headings herein are for convenience only and are in no way to be construed as part of this Agreement or as a limitation of the scope of the particular governmental sections to which they may refer.

19.3 Separability - If any section, subsection, sentence or clause of this Agreement shall be adjudged illegal, invalid or unenforceable, such illegality, invalidity or unenforceability shall not affect the legality, validity or enforceability of this Agreement as a whole or of any section, subsection, sentence or clause hereof not so adjudged.

19.4 Successors and Assigns - The covenants and agreements contained in this Agreement shall apply to, inure to the benefit of and be binding upon the parties hereto and upon their respective successors and assigns.

19.5 Notice - Any notice, communication or statement required or permitted to be given hereunder shall be in writing and deemed to have been sufficiently given when delivered in person or by registered or certified mail, postage prepaid, return receipt requested, or by overnight carrier service to the address of the other party below, or by confirmed telecopier transmission to the FAX number of the other party listed below:

CLIENT: **KoppersIndustries**
1005 William Pitt Way
Pittsburgh, PA 15238-
Attn: Jack Stephenson
Fax: 412-826-3905

IT Corporation: **International Technology Corporation.**
5445 Triangle Parkway Suite 400.
Norcross, Georgia 30092
Attn: Mark D. Harland
Manager, Contract Administration
Fax - (770) 729-7200

Either party may, by notice to the other, change the addresses and names given above.

19.6 Exclusivity - CLIENT agrees that it will use IT Corporation 's services on a first call basis. The IT Corporation agrees to give CLIENT notification within thirty (30) minutes after receipt of any emergency call of its acceptance or rejection of such emergency work, provided, however, in the event IT Corporation does not provide CLIENT with notice within such thirty (30) minutes, CLIENT shall be free to contact another contractor to perform the emergency work and IT Corporation waives all rights to perform such work.

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19.7 Entire Agreement - This Agreement and its attachments represent the entire understanding and agreement between the parties hereto and supersedes any and all prior agreements, whether written or oral, that may exist between the parties regarding same. The Agreement documents consist of: (i) this Agreement and its Exhibits; (ii) CLIENT accepted IT Corporation Proposals; and (iii) Amendments or Modifications approved by the parties after the execution of the Agreement. The Agreement documents do not include any other documents unless specifically enumerated in this Agreement or through an amendment hereto.

19.8 Amendments - This Agreement may be amended or modified only by a written amendment to the Agreement signed by both parties. Additional or different terms or any attempt by CLIENT, through a purchase order, or other document, to vary in any degree any of the terms of this Agreement shall be deemed material and shall be rejected, unless this provision is expressly waived in writing by IT Corporation.

19.9 Term of Agreement - This Agreement, effective as of the date referenced on Page 1, is for a one (1) year term and shall automatically renew for one year terms thereafter, unless either party gives notice of non-renewal thirty (30) days prior to such date.

19.10 Planned Remediation - By execution of this Agreement, CLIENT agrees to include to IT Corporation as a bidder on all planned remediation work.

19.11 Administrative Fees - CLIENT, by execution of this Agreement, agrees to pay an administrative fee to IT Corporation of $ — per year per facility covered in this Agreement. A full list of facilities covered under this Agreement is provided as Exhibit _____.

International Technology Corporation.

By: W. R. [signature]

Title: Director SSER Program

Date: 4/01/99

CLIENT: Koppers Industries

By: Jack L Stephenson

Title: Mgr. of Purchasing

Date: 3/18/99

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EXHIBIT A _____

DAILY REPORT FORM

Daily Report

the i group

Job No.	Proj. Mgr	Client	Phone:
Day	Date	Client Representative	
Project Location:		Contract No./Purchase Order No.	

Personnel

Code No.	Position	Name	Emp No.	Start Time	End Time	ST Hours	OT Hours	ST Rate	OT Rate	Total
										$0.00
										$0.00
										$0.00
										$0.00
										$0.00
										$0.00
										$0.00
										$0.00
										$0.00
										$0.00
										$0.00
										$0.00
										$0.00
										$0.00
										$0.00
										$0.00
										$0.00
							Total			$0.00

Per Diem

Full Per Diem		Rate		1/2 Per Diem		Rate		Total	$0.00

Equipment

Code No.	Description	Equip No.	Quantity	Start Time	End Time	Rate	Total
							$0.00
							$0.00
							$0.00
							$0.00
							$0.00
							$0.00
							$0.00
							$0.00
							$0.00
							$0.00
							$0.00
							$0.00
							$0.00
							$0.00
							$0.00
						Total	$0.00

Inventory

Code No.	Stock Expendables	Qnty	Rate	Total
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
				$0.00
		Total		$0.00

Affiliates

Affiliates	Quantity	Rate	Total
			$0.00
			$0.00
			$0.00
	Total		$0.00

Field Purchases

Description	Cost	Mark Up	Total
	$0.00	0%	$0.00
	$0.00	0%	$0.00
	$0.00	0%	$0.00
	$0.00	0%	$0.00
	Total		$0.00

Subcontractors

Subcontractors	Cost	Up	Total
		0.00%	$0.00
		0.00%	$0.00
		0.00%	$0.00
		0.00%	$0.00
		0.00%	$0.00
		0.00%	$0.00
		0.00%	$0.00
		0.00%	$0.00
	Total		$0.00

Work Description:	Daily Total
	$0.00

IT Representative _____ Client Representative _____

EXHIBIT B

IT PRICE LIST

the igroup

IT Corporation
Price List
Confidential

Personnel

Project Director/Program Manager	$135.00/hr
Senior Project Manager	$125.00/hr
Certified Industrial Hygienist	$110.00/hr
Project Manager	$ 95.00/hr
Senior Project Engineer/Scientist	$ 95.00/hr
Project Engineer/Scientist	$ 80.00/hr
Project Superintendent	$ 80.00/hr
Project Supervisor	$ 78.00/hr
Senior Engineer/Scientist	$ 70.00/hr
Transportation and Disposal Coordinator/Buyer	$ 65.00/hr
Equipment Specialist	$ 60.00/hr
Engineer/Scientist	$ 58.00/hr
Sr. Project Administrator	$ 60.00/hr
General Foreman	$ 55.00/hr (ST) $ 74.00/hr (OT)
Operations Foreman	$ 50.00/hr (ST) $ 67.00/hr (OT)
Marine Operator	$ 50.00/hr (ST) $ 67.00/hr (OT)
Equipment Operator	$ 47.00/hr (ST) $ 63.00/hr (OT)
Sr. Technician (Lab/Safety/Sampling)	$ 45.00/hr (ST) $ 63.00/hr (OT)
Welder/Fabricator	$ 44.00/hr (ST) $ 60.00/hr (OT)
Mechanic	$ 44.00/hr (ST) $ 60.00/hr (OT)
Electrician	$ 44.00/hr (ST) $ 60.00/hr (OT)
Carpenter	$ 44.00/hr (ST) $ 60.00/hr (OT)
Truck Driver	$ 43.00/hr (ST) $ 58.00/hr (OT)
Project Administrator	$ 43.00/hr (ST) $ 58.00/hr (OT)
Sr. Recovery Technician	$ 42.00/hr (ST) $ 56.00/hr (OT)
Recovery Technician	$ 38.50/hr (ST) $ 52.00/hr (OT)
Technician (Lab/Safety/Sampling)	$ 35.00/hr (ST) $ 48.00/hr (OT)
CAD/CAM Operator	$ 45.00/hr
Technical Editor	$ 35.00/hr
Word Processing Specialist	$ 32.00/hr
Clerk/Secretary	$ 30.00/hr
Breathing-air Time	$ 7.50/hr/person
Per Diems	See Notes

Vacuum Equipment

Vacuum Truck, 3,500 gallon	$ 67.50/hr plus $ .50/mile
Vacuum Truck, 2,000 gallon	$ 57.50/hr plus $ .50/mile
Vacuum Truck, 1,800 gallon	$ 52.00/hr plus $ .50/mile
Vacuum Unit, 1,500 gallon	$ 42.00/hr plus fuel
Mobile Vacuum Truck, 6000 cfm	$100.00/hr plus $ .50/mile
Mobile Vacuum Loader, 3,600 cfm	$ 77.50/hr
Mobile Vacuum Loader, 1,600 cfm	$ 49.00/hr
Mobile HEPA Trailer	$ 26.00/hr

Trucks and Trailers

Over-the-road Diesel Tractor	$375.00/day plus $ .90/mile
Pollution-control Truck, Two ton	$310.00/day plus $ .50/mile
Pollution-control Truck, One ton	$260.00/day plus $ .30/mile
Pickup Truck (4WD)	$110.00/day including mileage
Truck, Two-ton Box	$260.00/day plus $ .50/mile
Truck, One-ton Box	$205.00/day plus $ .30/mile
Truck, Two-ton Stake	$250.00/day plus $ .50/mile
Truck, One-ton Stake	$185.00/day plus $ .30/mile
Pickup Truck	$ 90.00/day including mileage
Van	$100.00/day including mileage
Car	$ 75.00/day including mileage
Service Van/Mechanics Truck	$220.00/day plus $ .30/mile
Decontamination and Office Trailer, 45 foot	$410.00/day
Decontamination and Office Trailer, 28 foot	$235.00/day
Decontamination and Laundry Trailer	$360.00/day
Lowboy, Gooseneck Dolly, or Dropdeck Trailer	$185.00/day
Utility Trailer	$125.00/day
Office Trailer - 30 feet	$100.00/day
Crew Trailer	$285.00/day
Box Trailer	$ 65.00/day
Bomb Trailer	$1,250.00/day
Water Truck, 4,000 gallon	$275.00/day
Water Truck, 2,000 gallon	$195.00/day
Fuel/Lube Truck	$175.00/day
Spill Response Trailer	$175.00/day
Tool/Storage Trailer	$ 75.00/day
Dump Truck (5-10 cubic yard)	$ 35.00/hr plus $ .50/mile
Dump Truck (11-15 cubic yard)	$ 50.00/hr plus $ .50/mile

Protective Clothing and Equipment

EPA Level A Protection or Equivalent	$425.00/day
EPA Level B Protection or Equivalent	
With Tyvek Suit	$245.00/day
With Saran-coated Suit	$285.00/day
With Acid Suit	$360.00/day
EPA Level C Protection or Equivalent	
With Tyvek Suit	$110.00/day
With Saran-coated Suit	$145.00/day
With Acid Suit	$225.00/day
EPA Level D Protection or Equivalent	$ 25.00/day
Regulated Manifold Air-supply System	$165.00/day
Emergency Escape Air Paks	$ 57.00/day
Additional Bottles Breathing Air	$ 20.00/day
Additional Breathing Air Hose per 50 feet	$ 30.00/day
Emergency Oxygen System	$ 25.00/day
Cascade System with Booster Pump, Two way	$235.00/day
Bomb Suit	$600.00/day
Personnel Retrieval System	$ 50.00/day

Recovery and Treatment Equipment

Mobile Clarifier with	
Sludge Collector Unit, 12,000 gallon	$435.00/day
Clarifier, Low-capacity, 4,000 gallon	$245.00/day
Compatibility Chamber, 10,000 gallon	$395.00/day
Holding Tank, 5,000 gallon	$ 50.00/day
Activated-carbon Filtration Unit,	
Potable Water, 2 cell	$700.00/day
Activated Carbon Filtration Unit, 2 cell (HP)	$350.00/day
Activated Carbon Filtration Unit, 1 cell (HP)	$220.00/day
Vapor Carbon Filter, High capacity	$250.00/day
Vapor Carbon Filter, Low capacity	$160.00/day
Mixed Media Prefilter, High capacity	$210.00/day
Mixed Media Prefilter, Low capacity	$ 80.00/day
Box Clarifier with Sludge Collection, 12,000 gallon	$435.00/day
Lamella Clarifier, 50-150 gpm	$595.00/day
Trailer Mounted Lamella Clarifier	$395.00/day
Holding Tanks, 100,000 gallon	$1,000.00/day
Portable Pool, 50,000 gallon	$215.00/day plus liner
Portable Pool, 12,000 gallon	$105.00/day plus liner
Tank and Drum Mixers	$ 40.00/day
In-line Filter	$ 25.00/day
Flow Meter	$ 25.00/day

Sampling/Mobile Analytical Equipment

TPHC/IR	$ 50.00/day
Analytical Laboratory, 45 foot	$650.00/day
Analytical Laboratory, 28 foot	$425.00/day
Hazcat Trailer	$350.00/day
Gas Chromatograph with Integrator/Detector	$365.00/day

Sampling/Mobile Analytical Equipment (continued)

Sample Inlet System (purge and trap)	$195.00/day
Auto Sampler	$315.00/day
Gas Chromatograph/Mass Spectrometer	$650.00/day
Inductively Coupled Argon Plasma Unit	$620.00/day
Atomic Absorption Unit	$500.00/day
Mercury Detector	$155.00/day
Mercury Analyzer	$180.00/day
Spectrophotometer	$ 75.00/day
Turbidity Meter	$ 75.00/day
Specific-ion Meter	$ 80.00/day
pH Meter	$ 20.00/day
Flash-point Analyzer	$ 70.00/day
Sonicator	$105.00/day
TCLP/Ep-toxicity Extractor	$ 75.00/day
Centrifuge	$ 35.00/day
Aerosol Monitor	$ 35.00/day
Air-flow Monitor	$ 25.00/day
Personal Air-sampling Pump	$ 35.00/day
Air-flow Calibrator	$ 25.00/day
Multipurpose Rad Kit	$125.00/day
Drager Gas Sampler	$ 25.00/day
ZHE Extractors	$ 30.00/day
Cyanide Meter with Generator	$ 80.00/day
Sulfide Meter with Generator	$ 80.00/day
Carbon-monoxide Detector	$ 80.00/day
Methane-gas Detector	$ 80.00/day
Photoionization Detector	$135.00/day
Flame Ionization Detector	$185.00/day
LEL meter, 2 gas	$ 75.00/day
LEL meter, 3 gas	$ 85.00/day
LEL meter, 4 gas	$ 95.00/day
Geiger Counter	$ 95.00/day
Organic-vapor Analyzer	$150.00/day
pH Controller	$ 35.00/day
Hydrolab Meter	$210.00/day
Laboratory Filter Press	$ 70.00/day
Oil-content (TPH) Analyzer	$260.00/day
Nuclear Density Gauge	$175.00/day
High Volume Air Sampler	$ 85.00/day
Low Volume Air Sampler	$ 75.00/day
Portable Controlled-flow Sampler	$ 85.00/day
Ground-water Flow Meter	$270.00/day
Peristaltic Testwell Pump	$ 75.00/day
Water-level Indicator	$ 15.00/day
Water-level Recorder	$ 33.00/day
Oil/Water-level Indicator	$ 50.00/day
Hermit Data Logger	$ 65.00/day
Pressure Transducer	$ 45.00/day
Split Spoon Soil Sampler, Manual	$ 35.00/day
Sample Auger, 3-inch, Stainless Steel	$ 75.00/day
Soil Gas Sample Kit	$200.00/day
Bacon Bomb Sampler	$ 25.00/day

Bioanalytical Equipment

Bioanalytical Laboratory	$425.00/day
Bioreactor	$645.00/day
Pilot Land-farm Cell	$ 80.00/day
Incubator	$ 80.00/day
Colony Counter/Stereoscopic Microscope	$ 35.00/day
Bioreactor System	$925.00/day
Electrolytic Respirometer	$265.00/day
Autoclave	$ 35.00/day
Dissolved-oxygen Meter	$ 40.00/day
Liquid Scintillation Counter	$130.00/day
Ultraviolet Sterilizer, 80 gpm	$ 50.00/day

Chemical Transfer Equipment

Transfer Equipment Trailer	$1,500.00/day
Transfer Pumping Trailer	$650.00/day
Tank Tap Machine	$1,250.00/day
Nonsparking Tool Set	$135.00/day
Patch Kit	$595.00/day
Chemical Transfer Hose	$ 12.00/foot
Chemical Transfer Pumps	$810.00/day
Hydraulic Power Pack	$600.00/day
Floristat Flare Stack	$200.00/day
Nitrogen Purge System	$200.00/day
Flow Indicator	$ 65.00/day
3 Stage Compressor	$1,100.00/day
2 Stage Compressor	$750.00/day
Steam Boiler, 65 psi	$1,500.00/day plus fuel
Steamer, 500,000 Btu	$375.00/day plus fuel
Steamer, 350,000 Btu	$285.00/day plus fuel
Steamer, 200,000 Btu	$205.00/day plus fuel

Heavy Equipment

Cat D-6 Dozer or Equal	$ 75.00/hr
Cat D-5 Dozer or Equal	$ 68.00/hr
Cat D-4 Dozer or Equal	$ 60.00/hr
Cat D-3 Dozer or Equal	$ 46.00/hr
Cat 963 Track Loader or Equal	$ 82.00/hr
Cat 966 Rubber Tired Loader or Equal	$ 95.00/hr
Cat 950 Rubber Loader or Equal	$ 87.00/hr
Cat 938 Rubber Loader or Equal	$ 82.00/hr
Cat 245/350 Trackhoe or Equal	$150.00/hr
Cat 235/330 Trackhoe or Equal	$115.00/hr
Cat 225/325 Trackhoe or Equal	$ 87.00/hr
Cat 215/320 Trackhoe or Equal	$ 82.00/hr
Case 580 Backhoe or Equal	$ 45.00/hr
Rough Terrain Forklifts	$ 45.00/hr
Bobcat, 4WD or Equal	$ 35.00/hr
Dump Trucks, 6x6, 25-29 ton	$ 75.00/hr
Dump Trucks, 6x6, 30-34 ton	$ 95.00/hr
Dump Trucks, 6x6, 35-40 ton	$135.00/hr

Lights and Generators

Satellite Light	$ 28.00/day
Light Plant, 5 kW	$275.00/day plus fuel
Generator, 350 kW	$750.00/day plus fuel
Generator, 150 kW	$525.00/day plus fuel
Generator, 125 kW	$450.00/day plus fuel
Generator, 30 kW	$225.00/day plus fuel
Generator, 15 kW	$175.00/day plus fuel
Generator, 12 kW	$130.00/day plus fuel
Generator, 6.5 kW	$100.00/day plus fuel
Generator, 5 kW	$ 85.00/day plus fuel

Compression Equipment

Hydroblaster, 20,000 psi	$1,250.00/day plus fuel
Hydroblaster, 10,000 psi	$1,000.00/day plus fuel
Hydroblaster, 8,000 psi	$875.00/day plus fuel
High-pressure Water Laser, 3,000 psi	$465.00/day plus fuel
High-pressure Water Laser, 2,000 psi	$360.00/day plus fuel
Pressure Washer, 500,000 Btu	$375.00/day plus fuel
Pressure Washer, Portable	$ 50.00/day plus fuel
Air Compressor, 750 cfm	$495.00/day plus fuel
Air Compressor, 230 cfm	$255.00/day plus fuel
Air Compressor, 185 cfm	$185.00/day plus fuel
Air Blower, 7,500 cfm	$435.00/day plus fuel
Air Blower, 5,000 cfm	$395.00/day plus fuel
Air Blower, 4,000 cfm	$335.00/day plus fuel
Air Blower, 3,000 cfm	$290.00/day plus fuel
Air Blower, 1,000 cfm	$170.00/day plus fuel
Portable Air Blower	$ 60.00/day plus fuel
Positive-displacement Air Pump, 650 cfm	$485.00/day
Positive-displacement Air Pump, 250 cfm	$250.00/day
Positive-displacement Air Pump, 150 cfm	$140.00/day
High-pressure, Tank-cleaning Head	$270.00/day

Water Equipment

Work Boat, 16 foot (20-40 hp)	$165.00/day
Work Boat, 16 to 18 foot (70 to 115 hp)	$450.00/day
Work Boat, 20 to 22 foot (115 to 230 hp)	$550.00/day
Work Boat, 26 to 28 foot (400 hp)	$1,000.00/day
Jon Boat	$ 60.00/day
Boat Motor, 15 to 30 hp	$ 80.00/day
Containment Boom 12"	$1.25/foot/day
Containment Boom 18"	$1.50/foot/day

Pumping Equipment

Hydraulic Sludge Pump, Stainless Steel	$725.00/day
Hydraulic Sludge Pump, 4 inch	$260.00/day
Hydraulic Sludge Pump, 2 ½ inch	$190.00/day
Electrical Submersible Pump, 4 inch	$335.00/day
Electrical Submersible Pump, 3 inch	$195.00/day
Electrical Submersible Pump, 2 inch	$ 85.00/day
Trash Pump, 8 inch	$695.00/day

Pumping Equipment (continued)

Trash Pump, 6 inch	$415.00/day
Trash Pump, 3 and 4 inch	$290.00/day
Centrifugal Pump, 3 inch	$210.00/day
Centrifugal Pump, 2 inch	$185.00/day
Diaphragm Pump, 3 inch	$155.00/day
Diaphragm Pump, 2 inch	$135.00/day
Diaphragm Pump, 1½ inch	$120.00/day
Diaphragm Pump, 1 inch	$ 95.00/day
Diaphragm Pump, 3 inch, Stainless steel	$230.00/day
Diaphragm Pump, 2 inch, Stainless steel	$185.00/day
Diaphragm Pump, 1½ inch, Stainless steel	$160.00/day
Diaphragm Pump, 1 inch, Stainless steel	$130.00/day
Diaphragm Pump, 1½ inch, (EPDM)	$160.00/day
Progressive Cavity Pump, 6 inch	$210.00/day
Petro Purge Pump with Controls, 1½ inch	$115.00/day
Hydro Purge Pump with Controls, 2 inch	$ 85.00/day
Explosion-proof Barrel Pump	$125.00/day
Chemical-feed Pump	$ 45.00/day
Recovery Well Pump, 1½ inch	$ 37.00/day
Well Development Pump	$ 35.00/day
High-pressure pump, 1½ inch	$ 90.00/day
Suction Hose, 3 and 4 inch	$75.00/50 feet/day
Suction Hose, 2 inch	$64.00/50 feet/day
Suction Hose, 1½ inch	$43.00/50 feet/day
Discharge Hose, 3 and 4 inch	$25.00/50 feet/day
Discharge Hose, 2 inch	$21.00/50 feet/day
Discharge Hose, 1½ inch	$19.00/50 feet/day
Air Hose, 1½ inch	$38.00/50 feet/day
Air Hose, ¾ inch	$23.00/50 feet/day
Aluminum Transfer Pipe, 6 inch	$16.00/20 feet/day

Specialized Tools and Equipment

All Terrain Vehicle	$ 85.00/day
Hydraulic Drum/Claw Grappler	$380.00/day
Double-barrel Forklift Grappler	$ 55.00/day
Hydraulic Shears, 1,200 ton	$1,600.00/day
Hydraulic Shears, 490 ton	$1,250.00/day
Hydraulic Shears, 200 ton	$615.00/day
Hydraulic Ho-ram, 215/320	$265.00/day
Hydraulic Ho-ram, 580	$145.00/day
Hoe Pack, 320	$225.00/day
Hoe Pack, 580	$125.00/day
Hydraulic Ho-ram, Bobcat	$100.00/day
Manlift	$130.00/day plus fuel
Magnet with 4-kW Rectifier	$105.00/day
Debris Shredder, 40- x 62-inch throat (high torque)	$4,500.00/day plus fuel
Barrel Shredder, 40- x 62-inch throat	$3,500.00/day plus fuel
Can Shredder, 18- x 20-inch throat	$650.00/day
Plastic Shredder	$260.00/day
Barrel Hopper	$260.00/day
Well Sampler Controller	$ 90.00/day
Hydraulic Earth Drill	$ 75.00/day
Blast Machine with Galvanometer	$150.00/day

Miscellaneous Tools and Equipment

Concrete Coring Machine	$255.00/day plus tooling
Pneumatic Nibbler	$ 47.00/day
Cutting Torch	$ 65.00/day
Welder	$ 65.00/day
Welder, Gas Powered	$125.00/day
Partner Saw	$ 47.00/day
Chain Saw	$ 40.00/day
Brush and Weed Cutter	$ 60.00/day
Jackhammer	$ 60.00/day
Hammer Drill	$ 55.00/day
Survey Instrument Set	$ 90.00/day
Laser Level	$225.00/day
Magnetic Metal Detector	$130.00/day
Space Heater, 90,000 Btu	$ 26.00/day plus fuel
Barrel Cart	$ 30.00/day
Sandblaster	$115.00/day
Power Auger, Two man	$ 55.00/day
Equipment Hoist, 3 ton	$ 70.00/day
Sound-level Meter	$ 26.00/day
Temporary Control Panel, 400 amp	$130.00/day
Temporary Control Panel, 100 amp	$ 60.00/day
Platform Truck Scales	$195.00/day
Portable Barrel Scales	$ 70.00/day
Mercury Vacuum	$155.00/day
HEPA Vacuum	$135.00/day
Barrel Vacuum	$ 50.00/day
Shop Vacuum	$ 20.00/day
Radio, Handheld	$ 26.00/day
Portable Base	$ 50.00/day
Marine Band Radio, Handheld	$ 26.00/day
Portable Cellular Telephone	$ 35.00/day
Portable Computer	$ 35.00/day
Facsimile (FAX) Machine	$ 25.00/day

Rates for these items will be quoted on a contract-specific basis.

Mobile Incinerators,
100-1,000 ton/day
Mobile Infrared Incinerator,
150-ton/day capacity
Thermal Volatilization Unit,
150-ton/day capacity
Refinery Waste Dryer Unit,
48-ton/day capacity
Direct-flame Reactor Conveyor
Treatability Trailer
Soil Vapor Extraction System
Hydrocarbon Recovery System
Vapor Emission Control System
Hydrostatic Injection System
Burner, 5-million BTU
Stone Crushing and Screen Plant
Pugmill, 3.5 yard
Pugmill, 1 yard
Pugmill Feed System
Reciprocating Feeder
Belt Feeder
Shaker, Double Deck
Shaker, Single Deck
Belt Conveyor
Screw Auger
Cement Silo
Portable Building
Air-stripping Chambers:
25-50 gpm
100-200 gpm
500-1,000 gpm
Dewatering Unit,
100 cubic feet
Dewatering Unit,
200 cubic feet

Koppers004028

NOTES

Invoicing Procedures

- IT requires an executed contract, signed customer purchase order acceptable to IT, or signed IT terms and conditions to commence work.
- It is IT's practice to progress invoice every 7 days. Progress invoices estimate work performed and costs incurred during the invoice period. A final invoice that summarizes actual use of rate-sheet items and other costs incurred is issued at the completion of the job.
- All work performed on an "emergency response" basis is invoiced at price list rates plus 10 percent.
- All rates are subject to change without prior written notice.
- Customer is responsible for all applicable federal, state, and local taxes and permit fees.
- All rates are stated in United States dollars.
- All invoices are due upon receipt. Balances outstanding more than 30 days after the invoice date are subject to a monthly finance charge of 1½ percent per month from the invoice date.
- All hourly rate equipment and personnel are billed a minimum of 4 hours per day.
- For information on liabilities and responsibilities, please refer to contractual terms and conditions.

Subcontractors, Expendables, and Additional Equipment

- Mobile analytical laboratories include fume hood, balances, drying oven, and laboratory glassware. Reagents, carrier gases, columns, contaminated glassware, and miscellaneous laboratory expendable items will be billed at invoice price plus 20 percent.
- All pump rates include 10 feet of suction hose and 50 feet of discharge hose.
- All subcontractors and/or costs for disposal, utilities, or other contracted project services are billed at invoice price plus 20 percent.

Subcontractors, Expendables, and Additional Equipment (continued)

- Expendable items inventoried and warehoused by IT are billed according to the IT expendables price list. Items purchased locally for specific projects are billed at invoice price plus 20 percent.
- Cleaning, repair, or replacement charges will be assessed for equipment contaminated or damaged by site conditions. Equipment contaminated or damaged beyond repair will be charged at actual replacement cost plus 20 percent.

Personnel

- A daily rate for subsistence, lodging, and incidental costs shall be charged per person. This rate shall be that for the nearest locale listed in Appendix D of the United States Government's Current Joint Travel Regulations plus 20 percent.
- Prices for protective clothing and equipment, where applicable, include up to four sets per day of disposable protective suits (Tyvek/saran-coated). Fifty feet of breathing-air hose is included with supplied-air systems. A maximum of three sets of MSA, GMC-H respiratory cartridges are included with Level C protection. Standard non-disposable protective clothing or equipment damaged or contaminated by site conditions is billed at replacement cost plus 20 percent.
- All equipment and personnel are billed portal-to-portal.
- Straight time (ST) is 8 a.m. to 4 p.m. weekdays. Overtime (OT) is anytime before 8 a.m. and after 4 p.m. weekdays and all day Saturday and Sunday. A 20 percent premium will be added to the hourly or overtime rate for all personnel working on holidays.
- There is a $7.50 per-hour, per-person surcharge for each hour worked in Level A or Level B protection.
- There is a high hazards-handling fee of $250 per day, per person, for handling explosives and compressed gas transfers.
- Expert testimony, including preparation and review time, is charged at 2.0 times normal price list rates.
- The Company reserves the right to increase personnel rates depending upon local conditions

EXHIBIT C _____

CHANGE ORDER FORM

the igroup

FIELD CHANGE ORDER

Client Name _____ Date _____

Project Name _____ IT Project No. _____

Location _____ Change Order No. _____

Description of new or changed work or conditions (Attach additional initialed sheet(s) if necessary. Explain reasons for change if desirable): _____

_____

_____

_____

_____

_____

_____

Impact of this change order: Unless otherwise expressly stated below, IT and Client agree that: 1) Client has requested the additional work and/or acknowledges that changed conditions giving rise to this change order, 2) this change order will impact the scope, schedule, and cost of IT's services, 3) client will pay IT for the additional services and expenses required by this change order at the time and material rates shown in IT's current Price List, and 4) any dollar figure estimate stated below is only a non-binding good faith estimate made at Client's request.

Describe any payment arrangements or other impacts not addressed above (such as whether any unit rates or other specific rates specified for extra work in the contract between Client and IT will apply):

_____

_____

_____

_____

Agreed by IT and Client:

IT Site Representative

Sign _____

Print _____

IT Project Manager

Sign _____

Print _____

Client Authorized Representative

Sign _____

Print _____

Title _____

RECEIVED

APR 3 0 1999

KOPPERS INDS, INC.
PORTLAND OR

LAIDLAW ENVIRONMENTAL SERVICES
"An Equal Opportunity Employer"

LES (CHEMPAK) - 293
LAIDLAW ENVIRONMENTAL(CHEMPAK),INC.
7835 SW HUNZIKER STREET
TIGARD OR 97223
Telephone: 503-639-5446

FEDERAL ID NUMBER: 51-0290240

DATE	INVOICE NO.
04/09/98	29380409012

Page 1

931866 - 5 -

ATTN: ACCOUNTS PAYABLE
KOPPERS INDUSTRIES, INC.
7540 N.W. SAINT HELENS ROAD

PORTLAND, OR 97210-3663

KOPPERS INDUSTRIES, INC.
7540 NW ST HELENS ROAD

PORTLAND, OR 97210
SALES: 3311346

TRANSPORTED BY	TERMS	DATE SHIPPED	P.O. NUMBER
	Net 10 Days	03/05/98	

WORK ORDER NO.	QUANTITY SHIPPED		DESCRIPTION	UNIT PRICE	AMOUNT
841A	1.000	55	CLEAN UP DEBRIS	345.0000	345.00
			MANIFEST #	PROFILE: ORKOP-651DLTA	
			DISPOSAL SERVICES GROUP SUBTOTAL		$ 345.00

Reapplied in Jan.
2 times. - Finally we got it!

Reapplied to TJ's
C.C. on 11-11-98
(did not go through
in April)

NOTE: BILLING ADDITIONAL DRUM FROM EARLIER BILLING ON
INVOICE#29380311008/MANIFEST #01841

Please Remit To: LAIDLAW ENVIRONMENTAL(CHEMPAK),INC.
P.O. BOX 100026
PASADENA, CA 91189-0026

SALES TAX$ 0.00

TOTAL DUE $ 345.00

CUSTOMER COPY

Koppers004034

PACIFIC TERMINAL SERVICES, INC.
A HARLEY MARINE SERVICES, INC. COMPANY
910 S.W. Spokane Street, Seattle, Washington 98134
P.O. Box 24005, Seattle, Washington 98124-0005
Tele. (206) 628-0051 Fax (206) 628-0293
www.harleymarine.com

AUG 2 8 2003

July 28. 2003

Koppers Industries
7540 NW St. Helens Road
Portland. OR 97210
Attn: TJ Turner

Dear TJ.

I have attached a copy of the resulting paperwork from our facility spill drill conducted at the Pacific Terminal Services Portland facility on July 24. 2003.

We were happy that Kopper's was able to attend and would like to thank you for your participation in the drill.

Should you have any questions or need anything further please feel free to contact me.

Cordially yours.

Tina F. Garrett
Terminal Superintendent

cc: J. Maccinowski, K-1800

RECOVERED OIL:

Recovered liquid oil will be transported by contracted barge, tank truck and/or vacuum truck with all applicable manifests, labeling and placarding. The liquid oil will be transported to Spencer Environmental in Portland for recycling.

HAZARDOUS WASTE:

The oily wastes, including oily water, oily debris, oily soil and used personal protective equipment (PPE), may not be designated as dangerous or extremely hazardous wastes in which case they will be treated as solid wastes. These wastes will be transported by the Primary Response Contractor, by truck, with all applicable manifests, labeling and placarding, as applicable.

1. Oily water will be transported to Spencer Environmental, Portland, OR to be recycled.
2. Oily debris will be transported to Rabanco, Roosevelt, WA to be land filled.
3. Used PPE will be transported to Recomp of Washington, Bellingham, WA to be incinerated.

SOILD WASTE:

Oily gravel, soil and/or sand debris may be approved, after appropriate testing, for incineration at Recomp of Washington, Bellingham, WA or at T.P.S., Portland, OR.

The disposal plan is based on the "Oiled Debris Disposal Plan" in Appendix III of the Oregon Oil and Hazardous Materials Spill Contingency Plan.

One representative grab sample will be taken from each type of oily waste collected.

Samples of soil and water will be analyzed for ignitibility, corrosivity, reactivity and toxicity according to accepted EPA test methods for hazardous waste characterization.

INTERIM STORAGE

The primary interim storage site will be located on open paved areas at the PTSI facility. Interim storage of oily debris will be held at the facility for no more than 90 days. Interim storage areas will be designed to use the best achievable technology to protect the environment and human health. Ground water measures approximately 15 feet down through sandy soil (dredged fill) and surface water run offs through the facility oil/water separation system before being discharged to the Williamette River. The area is not considered an endangered species habitat.

The interim storage areas will be protected from contamination and will protect human health by the following protective measures:

1. The areas will be secured from free public access by the Northwest Natural Gas Company 24-hour security personnel and facility fencing.

2. The interim storage areas will be bermed and lined with visqueen sheets 10 millimeters thick, without joints, placed on underfelt of a thickness adequate to protect the visqueen from surface irregularities, rocks and jagged edges, with the edges weighted with stones or soil and with a reinforced access area of packed sand for vehicles. Visqueen or tarps will be used to protect the wastes from rain. Interim storage will be in place before debris will be transported to the site.

3. Following the removal of the last of the debris, the area will be returned, to the maximum extent feasible, to its original condition.

2 dropboxes have been ordered from Baker Tanks. One will be on-site and one will be at Transversal

APPENDIX K
PORTLAND FACILITY

DRAFT

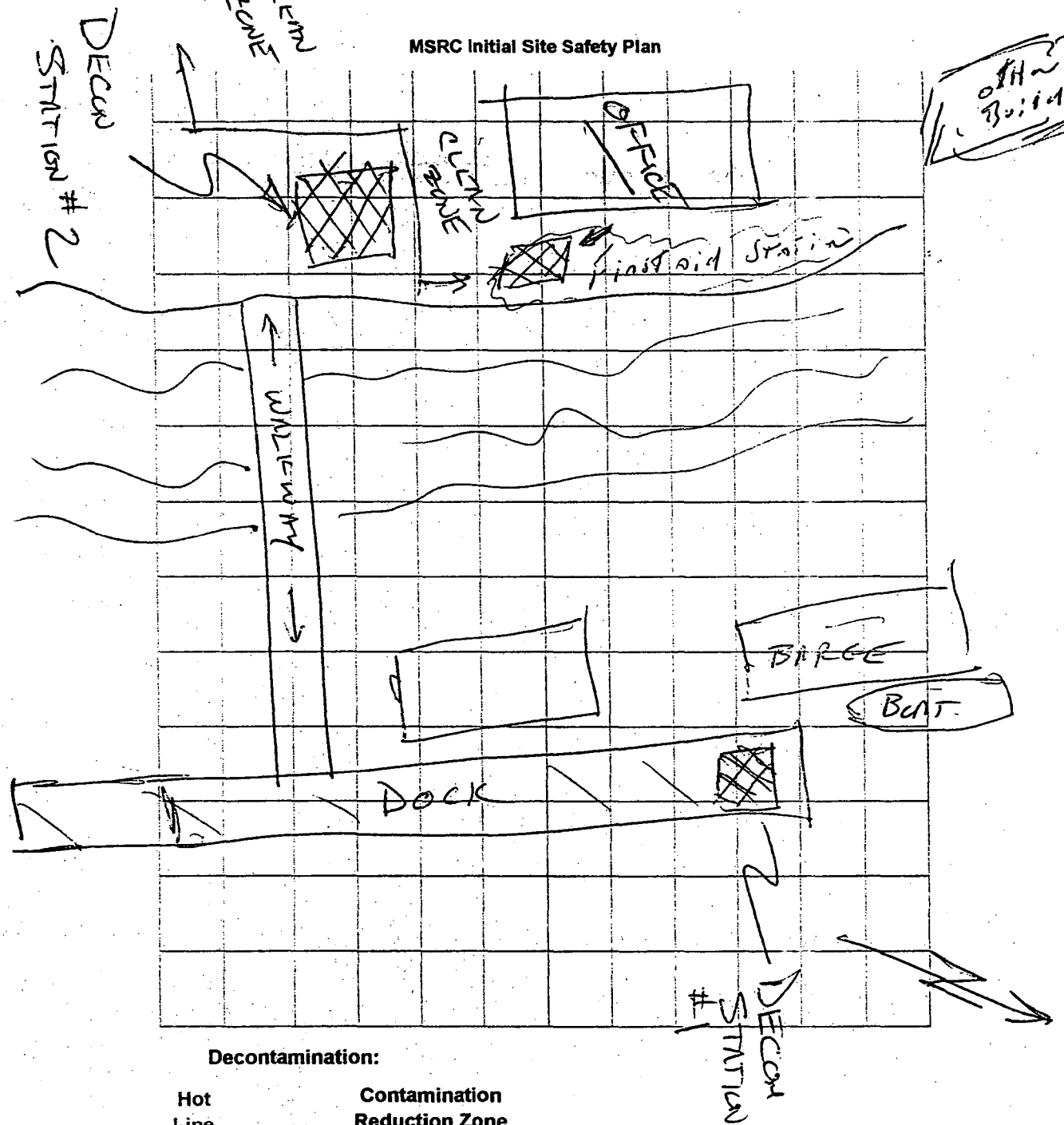
Oil Spill Response Disposal Plan

This disposal plan covers the handling, storage, transportation and disposal of oily water and oily debris recovered from spilled petroleum oil. Pacific Terminal Services, Inc. (PTSI) will recover the maximum feasible amount of marine fuel oil, bunker C, and/or diesel oil spilled into the Willamette River on 7/24/03 (date) from the PTSI Portland facility at 7900 NW St. Helens Road, Portland, Oregon. In addition, an unknown quantity of contaminated solid debris may be recovered during the cleanup. PTSI will abide by all applicable federal, state and local laws and regulations in implementing this plan.

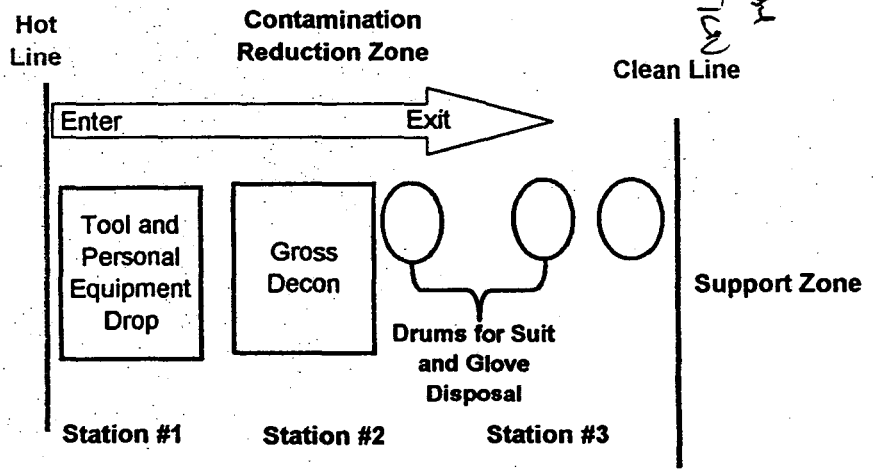
SAMPLING & TESTING:

The purpose of sampling and testing is to evaluate the oil contamination of recovered oily water, oily sand, and oily debris to characterize these wastes as dangerous or hazardous according to state and federal regulations to ensure that designation, treatment and/or disposal complies with applicable regulations.

Samples will be grab samples taken from the interim storage areas placed in cleaned and dried containers (jars or bottles), which will be immediately sealed and labeled with sampling date, time, location and sample identification. After samples are taken they will be transported in iced coolers under Chain of Custody procedures to ~~Pacific Northern Analytical, Redmond, WA~~ Columbia Analytical for laboratory analysis.
Columbia Inspection - 7133 N Lombard - Portland, OR



Decontamination:



Koppers004040

Action Levels & Obser Log pg 14

	Action Levels:				Time reading taken:						
	Evacuation	Level B (Supplied Air)	Level C (Air-Purifying	Level D (No Respiratory Protection)	1st 0830 am	2nd 0930 am	3rd 10:30 am	4th 11 am	5th	6th	7th
LEL	At or above 10%	Below 10%	Below 10%	Below 10%	~~0830~~ 0	0	0	0			
Oxygen	At or above 22.5%	At or below 19.5%	Above 19.5%	Above 19.5%	ok 19.5% above	above 19.0%	above 19.5%	above 19.5%			
H_2S	At or above 15 ppm	At or above 10 ppm	N/A	Below 10 ppm	0	0	0	0			
Benzene	Only required w/ respiratory device absence or	At or above 50 ppm	10 - 49 ppm full-face; 0.5 - 9 ppm half-face	Below 0.5 ppm	0 No Reading	0	0	0			
CO	At or above 25 ppm	Above 25 ppm	N/A	Below 25 ppm	0	0	0	0			
Latitude in Minutes & Seconds				N°							
Longitude in Minutes & Seconds				W°							
Relative Geographical Location:					Wind is coming from:		West				
On Scene Weather & Temperature:			60-65	Slight Wind	Current is flowing to:		East/West				
Oil Characteristics & Color:		Dark Brown			Water Temperature:		50-55				
Comments:											

S/N or ID of 4 Gas Meter	S/N or ID of Benzene Monitor	Team Leader Signature	Date / Time Start	Date / Time Completed
			7/24/2003 @ 0830	7/24/2003 @ 11:30 am

Koppers004041

SAFETY AND HEALTH EMERGENCY RESPONSE PLAN

CONTROL MEASURES (Con't):

Sanitation
- [x] Facilities provided per OSHA 1910.120(n)

Illumination
- [x] Facilities provided per OSHA 1910.120(m)

Medical Surveillance
- [x] Will be provided per OSHA 1910.120(l)

WORK PLAN (Buddy system must be used)
- [x] Booming
- [x] Skimming
- [x] Vac. trucks
- [x] Pumping
- [ ] Excavation
- [ ] Heavy equip.
- [x] Sorbent Pads
- [ ] Patching
- [ ] Hot Work
- [ ] Shoring
- [ ] Appropriate permits issued
- [ ] Other (describe): On water work operations

TRAINING: (see Training Program Attachment)
- [x] Verified site workers trained per OSHA 1910.120

ORGANIZATION: Complete below or see Attachment - Communication / Organization

Incident Command: Troy Goodman Radio/Telephone: 206-571-5483

Oregon State OSC: yes Radio/Telephone:

Safety Officer: R. D. [illegible] Radio/Telephone: 206-255-5010

Public Affairs Officer: Radio/Telephone:

EMERGENCY PLAN (See Site Map and Site Emergency Response Plan Attachments)
- [ ] Alarm system:
- [ ] Evacuation Plan
- [x] First aid locations: See Attached Map

Notify the following as soon as possible:
- [x] Hospital: Phone
- [ ] Ambulance Phone
- [ ] Air Ambulance Phone
- [x] Fire: Phone
- [ ] Police: Phone

PRE-ENTRY BRIEFING:
- [ ] Date/Time completed: By:
- [ ] Hazards discussed (attach training documentation)
- [ ] Other topics:

Date Plan Completed: 7/24/2003 By: R. D. [illegible]

SAFETY AND HEALTH EMERGENCY RESPONSE PLAN

APPLIES TO SITE: Portland Gasco Pier

DATE/TIME: July 24/03 0808 INCIDENT: Oil Spill Barge Loading (Megan J)

PRODUCTS: Bunker 380 (ATTACH MSDS)

SITE CHARACTERIZATION: ☒ Marine Vessel ☐ Pipeline ☐ Storage facility ☐ Truck/Rail car ☐ Other

Water ☐ Shoreline ☐ Wetlands ☐ Muddy ☐ Ocean ☐ Rocky ☐ Sandy ☐ Bay ☐ Other ☒ River ☐ Creek ☐ Canal

Land ☐ Mountains ☐ Hills ☐ Brushland ☐ Forest ☐ Grassland ☐ Other

Use ☐ Public ☐ Government ☐ Residential ☒ Commercial ☐ Recreational ☐ Industrial ☐ Farmland ☐ Other

Weather ☐ Temp 65 F ☐ Wind Di W15 mph ☐ Rain ☐ Snow ☐ Ice ☐ Other Sunny

Pathways for Dispersion ☑ Air ☑ Water ☐ Land ☐ Other

Site Hazards (See Attachment-Site Hazards for more information)

- ☑ Boats
- ☑ Chemical Hazard
- ☐ Cold Stress
- ☑ Confined Spaces
- ☑ Drowning
- ☐ Drum Handling
- ☑ Fire/Explosion
- ☐ Hand/power tools
- ☑ Heat stress
- ☐ Heavy Equipment
- ☐ Lifting
- ☐ Motor Vehicles
- ☐ Noise
- ☑ Poor Visibility
- ☑ Pump, hoses
- ☑ Slips, trips, falls
- ☐ Steam, hot water
- ☐ UV Radiation
- ☐ Weather
- ☑ Wildlife/plants
- ☐ Other:

Air Monitoring

%LEL 0 %O: 0 PPM Benzen 0 PPM H2: 0

☐ Other (specify)

☐ See Attachment - Monitoring Program

CONTROL MEASURES:

Engineering Controls

☐ Source of release secured ☑ Valve(s) closed ☑ Facility shut down

☐ Site secured ☐ Energy sources locked/tagged out

☐ Other

Personnel Protective Equipment (PPE)

- ☐ Impervious suits
- ☐ Inner gloves
- ☐ Outer gloves ✓
- ☐ Boots ✓
- ☐ Hard Hats
- ☐ Respirator
- ☐ Eye Protection
- ☐ Personal Flotation
- ☐ Other Rain Gear

Decontamination

☐ Stations established (see Site Map for location and Decontamination Attachment)

Koppers004043

Home Base (12)	State (2)	Storage (13)	Latitude (10)	Longitude (10)	Cost per Unit	Cost per Day	One-time Charge	TOTAL COST
AAAAAAAAAAAA	AA	AAAAAAAAAAAAA	AAAAAAAAAA	AAAAAAAAAA				
Ranier	OR	FOSS	46*05.35N	122*55.69W				
Portland	OR	Freds	45*3715N	122*48.21W				
Portland	OR	CRC	45*00.17N	122*54.55W				
Longview	WA							
Longview	WA							
Longview	WA							
Longview	WA							
Portland	OR	Trailer	47-35.00 N	122-20.80 W				
Astoria	OR							
Everett	WA							
Portland	OR							
Portland	OR	CRC	45*00.17N	122*54.55W				
Portland	OR							
Portland	OR							
Seattle	WA							
Portland	OR	CRC	45*00.17N	122*54.55W				
Portland	OR	Spill Trailer	45*00.17N	122*54.55W				
Portland	OR							
Longview	WA							
Longview	WA							
Longview	WA							

[redacted]

Koppers004044

					7,440	648	60	47
OSRO (6)	Resource (12)	Kind - Type (6)	Identification (24)	Specification (12)	Recovery BPD EDRC (8)	Liquid Storage bbls (10)	Boom Length (7)	Personnel (5)
AAAA	AAAAAAAAAAAA	AAAAAA	AAAAAAAAAAAAAAAAAAAAAAAA	AAAAAAAAAAAA	AAAAAAAA	AAAAAAAAAA	AAAAAAA	AAAAA
CRC	R-VS-34	WB-3	OSRV "MFSA 1" (20-200)	34' Kvichak	3,720	24		2
CRC	R-VS-34	WB-3	OSRV "Alliance" (22-202)	34' Kvichak	3,720	24		2
CRC	T-SR-30		Spill Reponse Trailer (40-)	30'	0			
CCS			80 BBL Vacuum Truck			80		
CCS			120 BBL Vacuum Truck			120		
CCS			Spill Reponse Trailer (40-)					
CCS			Response Techs					14
MSRC	R SWB		SWB123	Shallow Water Barg	0	400	60	
MSRC			Responders					3
MSRC			Personnel					4
MSRC			Arm Person					2
MSRC			Diversified Personnel					4
CRC			160 Hydraulic Pump					
CRC	T-1		1 ton service truck (51-937)	1989 Ford	0			
HMS	OTB-PDX		Lucy Sondland & Lily 101					
HMS	OTB-PDX		Sarina					
HMS	OTB-SEA		Personnel					6
CRC	V-WB-14	SB-3	14' Skiff (28-210)	14' skiff w/ 15hp	0			
CRC	V-WB-14	SB-3	14' Skiff (28-211)	14' skiff w/ 15hp	0			
MSRC			Per diem (lodging, food, etc.)					
MSRC			Contract Crane for SBS Launch	one time cost				
MSRC			Decon Cost	one time cost				
CRC			2000' boom					
			Baker Tank					
CCS			Workboat					
CCS			Personnel-beach clean up crew					9
CCS			Personnel-beach clean up crew					1

Koppers004045

1. Incident Name	2. Operational Period (Date / Time)	INCIDENT OBJECTIVES ICS 202-OS
Portland Spill	From: 7/24/03 0900	

3. Overall Incident Objective(s)

1. Ensure the Safety of Citizens & response personnel
2. Manage coordinated response effort
3. Maximize protection of environmentally sensitive areas
4. Contain & Recover spilled material
5. Keep stakeholders informed of response activities

4. Objectives for specified Operational Period

1. Contain & recover oil
2. Deploy resources at GRP's
3. Ensure safety briefings conducted for all personnel at all sites

5. Safety Message for specified Operational Period

Level D clothing for all personnel - standard rain gear

Follow all water safety rules

Approved Site Safety Plan Located at: Office

6. Weather See Attached Weather Sheet

7. Tides / Currents See Attached Tide / Current Data

8. Time of Sunrise **Time of Sunset**

9. Attachments (mark "X" if attached)

- ☐ Organization List (ICS 203-OS)
- ☐ Assignment List (ICS 204-OS)
- ☐ Communications List (ICS 205-OS)
- ☐ Medical Plan (ICS 206-OS)
- ☐ Incident Map(s)
- ☐ Traffic Plan
- ☐ Resource at Risk Summary (ICS 232-OS)
- ☐ _____
- ☐ _____

10. Prepared by: (Planning Section Chief) **Date / Time**

1. Incident Name	2. Prepared by: (name)	INCIDENT BRIEFING ICS 201-OS (pg 4 of 4)
Portland Spill	Tina Garrett Date: 7-24-03 Time: 0800	

7. Resources Summary

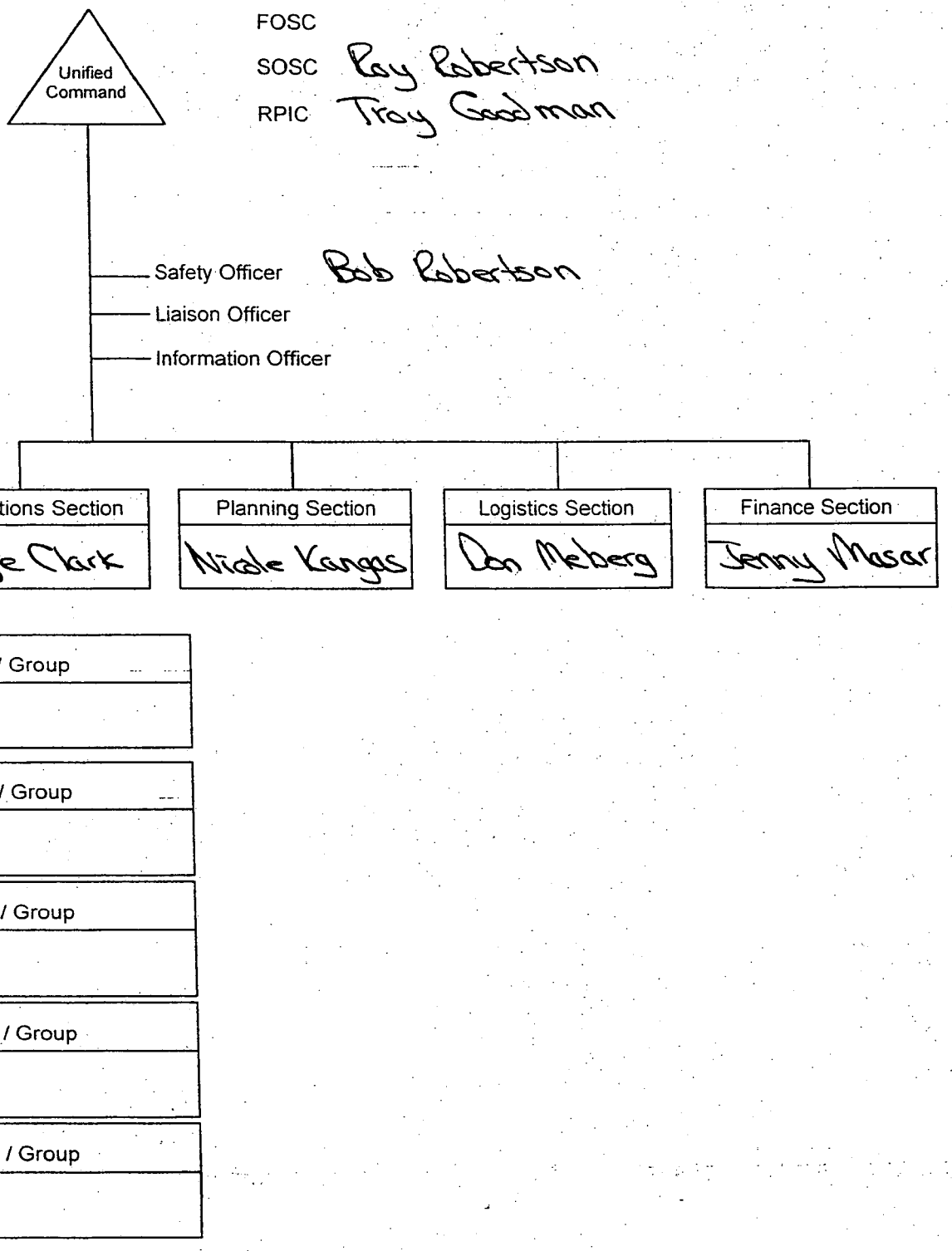
Resources Needed	Time Ordered	Resources Identifier	ETA	On-Scene? (X)	NOTES: (Location / Assignment / Status)
2000' Boom		In river		X	In place at time of spill
1000' Boom	0810	Boom Box		X	Secondary Containment
1000' Boom	0810	On Barge		X	Step Down
Lily Ivy / Lucy	0830	Olympic	0900		8500 bbl Storage / 1000' boom
Sarina	"	"	"		
3 Personnel					
800' boom					
Trawl Skimmer					
34' OSRV		MFSA	0930		Skimming + terminal offloading
1000' 20" boom					
3420 EDRC					
3 Personnel					
34' OSRV		Alliance			Deployment of 1000' Stepdown (Corp of Engineers
1000' 20" boom					
3420 EDRC					
3 Personnel					
Vac truck		Alliance	1000		80 bbl
2 Personnel					
2- Supply trailor + work boats		Alliance	1000		
4 Personnel		Contractors	1200		MSRC Operators
SBS System		MSRC	1200		Skim @ terminal
4 Personnel		"	1330		Everett
1 Arm person		"	1330		
4 Responders		"	1130		Astoria - barge clean up
160 Hyd Pump		CRC	1100		Term staging on barge
1 Ton truck		"	1100		Term staging
Personnel - 6		Olympic	1330		Seattle - barge clean-up
Personnel - 10		CCS	1150		Beach Clean-up
2 Drop Boxs		Baker Tank	1400		1- Terminal, 1- Transversal/Disposal

Electronic version: NOAA 1.0 June 1, 2000

Koppers004047

1. Incident Name	2. Prepared by: (name)	INCIDENT BRIEFING ICS 201-OS (pg 3 of 4)
Portland Spill	Tina Garrett Date: 7-24-03 Time: 0800	

6. Current Organization



1. Incident Name	2. Prepared by: (name) Tina Garrett	INCIDENT BRIEFING ICS 201-OS (pg 2 of 4)
Portland Spill	Date: 7-24-03 Time: 0800	

4. Initial Incident Objectives

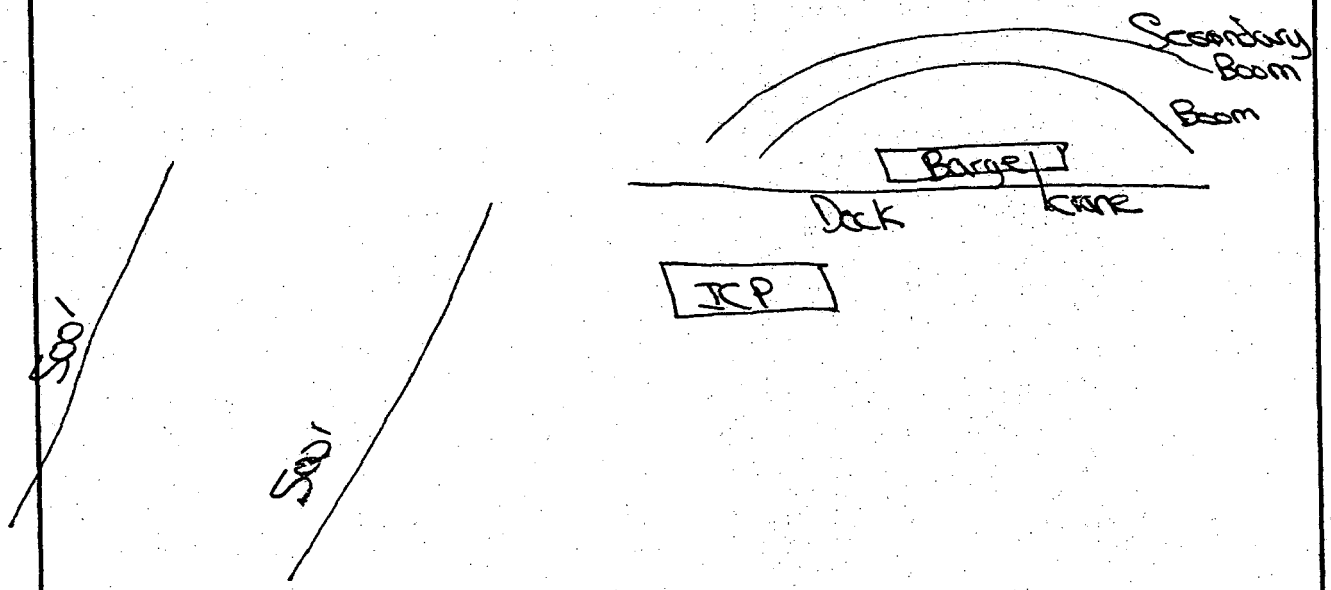
Retain - recover oil

5. Summary of Current Actions

Time	Action / Note
0805	Notified of spill
0810	Notified - Troy Goodman
0811	Clean Rivers called
0815	NRC Notified - # 651784
"	MSRC Notified
0820	MSO Notified - Coast Guard no wake
0810	ORES Notified
0820	Clean Rivers notified CCS
0830	H_2S Tested - none present
0840	MSRC notified 1 WRC on standby
0845	MSRC notified Columbia Helicopter - Stand by
0850	MSRC notified CSD and NWFF on Stand by
"	Notified DEQ
0935	Oil in First Chevron
0940	H_2S Tested - none present - Current downstream
"	Gate notified - limit access to response personnel

1. Incident Name: Portland Spill	2. Prepared by: (name) Tina Garrett Date: 7-24-03 Time: 0800	INCIDENT BRIEFING ICS 201-OS (pg 1 of 4)

3. Map / Sketch (Include maps drawn here or attached, showing the total area of operations, the incident site/area, overflight results, trajectories, impacted shorelines, or other graphics depicting situational and response status)



This plan may be amended as necessary to ensure compliance with all applicable laws and regulations. Amendments may occur only upon mutual agreement of PTSI, The U.S. Coast Guard and/or the Oregon Department of Environmental Quality.

Approvals:

By _____ ~~(Facility~~ OSC)
PACIFIC TERMINAL SERVICES, INC.

Date: 7/24/03

By _____ (State OSC)
~~**OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY**~~
WA Ecology

Date: 7/24/03

By _____ (Federal OSC)
UNITED STATES COAST GUARD

Date: _____

Potential Hazards Release Forms

Koppers004052

KOPPERS
INDUSTRIES

Koppers Industries, Inc.
7540 N.W. St. Helens Road
Portland, OR 97210-3663

Telephone: 503-286-3681
Fax: 503-285-2831

I have been informed and understand the potential hazards of the products stored at and distributed from this plant. I have also received the appropriate MSDS concerning these products.

Fabrication Products
Company

9-27-95
Date

Signature

KOPPERS
INDUSTRIES

Koppers Industries, Inc.
7540 N.W. St. Helens Road
Portland, OR 97210-3663

Telephone: 503-286-3681
Fax: 503-285-2831

I have been informed and understand the potential hazards of the products stored at and distributed from this plant. I have also received the appropriate MSDS concerning these products.

_____ _____

Company Date

_____

Signature

KOPPERS
INDUSTRIES

Koppers Industries, Inc.
7540 N.W. St. Helens Road
Portland, OR 97210-3663

Telephone: 503-286-3681
Fax: 503-285-2831

I have been informed and understand the potential hazards of the products stored at and distributed from this plant. I have also received the appropriate MSDS concerning these products.

Company _____ Date _____

Signature _____

KOPPERS
INDUSTRIES

Koppers Industries, Inc.
7540 N.W. St. Helens Road
Portland, OR 97210-3663

Telephone: 503-286-3681
Fax: 503-285-2831

I have been informed and understand the potential hazards of the products stored at and distributed from this plant. I have also received the appropriate MSDS concerning these products.

_____ _____

Company Date

_____

Signature

KOPPERS
INDUSTRIES

Koppers Industries, Inc.
7540 N.W. St. Helens Road
Portland, OR 97210-3663

Telephone: 503-286-3681
Fax: 503-285-2831

I have been informed and understand the potential hazards of the products stored at and distributed from this plant. I have also received the appropriate MSDS concerning these products.

_____ _____

Company Date

_____

Signature

KOPPERS
INDUSTRIES

Koppers Industries, Inc.
7540 N.W. St. Helens Road
Portland, OR 97210-3663

Telephone: 503-286-3681
Fax: 503-285-2831

I have been informed and understand the potential hazards of the products stored at and distributed from this plant. I have also received the appropriate MSDS concerning these products.

_____ _____

Company Date

_____

Signature

Appendix F

CONTROL OF HAZARDOUS ENERGY

Inspection Form

Type of Inspection: (X) Periodic ( ) Annual Program Audit

Date: 1-8-98 Time: 230 AM / PM

Inspector: I J Turner Title: Gen. Foreman.

Area Inspected: Lower Tank farm pitch pump area

Employees Interviewed: Brad Harwood - Ron Eaton

Equipment/Machines Involved: D roper pitch pump

Program Deviations Noted: None

Proper lock out Procedures Taken

Corrective Actions to be Taken: None

Date Actions to be Completed: NA

Person to Implement Action: _____

Inspector Signature/Title: I J Turner Gen Foreman

Employees Interviewed Signature: Brad D. Harwood 1-8-98

Ron Eaton 1-8-98

Date Actions Completed: 1-8-98 (use back of form)

Koppers004059

Appendix F

CONTROL OF HAZARDOUS ENERGY

Inspection Form

Type of Inspection: (✓) Periodic ( ) Annual Program Audit

Date: 8-6-02 Time: 10 ~~00~~ (AM) / PM

Inspector: T Turner Title: General Foreman

Area Inspected: T-68 Pitch System/Steam Line Attachment

Employees Interviewed: Ron Eaton

Equipment/Machines Involved: T-68 Suction Line/Pump D. Steam Line Procedure 22

Program Deviations Noted: None/proper procedure followed

Corrective Actions to be Taken: None

Date Actions to be Completed: NA

Person to Implement Action: NA

Inspector Signature/Title: T Turner General Foreman

Employees Interviewed Signature: Ron Eaton

Date Actions Completed: NA (use back of form)

Koppers004060

2001
– Control of Hazardous Energy Inspect.

Koppers004061

Control of Hazardous Energy (Lockout)

Inspection Form

Type of Inspection ( ) Periodic (✓) Annual Program Audit

Date: 1-24-01 Time: 10 am

Inspector: TJ Turner Title: Gen Foreman

Area Inspected: E-170 Hot oil systems

Employees Interview: John Summerfield

Equipment/Machines Involved: #5 Hot oil Pump

Program Deviations Noted: None

Actions to be Taken: locks were Properly placed, all potential hazardous energy dispated, appropriate entries made in lockout log book.

Date Actions to be Completed:

Person to Implement Action:

Inspector Signature/Title: T.J. Turner Gen Foreman

Signature of Interviewed Employees: Joh Summerfield

Date Actions Completed: 1-24-01 (use back of form)

Control of Hazardous Energy (Lockout)

Inspection Form

Type of Inspection ( ) Periodic (✓) Annual Program Audit

Date: 12-27-00 Time: 10ᵃᵐ AM

Inspector: TJ Turner Title: Gen Foreman

Area Inspected: Pump P-225 (Viking) T-200 area

Employees Interview: Brad Hazewood Ron Eaton,

Equipment/Machines Involved: Viking Pump P-225

Program Deviations Noted: None

Corrective Actions to be Taken: None

Date Actions to be Completed: None

Person to Implement Action: None

Inspector Signature/Title: TJ Turner Gen Foreman

Signature of Interviewed Employees: Brad Hazewood

Date Actions Completed: _____ (use back of form)

Author: AMOS KAMERER at PITT
Date: 4/12/99 4:13 PM
Priority: Normal
TO: Walter Turner at PITT
TO: Kevin Fitzgerald at PITT
TO: Don Evans at PITT
TO: Drew Bachman at PITT
TO: Chuck Kraynik at PITT
TO: Jim Dietz at PITT
Subject: VFT Pitch

---------- Message Contents ----------

Walt,

The MV Star Evanger is due in tomorrow PM, with the discharge scheduled to start on the 3rd shift, Wednesday AM. The cargo is 4,200MT's total. 20 jumbo hopper cars will be loaded for Reynolds, Troutdale and the balance is to be trucked to the Allied warehouse. So, Troutdale will get about 1,800MT's of the total.

Amos

Author: Walter Turner at PITT
Date: 4/7/99 4:39 PM
Priority: Normal
TO: Amos Kamerer
Subject: Re: VFT pitch

SSA 7

---------- Message Contents ----------

Amos, thanks, keep digging. I am interested to know where every ton is coming from in the Northwest.

Walt

---------- Reply Separator ----------

Subject: VFT pitch
Author: AMOS KAMERER at PITT
Date: 4/7/99 11:10 AM

Walt,

As a follow up on my e-mail to you yesterday regarding the pitch for Vanalco; I was visiting the POLV earlier this AM and in conversation with Virgil he mentioned that they were going to make some further improvements to the new equipment, after they finished the discharge of the Star Evanger, next week. I asked, the Allied going to Vanalco and he said no, it's Allied's German pitch, but that most of the cargo was going to Reynolds, Troutdale.

The Vanalco vessel must be coming later and this would explain way it is not the 6,000MT that Judy said she was buying. I will find out more about this next week, during the discharge.

Amos

20 CARS Reynolds, Td.

20 x 90 = 1800

Author: AMOS KAMERER at PITT
Date: 4/7/99 10:51 AM
Priority: Normal
TO: Walter Turner at PITT
TO: Kevin Fitzgerald at PITT
TO: Jim Dietz at PITT
TO: Don Evans at PITT
TO: Drew Bachman at PITT
TO: Chuck Kraynik at PITT
Subject: VFT pitch
---------- Message Contents ----------

Walt,

As a follow up on my e-mail to you yesterday regarding the pitch for Vanalco; I was visiting the POLV earlier this AM and in conversation with Virgil he mentioned that they were going to make some further improvements to the new equipment, after they finished the discharge of the Star Evanger, next week. I asked, the Allied going to Vanalco and he said no, it's Allied's German pitch, but that most of the cargo was going to Reynolds, Troutdale.

The Vanalco vessel must be coming later and this would explain way it is not the 6,000MT that Judy said she was buying. I will find out more about this next week, during the discharge.

Amos

Author: AMOS KAMERER at PITT
Date: 4/6/99 1:55 PM
Priority: Normal
TO: Walter Turner at PITT
TO: Kevin Fitzgerald at PITT
TO: Don Evans at PITT
TO: Jim Dietz at PITT
TO: Drew Bachman at PITT
Subject: Vanalco Pitch

---------- Message Contents ----------

Walt,

Per your request. First, it is my understanding from what Judy told me, that this second receipt is the same pitch as what they recently completed the first test on, VFT rod pitch.

The vessel is on the water and the info is as follows;

MV Star Evanger with an ETA of 4/12/99.
Shipped from Dordrecht, Netherlands.
Shipper is Energy Carbon Metals, Liechtenstein, Switzerland.
It's consigned to Allied.
The cargo is 4,200MT.

This cargo size is surprising, in that Judy told me that she was planning to buy 6,000MT, which would last her through October and into November. This will only last them for 4 months, or through August. So, she either has another 2,000MT cargo coming later, which would be pretty costly on the ocean freight; or she settled for this smaller quantity, waiting to see what happens with Anchan over the next few weeks.

Amos

Author: Walter Turner at PITT
Date: 4/5/99 10:48 AM
Priority: Normal
TO: Amos Kamerer
TO: Kevin Fitzgerald
Subject: Re: Vanalco
---------- Forwarded w/Changes ----------
Author: Kevin Fitzgerald 4/4/99 2:22 PM
TO: Amos Kamerer
CC: Drew Bachman
CC: Walter Turner
Subject: Re: Vanalco
---------- Message Contents ----------

Amos, will you please find out which Europpean pitch it is. This is very important to know.

Walt Switzerland

Forward Header

Subject: Re: Vanalco
Author: Kevin Fitzgerald at PITT
Date: 4/4/99 2:22 PM

Amos:

Must be Troutdale or they could have been counting on Kaiser.

Kevin

Reply Separator

Subject: Vanalco
Author: AMOS KAMERER at PITT
Date: 3/31/99 3:03 PM

Kevin,

I just talked to Judy Chipman and she advises that she has placed the order for the 6,000 MT of European pitch, as she told me she planned to do, and as a result that she would not be needing any pitch until the end of this year.

If this is true, where is the trader selling the 6,000 MT of Anchan pitch that he wants to bring over in June? Allied and Reynolds, Troutdale?

Amos

Author: AMOS KAMERER at PITT
Date: 1/29/99 2:26 PM
Priority: Normal
TO: Kevin Fitzgerald at PITT
Subject: VFT pitch

---------- Message Contents ----------

Kevin,

The MV Star Hansa discharged 7,349 MT in mid November 1998, at the Port of Longview, with 3,000 MT going to Vanalco.

Amos

Date Run: Jul 15 96 15:12 TRUCK SHIPMENTS Page: 1

Plant : PORTLAND SHIPPING WEIGHT ANALYSIS REPORT Dates: 96/07/01 thru 96/07/15

Target Load Weight: 105500

SOLD-TO NAME	COMMODITY	PKG	CARRIER/ROUTE	B.O.L.	GROSS	TARE	NET	DIFF	LOAD FAC.
REPORT# 2 - BY SHIP-TO-N									
ALLIED SIGNAL INC	CARBON PITCH - ALLIE	DT	GRESHAM TRANSFER	9270001843	106060	42380	63680	560	100.53
ALLIED SIGNAL INC	CARBON PITCH - ALLIE	DT	GRESHAM TRANSFER	9270001844	104180	42100	62080	1320-	98.75
ALLIED SIGNAL INC	CARBON PITCH - ALLIE	DT	GRESHAM TRANSF	9270001853	104420	42200	62220	1080-	98.98
ALLIED SIGNAL INC	CARBON PITCH - ALLIE	DT	GRESHAM TRANSF	9270001854	101240	41920	59320	4260-	95.96
ALLIED SIGNAL INC	CARBON PITCH - ALLIE	DT	GRESHAM TRANSF	9270001859	104800	42000	62800	700-	99.34
ALLIED SIGNAL INC	CARBON PITCH - ALLIE	DT	GRESHAM TRSF	9270001860	102720	42600	60120	2780-	97.36
ALLIED SIGNAL INC	CARBON PITCH - ALLIE	DT	CUSTOMER ARRANGED	9270001861	106480	42440	64040	980	100.93
ALLIED SIGNAL INC	CARBON PITCH - ALLIE	DT	CUSTOMER ARRANGED	9270001865	105400	41880	63520	100-	99.91
ALLIED SIGNAL INC	CARBON PITCH - ALLIE	DT	CUSTOMER ARRANGED	9270001866	102820	42320	60500	2680-	97.46
ALLIED SIGNAL INC	CARBON PITCH - ALLIE	DT	CUSTOMER ARRANGED	9270001867	102580	42420	60160	2920-	97.23
ALLIED SIGNAL INC	CARBON PITCH - ALLIE	DT	CUSTOMER ARRANGED	9270001868	102600	41700	60900	2900-	97.25
ALLIED SIGNAL INC	CARBON PITCH - ALLIE	DT	GRSHM TRSF	9270001880	104440	41560	62880	1060-	99.00
ALLIED SIGNAL INC	CARBON PITCH - ALLIE	DT	GRESHAM TRSF	9270001881	104220	42320	61900	1280-	98.79
ALLIED SIGNAL INC	CARBON PITCH - ALLIE	DT	GRSHM TRASF	9270001882	103980	42260	61720	1520-	98.56
ALLIED SIGNAL INC	CARBON PITCH - ALLIE	DT	GRESHAM TRSF	9270001883	105180	42300	62880	320-	99.70
ALLIED SIGNAL INC	CARBON PITCH - ALLIE	DT	GRESHAM TRSF	9270001892	105560	42120	63440	60	100.06
ALLIED SIGNAL INC	CARBON PITCH - ALLIE	DT	GRESHAM TRSF	9270001893	103340	42120	61220	2160-	97.95
ALLIED SIGNAL INC	CARBON PITCH - ALLIE	DT	CUSTOMER ARRANGED	9270001894	104140	42140	62000	1360-	98.71
ALLIED SIGNAL INC	CARBON PITCH - ALLIE	DT	CUSTOMER ARRANGED	9270001895	105260	42200	63060	240-	99.77
ALLIED SIGNAL INC	CARBON PITCH - ALLIE	DT	GRESHAM TRSF.	9270001903	105500	42540	62960		100.00
ALLIED SIGNAL INC	CARBON PITCH - ALLIE	DT	GRESHAM TRANSF	9270001904	105080	42060	63020	420-	99.60
ALLIED SIGNAL INC	CARBON PITCH - ALLIE	DT	GRESHAM TRANSF	9270001905	105480	42300	63180	20-	99.98
ALLIED SIGNAL INC	CARBON PITCH - ALLIE	DT	GRESHAM TRANSF	9270001906	106120	42380	63740	620	100.59
ALLIED SIGNAL INC	CARBON PITCH - ALLIE	DT	GRESHAM TRASF	9270001907	103240	42280	60960	2260-	97.86
									97.86
			REPORT TOTALS:		2504840	1012540	1492300	27160-	98.93
			SHIPMENTS		24		÷2000 = 746.150		

Allied: [illegible]

[illegible]

we held the [illegible]

FAX MEMORANDUM

June 20, 1996

To: Howard Simon, Allied Signal

From: Amos Kamerer, Koppers Industries

Reference: Chinese Pencil Pitch Shipments

To confirm our agreement, we have shipped you 681.82 tons this month, and plan to ship you approximately 750 tons in July, and will ship nothing in August.

Invoices will be issued as the material ships, however you will only be required to pay for a maximum of 500 tons for each of the three months.

The following invoices are to be paid for as the June shipments and total 494.99 tons:

Invoice # 9270-06-00468,469,470,471,472,481,482,483,487,488,489,490,497,498, 499,405,534 and 535.

The following invoices will be considered to have 45 day terms and will be part of the July shipments, these total 186.83 tons:

Invoice # 9270-96-00505,506,507,516,517 and 518

After the completion of the July shipments, I will provide you with a similar recap for payment purposes.

Please call if you have any questions.

Amos

Amos S. Kamerer

cc: K.J. Fitzgerald
M.G. Smrek, Credit & Collections

Date Run: Jun 20 96 07:57 TRUCK SHIPMENTS Page: 1
Plant : PORTLAND SHIPPING WEIGHT ANALYSIS REPORT Dates: 96/06/01 thru 96/06/19

Target Load Weight: 105500

REPORT# 2 - BY SHIP-TO-N

Inv. 9270-96-00

SOLD-TO NAME	COMMODITY	PKG	CARRIER/ROUTE	B.O.L.	GROSS	TARE	NET	DIFF	LOAD FAC.
ALLIED SIGNAL INC 468	CARBON PITCH - ALLIE	BK	CUSTOMER ARRANGED	9270001690	102160	42780	59380 ✓	3340-	96.83
ALLIED SIGNAL INC 469	CARBON PITCH - ALLIE	BK	CUSTOMER ARRANGED	9270001691	104180	41780	62400 ✓	1320-	98.75
ALLIED SIGNAL INC 490	CARBON PITCH - ALLIE	BK	CUSTOMER ARRANGED	9270001692	105280	41920	63360 ✓	220-	99.79
ALLIED SIGNAL INC 470	CARBON PITCH - ALLIE	BK	CUSTOMER ARRANGED	9270001693	105800	42540	63260 ✓	300	100.28
ALLIED SIGNAL INC 471	CARBON PITCH - ALLIE	BK	GRESHAM TRANSFER	9270001703	102480	41980	60500 ✓	3020-	97.14
ALLIED SIGNAL INC 472	CARBON PITCH - ALLIE	BK	GRESHAM TRASF	9270001704	104760	42360	62400 ✓	740-	99.30
ALLIED SIGNAL INC 481	CARBON PITCH - ALLIE	BK	GRESHAM TRANSFER	9270001705	102740	42620	60120 ✓	2760-	97.38
ALLIED SIGNAL INC 482	CARBON PITCH - ALLIE	BK	GRESHAM TRANSF	9270001706	104500	41740	62760 ✓	1000-	99.05
ALLIED SIGNAL INC 483	CARBON PITCH - ALLIE	BK	GRESHM TRSF	9270001707	105200	42440	62760 ✓	300-	99.72
ALLIED SIGNAL INC 487	CARBON PITCH - ALLIE	BK	GRESHAM TRSF	9270001715	104660	41620	63040 ✓	840-	99.20
ALLIED SIGNAL INC 488	CARBON PITCH - ALLIE	BK	GRESHAM TRASF	9270001716	104660	42560	62100 ✓	840-	99.20
ALLIED SIGNAL INC 489	CARBON PITCH - ALLIE	BK	GRESHAM TRSF	9270001717	105080	42260	62820 ✓	420-	99.60
ALLIED SIGNAL INC 497	CARBON PITCH - ALLIE	BK	GRESHM TRSF	9270001718	104060	42360	61700 ✓	1440-	98.64
ALLIED SIGNAL INC 498	CARBON PITCH - ALLIE	DT	GRESHAM TRANSFER	9270001726	104040	42100	61940 ✓	1460-	98.62
ALLIED SIGNAL INC 499	CARBON PITCH - ALLIE	DT	GRESHAM TRANSF	9270001727	104580	42400	62180 ✓	920-	99.13
ALLIED SIGNAL INC 504	CARBON PITCH - ALLIE	DT	GRESHAM TRANSFER	9270001728	103220	42480	60740 ✓	2280-	97.84
ALLIED SIGNAL INC 505	CARBON PITCH - ALLIE	DT	GRESHAM TRANSF	9270001729	103160	41920	61240 ✗	2340-	97.78
ALLIED SIGNAL INC 518	CARBON PITCH - ALLIE	DT	GRSHAM TRANSFER	9270001730	104400	42200	62200 ✗	1100-	98.96
ALLIED SIGNAL INC 506	CARBON PITCH - ALLIE	DT	GRESHAM TRANSFER	9270001731	103780	42320	61460 ✗	1720-	98.37
ALLIED SIGNAL INC 507	CARBON PITCH - ALLIE	DT	GRESHAM TRANSFER	9270001732	105240	41800	63440 ✗	260-	99.75
ALLIED SIGNAL INC 516	CARBON PITCH - ALLIE	DT	GRESHAM TRANSFER	9270001737	105500	42540	62960 ✗		100.00
ALLIED SIGNAL INC 517	CARBON PITCH - ALLIE	DT	GRESHAM TRANSFER	9270001738	104880	42520	62360 ✗	620-	99.41
									99.41
			REPORT TOTALS:		2294360	929240	1365120	26640-	98.85
			SHIPMENTS		22				

534 Credit Memo on B.O.L. 9270001692 <105280> <41920> <63360> -
535 Correct Billing on B.O.L. 9270001692 103800 41920 61880 -

Correct Report Totals 2292880 929240 1363640

÷ 2000 = 681.82

- 989,980 #
494.99 S Tons

X balance 373,660 #
186,83 S. Tons

681,82

J. CAMERON McKERNAN COMPANY

Engineering & Naval Architecture

825 NE 20th Avenue, Suite 110 • Portland, Oregon 97232 • (503) 232-7211 • FAX (503) 232-7658

INVOICE

RECEIVED

JUN - 9 1997

KOPPERS INDS., INC.
PORTLAND, OR

June 6, 1997

NO: PI97-46

Koppers Industries, Inc.
1005 William Pitt Way
Pittsburgh, PA 15238-1362

Attention: James T. Dietz

Reference: Purchase Order No. 3000-7-9020

DESCRIPTION	AMOUNT
Portland Pitch Ship Unloading Pier & Pipe Line Project (INTERIM INVOICE for the period from 5-1-97 to 5-31-97) (McKernan Job No. P97-10)	
Engineering services to support the pitch ship unloading pier and pipe line project as outlined in McKernan letter dated 3/19/97. Services during this period are listed on the following pages.	
CHARGES	
LABOR (Summary & Activity Logs attached):	
Principal engineer: 20 man-hours @ $75 per man-hour	$1,500.00
Senior Designer/Drafter: 15 man-hours @ $35 per man-hour	525.00
TOTAL AMOUNT DUE (35 man-hours)	$2,025.00

TERMS: Net cash

KI 37W REV 2 6M 6/90

CIRCLE TERMS ON INVOICE

GIL	DET.	S-DET.	LOC.	DEPT.	TAX	EMP #	MOVE # PO #	AMOUNT
4210			9270	8027	0362			2025 -

INV # 97-46 DATE 6/6/97

A/P DEPARTMENT USE ONLY

VENDOR NUMBER 0 0 6 5 6 5 0 0 8

TERMS CODE: 045 DUE DATE: / /

OK TO PAY

GROSS AMOUNT 2025 -

DISCOUNT $

NET $

IMPORTANT: CIRCLE TERMS ON INVOICE

DIVISION	MONTH	AUDIT NUMBER
483	6	92700362

June 6, 1997

Koppers Industries, Inc. (Attention: J. Dietz)
Pitch Ship Unloading Pier and Pipe Line Project
Purchase Order No. 3000-7-9020
McKernan Invoice No. PI97-46

DESCRIPTION	AMOUNT

1. Visited Koppers Terminal on 5-1-97. Met with Jim Dietz and Amos Kamerer of Koppers and Christian Nielsen of Tar Tech International. Discussed the project and viewed the site.

2. Prepared Construction and Environmental Protection Procedure. Sent the Procedure by FAX to Jim Dietz on 5-5-97. Mailed copies to Jim Dietz, Amos Kamerer and Sandra Hart of NW Natural Gas Co. on 5-8-97.

3. Contacted Gearbulk and ship owners KGJS to obtain information on the discharge pressure of the ships that will be unloading at the terminal.

4. Visited Koppers Terminal on 5-12-97. Met with Koppers, NW Natural Gas Co., Oregon DEQ, and a Geotechnical firm's personnel. Discussed site contamination and proper pile driving procedures.

5. Contacted Portland Fire Bureau. Obtained their requirements for the pipe line clearances on road ways. Wrote letter forwarding requirements to Jim Dietz and Amos Kamerer. Sent letter by FAX and by mail on 5-20-97.

6. Prepared draft of Joint Corps of Engineers and State of Oregon Permit Application. Hand delivered to Amos Kamerer with letter dated May 16, 1997.

7. Obtained schedule of permit fees for the City of Portland. Worked up estimate for the Koppers Project. Wrote letter forwarding estimate to Jim Dietz and Amos Kamerer. Sent letter by FAX and by mail on 5-20-97.

END

June 6, 1997

Koppers Industries, Inc. (Attention: J. Dietz)
Pitch Ship Unloading Pier and Pipe Line Project
Purchase Order No. 3000-7-9020
McKernan Invoice No. PI97-46

LABOR SUMMARY
(From 5-1-97 through 5-31-97)

Period ending:	5/15	5/31	TOTAL
Principal Engineer:			
McKernan	15½	4½	20
Senior Designer/Drafter:			
Kincaid	15	0	15
			35 man-hours

ACTIVITY LOG

NAME J. CAMERON MCKERNAN PERIOD ENDING MAY 15, 1997

JOB NO: P97-10 NAME KOPPERS PITCH SHIP TERMINAL (1 OF 2)

DATE	HOURS	DESCRIPTION OF ACTIVITY
5-1	3	Went directly from the house to Koppers. I arrived there a little bit before 9:00. Met with Jim Dietz, Amos Kamerer, and Christian Nielsen. Discussed the project. In particular, my end of it. Got some assignments verbally from Jim Dietz and discussed some technical questions about how the pipes got supported, what the distance is between the pipes, what kind of insulation gets put on, and discussed the access bridge and the pilings and the modified bridge between the existing dock and the upstream dolphin. We finished these discussions and went out to the site and walked the area where the bridge is going to end and the pipe line is going to run. Decided to re-route the pipe to a different location. Went back to the office, finished up our discussions, and I left shortly before noon.
5-5	3 1/2	Prepared draft of the Construction and Environmental Protection Procedure. Had Mary type it and I edited it a couple of times and then sent it by FAX to Jim Dietz in Pittsburgh.
5-7	1	Tried to call the City Building Department. Made several attempts but was left with electronic mail. People did not call back. Wrote a letter to Stephen Brown at Gearbulk regarding the discharge pressure from the ship for design of the piping system on shore.
5-8	1/2	Checked the draft of the construction and environmental protection procedure and signed the forwarding letters and had Mary mail them before she left so the people could have them by mail tomorrow or at least by Monday.
5-9	1 1/2	Reviewed the Corps of Engineer Application Form and prodded Mike to get the little drawings that have to go with the application completed. Reviewed his drawings and made some mark ups to get the captions and the organization the way the Corps of Engineers wants it. I also attempted again to call Ritch Butchert, the man Russ Sill told me to call about the clearances for fire truck access.
5-12	2 1/2	Attended meeting at Koppers with Gas Co. personnel, State of Oregon DEQ personnel, an environmental management firm, and some Geotechnical engineer firm to discuss the contamination on the site and in particular how we are going to drive piles so that we can support the tank properly.
	12	

CONT'D . . .

SIGNED [illegible] DATE 5-22-97

Total 2 pages = 15½ mh

1 of 2

ACTIVITY LOG

NAME J. CAMERON MCKERNAN PERIOD ENDING MAY 15, 1997

JOB NO: P97-10 NAME KOPPERS PITCH SHIP TERMINAL (2 OF 2)

DATE	HOURS	DESCRIPTION OF ACTIVITY
5-14	2	Telephone conversation with Ritch Butcher of the Portland Fire Bureau about the requirements for clearances on road ways. He sent me a FAX of the excerpts from the National Fire Code. Telephone conversation with Mario Ramirez Gaston who is with KGJS who are the ship owners for Gearbulk with comments on the letter from Stephen Brown of Gearbulk. I was able to ferret out from him that the relief valve's pressure setting will probably be around 10 1/2 bar. Spent a few minutes reviewed the FAX from Glumac regarding the minutes of the meeting that was held on May 1st at Glumac.
5-15	1 1/2	Reviewed the Corps of Engineers Application. The text and all the little drawings. Marked and re-edited and had them redone again and got them to be in a final condition for submittal to Koppers.
	3 1/2	

SIGNED [signature] DATE 5-22-97

2 of 2

ACTIVITY LOG

NAME J. CAMERON MCKERNAN PERIOD ENDING MAY 31, 1997

JOB NO: P97-10 NAME KOPPERS PITCH SHIP TERMINAL

DATE	HOURS	DESCRIPTION OF ACTIVITY
5-16	2	Checked Michael's print of the little Corps of Engineer's Permit Application and made the vicinity plan with all the correct captions. Assembled the whole thing. Gave it to Mary-Anne to make some corrections in the application form and asked her to make 3 copies. 2 copies to be sent to Amos Kamerer at Koppers.
	1 1/2	Asked Mary to get the schedule for the permit fees from the City of Portland. She was able to obtain them by FAX. I worked up an estimate for what the fees are going to be for a $6 million dollar project. Had Mary go back to the City and ask some questions that were a little bit confusing in the fee schedule. Finished the fee estimate.
5-20	1	Checked and reviewed the letters to Jim Dietz regarding the Harbor Master's requirements on the pier. Checked with the City of Portland for the fee for the Greenway Review. Prepared a letter to send to Jim Dietz regarding the City of Portland's fees. Sent both letters to Jim Dietz and Amos Kamerer by FAX and by mail.

SIGNED JCMK DATE 6-4-97

4½ mh

ACTIVITY LOG

NAME MICHAEL H. KINCAID PERIOD ENDING MAY 15, 1997

JOB NO: P97-10 NAME KOPPERS PITCH SHIP TERMINAL

DATE	HOURS	DESCRIPTION OF ACTIVITY
5/3/97	½	HAD DISCUSSION w/ CAM ABOUT THE REROUTING OF THE PIPELINE.
5/5/97	2	WORKED ON SHEETS 97010-1, 8½ x 11 PERMIT DRAWING, AND LANDSCAPE PLAN. MADE CHANGES IN THE PIPE RUN LOCATION
5/8/97	1½	STARTED TO WORK ON FORMING OTHER 8½ x 11 DRAWINGS FOR PERMIT.
5/9/97	1½	WORKED ON SHEETS -2 TO -5 (8½ x 11 DRAWINGS) FOR PERMIT PACKAGE
5/12/97	1¼	WORKED ON SHEETS -2 THRU -5 OF THE PERMIT DRAWINGS AND PLOTTED THEM OUT FOR CAM TO TAKE TO HIS MEETING.
5/13/97	2½	WORKED ON SHEETS -1 THRU -5 FOR DRAWINGS THAT WILL BE SUBMITTED FOR PERMITS.
5/14/97	3¾	WORKED ON SHEETS -2 THRU -5 OF PERMIT PACKAGE. PLOTTED DRAWINGS FOR CAM TO REVIEW.
5/15/97	2	WORKED ON SHEETS -1 THRU -5 OF PERMIT DRAWINGS AFTER CAM'S REVIEW.

SIGNED [signature] DATE MAY 15, 1997

15 mh

J. CAMERON McKERNAN COMPANY
Engineering & Naval Architecture
825 NE 20th Avenue, Suite 110 • Portland, Oregon 97232 • (503) 232-7211 • FAX (503) 232-7858

RECEIVED
JUN - 9 1997
KOPPERS INDS., INC.
PORTLAND, OR
COPY

June 6, 1997

INVOICE

NO: PI97-46

Koppers Industries, Inc.
1005 William Pitt Way
Pittsburgh, PA 15238-1362

Attention: James T. Dietz

Reference: Purchase Order No. 3000-7-9020

DESCRIPTION	AMOUNT

Portland Pitch Ship Unloading Pier & Pipe Line Project
(INTERIM INVOICE for the period from 5-1-97 to 5-31-97)
(McKernan Job No. P97-10)

Engineering services to support the pitch ship unloading pier and pipe line project as outlined in McKernan letter dated 3/19/97. Services during this period are listed on the following pages.

CHARGES

LABOR (Summary & Activity Logs attached):

Principal engineer:	
20 man-hours @ $75 per man-hour	$1,500.00
Senior Designer/Drafter:	
15 man-hours @ $35 per man-hour	525.00
TOTAL AMOUNT DUE (35 man-hours)	$2,025.00

TERMS: Net cash

Amos - OK to Pay - J. [illegible]

KOPPERS INDUSTRIES

FAX TRANSMITTAL

Koppers Industries, Inc.
7540 N.W. St. Helens Road
Portland, OR 97210-3663

Telephone: 503-286-3681
Fax: 503-285-2831

TO: Jim Dietz DATE: 6/9/97

FROM: Amar TOTAL # OF PAGES: 8

For your Reviews AND PAYMENT APPROVAL

IF THIS TRANSMITTAL IS IN ERROR, PLEASE CALL 503-286-3681 FAX # 503-285-2831

Koppers004081

J. CAMERON McKERNAN COMPANY

Engineering & Naval Architecture

825 NE 20th Avenue, Suite 110 • Portland, Oregon 97232 • (503) 232-7211 • FAX (503) 232-7658

RECEIVED
MAY 19 1997
KOPPERS INDS. INC.
PORTLAND OR

May 7, 1997

INVOICE

NO: PI97-34

Koppers Industries, Inc.
1005 William Pitt Way
Pittsburgh, PA 15238-1362

Attention: James T. Dietz

Reference: Purchase Order No. 3000-7-9020

DESCRIPTION		AMOUNT
Portland Pitch Ship Unloading Pier & Pipe Line Project (INTERIM INVOICE for the period from "start" to 4-30-97) (McKernan Job No. P97-10)		
Engineering services to support the pitch ship unloading pier and pipe line project as outlined in McKernan letter dated 3/19/97. Services during this period are listed on the following pages.		
CHARGES		
LABOR (Summary & Activity Logs attached):		
Principal engineer: 59 man-hours @ $75 per man-hour . . .	$4,425.00	
Senior Designer/Drafter: 96¾ man-hours @ $35 per man-hour . . .	3,386.25	
Labor total (155¾ man-hours)	$7,811.25	$ 7,811.25
MATERIAL (copy of receipt & invoice attached):		
Photo reprints of site	82.50	
Minister-Glaeser surveying services. . . .	2,240.00	
Material total	$2,322.50	2,322.50
TOTAL AMOUNT DUE		$10,133.75

TERMS: Net cash

OK TO PAY - [signature]

KI 37W REV 2 6M 6/90

CIRCLE TERMS ON INVOICE

GIL	DET.	S-DET.	LOC.	DEPT.	TAX	EMP #	MOVE # PO #	AMOUNT
4210			9270	8027	0362			10134

INV # 9734 DATE 5/7/97

A/P DEPARTMENT USE ONLY

VENDOR NUMBER 0 0 6 5 6 5 0 0 8

TERMS CODE 45 DUE DATE: / /

OK TO PAY [signature]

GROSS AMOUNT 10133 75

DISCOUNT $

NET $

DIVISION	MONTH	AUDIT NUMBER
483	5	92700322

IMPORTANT: CIRCLE TERMS ON INVOICE

May 7, 1997

Koppers Industries, Inc. (Attention: J. Dietz)
Pitch Ship Unloading Pier and Pipe Line Project
Purchase Order No. 3000-7-9020
McKernan Invoice No. PI97-34

DESCRIPTION	AMOUNT

1. (NO CHARGE) Visited Koppers Terminal on 3-11-97. Met with Jim Dietz, Amos Kamerer of Koppers and Christian Nielsen of Tar Tech International to discuss the project.

2. Visited Koppers Terminal on 3-13-97. Met with Jim Dietz, Amos Kamerer, and Bill Swearingen to discuss the scope and schedule of my involvement in the project.

3. Hired Minister-Glaeser to survey the existing site and "stake" out the new pipe line route. Met with them at the Koppers Terminal on 4-3-97 to do the survey.

4. Prepared "SITE PLAN" incorporating previous drawings and new survey drawings.

5. Prepared "LANDSCAPE PLAN" and a specification for the landscaping.

6. Drafted PRELIMINARY City of Portland Land Use Review/Greenway Review Application. Hand delivered 2 copies to Amos Kamerer on 4-11-97.

7. Visited Koppers Terminal on 4-11-97. Met with Amos Kamerer and Stephen Brown of Gearbulk to discuss the project particularly projected cargos.

8. Corresponded with Gearbulk to obtain additional data on projected ship and cargo sizes.

9. Corresponded with Tar Tech International to obtain detailed information for the walkway and pipe support design.

10. Attended meeting at Northwest Natural Gas Company headquarters with Amos Kamerer on 4-15-97. Discussed project with their property manager and environmental specialist.

11. Prepared the following bridge concept plans:

    "ACCESS BRIDGE - PILING SUPPORTED CONCEPT" Plan No. 97010-SK1
    "ACCESS BRIDGE - SINGLE SPAN CONCEPT" Plan No. 97010-SK2

Cont'd . . .

May 7, 1997

Koppers Industries, Inc. (Attention: J. Dietz)
Pitch Ship Unloading Pier and Pipe Line Project
Purchase Order No. 3000-7-9020
McKernan Invoice No. PI97-34

DESCRIPTION AMOUNT

12. Completed final draft of the City of Portland Land Use Review/Greenway Review Application incorporating comments from Amos Kamerer.

13. Visited Koppers Terminal on 4-18-97. Delivered 2 copies of the Permit Application and Plans prepared to date to Amos Kamerer.

14. Worked with Glumac to obtain information for the pipe lay out and supports. Had several telephone conversations, exchanged drawings, and had a meeting on 4-25-97.

15. Revised the Site Plan to relocate the pipe line so it goes on the inside of the fence and up along the road as requested by Northwest Natural Gas Company.

16. Contacted contractors for pricing on some of th site work and on the water work.

17. Started drafting the Joint Corps of Engineers and State of Oregon Permit Application.

18. Prepared the following additional plans for use in estimating costs:

    "SECTIONS" - - - Plan No. 97010-SK4
    "PIPE LINE SUPPORTS" Plan No. 97010-SK4

19. Visited Glumac offices on 4-30-97. Attended joint meeting of all the project participants to correlate estimates for the construction.

End

May 7, 1997

Koppers Industries, Inc. (Attention: J. Dietz)
Pitch Ship Unloading Pier and Pipe Line Project
Purchase Order No. 3000-7-9020
McKernan Invoice No. PI97-34

LABOR SUMMARY
(From "start" through 4-30-97)

Period ending:	3/15	3/31	4/15	4/30	TOTAL
Principal Engineer:					
McKernan	5½	6½	29½	17½	59
Senior Designer/Drafter:					
Kincaid	15½	14	21¼	46	96¾
					155¾ man-hours

ACTIVITY LOG

NAME J. CAMERON MCKERNAN PERIOD ENDING MARCH 15, 1997

JOB NO: P97-10 NAME PITCH SHIP TERMINAL

DATE	HOURS	DESCRIPTION OF ACTIVITY
3-11	N/C	(1 1/2 hours) Attended meeting at Koppers with James Dietz, Manager of Engineering, Amos Kamerer, Regional Sales Manager, and Christian Nielsen of Tar Tech International to discuss the engineering of a marine terminal and pipe line to receive coal tar pitch from ships.
3-12	1	Reviewed the old job files for this project. Pulled out some of the information that will applicable to this project such as the survey drawings. Did a fairly comprehensive review of the old files.
	1	Went over and visited the Pacific Northern Oil Dock just to re-familiarize myself with the dock.
3-13	3	Meeting at Koppers with Jim Deitz, Bill Swearingen, and Amos Kamerer to discuss the scope and schedule of project at least my involvement. Instructed Mary-Anne to go over to the City Planning Offices and get the current up-to-date instructions and forms for a Land Use Review.
	1/2	Instructed Michael to start making a site plan for the project and to convert the drawing that we have (which is a pencil drawing) into a CAD drawing.

SIGNED JCMK DATE 3-20-97

5 1/2 mh

ACTIVITY LOG

NAME MICHAEL H. KINCAID PERIOD ENDING MARCH 15, 1997

JOB NO: P97-10 NAME KOPPERS PITCH SHIP TERMINAL

DATE	HOURS	DESCRIPTION OF ACTIVITY
3-13-97	6	DISCUSSED PROJECT WITH CAM. STARTED TO PUT SITE PLAN OF KOPPERS ON CAD. REFERENCED SEVERAL DRAWINGS TO MAKE COMPLETE DRAWING.
3-14-97	6½	WORKED ON SITE PLAN
3-15-97	3	WORKED ON SITE PLAN

SIGNED [signature] DATE 3-17-97

15½ mh

ACTIVITY LOG

NAME J. CAMERON MCKERNAN PERIOD ENDING MARCH 31, 1997

JOB NO: P97-10 NAME PITCH SHIP TERMINAL

DATE	HOURS	DESCRIPTION OF ACTIVITY
3-17	1	Went over to Hugh Ackroyd and ordered 6 prints for the applications. Marked the prints so he could make the copies of them.
3-18	1/2	Contacted Bob Glaser of Minster & Glaeser Surveyors to make tentative arrangement to survey the site for this pipe line.
	N/C	(1/2 hour) Prepared a draft of the letter for the engineering cost.
3-19	1 1/2	Wrote a letter to Tar Tech requesting information for the dock walkway and pipe support design. Obtained the site plan and survey drawings, property line drawings, from the gas company. Briefly reviewed them with Michael so that we can make our site plan agree with them.
3-24	2 1/2	Went to Koppers and visited with Amos Kamerer. We toured the property and viewed the run for the pipe line, the location for the new storage tanks, the site of the new bridge, and small parking lot.
3-25	1/2	General hassle with Mary-Anne and Mike about getting the 3 or 4 transmissions we receive by email today reverse encoded so that we can get the information on our AutoCAD system. Mary was finally able to do that.
3-26	1/2	Brief discussion with Michael about what we're going to do to finish this site plan. Telephone conversation with Jim Latalla of Glumac regarding the site plan that he sent me.

SIGNED JCMK DATE 4-1-97

6 1/2 mh

ACTIVITY LOG

NAME MICHAEL H. KINCAID PERIOD ENDING MARCH 31, 1997

JOB NO: P97-10 NAME KOPPERS

DATE	HOURS	DESCRIPTION OF ACTIVITY
3-17-97	6	WORKED ON SITE PLAN.
3-18-97	1	DID SOME MINOR CHANGES TO SITE PLAN.
3-21-97	3	WORKED ON SITE PLAN. STARTED TO USE SITE PLAN FROM KOPPERS (PLANS RECEIVED)
3-25-97	½	SPENT TIME TRYING TO FIGURE OUT WHAT WAS SENT TO US FROM KOPPERS (E-MAIL)
3-26-97	½	DID SOME STUFF WITH THE DRAWING WE RECEIVED FROM KOPPERS (COMPUTER FILE)
3-27-97	2	WORKED ON COMBINING COMPUTER SITE PLAN FROM KOPPERS AND OUR SITE PLAN
3-28-97	1	WORKED ON SITE PLAN

SIGNED [signature] DATE 4-1-97

14mh

ACTIVITY LOG

NAME J. CAMERON MCKERNAN PERIOD ENDING APRIL 15, 1997

JOB NO: P97-10 NAME PITCH SHIP TERMINAL (1 OF 2)

DATE	HOURS	DESCRIPTION OF ACTIVITY
4-3	2	Went directly from the house to Koppers. Met with the surveyors from Minister & Glaeser; Tim Scott & David Proudfit. Went over the ground with them and explained the project and explained what I wanted to do in the way of locating the various features on the ground and particularly the distance from the pier dolphin to the top of the bank. They immediately measured that and it was 177 feet. We traced the whole length of the pipe line and along the top of the bank where the berms were for the tank enclosures along side where they were going to have this bridge.
4-4	2	Worked with Mike to show how I wanted to have the site plan reworked and the information added and correlated. Laid out where the new tanks were going to be and the new pipe line.
4-6	4	Studied the City of Portland Greenway Review documents. Drafted an Application for Greenway Review. Completed the draft except for the questions.
4-7	2	Instructed Mary on typing the draft of the City of Portland Application. Asked her to go down to the City and clarify, if she could, the requirement for "other questions" and asked her to go over to the Corps of Engineers and check that the form we have is the proper form. Talked with Bob Glaeser about where to send his invoice. Later talked to Jim Laitila at Glumac about the tanks. Checked with Michael Kincaid in the office about getting the plans done. Found out that he really hadn't made any over the weekend.
4-8	3	Worked with Michael and we got the site plan finished and checked and ready to send out. Had him make the reduced size site plan for the applications for permits. Received the survey map from Minister & Glaeser today. Reviewed that map. Had Michael incorporate some of the detailed dimension into our site plan.
4-9	2 1/2	Worked with Mike to get the landscape plan done. Drafted a specification for the landscaping.
4-10	5	Completed the preliminary of the City of Portland Greenway Review Application. Made a couple copies of the completed draft. Got ready for a meeting with Amos Kamerer tomorrow about the dock. Packed up the files and the drafts of the Greenway Review.
	20½	CONT'D. . .

SIGNED JCMcK DATE 4-25-97

29½ = both sheets 1 of 2

ACTIVITY LOG

NAME J. CAMERON MCKERNAN PERIOD ENDING APRIL 15, 1997

JOB NO: P97-10 NAME KOPPERS PITCH SHIP TERMINAL (2 OF 2)

DATE	HOURS	DESCRIPTION OF ACTIVITY
4-11	3	Met at Koppers office with Amos Kamerer and Stephen Brown of Gearbulk. Discussed the dock in quite a bit of detail and the project in general. Amos went over the projected cargos as they would be incrementally acquired. Made a tour of the site including the end of the new access bridge and out on the pier itself. Noted the dolphins that had been put in there for barges.
	1/2	When I came back to the office later I looked up the Lord fender system for the present dock and had Mary FAX the catalog cuts for those fenders to Stephen Brown.
4-13	4	Worked up a design for the access bridge using piling supports. Made a weight estimate and a cost estimate. Worked up a design for the access bridge without any piling. Made a weight estimate and a cost estimate for it.
4-15	1 1/2	Attended a meeting at Northwest Natural Gas Company headquarters with Amos Kamerer. Met with the gas company's property manager and environmental specialist and discussed the dock project.
	9	

SIGNED JCMcK DATE 4-25-97

2 of 2

ACTIVITY LOG

NAME MICHAEL H KINCAID PERIOD ENDING APR 15, 1997

JOB NO: P97-10 NAME KOPPERS PITCH SHIPTERMINA

DATE	HOURS	DESCRIPTION OF ACTIVITY
4-4-97	1	HAD DISCUSSION W/ CAM ABOUT SITE PLAN AFTER INFORMATION WAS RECEIVED.
4-8-97	11 1/4	WORKED ON SITE PLAN. REVIEWED PLAN W/ CAM AFTER PLOTTING. WHEN CHANGES WERE INCORPORATED, CREATED 8 1/2 x 11 DRAWING OF SITE. DISCUSSED LANDSCAPE PLAN W/ CAM
4-9-97	3	WORKED ON LANDSCAPE PLAN MADE SMALL CHANGES TO 97010-1 AND MATCHING 8 1/2 x 11 DRAWING. PLOTTED ALL DRAWINGS.
4-10-97	3/4	WORKED ON ALL DRAWINGS (97010-1 8 1/2 x 11 DRAWING, & LANDSCAPE PLAN)
4-11-97	1/2	HAD DISCUSSION W/ CAM ABOUT PROJECT (DISCUSSION ABOUT BRIDGE)
4-14-97	4 3/4	WORKED ON PLAN & ELEVATION OF DOCK / BANK / BRIDGE (97010 - SK1) PLOTTED DRAWING FOR CAM TO REVIEW.

SIGNED MHK DATE 4-16-97

21 1/4 mh

ACTIVITY LOG

NAME J. CAMERON MCKERNAN PERIOD ENDING APRIL 30, 1997

JOB NO: P97-10 NAME KOPPERS PITCH SHIP TERMINAL

DATE	HOURS	DESCRIPTION OF ACTIVITY
4-18	2 1/2	Completed the final preliminary draft of the City of Portland Greenway Permit Application and made 2 copies of it. Worked with Michael reviewing the drawings for the 2 different bridge access concepts. Marked them up and he revised them. He and Esteban then plotted them and ran me 2 prints. Went over and visited Amos Kamerer briefly at Koppers and discussed the 2 bridge concepts and discussed my concern about the adequacy of that pier for handling as big a ship as they are talking about bringing in there.
4-25	4	Reviewed Mike's site plan and had him revise it to relocate the pipeline so it goes on the inside of the fence and up along the road as requested by the gas company. He made the revision on the screen, I checked it, and he plotted it out. Went over to Glumac with my plans and met with John Duffy. Received a bunch of the TarTech drawings and standard sheets for fabrication. Did some analyses of the piping loads to determine how accurate we had to be in aligning the heights of the supports. Made a sketch of a possible reinforced concrete base for the pipe supports.
4-28	3	Contacted some perspective contractors in order to get prices for some of the site work on the water side. Contacted Chuck Chandler at Chandler Electric, Hal Hickman of Hal's Construction, Rod Monroe of Smith, Monroe & Gray, an engineering firm that I would use to help with the design of the bridge. Outlined the project with them and told them I would be sending some more data and information to them. Worked up some general calculations to determine the expansion of the piping because of the temperature. Instructed Mike to make some sketches of the piping and the pedestals and the road and the parking area next to the dock so we can estimates for the work.
4-29	5	Worked with Michael to get the site plan and the landscape plan for the Greenway Application revised so the Greenway Application can be signed tomorrow if Koppers is ready to do that. Reviewed Mary's draft of the Corps & State of Oregon Permit Application and marked it up for her to revise. I'll wait until after the meeting tomorrow to finish it. Had Michael complete the sketch on the piping supports and kind of a detail of a pad to set the pipes on. Made preparations for the meetings tomorrow. Got my files in order, my calculations in order, and assembled the drawings and sketches that I prepared.
4-30	3	Attended a meeting at Glumac for the purposes of correlating the estimates for the construction. Gathered my files and got ready for the meeting. Participated in the meeting with some explanations of what has to be done along the waterfront. Got one assignment from the meeting, that is to contact the Fire Marshall and find out what he's going to want in the way of a fire protection system on the pier and in the plant area.

SIGNED JCMK DATE 5-3-97

17½ mh

ACTIVITY LOG

NAME MICHAEL H. KINCAID PERIOD ENDING APRIL 30, 1997

JOB NO: P97-10 NAME KOPPERS PITCH SHIP TERMINAL

DATE	HOURS	DESCRIPTION OF ACTIVITY
4/16/97	½	HAD DISCUSSION w/ CAM ABOUT PROJECT.
4/17/97	7½	WORKED ON SHEETS 97010-SK1 & 97010-SK2. PLOTTED DRAWINGS FOR CAM TO REVIEW.
4/18/97	6½	AFTER HAVING REVIEW w/ CAM ABOUT DRAWINGS MADE CHANGES AND PLOTTED THEM ON VELLUM.
4/21/97	4	WORKED ON VARIOUS THINGS CONCERNING SHEETS 97010-SK1 & 97010-SK2.
4/22/97	5	WORKED ON CROSS SECTIONS OF BRIDGES (97010-SK3)
4/23/97	2	WORKED ON SHEET 97010-SK3
4/24/97	2	WORKED ON SHEET 97010-SK3
4/25/97	3½	WORKED ON ALL SHEETS (MOVED LOCATION OF PIPE RUN). MADE PLOT OF ALL DRAWINGS. WORKED ON WEIGHT OF PIPE.
4/28/97	6½	MADE PLOT OF SURVEYED DRAWING. MADE A DRAWING OF PARKING AND DRIVE AREA TO BE FILLED WITH GRAVEL. WORKED ON DRAWING OF CONCRETE PAD SUPPORT FOR PIPE (96023-SK4)
4/29/97	8½	WORKED ON SHEETS 97010-1, -SK4, PERMIT AND LANDSCAPE DRAWINGS. PLOTTED ALL DRAWINGS

SIGNED [signature] DATE 5-1-97

46 mh

Kamerer Amos

From: Self Traci
Sent: Tuesday, November 06, 2001 9:42 AM
To: Kamerer Amos
Subject: RE: Pacific Terminal Services - Proposal

Hi Amos,

I spoke with Troy and he was helpful in determining requirements for asphalt storage. I reviewed various regs, coast guard, CWA, CAA, Solid Waste and Oregon Regs and statutes. As we discussed asphalt storage would require notification in accordance with the Air Contaminant Discharge Permit and emission calculations to show we can meet exiting permit conditions. There is an Effluent Limitation Guideline (ELG) for Asphalt Concrete production at 40 CFR 433, Troy and I don't believe this pertains to storage but we must meet existing NPDES limits and should notify Elliot of new material on-site. From your description of the process KII will provide terminal service only of "Asphalt cement" MSDS provided. It is my understanding that it is an intermediate product for manufacturing cutback, emulsified and/or cement asphalt, none of which will be produced or stored on the KII facility.

Discussions with Troy and reading of 40CFR112 SPCC and Coast guard regs -a SPCC and oil spill response plan would be applicable to the facility. The coast guard regulates from the barge to the first tank valve and EPA controls tank and any potential releases. Troy states that PTSI they would be willing to amend their existing Oil Spill response plan to include asphalt storage at KII. Troy also said that PTSI responsibility would be the same as for pitch- for emergency shut down only and clean-up would be responsibility of KII. I am not sure if this is in agreement with Steve Kifer's assessment of the contract. KII would need to amend the existing Terminal SPCC plan to include Bulk storage of Asphalt, periodic tank inspections must be included as well as a means to prevent material from the tank from entering the river (diversions, barrier etc). Notification of storage of a hazardous substance would be required to the Fire Marshal however asphalt is exempt from fee payment. Notification should also be made to the city of Portland for sewer discharge authorization. If I can assist with any of the notifications, please let me know. Thank You.

-----Original Message-----
From: Kamerer Amos
Sent: Tuesday, November 06, 2001 11:38 AM
To: Self Traci
Subject: FW: Pacific Terminal Services - Proposal

Traci,

Here's the quote letter for Troy with the reference to the SPCC and PSCP.

Amos
-----Original Message-----
From: Troy Goodman [mailto:TroyG@fammpnw.com]
Sent: Monday, November 05, 2001 10:21 AM
To: James Dietz (E-mail)
Cc: Vince Godfrey; Amos Kamerer
Subject: Pacific Terminal Services - Proposal

Jim,

Thank you for the opportunity to meet with you last week. I hope you had a successful trip. Attached is a proposal for personnel services for land based operations and oil dock services. I believe this covers your requirements. I will call you this week to discuss.

Regards,

Troy

Author: AMOS KAMERER at PITT
Date: 5/25/98 9:01 AM
Priority: Normal
TO: randy.czikall@primary.kaiseral.com at Internet
Subject: Labratory Analysis Work Times
---------- Message Contents ----------

Hi Randy,

I'm wondering if you have developed any kind of a an activity list for your Lab personnel, that shows the approximate time that it should take for that person to do the various pitch analysis'? I realize that in most cases that your doing ISO, and were doing ASTM, tests, however, if you have anything at all that you have developed, I would still like to see a copy of it.

Thanks,

Amos 6/5/98 1 man - 2 days to run full pitch analysis

KOPPERS INDUSTRIES, INC.

STICKNEY PLANT

QUALITY ASSURANCE ACTIVITY LIST

DEPARTMENT: TAR PLANT

ACT. NO.	wit of	ESTIMATED R.E.S	OBSERVED R.E.S	"USED R.E. s"
1	METTLER SOFTENING POINT	5	5	5
2	R/B SOFTENING POINT	15		15
3	C/W SOFTENING POINT			15
4	QI- Quenoline Insoluble	30	29	30
5	ASH	10	8	10
6	TI - Toluene Insoluble	7	6	30
7	XI - Xylene Insoluble	30	28	30
8	C/V- COKING VALUE	7		7
9	PITCH DISTILLATION	45		45
10	CREOSOTE DISTILLATION	45	60	60
11	CARBON BLACK DISTILLATION			60
12	Pitch Specific Gravity	15	11	11
13	TI- Becancour			7
14	FLOAT TEST	15	9	10
15	CS(2)- Carbon Disulfide	10		10
16	% H2O (K. Fisher or D. Stark	8	7	8
17	Limpid Point	1		1
18	GC- Gas Clromatograph	10		10
19	Open Cup - Flash Point	65		65
20	Closed Cup - Flash Point			65
21	Gravity of Fractions	40		40
22	SP of Residue on soft carbon	5		5
23	API Gravity			1
24	BMCI			1
25	Chlorides in Crude Tar			
26	Issue C of A on shipments			2
27	SP.GR. by Hydrometer		4	4
28	PHONE CALLS			2

NOTES:

1. The observed R.E.s were very close to the estimated R.E.s.
2. The red colored R.E.s under the " USED R.E.s" are from the estimated R.E.s.
3. The red colored R.E.s under th " USED R.E.s" without an estimated R.E.s, are numbers from the discussion with the

includes Preperation & Clean up

Koppers004097

KOPPERS INDUSTRIES

FAX COVER SHEET

Koppers Industries, Inc.
3900 S. Laramie Avenue
Cicero, IL 60650

Telephone (708) 656-5900
Fax (708) 656-6079

Date:	03/16/98

Company Name:	
Contact Name:	AMOS KAMERER
Location:	PORTLAND
Fax Number:	503-285-2831

Sender:	JOE GORBA
Description:	
	AS YOU REQUESTED
	CALL IF YOU HAVE QUESTIONS

Number of pages (including cover sheet):	2
If there are any problems with this transmission, please call the sender at (708) 656-5900 immediately	

Table 3.8
TANK LISTING TABLE
Koppers Industries, Northwest Plant

Tank No.	Current use	Last contained	Capacity (000)
1.	SW Surge	Crude Tar	660 M
2.	SW Surge	Crude Tar	1065 M
3.	SW Surge	Methyl Solvent	99 M
4.	SW Surge	Lt. Uncorrected Creosote	99 M
11.	SW Surge	Creosote	254 M
12.	SW Surge	Unknown	57 M
17.	SW Surge	Heavy Oil	20 M
18.	SW Surge	NSR Oil	20 M
19.	SW Surge	P & R Oil	20 M
20.	SW Surge	Creosote	317 M
23.	SW Surge	Lt. Uncorrected Creosote	20 M
33.	Heavy Oil	Heavy Oil	45 M
34.	SW Surge	NSR Oil	45 M
39.	SW Surge	Creosote	20 M
53.	SW Surge	Creosote	10 M
65.	Liquid Pitch	Heavy Oil	761 M
66.	SW Surge	Creosote	191 M
67.	Heavy Oil	Heavy Oil	102 M
68.	Liquid Pitch	Liquid Pitch	248 M
74.	SW Surge	Creosote	20 M
99.	SW Surge	Creosote	209 M
101.	SW Surge	Creosote	759 M
102.	Fume Tank	Heavy Oil	9.3 M
200	Liquid Pitch	Liquid Pitch	2100 M
V201	SW Surge	Liquid Pitch	19 M
V207	SW Surge	Liquid Pitch	19 M
240	Heat Transfer Oil	Heat Transfer Oil	2 M
250	Heat Transfer Oil	Heat Transfer Oil	2 M
SW #1	Storm Water (SW)		45 M
SW #2	Storm Water (SW)		45 M
SW #3	Storm Water (SW)		45 M
SW #4	Storm Water (SW)		45 M
SW #5	Storm Water (SW)		20 M
SW #6	Storm Water (SW)		20 M

Koppers004099

Condition*	Tank #		Product	Residue (Gals.)
70% Liquid	T-1	(A)	Crude Tar/other	19,755 -
"	T-2	(A)	Crude Tar	26,851 -
Mush	T-3	(A)	Methyl Naphthanate	1,691 -
Hard	T-101	(B)	Distillate (Mostly Creosote)	169,184 -
Mush	T-11	(B)	Creosote	3,131 -
Hard	T-17	(A)	Distillate	425 -
Hard	T-18	(A)	"	2,547 -
Mush	T-19	(A)	"	566 -
Mush	T-20	(A)	"	5,444 -
Mush	T-23	(A)	"	1,977 -
Mush	T-34	(A)	"	1,585 -
Hard	T-4	(A)	"	16,081 -
"	T-53	(C)	Creosote/Mud+Rock	2,400
"	T-66	(B)	Creosote	18,915 -
Mush/Dirt	T-74	(C)	Creosote/Mud+Rock	500
70% Liquid	T-99	(A) (D)	Distillate/WATER	17,400 - (3,600 product, 13,800 water)
UNKNOWN	T-39	(A) (D)	Distillate/water	

17 TANKS

	Gals	#@ 9#/gal	@ %	Tons Needed to blend
A) Naphthalene lighter than Creosote	80,522	724,698#/362.4T.	2%	18,120
B) Creosote	191,130	1,720,170#/860.1T	4%	21,503
C) Non-Recyclicable	2,900			
D) Water to be disposed.	13,800			
				39,623

* As known About 12 years Ago

Koppers Industries, Inc.
Northwest Terminal
7540 NW Saint Helens Road
Portland, Oregon 97210
Tele. 503/286-3681
Fax. 503/285/2831

Fact Sheet

Railroad: Portland & Western RR, short line carrier off of the BNSFRR main line.
9 spots on the inner track and 20 spots on the outer track
There is a $75 switching fee between the 2 tracks.

Marine facilities: Gasco Dock, Columbia River, Portland, Oregon, for only liquid products.
The dock is considered to be a Panamax size facility, with a max. vessel length of 800'.
The normal mean low water draft is 34', but this can change at various time of the year, depending on the water conditions on the river.

Truck Loading: Available, however, there no scales on site.
Public scales are located with in 5 miles of the terminal.
This scale is 82' long, with a max. capacity of 120,000#

Warehouse storage: 46,500 SF of covered area.

Available tankage:

Tank #	Capacity(gals.)	Heating type	Max. Heat available
1	660,000	None	N/A
11	250,000	None	N/A
33	45,000	Steam	250 F
34	45,000	Steam	250 F
65	760,000	Hot Oil	450 F
67	100,000	Steam	250 F
68	245,000	Hot Oil	450 F
200	2,000,000	Hot Oil	450 F

Tanks 65, 68 & 200 are connected to a fume recovery system, as are the truck and rail car load out stations.

The boiler is a 440 HP, 130-PSI low-pressure steam.

There are 2 hot oil heater units: one is a 10 MMBtu unit and the other is an 8 MMBtu unit, that service tanks 65, 68, 200 and related piping system to them and the load out stations.

Services Provided to Koppers Today

- Dock Services Including
  - Receiving and letting go vessel lines
  - Hooking up and unhooking hoses
  - Opening and closing dock valves
  - USCG Person-In-Charge providing constant surveillance of the operation
  - Putting out and retrieving oil spill boom
  - Participate in emergency response drills
  - Secure, test, and drain pipeline after vessel receipts
  - Participate in regulatory testing

Koppers004102

Pacific Terminal Services, Inc.

Proposal For

Operation of Koppers Portland Terminal

November 14, 2000

Pacific Terminal Services, Inc. is pleased to offer our services to operate the Koppers Portland Terminal and provide your dock services for a fixed monthly fee that is less than your current operating cost. We are a company that endeavors to operate in a safe and environmentally sound manner while being focused on customer satisfaction. We have always been flexible in our ability to respond to customer needs and desires. It is with great pride that we make the following offer to your firm.

We are willing to further discuss any and all parts of this offer in the spirit of fair business dealing and cooperation of both parties involved to develop the best contract for all parties concerned. This offer is valid through close of business November 30, 2000.

Operation of Pacific Terminal Services

We at Pacific Terminal Services desire to be the premier marine terminal operations company. We are based in Seattle with our other major office in Portland, Oregon. Pacific Terminal Services is a subsidiary of Harley Marine Services, Inc., one of the fastest growing marine transportation businesses on the West Coast. Pacific Terminal Services has an excellent reputation for operating terminal equipment with first class employees who are considered some of the best in the industry. The complete history of Pacific Terminal Services and its parent company, Harley Marine Services, Inc., is detailed later in this proposal.

Scope of Pacific Terminal's Services

Pacific Terminal Services will provide terminal services as requested by Koppers to include:

1. Schedule, receive, store, inventory, blend and deliver pitch, from and to trucks, rail cars, barges and/or vessels;
2. In connection with (1) above, ensure that products are properly transferred into and out of the storage tanks and ensure product quality and quantity.
3. Provide Koppers with a daily fuel inventory report in form and manner satisfactory to Koppers, which contains, among other things, product receipts into and out of the Terminal and deliveries and product blended.

4. Provide Koppers with all documents relating to product transfers and additional reports as requested by Koppers.
5. Perform all maintenance work as required in the Northwest Natural Gas lease agreement.
6. Be available to perform services as scheduled with Koppers
7. Obtain all permits necessary to perform services.

Timing
Contract commencing December 1, 2000 or other mutually agreeable date.

Term:
Four-year term with a five-year option. Koppers can terminate within the first year provided they pay a $150,000 early termination fee. After the first year Koppers can terminate at any time with 180 days notice and a $75,000 termination fee.

Fee for Services
Terminal services including dock service will be provided for a monthly fee equal to Koppers current cost for the first 4175 tons (25,000 bbls) per month.

Incremental throughput above the minimum will be at an agreed per ton (or barrel) rate.

Any incremental or third party revenue less costs generated will be split evenly between the parties.

In addition, Koppers will pay an incentive of $5,000 per quarter for every quarter that Pacific Terminal Services performs without injury to persons or product spills.

Koppers Assets
Pacific Terminal Services will manage the terminal assets currently owned by Koppers.

Maintenance & Repair
Pacific Terminal Services will maintain the facility consistent with the Northwest Natural Lease Agreement.

Environmental Liability
Pacific Terminal Services will be responsible for any spills caused while under Pacific Terminal management.

PACIFIC TERMINAL SERVICES, INC. - COMPANY DESCRIPTION

Pacific Terminal Services is in the marine terminal and services business. We are dedicated to providing excellent customer service while mindful of obligations to employees, shareholders, community and the environment. Pacific Terminal Services, Inc. is a Washington corporation.

Pacific Terminal Services is a terminal management company on the West Coast and includes personnel experienced in world wide Terminal operations. We currently manage and operate two marine petroleum terminals for Fuel and Marine Marketing (FAMM), a joint venture between Chevron and Texaco. In a mature industry with an ever-shrinking customer base and tenacious regulatory environment, we have experienced success during our first years of operations. This has been achieved by listening to customer's needs and desires and then providing procedures and systems necessary to consistently deliver requested services in a timely, safe and cost effective manner. Pacific Terminal Services delivers outstanding service at competitive pricing, the first time and every time.

Pacific Terminal Services has operating offices in Seattle, Washington and Portland, Oregon. Our company is positioned for growth and diversification focusing on coastwise marine terminals, bulk logistics, and related marine services including dry bulk.

Pacific Terminal Services is a wholly owned subsidy of Harley Marine Services. Company officers include Vince Godfrey, President, and Lela Franco the Secretary Treasurer.

History

Pacific Terminal Services developed from the close relationship established between FAMM and Harley Marine Services. FAMM recognized Harley Marine Service's history of operations excellence and customer service and approached Harley Marine management concerning FAMM's need for a terminal operating company. Harley Marine put together a strategic alliance and started Pacific Terminal Services to meet the customer's needs. FAMM is extremely pleased with the results of the alliance and the performance of Pacific Terminals. Pacific Terminals has focused on improving facility productivity and has been rewarded with shared cost savings and incentives for accident and spill free operations. FAMM, through Pacific Terminals, has also been able to tap into the third party terminal revenue, further lowering facility operating costs. Pacific Terminals is organized to focus on productive, safe operations with the ability to market third party services and other creative opportunities that create value for the parties involved

Company Products and Services:

Terminal Operations

Koppers004105

Trucking Operations
Training and Planning
Inventory Control
Oil Spill Plans and Drills
Petroleum Product Storage and Transportation
Dry Bulk Product Storage and Transportation
Chemical Product Storage and Transportation
Capital Project Development
International Marine Project Management
Terminal Consulting Services

In addition to these services, Pacific Terminals brings personnel experienced in the logistics services, terminal operations, productivity improvement, and business/project development:

- Established an international petroleum terminal including inventory management system in Gabon, West Africa.
- Designed and built a crude oil blending terminal including odor control system in Alberta, Canada.
- Conducted pipeline and terminal productivity analysis for three domestic pipeline companies. Included increased throughput, reduced costs, and improved product quality.
- Coordinated development of a joint venture for LPG import business in Brazil. Included for capital development for two refrigerated LPG terminals in NE Brazil.

Company's Message
Pacific Terminal Services is a customer service oriented company that is quick to react to changing market conditions. Our company is currently one of the lowest cost operators in its marketing area. The message to our customers is that we can perform to customers' expectations while providing a more customer friendly environment and work at a lower price than the majority of our competitors.

Labor
Pacific Terminals is flexible and can operate in union and non-union environments. The company has extensive labor relations experience.

Risk Management
Pacific Terminal Services has a superior risk management program including insurance in the domestic and international markets.

Quality Control
Quality of operations is monitored by a regularly scheduled facility maintenance program. Included are regular tank inspections that meet API 653 guidelines. This coupled with regular visits to facilities and customers by the President and

Koppers004106

KOPPERS INDUSTRIES

APPROPRIATION REQUEST FOR ITEMS REQUIRING PRIOR APPROVAL

DIVISION Carbon Materials and Chemicals Division		APPROPRIATION NUMBER 9270.46	
PLANT OR LOCATION Portland, Oregon		CLASS	DEGREE OF RISK Low
TITLE (Summarize to one line) Liquid Pitch Unloading Terminal		ESTIMATED BEGIN DATE 4th Quarter, 1998	
		ESTIMATED START UP DATE 4th Quarter, 1999	
REQUESTED BY Kevin J Fitzgerald	APPROVED BY 2/2 Turner	DATE OF REQUEST May 20, 1998	

1. DESCRIPTION OF PROPOSED ASSET Dock and unloading pipeline, fume system, heating system and one 7,000 ton pitch storage tank with related material handling and instrumentation.

COSTS		AMOUNT
2. CASH EXPENDITURE		$4,310,000
3. TRADE-IN, SALVAGE OR SCRAP VALUE		
4. EQUIPMENT ON HAND NOT PREVIOUSLY CAPITALIZED		
5. TOTAL OF THIS REQUEST	(2 + 3 + 4)	$4,310,000
6. EQUIPMENT ON HAND PREVIOUSLY CAPITALIZED		
7. ESTIMATED TOTAL COST OF CAPITAL ITEM	(5 + 6)	$4,310,000
8. ESTIMATED WORKING CAPITAL REQUIREMENTS AVERAGE FIVE YEARS	(L22 ADS-230)	
EARNINGS - AVERAGE OF FIRST FIVE YEARS		
9. ESTIMATED INCOME BEFORE INTEREST AND TAXES	(L9 ADS-230)	$2,936,000
10. ESTIMATED NET INCOME AFTER INTEREST AND TAXES	(L13 ADS-230)	$1,604,000
11. % RETURN BEFORE INTEREST AND TAXES ON AVERAGE NET INVESTMENT	(L15 ADS-230)	57.0%
12. % NET RETURN ON AVERAGE NET INVESTMENT	(L16 ADS-230)	31.2%
PAYOUT PERIOD	(L28 ADS-230)	31 months
13. EXPIRATION DATE OF LEASE IF ON LEASED LAND		2008
14. PRESENT AGE IF USED EQUIPMENT		
15. SOURCE OF FUNDS FROM CAPITAL PROGRAM - 1999 expenditures will be included in the 1999 program. 1998 expenditures are included in current capital expenditure forecast.		$0

16. JUSTIFICATION SUMMARY

WHY DO THIS AT ALL? To participate in future aluminum growth in the Northwest as well as protect current pitch profitability.

WHY DO THIS THIS WAY? Current Portland infrastructure is in place and strategically located in center of Northwest aluminum market.

WHY DO THIS NOW It is anticipated that in the near future there will be no unloading facilities for solid pencil pitch.

		BOARD APPROVAL DATE

KII-2.0/vjl 6/93

Statement of Request

The Carbon Materials and Chemicals Division requests $4,310,000 for the conversion of Koppers' existing solid pitch melting facility at Portland, Oregon to a liquid pitch unloading terminal to retain existing business in the Pacific Northwest and to pursue future growth opportunities in this region.

Source of Funds

Funds will be provided in the 1999 capital expenditure program. The 1998 expenditures will be covered through the deferral of other 1998 capital projects.

Marketing Review

The United States aluminum industry has a current primary aluminum production capacity of 4.2 million metric tons of which 1.6 million metric tons is located in the Northwest (Washington, Oregon and Montana), or a total of 38%. In terms of carbon pitch demand for this industry in the Northwest, there is a demand of 191,000 metric tons at capacity.

We are projecting that the aluminum industry in the Northwest will be operating at 100% of capacity in 1999. Koppers will at that time be supplying 32% of this pitch requirement (15% of our total business).

As we look forward, we are projecting the following changes in the Northwest:

- It is anticipated that the aluminum industry capacity will remain at 100% over the next ten plus years. With the retail wheeling of power and continued cooperation with the Bonneville Power Authority, we see the smelters located in the Northwest being healthy and viable operations and operating at high capacity levels. Furthermore, there have been announcements of construction plans for 2 new smelters in the region for which feasibility studies are being conducted.

- The handling of solid pitch at the port facilities and at the smelters is becoming a very serious issue from both an environmental and worker health areas. Hall-Buck, the contractor we have been using at the Port of Portland for the past 12 years, has notified us that they are ceasing their operation as of June 1998 and will no longer be handling the pitch product because of environmental issues. The only other facility that is currently handling solid pitch in the Northwest is the Port of Longview, Washington facility. It is difficult to say how long the Longview Port will be operating. In fact, they only have an operating permit good through July 2001.

We are planning to utilize the Longview facility once Hall-Buck is out of business; but at a higher cost for unloading and transporting the pitch to the Portland

terminal. The current costs for unloading and transportation from Portland are $29.31 per ton, $11.44 per ton less than the Longview cost of $40.75 per ton.

The KII pitch melter tank at Portland was constructed in 1992 at a cost of $1.2 million and has provided Koppers the ability to service the Northwest market with import pitch. Plant gross profit over the last 5 years has averaged $1.0 million.

- The trend to convert to liquid pitch by the aluminum industry continues onward. Over the past four years, we have converted the Alcoa Wenatchee Washington and Intalco Washington smelters. The only Northwest smelters remaining on solid pitch are Vanalco, Goldendale Aluminum, Northwest Aluminum and Reynolds, Troutdale. Goldendale and Northwest Aluminum are now under the same ownership. We believe that Goldendale, Northwest and Troutdale will convert to liquid pitch within the next two years. In fact, all three locations have asked us for a proposal to terminal their pitch when they do their conversion. Vanalco will probably hang in until they are forced to do so.

- Smelters are also converting to liquid pitch in other parts of the world. Alba in Bahrain and Dubai in Dubal are converting to liquid this year and Alumar and Albras in Brazil have sent in serious inquiries. All future new smelters such as the one in South Africa (Alusaf) will have liquid tanks to receive their pitch in liquid form.

- Keopyung Steel Co. (KOSCO), in Korea, one of our suppliers of import pitch in the Northwest, and the 100% supplier to the Goldendale and Northwest smelters, has informed us that once these two smelters convert to liquid, they will no longer supply solid pitch – liquid only.

- Our current import program for this year is 53,000 metric tons but because of the decline of crude tars here in North America, our 1999 import pitch program will include a minimum of 68,000 metric tons with a marketing plan to go to 85,000 tons in the year 2000. This is the only way we will be able to protect and maintain our market share. Our major source for import pitch will be KOSCO in Korea who is presently supplying 25,000 tons and an option for another 25,000 tons. Currently discussions are going forward on a seven-year contract extension. In addition, with the assistance of Koppers Australia, we are negotiating a joint venture with TISCO in China that we hope to complete by the end of 1998 for 40,000 tons and are working with Sumitomo in Japan for an additional 15,000 - 20,000 tons.

The primary justification for this project is maintaining our current pitch business and further growing our business through the terminaling of other pitches in the Northwest. As mentioned above, Goldendale, Northwest Aluminum and Reynolds, Troutdale will be in need of a terminaling facility when they convert to liquid. We feel confident that this project will make it very difficult for others to justify a greenfield terminal and will offer Koppers the opportunity to market our terminal

services.

This appropriation is an important foundation for our future pitch business, not only in the Northwest, but our overall total business. Over the next two to three years, the total pitch requirements in the Northwest will be supplied from offshore sources and will be in liquid form. Koppers, as a global company with various growth initiatives in the pitch area, especially in the Asian market, should be the leader of this transition from solid to liquid pitch handling.

Operations Summary

The proposed project at the Portland terminal includes a 1,400 foot liquid pitch unloading line that will discharge the pitch directly from the ocean vessel into storage tanks. We will construct one new tank, approximately 7,000 metric tons in size, and build future additional tanks as needed. Portland is the ideal location for a liquid pitch terminal, as it is easily accessible by tank truck and rail to all of the smelter locations in the Northwest. We already have the melter tank and a shipping tank in place that have a combined capacity of 4,500 metric tons. Also, we have the necessary workforce and support facilities to operate the proposed facility.

The Portland terminal property is leased from Northwest Natural Gas with the current lease expiring at the end of this year. Koppers and Northwest Gas have agreed on a ten-year lease agreement that is awaiting signature.

The net logistics cost of receiving liquid pitch will be approximately $20.00 per metric ton less than the freight and handling costs of solid pitch. The increased liquid freight costs of approximately $20.00 are offset by the $40.00 per ton savings from unloading and transportation costs for solid pitch resulting in the net savings of $20.00 per ton. We have negotiated a ten-year agreement with Gearbulk Shipping Canada, Ltd. for transportation of liquid pitch from Asia to the Pacific Northwest pending Board approval of this project.

Environmental Statement

An environmental risk assessment has been completed for the pipeline and unloading terminal facilities. Design features have been included to address potential scenarios that will minimize any potential environmental impacts if such worst case incidents do occur. For example, quick acting hot oil shut-off valves are located on land near where the pipe begins its route over water. The valves will be provided to shut off both the pitch and heating oil pipes, and can be remotely operated from the terminal. The pipe construction will include only the absolute minimum number of flanges, with most joints being welded.

Necessary environmental air permits for this installation as well as future expansion have been obtained. The required state waterway permit has also been obtained.

Financial Summary

In analyzing this project, two cases were developed. The first case, requiring no capital investment, anticipates the closure of Longview to solid pitch unloading upon the expiration of their current permit in July 2001. Closure of the Portland facility would follow with estimated shutdown and clean-up costs of $5.7 million. Solid pitch volume during this period is estimated to be 60,000 metric tons. This material would be sourced from Korea and Japan. Because of the poor quality and resulting environmental problems caused by the Chinese pitch, it will no longer be available without a substantial capital investment. Gross profit would average approximately $1.9 million per year until shutdown.

The second scenario presented is one with the capital investment of $4.3 million and Portland converting to 100% liquid pitch by the year 2002. The facility will start up during the fourth quarter of 1998 and handle both liquid and solid pitch until 2002. Projected volumes are estimated to reach 72,000 metric tons in 2002. This is a conservative estimate in that we already have 63,000 tons of the business and a marketing plan is in place to reach 85,000 tons per year. Gross profit for the Portland facility will average approximately $3.5 million per year.

Construction of the terminal will result in an increase over the shutdown case of earnings before interest and taxes of $2.9 million. Increased net income over the shutdown case will be $1.6 million. The payback period is 31 months.

Equipment List

See attached.

Schedule of Expenditures

Fourth quarter 1998	$300,000
First quarter 1999	950,000
Second quarter 1999	1,000,000
Third quarter 1999	1,000,000
Fourth quarter 1999	1,060,000
Total	$4,310,000

Koppers004111

Dock & Unloading Pipeline:		
Pipeline		$490,295
Dock		$149,134
Dock Access & Bridge		$154,123
Switchgear		$103,000
Instrumentation		$51,500
Lighting		$77,250
Motor Control Center/Components		$15,450
Fire Protection		$77,250
Permitting		$55,826
Paving		$20,600
	Total	$1,194,428
Fume System Piping:		$150,000
Heating System:		
Hot Oil Heater, Piping & Circ. Pumps		$350,000
Instrumentation		$35,000
Motor Control Components		$15,000
	Total	$400,000
Tank:		
Pitch Tank-7000 MT		$378,296
Foundation		$175,077
Yard Slab & Curbing		$78,629
Insulation		$152,955
Instrumentation		$80,179
Valves		$7,314
	Total	$872,450
Material Handling & Loadout:		
Pitch Pumps		$60,000
Motor Control Components		$20,000
Piping		$240,000
	Total	$320,000
Fume Recovery Upgrade:		$90,000
Level Instrumentation:		$30,000
Shop Relocation		$87,550
Future Pitch Tank Piling:		$115,000
	Subtotal	$3,259,428
Engineering (15%)		$488,914
Contingency (15%)		$562,251
	TOTAL PROJECT	$4,310,594

Portland Facility
Summary of Terminal Options
($000)

	1999	2000	2001	2002	2003	2004	6 Year Average	ROI *	Payback Period (Months)
Net Income									
Most Likely	$ 1,356	$ 1,750	$ 1,898	$ 2,105	$ 2,138	$ 2,170	$ 1,903	37.0%	31
Shutdown 2001	1,153	1,104	(2,922)	-	-	-	(111)	-3.9%	
Cash Flow									
Most Likely	$ (2,697)	$ 2,427	$ 2,575	$ 2,782	$ 2,815	$ 2,847	$ 1,791		
Shutdown 2001	1,393	1,344	(2,802)	-	-	-	(11)		

* ROI calculated on total Portland investment.

Portland Pitch Facility
Scenario One - Most Likely
Earnings Statement

Net Sales		1999	2000	2001	2002	2003	2004
Melted Pitch	S Tons	67,000	25,000	15,000			
	$/Ton	$ 318.00	$ 318.00	$ 318.00			
	M$	21,306	7,950	4,770			
Liquid Pitch	S Tons	8,000	55,000	65,000	80,000	80,000	80,000
	$/Ton	$ 318.00	$ 318.00	$ 318.00	$ 318.00	$ 318.00	$ 318.00
	M$	2,544	17,490	20,670	25,440	25,440	25,440
Total Pitch Sales	Tons	75,000	80,000	80,000	80,000	80,000	80,000
	$/Ton	$ 318.00	$ 318.00	$ 318.00	$ 318.00	$ 318.00	$ 318.00
	M$	23,850	25,440	25,440	25,440	25,440	25,440
Intalco							
Terminal Fee @ $50,000 Month	M$						
Handling Fee @ $21 MT	M$						
Total Net Sales	M$	23,850	25,440	25,440	25,440	25,440	25,440

Material Cost		1999	2000	2001	2002	2003	2004
Solid Pitch	S Tons	67,000	25,000	15,000			
	$/Ton	$ 178.32	$ 178.32	$ 178.32			
	M$	11,947	4,458	2,675			
Ocean Freight	$/Ton	46.00	46.00	46.00			
	M$	3,082	1,150	690			
Liquid Pitch	S Tons	8,000	55,000	65,000	80,000	80,000	80,000
	$/Ton	$ 178.32	$ 178.32	$ 178.32	$ 178.32	$ 178.32	$ 178.32
	M$	1,427	9,808	11,591	14,266	14,266	14,266
Ocean Freight	$/Ton	66.00	66.00	66.00	66.00	66.00	66.00
	M$	528	3,630	4,290	5,280	5,280	5,280
Freight - Longview to Portland	$/Ton	10.00	10.00	10.00			
	M$	670	250	150			
Stevedore & Inland Freight	$/Ton	29.00	29.00	29.00			
	M$	1,943	725	435			
Total Pitch Material Cost	S Tons	75,000	80,000	80,000	80,000	80,000	80,000
	$/Ton	$ 261.29	$ 250.26	$ 247.88	$ 244.32	$ 244.32	$ 244.32
	M$	19,597	20,021	19,831	19,546	19,546	19,546

Operating Costs		1999	2000	2001	2002	2003	2004
Labor Costs	M$	377	377	377	377	377	377
Fuel & Utilities	M$	375	400	400	400	400	400
Maintenance	M$	100	190	190	190	190	190
Other Operating	M$	300	300	300	300	300	300
Depreciation	M$	247	677	677	677	677	677
Existing Investment		247	247	247	247	247	247
New Capital Expenditure		-	430	430	430	430	430
Other Fixed	M$	300	300	300	300	300	300
Total Operating Cost	M$	1,699	2,244	2,244	2,244	2,244	2,244
Operating Cost per Ton		$ 22.65	$ 28.05	$ 28.05	$ 28.05	$ 28.05	$ 28.05
Operating Cost per Ton - Excl. Depr.		$ 19.36	$ 19.59	$ 19.59	$ 19.59	$ 19.59	$ 19.59
Cost of Sales	M$	21,296	22,265	22,075	21,790	21,790	21,790
Gross Profit	M$	2,554	3,175	3,365	3,650	3,650	3,650
Provision for Interest	8%	324	297	243	189	135	81
Income before Taxes		2,230	2,878	3,122	3,462	3,516	3,570
Provision for Income Taxes	39.2%	874	1,128	1,224	1,357	1,378	1,399
Net Income	M$	$1,356	$1,750	$1,898	$2,105	$2,138	$2,170

Portland Pitch Facility
Scenario Two - Shutdown 2001
Earnings Statement

Net Sales		1999	2000	2001	2002	2003	2004
Melted Pitch	S Tons	66,000	66,000	33,000			
	$/Ton	$ 318.00	$ 318.00	$ 318.00			
	M$	20,988	20,988	10,494			
Liquid Pitch	S Tons		-	-			
	$/Ton		$ 318.00	$ 318.00			
	M$		-	-			
Total Pitch Sales	Tons	66,000	66,000	33,000			
	$/Ton	$ 318.00	$ 318.00	$ 318.00			
	M$	20,988	20,988	10,494			
Intalco							
Terminal Fee @ $50,000 Month	M$						
Handling Fee @ $21 MT	M$						
Total Net Sales	M$	20,988	20,988	10,494			

Material Cost		1999	2000	2001	2002	2003	2004
Solid Pitch	S Tons	66,000	66,000	33,000			
	$/Ton	$ 178.32	$ 178.32	$ 178.32			
	M$	11,769	11,769	5,885			
Ocean Freight	$/Ton	46.00	46.00	46.00			
	M$	3,036	3,036	1,518			
Liquid Pitch	S Tons		-	-			
	$/Ton		$ 178.32	$ 178.32			
	M$		-	-			
Ocean Freight	$/Ton		66.00	66.00			
	M$		-	-			
Freight - Longview to Portland	$/Ton	10.00	10.00	10.00			
	M$	660	660	330			
Stevedore & Inland Freight	$/Ton	29.00	29.00	29.00			
	M$	1,914	1,914	957			
Total Pitch Material Cost	S Tons	66,000	66,000	33,000			
	$/Ton	$ 263.32	$ 263.32	$ 263.32			
	M$	17,379	17,379	8,690			

Operating Costs		1999	2000	2001	2002	2003	2004
Labor Costs	M$	377	377	189			
Fuel & Utilities	M$	330	330	165			
Maintenance	M$	100	190	95			
Other Operating	M$	300	300	150			
Depreciation	M$	240	240	120			
Existing Investment		240	240	120			
New Capital Expenditure							
Other Fixed	M$	300	300	150			
Terminal Shutdown Charges							
Severance	M$			400			
Cleanup & Dismantling	M$			5,300			
Total Operating Cost	M$	1,647	1,737	6,569	-		
Operating Cost per Ton		$ 24.95	$ 26.32	$ 199.05			
Operating Cost per Ton - Excl. Depr.		$ 21.32	$ 22.68	$ 195.41			
Cost of Sales	M$	19,026	19,116	15,258	-	-	
Gross Profit	M$	1,962	1,872	(4,764)	-	-	
Provision for Interest	8%	66	56	42			
Income before Taxes		1,896	1,815	(4,806)			
Provision for Income Taxes	39.2%	743	712	(1,884)			
Net Income	M$	$1,153	$1,104	($2,922)			

RECEIVED
MAY 26 1993
KOPPERS INDS., INC.
PORTLAND, OR

KOPPERS
Koppers Industries, Inc.

CAPITAL EXPENDITURE REQUEST

				Request No.	9270 - 93
Division	Carbon Materials & Chemicals	Location	Portland, Or	Request Date	09 / 05 / 96
Request Initiated By	A. S. Kamerer	Approved By			9/16/96
Title	Storm Water Dishcharge System				
Amount of Request	$ 45,000.00	Depreciation Life	10 YRS	Estimated Life	15 YRS
Approval Date	MO. 19 YEAR				
Class of Expenditure (See Reverse)	1 B	Depreciation Acct. No.	305	969	x 9270 910

Specification & Description: Replace the entire storm water discharge system from the existing storm water collection tanks. Includes new 8" PVC suction side piping from the tanks to the pump; new 6"x6" pump, rated @ 800 GPM; new 6" schedule 40 pipe from the pump to the outfill (approx. 800 L.F.); a new secondary sump in the low end of the tank farm; grading and rock-work; new electrical panel; treated wood walking; and plant labor for construction.

Summary of Justification: To replace the existing 30 plus year old system with the above, that will increase the discharge rate by some 500%. In the process, will elimate the tank farm standing water problem that we have had for the last 4 years or so. This standing water problem has become a safety issue for the men and we have started to experience a corrosion problem on our creosote storage tank, that will only get worse if not remedied. Last, this up grade should eliminate the major flooding condition, similar to the one that we experienced this past February, and thus should eliminate the possiblility of any future business or shipping interruptions.

ENGINEERING: By J.T. Dietz Approval _____ COSTS: Cash Expenditure (1) 45,000.

Trade-In or Salvage (2) _____

ESTIMATE: By A.S. Kamerer Approval _____ Amt. of Requests(1) + (3) 45,000.

Type of Investment	Building	%	Equipment	%	Land	%	Type of Equipment	New		Used		Age		For Use On	Owned Property		Leased Property	
				100					x									x

EARNINGS OR COST: *(5 Yrs. Average)*

Division Income Before Interest & Taxes _____

% Return On Net Investment _____

Added Working Capital Required If Any _____

RETIREMENTS: *(PDA) Attached*

Total Original Value _____

Years Acquired _____

Total Book Value _____

CONSTRUCTION BY:

Est. Schedule of Expense Oct.-Dec.1996

Est. Start - Up Date Sept. 1996

Est. Close to Property _____

Referral to Insurance _____

APPROVAL:

RECEIVED
SEP 30 1996
KOPPERS INDS., INC.
PORTLAND, OR

Production Manager		DATE
Capital Planning		DATE
Environmental & Safety		DATE
Engineering	9/23/96	DATE
Division Controller	9/11/96	DATE
Group Controller		DATE
Other	9-17-96	DATE

KI - 405 Rev. 5

Interoffice Memo

To:	J.W. Kunkle	From:	Amos S. Kamerer
Location:	K-1650	Location:	Portland, OR.
Subject:	Capital Request Stormwater Discharge System	Date:	September 6, 1996

My thoughts re the justification for this project are as follows:

1. At the time of our flood in February we expensed some $2,855. for items such as:

   PVC pipe and valves, short term electrical repairs, pump rentals, and the corresponding labor to do the repairs.

   Additionally, we lost the discharge pump and the electrical panel servicing that system. These two items have not been replaced because they are a part of this capital, however if we had replaced them, we would have spent an additional $4,700. Thus, I would consider the total flood loss at $7,555. with the old system, we could potentially experience this kind of flooding problem at least once a year.

2. With the addition of 3 new sumps in the plant over the last 4 years that feed into the tank farm, we have far more storm water going through the system than it was designed to handle, as a result we have a constant standing water situation in lower end of the tank farm (northeast corner). At this time, 2 tanks have started to corrode. One of these is out of service, the other is our creosote storage and shipping tank. Jim Dietz advises that if this condition is not corrected we could experience a corrosion related leak, and a possible reportable spill incident, in as few as 5 years.

3. The standing water condition in the tank farm has created a safety concern for our employee's. The low area that I mentioned above is virtually muddy all the time, in fact there is about 3" of mud today and we had zero rain fall during the months of July and August. During our rainy season, this area has 8" or more of mud on the surface and when we only have one employee on duty for the night shifts, who has to do periodic inspections of that area, this condition has become a serious safety issue.

4. In the past, some 5 or so times last year, when flooding conditions developed of say 10" or more water in the tank farm, we would have to disconnect the electrical service to that area. Because we were loading tank cars directly from the melter, no interruption of shipment to our customers occurred. Now with truck deliveries, we use a special tank in the tank farm for shipping purposes. Without this upgrade, we would have shipment interruptions to our customers. I do not think we would actually loose any business as a result, however we would certainly effect customer satisfaction by doing so.

Amos

Amos S. Kamerer

cc: W.W. Turner
F.J. Fitzgerald

KOPPERS INDUSTRIES

INTEROFFICE CORRESPONDENCE

To: M.H. MURRAY
Location: K-1650, PITTSBURGH
Subject: CAPITAL EXPENDITURE PRE-AUTHORIZATION

From: AMOS S. KAMERER
Location: PORTLAND, OR
Date: MARCH 26, 1997

REQUESTING DIVISION (Circle One)	WOOD (TAR) COKE ADMINISTRATIVE
REQUESTING LOCATION	PORTLAND, OR - 9270
REQUEST DATE	MARCH 26, 1997
PROJECT TITLE	IMPORT LIQUID PITCH DOCK, UNLOADING LINE AND TANKS
AMOUNT OF REQUEST NOTE: THIS AMOUNT SHOULD BE FOR THE PRELIMINARY SCOPE OF THE WORK ONLY.	$80,000.00
TEMPORARY APPROPRIATION NUMBER ASSIGNED	GL DET SUB LOC DEPT 4210 - X - X - 9270 - P027
DESCRIPTION OF THE PROJECT SCOPE TO MODIFY AN EXISTING DOCK TO PERMIT THE RECEIPT OF IMPORT LIQUID PITCH. TO CONSTRUCT A 2000 FT. LONG PIPELINE FROM THE DOCK TO 3 NEW 6,000 METRIC TON CAPACITY STORAGE TANKS. WORK WILL INCLUDE A NEW HOT OIL HEATING SYSTEM AND FUME COMBUSTOR, TRANSFORMER AND SWITCHGEAR, INSTRUMENTATION, PUMPS, VALVES, CONTROL / MCC HOUSES, LIGHTING, PAVING, ETC.	
AUTHORIZED SIGNATURE	
COPY TO: REQUESTING LOCATION MANAGER	A.S. KAMERER
REQUESTING DEPARTMENT	J.T. DIETZ
DIVISION CONTROLLER	J.W. KUNKLE
DIVISION GENERAL MANAGER	W.W. TURNER 4/4/97

KOPPERS
Koppers Industries, Inc.

CAPITAL EXPENDITURE REQUEST

				Request No.	9270-30
Division	TAR PRODUCTS	Location	PORTLAND, OR	Request Date	10 / 27 / 93
Request Initiated By	A. S. KAMERER		Approved By		
Title	CONCRETE PAD AND SPILL CONTAINMENT FOR PLANT FUME TANK				

Amount of Request	$ 3000	Depreciation Life	10 YRS	Estimated Life	10 YRS	Approval Date	MO.	19 YEAR			
Class of Expenditure	See Reverse 1	9	Depreciation Acct. No.	305	969	X	9270	910			

Specification & Description:

INSTALL 4" CONCRETE SLAB BETWEEN EXISTING PAD AND TANK FARM WALL, AND ADD 12" HIGH CONTAINMENT CURB ON THE NON-CONTAINED SIDES.

Summary of Justification:

THIS IS PART OF OUR SPILL CONTAINMENT PLAN FOR THE ENTIRE PLANT.

ENGINEERING: By LOCAL Approval _____ **COSTS:** Cash Expenditure (1) $3000

Trade-In or Salvage (2) _____

ESTIMATE: By A. KAMERER Approval _____ Amt. of Requests(1) + (3) $3000

Type of Investment	Building	100%	Equipment	%	Land	%	Type of Equipment	New	X	Used		Age		For Use On	Owned Property	X	Leased Property

EARNINGS OR COST: *(5 Yrs. Average)*

Division Income Before Interest & Taxes _____

% Return On Net Investment _____

Added Working Capital Required If Any _____

RETIREMENTS: *(PDA) Attached*

Total Original Value _____

Years Acquired _____

Total Book Value _____

CONSTRUCTION BY:

Est. Schedule of Expense NOV/DEC 94

Est. Start - Up Date _____

Est. Close to Property _____

Referral to Insurance _____

APPROVAL:

Production Manager	_____	DATE
Capital Planning	_____	DATE
Environmental & Safety	_____	DATE
Engineering	_____	DATE
Division Controller	_____	DATE
Group Controller	_____	DATE
Other	_____	

KI - 405 Rev. 5

KOPPERS INDUSTRIES

Koppers Industries, Inc.
7540 N.W. St. Helens Road
Portland, OR 97210-3663

Amos S. Kamerer
Plant Manager

Telephone: 503-286-3681
Fax: 503-285-2831

January 3, 1994

Mr. Ron Opitz
Manager, Risk & Land Management
Northwest Natural Gas Company
220 NW Second Ave.
Portland, OR 97209

Reference: Liquid Pitch Unloading System

Dear Ron:

First, let me thank you for the time that you and Carla Kelly gave to Walt Turner and myself during our visit back in November, and please let me apologize for taking so long in getting this confirmation back to you about our thoughts on this project.

Even though many are concerned about the state of the aluminum industry in the Northwest, we at Koppers are very excited about our position as a supplier to it. Generally, due to our location and the many environmental considerations that are facing these facilities, we feel that we are very well positioned for many years to continue to supply this industry, through our Portland facility with imported pitches. As a result, we need to further modify our operations here in Portland with this unloading system to maintain this position.

As we discussed in our meeting, because of relatively new developments by our foreign associates in the building of hot oil heated tankers, capable of hauling liquid pitch at temperatures of up to 400°F, we have decided to proceed with a liquid approach for our future import requirements. In the process, we will be eliminating most of the environmental concerns associated with the handling of the solid pitch, that we have today.

This liquid pitch approach requires the co-use of the existing P.N.O. dock on the Willamette River, to the west of our site. Below are our concepts on how we would build a pipe line from our tanks to this dock.

Our plans are to construct a 10" diameter pipe line, with 2" diameter hot oil tracer lines that will run some 1500 linear feet from our storage tanks to the existing dock. See attachment "A." We will utilize our existing hot oil heater and fume recovery systems, with only the pipeline representing new construction.

Attachment "B" shows the existing dock, which is more than capable of handling the 6,000 to 7,000 Metric ton-size vessels that we would plan to receive. The only problem with this facility is the fact that the existing bridge also supports the existing pipelines and is very congested. Additional capacity appears unlikely, thus we would need to bring our own pipeline from the riverbank to the center service platform. This would normally require the driving of pilings into the river to support the pipe, and as we were under the impression that pilings have been driven

at this location within the last couple of years, we did not anticipate that this would be a problem. However, at our meeting you expressed concern about this possibility, so I have discussed other options with our engineers in this regard and they advise that other methods are available, however at much higher costs.

Attachment "C" is a detail of the intermediate pipe supports. There would be about 100 of these required, or 1 approximately every 15 feet.

Attachment "D" is a detail of the anchor pipe supports. There would be about 7 of these required, or 1 approximately every 200 feet.

Attachment "E" is a general arrangement of the overall piping schematic, showing the piping from the dock to our storage tanks, and the fume recovery system.

Attachment "F" is a general arrangement of the 2 major storage tanks that will be used to store the liquid pitch received from the ships.

The ships will have their own pumps that will discharge the pitch at a rate of 300 metric tons per hour. Thus, total discharge will take about 24 hours after docking. Scheduling coordination with P.N.O. will be required; however, we will be able to provide at least 2 weeks advance notice of the vessel's ETA. Based on my understanding of their business, I don't see this as a problem with this amount of lead time.

At this point, our time table for the completion of this project is the third quarter in 1996. We estimate that permitting alone will take from 3 to 6 months, thus we need to get going on this project as early as we can next year, and will appreciate your consideration in this regard.

As I indicated to you, I am available to you and Sandy Hart at any time to discuss any questions that you may have about this project.

Sincerely,

Amos S. Kamerer

bcc: W. W. Turner

KOPPERS INDUSTRIES

FAX TRANSMITTAL

Koppers Industries, Inc.
7540 N.W. Saint Helens Road
Portland, OR 97210-3663

Telephone: (503) 286-3681
FAX: (503) 285-2831

TO: J. Batchelder, cc: W. Turner, L. Flaherty DATE: 6/9/94 8:15

FROM: Amos TOTAL # OF PAGES: 2

RE: N.W. Nat. Gas meeting, Ron Opitz, Lands Manager

Here's my write up of my meeting earlier today with Ron that we discussed, please discuss with Larry and let me know what we plan to do or how ya want me to respond to Ron.

IF INCOMPLETE OR POOR QUALITY TRANSMITTAL, PLEASE CALL 503-286-3681.

Koppers004124

Ron Opitz, N.W. Nat. Gas 6/9/94

This was a strange meeting.

Ron advised that he had met yesterday with Bruce Samson, Sr. V.P. and General Council and Sande Hart, Environmental Manager to discuss my last call to Ron, stating that I was concerned that according to Bill Gladla with Reazen, he had not heard from N.W. Nat. Gas with regard to the site assessment. And that as long as this process was delayed, I was concerned that action on our ship unloading dock plans, would also be delayed.

He advised that they had hired a company by the name of Decision Focus Inc. to do the site assessment and that work was started about 5 weeks ago on the project.

Ron indicated that Bruce's 2 points of concern were as follows:

1) They feel that since we are their tenants and that they advised us of the site assessment action, that it was our responsibility to advise Reazen and in turn, Reazen's responsibility to respond to them.

I explained that what we did, was normal procedure in these matters and that as far as I knew, Reazen had been reliable in responding to such matters. To which he said, that was not their understanding, that they have "heard" that Reazen is more likely to litigate, than to cooperate!

2) they feel that they are in a "managed" risk position at this time, with regard to the site assessment. By letting us proceed with construction of the dock, they could develope new or unknown risks and since "were" not cooperating with regard to the site assessment, there is no reason for them to cooperate with us on the dock project.

He indicated that from what Bruce said, that until Reazen responds to the site assessment issue, that there is no way for them to cooperate on the dock.

(2)

I reviewed the facts that back in the mid to late 1980's when the "Doans" Lake site assessment work was conducted, including 4 wells on our property, no coal tar related contamination was found. Thus, KCO, Reazen and KII have felt that our participation in the problem was non-existent or would be limited, at best. He commented that some recent test results would indicate that that might not be the case.

Bottom line, As strange as it is, they are hung up on them calling Reazen vs. Reazen calling them. Is it possible that we could write Reazen, providing them with all of the documentation that we already have received from N.W. Gas, EPA + DEP and then ask Reazen to contact N.W. Gas (Bruce Samson) in a timely manner?

Ann

6/9/94

Bruce Samson, ~~Sr.~~ VP & General Concil, & Hart

1) Risk mgt.

1) Beacon

Decision focus

"Managed Risk" position

1) Nothing - no reason to expand their risk

2) Reach being the responsible party

wants to hear from the res. party directly to Samson

Note to Batch

Beacon litigation

I reviewed the chain of responsibility

but no responsible

KOPPERS INDUSTRIES

Koppers Industries, Inc.
436 Seventh Avenue
Pittsburgh, PA 15219-1800

Lawrence F. Flaherty
Vice President and Manager
Tar Operations

Telephone: (412) 227-2304
FAX: (412) 227-2022

August 4, 1994

William F. Giarla
Beazer East, Inc.
1001 Koppers Building
Pittsburgh, PA 15219

Re: Northwest Terminal Property
Portland, Oregon

Dear Bill:

KII has been trying to pursue with Northwest Natural Gas Company (our Portland Terminal Lessor) the possibility of our installing a pitch unloading facility at the Portland Plant Site. The Gas Company has refused to consider the project until some understanding is reached with "Koppers Company" regarding participation in the investigation and remediation of the Gasco Site. Further, Northwest Natural Gas expects KII to define the role of "Koppers Company" in this investigation and remediation despite our repeated declarations that they should be dealing directly with Beazer. Enclosed is some background correspondence on the issue.

Bill, as we discussed yesterday, could you please contact Northwest Natural Gas Company to begin a dialogue between them and Beazer East on what participation (if any) Beazer might have at this site. The Gas Company contact is:

Bruce Samson
General Counsel
Northwest Natural Gas Company
220 N.W. Second Avenue
Portland, Oregon 97209-3991
Phone: (503) 226-4211

Thanks for your help, please keep me advised.

Sincerely,

L. F. Flaherty/rs

L. F. Flaherty

LFF:rs

Enclosures

CC: J. R. Batchelder - K-1701
A. Kamerer - Portland
W. W. Turner - K-1601

Portland

NORTHWEST NATURAL GAS COMPANY

220 N.W. SECOND AVENUE PORTLAND, OREGON 97209 - 3991

(503) 226-4211

December 16, 1993

Mr. Amos Kamerer
Regional Sales Manager
Koppers Industries
7540 N. W. St. Helens Rd.
Portland, Or. 97210-3663

Dear Amos:

After our recent visit with you and your associate, we have discussed with our senior management your proposal and situation regarding the unloading facility you are requesting to build along the Willamette River. In order to reach a decision, we would like further clarification as to the role of your company in preparing the site for such an addition. Preliminarily, we would expect that Koppers would dismantle the old unloading ramp located at the north end of the shoreline and would additionally be responsible for any emergency response for any release, spills or discharges brought about during the construction of the new facility.

As we have previously discussed, we are about to conduct an investigation of the entire property at Gasco, including the parcel you lease from us, to determine the environmental condition and any possible risk associated with the existence of by-products from the old gas manufacturing operation that was once located there. We would appreciate a clearer expression from your company of the role you will play in the investigation and any resulting remediation work.

It is our hope that you will fully cooperate with our efforts and accept your responsibility for dealing with anything that has resulted from either your current or past operations.

Your response to these issues will help us to further clarify our position, and will enable us to expand our discussion with the senior management at Northwest Natural Gas Company.

Best regards,

Ronald K. Opitz, Manager
Risk & Land Management

RKO:jd

cc: Bruce Samson
Bruce DeBolt
Bill Prentice
Sandy Hart

KOPPERS INDUSTRIES

Koppers Industries, Inc.
436 Seventh Avenue
Pittsburgh, PA 15219-1800

Lawrence F. Flaherty
Vice President and Manager
Tar Operations

Telephone: (412) 227-2304
FAX: (412) 227-2022

March 25, 1994

Mr. Ronald K. Opitz, Manager
Risk & Land Management
Northwest Natural Gas Company
220 N. W. Second Avenue
Portland, Oregon 97209-3991

Dear Mr. Opitz:

I have been advised by our local manager, Amos Kamerer, that your letter of December 16, 1993 has not been answered by our company. It was my responsibility to respond to you and I apologize for being so tardy with this reply. I hope that this following will present our position with regard to the preparation of the site proposed as an unloading facility and will clarify the Koppers Industries, Inc. (KII) position on the issue of our role in the investigation and resulting remediation of the larger Gasco plant site.

1. If KII were to proceed with the unloading facility being considered, we would dismantle the existing unloading ramp located at the North end of the property and further, we would be responsible for any new releases, spills or discharges brought about during construction. We would not expect to be responsible for any prior pre-existing contamination uncovered in construction.

2. Regarding the Gasco site investigation and resulting remediation work, Koppers Industries has occupied its leased property only since its formation on December 29, 1988. Given our short tenure, with no history of environmental incident, we presume KII not to be a potentially responsible party to the contamination at the site. We will, however, fully cooperate with Northwest Natural Gas regarding this issue as appropriate.

3. The predecessor to KII at the Gasco Site was Koppers Company, Inc. (KCI). KCI managed operations at that site from approximately 1960 through 1988. KCI was acquired by Beazer, PLC in June, 1988 and in December, 1988, sold off the KCI assets now know as Koppers Industries. In the transaction agreement, KCI retained all the pre-closing environmental liabilities associated with the KII properties. Koppers Company, Inc. is now known as Beazer East, Inc.

We have had discussions with Beazer regarding the situation at the Northwest Natural Gas Company Site and they have expressed a willingness to discuss the issues with you. The Beazer contact is:

William F. Giarla, Esq.
Beazer East, Inc.
436 Seventh Avenue
Pittsburgh, PA 15219
Phone: (412) 227-2635

If you would like to discuss further, please write or call at (412) 227-2304. Perhaps on my next trip to Portland we could visit.

Sincerely,

Lawrence F. Flaherty

LFF:rs

RECEIVED

AUG 8 1994

KOPPERS INDS., INC.
PORTLAND, OR

INTER-OFFICE MEMO

DATE 5/2

TO Opitz

NWNAT GAS

Decision Focus
Hahn Assoc

5/5 + 56

- they will be calling Gianla soon
- "wheels of progress move slowly"

WALT 5/26/94
- think meeting sometime in September
- 1st class presentation on future construction plans — 1996 liquid unloading line

BY

GBC® GREIF BROS. CONTAINERS

KOPPERS INDUSTRIES

INTEROFFICE CORRESPONDENCE

To:	L. F. Flaherty	From:	A. S. Kamerer
Location:	K-1750	Location:	Portland
Subject:	Northwest Natural Gas	Date:	March 18, 1992

The attached letter is self-explanatory.

As for a new building, I'm sure we can provide documentation per their request. Thus, when we decide to proceed with this project, we should not have any problems.

As for the unloading facility, the door appears to be slightly open. How do you and Walt want us to proceed in this regard?

A. S. Kamerer

ASK/km

cc: J. A. Oxford
W. W. Turner

NORTHWEST NATURAL GAS COMPANY

220 N.W. SECOND AVENUE PORTLAND, OREGON 97209 - 3991

(503) 226-4211

March 5, 1992

Mr. Amos Kamerer
Pacific Procurement Manager
Koppers Industries, Inc.
7540 N. W. St. Helens Road
Portland, OR 97210-3663

Dear Amos:

In response to your letter of February 26, 1992, I find no objections to the construction of the proposed building we discussed while visiting your facility, provided that you assure access to the test pipes for the leach field and that you forward some documentation that demonstrates an acceptance on the part of the DEQ.

With regard to the other mentioned project, we feel that many more questions must be answered in order to approve such an expansion. We would ask that a study be completed that addresses environment, land use, obtainment of permits and an approval from the Army Corp of Engineers for the construction of an unloading facility on top of existing pilings.

As you know, Northwest Natural is committed to work with you in every way possible, provided that all questions concerning environment and property utilization can be addressed.

Please contact us should you have any questions concerning our response, and we look forward to working with you in the future.

Sincerely,

Ronald K. Opitz, Manager
Risk & Land Management

RKO:dg

cc: B. B. Samson
S. K. Hart

KOPPERS INDUSTRIES

Koppers Industries, Inc.
7540 N.W. Saint Helens Road
Portland, OR 97210-3663

Amos S. Kamerer
Pacific Procurement Manager

Telephone: (503) 286-3681
FAX: (503) 285-2831

February 26, 1992

Mr. Ronald K. Opitz
Manager, Risk and Land Management
Northwest Natural Gas Company
220 N. W. Second Avenue
Portland, Oregon 97209

Dear Ron,

First, please excuse my delay in getting this information off to you, realizing that our meeting here at the terminal was almost a month ago.

As we discussed, it is our intent to construct an addition to our existing pitch storage building. This addition will be approximately 150' X 200' and would sit to the east and north of the existing building, and frankly is the only available space here for this purpose. This would require us to cover the old leach field with reinforced concrete, joining the existing asphalt in that area to form the floor for the new building. Our Environmental Affairs Manager, advises that he sees no legal or environmental problems in constructing this building over the leach field, as long as the existing test pipes are capped at floor level and are still accessible for future testing.

With regard to the future, we would like you to look at the feasibility of Koppers constructing our own unloading facility on the Willamette River, to the north of our current leased property.

Our thought would be to construct an environmentally safe vacuum unloading system on top of pilings in the river. The screw conveyor, needed to move the pitch from the ship to our storage building, would be constructed using floating foundation blocks for the supports. Also, we think that this conveyor system and the support structures could follow close to the existing roadway, from the river to our property and would thus not interfere with the Gas Company land, as we discussed during your visit.

As our business continues to expand, the ability for us to control all of our operations, including the unloading of the pitch, will become very important to us and will also make us a long term tenant for the Gas Company.

Needless to say, I am most concerned about your agreement with our position as to the addition to the storage building and would appreciated a prompt response.

As to the unloading system, I realize that this will require additional consideration, however some kind of indication of your thought in this regard in the next couple of months, would be very much appreciated.

Thanking you in advance of your consideration, I remain,

Very truly yours,

Amos S. Kamerer

ASK/km

CC: Ms. Sandy Hart, Environmental Engineering, N.W. Natl. Gas

BCC: L. F. Flaherty
J. O. Oxford
W. W. Turner

KOPPERS INDUSTRIES

INTEROFFICE CORRESPONDENCE

To: AMOS KAMERER

From: JOHN OXFORD

Location: PORTLAND PLANT

Location: PORTLAND PLANT

Subject: FUTURE PLANT EXPANSION

Date: February 19, 1992

Amos,

Per your request, from a production stand point, this letter gives an overview of what we feel could be our needs in the near future. The increased pitch business that we foresee coming to pass will surely require us to expand our storage facilities here in Portland. The best expansion point is to attach to the existing pitch storage shed and erect a 150 x 200 addition, this will allow us to store 6,000 additional tons. This would require us to cover the old leach field with reinforced concrete and join to our existing asphalt in that area. As I have explained to you on previous occasions, Mr. Wm. Swearingen our Chief Environmental Affairs Manager for the Tar Division of Koppers Industries Inc., has stated he sees no legal or environmental problem in proceeding with this construction providing that the test pipes for the leach field be capped at floor level so that they are accessible should D.E.Q. decide that they wish to perform testing on the area.

As we look into the future, we see that at some date we may be forced to look at providing our own unloading facility on the Willamette River. As you know, concern has been expressed with the present unloading at Terminal 4, Port of Portland, due to the fact that it is a clam shell operation and generates a dusting problem inherent to that type of system. As you and I pointed out to Mr. Ron Opitz, Land & Property Manager of N.W. Natural Gas, and Ms. Sandy Hart, Environmental Engineering Manager, for N. W. Gas, the system that we propose to utilize here is simplistic in design and creates no pollution in its operation. We simply would vacuum the pitch from inside the ship that would have a dust cover in place. We would then use a filtration bag house and put the pitch on a screw conveyor up to our pitch storage shed here in the plant. The only construction needed on Gas Company Property from the river to our existing plant would be to have concrete floating foundation blocks to support the weight distribution legs of the conveyor itself. It was my impression that Sandy Hart of the Gas Company was in agreement with the feasibility of this part of the project. As it was explained at the time of the tour the vacuum unloader itself would be constructed on top of the pilings in the river thereby eliminating the need to disturb the Gas Company Land.

If I can be of any further help on this matter to you please feel free to contact me.

Regards,

John

INTEROFFICE CORRESPONDENCE

To:	Walt Turner	From:	Amos S. Kamerer
Location:	K-1600	Location:	Portland
Subject:	Northwest Natural Gas	Date:	September 12, 1995

Sandy Hart, Director of Environmental Services, stopped by last week to discuss the locations on our lease property that Hahn and Associates had identified to extract core samples. In conversation, I mentioned to her that we were still quite anxious to pursue the building of a pipe line from the PNO dock to our tanks, to off load liquid pitch sometime in 1997. She said that the site assessment work with Hahn should be completed within 6 months and that once they had decided on what remediation would be required, that they could then determine if our pipeline project could proceed without any interference.

Also, during Bill Swearingen's visit he confirmed that any disturbance to existing contamination, during the construction of a pipe line, would be Koppers Industries, Inc. responsibility not Beazers. Bill also said that he did not think that the existing riveted T-1 tank, with 650,000 gallon capacity, could be used as a liquid pitch storage tank because of the rivet design. Thus, we would have to look at the construction of a new tank for this project. Perhaps we should proceed now with having this tank tested to verify, one way or the other, if it is usable.

Amos

Amos S. Kamerer

PURCHASE INVOICE

Purchase Invoice Number: 347

Purchase Invoice Date: 11/13/06

Pay
To: PACIFIC TERMINAL SERVICES INC
PACIFIC TERMINAL
PO BOX 24005
SEATTLE, WA 98124-0005

Ship
To: PORTLAND TERMINAL
7540 NW Saint Helens Road
Portland, OR 97210

Ship Via		Confirm To	
Receive By	11/28/06	Buyer	
Terms	Net 30 Days from Ship Date	P.O. Number	
Vendor ID	383878003	P.O. Date	11/28/06

Item No.	Description	Unit	Quantity	Unit Price	Total Price
	PRODUCTS USED IN OPERATIONS		1	5,050.00	5,050.00

Subtotal:	5,050.00
Invoice Discount:	0.00
Total Sales Tax:	0.00
Total:	5,050.00

Pacific Terminal Services, Inc.
P O BOX 24006
Seattle WA 98124

Invoice	347
Date	11/13/2006
Page	1

NOV 27 2006

Bill To:

Kopper Industries, Inc
7540 N.W. St. Helens Road
Portland OR 97210

Ship To:

Kopper Industries, Inc
7540 N.W. St. Helens Road
Portland OR 97210

Purchase Order No.	Customer ID	Salesperson ID	Shipping Method	Payment Terms	Req Ship Date	Master No.
	KOPPER			Due on Receipt	11/13/2006	514

Ordered	Shipped	B/O	Item Number	Description	Discount	Unit Price	Ext. Price
1.00	1.00	0.00	MGMTFEE-STERM	Vessel Service-Boom	$0.00	$5,050.00	$5,050.00

PI 14490
PPI9270000-
204

Please remit payment by wire to US Bank account# 153595020311, aba#125000105. Thank you for your business.

Subtotal	$5,050.00
Misc	$0.00
Tax	$0.00
Freight	$0.00
Trade Discount	$0.00
Total	$5,050.00

Gisela Paz

From: Tina Garrett [tinag@fammpnw.com] **Sent:** Mon 11/13/2006 2:56 PM
To: Gisela Paz
Cc: Purchasing @ Harley Marine
Subject: Kopper's Invoice
Attachments:

Hi Gisela – We need another invoice for Kopper's please.

Osprey Arrow at dock 1330 10/23/06 until 0630 10/24/06

Total hours at dock = 17

Additional 5 hours for Coast Guard inspections

3 shifts at 8 hours = 24 hours

24 hours x 2 operators = 48 hours

Thruput = 20,535 barrels

Labor = 48 hours x $63.72 = $3,058.56

Thruput = 20,535 barrels x $0.0625 = $1,283.44

Boom deployment = $708.00

Total = $5,050.00

PURCHASE INVOICE

Purchase Invoice Number: IVC000000004

Purchase Invoice Date: 08/31/06

Pay
To: PACIFIC TERMINAL SERVICES INC
PACIFIC TERMINAL
PO BOX 24005
SEATTLE, WA 98124-0005

Ship
To: PORTLAND TERMINAL
7540 NW Saint Helens Road
Portland, OR 97210

Ship Via		Confirm To	
Receive By	09/15/06	Buyer	
Terms	Net 30 Days from Ship Date	P.O. Number	
Vendor ID	383878003	P.O. Date	09/15/06

Item No.	Description	Unit	Quantity	Unit Price	Total Price
	PRODUCTS USED IN OPERATIONS		1	5,052.87	5,052.87

Subtotal:	5,052.87
Invoice Discount:	0.00
Total Sales Tax:	0.00
Total:	5,052.87

Pacific Terminal Services, Inc.
P
Se

PACIFIC TERMINAL SERVICES, INC

910 SW Spokane Street, Seattle, Washington 98134
P.O. Box 24005, Seattle, Washington 98124-0005
Tele. (206) 628-0051 Fax (206) 628-0293

INVOICE	IVC00000000487
Type	
Date	8/31/2006
Page	1

Bill to:

Kopper Industries, Inc
7540 N.W. St. Helens Road
Portland OR 97210

Ship to:

Kopper Industries, Inc
7540 N.W. St. Helens Road
Portland OR 97210

Purchase Order ID	Customer ID	Salesperson ID	Shipping Method	Payment Terms ID
	KOPPER			Due on Receipt

Quantity	Item Number	Description	U Of M	Discount	Unit Price	Ext. Price
1.00	MGMTFEE-STERM	Vessel Service-Boom	Each	$0.00	$5,052.87	$5,052.87

PI 10026

PPI927000
131

Please remit payment by wire to US Bank account# 153595020311, aba#125000105. Thank you for your business.

Subtotal	$5,052.87
Misc	$0.00
Tax	$0.00
Freight	$0.00
Trade Discount	$0.00
Total	$5,052.87

Osprey Arrow at dock 1200 8/30/06 until 0915 8/31/06
Total hours at dock = 21.25

3 shifts at 8 hours = 24 Hours
24 hours x 2 Operators = 48 Hours

Thruput = 20,581 barrels

Labor = 48 hours x $63.72 = $3,058.56
Thruput = 20,581 barrels x 0.0625 = $1,286.31
Boom deployment = $708.00

Total = $5,052.87

PURCHASE INVOICE

7

Purchase Invoice Number: INV000478

Purchase Invoice Date: 06/24/06

Pay
To: PACIFIC TERMINAL SERVICES INC
PACIFIC TERMINAL
PO BOX 24005
SEATTLE, WA 98124-0005

Ship
To: PORTLAND TERMINAL
7540 NW Saint Helens Road
Portland, OR 97210

Ship Via		Confirm To	
Receive By	07/14/06	Buyer	
Terms	Net 30 Days from Ship Date	P.O. Number	
Vendor ID	383878003	P.O. Date	07/14/06

Item No.	Description	Unit	Quantity	Unit Price	Total Price
	PRODUCTS USED IN OPERATIONS	Each	1	3,970.35	3,970.35

Subtotal:	3,970.35
Invoice Discount:	0.00
Tax:	0.00
Total:	3,970.35

INVOICE IVC00000000478

Pacific Terminal Services, Inc

P

Seattle WA 98124

PACIFIC TERMINAL SERVICES, INC.

910 SW Spokane Street, Seattle, Washington 98134
P.O. Box 24005, Seattle, Washington 98124-0005
Tele. (206) 628-0051 Fax (206) 628-0293

Date
6/30/2006

JUL 12 2006

Bill to:
Kopper Industries, Inc
7540 N.W. St. Helens Road

Portland OR 97210

Ship to:
Kopper Industries, Inc
7540 N.W. St. Helens Road

Portland OR 97210

Purchase Order ID	Customer ID	Salesperson ID	Shipping Method	Payment Terms ID
	KOPPER			Due on Receipt

Quantity	Item Number	Description	U Of M	Discount	Unit Price	Ext Price
1.00	MGMTFEE-STERM	Vessel Service-Boom	Each	$0.00	$3,970.35	$3,970.35

PPI92700000 72

Please remit payment by wire to US Bank account# 153595020311, aba#125000105. Thank you for your business.

Subtotal	$3,970.35
Misc	$0.00
Tax	$0.00
Freight	$0.00
Trade Discount	$0.00
Total	$3,970.35

You replied on 7/7/2006 11:50 AM.

Gisela Paz

From: Tina Garrett [tinag@fammpnw.com] **Sent:** Fri 7/7/2006 11:26 AM
To: Gisela Paz
Cc: 'Troy Goodman'
Subject: Osprey Arrow
Attachments:

Hi Gisela – we need an itemized invoice for Koppers please

Osprey Arrow at dock 0600 6/24/2006 until 2200 6/24/2006

Total Hours at dock – 16

2 shifts at 8 hours = 16 hours

16 hours x 2 operators = 32 hours

Thruput = 19,573 barrels

Labor = 32 hours x $63.72 = $2,039.04

Thruput = 19573 barrels x 0.0625 = $1,223.31

Boom deployment = $708

Total = $3,970.35

INVOICE - IVC00000000468

Pacific Terminal Services, Inc
P
Se WA 98124

PACIFIC TERMINAL SERVICES, INC.

910 SW Spokane Street, Seattle, Washington 98134
P.O. Box 24005, Seattle, Washington 98124-0005
Tele. (206) 628-0051 Fax (206) 628-0293

Date
4/30/2006

MAY 16 2006

Bill to:
Kopper Industries, Inc
7540 N.W. St. Helens Road

Portland OR 97210

Ship to:
Kopper Industries, Inc
7540 N.W. St. Helens Road

Portland OR 97210

Purchase Order ID	Customer ID	Salesperson ID	Shipping Method	Payment Terms ID
	KOPPER			Due on Receipt

Quantity	Item Number	Description	U Of M	Discount	Unit Price	Ext Price
1.00	MGMTFEE-STERM	Vessel Service-Boom	Each	$0.00	$5,746.69	$5,746.69

VIN - 383878003

G/L - 02710000

PPI 927000037

Please remit payment by wire to US Bank account# 153595020311, aba#125000105. Thank you for your business.

Subtotal	$5,746.69
Misc	$0.00
Tax	$0.00
Freight	$0.00
Trade Discount	$0.00
Total	$5,746.69

You replied on 5/5/2006 3:39 PM.

Gisela Paz

From: Tina Garrett [tinag@fammpnw.com] **Sent:** Fri 5/5/2006 2:09 PM
To: Gisela Paz
Cc: Purchasing @ Harley Marine; 'Troy Goodman'
Subject: Koppers Invoice
Attachments:

Hi Gisela – we need an itemized invoice for Koppers please.

4/6/2006 – boom deployment for hose and line testing

Osprey Arrow at dock 1700 4/28/2006 until 1330 4/29/2006

Total Hours at dock – 20.5

3 shifts at 8 hours = 24 hours

24 hours x 2 operators = 48 hours

Thruput = 20,354 barrels

Labor = 48 hours x $63.72 = $3,058.56

Thruput = 20354 barrels x 0.0625 = $1,272.13

Boom deployment = $708 x 2 = $1416.00

Total = $5,746.69

PURCHASE INVOICE

Purchase Invoice Number: INV0000468

Purchase Invoice Date: 04/30/06

Pay
To: PACIFIC TERMINAL SERVICES INC
PACIFIC TERMINAL
PO BOX 24005
SEATTLE, WA 98124-0005

Ship
To: PORTLAND TERMINAL
7540 NW Saint Helens Road
Portland, OR 97210

Ship Via		Confirm To	
Receive By	05/16/06	Buyer	
Terms	Net 30 Days from Ship Date	P.O. Number	
Vendor ID	*383878003*	P.O. Date	*05/16/06*

Item No.	Description	Unit	Quantity	Unit Price	Total Price
	PRODUCTS USED IN OPERATIONS	Each	1	5,746.69	5,746.69

Subtotal:	5,746.69
Invoice Discount:	0.00
Tax:	0.00
Total:	5,746.69

APR 12 2006

J. CAMERON McKERNAN COMPANY

Engineering + Naval Architecture

7900 NW St. Helens Road * Portland, Oregon 97210 * (503) 232-7211 * FAX (503) 232-7658
E-mail: canita@teleport.com

April 11, 2006

INVOICE:

NO: PI06-09

Koppers Industries, Inc.
7540 NW St. Helens Road
Portland, Oregon 97210-3663

Attention: Amos Kamerer

DESCRIPTION AMOUNT

Portland Marine Terminal - Hydro/Pneumatic Test of Pipeline from Pier (2006)
(McKernan File No. P97-10)

Engineering service to assist with the annual hydro/pneumatic test of the pipeline from pier to storage tank and to prepare a report.

SERVICES:

1. Visited Koppers on April 7, 2006
   - Witnessed pressure applied to the pipeline
   - Walked the pipeline looking for leaks
   - Noted the temperature of the pipeline on the pier

2. Prepared letter report dated April 11, 2006
   - Described test procedure
   - Reported satisfactory results
   - Mailed letter report to Amos Kamerer

CHARGES:

- Labor (copy of Activity Log attached):

2 man-hours @ $110.00 per man-hour $220.00

TOTAL AMOUNT DUE $220.00

TERMS: Net cash

VIN - 0065650Z4 — 30 days
Dct - 03050413 (840)

PPI 9270 000 13
Agreed Pay From work Start date;

ACTIVITY LOG

NAME J. CAMERON McKERNAN PERIOD ENDING APRIL 15, 2006

JOB NO: P97-10 NAME KOPPERS 2006 ANNUAL PIPELINE TEST

DATE	HOURS	DESCRIPTION OF ACTIVITY
4-7	1½	Went over to Koppers. Met with TJ Turner about 9:30. Waited awhile for him to finish pressing the pipeline up for the annual hydrostatic test of the pipeline. After he got the pressure all the way up, walked the entire length of the pipeline out to the pier. Noted the pressure out there and then walked all the way back to the beginning of the pipeline.
4-10	½	Wrote the letter report about the test.
4-11	-	Did final check of letter report. Signed & stamped it.

SIGNED [signature] DATE 4-11-06

J. CAMERON McKERNAN COMPANY

Engineering + Naval Architecture

7900 NW St. Helens Road * Portland, Oregon 97210 * (503) 232-7211 * FAX (503) 232-7658
E-mail: canita@teleport.com

April 11, 2006

INVOICE:

NO: PI06-09

COPY

Koppers Industries, Inc.
7540 NW St. Helens Road
Portland, Oregon 97210-3663

Attention: Amos Kamerer

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TOTAL AMOUNT DUE $220.00

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4-10	½	Wrote the letter report about the test.
4-11	-	Did final check of letter report. Signed & stamped it.

SIGNED [signature] DATE 4-11-06

PURCHASE INVOICE

Purchase Invoice Number: P106-09

Purchase Invoice Date: 04/07/06

Page: 1

Pay
To: MCKERNAN
J CAMERON
MCKERNAN J CAMERON
2303 N RANDOLPH AVE
PORTLAND, OR 97227

Ship
To: PORTLAND TERMINAL
7540 NW Saint Helens Road
Portland, OR 97210

Ship Via		Confirm To	
Receive By	04/19/06	Buyer	
Terms	Net 46 Days	P.O. Number	
Vendor ID	006565024	P.O. Date	04/19/06

Item No.	Description	Unit	Quantity	Unit Price	Total Price
	CONTRACTED EXPENSE	Each	1	220.00	220.00

Subtotal:	220.00
Invoice Discount:	0.00
Tax:	0.00
Total:	220.00

Agriculture: Oregon Dept. of

Koppers004158

Agriculture: Oregon Dept of

Koppers004159

STATE OF WASHINGTON
DEPARTMENT OF LICENSING
MASTER LICENSE SERVICE

MASTER LICENSE RENEWAL APPLICATION

EXPIRATION DATE: 12-31-1999
(To avoid penalties, payment and completed form must be submitted on or before the expiration date.)

OFFICE USE ONLY
9946-W

ZIP - 400 - 731 - 0003

BUSINESS OWNER NAME & MAILING ADDRESS:
Please make corrections to the business name, mailing, or business address.

0004992 AB **AUTO H1 9 1165 97210-366340

KOPPERS INDUSTRIES, INC.
7540 NW SAINT HELENS RD
PORTLAND OR 97210-3663

UNIFIED BUSINESS ID#: 601 139 216 001 0003

BUSINESS FIRM NAME & LOCATION ADDRESS:

KOPPERS INDUSTRIES, INC.
7540 NW SAINT HELENS RD
PORTLAND OR 97210

COMPLETE THE BACK SIDE FOR LIQUOR, LOTTERY, PHONE SOLICITOR, OR PESTICIDE	AMOUNT DUE	LATE CHARGE
PESTICIDE DEALER	$ 50.00	$ 0.00
RENEWAL APPLICATION FEE	9.00	0.00

We no longer sell this product & no longer need the license.

RECEIVED
NOV 23 1999
KOPPERS INDS, INC.
PORTLAND OR

sent 11.23.99 EP

OUR COMPUTER IS Y2K COMPLIANT! FOR YOUR CONVENIENCE, WE ENCOURAGE EARLY RENEWAL TO AVOID ANY LAST MINUTE RUSH THAT MAY DELAY YOUR LICENSE.	$ 59.00	$ 0.00

YOUR MASTER LICENSE WILL BE INVALID AND LATE CHARGES WILL BE DUE IF PAYMENT IS NOT RECEIVED BY THE EXPIRATION DATE.

Total Due: $ 59.00
Make check payable in U.S. $ to:
Washington State Treasurer

Requested By: 12-15-1999

UBI#: 601 139 216 001 0003

YOUR NEW EXPIRATION DATE WILL BE: 12-31-2000

Check if either of the following occurred:
Change in ownership ☐
Change in partnership ☐

I certify under penalty of perjury under the laws of the State of Washington that I have read and understand the conditions and requirements described, and that the matters and things set forth on this renewal application, including any accompanying information, are true and correct.

X _____
Signature of Sole Proprietor, Partner, Officer of the Corporation, or LLC Member or Manager

11/23/99 Portland Multnomah (503) 286-3681
Date & Place (City & County) Where Signed — Business Telephone Number

Return renewal application and payment to:

DEPARTMENT OF LICENSING
MASTER LICENSE SERVICE
PO BOX 9034
OLYMPIA WA 98507-9034

Phone: 360 664-1414

The Department of Licensing has a policy of providing equal access to its services. If you need special accommodation please call (360) 664-1400 or TDD (360) 586-2788.

OREGON DEPT OF AGRICULTURE
635 Capitol St. NE
Salem, OR 97301-2532
503/986-4635

RECEIVED

NOV 2 3 1999

KOPPERS INDS, INC
PORTLAND OR

Pesticide Dealer
2000 LICENSE RENEWAL APPLICATION

KOPPERS INDUSTRIES INC
AMOS S KAMERER
7540 NW ST HELENS RD
PORTLAND OR 97210

CURRENT LICENSE EXPIRES: 12/31/1999
Mail/Firm Number: 077467 077467
Phone number: 503/286-3681
FAX number: 503/285-2831
E-mail:

Business Location Address:
KOPPERS INDUSTRIES INC
AMOS S KAMERER
7540 NW ST HELENS RD
PORTLAND OR 97210

Contact person: AMOS S KAMERER
Phone number: 503/286-3681
FAX number: 503/285-2831
E-mail:

ODA Pesticide Quarterly Newsletter notification by E-mail? ___yes _X_no

Lic Code
081780-65

Please complete this form and make corrections where necessary.

LICENSE FEE - Pesticide Dealer

TOTAL FEE DUE: $ 10.00

LICENSE REQUIRED ONLY FOR THOSE WHO SELL, OFFER FOR SALE, OR DISTRIBUTE RESTRICTED USE PESTICIDES. LICENSE IS SPECIFIC TO THIS LOCATION AND IS NOT VALID AT ANY OTHER LOCATIONS.

X Check here if license is no longer required.

Payment Due By January 1

Signature _____ Title Plant Manager Date 11/23/99

Print name Amos Kamerer

Make remittance payable to Oregon Department of Agriculture
YOU MUST RETURN THIS APPLICATION TO RENEW OR DELETE YOUR LICENSE.

Sent 11/23/99 EP

Oregon
John A. Kitzhaber, M.D., Governor

Department of Agriculture
Mailing address:
635 Capitol Street NE
Salem, OR 97310-0110

Location address:
3420 Cherry Ave NE

PESTICIDES DIVISION

December 14, 1998

Koppers Industries
7540 NW St Helens Road
Portland, OR 97210-3663

ATTN: Amos Kamerer

Thank you for submitting your pesticide dealer records.

I have reviewed the records and found them to be in compliance with ORS 634.372(5).

If you ever have any questions concerning your pesticide sales records, feel free to contact me at (503) 986-4650.

Sincerely,

Brent Nicolas

Brent Nicolas
Pesticide Investigator
Pesticides Division
Phone - (503) 986-4650
FAX - (503) 986-4735

RECEIVED
DEC 16 1998
KOPPERS INDS, INC.
PORTLAND OR

– Air Liquide: Contract –

Transmitter # 503-286-8113

Koppers004163

PERMIT TO OPERATE

Building Codes Division Boiler and Pressure Vessel Program

THIS PERMIT MUST BE CONSPICUOUSLY DISPLAYED ON OR NEAR VESSEL

Site no.:

19723
KOPPERS IND
7540 NW ST HELENS RD
PORTLAND, OR 97210

Location: YARD-T200

AIR LIQUIDE
ATTN LIZ
10450 SW TUALATIN SHERWOOD RD
TUALATIN, OR 97062

Vessel no.: NB1483

Pressure: 250

Code: U2E

Type: LNIG

Permit no.: 76763

Permit expires: 06/30/2009

DEPARTMENT OF CONSUMER & BUSINESS SERVICES

440-2576 (2/01/COM)

Note: Please use the attached card to notify the Building Codes Division of any change in the status of this vessel (e.g., junked, moved out of Oregon, shut down or disconnected, ownership changed, etc.).

This permit signifies that the vessel is properly registered with the Building Codes Division and that the current fee is paid. Permit is not transferable from one responsible party to another.

Koppers004164

AIR LIQUIDE

February 26, 2007

TJ Turner
Plant Supervisor
Koppers
7540 NW Saint Helens Road
Portland, OR 97210

Dear Mr. Turner:

Thank you for your continued confidence in Air Liquide Industrial U.S. LP. Enclosed is your signed Bulk Product Agreement. This is a seven (7) year contract with an effective date of October 1, 2008. Attached is a Material Safety Data Sheet for nitrogen in accordance with section 12 d of your agreement.

Air Liquide Industrial U.S. LP has an excellent service and distribution department. Contacts for these two groups, in the event JV Northwest needs support, are:

Name	Area of Service	Phone #
Dan Miller/Brandon Bowles	Customer Service	800-527-4374
Greg LeBoeuf	Dispatch	800-323-1970

Both service departments are open during normal business hours but you can also reach someone with emergency requests 24 hours a day, 7 days a week including holidays at the above numbers.

We value your business and look forward to a long and mutually beneficial business relationship. If you have any questions or concerns, please feel free to contact Jim Graber, Account Manager, at 503-703-3722 (cell) or myself at the Tualatin Region office in Tualatin, OR at 503-691-7125.

Sincerely,

Liz Chase-VonDemfange

AIR LIQUIDE INDUSTRIAL U.S. LP • 10450 SW Tualatin-Sherwood Road, Tualatin, OR 97062
Phone: 503-691-2600 • Fax: 503-692-4815

AIR LIQUIDE

ATMOSPHERIC GASES INSPECTION REPORT

Customer Name: Koppers Date: 11/14/01 Time: 1200

City, State: Portland, OR Contact Name & Phone: T.J. (503) 286-3681

☐ Oxygen ☒ Nitrogen ☐ Argon ☐ Emixal (Blend: Argon ____%, Oxygen ____%) ☐ _____

Inspection Frequency: ☐ 3 months ☐ 6 months ☒ ~~12~~ 24 months Next Inspection Due: 11/14/03

Installed Equipment is: ☐ Leased ☐ Customer Owned ☐ Third Party Owned by: _____

SECTION I - GENERAL

All Vessels Contain the Same Product	Vessel 1 (Main)	Vessel 2 (Reserve)	Vessel 3
Manufacturer	Linde		
Size, Gallons (Tons for converted CO_2 Buffer Vessels)	3000		
Manufacturer's Serial Number	TM-3000-3135		
National Board Number	1483		
Year Built	1969		
Maximum Allowable Working Pressure	250 PSIG	____ PSIG	____ PSIG
Customer Installation Bar Code Number	B0020135 86		
Vessel Configuration (Vertical Unless Checked):	☐ Horiz. ☐ Sph.	☐ Horiz. ☐ Sph.	☐ Horiz. ☐ Sph.

☒ Satisfactory
☒ Unsatisfactory
☒ Corrected
☒ Not Applicable

☐ Service Call Reports performed since last Inspection reviewed for follow-up with this Inspection.

☒	☐	☐		1. Station area is free from weeds, trash, and combustible material.
☒	☐	☐		2. Delivery vehicle has safe access to station.
☒	☐	☐		3. Emergency vehicles have access during delivery operations.
☒	☐	☐		4. Station is adequately secured from unauthorized entry. Master® Lock number _____
☒	☐	☐	☐	5. Station is protected by vehicle traffic barriers.
☒	☐	☐		6. Foundation is in good condition (no cracks, settling, spalling).
☒	☐	☐		7. Station is suitably illuminated for night deliveries.
☒	☐	☐		8. Air flow is sufficient for equipment & personnel.
☒	☐	☐		9. Drainage from station area is adequate.
☒	☐	☐		10. Space above station is free from power lines, pipe racks, buildings, etc.
				11. The following decals are in place, legible and correct:
☐	☒	☐	☐	a. Air Liquide Logo
☒	☐	☐		b. Product Identification Label
☒	☐	☐		c. Hazardous Warning Label
☒	☐	☐		d. Contact Phone Numbers for Deliveries and Service
☒	☐	☐		e. Driver Information Label
☒	☐	☐		12. Fill connection is secured to foundation and dust cap installed.
☒	☐	☐		13. Installation is leak free.
☒	☐	☐		14. Piping, valves and conduit are adequately supported.
☒	☐	☐	☐	15. State and/or local government inspection/registration certificate in place, legible and current.
☒	☐	☐	☐	16. Final product check valve installed.

FORM MOL-ES-104 (Formerly SMT-ES-104) REV 1/98

CUSTOMER

Koppers004166

AIR LIQUIDE

ATMOSPHERIC GASES INSPECTION REPORT

Customer Name: Koppers Date: 11/14/01

SECTION II - VESSEL CONTROLS

	Vessel 1 (Main)	Vessel 2 (Reserve)	Vessel 3
Current Operating Pressure:	165 PSIG	_____ PSIG	_____ PSIG
Vacuum Reading:	9 Microns	_____ Microns	_____ Microns
Take Vacuum Reading Once per Year Unless a Problem is Encountered or Expected.			
Vacuum Reading Taken with Vessel:	☒ Cold ☐ Warm	☐ Cold ☐ Warm	☐ Cold ☐ Warm
Vessel Equipped With Dual Relief Valves and Discs:	☐ Yes ☐ No	☐ Yes ☒ No	☐ Yes ☐ No
Pressure Relief Valve 1 Nameplate Set Point:	250 PSIG	_____ PSIG	_____ PSIG
Pressure Relief Valve 2 Nameplate Set Point:	250 PSIG	_____ PSIG	_____ PSIG
Rupture Disc 1 Rating:	370 PSIG	_____ PSIG	_____ PSIG
Rupture Disc 2 Rating:	370 PSIG	_____ PSIG	_____ PSIG
Pressure Build Cut In Set Point:	160 PSIG	_____ PSIG	_____ PSIG
Economizer Cut In Set Point:	170 PSIG	_____ PSIG	_____ PSIG

	Satisfactory	Unsatisfactory	Corrected	Not Applicable	Satisfactory	Unsatisfactory	Corrected	Not Applicable	Satisfactory	Unsatisfactory	Corrected	Not Applicable
1. Liquid level gauge zero and span check.	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
2. Liquid level gauge condition.	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
3. Full and report arrows in place.	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
4. Pressure gauge zero check.	☒	☐	☐		☐	☐	☐		☐	☐	☐	
5. Pressure gauge condition.	☒	☐	☐		☐	☐	☐		☐	☐	☐	
6. Paint condition.	☒	☐	☐		☐	☐	☐		☐	☐	☐	
7. Cabinet condition including door(s).	☐	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐
8. Vessel secured against movement.	☒	☐	☐		☐	☐	☐		☐	☐	☐	
9. Pressure build regulator / solenoid operation.	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
10. Economizer regulator / solenoid operation.	☒	☐	☐		☐	☐	☐		☐	☐	☐	
11. Pressure build coil ice accumulation.	☒	☐	☐		☐	☐	☐		☐	☐	☐	
12. Full trycock valve operation.	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
13. Fill line check valve operation.	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
14. Fill line drain valve operation.	☒	☐	☐		☐	☐	☐		☐	☐	☐	
15. Fill line relief valve operation.	☒	☐	☐		☐	☐	☐		☐	☐	☐	
16. Dedicated fill / VGL hose purge valve operation.	☐	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐
17. Dedicated fill / VGL hose relief valve operation.	☐	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐
18. Dedicated fill / VGL hose stand secured.	☐	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐
19. Dedicated fill / VGL hose stand locked closed.	☐	☐	☐	☒	☐	☐	☐	☐	☐	☐	☐	☐
20. Pressure relief valve cannot unscrew upon discharge.	☐	☐	☐		☐	☐	☐		☐	☐	☐	

FORM MOL-ES-104 (Formerly SMT-ES-104) REV 1/98

CUSTOMER

Koppers004167

AIR LIQUIDE

ATMOSPHERIC GASES INSPECTION REPORT

Customer Name: Koppers Date: 11/14/01

SECTION III - VAPORIZERS & HEATERS

☐ No Vaporizers or Heaters Installed. Proceed to next Section.

Manufacturer:	Cryoquip		
Model Number:	VAT-812-FXL12		
Type (Ambient, Forced Air, Water, Steam, Electric):	AMB		
Quantity of Each Model Installed:	2		
Capacity of Each Model (8 hr rating):	7200 KSCFH	____ KSCFH	____ KSCFH
Ambient Temperature: 67 °F	Satisfactory ☒	☒	☒
	Unsatisfactory ☒	☒	☒
	Corrected ☒	☒	☒
	Not Applicable ☒	☒	☒
1. Vaporizer ice accumulation (less than 50% covered).	☒	☐	☐
2. Vaporizer secured against movement.	☒	☐	☐
3. Thermal relief (trapped liquid) valves installed.	☒	☐	☐
4. Electrical control boxes sealed.	☒	☐	☐
5. Low temperature protection operation:	☒	☐	☐
6. Low temperature protection set point:	____ °F	____ °F	____ °F
7. Low temperature protection calibration date:	__/__/__	__/__/__	__/__/__
8. Low temperature protection type (a, b, c, other):	____	____	____
a. Temperature switch / solenoid b. Bimetallic pilot (e.g. Kaye & MacDonald) c. Charged bulb (e.g. Robertshaw)			
9. Switching system operation:	☒	☐	☐
10. Timer setting for each side:	____ hours	____ hours	____ hours
11. Switching type (a, b, c, other):	____	____	____
a. Direct solenoid b. 2 way ball valve (electric or air) c. 3 way ball valve (electric or air)			
Forced Air and Electric Vaporizers:	☒	☐	☐
12. Belt tension and condition.	☐	☐	☐
13. Fan/belt guard in place.	☐	☐	☐
14. Condition of wiring and control cabinet.	☐	☐	☐
15. Amperage draw Leg 1	____ A	____ A	____ A
Leg 2	____ A	____ A	____ A
Leg 3	____ A	____ A	____ A
16. Temperature switch set point:	____ °F	____ °F	____ °F
Water Bath and Steam Vaporizers:	☒	☐	☐
17. Water bath temperature switch set point:	____ °F	____ °F	____ °F
18. Water flow switch operation.	☐	☐	☐
19. Steam supply pressure switch set point:	____ PSIG	____ PSIG	____ PSIG
20. Steam supply pressure.	____ PSIG	____ PSIG	____ PSIG
21. Steam pressure relief valve set point:	____ PSIG	____ PSIG	____ PSIG
22. Steam pressure relief valve condition and operation.	☐	☐	☐
23. Steam trap operation and drainage.	☐	☐	☐
24. Vacuum breaker valve condition and operation.	☐	☐	☐

FORM MOL-ES-104 (Formerly SMT-ES-104) REV 1/98

CUSTOMER

Koppers004168

AIR LIQUIDE

ATMOSPHERIC GASES INSPECTION REPORT

Customer Name: Koppers Date: 11/14/a

SECTION IV - OXYGEN

The following conditions shall be met for bulk oxygen storage systems having a total capacity of greater than 20,000 SCF, including unconnected reserves stored on the same site. The distances from exposures shall be measured from the edge of the bulk oxygen storage system foundation, unless otherwise noted. Distances from an exposure listed below without the fire wall (as defined by local codes) option are not reducible with the addition of a fire wall. In the event of a conflict with NFPA 50, the current edition of NFPA 50 shall rule.

☒ Satisfactory
☒ Unsatisfactory
☒ Corrected
☒ Not Applicable
☒ Fire Wall of 2 Hour Duration Interrupts Line of Sight from Exposure. Minimum One Foot Clearance between Equipment and Fire Wall.

☒ Not an Oxygen Installation. Proceed to next Section.

1. "OXYGEN - NO SMOKING - NO OPEN FLAMES" signs posted on all views of station.
2. Concrete off loading pad is clean and of adequate size (8' square minimum for existing installations, 12' square minimum for new installations).
3. Wood frame construction: 50 ft.
4. Nearest wall opening: 10 ft.
5. Above ground flammable liquid storage, 1000 gal or less: 25 ft.
6. Above ground flammable liquid storage, more than 1000 gal: 50 ft.
7. Below ground flammable liquid storage: 15 ft from tank; 25 ft from vent.
8. Liquid hydrogen: 75 ft.
9. Other flammable liquefied gases storage above ground: 1000 gal or less: 25 ft.
10. Other flammable liquefied gases storage above ground: more than 1000 gal: 50 ft.
11. Non-liquefied or dissolved flammable gases storage above ground: 25,000 scf or less: 25 ft.
12. Non-liquefied or dissolved flammable gases storage above ground: more than 25,000 scf: 50 ft.
13. Rapidly burning solid materials (paper, cardboard, etc.): 50 ft.
14. Slowly burning solid materials (coal, timber, etc.): 25 ft.
15. Confining walls on three sides or fewer: 75 ft in one direction and 35 ft in approximately 90° direction - not including 2 hour fire wall less than 12 ft high.
16. Places of public assembly or commonly occupied areas: 50 ft.
17. Non-ambulatory patients: 50 ft.
18. Public sidewalk or parked vehicles: 10 ft.
19. Adjoining property line which may be built upon: 5 ft.
20. Weeds and long dry grass: 15 ft.
21. Fill connection and relief valve outlets from underground sewer: 8 ft.
22. Stationary equipment neither beneath nor exposed by failure of:
    a. Electric power lines.
    b. Piping containing any flammable or combustible liquids or gases.
23. Equipment located at ground level, not on rooftops or other structures.

Signature denotes this section was completed by:

Printed name: _____ Date: ___/___/___

Signature: _____

CUSTOMER

AIR LIQUIDE

ATMOSPHERIC GASES INSPECTION REPORT

Customer Name: Koppers Date: 11/14/01

SECTION V - MEDICAL

This section shall be completed for bulk oxygen service to a Health Care Facility as defined by NFPA 99.

- ☒ Customer is not a Health Care Facility per NFPA 99. Proceed to next Section.
- ☐ Customer does not have hyperbaric facilities in use. Complete "Respiratory Use" portion only.
- ☐ Customer does not have respiratory facilities in use. Complete "Hyperbaric Use" portion only.

	Respiratory Use	Hyperbaric Use
Satisfactory	☒	☒
Unsatisfactory	☒	☒
Corrected	☒	☒
Not Applicable	☒	☒
1. Primary Bulk Liquid Storage Vessel Low Liquid Level Alarm.		
a. Switch operation.	☐☐☐ / ☐☐☐	☐☐☐ / ☐☐☐
b. Annunciator operation.		
c. Set point on decreasing level:	_____ "H_2O ☐	_____ "H_2O ☐
2. Reserve Bulk Liquid Storage Vessel Low Liquid Level Alarm.		
a. Switch operation.	☐☐☐ / ☐☐☐	☐☐☐ / ☐☐☐
b. Annunciator operation.		
c. Set point on decreasing level:	_____ "H_2O	_____ "H_2O
3. Low Reserve System Pressure.		
a. Switch operation.	☐☐☐ / ☐☐☐	☐☐☐ / ☐☐☐
b. Annunciator operation.		
c. Set point on decreasing pressure:	_____ PSIG	_____ PSIG
4. Reserve System in Use Alarm.		
a. Switch operation.	☐☐☐ / ☐☐☐	☐☐☐ / ☐☐☐
b. Annunciator operation.		
c. Set point on decreasing pressure:	_____ PSIG	_____ PSIG
5. Regulator set points per Drawing STX 1015, STX 1016, STX 1044 or STX 1045, as applicable.		
a. Primary supply product regulator (PCV100).	_____ PSIG	_____ PSIG
b. Reserve supply product regulator (PCV101).	_____ PSIG	_____ PSIG
c Final supply line regulator - primary.	_____ PSIG	_____ PSIG
d. Final supply line regulator - back up.	_____ PSIG	_____ PSIG
6. Cylinder reserve system pressure (1800 PSIG or greater).	_____ PSIG	_____ PSIG
7. Cylinder reserve shall **NOT** be equipped with pigtail check valves.	☐☐☐☐	☐☐☐☐
8. Product labels, lot numbers and expiration dates for reserve legible and current.	☐☐☐☐	☐☐☐☐

Signature denotes this section was completed by:

Printed name: _____ Date: ___/___/___

Signature: _____

SECTION VI - NON-MEDICAL CONTROLS

☐ Customer is a Health Care Facility per NFPA 99 or has no final line controls. Proceed to next Section.

☐☐☐☐	1. Intermediate (first stage) regulator(s) operation and set point:	_____ PSIG
☐☐☐☐	2. Primary final regulator(s) operation and set point:	_____ PSIG
☐☐☐☐	3. Secondary final regulator(s) operation and set point:	_____ PSIG
☐☐☐☐	4. Reserve system cut-in regulator(s) operation and set point:	_____ PSIG

AIR LIQUIDE

ATMOSPHERIC GASES INSPECTION REPORT

Customer Name: Koppers Date: 11/14/01

SECTION VII - HIGH PRESSURE STORAGE

This section is to be filled out for all gaseous storage with a maximum working pressure in excess of 250 PSIG. This includes all storage associated with the bulk system, such as reserve systems for Health Care Facilities, Floxal and interim supply systems intended for use while a primary supply is being refilled. For CO_2 or propane type vessels used as buffer storage, complete the Inspection Report with the buffer storage included in Section I (Liquid Vessels). In general, a "tube" is a high pressure receiver, either ASME or DOT, with a length of six feet or greater and mounted in a frame, while a "cylinder" is a DOT high pressure receiver with a length of less than six feet, either with a frame and Pack Number or individually connected to a manifold without a frame.

☒ Satisfactory
☒ Unsatisfactory
☒ Corrected
☒ Not Applicable

☒ No High Pressure Storage Installed. Proceed to next Section.

1. Cylinder/Tube valve condition.
2. Pigtail condition. Pigtail material: ☐ Copper ☐ Stainless Steel ☐ Braided Hose
3. Manifold valve condition.
4. Manifold condition.
5. Pressure gauge condition.
6. Temperature gauge condition.
7. Master valve condition.
8. Cylinder/Tube secured against movement.
9. Frame or stand condition.

If individual tubes (or assemblies of tubes without assigned Tube Pack Numbers) are installed, indicate on additional sheets, as necessary, the Manufacturer, Serial Number, MAWP and Water Volume for each tube. For ASME tubes, indicate the National Board Number, the Date of Manufacture and the pressure at which each Relief Valve opens. For DOT tubes, indicate the DOT Class, Date of Last Retest, and the set pressure of the Relief Disc and whether the Disc is lead backed. For tubes displaying neither ASME nor DOT nomenclature, copy all information from the Data Plate(s).

☐ No Tubes Installed. Proceed to Cylinders, below. ☐ No ASME tubes installed. ☐ No DOT tubes installed.

Tube Pack Number(s):								
Number of Tubes per Pack:								
Maximum Allowable Working Pressure:								
Pack is Dual Rated (2400 DOT, 1475 ASME)	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes	☐ Yes
Month/Year Retest Due (ASME N/A):	__/__	__/__	__/__	__/__	__/__	__/__	__/__	__/__
Pressure Relief Valve Opens At (DOT N/A):								
Initials Required:								

☐ No Cylinders Installed. Proceed to next Section.

Size of cylinders, SCF				
Number of cylinders of each size				
Oldest cylinder test date of each size	__/__	__/__	__/__	__/__

CUSTOMER

AIR LIQUIDE

ATMOSPHERIC GASES INSPECTION REPORT

Customer Name: Koppers Date: 11/14/01

SECTION VIII - PUMPS

☒ No Pumps Installed. Proceed to next Section.

Manufacturer:			
Model Number and/or Housing Size:			
Serial Number:			
Capacity of Each Pump:	____ GPM	____ GPM	____ GPM
Rated Discharge Pressure:	____ PSIG	____ PSIG	____ PSIG
Pressure Relief Valve Set Point:	____ PSIG	____ PSIG	____ PSIG
Hour Meter Reading			

Satisfactory	☒				☒				☒		
Unsatisfactory		☒				☒				☒	
Corrected			☒				☒				☒
Not Applicable				☒				☒				☒
1. Liquid solenoid valve operation.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
2. Cool down timer operation.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
3. Cavitation sensor operation.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
4. Packing/shaft seal condition.	☐	☐	☐		☐	☐	☐		☐	☐	☐	
5. Low pressure start switch operation.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
6. Dump solenoid valve operation.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
7. High pressure stop switch operation.	☐	☐	☐		☐	☐	☐		☐	☐	☐	
8. Over pressure stop switch operation.	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
9. Drive motor/warm end operation/condition.	☐	☐	☐		☐	☐	☐		☐	☐	☐	
10. Drive motor/warm end lubrication.	☐	☐	☐		☐	☐	☐		☐	☐	☐	

SECTION IX - TELEFLO

This section is to be filled out in coordination with the TELEFLO System Administrator or their designate. The pressure and/or level signals shall be simulated to the transmitter(s) to demonstrate the proper alarm function at the Alarm Reception location.

☐ No telemetry installed. Proceed to next Section.

Telephone number for telemetry unit (503 286 - 8113 x____

Telemetry installed: ☑ DIVA ☐ Classic ☐ SL-42 ☐ SL-21 ☐ Telesafe 6000 ☐ Telesafe VS/2

	Vessel 1 (Main)	Vessel 2 (Reserve)	Vessel 3
1. Low liquid level set point.	50 "H_2O	____ "H_2O	____ "H_2O
2. Low low liquid level set point.	30 "H_2O	____ "H_2O	____ "H_2O
3. High pressure set point.	300 PSIG	____ PSIG	____ PSIG
4. Low pressure set point.	— PSIG	____ PSIG	____ PSIG
5. Low low pressure set point.	— PSIG	____ PSIG	____ PSIG

FORM MOL-ES-104 (Formerly SMT-ES-104) REV 1/98

CUSTOMER

AIR LIQUIDE

ATMOSPHERIC GASES INSPECTION REPORT

Customer Name: Koppers Date: 11/14/01

SECTION X - COMMENTS

All items which are marked "UNSATISFACTORY" and not also marked "CORRECTED" must be explained below. Attach additional sheets as necessary.

Section	Line	Explanation
1	11A	Air Liquid logo on tank. Liquid Air

SECTION XI - REVIEW & APPROVAL

The Customer Representative shall be given an opportunity to comment on the Air Liquide system. The Customer Representative shall sign this document to indicate the inspection described herein was performed with the Customer's knowledge.

Customer Representative Printed Name and Title: T.J. Turner Gen. Foreman

Customer Representative Signature and Date: T.J. Turner 11/14/01

Customer Comments:

Field Service or Maintenance Technician Printed Name and Signature: Rich Perez

Reviewed by Regional Office and/or Area Engineer Initials:

To be completed by Corporate Office Personnel:

Vessel Code(s) A A A

Inspection Reviewed by (Initials and Date): ___ ___/___/___ ☐ Database Revised ___/___/___

☐ Review Required by Medical Quality Control Team (Signature and Date) ___ ___/___/___

FORM MOL-ES-104 (Formerly SMT-ES-104) REV 1/98

CUSTOMER

Koppers004173

TRANSMITTAL LETTER

AM Health & Safety
100 Bell Avenue, PO Box 547 Carnegie, PA 15106
Phone: 412-429-0560 Fax: 412-429-5122

PROJECT	**Koppers Industries, Inc. Portland Terminal Carbon Materials & Chemical Division Comprehensive IH Survey**	**TO:**	**Koppers Industries, Inc. 7540 NW St. Helens Road Portland, OR 97210-3663**
PROJECT NO.:	**02444P.00**	**ATTN:**	**Mr. Amos Kamerer**
DATE:	**November 12, 2002**	If enclosures are not as noted, please inform us immediately If checked below, please: _X_ Acknowledge receipt of enclosures. __ Return enclosures to us.	

WE TRANSMIT: X Herewith | Under Separate Cover
In Accordance With Your Request

FOR YOUR: Approval | Distribution To Parties | X Information
Review & Comment | Record
Use | Other

THE FOLLOWING: Drawings | Shop Drawings Prints | Samples
X Specifications | Shop Drawing Reproducible | Product Literature
Change Order | Other -Tables

COPIES	DATE	REV. NO.	DESCRIPTION	CODE
1	11/12/02		Portland NW Terminal – Comprehensive IH Survey	B
1	11/12/02		Extra Copy of Posting Tables and Employee Notification Letters	B

ACTION CODE
A. Action indicated on item transmitted
B. No action required
C. For signature and return to this office
D. For signature and forwarding as noted below under REMARKS
E. See REMARKS below

REMARKS

COPIES TO: Michael Juba (with enclosures)
File

BY: Scott B. Neff, Health & Safety Associate

REPORT

INDUSTRIAL HYGIENE SURVEY

Occupational Exposures to Airborne
Coal Tar Pitch Volatiles and Poly Aromatic Hydrocarbons (PAH)

Northwest Terminal
Portland, Oregon

KOPPERS
INDUSTRIES

Project No.: 02444P.00

November 2002

AM Health & Safety

AM Health and Safety, Inc.
100 Bell Avenue
P.O. Box 547
Carnegie, Pa 15106
Telephone: 412-429-0560
Fax: 412-429-5122

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1

INTRODUCTION

As directed by Mr. Michael Juba, CIH, Manager, Industrial Hygiene and Safety Services, Koppers Industries, Inc. an industrial hygiene survey for potential airborne Coal Tar Pitch Volatiles (CTPV) and Poly Aromatic Hydrocarbons (PAH) exposures was conducted on October 1-2, 2002 during the day and night shifts, at the Koppers Industries Northwest Terminal in Portland Oregon. As requested by Koppers Industries, at least two work shifts were sampled per contaminant per occupation in order to achieve sampling that would be as representative as practicable of the operations. This was a comprehensive industrial hygiene exposure survey of the facility. According to the Koppers IH Program, comprehensive industrial hygiene surveys of each facility are performed approximately every three to four years. The noise component of the comprehensive industrial hygiene survey including exposures and area noise levels are reported under a separate cover and report.

The purpose of this survey was to assess representative potential occupational airborne exposures to the above-mentioned contaminants. Full shift eight-hour time weighted average (8-hour TWA) samples were collected for CTPVs and PAHs for each of the occupations identified by Amos Kamerer, Plant Manager, Koppers Industries Portland Terminal. A short term sample was also obtained of the above mentioned contaminants on the night shift employee who stayed over into the beginning of the day shift to load two tanker trucks with coal tar pitch.

Finally, a ventilation survey was conducted on the two Laboratory Fume Hoods in the Laboratory. The purpose of this ventilation survey was to test the Face Velocities of the fume hoods and adjust the sash heights in order to obtain an average face velocity of one hundred feet per minute of air (100 fpm) per Koppers Industries policy.

All airborne contaminant monitoring was conducted in accord with current Occupational Safety and Health Administration (OSHA) and Koppers Industries guidelines as well as AM Health and Safety Standard Operating Procedures (SOP).

Scott B. Neff, Health and Safety Associate, conducted these surveys under the direct supervision of Mr. Bernard J. Quinn, Certified Industrial Hygienist (CIH), President/Chief Executive Officer of AM Health & Safety, Inc., Carnegie, PA.

CRITERIA

Coal Tar Pitch Volatiles

The Occupational Safety and Health Administration (OSHA), under 29 CFR 1910.1000 Table Z-1 has established a Permissible Exposure Limit (PEL) based upon an eight hour, full shift Time Weighted Average (8-hour TWA) for Coal Tar Pitch Volatiles which is listed below:

Airborne Contaminant	OSHA PEL
Coal Tar Pitch Volatiles	0.2 mg/m^3

Where:

mg/m^3 milligrams per cubic meter of air

PEL Permissible Exposure Limit

As of this date, the Occupational Safety and Health Administration (OSHA) has not established a Short Term Exposure Limit (STEL) for airborne Coal Tar Pitch Volatiles (CTPV). For comparison purposes, the American Conference of Governmental Industrial Hygienists (ACGIH) has developed recommendations for contaminants that do not have established STELs. These recommendations state that excursions in worker exposure levels may exceed three times the Threshold Limit Value (TLV) – Time Weighted Average (TWA) for no more than a total of thirty minutes, and under no circumstances should they exceed five times the TLV – TWA. In the case of CTPV, if the OSHA PEL is substituted for the TLV, then the recommended 30 minute

CRITERIA (CONT...)

excursion limit would be 0.6 mg/m^3 with a never to exceed limit of 1.0 mg/m^3. Keep in mind this excursion limit is a guideline and not a regulatory level.

Ventilation Survey

Koppers Industries has established a policy that states that all laboratory fume hoods shall maintain an average face velocity of one hundred feet of air per minute (100 fpm). Upon testing of face velocities, sash heights shall be adjusted to appropriate levels to obtain the required face velocity and arrow shall be placed on the hoods and sashes which are lined up to identify the appropriate sash height settings.

CONCLUSIONS

Based on the results and observations of this survey, the following conclusions are presented:

1. One (1) of the two (2) occupations monitored for full shift airborne contaminant exposures on the two consecutive days exceeded the OSHA PEL for Coal Tar Pitch Volatiles (CTPV) of 0.2 mg/m^3, TWA, with an exposure of 0.67 mg/m^3. This employee (Utility Man, employee # - 1977) obtained the over exposure on the second day of monitoring (10/2/02) while observed operating the loader to load pencil pitch into the melter for most of the shift (Refer to Section 2, Table I).

   It should be noted, this occupation (Utility Man, employee # - 1977) had a full shift exposure to airborne CTPVs that was less than the level of the OSHA PEL on the other day of monitoring (10/1/02). The other occupation (General Foreman, employee # - 6141) monitored for full shift airborne CTPVs as part of this survey obtained an exposure result which was less than the level of the OSHA PEL on both days of monitoring.

   As requested by Koppers Industries, any occupation monitored for full shift airborne exposure to CTPVs obtaining an exposure which meets or exceeds the level of one tenth of a milligram per cubic meter of air (0.1 mg/m^3) shall have an additional five PAH scan performed on the filter media. It should be noted that the one (1) CTPV exposure (Utility Man, employee # - 1977 on 10/2/02) which exceeded this level resulted in detectable PAH levels for all five contaminants. (Refer to Section 2 Table IA).

2. The one (1) short term task oriented airborne contaminant exposure to CTPVs collected on the occupation (Utility Man, employee # - 5700) responsible for loading two tanker trucks with coal tar pitch was less than the ACGIH recommendations for contaminants with no established STELs (Refer to Section 2, Table II).

3. Only four (4) of the eighty (80) or five percent (5 %) of the total PAH exposures resulted in detectable amounts. It should be noted, that three (3) of the four (4) detectable PAHs were for naphthalene with exposure results all below the OSHA PEL. The remaining seventy six (76), or ninety five percent (95 %) of the total PAH exposures were less than the analytical limits of detection (Refer to Section 2, Tables III, IIIA & IIIB).

4. The face velocities of the two fume hoods in the laboratory were evaluated. Where necessary, the sash heights were adjusted to obtain average face velocities as close to one hundred feet of air per minute (100 fpm) as possible and arrow tags applied to indicate proper sash heights. (Refer to Section 4, "Ventilation Survey Worksheets" for individual hood face velocities and hood descriptions.) Information provided by Koppers employees indicated that lab hoods are no longer used at the Portland Terminal. Both lab hoods evaluated were able to achieve 100 fpm, one fully open, and one with the sash adjusted to seventeen and one half inches high.

CONCLUSIONS (CONT...)

5. The employees were observed to be utilizing the following personal protective equipment (PPE): Hard Hats, Safety Glasses, Face Shields, Gloves and Steel Toe Boots. Employees were also observed utilizing Tyvek chemical protective suits and face shields while working with Coal Tar Pitch. Respiratory protection utilized included Wilson Premier 6000 Series half mask air purifying respirators equipped with OV cartridges while working with liquid pitch and particulate (P100) filters while working with solid pitch.

   It should be noted that the Utility Man monitored (task oriented) while loading 2 tanker trucks with liquid Pitch was observed utilizing a respirator equipped with particulate (P100) filter cartridges. In addition, employees where also observed wearing cotton gloves while working with liquefied pitch

6. During this survey production levels on October 1, 2002 included 2 tanker cars unloaded containing a total of 365,700 pounds of coal tar pitch and transferred into tank T-65. On October 2, 2002 production levels included 2 tanker trucks loaded with a total of 137,200 pounds of coal tar pitch, 1,000,000 pounds of pitch transferred from tank T-200 to tank T-65 and 720,000 pounds of pencil pitch added to the melter and transferred to tank T-65.

RECOMMENDATIONS

Based on the results and observations of this survey, the following recommendations are presented for your consideration:

1. The investigation of the feasibility of engineering and/or administrative controls must conducted and documented for the one employee (Utility Man) who obtained an exposure which exceeded the OSHA PEL for CTPVs while loading pencil pitch in the melter. If determined feasible, these engineering and/or administrative controls must be implemented to reduce employee exposures to CTPVs while loading pencil pitch. If engineering and/or administrative controls are determined not feasible, then documentation of the investigation must be maintained. AM Health & Safety is available to assist with the investigation if needed (Refer to Section 2, Summary Tables).

   At a minimum, employees should still practice wearing half-mask negative pressure air purifying respirators equipped with organic vapor cartridges with a P100 pre-filter while working with liquid pitch or equipped with P100 cartridges while working with solid pitch.

2. As a good Industrial Hygiene practice and to assure that a current and continuous data base of exposures exists, periodic re-monitoring for these airborne contaminants should be conducted. Every three years, as required by Koppers Industries Industrial Hygiene Monitoring Program, should be sufficient.

3. The sashes for the fume hoods in the laboratory should be maintained at the heights set during the survey in order to assure that the average face velocities remain at approximately one hundred feet per minute (100 fpm).

   Also, if lab hoods are utilized at the Portland Terminal, preventive maintenance, including changing filters, should be conducted on each of the fume hood exhaust systems on a regular basis. If a preventive maintenance plan and schedule does not exist, the development of such a program is highly recommended. AM Health and Safety is available to assist Koppers Follansbee Plant in the development of such a program.

4. The use of impervious chemical resistant gloves should be implemented while working with liquid pitch. In addition, employees should be educated on the use of air purifying respirators. Respirators equipped with P100 particulate filters should be used while working with solid pencil pitch and organic cartridges with P100 particulate pre-filters used while working with liquid pitch.

5. For your convenience, the enclosed posting tables are provided for employee notification, as required by 29 CFR 1910.1020, "Access to employee exposure and medical records."

DISCUSSION

This industrial hygiene survey for occupational exposures to Coal Tar Pitch Volatiles (CTPV) and Poly Aromatic Hydrocarbons (PAH) and the Laboratory exhaust fume ventilation survey was conducted October 1-2, 2002 at the Portland Terminal during the daylight shifts. During the survey, the environmental conditions were cool and humid with overcast and clear skies. The plant is mostly an outdoor facility, with the majority of the employees working outside during their shifts.

The process evaluated during this survey included liquid and solid pitch received at the terminal via rail cars or ship. The solid pitch (pencil pitch) is stored indoors until it can be loaded into the melter which liquefies it to be transferred into a holding tank. The liquid pitch is heated to a desired temperature (approximately 400° F) and also transferred into a holding tank. The pitch is finally loaded into rail cars or tanker trucks to fill customer orders.

The **General Foreman** is responsible for the oversight and organization of all loading, unloading, transferring, etc. operations at the terminal. Employee also assists with connects, disconnects, and with performing maintenance.

The **Utility Men** are responsible for performing all the operations at the terminal. Duties include unloading cars, loading cars, making transfers, performing maintenance, operating the loader, etc. During the monitored shifts, the employees were observed unloading 2 tanker cars, performing tanker car inspections, loading tanker trucks and loading pencil pitch into the melter.

SAMPLING TECHNIQUES AND ANALYTICAL METHODS

As previously mentioned, all sampling was attempted to be performed in accord with appropriate OSHA, Koppers, and AM Health and Safety industrial hygiene methodologies.

All airborne full shift and task oriented occupational exposures for total CTPV, and Polyaromatic Hydrocarbons (PAHs) were collected utilizing a sampling train containing 37 millimeter (mm) glass fiber filters (GFF) and SKC, XAD-2 sorbent tubes in series attached to Gillian HFS 113 personal sampling pumps calibrated to an average flow rate of 1.0 liter per minute (LPM).

Every attempt was made to conduct sampling during representative production and work practices during this survey.

Calibration of the personal sampling pumps was performed prior to and after the sampling period in accord with AM Health and Safety Standard Operating Procedure (SOP) by a secondary standard (Dwyer medium-flow Rotometer) which had been previously calibrated against a primary standard (Gilibrator- medium flow cell).

Quantitative analysis for airborne coal tar pitch volatiles (CTPV) exposures was performed utilizing NIOSH- 5023 (MOD). Additionally, High Performance Liquid Chromatography (HPLC) for the Poly Aromatic Hydrocarbon's (PAH) was performed on the XAD-2 tubes.

The face velocities of the laboratory fume hoods were obtained using a TSI VelociCalc Plus velocimeter, which was calibrated by the manufacturer.

All analyses were performed by UEC Laboratories, Monroeville, Pennsylvania, an American Industrial Hygiene Association (AIHA) accredited laboratory.

WRITTEN BY:

Scott B. Neff
Health and Safety Associate

REVIEWED & APPROVED BY:

Bernard J. Quinn, MS, CIH
President/Chief Executive Officer

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TABLE I
FULL SHIFT AIRBORNE COAL TAR PITCH VOLATILES (CTPV) EXPOSURES

KOPPERS INDUSTRIES
NORTHWEST TERMINAL
PORTLAND, OREGON

Survey Date (Shift)	Occupation Name Clock #	Sample Number	Monitoring Time (Min)	Sample Volume (L)	Coal Tar Pitch Volatiles[a] mg/m³	TWA	Remarks
10-01-02 (7:00-3:00)	**General Foreman** TJ Turner 6141	KP-CT-01A	422	422	<0.05	**<0.04**	Employee is responsible for the oversight and organization of all loading, unloading, transferring, etc. operations at the terminal. Employee also assists with connects, disconnects, and with performing maintenance.
10-01-02 (7:00-3:00)	**Utility Man** R. Eaton 1977	KP-CT-03A	424	424	<0.05	**<0.04**	Employee is responsible for performing all the operations at the terminal. Duties include unloading cars, loading cars, making transfers, performing maintenance, operating the loader, etc. During the monitored shift, the employee was observed unloading 2 tanker cars and performing tanker car inspections
10-02-02 (7:00-3:00)	**Utility Man** R. Eaton 1977	KM-CT-05A	469	469	0.68	**0.67**	Employee is responsible for performing all the operations at the terminal. Duties include unloading cars, loading cars, making transfers, performing maintenance, operating the loader, etc. During the monitored shift, the employee was observed operating the loader to load pencil pitch into the melter.
10-02-02 (7:00-3:00)	**General Foreman** TJ Turner 6141	KM-CT-06A	433	433	0.05	**0.04**	Employee is responsible for the oversight and organization of all loading, unloading, transferring, etc. operations at the terminal. Employee also assists with connects, disconnects, and with performing maintenance.

a The Occupational Safety and Health Administration (OSHA), under 29 CFR 1910.1000 Table Z-1, has established a Permissible Exposure Limit (PEL) for airborne coal tar pitch volatiles (CTPV) of two-tenths of a milligram per cubic meter of air (0.2 mg/m^3), Time Weighted Average over an eight hour period (8-hour TWA).

< Less than the analytical limit of detection.

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TABLE IA
FULL-SHIFT OCCUPATIONAL AIRBORNE POLY AROMATIC HYDROCARBON'S (PAH) CONCENTRATIONS FOR FULL SHIFT CTPV EXPOSURES GREATER THAN 0.1 mg/m^3

KOPPERS INDUSTRIES
NORTHWEST TERMINAL
PORTLAND, OREGON

Survey Date (Shift)	Sample Number	Occupation Name Clock Number	Monitoring Time (Min)	Sample Volume (L)	Anthracene µg/m^3	Anthracene TWA	Benzo(A)pyrene µg/m^3	Benzo(A)pyrene TWA	Chrysene µg/m^3	Chrysene TWA	Phenanthrene µg/m^3	Phenanthrene TWA	Pyrene µg/m^3	Pyrene TWA
10-02-02 (7:00-3:00)	KM-CT-05A	**Utility Man** R. Eaton 1977	469	469	13.0	**13.0**	9.9	**9.7**	5.4	**5.3**	5.0	**4.9**	7.9	**7.7**

Refer to: Table I, OSHA Coal Tar Pitch Volatiles established Permissible Exposure Limit (PEL).

Note: Refer to tables I for remarks.

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TABLE II
SHORT TERM AIRBORNE COAL TAR PITCH VOLATILES (CTPV) EXPOSURE

KOPPERS INDUSTRIES
NORTHWEST TERMINAL
PORTLAND, OREGON

Survey Date (Shift)	Occupation Name Clock #	Sample Number	Monitoring Time (Min)	Sample Volume (L)	Coal Tar Pitch Volatiles[a] mg/m³	TWA	Remarks
10-02-02 (11:00-7:00)	**Utility Man** J. Summerfield 5700	KM-CT-04A	107	107	0.37	N/A	Employee is responsible for performing all the operations at the terminal. Duties include unloading cars, loading cars, making transfers, performing maintenance, operating the loader, etc. During the task oriented sampling, the employee was observed loading 2 tanker trucks with Coal Tar Pitch.

a As of this date, the Occupational Safety and Health Administration (OSHA) has not established a Short Term Exposure Limit (STEL) for airborne coal tar pitch volatiles (CTPV). For comparison purposes, the American Conference of Governmental Industrial Hygienists (ACGIH) has developed recommendations for contaminants that do not have established STELs. These recommendations state that excursions in worker exposure levels may exceed three times the Threshold Limit Value (TLV) – Time Weighted Average (TWA) for no more than a total of thirty minutes, and under no circumstances should they exceed five times the TLV – TWA. In this case, if the OSHA PEL for CTPVs is substituted for the TLV, then the recommended excursion limit (3o minute) would be 0.6 mg/m^3 with a never to exceed limit of 1.0 mg/m^3. Keep in mind, this excursion limit is a guideline and not a regulatory level.

Note: See Table I for OSHA full shift employee CTPV exposure criteria.

N/A Sample was not time weighted, because it was a shortened task oriented sample.

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TABLE III
FULL-SHIFT OCCUPATIONAL AIRBORNE TOTAL POLYAROMATIC HYDROCARBON (PAH) EXPOSURES

KOPPERS INDUSTRIES
NORTHWEST TERMINAL
PORTLAND, OREGON

Survey Date (shift)	Sample Number	Occupation Name ID Number	Monitoring Time (Min)	Sample Volume (L)	Acenaphthene µg/m³	Acenaphthene TWA	Acenaphthylene µg/m³	Acenaphthylene TWA	Anthracene µg/m³	Anthracene TWA	Benzo (a) Anthracene µg/m³	Benzo (a) Anthracene TWA	Benzo (b) Fluorathene µg/m³	Benzo (b) Fluorathene TWA
10-01-02 (7:00-3:00)	KP-CT-01	**General Foreman** TJ Turner 6141	422	422	<12.0	**<10.0**	<12.0	**<10.0**	<12.0	**<10.0**	<1.2	**<1.0**	<1.2	**<1.0**
10-01-02 (7:00-3:00)	KP-CT-03	**Utility Man** R. Eaton 1977	424	424	<12.0	**<10.0**	<12.0	**<10.0**	<12.0	**<10.0**	<1.2	**<1.0**	<1.2	**<1.0**
10-02-02 (11:00-7:00)	KM-CT-04	**Utility Man** J. Summerfield 5700	107	107	48.0	**N/A**	<47.0	**N/A**	<47.0	**N/A**	<4.7	**N/A**	<4.7	**N/A**
10-02-02 (7:00-3:00)	KM-CT-05	**Utility Man** R. Eaton 1977	469	469	<11.0	**<10.0**	<11.0	**<10.0**	<11.0	**<10.0**	<1.1	**<1.0**	<1.1	**<1.0**
10-02-02 (7:00-3:00)	KM-CT-06	**General Foreman** TJ Turner 6141	433	433	<12.0	**<10.0**	<12.0	**<10.0**	<12.0	**<10.0**	<1.2	**<1.0**	<1.2	**<1.0**

N/A Sample was not time weighted, because it was a shortened task oriented sample.

Refer to Table I, OSHA Coal Tar Pitch Volatiles established Permissible Exposure Limit (PEL).

Note: Refer to Table I for remarks.

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TABLE IIIA
FULL-SHIFT OCCUPATIONAL AIRBORNE TOTAL POLYAROMATIC HYDROCARBON (PAH) EXPOSURES

KOPPERS INDUSTRIES
NORTHWEST TERMINAL
PORTLAND, OREGON

Survey Date (shift)	Sample Number	Occupation Name ID Number	Monitoring Time (Min)	Sample Volume (L)	Benzo (k) fluorathene µg/m³	Benzo (k) fluorathene TWA	Benzo (g,h,i) Perylene µg/m³	Benzo (g,h,i) Perylene TWA	Benzo (a) Pyrene µg/m³	Benzo (a) Pyrene TWA	Chrysene µg/m³	Chrysene TWA	Dibenzo (a,h) Anthracene µg/m³	Dibenzo (a,h) Anthracene TWA
10-01-02 (7:00-3:00)	KP-CT-01	**General Foreman** TJ Turner 6141	422	422	<1.2	**<1.0**	<1.2	**<1.0**	<1.2	**<1.0**	<1.2	**<1.0**	<1.2	**<1.0**
10-01-02 (7:00-3:00)	KP-CT-03	**Utility Man** R. Eaton 1977	424	424	<1.2	**<1.0**	<1.2	**<1.0**	<1.2	**<1.0**	<1.2	**<1.0**	<1.2	**<1.0**
10-02-02 (11:00-7:00)	KM-CT-04	**Utility Man** J. Summerfield 5700	107	107	<4.7	**N/A**	<4.7	**N/A**	<4.7	**N/A**	<4.7	**N/A**	<4.7	**N/A**
10-02-02 (7:00-3:00)	KM-CT-05	**Utility Man** R. Eaton 1977	469	469	<1.1	**<1.0**	<1.1	**<1.0**	<1.1	**<1.0**	<1.1	**<1.0**	<1.1	**<1.0**
10-02-02 (7:00-3:00)	KM-CT-06	**General Foreman** TJ Turner 6141	433	433	<1.2	**<1.0**	<1.2	**<1.0**	<1.2	**<1.0**	<1.2	**<1.0**	<1.2	**<1.0**

N/A Sample was not time weighted, because it was a shortened task oriented sample.

Refer to Table I, OSHA Coal Tar Pitch Volatiles established Permissible Exposure Limit (PEL).

Note: Refer to Table I for remarks.

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TABLE IIIB
FULL-SHIFT OCCUPATIONAL AIRBORNE TOTAL POLYAROMATIC HYDROCARBON (PAH) EXPOSURES

KOPPERS INDUSTRIES
NORTHWEST TERMINAL
PORTLAND, OREGON

Survey Date (shift)	Sample Number	Occupation Name ID Number	Monitoring Time (Min)	Sample Volume (L)	Fluoranthene µg/m³	Fluoranthene TWA	Fluorene µg/m³	Fluorene TWA	Indeno (1,2,3-cd) Pyrene µg/m³	Indeno (1,2,3-cd) Pyrene TWA	Naphthalene µg/m³	Naphthalene TWA	Phenanthrene µg/m³	Phenanthrene TWA	Pyrene µg/m³	Pyrene TWA
10-01-02 (7:00-3:00)	KP-CT-01	**General Foreman** TJ Turner 6141	422	422	<1.2	**<1.0**	<12.0	**<10.0**	<1.2	**<1.0**	<12.0	**<10.0**	<12.0	**<10.0**	<1.2	**<1.0**
10-01-02 (7:00-3:00)	KP-CT-03	**Utility Man** R. Eaton 1977	424	424	<1.2	**<1.0**	<12.0	**<10.0**	<1.2	**<1.0**	<12.0	**<10.0**	<12.0	**<10.0**	<1.2	**<1.0**
10-02-02 (11:00-7:00)	KM-CT-04	**Utility Man** J. Summerfield 5700	107	107	<4.7	**N/A**	<47.0	**N/A**	<4.7	**N/A**	670.0	**N/A**	<47.0	**N/A**	<4.7	**N/A**
10-02-02 (7:00-3:00)	KM-CT-05	**Utility Man** R. Eaton 1977	469	469	<1.1	**<1.0**	<11.0	**<10.0**	<1.1	**<1.0**	12.0	**11.0**	<11.0	**<10.0**	<1.1	**<1.0**
10-02-02 (7:00-3:00)	KM-CT-06	**General Foreman** TJ Turner 6141	433	433	<1.2	**<1.0**	<12.0	**<10.0**	<1.2	**<1.0**	22.0	**20.0**	<12.0	**<10.0**	<1.2	**<1.0**

N/A Sample was not time weighted, because it was a shortened task oriented sample.

Refer to Table I, OSHA Coal Tar Pitch Volatiles established Permissible Exposure Limit (PEL).

Note: Refer to Table I for remarks.

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POSTING TABLE I
FULL SHIFT AIRBORNE COAL TAR PITCH VOLATILES (CTPV) EXPOSURES

KOPPERS INDUSTRIES
NORTHWEST TERMINAL
PORTLAND, OREGON

Survey Date (Shift)	Occupation Clock #	Coal Tar Pitch Volatiles[a] TWA (mg/m^3)
10-01-02 (7:00-3:00)	**General Foreman** 6141	**<0.04**
10-01-02 (7:00-3:00)	**Utility Man** 1977	**<0.04**
10-02-02 (7:00-3:00)	**Utility Man** 1977	**0.67**
10-02-02 (7:00-3:00)	**General Foreman** 6141	**0.04**

a The Occupational Safety and Health Administration (OSHA), under 29 CFR 1910.1000 Table Z-1, has established a Permissible Exposure Limit (PEL) for airborne coal tar pitch volatiles (CTPV) of two-tenths of a milligram per cubic meter of air (0.2 mg/m^3), Time Weighted Average over an eight hour period (8-hour TWA).

< Less than the analytical limit of detection.

Posted By: _____ **Date Posted:** _____

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POSTING TABLE II
SHORT TERM AIRBORNE COAL TAR PITCH VOLATILES (CTPV) EXPOSURES

KOPPERS INDUSTRIES
NORTHWEST TERMINAL
PORTLAND, OREGON

Survey Date (Shift)	Occupation Clock #	Coal Tar Pitch Volatiles[a] (mg/m^3)
10-02-02 (11:00-7:00)	**Utility Man** 5700	0.37

a As of this date, the Occupational Safety and Health Administration (OSHA) has not established a Short Tenn Exposure Limit (STEL) for airborne coal tar pitch volatiles (CTPV). For comparison purposes, the American Conference of Governmental Industrial Hygienists (ACGIH) has developed recommendations for contaminants that do not have established STELs. These recommendations state that excursions in worker exposure levels may exceed three times the Threshold Limit Value (TLV) – Time Weighted Average (TWA) for no more than a total of thirty minutes, and under no circumstances should they exceed five times the TLV – TWA. In this case, if the OSHA PEL for CTPVs is substituted for the TLV, then the recommended excursion limit (3o minute) would be 0.6 mg/m^3 with a never to exceed limit of 1.0 mg/m^3. Keep in mind, this excursion limit is a guideline and not a regulatory level.

< Less than the analytical limit of detection.

N/A Sample was not time weighted, because it was a shortened task oriented sample.

Posted By: _____ **Date Posted:** _____

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4

VENTILATION SURVEY WORK SHEET

DATE: 10/2/00

BUILDING: lab / office	ROOM: lab	DEPARTMENT:	HOOD NO: 001
HOOD TYPE: lab hood	HOOD OPERATION:	NO. EMPLOYEES IN AREA: 0	

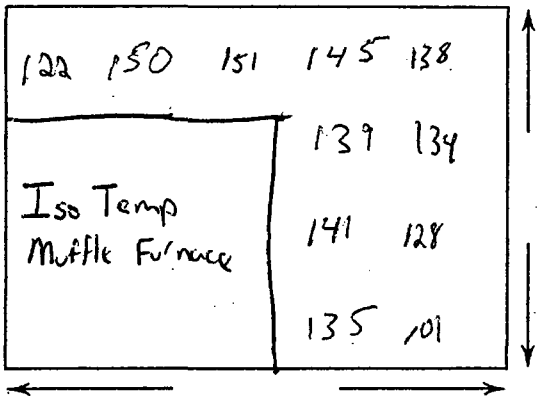
MEASUREMENTS

INSTRUMENT USED:	SERIAL NUMBER:	CALIBRATION DATE:
Veloci Calc Plus	98090138	9-99

HOOD DIAGRAMS

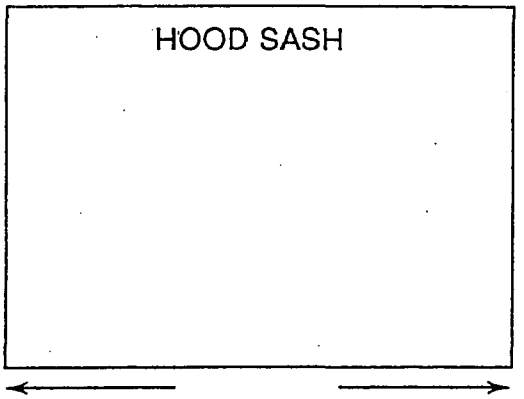
(All velocity readings in feet per minute)

FULL OPEN



Avg. = 135 ft/min

CONFIGURED TO ACHIEVE 100 fpm



Height sash set to obtain average face velocity of: 100 fpm: full open 75 fpm: N/A

COMMENTS:

- Hoods are no longer used
- Furnace in place, takes up ≈ 1/3 of hood face area

SPECIAL FEATURES:

☐	Halon	☐	Lockout	☐		☐	
☒	Alarm	☐	Indicator Light	☐		☐	

COMPARE WITH PAST SURVEY OF: 03 / 22 / 00

OVERALL:

- ☐ Same
- ☐ Better
- ☐ Worse

VELOCITY DISTRIBUTION:

- ☐ Same
- ☒ Different (Describe) better due to furnace in place

Hood was surveyed under worst possible conditions (other hood open, windows and doors closed, etc.). YES ☒ NO ☐ If no, why not? _____

Diagram of other connections: Location and Status (open, closed) of other hoods:

Intended Use of Hood: Prep + analysis of Coal Tar Pitch samples

Chemicals used, produced, released in hood:

Coal Tar Pitch	

Do those using the hood have sufficient information available about the chemicals used? N/A YES ☐ NO ☐

Have those using the hood reviewed the Health and Safety Data Sheets on the above chemicals? N/A YES ☐ NO ☐

List chemicals where additional information is required:

SURVEYED BY: Scott Neff

RECOMMENDATIONS:

DATE: 10/2/02

BUILDING: lab/office	ROOM: 126	DEPARTMENT:	HOOD NO: 002

HOOD TYPE:	HOOD OPERATION:	NO. EMPLOYEES IN AREA:
lab hood		0

MEASUREMENTS

INSTRUMENT USED:	SERIAL NUMBER:	CALIBRATION DATE:
Veloci Calc Plus	98090138	9-99

HOOD DIAGRAMS

(All velocity readings in feet per minute)

FULL OPEN

99	87	92	86	79	75
93	76	70	70	72	74
81	68	55	43	69	64
60	50	47	43	73	50

Avg. = 70 Ft/min

CONFIGURED TO ACHIEVE ~~75~~ fpm

HOOD SASH

160	114	114	100	107	105
143	113	106	99	104	113
139	122	108	107	109	112

Avg = 115

Height sash set to obtain average face velocity of: 100 fpm: 17½" 75 fpm:

COMMENTS:

- Hood is no longer used

SPECIAL FEATURES:

- ☐ Halon
- ☒ Alarm
- ☐ Lockout
- ☐ Indicator Light
- ☐ _____
- ☐ _____
- ☐ _____
- ☐ _____

COMPARE WITH PAST SURVEY OF: 03/20/02

OVERALL:

- ☐ Same
- ☐ Better
- ☐ Worse

VELOCITY DISTRIBUTION:

- ☒ Same
- ☐ Different (Describe) _____

Hood was surveyed under worst possible conditions (other hood open, windows and doors closed, etc.). YES ☒ NO ☐ If no, why not? _____

Diagram of other connections: Location and Status (open, closed) of other hoods:

Intended Use of Hood: preparation + analysis of Coal Tar Pitch Samples

Chemicals used, produced, released in hood:

Coal Tar Pitch	

Do those using the hood have sufficient information available about the chemicals used? N/A YES ☐ NO ☐

Have those using the hood reviewed the Health and Safety Data Sheets on the above chemicals? N/A YES ☐ NO ☐

List chemicals where additional information is required:

SURVEYED BY: Scott Neff

RECOMMENDATIONS:

5

UEC Technologies LLC
IH and Environmental Laboratories
4000 Tech Center Drive
Monroeville, PA 15146
Phone: (412) 825-2400 Fax: (412) 825-2407
AIHA Accreditation #322 *http://www.uec.com*

Final Report
UEC Tracking Sheet: 4366

AM Health & Safety, Inc.	Customer Code: 1127-0001	Phone:	(412) 429-0560
PO Box 547	Attention: Barry Momyer	Fax:	(412) 429-5122
100 Bell Avenue	Work Req By: Scott Neff	Email:	sneff@amhealthandsafety.com
Carnegie, PA 15106	Customer P.O.:	Loc:	02444P.00
	Project Number: 02444P.00	Date Rcvd:	10/15/02

UEC Sample Id: **000017617** Client Sample Id: **KP-CT-01A** Sampling Date: 10/01/02 Sampling Rate: 1.0000 LPM
Sampling Time: 422 min. Sample Volume: 422.0000 L

Analyte	Method	Analysis Date	An. Init.	Reporting Limit	Results Total	Air Con	TWA
Coal Tar Pitch Volatiles	NIOSH 5023	10/25/02	WV	**0.02 mg**	< **0.02 mg**	< **0.05 mg/m3**	< **0.04 mg/m3**

UEC Sample Id: **000017618** Client Sample Id: **KP-CT-03A** Sampling Date: 10/01/02 Sampling Rate: 1.0000 LPM
Sampling Time: 424 min. Sample Volume: 424.0000 L

Analyte	Method	Analysis Date	An. Init.	Reporting Limit	Results Total	Air Con	TWA
Coal Tar Pitch Volatiles	NIOSH 5023	10/25/02	WV	**0.02 mg**	< **0.02 mg**	< **0.05 mg/m3**	< **0.04 mg/m3**

UEC Sample Id: **000017619** Client Sample Id: **KP-CT-02A** Sampling Date: 10/01/02

Analyte	Method	Analysis Date	An. Init.	Reporting Limit	Results Total	Air Con	TWA
Coal Tar Pitch Volatiles	NIOSH 5023	10/25/02	WV	**0.02 mg**	< **0.02 mg**	**N/A**	**N/A**

Koppers004199

UEC Sample Id: 000017620 Client Sample Id: KP-CT-04A Sampling Date: 10/02/02 Sampling Rate: 1.0000 LPM
Sampling Time: 107 min. Sample Volume: 107.0000 L

Analyte	Method	Analysis Date	An. Init.	Reporting Limit	Results Total	Air Con	TWA
Coal Tar Pitch Volatiles	NIOSH 5023	10/25/02	WV	0.02 mg	0.04 mg	0.37 mg/m3	0.08 mg/m3

UEC Sample Id: 000017621 Client Sample Id: KP-CT-05A Sampling Date: 10/02/02 Sampling Rate: 1.0000 LPM
Sampling Time: 469 min. Sample Volume: 469.0000 L

Analyte	Method	Analysis Date	An. Init.	Reporting Limit	Results Total	Air Con	TWA
Coal Tar Pitch Volatiles	NIOSH 5023	10/25/02	WV	0.02 mg	0.32 mg	0.68 mg/m3	0.67 mg/m3

UEC Sample Id: 000017622 Client Sample Id: KP-CT-06A Sampling Date: 10/02/02 Sampling Rate: 1.0000 LPM
Sampling Time: 433 min. Sample Volume: 433.0000 L

Analyte	Method	Analysis Date	An. Init.	Reporting Limit	Results Total	Air Con	TWA
Coal Tar Pitch Volatiles	NIOSH 5023	10/25/02	WV	0.02 mg	0.02 mg	0.05 mg/m3	0.04 mg/m3

UEC Sample Id: 000017623 Client Sample Id: KP-CT-07A Sampling Date: 10/02/02

Analyte	Method	Analysis Date	An. Init.	Reporting Limit	Results Total	Air Con	TWA
Coal Tar Pitch Volatiles	NIOSH 5023	10/25/02	WV	0.02 mg	< 0.02 mg	N/A	N/A

Koppers004200

Analyst: _____ Date: 10/25/02
Joan Vukson - Benzene Extraction

Approved: _____ Date: 10/25/02
Nasreen DeRubeis - QA Manager

Time, flow rate, and/or sample volume data are based on client supplied information, unless otherwise noted.

***** END OF REPORT *****

Koppers004201

AM HEALTH & SAFETY, INC.
100 Bell Avenue
P.O. Box 547
Carnegie, PA 15106

PHONE: (412) 429-0560 FAX: (412) 429-5122

4366

LABORATORY TRANSMITTAL FORM (LTF)

SAMPLES COLLECTED BY: Scott Neff
EMAIL: sneff@amhealthandsafety.com
PROJECT NUMBER: 02444P.00
LAB NAME: UEC
LAB PHONE: 825-2400

SUBMITTAL DATE: 10/14/02
SUBMITTAL TIME: 3:30
SAMPLING DATE: 10/1/02
TURN AROUND TIME REQUESTED: (X) Normal ( ) Rush
SAMPLE SUBMITTED BY: C.C.

SAMPLE NUMBER	Time (Min)	Volume (Liters)	ANALYSIS REQUIRED						SAMPLE TYPE				SAMPLE DESCRIPTION
			ICP	AAS	GC	IC	TCLP	OTHER	PERS	BKGRND	AREA	BULK	
KP-CT-01A	422	422							X				General Foreman
KP-CT-03A	~~427~~ 422 min	~~427~~ 422 liters							X				Utility Man
KP-CT-02A													Blank
													* Analyze for Coal Tar Pitch Volatiles, run 5 PAH scan on any filter ≥ ~~0.1~~ 0.1 mg/m³

SPECIAL INSTRUCTIONS: Hold samples for 30 days

CHAIN OF CUSTODY: LAB SAMPLES RECEIVED BY _____ PROCESSED BY _____

AM HEALTH & SAFETY, INC.
100 Bell Avenue
P.O. Box 547
Carnegie, PA 15106

PHONE: (412) 429-0560 FAX: (412) 429-5122

4366

LABORATORY TRANSMITTAL FORM (LTF)

SAMPLES COLLECTED BY: Scott Neff
EMAIL: sneff@amhealthandsafety.com
PROJECT NUMBER: 02444P.00
LAB NAME: UEC
LAB PHONE: 825-2400

SUBMITTAL DATE: 10/11/02
SUBMITTAL TIME: 3:30
SAMPLING DATE: 10/2/02
TURN AROUND TIME REQUESTED: (X) Normal ( ) Rush
SAMPLE SUBMITTED BY: C.C.

SAMPLE NUMBER	Time (Min)	Volume (Liters)	ANALYSIS REQUIRED						SAMPLE TYPE				SAMPLE DESCRIPTION
			ICP	AAS	GC	IC	TCLP	OTHER	PERS	BKGRND	AREA	BULK	
KP-CT-04A	107	107							X				Utility Man
KP-CT-05A	469	469							X				Utility Man
KP-CT-06A	433	433							X				~~Driving Man~~ General Foreman
KP-CT-07A													Blank
													* Analyze for CTPV's, run 5 PAH scan on any filter ≥ ~~0.1~~ 0.01 mg/m³

SPECIAL INSTRUCTIONS: Hold samples for 30 days

CHAIN OF CUSTODY: LAB SAMPLES RECEIVED BY _____ PROCESSED BY _____

UEC Technologies LLC
IH and Environmental Laboratories
4000 Tech Center Drive
Monroeville, PA 15146
Phone: (412) 825-2400 Fax: (412) 825-2407
AIHA Accreditation #322 *http://www.uec.com*

Preliminary Report
UEC Tracking Sheet: 4573

P.01/01 412 825 2407 TO 94124295122
NOV 05 '02 09:39 FR UEC LABS
** TOTAL PAGE.01 **

AM Health & Safety, Inc.	Customer Code: 1127-0001	Phone:	(412) 429-0560
PO Box 547	Attention: Barry Momyer	Fax:	(412) 429-5122
100 Bell Avenue	Work Req By: Scott Neff	Email:	sneff@amhealthandsafety.com
Carnegie, PA 15106	Customer P.O.:	Loc:	
	Project Number: 02444P.00	Date Rcvd:	10/30/02

UEC Sample Id:000019059 Client Sample Id: KP-CT-05A
Sampling Date: 10/02/02 Sampling Rate: 1.0000 LPM
Sampling Time: 469 min. Sample Volume: 469.0000 L

Analyte	Method	Analysis Date	An. Init.	Reporting Limit	Results Total	Air Con	TWA
Phenanthrene	OSHA 58-mod	10/30/02	HN	1.0 µg	2.4 µg	5.0 µg/m3	4.9 µg/m3
Anthracene	OSHA 58-mod	10/30/02	HN	1.0 µg	6.2 µg	13 µg/m3	13 µg/m3
Pyrene	OSHA 58-mod	10/30/02	HN	0.1 µg	3.7 µg	7.9 µg/m3	7.7 µg/m3
Chrysene	OSHA 58-mod	10/30/02	HN	0.1 µg	2.5 µg	5.4 µg/m3	5.3 µg/m3
Benzo(a)pyrene	OSHA 58-mod	10/30/02	HN	0.1 µg	4.7 µg	9.9 µg/m3	9.7 µg/m3

Analyst: Homer Navarro - LC-IH Date: 11/05/02

Time, flow rate, and/or sample volume data are based on client supplied information, unless otherwise noted.

*** END OF REPORT ***

Koppers004204

UEC Technologies LLC
IH and Environmental Laboratories
4000 Tech Center Drive
Monroeville, PA 15146
Phone: (412) 825-2400 Fax: (412) 825-2407
AIHA Accreditation #322 *http://www.uec.com*

Final Report
UEC Tracking Sheet: 4362

AM Health & Safety, Inc.	Customer Code:	1127-0001	Phone:	(412) 429-0560
PO Box 547	Attention:	Barry Momyer	Fax:	(412) 429-5122
100 Bell Avenue	Work Req By:	Scott Neff	Email:	sneff@amhealthandsafety.com
Carnegie, PA 15106	Customer P.O.:		Loc:	02444P.00
	Project Number:	02444P.00	Date Rcvd:	10/15/02

UEC Sample Id: **000017597** Client Sample Id: **KP-CT-01**
Sampling Date: 10/01/02 Sampling Rate: 1.0000 LPM
Sampling Time: 422 min. Sample Volume: 422.0000 L

Analyte	Method	Analysis Date	An. Init.	Reporting Limit	Results											
					Back		Front		Total		Air Con		TWA			
Naphthalene	NIOSH 5506	10/16/02	JO	5.0 µg	<	5.0 µg	<	5.0 µg	<	5.0 µg	<	12 µg/m3	<	10 µg/m3
Acenaphthylene	NIOSH 5506	10/16/02	JO	5.0 µg	<	5.0 µg	<	5.0 µg	<	5.0 µg	<	12 µg/m3	<	10 µg/m3
Acenaphthene	NIOSH 5506	10/16/02	JO	5.0 µg	<	5.0 µg	<	5.0 µg	<	5.0 µg	<	12 µg/m3	<	10 µg/m3
Fluorene	NIOSH 5506	10/16/02	JO	5.0 µg	<	5.0 µg	<	5.0 µg	<	5.0 µg	<	12 µg/m3	<	10 µg/m3
Phenanthrene	NIOSH 5506	10/16/02	JO	5.0 µg	<	5.0 µg	<	5.0 µg	<	5.0 µg	<	12 µg/m3	<	10 µg/m3
Anthracene	NIOSH 5506	10/16/02	JO	5.0 µg	<	5.0 µg	<	5.0 µg	<	5.0 µg	<	12 µg/m3	<	10 µg/m3
Fluoranthene	NIOSH 5506	10/16/02	JO	0.5 µg	<	0.5 µg	<	0.5 µg	<	0.5 µg	<	1.2 µg/m3	<	1.0 µg/m3
Pyrene	NIOSH 5506	10/16/02	JO	0.5 µg	<	0.5 µg	<	0.5 µg	<	0.5 µg	<	1.2 µg/m3	<	1.0 µg/m3
Benzo(a)anthracene	NIOSH 5506	10/16/02	JO	0.5 µg	<	0.5 µg	<	0.5 µg	<	0.5 µg	<	1.2 µg/m3	<	1.0 µg/m3
Chrysene	NIOSH 5506	10/16/02	JO	0.5 µg	<	0.5 µg	<	0.5 µg	<	0.5 µg	<	1.2 µg/m3	<	1.0 µg/m3
Benzo(b)fluoranthene	NIOSH 5506	10/16/02	JO	0.5 µg	<	0.5 µg	<	0.5 µg	<	0.5 µg	<	1.2 µg/m3	<	1.0 µg/m3
Benzo(k)fluoranthene	NIOSH 5506	10/16/02	JO	0.5 µg	<	0.5 µg	<	0.5 µg	<	0.5 µg	<	1.2 µg/m3	<	1.0 µg/m3
Benzo(a)pyrene	NIOSH 5506	10/16/02	JO	0.5 µg	<	0.5 µg	<	0.5 µg	<	0.5 µg	<	1.2 µg/m3	<	1.0 µg/m3
Dibenzo(a,h)anthracene	NIOSH 5506	10/16/02	JO	0.5 µg	<	0.5 µg	<	0.5 µg	<	0.5 µg	<	1.2 µg/m3	<	1.0 µg/m3
Benzo(g,h,i)perylene	NIOSH 5506	10/16/02	JO	0.5 µg	<	0.5 µg	<	0.5 µg	<	0.5 µg	<	1.2 µg/m3	<	1.0 µg/m3
Indeno(1,2,3-cd)pyrene	NIOSH 5506	10/16/02	JO	0.5 µg	<	0.5 µg	<	0.5 µg	<	0.5 µg	<	1.2 µg/m3	<	1.0 µg/m3

Koppers004205

UEC Sample Id: 000017598 Client Sample Id: KP-CT-03

Sampling Date: 10/01/02 Sampling Rate: 1.0000 LPM
Sampling Time: 422 min. Sample Volume: 422.0000 L

Analyte	Method	Analysis Date	An. Init.	Reporting Limit	Results	Back		Front		Total		Air Con		TWA
Naphthalene	NIOSH 5506	10/16/02	JO	5.0 µg	<	5.0 µg	<	5.0 µg	<	5.0 µg	<	12 µg/m3	<	10 µg/m3
Acenaphthylene	NIOSH 5506	10/16/02	JO	5.0 µg	<	5.0 µg	<	5.0 µg	<	5.0 µg	<	12 µg/m3	<	10 µg/m3
Acenaphthene	NIOSH 5506	10/16/02	JO	5.0 µg	<	5.0 µg	<	5.0 µg	<	5.0 µg	<	12 µg/m3	<	10 µg/m3
Fluorene	NIOSH 5506	10/16/02	JO	5.0 µg	<	5.0 µg	<	5.0 µg	<	5.0 µg	<	12 µg/m3	<	10 µg/m3
Phenanthrene	NIOSH 5506	10/16/02	JO	5.0 µg	<	5.0 µg	<	5.0 µg	<	5.0 µg	<	12 µg/m3	<	10 µg/m3
Anthracene	NIOSH 5506	10/16/02	JO	5.0 µg	<	5.0 µg	<	5.0 µg	<	5.0 µg	<	12 µg/m3	<	10 µg/m3
Fluoranthene	NIOSH 5506	10/16/02	JO	0.5 µg	<	0.5 µg	<	0.5 µg	<	0.5 µg	<	1.2 µg/m3	<	1.0 µg/m3
Pyrene	NIOSH 5506	10/16/02	JO	0.5 µg	<	0.5 µg	<	0.5 µg	<	0.5 µg	<	1.2 µg/m3	<	1.0 µg/m3
Benzo(a)anthracene	NIOSH 5506	10/16/02	JO	0.5 µg	<	0.5 µg	<	0.5 µg	<	0.5 µg	<	1.2 µg/m3	<	1.0 µg/m3
Chrysene	NIOSH 5506	10/16/02	JO	0.5 µg	<	0.5 µg	<	0.5 µg	<	0.5 µg	<	1.2 µg/m3	<	1.0 µg/m3
Benzo(b)fluoranthene	NIOSH 5506	10/16/02	JO	0.5 µg	<	0.5 µg	<	0.5 µg	<	0.5 µg	<	1.2 µg/m3	<	1.0 µg/m3
Benzo(k)fluoranthene	NIOSH 5506	10/16/02	JO	0.5 µg	<	0.5 µg	<	0.5 µg	<	0.5 µg	<	1.2 µg/m3	<	1.0 µg/m3
Benzo(a)pyrene	NIOSH 5506	10/16/02	JO	0.5 µg	<	0.5 µg	<	0.5 µg	<	0.5 µg	<	1.2 µg/m3	<	1.0 µg/m3
Dibenzo(a,h)anthracene	NIOSH 5506	10/16/02	JO	0.5 µg	<	0.5 µg	<	0.5 µg	<	0.5 µg	<	1.2 µg/m3	<	1.0 µg/m3
Benzo(g,h,i)perylene	NIOSH 5506	10/16/02	JO	0.5 µg	<	0.5 µg	<	0.5 µg	<	0.5 µg	<	1.2 µg/m3	<	1.0 µg/m3
Indeno(1,2,3-cd)pyrene	NIOSH 5506	10/16/02	JO	0.5 µg	<	0.5 µg	<	0.5 µg	<	0.5 µg	<	1.2 µg/m3	<	1.0 µg/m3

Koppers004206

UEC Sample Id: **000017599** Client Sample Id: **KP-CT-02**

Sampling Date: 10/01/02 Sampling Rate: 0 LPM
Sampling Time: 0 min. Sample Volume: 0 L

Analyte	Method	Analysis Date	An. Init.	Reporting Limit	Results: Back	Results: Front	Results: Total	Air Con	TWA
Naphthalene	NIOSH 5506	10/16/02	JO	5.0 µg	< 5.0 µg	< 5.0 µg	< 5.0 µg	N/A	N/A
Acenaphthylene	NIOSH 5506	10/16/02	JO	5.0 µg	< 5.0 µg	< 5.0 µg	< 5.0 µg	N/A	N/A
Acenaphthene	NIOSH 5506	10/16/02	JO	5.0 µg	< 5.0 µg	< 5.0 µg	< 5.0 µg	N/A	N/A
Fluorene	NIOSH 5506	10/16/02	JO	5.0 µg	< 5.0 µg	< 5.0 µg	< 5.0 µg	N/A	N/A
Phenanthrene	NIOSH 5506	10/16/02	JO	5.0 µg	< 5.0 µg	< 5.0 µg	< 5.0 µg	N/A	N/A
Anthracene	NIOSH 5506	10/16/02	JO	5.0 µg	< 5.0 µg	< 5.0 µg	< 5.0 µg	N/A	N/A
Fluoranthene	NIOSH 5506	10/16/02	JO	0.5 µg	< 0.5 µg	< 0.5 µg	< 0.5 µg	N/A	N/A
Pyrene	NIOSH 5506	10/16/02	JO	0.5 µg	< 0.5 µg	< 0.5 µg	< 0.5 µg	N/A	N/A
Benzo(a)anthracene	NIOSH 5506	10/16/02	JO	0.5 µg	< 0.5 µg	< 0.5 µg	< 0.5 µg	N/A	N/A
Chrysene	NIOSH 5506	10/16/02	JO	0.5 µg	< 0.5 µg	< 0.5 µg	< 0.5 µg	N/A	N/A
Benzo(b)fluoranthene	NIOSH 5506	10/16/02	JO	0.5 µg	< 0.5 µg	< 0.5 µg	< 0.5 µg	N/A	N/A
Benzo(k)fluoranthene	NIOSH 5506	10/16/02	JO	0.5 µg	< 0.5 µg	< 0.5 µg	< 0.5 µg	N/A	N/A
Benzo(a)pyrene	NIOSH 5506	10/16/02	JO	0.5 µg	< 0.5 µg	< 0.5 µg	< 0.5 µg	N/A	N/A
Dibenzo(a,h)anthracene	NIOSH 5506	10/16/02	JO	0.5 µg	< 0.5 µg	< 0.5 µg	< 0.5 µg	N/A	N/A
Benzo(g,h,i)perylene	NIOSH 5506	10/16/02	JO	0.5 µg	< 0.5 µg	< 0.5 µg	< 0.5 µg	N/A	N/A
Indeno(1,2,3-cd)pyrene	NIOSH 5506	10/16/02	JO	0.5 µg	< 0.5 µg	< 0.5 µg	< 0.5 µg	N/A	N/A

Koppers004207

UEC Sample Id: 000017600 Client Sample Id: KP-CT-04 Sampling Date: 10/02/02 Sampling Rate: 1.0000 LPM
Sampling Time: 107 min. Sample Volume: 107.0000 L

Analyte	Method	Analysis Date	An. Init.	Reporting Limit	Results: Back	Front	Total	Air Con	TWA
Naphthalene	NIOSH 5506	10/16/02	JO	5.0 µg	< 5.0 µg	72 µg	72 µg	670 µg/m3	150 µg/m3
Acenaphthylene	NIOSH 5506	10/16/02	JO	5.0 µg	< 5.0 µg	< 5.0 µg	< 5.0 µg	< 47 µg/m3	< 10 µg/m3
Acenaphthene	NIOSH 5506	10/16/02	JO	5.0 µg	< 5.0 µg	5.1 µg	5.1 µg	48 µg/m3	11 µg/m3
Fluorene	NIOSH 5506	10/16/02	JO	5.0 µg	< 5.0 µg	< 5.0 µg	< 5.0 µg	< 47 µg/m3	< 10 µg/m3
Phenanthrene	NIOSH 5506	10/16/02	JO	5.0 µg	< 5.0 µg	< 5.0 µg	< 5.0 µg	< 47 µg/m3	< 10 µg/m3
Anthracene	NIOSH 5506	10/16/02	JO	5.0 µg	< 5.0 µg	< 5.0 µg	< 5.0 µg	< 47 µg/m3	< 10 µg/m3
Fluoranthene	NIOSH 5506	10/16/02	JO	0.5 µg	< 0.5 µg	< 0.5 µg	< 0.5 µg	< 4.7 µg/m3	< 1.0 µg/m3
Pyrene	NIOSH 5506	10/16/02	JO	0.5 µg	< 0.5 µg	< 0.5 µg	< 0.5 µg	< 4.7 µg/m3	< 1.0 µg/m3
Benzo(a)anthracene	NIOSH 5506	10/16/02	JO	0.5 µg	< 0.5 µg	< 0.5 µg	< 0.5 µg	< 4.7 µg/m3	< 1.0 µg/m3
Chrysene	NIOSH 5506	10/16/02	JO	0.5 µg	< 0.5 µg	< 0.5 µg	< 0.5 µg	< 4.7 µg/m3	< 1.0 µg/m3
Benzo(b)fluoranthene	NIOSH 5506	10/16/02	JO	0.5 µg	< 0.5 µg	< 0.5 µg	< 0.5 µg	< 4.7 µg/m3	< 1.0 µg/m3
Benzo(k)fluoranthene	NIOSH 5506	10/16/02	JO	0.5 µg	< 0.5 µg	< 0.5 µg	< 0.5 µg	< 4.7 µg/m3	< 1.0 µg/m3
Benzo(a)pyrene	NIOSH 5506	10/16/02	JO	0.5 µg	< 0.5 µg	< 0.5 µg	< 0.5 µg	< 4.7 µg/m3	< 1.0 µg/m3
Dibenzo(a,h)anthracene	NIOSH 5506	10/16/02	JO	0.5 µg	< 0.5 µg	< 0.5 µg	< 0.5 µg	< 4.7 µg/m3	< 1.0 µg/m3
Benzo(g,h,i)perylene	NIOSH 5506	10/16/02	JO	0.5 µg	< 0.5 µg	< 0.5 µg	< 0.5 µg	< 4.7 µg/m3	< 1.0 µg/m3
Indeno(1,2,3-cd)pyrene	NIOSH 5506	10/16/02	JO	0.5 µg	< 0.5 µg	< 0.5 µg	< 0.5 µg	< 4.7 µg/m3	< 1.0 µg/m3

Koppers004208

UEC Sample Id: 000017601 Client Sample Id: KP-CT-05 Sampling Date: 10/02/02 Sampling Rate: 1.0000 LPM
Sampling Time: 469 min. Sample Volume: 469.0000 L

Analyte	Method	Analysis Date	An. Init.	Reporting Limit	Results											
					Back		Front		Total		Air Con		TWA			
Naphthalene	NIOSH 5506	10/16/02	JO	5.0 µg	<	5.0 µg		5.4 µg		5.4 µg		12 µg/m3		11 µg/m3		
Acenaphthylene	NIOSH 5506	10/16/02	JO	5.0 µg	<	5.0 µg	<	5.0 µg	<	5.0 µg	<	11 µg/m3	<	10 µg/m3		
Acenaphthene	NIOSH 5506	10/16/02	JO	5.0 µg	<	5.0 µg	<	5.0 µg	<	5.0 µg	<	11 µg/m3	<	10 µg/m3		
Fluorene	NIOSH 5506	10/16/02	JO	5.0 µg	<	5.0 µg	<	5.0 µg	<	5.0 µg	<	11 µg/m3	<	10 µg/m3		
Phenanthrene	NIOSH 5506	10/16/02	JO	5.0 µg	<	5.0 µg	<	5.0 µg	<	5.0 µg	<	11 µg/m3	<	10 µg/m3		
Anthracene	NIOSH 5506	10/16/02	JO	5.0 µg	<	5.0 µg	<	5.0 µg	<	5.0 µg	<	11 µg/m3	<	10 µg/m3		
Fluoranthene	NIOSH 5506	10/16/02	JO	0.5 µg	<	0.5 µg	<	0.5 µg	<	0.5 µg	<	1.1 µg/m3	<	1.0 µg/m3		
Pyrene	NIOSH 5506	10/16/02	JO	0.5 µg	<	0.5 µg	<	0.5 µg	<	0.5 µg	<	1.1 µg/m3	<	1.0 µg/m3		
Benzo(a)anthracene	NIOSH 5506	10/16/02	JO	0.5 µg	<	0.5 µg	<	0.5 µg	<	0.5 µg	<	1.1 µg/m3	<	1.0 µg/m3		
Chrysene	NIOSH 5506	10/16/02	JO	0.5 µg	<	0.5 µg	<	0.5 µg	<	0.5 µg	<	1.1 µg/m3	<	1.0 µg/m3		
Benzo(b)fluoranthene	NIOSH 5506	10/16/02	JO	0.5 µg	<	0.5 µg	<	0.5 µg	<	0.5 µg	<	1.1 µg/m3	<	1.0 µg/m3		
Benzo(k)fluoranthene	NIOSH 5506	10/16/02	JO	0.5 µg	<	0.5 µg	<	0.5 µg	<	0.5 µg	<	1.1 µg/m3	<	1.0 µg/m3		
Benzo(a)pyrene	NIOSH 5506	10/16/02	JO	0.5 µg	<	0.5 µg	<	0.5 µg	<	0.5 µg	<	1.1 µg/m3	<	1.0 µg/m3		
Dibenzo(a,h)anthracene	NIOSH 5506	10/16/02	JO	0.5 µg	<	0.5 µg	<	0.5 µg	<	0.5 µg	<	1.1 µg/m3	<	1.0 µg/m3		
Benzo(g,h,i)perylene	NIOSH 5506	10/16/02	JO	0.5 µg	<	0.5 µg	<	0.5 µg	<	0.5 µg	<	1.1 µg/m3	<	1.0 µg/m3		
Indeno(1,2,3-cd)pyrene	NIOSH 5506	10/16/02	JO	0.5 µg	<	0.5 µg	<	0.5 µg	<	0.5 µg	<	1.1 µg/m3	<	1.0 µg/m3		

Koppers004209

UEC Sample Id: **000017602** Client Sample Id: **KP-CT-06**

Sampling Date: 10/02/02 Sampling Rate: 1.0000 LPM

Sampling Time: 433 min. Sample Volume: 433.0000 L

Analyte	Method	Analysis Date	An. Init.	Reporting Limit	Results											
					Back		Front		Total		Air Con		TWA			
Naphthalene	NIOSH 5506	10/16/02	JO	5.0 µg	<	5.0 µg		9.4 µg		9.4 µg		22 µg/m3		20 µg/m3		
Acenaphthylene	NIOSH 5506	10/16/02	JO	5.0 µg	<	5.0 µg	<	5.0 µg	<	5.0 µg	<	12 µg/m3	<	10 µg/m3		
Acenaphthene	NIOSH 5506	10/16/02	JO	5.0 µg	<	5.0 µg	<	5.0 µg	<	5.0 µg	<	12 µg/m3	<	10 µg/m3		
Fluorene	NIOSH 5506	10/16/02	JO	5.0 µg	<	5.0 µg	<	5.0 µg	<	5.0 µg	<	12 µg/m3	<	10 µg/m3		
Phenanthrene	NIOSH 5506	10/16/02	JO	5.0 µg	<	5.0 µg	<	5.0 µg	<	5.0 µg	<	12 µg/m3	<	10 µg/m3		
Anthracene	NIOSH 5506	10/16/02	JO	5.0 µg	<	5.0 µg	<	5.0 µg	<	5.0 µg	<	12 µg/m3	<	10 µg/m3		
Fluoranthene	NIOSH 5506	10/16/02	JO	0.5 µg	<	0.5 µg	<	0.5 µg	<	0.5 µg	<	1.2 µg/m3	<	1.0 µg/m3		
Pyrene	NIOSH 5506	10/16/02	JO	0.5 µg	<	0.5 µg	<	0.5 µg	<	0.5 µg	<	1.2 µg/m3	<	1.0 µg/m3		
Benzo(a)anthracene	NIOSH 5506	10/16/02	JO	0.5 µg	<	0.5 µg	<	0.5 µg	<	0.5 µg	<	1.2 µg/m3	<	1.0 µg/m3		
Chrysene	NIOSH 5506	10/16/02	JO	0.5 µg	<	0.5 µg	<	0.5 µg	<	0.5 µg	<	1.2 µg/m3	<	1.0 µg/m3		
Benzo(b)fluoranthene	NIOSH 5506	10/16/02	JO	0.5 µg	<	0.5 µg	<	0.5 µg	<	0.5 µg	<	1.2 µg/m3	<	1.0 µg/m3		
Benzo(k)fluoranthene	NIOSH 5506	10/16/02	JO	0.5 µg	<	0.5 µg	<	0.5 µg	<	0.5 µg	<	1.2 µg/m3	<	1.0 µg/m3		
Benzo(a)pyrene	NIOSH 5506	10/16/02	JO	0.5 µg	<	0.5 µg	<	0.5 µg	<	0.5 µg	<	1.2 µg/m3	<	1.0 µg/m3		
Dibenzo(a,h)anthracene	NIOSH 5506	10/16/02	JO	0.5 µg	<	0.5 µg	<	0.5 µg	<	0.5 µg	<	1.2 µg/m3	<	1.0 µg/m3		
Benzo(g,h,i)perylene	NIOSH 5506	10/16/02	JO	0.5 µg	<	0.5 µg	<	0.5 µg	<	0.5 µg	<	1.2 µg/m3	<	1.0 µg/m3		
Indeno(1,2,3-cd)pyrene	NIOSH 5506	10/16/02	JO	0.5 µg	<	0.5 µg	<	0.5 µg	<	0.5 µg	<	1.2 µg/m3	<	1.0 µg/m3		

Koppers004210

UEC Sample Id: 000017603	Client Sample Id: KP-CT-07	Sampling Date: 10/02/02	Sampling Rate: 0 LPM
		Sampling Time: 0 min.	Sample Volume: 0 L

Analyte	Method	Analysis Date	An. Init.	Reporting Limit	Results											
					Back			Front			Total			Air Con	TWA
Naphthalene	NIOSH 5506	10/17/02	JO	5.0 µg	<	5.0	µg	<	5.0	µg	<	5.0	µg	N/A	N/A
Acenaphthylene	NIOSH 5506	10/17/02	JO	5.0 µg	<	5.0	µg	<	5.0	µg	<	5.0	µg	N/A	N/A
Acenaphthene	NIOSH 5506	10/17/02	JO	5.0 µg	<	5.0	µg	<	5.0	µg	<	5.0	µg	N/A	N/A
Fluorene	NIOSH 5506	10/17/02	JO	5.0 µg	<	5.0	µg	<	5.0	µg	<	5.0	µg	N/A	N/A
Phenanthrene	NIOSH 5506	10/17/02	JO	5.0 µg	<	5.0	µg	<	5.0	µg	<	5.0	µg	N/A	N/A
Anthracene	NIOSH 5506	10/17/02	JO	5.0 µg	<	5.0	µg	<	5.0	µg	<	5.0	µg	N/A	N/A
Fluoranthene	NIOSH 5506	10/17/02	JO	0.5 µg	<	0.5	µg	<	0.5	µg	<	0.5	µg	N/A	N/A
Pyrene	NIOSH 5506	10/17/02	JO	0.5 µg	<	0.5	µg	<	0.5	µg	<	0.5	µg	N/A	N/A
Benzo(a)anthracene	NIOSH 5506	10/17/02	JO	0.5 µg	<	0.5	µg	<	0.5	µg	<	0.5	µg	N/A	N/A
Chrysene	NIOSH 5506	10/17/02	JO	0.5 µg	<	0.5	µg	<	0.5	µg	<	0.5	µg	N/A	N/A
Benzo(b)fluoranthene	NIOSH 5506	10/17/02	JO	0.5 µg	<	0.5	µg	<	0.5	µg	<	0.5	µg	N/A	N/A
Benzo(k)fluoranthene	NIOSH 5506	10/17/02	JO	0.5 µg	<	0.5	µg	<	0.5	µg	<	0.5	µg	N/A	N/A
Benzo(a)pyrene	NIOSH 5506	10/17/02	JO	0.5 µg	<	0.5	µg	<	0.5	µg	<	0.5	µg	N/A	N/A
Dibenzo(a,h)anthracene	NIOSH 5506	10/17/02	JO	0.5 µg	<	0.5	µg	<	0.5	µg	<	0.5	µg	N/A	N/A
Benzo(g,h,i)perylene	NIOSH 5506	10/17/02	JO	0.5 µg	<	0.5	µg	<	0.5	µg	<	0.5	µg	N/A	N/A
Indeno(1,2,3-cd)pyrene	NIOSH 5506	10/17/02	JO	0.5 µg	<	0.5	µg	<	0.5	µg	<	0.5	µg	N/A	N/A

Analyst: _____ Date: 10/21/02
John Oravec - LC-IH

Approved: Nasreen K. DeRubeis Date: 10/22/02
Nasreen DeRubeis - QA Manager

Time, flow rate, and/or sample volume data are based on client supplied information, unless otherwise noted.

***** END OF REPORT *****

Koppers004211

4362

AM HEALTH & SAFETY, INC.
100 Bell Avenue
P.O. Box 547
Carnegie, PA 15106

PHONE: (412) 429-0560 FAX: (412) 429-5122

LABORATORY TRANSMITTAL FORM (LTF)

SAMPLES COLLECTED BY: Scott Neff
EMAIL: sneff@amhealthandsafety.com
PROJECT NUMBER: 02444P.00
LAB NAME: UEC
LAB PHONE: 825-2400

SUBMITTAL DATE: 10/14/02
SUBMITTAL TIME: 2:30
SAMPLING DATE: 10/1/02
TURN AROUND TIME REQUESTED: (X) Normal ( ) Rush
SAMPLE SUBMITTED BY: C. C

SAMPLE NUMBER	Time (Min)	Volume (Liters)	ANALYSIS REQUIRED						SAMPLE TYPE				SAMPLE DESCRIPTION
			ICP	AAS	GC	IC	TCLP	OTHER	PERS	BKGRND	AREA	BULK	
KP-CT-01	422	422							X				General Foreman
KP-CT-03	422	422							X				Utility Man
KP-CT-02													Blank
													* Analyze for PAH's (16 Scan)

SPECIAL INSTRUCTIONS: Hold samples for 30 days

CHAIN OF CUSTODY: LAB SAMPLES RECEIVED BY _____ PROCESSED BY _____

4362

AM HEALTH & SAFETY, INC.
100 Bell Avenue
P.O. Box 547
Carnegie, PA 15106

PHONE: (412) 429-0560 FAX: (412) 429-5122

LABORATORY TRANSMITTAL FORM (LTF)

SAMPLES COLLECTED BY: Scott Neff
EMAIL: sneff@amhealthandsafety.com
PROJECT NUMBER: 02444P.00
LAB NAME: UEC
LAB PHONE: 825-2400

SUBMITTAL DATE: 10/14/02
SUBMITTAL TIME: 3:30
SAMPLING DATE: 10/2/02
TURN AROUND TIME REQUESTED: (X) Normal ( ) Rush
SAMPLE SUBMITTED BY: C. C.

SAMPLE NUMBER	Time (Min)	Volume (Liters)	ANALYSIS REQUIRED						SAMPLE TYPE				SAMPLE DESCRIPTION
			ICP	AAS	GC	IC	TCLP	OTHER	PERS	BKGRND	AREA	BULK	
KP-CT-04	107	107							X				Utility Man
KP-CT-05	469	489							X				Utility Man
KP-CT-06	433	433							X				General Foreman
KP-CT-07													Blank
													* Analyze for PAH's (16 scan)

SPECIAL INSTRUCTIONS: Hold samples for 30 days

CHAIN OF CUSTODY: LAB SAMPLES RECEIVED BY _____ PROCESSED BY _____

6

Air Monitoring
Area Log
Sheet

AM Health and Safety, Inc.
Environmental Health & Safety Consulting Firm
100 Bell Avenue
P.O. Box 547
Carnegie, PA 15106
Telephone: 412/429-0560
Fax: 412/429-5122

Date: 10/1/02 **Client:** Koppers Industries **Area/Dept:** Portland
Project #: 02444P.00 **Media:** XAD-2 + GF **Shift:** 7-3

Name	Area	Position	Sample #	Pump #	Time On	Time Off
T. J. Turner	6141	General Foreman	KP-CT-01/A	401	0745	1447
			KP-CT-02/A			
R. Eaton	1977	Utility Man	KP-CT-03/A	418	0745	1449

AM Health and Safety, Inc.
Field Monitoring Data Sheet
Project Number: 02444P.00

AM Health and Safety, Inc.
Environmental Health & Safety Consulting Firm
100 Bell Avenue
P.O. Box 547
Carnegie, PA 15106
Telephone: 412/429-0560
Fax: 412/429-5122

Facility	Date	Shift	Sample Number
Koppers - Portland	10/1/02	7-3	KP-CT-01/A

~~Area~~ Name	Clock #	~~Occupation Working in Area & Number of Employees Present~~ Occupation
TJ Turner	6141	General Foreman

~~Specific Location of Sample~~	~~Regulated Area (if yes) for what substance~~ PPE
Respirator N/A	- Hard Hat - Shoes - Glasses - Cover Alls

General Exhaust Operating	Yes	No	N/A	Local Exhaust Operating	Yes	No	N/A
Description of General Exhaust Ventilation				Description of Local Exhaust Ventilation			

Analytical Method(s)	Media Type(s)
	SKC 226-30-04 + Glass Fiber

Weather Conditions

Wind Speed (mph)	Wind Direction	RH (%)	Temperature (°F)	Remarks
5	NE	87	50 AM 65 PM	Overcast

Remarks

- Employee oversees and organizes all loading, unloading, transferring, etc operations at the terminal. Employee also assists with connecting, disconnecting, etc.
- Unloaded 2 rail cars with pitch ~~from~~ from Stickney
- pitch is heated to ≈400°
- while heating up lines employee will open valve to observe liquid state of pitch (spilling on ground)

Time	Location	Remarks	Resp.
0745	loading	heating up line	
0905	office	doing paperwork	
1002	loading	disconnecting railcar	
1100	"	Observing Operations	
1220	"	Observing Unloading	
1350	Office	Doing Paperwork	
1449	Office	Idle (sample stopped)	

Sampling Pump	
Type	Number
Gilian	401
Pre-Calibration Date	
9/30/02	
Pre (LPM)	Post (LPM)
1 1.0	1 1.0
2	2
3	3
Avg.	Avg.

~~Total~~ Sampling Time (min.)	Average Sampling Rate (LPM)	Total Sampling Volume (Liters)
~~422~~ 422	1.0	~~422~~ 422

Collected By
Scott B. [illegible]

AM Health and Safety, Inc.
Field Monitoring Data Sheet
Project Number: 02444P.00

AM Health and Safety, Inc.
Environmental Health & Safety Consulting Firm
100 Bell Avenue
P.O. Box 547
Carnegie, PA 15106
Telephone: 412/429-0560
Fax: 412/429-5122

Facility	Date	Shift	Sample Number
Koppers - Portland	10/1/02	7-3	KP-CT-03/A

~~Area~~ Name	Clock #	~~Occupations Working in Area & Number of Employees Present~~ Occupation
R. Eaton	1977	Utility Man

~~Specific Location of Sample~~ Respirator
Wilson T101 OV filter ~~Wilson~~ Wilson Premier 6000 Series

~~Regulated Area (if yes, for what substance)~~ PAC
~~Yes~~ No - Hard Hat - Shoes - Glasses - Coveralls

General Exhaust Operating	Yes	No	N/A	Local Exhaust Operating	Yes	No	N/A

Description of General Exhaust Ventilation	Description of Local Exhaust Ventilation

Analytical Method(s)	Media Type(s)
	SKC 226-30-04 + Glass Fiber

Weather Conditions

Wind Speed (mph)	Wind Direction	RH (%)	Temperature (°F)	Remarks
5	NE	87	50 AM 65 PM	Overcast

Remarks

- Employee is responsible for performing all the operating at the terminal. Duties include unloading cars, loading cars, making transfers, performing maintenance, operating loader, etc.
- Unloaded 2 rail cars with pitch from Stickney

- ~~pitch~~ pitch is heated to ≈ 400°
- while heating up lines employee will open valve & observe liquid state of pitch spilling on the ground.

Time	Location	Remarks	Resp.
0745	loading	heating up line	
0900	"	Observing unloading	
1000	"	disconnecting truck	
1102	Control Room	On break	
1220	loading	Gauging Rail Car from Dome lid	X
1345	"	Inspecting Rail Cars	
1447	office	idle (sample stopped)	

Sampling Pump		
	Type	Number
	Gilian	418
Pre-Calibration Date	9/30/02	
	Pre (LPM)	Post (LPM)
1	1.6	1 1.6
2		2
3		3
	Avg.	Avg.

Total Sampling Time (min.)	Average Sampling Rate (LPM)	Total Sampling Volume (Liters)
~~424~~	1.0	~~424~~

Collected By: Scott B.

Air Monitoring
Area Log
Sheet

AM Health and Safety, Inc.
Environmental Health & Safety Consulting Firm
100 Bell Avenue
P.O. Box 547
Carnegie, PA 15106
Telephone: 412/429-0560
Fax: 412/429-5122

Date: 10/3/02 **Client:** Koppers **Area/Dept:** Portland Terminal
Project #: 02444P.02 **Media:** XAD-2 + GF **Shift:** 7-3

Area	Clock #	~~Specific Location~~ Occupation	Sample #	Pump #	Time On	Time Off
J. Summerfield	5700	Utility Man	KP-CT-04/A	401	5:53	0740
R. Eaton	1977	Utility Man	KP-CT-05/A	19682	0705	1454
TJ Turner	6141	General Foreman	KP-CT-06/A	411	0705	1418

AM Health and Safety, Inc.
Field Monitoring Data Sheet
Project Number: 0244P.00

AM Health and Safety, Inc.
Environmental Health & Safety Consulting Firm
100 Bell Avenue
P.O. Box 547
Carnegie, PA 15106
Telephone: 412/429-0560
Fax: 412/429-5122

Facility	Date	Shift	Sample Number
Koppers - Portland	10/2/02	7-3	KP-CT-06/06A

~~Area~~ Name	Clock #	~~Occupations Working in Area & Number of Employees Present~~ Occupation
TJ Turner	6141	General Foreman

Specific Location of Sample: Respirator
Wilson Premier 6000 Series / P100 Filters

~~Regulated Area (if yes, for what substance)~~ ~~Yes No~~ - hard hat - shoes - glasses - coveralls PPE

General Exhaust Operating	Yes	No	Local Exhaust Operating	Yes	No

Description of General Exhaust Ventilation	Description of Local Exhaust Ventilation
N/A	N/A

Analytical Method(s)	Media Type(s)
	SKC XAD-2 + Glass Fiber

Weather Conditions

Wind Speed (mph)	Wind Direction	RH (%)	Temperature (°F)	Remarks
3	NE	87	50 AM 68 PM	Overcast

Remarks

- Employee made rounds throughout the plant inspecting and adjusting equipment as needed. Employee was also observed doing paper work in the office, and filling in operating the loader when needed.

Time	Location	Remarks	Resp.
0705	Control Room	Preparing to Start	
0835	Office	doing paperwork	
1000	pencil pitch	Operating loader	X
1110	office	doing paperwork	
1209	pencil pitch	Operating loader	X
1333	Office	doing paperwork	
1418	office	idle (sample stopped)	

Sampling Pump

Type	Number
Gilian	411

Pre-Calibration Date: 10/1/02

Pre (LPM)	Post (LPM)
1 1.0	1 1.0
2	2
3	3
Avg.	Avg.

Total Sampling Time (min.)	Average Sampling Rate (LPM)	Total Sampling Volume (Liters)
433	1.0	433

Collected By: Scott B. May

AM Health and Safety, Inc.
Field Monitoring Data Sheet
Project Number: 02444P.00

AM Health and Safety, Inc.
Environmental Health & Safety Consulting Firm
100 Bell Avenue
P.O. Box 547
Carnegie, PA 15106
Telephone: 412/429-0560
Fax: 412/429-5122

Facility	Date	Shift	Sample Number
Koppers - Portland	10/2/02	task	KP-CT-04/04A

~~Area~~ Name / Clock #	Occupations Working in Area & Number of Employees Present
J. Summerfield / 5700	Wilson Premier 6000 Series / Wilson P100

~~Source~~ Location of Sample Occupation	Regulated Area (if yes, for what substance) PAE
Utility Man	coal tar ~~No~~ - Hard Hat - Steel Toes - Gloves - Glasses - cover alls

General Exhaust Operating	Local Exhaust Operating
Yes No	(Yes) No - Face shield

Description of General Exhaust Ventilation	Description of Local Exhaust Ventilation
N/A	~~N/A~~ - Vapor recovery system

Analytical Method(s)	Media Type(s)
	XAD-2 + Glass Fiber

Weather Conditions

Wind Speed (mph)	Wind Direction	RH (%)	Temperature (°F)	Remarks
3	NE	87	50 AM 68 PM	Overcast

Remarks

- Task sample taken during pitch loading process
- Employee ~~Mark~~ loaded 2 tanker trucks during sampling period
- Vapor recovery system operating
- Vapor recovery line + product line are mounted to a plate which fits in dome lid slot
- Employee opens dome lid, lowers lines into place, activates the pump, take QA/QC sample, raises lines, closes dome lid
- pitch is heated to ~ 400°
- Slight breeze blowing away from dome lid
- loading plate does not seal perfectly (slightly bent)
- some visable vapors
- employee stands on top of loading platform during entire process

Time	Location	Remarks	Resp.
0553	Loading Station	Preparing to start	
0630	" "	Employee taking QA/QC Sample	X
0700	" "	Employee removing lines + closing dome lid	X
0710	" "	Employee hooking up 2nd truck	X
0715	" "	Loading tanker truck	X
0730	" "	Employee disconnecting 2nd truck	X
0740	Control Room	idle (sample stopped)	

Sampling Pump		
	Type	Number
	Gilian	401
Pre-Calibration Date	10/1/02	
	Pre (LPM)	Post (LPM)
1	1.0	1 1.0
2		2
3		3
	Avg.	Avg.

Total Sampling Time (min.)	Average Sampling Rate (LPM)	Total Sampling Volume (Liters)
107	1.0	107

Collected By: Scott D. [signature]

AM Health and Safety, Inc.
Field Monitoring Data Sheet
Project Number: 02444P.00

AM Health and Safety, Inc.
Environmental Health & Safety Consulting Firm
100 Bell Avenue
P.O. Box 547
Carnegie, PA 15106
Telephone: 412/429-0560
Fax: 412/429-5122

Facility	Date	Shift	Sample Number
Koppers - Portland	10/2/02	7-3	KP-CT-05 / 05A

~~Area~~ Name	Clock #	~~Occupations Working in Area & Number of Employees Present~~ Occupation
R. Eaton	1977	Utility Man

~~Specific Location of Sample~~ Respirator	~~Regulated Area (if yes, for what substance)~~ PPE
Wilson Premier 6000 Series / P100 Filters	~~Yes No~~ - hard hat - shoes - safety glasses - coveralls

General Exhaust Operating	Yes	No	Local Exhaust Operating	Yes	No

Description of General Exhaust Ventilation	Description of Local Exhaust Ventilation
N/A	N/A

Analytical Method(s)	Media Type(s)
	SKC XAD-2 + Glass Fiber

Weather Conditions

Wind Speed (mph)	Wind Direction	RH (%)	Temperature (°F)	Remarks
3	NE	87	50 AM 68 PM	Overcast

Remarks

- Employee was assigned to loading the melter with pencil pitch during the monitored shift. Employee operated a loader within the pencil pitch building to load the melter

- Inside of building was extremely dusty during shift

- Employee operated from within an enclosed cab

Time	Location	Remarks	Resp.
0705	Control Room	preparing to start	
0830	pencil pitch	operating loader	X
1000	" "	Operating loader	X
1100	" "	Operating loader	X
1205	Control Room	on break	
1330	pencil pitch	Operating loader	X
1454	Control Room	Idle (Sample Stopped)	

Sampling Pump	
Type	Number
Gilian	19682
Pre-Calibration Date	
10/1/02	
Pre (LPM)	Post (LPM)
1 1.0	1 1.0
2	2
3	3
Avg.	Avg.

Total Sampling Time (min.)	Average Sampling Rate (LPM)	Total Sampling Volume (Liters)
~~478~~ 469	1.0	469

Collected By: Scott B. [illegible]

EMPLOYEE NOTIFICATION
SIGN OFF SHEET
CHECKLIST
FOR THE
PORTLAND NORTHWEST TERMINAL

Survey Date	Occupation Employee Monitored Clock #	Date Distributed	Date Signed and Returned
10-01-02	**General Foreman** TJ Turner 6141	12-27-02	12-27-02
10-01-02	**Utility Man** R. Eaton 1977	12-27-02	12-27-02
10-02-02	**Utility Man** J. Summerfield 5700	12-27-02	12-27-02
10-02-02	**General Foreman** TJ Turner 6141	12-27-02	12-27-02
10-02-02	**Utility Man** R. Eaton 1977	12-24-02	12-27-02

AM Health & Safety

AM Health & Safety, Inc.
PO Box 547
100 Bell Avenue
Carnegie, PA 15106
www.amhealthandsafety.com
Phone: 412-429-0560
Fax: 412-429-5122

Employee Notification Form

AM Health & Safety

AM Health & Safety, Inc.
PO Box 547
100 Bell Avenue
Carnegie, PA 15106
www.amhealthandsafety.com
Phone: 412-429-0560
Fax: 412-429-5122

TJ Turner
Clock # 6141
General Foreman

I am in receipt of the results of the recent employee monitoring for occupational exposure to airborne coal tar pitch volatiles. In order to demonstrate compliance with the Occupational Safety and Health Administration (OSHA) under 29 CFR 1910.1020 "Access to employee exposure and medical records," you are hereby notified within fifteen (15) working days of these results of your exposure to the previously mentioned occupational exposure to airborne coal tar pitch volatiles as reported to Koppers Industries Portland Terminal.

Measured on: October 1, 2002 – Day Shift

Occupational Airborne Exposures	
Coal Tar Pitch Volatiles[a]	
mg/m^3	TWA
<0.05	<0.04

a The Occupational Safety and Health Administration (OSHA), under 29 CFR 1910.1000 Table Z-1, has established a Permissible Exposure Limit (PEL) for airborne coal tar pitch volatiles (CTPV) of two-tenths of a milligram per cubic meter of air (0.2 mg/m^3), Time Weighted Average over an eight hour period (8-hour TWA).

< Less than the analytical limit of detection.

T. J. Turner — 12-27-02

Koppers Industries, Inc.
Authorized Representative — Date

I have received the above information:

T. J. Turner — 12-27-02

Employee Signature — Date

Employee Notification Form

AM Health & Safety, Inc.
PO Box 547
100 Bell Avenue
Carnegie, PA 15106
www.amhealthandsafety.com
Phone: 412-429-0560
Fax: 412-429-5122

R. Eaton
Clock # 1977
Utility Man

I am in receipt of the results of the recent employee monitoring for occupational exposure to airborne coal tar pitch volatiles. In order to demonstrate compliance with the Occupational Safety and Health Administration (OSHA) under 29 CFR 1910.1020 "Access to employee exposure and medical records," you are hereby notified within fifteen (15) working days of these results of your exposure to the previously mentioned occupational exposure to airborne coal tar pitch volatiles as reported to Koppers Industries Portland Terminal.

Measured on: October 1, 2002 – Day Shift

Occupational Airborne Exposures	
Coal Tar Pitch Volatiles[a]	
mg/m³	TWA
<0.05	<0.04

a The Occupational Safety and Health Administration (OSHA), under 29 CFR 1910.1000 Table Z-1, has established a Permissible Exposure Limit (PEL) for airborne coal tar pitch volatiles (CTPV) of two-tenths of a milligram per cubic meter of air (0.2 mg/m³), Time Weighted Average over an eight hour period (8-hour TWA).

< Less than the analytical limit of detection.

Koppers Industries, Inc.
Authorized Representative

12-27-02
Date

I have received the above information:

Ron Eaton
Employee Signature

12/27/02
Date

Employee Notification Form

AM Health & Safety, Inc.
PO Box 547
100 Bell Avenue
Carnegie, PA 15106
www.amhealthandsafety.com
Phone: 412-429-0560
Fax: 412-429-5122

J. Summerfield
Clock # 5700
Utility Man

I am in receipt of the results of the recent employee monitoring for occupational exposure to airborne coal tar pitch volatiles. In order to demonstrate compliance with the Occupational Safety and Health Administration (OSHA) under 29 CFR 1910.1020 "Access to employee exposure and medical records," you are hereby notified within fifteen (15) working days of these results of your exposure to the previously mentioned occupational exposure to airborne coal tar pitch volatiles as reported to Koppers Industries Portland Terminal.

Measured on: October 2, 2002 – Night Shift

Occupational Airborne Exposures
Coal Tar Pitch Volatiles[a] mg/m^3
0.37

a As of this date, the Occupational Safety and Health Administration (OSHA) has not established a Short Term Exposure Limit (STEL) for airborne coal tar pitch volatiles (CTPV). For comparison purposes, the American Conference of Governmental Industrial Hygienists (ACGIH) has developed recommendations for contaminants the do not have established STELs. These recommendations state that excursions in worker exposure levels may exceed three times the Threshold Limit Value (TLV) – Time Weighted Average (TWA) for no more than a total of thirty minutes, and under no circumstances should they exceed five times the TLV – TWA. In this case, if the OSHA PEL for CTPVs is substituted for the TLV, then the recommended excursion limit (3o minute) would be 0.6 mg/m^3 with a never to exceed limit of 1.0 mg/m^3. Keep in mind, this excursion limit is a guideline and not a regulatory level.

Note: Sample was not time weighted, because it was a shortened task oriented sample.

P J Turner — 12-27-02

Koppers Industries, Inc.
Authorized Representative — Date

I have received the above information:

[signature] — 12-27-02

Employee Signature — Date

Employee Notification Form

AM Health & Safety, Inc.
PO Box 547
100 Bell Avenue
Carnegie, PA 15106
www.amhealthandsafety.com
Phone: 412-429-0560
Fax: 412-429-5122

TJ Turner
Clock # 6141
General Foreman

I am in receipt of the results of the recent employee monitoring for occupational exposure to airborne coal tar pitch volatiles. In order to demonstrate compliance with the Occupational Safety and Health Administration (OSHA) under 29 CFR 1910.1020 "Access to employee exposure and medical records," you are hereby notified within fifteen (15) working days of these results of your exposure to the previously mentioned occupational exposure to airborne coal tar pitch volatiles as reported to Koppers Industries Portland Terminal.

Measured on: October 2, 2002 – Day Shift

Occupational Airborne Exposures	
Coal Tar Pitch Volatiles[a]	
mg/m^3	TWA
0.05	**0.04**

a The Occupational Safety and Health Administration (OSHA), under 29 CFR 1910.1000 Table Z-1, has established a Permissible Exposure Limit (PEL) for airborne coal tar pitch volatiles (CTPV) of two-tenths of a milligram per cubic meter of air (0.2 mg/m^3), Time Weighted Average over an eight hour period (8-hour TWA).

T J Turner — 12-27-02

Koppers Industries, Inc.
Authorized Representative — Date

I have received the above information:

T J Turner — 12-27-02

Employee Signature — Date

Employee Notification Form

AM Health & Safety

AM Health & Safety, Inc.
PO Box 547
100 Bell Avenue
Carnegie, PA 15106
www.amhealthandsafety.com

Phone: 412-429-0560
Fax: 412-429-5122

R. Eaton
Clock # 1977
Utility Man

I am in receipt of the results of the recent employee monitoring for occupational exposure to airborne coal tar pitch volatiles. In order to demonstrate compliance with the Occupational Safety and Health Administration (OSHA) under 29 CFR 1910.1020 "Access to employee exposure and medical records," you are hereby notified within fifteen (15) working days of these results of your exposure to the previously mentioned occupational exposure to airborne coal tar pitch volatiles as reported to Koppers Industries Portland Terminal.

Measured on: October 2, 2002 – Day Shift

Occupational Airborne Exposures	
Coal Tar Pitch Volatiles[a]	
mg/m³	TWA
0.68	0.67

a The Occupational Safety and Health Administration (OSHA), under 29 CFR 1910.1000 Table Z-1, has established a Permissible Exposure Limit (PEL) for airborne coal tar pitch volatiles (CTPV) of two-tenths of a milligram per cubic meter of air (0.2 mg/m³), Time Weighted Average over an eight hour period (8-hour TWA).

T. G. Turner — 12-27-02

Koppers Industries, Inc.
Authorized Representative — Date

I have received the above information:

Ron Eaton — 12/27/02

Employee Signature — Date

Rose City Contracting Inc.

Phone (503) 624-6527 • FAX: (503) 624-6554

OR CCB # 102932
WA # ROSECCI063J9

PO Box 230625
Tigard, OR 97281-0625

July 5, 1999

Koppers Industries
T.J. Turner
7540 NW St. Helens Rd.
Portland, OR. 97210-3663
(503) 286-3681

RE: Asbestos Disposal, Project # 99118.

Dear T.J.,

Rose City Contracting, Inc. completed the disposal of asbestos materials from 7540 NW St. Helens Rd. on June 25, 1999.

All abatement methods employed by Rose City Contracting, Inc., meet or exceed federal, state, and local regulatory requirements.

All asbestos waste was disposed of at Hillsboro Landfill. I have enclosed the waste disposal permit (ASN-4) for your records.

Thank you for the opportunity to serve you. If you should have any questions please contact me at your earliest convenience.

Respectfully Submitted,

Andy Chaff

ASN-4 ASBESTOS WASTE SHIPMENT REPORT

77124 / 99118

PLEASE PRINT OR TYPE! If you have questions, contact the DEQ Asbestos Control Section located at 2020 SW 4th, Suite 400, Portland, Oregon 97201 or call (503) 229-5982, OR (800) 452-4011 for the phone number and location of your local regional DEQ office.

Koppers Indusrtries
7540 NW St. Helens Rd.
Portland, OR. 97210

WASTE GENERATOR: (Contractor, Facility, or Operator)

1. Asbestos removal site name and address: 11350 SW Dennis Rd. (Street) Beaverton (City/State) OR (County) (Zip)
   Contact person: Nick TJ Turner 286-3681 Phone: 348-78 28
2. Operator's name and address: Rose City Contracting, Inc. Phone: 503.624.6527
   P.O. Box 230625 (Street) Tigard, OR (City/State) Washington (County) 97281 (Zip)
3. Waste disposal site: Hillsboro Landfill Phone: 503.640.9427
   3205 SE Minter Bridge Rd (Street) Hillsboro, OR (City/State) Washington (County) 97124 (Zip)
4. Describe asbestos materials: Carpet pad and asbestos glue TSI
5. Containers: Number: 12 Type: bags
6. Total quantity (cubic yards): 1280 sqft.
7. **OPERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to government regulations. All movement of this asbestos-containing material is recorded on this Waste Shipment Record Form.
   Name: Rose City Contracting, Inc. Company: Olmondo Reyes
   Signature: [signature] Date: 6/26/99

TRANSPORTER(S):

8. Transporter #1: (Acknowledgment of receipt of materials)
   Agent: ROSE CITY CONTRACTING, INC. Company: RCCI
   Address: P.O. BOX 230625 Phone: 624 6527
   Signature: TIGARD, OR 97281 [signature] Date: 7-31-99
9. Transporter #2: (Acknowledgment of receipt of materials)
   Agent: Company:
   Address: Phone:
   Signature: Date:

DISPOSAL: (Certification of receipt of asbestos materials covered by this manifest, except as noted in item 11 below.)

10. Waste Disposal Site: HILLSBORO LANDFILL
    Name and Title: AARON VANCE Date:
    Signature: JUL 0 1 1999 Phone:
11. **DISCREPENCE SPACE:** (Add attachments as needed) Aaron Vance

(Revised 1/98)

HILLSBORO LANDFILL INC.

Siting
Design
Construction
Operation

3205 SE Minter Bridge Road
Hillsboro, Oregon 97123

(503) 640-9427 FAX (503) 648-2490

Sanitary Landfills

Gary Clapshaw
President

Dear Customer:

Recently you had some asbestos-related materials removed from your property which were disposed at our landfill. Enclosed is your copy of the waste shipment record, a custodial history of that material from generation site to disposal site. Please keep this copy for your records.

Kim N. Diestler
Environmental Affairs

asn-4(12/91)

RECEIVED
FEB 25 1993
KOPPERS INDS., INC.
PORTLAND, OR

156

FORM
ASN-4
OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY

Waste Shipment Record

DEQ PROJECT NUMBER (Issued by DEQ):

If you have questions about this form, contact the DEQ Asbestos Control Section, 811 SW Sixth Ave., Portland, OR 97204, (503) 229-5982.

WASTE GENERATOR:

1. Site owner's name and address: Koppers Industries
   7540 NW St Helens Rd. Portland. Mult. 97210
   Street City County ZIP
2. Operator's name and address IAM Environmental
   204 SE Stonemill Dr. Vanc. Clark 98684
   Street City County ZIP
3. Waste disposal site: Hillsboro Landfill
   3205 SE Minter Br. Rd. Hillsboro, OR WA 97123
   Street City County ZIP
4. Description of materials: ACM Pipe Insulation
5. Containers: Number 18 / 5 Type 18 EL Double Bags
6. Total quantity (cubic yards): 5 Wrapped Sections of Pipe.
7. Special handling instructions and additional information: No Throwing or Dropping

8. OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to government regulations; all movement of asbestos-containing material shall be recorded on a Waste Shipment Record.

NAME AND COMPANY (Print or type): IAM Env. Inc.
SIGNATURE: [signature] DATE: 6-26-92

TRANSPORTER(S):

9. TRANSPORTER #1 (Acknowledgment of receipt of materials)
   Company Name: IAM Environmental Agent name: Kevin Grouse
   Signature: [signature] Date: 6-26-92
10. TRANSPORTER #2 (Acknowledgment of receipt of materials)
   Company name: [illegible] Agent name:
   Signature: [signature] Date: 8-13-92
11. TRANSPORTER #3 (Acknowledgment of receipt of materials)
   Company name: Agent name:
   Signature: Date:

DISPOSAL: (Certification of receipt of asbestos materials covererd by this manifest, except as noted in Item 13 below.

12. WASTE DISPOSAL SITE: Hillsboro Landfill
   Name and title (Please print): [illegible]
   Signature: [signature] Date: 8-13-92
13. DISCREPANCY SPACE (Add attachments as needed): TJ Turner 286-3681
   Sent Yout correction / bag count [illegible]

Koppers004232

KOPPERS

Koppers Company, Inc.
Organic Materials Group

SPECIAL MAINTENANCE REQUEST

DEPARTMENT & LOCATION	REQUESTED BY	DATE	REQUEST NO.
TAR - NORTHWEST PLANT	JOHN OXFORD	9-12-91	91-1

TITLE	APPROVED BY	AMOUNT OF REQUEST
ASBESTOS REMOVAL & DISPOSAL		$13,857.00

SPECIFICATION & DESCRIPTION

CONTRACTED REMOVAL AND DISPOSAL OF ASBESTOS PIPE LINE INSTALLATION FROM APPROXIMATELY 1700 LINEAR FEET OF INSULATED PIPE LINE .

SUMMARY OF JUSTIFICATION

PIPE LINE INSULATED WITH ASBESTOS, THAT ARE NOT IN USE ,OR ,ARE IN THE WAY OF PROPOSED PIPE LINES FOR NEW PITCH MELTER. THESE LINES MUST BE REMOVED AND PROFESSIONALLY STRIPPED IN ORDER TO BE IN COMPLIANCE WITH OREGON STATE REGULATIONS.

CLASS OF EXPENDITURE
1. ____ GENERATION OF ADDITIONAL PROFITS
2. X RETAIN PROFITABLE OPERATION
3. ____ RESEARCH & DEVELOPMENT FACILITIES
4. ____ OTHER THAN PROFICIENCY

ENGINEERING: BY JOHN OXFORD APPROVAL: ____
ESTIMATE: BY ____ APPROVAL: ____
COSTS – CASH EXPENDITURE (1) $13,857.00
TRADE IN OR SALVAGE (2) ____
AMOUNT OF REQUEST (1) + (2) $13,857.00
DEPRECIATION: STANDARD ____
OTHER ____

CONTROL: APPROVAL: ____
CAPITALIZE ____
OTHER ____

INVESTMENT & GROWTH: APPROVAL: ____
FUNDS: PROGRAMMED ____
AUTHORIZED TO DATE ____
BALANCE ____

EQUIPMENT: NEW ____ USED ____ AGE ____
FOR USE ON: OWNED ____ OR LEASED ____ PROPERTY

DISTRIBUTION: DATE ____
____ CONTROLLER (ORIG) PLANT ____
____ FINANCE (STAFF) INVESTMENT ____
____ ENGINEERING OTHER ____
____ (PDA) ATTACHED ____

EARNINGS OR COST (5 YRS. AVERAGE)
NET INCOME AFTER TAXES ____
% RETURN ON GROSS INVESTMENT ____
% RETURN ON NET INVESTMENT ____
ADDED WORKING CAPITAL REQ'D. IF ANY ____

RETIREMENTS (PDA) ATTACHED
TOTAL ORIGINAL VALUE ____
YEARS ACQUIRED ____
TOTAL BOOK VALUE ____
PDA NO'S. ____

FOLLOW UP
CLOSED ____
AMOUNT SPENT ____
(UNDER-RUN) OR OVER-RUN ____
RATIFIED ____
AUDIT DATE, IF REQUIRED ____

CONSTRUCTION BY: ____
EST. SCHEDULE OF EXPENSE 3RD & 4TH (91)
EST. START UP DATE ____
EST. CLOSE TO PROPERTY ____
REFERRAL TO INSURANCE ____

RECOMMENDATION FOR APPROVAL (IF REQUIRED)
MARKETING ____ GROUP MGR. ____
PROCUREMENT ____ PRODUCTION MGR. ____
PLANNING ____ OTHER ____

T-25 REV. 1 5M 11-78

Special Mo R
91-1
Per Schamm

Fax to Jack Stephenson
412 227 2778

allwaste

305-490-1-~~807~~-910
1670

September 5, 1991

Koppers Industries, Inc.
7540 NW Saint Helen's Road
Portland, Oregon 97210-3663

Attention: Mr. John Oxford

Re: Various Piping
Asbestos Abatement
Estimate # 2622

Mr. Oxford:

Allwaste Asbestos Abatement of Portland, Inc. is pleased to provide the following proposal for the removal of approximately 1,700 linear feet of various size piping as directed by T.J. Turner during job walk on 4 September 1991.

Our price includes all necessary supervision, labor, tools, equipment, materials, disposal, OSHA air monitoring, and asbestos liability insurance for the sum of:

THIRTEEN THOUSAND EIGHT HUNDRED FIFTY SEVEN DOLLARS $ 13,857.00

Allwaste Asbestos will perform spot removals on lines in System I & System II areas. The exposed ends will be wrapped by Allwaste. Koppers will cut pipe and lower to the ground near containment area. Allwaste will strip pipe inside containment and leave clean pipe for Koppers to Salvage. System III area will be put under containment, and all three lines stripped in place.

ALLWASTE ASBESTOS ABATEMENT OF PORTLAND, INC.
P.O. Box 6009 • Vancouver, WA 98668-6009
204 SE Stonemill Drive • Suite 270 • Vancouver, WA 98684 • (206) 256-7557 • Fax (206) 254-9797

Koppers are to provide adequate staging area, water and power.

Please be advised that the Oregon Department of Environmental Quality requires an advance 10 day notification of "intent to remove" prior to any abatement activities.

Thank you for the opportunity to provide you with this quotation. Should you require additional information or services, please do not hesitate to contact the me, (206) 256-7557.

Respectfully submitted,

Benjamin T. Pullman
Estimating/Sales
ALLWASTE ASBESTOS ABATEMENT OF PORTLAND, INC.

BJP/lsc

cc: file
Estimate File
Chuck Ragan
\koppers.doc

AMERICAN ENVIRONMENTAL SERVICES GROUP, INC.
P.O. Box 4915
Vancouver, Washington 98662
206-253-2870

September 9,1991

John Oxford
Koppers Industries, Inc.
7540 N,W, St. Helens Road
Portland, OR 97210

RE: Asbestos Abatement Proposal

Dear John:

Please accept my sincere thanks for giving us the opportunity to be a provider of asbestos abatement services to Koppers Industries.

As per your instructions given on September 3rd. and 4th., I have separated the project into four areas as to facilitate the budgeting process. The cost of the removal includes the notification fee, air monitoring services and the disposal of the asbestos waste.

If we are the successful bidder we are prepared to initiate the project as soon as the DEQ's 10 day waiting period is satisfied. Upon giving notice to proceed we will make available the customary insurance certificates indicating that the project is fully covered.

The following is offered for your consideration as the proposed cost for performing the asbestos removal in the phased approach.

AREA 1 (roadside)	$ 19,513.00
AREA 2 (tower) (this area need only be done if sample analysis indicates that the insulation contains asbestos)	2,139.00
AREA 3 (oil lines)	6,822.00
AREA 4 (railroad tracks)	6,829.00
	$ 35303.00

In reviewing the options which best suit the budgetary resources it is suggested that the most cost effective approach to the project is to remove the asbestos insulation in place and not perform the removal at a remote decontamination site. It is seen as a redundant activity to have the technicians taking bites out of the pipe insulation, have your mechanics crop out the pipe sections and then have our people relocate the pipe section to the decontamination area for abatement. It will be more effective to have the abatement technician perform the removal on a manlift inside a modified negative pressure enclosure and then have your people cut or torch the pipe into manageable sections for disposal.

If the approach and cost details meet with your approval please do not hesitate to contact me. Start up and mobilization will be greatly enhanced if we can expedite the process.

Sincerely,

Kevin McCrann

Kevin McCrann
Representative

000

0. *

000

0. *

2,144.+

3,462.5+

8,984.+

003

14,590.5 *

000

CASCADE INDUSTRIAL MAINTENANCE CO.
6719 N.E. 219th STREET
BATTLE GROUND, WA. 98604
(206) 687-2846 687-7547

QUOTATION

TO:

KOPPERS INDUSTRIES
7540 St. Helens Rd.
Portland, OR 97210

Attn: John Oxford/T.J.

QUOTE NO. Q16691R

DATE 9-9-91

JOB NAME/LOCATION
Off of Boiler Room

We propose to provide for you at the prices indicated, all necessary certified labor, insurance, equipment and permits needed to remove and safely dispose of asbestos containing material in facility located at the above address.

Included within this proposal are:

A. Glove bags and disposal bags
B. Rental of HEPA Vacuum and HEPA Negative Air Fan
C. Fuel for vehicles
D. Lumber and visquine for construction of containment rooms.
E. Encapsulation material
F. Miscellaneous supplies and hand tools
G. Disposal

JOB DESCRIPTION:

Removal of three each 3" diameter steamlines, approximately 275 feet.....

$2,144.00

This price includes air monitoring.

Thank you for calling upon us for this proposal.

CASCADE INDUSTRIAL MAINTENANCE CO.
6719 N.E. 219th STREET
BATTLE GROUND, WA. 98604
(206) 687-2846 687-7547

QUOTATION

TO:

KOPPERS INDUSTRIES
7540 St. Helens Rd.
Portland, OR 97201

Attn: John Oxford/T.J.

QUOTE NO. Q16591R

DATE 9-9-91

JOB NAME/LOCATION

Fuel Oil System

We propose to provide for you at the prices indicated, all necessary certified labor, insurance, equipment and permits needed to remove and safely dispose of asbestos containing material in facility located at the above address.

Included within this proposal are:

A. Glove bags and disposal bags
B. Rental of HEPA Vacuum and HEPA Negative Air Fan
C. Fuel for vehicles
D. Lumber and visquine for construction of containment rooms.
E. Encapsulation material
F. Miscellaneous supplies and hand tools
G. Disposal

JOB DESCRIPTION:

Removal of approximately 435 feet of 3" diameter fuel oil lines.

$3,462.50

This price includes air monitoring.

Thank you for calling [illegible]

CASCADE INDUSTRIAL MAINTENANCE CO.
6719 N.E. 219th STREET
BATTLE GROUND, WA. 98604
(206) 687-2846 687-7547

QUOTATION

TO:

KOPPERS INDUSTRIES
7540 St. Helens Rd.
Portland, OR 97210

Attn: John Oxford/T.J.

QUOTE NO. Q16491R

DATE 9-9-91

JOB NAME/LOCATION
Main pipe run

We propose to provide for you at the prices indicated, all necessary certified labor, insurance, equipment and permits needed to remove and safely dispose of asbestos containing material in facility located at the above address.

Included within this proposal are:

A. Glove bags and disposal bags
B. Rental of HEPA Vacuum and HEPA Negative Air Fan
C. Fuel for vehicles
D. Lumber and visquine for construction of containment rooms.
E. Encapsulation material
F. Miscellaneous supplies and hand tools
G. Disposal

JOB DESCRIPTION:

Removal of asbestos containing material from approximately 675 feet of miscellaneous size steamlines as per walk-thru with T.J., plus 30 ft. tank top.....

$8,984.00

This price includes air monitoring.

Koppers Industries, Inc.
Pittsburgh, PA 15219-1800

KOPPERS INDUSTRIES

Purchase Order

Date : September 12, 1991
Page : 1

Purchase order # 14-1-50635
Contact : JACK L. STEPHENSON
412/227-2718

To:
Allwaste Asbestos Abatement
of Portland, Inc.
Post Office Box 6009
204 SE Stonemill Drive
Suite 270
Vancouver, WA 98684

Ship To:
Koppers Industries, Inc.
7540 N.W. Street, St. Helens Rd.
Portland, OR 97229

Koppers requests that Seller furnish the material and/or services listed below. Acceptance of this purchase order is expressly limited to the terms and conditions on the face and on the reverse side hereof.

The purchase order number must be shown on all correspondence, shipping papers, invoices, etc.

Quantity	Description	Price
	REQUISITION: J. OXFORD 9/11/91 ACCOUNT NO.: LATER ASBESTOS REMOVAL KI-63, REV. 4 KOPPERS INDUSTRIES, INC. PLANT SAFETY REGULATIONS EXHIBIT A - OSHA COMPLIANCE Contractor is to supply all labor, tools, materials, equipment, insurance and supervision necessary to provide asbestos removal and disposal at Koppers Industries' Portland, Oregon facility. All work is to be done in accordance with all state, county, Federal, EPA and DOT regulations. SCOPE OF WORK: Remove asbestos insulation and dispose of properly after removal of approximately 1,700 LF of various sized pipe. Price to include necessary supervision, labor, tools, equipment, materials, disposal, OSHA air monitoring and insurance. All performance of work must be authorized by Koppers Industries' plant representative before the outlined work or any new or non-outlined work is started. Should contractor encounter what he feels is an extra, no work is to be performed until the undersigned is contacted, confirms the validity of the extra and authorizes the extra work. Work will be done as dictated by construction superintendent, either on lump sum add-on, or time and material cost plus at current rates with time sheets approved and signed daily. In the event time and material work is utilized, one copy of the signed time sheet must be left with Koppers Industries' Superintendent. All T&M work must be invoiced separately from lump sum work. Insurance certificate(s) showing limits of liability as per form PD-63 are to be presented to the local plant manager and the undersigned prior to commencing field work. CONTRACTOR AGREES TO COMPLY WITH THE FOLLOWING: The above work will be done when, where and as instructed by KOPPERS INDUSTRIES' Representative.	$13,857.00/ LOT

RECEIVING DEPT. COPY

This Order shall be Subject to the Following Terms and Conditions:

1. This order must be acknowledged promptly on the enclosed acceptance copy, giving the information requested.

2. Seller's acknowledgement of, or fulfillment of this order, shall constitute Seller's acceptance of all the terms hereof or terms specifically incorporated by reference herein, which shall control, if they conflict with the terms of Seller's quotation.

3. The Seller agrees to defend and save harmless Koppers from all costs, expenses and damages occasioned by any alleged infringement of patents by any articles covered by this order.

4. The goods and/or services covered by this order are guaranteed to be free of defects in material and workmanship. The cost of repair or replacement of defective or non-conforming parts, including labor and freight, shall be borne by Seller.

5. In connection with any castings, machinery, apparatus, etc. of Koppers design covered by this order, Seller shall not in any manner cast, inscribe or placard such castings, machinery, apparatus, etc. with its trademark or name.

6. Koppers shall have the right to inspect the work covered by this order at any time during its progress. Any inspection by Koppers does not relieve the Seller of its responsibility for correctness in fabrication, the quality or workmanship in accordance with the specifications and/or drawings.

7. The Seller agrees to accept exclusive liability for the payment of any payroll taxes or contributions for unemployment insurance or old age pensions, or annuities which are measured by the wages, salaries, or other remuneration paid to the employees of the Seller; to reimburse Koppers for any of the aforesaid taxes or contributions which by law, Koppers may be required to pay; and to comply with valid administrative regulations respecting the assumption of liability for the aforesaid contributions by subcontractors.

8. Seller warrants that in the production of goods and services purchased hereunder, he has complied and will comply with all applicable statutes of the United States and lawful regulations issued thereunder, including, but not by way of limitation thereof, the following: Fair Labor Standards Act of 1938, as amended, Davis-Bacon Act, as amended, the Walsh-Healey Act, as amended, and the Occupational Safety and Health Act of 1970, as amended. Seller further warrants that he has complied and will comply with all statutes and regulations of any state, territory or other duly constituted public authority or political subdivision thereof wherein the work hereunder shall be performed.

9. Bills of lading, express receipts, invoices, shipping lists, etc. must be sent forward the day shipment is made with order number indicated on all papers. All shipments must be made in name of firm with whom order is placed and all shipping and invoice requirements must be complied with in every particular.

10. All barrels, boxes, bags, crates or other packages must be labeled with tag (linen tag preferred) securely fastened to packages showing shipper's name and Koppers' order number. If impossible to attach tags, information must be painted on packages.

11. Koppers shall not be responsible for any drayage, blocking or packaging and no reels, drums or packages shall be returned to Seller, except as set out on the reverse side of this sheet.

12. Net invoices for goods and/or services shall be paid 30 days following the date of the invoices.

13. Cash Discount Invoices - Cash discount shall be deducted at expiration of grace period dating from date of receipt of invoices.

14. NET invoices and CASH discount invoices received without supporting papers complete shall not be paid until complete as specified. The date of receipt of final supporting papers complete shall, in all cases, govern dates of payment.

15. It shall be strictly understood and agreed that this order shall be treated confidentially in every respect, and that the Seller shall refrain from any publicity or advertising concerning the sale of articles herein.

16. In no event shall Koppers be liable to Seller, regardless of the form of action, whether in contract or in tort or otherwise, for any incidental or consequential damages of any nature whatsoever, including without limitation, lost profits.

17. Koppers is entitled to all remedies, without limitation, available pursuant to the Uniform Commercial Code.

18. Seller shall defend, indemnify and save Koppers harmless from and against any and all claims, demands, causes of action, suits and all other liabilities whatsoever, including without limitation reasonable attorney fees, incurred by Koppers on account of, or by reason of, or arising out of personal injuries or death to seller, or a subcontractor of Seller, Koppers, or any other third party, or the employee(s) thereof, or property damage suffered by Seller, a subcontractor of Seller, Koppers, or any other third party of the employee(s) thereof, it being the intent of this provision to absolve and protect Koppers from any and all loss or liability arising out of the performance of this purchase order or the goods and/or services provided hereunder.

19. Seller's or Koppers waiver of any breach, or failure to enforce any of the terms and conditions of this contract, at any time, shall not, in any way affect, limit or waive Seller's or Koppers' rights thereafter to enforce and compel strict compliance with every term and condition hereof.

20. Seller shall not assign, transfer, convey, subcontract or authorize disposition of this agreement or its right, title or interest in or to the same or any part thereof without the previous consent in writing of Koppers.

21. This order constitutes the entire agreement, and no additions or changes are to be made without written authority from Koppers Purchasing Department.

22. During the performance of this purchase order, for amounts exceeding $10,000 unless exempt, the Seller agrees as follows:

(a) The Seller will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Seller will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Seller agrees to post, in conspicuous places, available to employees and applicants for employment, notices to be provided by the government contracting office setting forth the provisions of this nondiscrimination clause.

(b) The Seller will, in all solicitations or advertisements for employees placed by or on behalf of the Seller, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

(c) The Seller will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided by the agency contracting officer, advising the labor union or workers' representative of the Seller's commitments under Section 202 of Executive Order 11246 of September 24, 1965 and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(d) The Seller will comply with all provisions of Executive Order 11246 of September 24, 1965 and of the rules, regulations, and relevant orders of the Secretary of Labor.

(e) The Seller will furnish all information and reports required by Executive Order 11246 of September 24, 1965 and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(f) In the event of the Seller's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be cancelled, terminated or suspended in whole or in part and the Seller may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965 and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965 or by rule, regulation or order of the Secretary of Labor, or as otherwise provided by law.

(g) The Seller will include the provisions of paragraphs (a) through (g) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Seller will take such action with respect to any subcontract or purchase order as the contracting agency may direct as a means of enforcing such provisions, including sanctions for noncompliance; provided, however, that in the event the Seller becomes involved in, or is threatened with litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the Seller may request the United States to enter into such litigation to protect the interest of the United States.

(h) Seller certifies, in the form prescribed in 41 CFR, Chapter 1, Section 1-12, 803-10, regarding non-segregated facilities.

(i) Seller agrees to file with the appropriate federal agency a complete and accurate report of Standard Form 100 (EEO-1) within 30 days after the signing of this agreement or the award of any such purchase order, as the case may be (unless such a report has been filed in the last 12 months, or unless Seller does not meet the 100-employee test set forth in Section 701 (b) of Title VII of the Civil Rights Act of 1964), and agrees to continue to file such reports annually, on or before March 31.

23. All Federal Equal Opportunity and Affirmative Action requirements in regard to race, sex, religion, national origin, handicap and Vietnam veteran or disabled veteran status, as found in 41 CFR 60-1.4, 41 CFR 60-250.3, and 41 CFR 741.3, are herein incorporated by reference.

Koppers004243

Koppers Industries, Inc.
Pittsburgh, PA 15219-1800

KOPPERS INDUSTRIES

Purchase Order

Date : September 12, 1991
Page : 2

Purchase order # 14-1-50635

Contact : JACK L. STEPHENSON
412/227-2718

To:

Allwaste Asbestos Abatement
of Portland, Inc.
Post Office Box 6009
204 SE Stonemill Drive
Suite 270
Vancouver, WA 98664

Ship To:

Koppers Industries, Inc.
7540 N.W. Street, St. Helens Rd.
Portland, OR 97229

Koppers requests that Seller furnish the material and/or services listed below. Acceptance of this purchase order is expressly limited to the terms and conditions on the face and on the reverse side hereof.

The purchase order number must be shown on all correspondence, shipping papers, invoices, etc.

Quantity	Description	Price
	This work has been accepted by Seller subject to all the terms and conditions as set forth and contained in Form KI-63, Revision 4. In the event there are conflicting statements between the several documents incorporated in this purchase order, the following order of priority shall apply: 1. Typed portion of the purchase order. 2. Drawings, notes thereon and technical specifications. 3. Form KI-63, Revision 4. 4. Terms and conditions printed on the back of Sheet 1 of the purchase order form. Contractor is an independent contractor and not an agent of KOPPERS INDUSTRIES, INC. Labor is to be used to the extent lawful, which will be harmonious with that labor now employed by KOPPERS INDUSTRIES at its plant. Contractor and/or Seller agrees to be governed and abide by the rules and regulations as set forth in pamphlet entitled "Safety Regulations for Contractor Working in KOPPERS INDUSTRIES' Plants." A copy of this pamphlet is to be obtained from the local plant manager. Prior to performing on-site work on or associated with this order, contractor is required to submit one copy of the insurance form referencing the above purchase order number to KOPPERS INDUSTRIES' plant, Attn: Plant Manager. Send one copy to: Koppers Industries, Inc. 1650 Koppers Building Pittsburgh, PA 15219 Attn: The Undersigned Seller shall not assign, transfer, convey, subcontract or authorize disposition of this agreement or its right, title, or interest in or to the same or any part thereof without	

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Koppers Industries, Inc.
Pittsburgh, PA 15219-1800

KOPPERS INDUSTRIES

Purchase Order

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	the previous consent in writing of KOPPERS INDUSTRIES, and it shall not assign by power of attorney or otherwise any of the monies to become due and payable under this agreement without like consent. In the event of an approved subcontractor, Seller shall be fully responsible for the performance of his contractors in all matters including, but not limited to, accounting, cost distribution, purchasing, labor and material control, and proper and economical performance of the work. WAIVER OF LIEN SELLER SHALL SUBMIT WITH FINAL BILLING ONE EXECUTED NOTARIZED COPY OF THE ATTACHED AFFIDAVIT AND WAIVER OF LIEN. ALL FEDERAL EQUAL OPPORTUNITY AND AFFIRMATIVE ACTION REQUIREMENTS IN REGARD TO RACE, SEX, RELIGION, NATIONAL ORIGIN, HANDICAP AND VIETNAM VETERAN OR DISABLED VETERAN STATUS, AS FOUND IN 41 CFR 60-1.4, 41 CFR 60-250.3 AND 41 CFR 741.3, ARE HEREIN INCORPORATED BY REFERENCE. KOPPERS INDUSTRIES IS ENTITLED TO ALL REMEDIES PURSUANT TO THE UNIFORM COMMERCIAL CODE. FORCE MAJEURE: Neither party hereto shall be liable for its failure to perform hereunder due to contingencies beyond its reasonable control including, but not limited to strikes, riots, wars, fire, acts of God, compliance with any law, regulation or order, whether valid or invalid, of the United States of America or any other governmental body or instrumentality thereof, whether now existing or hereafter created. The Seller agrees to observe and abide by all applicable laws, regulations, ordinances and other rules of the state, territory or political sub-division thereof wherein the work is done or any other duly constituted public authority.	

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Koppers Industries, Inc.
Pittsburgh, PA 15219-1800

KOPPERS INDUSTRIES

Purchase Order

Date : September 12, 1991
Page : 4

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Quantity	Description	Price
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cc: J. Oxford - Portland, OR

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TOTAL: $13,857.00

Koppers Industries, Inc.
Pittsburgh, PA 15219-1800

KOPPERS INDUSTRIES

Purchase Order

Date : September 12, 1991
Page : 1

Purchase order # 14-1-50635

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412/227-2710

To:

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Post Office Box 6009
204 SE Stonemill Drive
Suite 270
Vancouver, WA 98684

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Portland, OR 97229

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Quantity	Description	Price
	REQUISITION: J. OXFORD 9/11/91 ACCOUNT NO.: LATER ASBESTOS REMOVAL KI-63, REV. 4 KOPPERS INDUSTRIES, INC. PLANT SAFETY REGULATIONS EXHIBIT A - OSHA COMPLIANCE Contractor is to supply all labor, tools, materials, equipment, insurance and supervision necessary to provide asbestos removal and disposal at Koppers Industries' Portland, Oregon facility. All work is to be done in accordance with all state, county, Federal, EPA and DOT regulations. SCOPE OF WORK: Remove asbestos insulation and dispose of properly after removal of approximately 1,700 LF of various sized pipe. Price to include necessary supervision, labor, tools, equipment, materials, disposal, OSHA air monitoring and insurance. All performance of work must be authorized by Koppers Industries' plant representative before the outlined work or any new or non-outlined work is started. Should contractor encounter what he feels is an extra, no work is to be performed until the undersigned is contacted, confirms the validity of the extra and authorizes the extra work. Work will be done as dictated by construction superintendent, either on lump sum add-on, or time and material cost plus at current rates with time sheets approved and signed daily. In the event time and material work is utilized, one copy of the signed time sheet must be left with Koppers Industries' Superintendent. All T&M work must be invoiced separately from lump sum work. Insurance certificate(s) showing limits of liability as per form PD-63 are to be presented to the local plant manager and the undersigned prior to commencing field work. CONTRACTOR AGREES TO COMPLY WITH THE FOLLOWING: The above work will be done when, where and as instructed by KOPPERS INDUSTRIES' Representative.	$13,857.00/ LOT

COPY

Koppers Industries, Inc.
Pittsburgh, PA 15219-1800

KOPPERS INDUSTRIES

Purchase Order

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cc: J. Oxford - Portland, OR

COPY

TOTAL: $13,857.00

KOPPERS

Koppers Company, Inc.
Organic Materials Group

SPECIAL MAINTENANCE REQUEST

DEPARTMENT & LOCATION	REQUESTED BY	DATE	REQUEST NO.
TAR - NORTHWEST PLANT	JOHN OXFORD	9-12-91	91-1
TITLE ASBESTOS REMOVAL & DISPOSAL	**APPROVED BY**	**AMOUNT OF REQUEST** $13,857.00	

SPECIFICATION & DESCRIPTION

CONTRACTED REMOVAL AND DISPOSAL OF ASBESTOS PIPE LINE INSTALLATION FROM APPROXIMATELY 1700 LINEAR FEET OF INSULATED PIPE LINE .

SUMMARY OF JUSTIFICATION

PIPE LINE INSULATED WITH ASBESTOS, THAT ARE NOT IN USE ,OR ,ARE IN THE WAY OF PROPOSED PIPE LINES FOR NEW PITCH MELTER. THESE LINES MUST BE REMOVED AND PROFESSIONALLY STRIPPED IN ORDER TO BE IN COMPLIANCE WITH OREGON STATE REGULATIONS.

CLASS OF EXPENDITURE 1. ____ GENERATION OF ADDITIONAL PROFITS 2. X RETAIN PROFITABLE OPERATION
3. ____ RESEARCH & DEVELOPMENT FACILITIES 4. ____ OTHER THAN PROFICIENCY

ENGINEERING: BY JOHN OXFORD APPROVAL: ____
ESTIMATE: BY ____ APPROVAL: ____
COSTS — CASH EXPENDITURE (1) $13,857.00
TRADE IN OR SALVAGE (2) ____
AMOUNT OF REQUEST (1) + (2) $13,857.00
DEPRECIATION: STANDARD ____
OTHER ____

CONTROL: APPROVAL: ____
CAPITALIZE ____
OTHER ____

INVESTMENT & GROWTH: APPROVAL: ____
FUNDS: PROGRAMMED ____
AUTHORIZED TO DATE ____
BALANCE ____

EQUIPMENT: NEW ____ USED ____ AGE ____
FOR USE ON: OWNED ____ OR LEASED ____ PROPERTY

EARNINGS OR COST (5 YRS. AVERAGE)
NET INCOME AFTER TAXES ____
% RETURN ON GROSS INVESTMENT ____
% RETURN ON NET INVESTMENT ____
ADDED WORKING CAPITAL REQ'D. IF ANY ____

RETIREMENTS (PDA) ATTACHED
TOTAL ORIGINAL VALUE ____
YEARS ACQUIRED ____
TOTAL BOOK VALUE ____
PDA NO'S. ____

DISTRIBUTION: DATE ____
____ CONTROLLER (ORIG) PLANT ____
____ FINANCE (STAFF) INVESTMENT ____
____ ENGINEERING OTHER ____
____ (PDA) ATTACHED ____

FOLLOW UP
CLOSED ____
AMOUNT SPENT ____
(UNDER-RUN) OR OVER-RUN ____
RATIFIED ____
AUDIT DATE, IF REQUIRED ____

CONSTRUCTION BY: ____
EST. SCHEDULE OF EXPENSE 3RD & 4TH (91)
EST. START UP DATE ____
EST. CLOSE TO PROPERTY ____
REFERRAL TO INSURANCE ____

RECOMMENDATION FOR APPROVAL (IF REQUIRED)
MARKETING ____ GROUP MGR. ____
PROCUREMENT ____ PRODUCTION MGR. ____
PLANNING ____ OTHER ____

T-25 REV. 1 SM 11-78

allwaste

Special Mo R
91-1
Per Schaum

Fax to Jack Stephenson
412 227 2778

305-490-1-~~907~~-910
1670

September 5, 1991

Koppers Industries, Inc.
7540 NW Saint Helen's Road
Portland, Oregon 97210-3663

Attention: Mr. John Oxford

Re: Various Piping
Asbestos Abatement
Estimate # 2622

Mr. Oxford:

Allwaste Asbestos Abatement of Portland, Inc. is pleased to provide the following proposal for the removal of approximately 1,700 linear feet of various size piping as directed by T.J. Turner during job walk on 4 September 1991.

Our price includes all necessary supervision, labor, tools, equipment, materials, disposal, OSHA air monitoring, and asbestos liability insurance for the sum of:

THIRTEEN THOUSAND EIGHT HUNDRED FIFTY SEVEN DOLLARS $ 13,857.00

Allwaste Asbestos will perform spot removals on lines in System I & System II areas. The exposed ends will be wrapped by Allwaste. Koppers will cut pipe and lower to the ground near containment area. Allwaste will strip pipe inside containment and leave clean pipe for Koppers to Salvage. System III area will be put under containment, and all three lines stripped in place.

Koppers are to provide adequate staging area, water and power.

Please be advised that the Oregon Department of Environmental Quality requires an advance 10 day notification of "intent to remove" prior to any abatement activities.

Thank you for the opportunity to provide you with this quotation. Should you require additional information or services, please do not hesitate to contact the me, (206) 256-7557.

Respectfully submitted,

Benjamin T. Pullman
Estimating/Sales
ALLWASTE ASBESTOS ABATEMENT OF PORTLAND, INC.

BJP/lsc

cc: file
Estimate File
Chuck Ragan
\koppers.doc

NK # 11-119

METRO

2000 S.W. First Avenue
Portland, OR 97201-5398
503/221-1646

Application to Dispose of Asbestos

APPROVED

INSTRUCTIONS: Please read important information on other side. Type or print heavily in ink. The person responsible for accuracy of information must sign. Return all copies of completed application and any supporting information to Metro, along with a check for the $25 application fee.

Office use only
Permit no. 2507
Expires 10/24/90

Applicant's name KOPPERS INDUSTRIES INC

Address 7540 NW ST HELENS RD City PORTLAND ZIP code 97210

Contact person JOHN A OXFORD Phone 286-3681

Description of asbestos (brake lining, insulation, tape, transite, etc.)

PIPE LINE INSULATION

One-time disposal? _____ yes X no _____ Disposal frequency (if more than one time) N/A

Quantity per trip 27 LNFT Quantity per year _____

Generator's name KOPPERS INDUSTRIES INC Address SAME 7540 NW ST HELENS RD

Transporter METROPOLITAN DISPOSAL CORPORATION

Previous permit for this waste, if any. Number N/A

Packaging and transporting requirements: Wet thoroughly with mist of soap or detergent and water. Double bag in 6mm or thicker plastic bags (transparent outer bag), fiber or metal drums completely sealed and labeled as required by OAR 340-25-465. Transport to landfill (not compacted, not mixed with other waste) in a closed van or covered dropbox.

Certificate of accuracy of description: This is to certify that the above described materials are properly classified, identified, packaged, marked, labeled, cleansed and prepared as indicated above.

Signature John A Oxford Date 7/20/90

Also type or print name JOHN A OXFORD

GENERAL INSTRUCTIONS: **Read the back of this form.** Appointment required 24 HOURS prior to each disposal. Call 286-9614. Cash on disposal (NO CHECKS) or have prior account established. To establish an account, call Accounting at 221-1646.

SPECIAL INSTRUCTIONS:

Office use only

Metro action: Disposal of the above described asbestos or asbestos-containing material is approved _____ disapproved _____

for disposal at the St. Johns Landfill at a disposal rate of $ _____ per ton; _____ per trip minimum charge.

Signature _____ Date _____

88471

Koppers004253

Asbestos handling procedures

1. Asbestos is a waste requiring special handling. It therefore requires a "special waste permit" to be on file prior to disposal. If you hire for the hauling of asbestos, the hauler should know the permit number prior to arriving at the landfill.

2. Appointments must be made before noon at least one day prior to disposal. The telephone number to call is 286-9614.

3. All loads must be unloaded by hand onto a conveyor belt at the site. If the material is heavier than 80 pounds or longer than six feet, an alternate method of unloading must be arranged. Please notify Metro if your material will require special unloading. Expenses for additional unloading equipment will be the responsibility of the customer.

4. All asbestos must be double bagged in accordance with Department of Environmental Quality (DEQ) regulations. All loads must be covered.

5. To prevent one customer's load from possibly contaminating the loads of other customers, there will be only one customer unloading allowed at a time in the area.

6. BFI will provide a spotter on site to ensure compliance with DEQ regulations during disposal. The spotter will also spot-check loads to ensure that the asbestos is wet prior to bagging and that loads are double bagged. Loads not in compliance may not be accepted. The DEQ will be notified of the problem to follow up. To make this inspection easier, please use a clear outer bag and a colored inner bag.

7. With the exception of residential customers, all persons unloading asbestos will be required to use an approved filter mask and Tyvek suit. The suit must be bagged and disposed of after unloading. These suits and masks will not be available at thelandfill; they must be provided by the hauler.

Oregon Department of Consumer & Business Services

Listing of Vessels by Site

Site Number: 8445
Site Name: KOPPERS INDUSTRIES INC

Questions?
Contact
Ray Andrus
(503) 373-1216

Building Codes - Statewide Services 11/08/2004

Resp. Party Number: 53293
Resp. Party Name: KOPPERS INDUSTRIES INC
7540 NW SAINT HELENS RD
PORTLAND OR 97210

Site Number: 8445
Site Name: KOPPERS INDUSTRIES INC
7540 NW SAINT HELENS RD
PORTLAND OR 97210

Vessel # / National # / Serial # / Permit Exp Date	AOR # / Insp # / Vessel Location / Zipcode	Diameter / Length / Heating Surface / Last Internal/External		Max/Set Pressure / Valve Capacity / Manufacturer / Manufactured Year		Old St # / Code / Type / Status
295	45	30		Max 125	Set:125	X6366-70X
	14	0				U2S
??	7540 NW ST HELENS	0				AT
6/30/2005	97210	1/27/1982	7/17/2003			A
31422	45	102		Max 175	Set:150	1142-66
5202	14	208		15828		P1L
5202	7540 NW ST HELENS	2000		NO AMERICAN ATL		SMWB
6/30/2005	97210	11/3/2003	6/2/2004	1966		A
39942	45	20		Max 125	Set:125	X6367-70X
30401	14	0				U5S
??	7540 NW ST HELENS	0		BUEHLER		AT
6/30/2005	97210	1/31/1978	8/26/1997	1965		A
74484	45	71		Max 40	Set:28	
52	14	119				U2E
96398-01	CONTROL ROOM			MCDOWELL WELDIN		ORES
6/30/2005	97210		7/17/2003	1999		A

Koppers004255

Oregon Department of Consumer & Business Services

Listing of Vessels by Site

Site Number: 8445
Site Name: KOPPERS INDUSTRIES INC

Questions?
Contact
Ray Andrus
(503) 373-1216

Resp. Party Number: 53293
Resp. Party Name: KOPPERS INDUSTRIES INC
7540 NW SAINT HELENS RD
PORTLAND OR 97210

Site Number: 8445
Site Name: KOPPERS INDUSTRIES INC
7540 NW SAINT HELENS RD
PORTLAND OR 97210

Vessel # / National # / Serial # / Permit Exp Date	AOR # / Insp # / Vessel Location / Zipcode	Diameter / Length / Heating Surface / Last Internal/External	Max/Set Pressure / Valve Capacity / Manufacturer / Manufactured Year	Old St # / Code / Type / Status
80809	45		Max 200 Set:200	
773874	14		108	U2S
	OS MAINTAINENCE		MELBEN	AT
6/30/2005	97210	7/17/2003	1998	A

Total Number of Vessels for this Site: 5

Koppers004256

Clean Harbors Env. Serv. Inc

Koppers004257

Koppers Industries, Inc.
436 Seventh Avenue
Pittsburgh, PA 15219-11800

Purchase Order

Date: 1/29/03 Purchase Order # 14-3-51144
Page: 1 Contact: JACK L. STEPHENSON – 412/227-2265 - Fax: 412/227-2935

To: Clean Harbors Environmental Services, Inc.
312 Scarlet Peak Court
Cranberry Twp, PA 16066
Attn: Mr. Doug Bayuk

Ship To:

Koppers requests that Seller furnish the material and/or services listed below. Acceptance of this purchase order is expressly limited to the terms and conditions on the face and on the reverse side hereof.

The purchase order number must be shown on all correspondence, shipping papers, invoices, etc.

WASTE DISPOSAL

Laidlaw National Agreement – Executed 10/26/91

Seller agrees to dispose of hazardous material furnished from Koppers Industries, Inc. facilities throughout the United States at the Deer Park, TX incinerators or at its Sarnia, Ontario, Canada hazardous waste landfill. All transactions to be in accordance with all local, state, county, Federal, EPA, Provincial, and DOT regulations. Drummed material is to be furnished to Seller in 55 gallon DOT approved drums.

Waste Description	Profile #	CHES/TSD Facility	Disposal Price ($)
K001 Sludge	338598	Chicago, IL	175.00/drum
		Deer Park, TX	227.00/drum
U051 Solids	338599	Chicago, IL	175.00/drum
		Deer Park, TX	227.00/drum
F034 Solids	338600	Chicago, IL	175.00/drum
		Deer Park, TX	227.00/drum
F034 Liquids	338601	Chicago, IL	175.00/drum
		Deer Park, TX	227.00/drum
F032/F034 Solids	338602	Chicago, IL	175.00/drum
		Deer Park, TX	227.00/drum
F032/F034 Liquids	338604	Chicago, IL	175.00/drum
		Deer Park, TX	227.00/drum
F032/F034/F035 Liquids	338605	Chicago, IL	175.00/drum
		Deer Park, TX	227.00/drum
F035 Solids	338606	Chicago, IL	175.00/drum
		Deer Park, TX	227.00/drum
F035 Liquids	338607	Chicago, IL	175.00/drum
		Deer Park, TX	227.00/drum
Bulk tank solids with above waste codes		Chicago, IL	
		Deer Park, TX	200.00/Ton CBC
Bulk tank sludges with above waste codes		Chicago, IL	350.00/Ton
		Deer Park, TX	CBC

Waste Description	Profile	CHES TSDE	Trans & Disposal
PAA Residue	PCKIL-002	Chicago, IL	141.09/drum
Waste PAA	PCKIL-002A	Chicago, IL	141.09/drum
Waste Soil & Creosote	PCKIL-003	Chicago, IL	141.09/drum
PAA Light Ends	PCKIL-007	Chicago, IL	99.00/drum
Xylene	PCKIL-012	Chicago, IL	366.00/ pallet
Paint Waste	PCKIL-018	Chicago, IL	

Koppers Industries, Inc.
436 Seventh Avenue
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NOTE:

1. Applicable sales tax and state regulatory fees are not included in quoted prices.
2. A temporary 3% OPEC/Insurance recovery fee will be applied to the cost of the total invoice.
3. All containers must be marked with Clean Harbors appropriate profile #.

Prior to performing work associated with this order Seller is required to submit one copy of an insurance certificate (his and all subcontractors) clearly showing KII as additional insured to Koppers Industries, Inc. 436 Seventh Avenue, Room 1700 Pittsburgh, PA 15219, Attention: J. L. Stephenson.

Minimum Insurance Requirements are as follows:

WORKMEN'S COMPENSATION, PUBLIC LIABILITY INSURANCE, AND AUTOMOBILE LIABILITY INSURANCE REQUIREMENTS
Seller shall properly maintain coverage and designate Koppers as an additional insured under the following:

a. Statutory Workmen's Compensation Insurance, Employer's Liability Insurance with the following coverages and limits of liability: $1,000,000 for bodily injury each accident; $1,000,000 for bodily injury by disease-policy limit; $1,000,000 for bodily injury by disease-each employee.

b. Comprehensive General Liability Insurance with the following limits: $2,000,000 each occurrence for bodily injury and $2,000,000 each occurrence for property damage, and endorsements extending the comprehensive liability insurance to cover contractual liability, completed operations liability, product liability.

Confirming verbal order to Mr. Douglas Bayuk – DO NOT DUPLICATE

Send original and one copy of all invoices to:

KOPPERS INDUSTRIES, INC.
ATTENTION: JACK L. STEPHENSON
436 SEVENTH AVENUE, ROOM 1700
PITTSBURGH, PA 15219-11800

PRICE: Based on Seller's quote dated 12/16/02 & Seller's verbal quotation of 1/15/03 – Price firm through 12/31/03
FOB: **SHIPPING POINT** – except as noted
SHIP: As required
TERMS: Net 45 days

Koppers Industries, Inc.
436 Seventh Avenue
Pittsburgh, PA 15219-11800

Purchase Order

Date: 1/29/03 Purchase Order # 14-3-51144
Page: 3 Contact: JACK L. STEPHENSON – 412/227-2265 - Fax: 412/227-2935

To: Clean Harbors Environmental Services, Inc.
312 Scarlet Peak Court
Cranberry Twp, PA 16066
Attn: Mr. Doug Bayuk

Ship To:

Koppers requests that Seller furnish the material and/or services listed below. Acceptance of this purchase order is expressly limited to the terms and conditions on the face and on the reverse side hereof.

The purchase order number must be shown on all correspondence, shipping papers, invoices, etc.

PLEASE ACKNOWLEDGE YOUR ACCEPTANCE OF THIS ORDER BY SIGNING AND RETURNING THE ATTACHED COPY.

ACCEPTED BY:

KOPPERS INDUSTRIES, INC.
AUTHORIZED SIGNATURE
JACK L. STEPHENSON
CC: All KII Plant Managers

SELLER'S AUTHORIZED SIGNATURE

TITLE _____

DATE _____

ESTIMATED TOTAL $250,000

Koppers Industries, Inc.
436 Seventh Avenue
Pittsburgh, PA 15219-11800

Purchase Order

KOPPERS INDUSTRIES

Date: 7/30/02 Purchase Order # 14-2-51084

Page: 1 Contact: JACK L. STEPHENSON – 412/227-2265 - Fax: 412/227-2935

To: Safety Kleen
312 Scarlet Peak Court
Cranberry Twp, PA 16066
Attn: Mr. Doug Bayuk

Ship To:

Koppers requests that Seller furnish the material and/or services listed below. Acceptance of this purchase order is expressly limited to the terms and conditions on the face and on the reverse side hereof.

The purchase order number must be shown on all correspondence, shipping papers, invoices, etc.

QUANTITY	DESCRIPTION	PRICE
COPY	**WASTE DISPOSAL** Laidlaw National Agreement – Executed 10/26/91	

Seller agrees to incinerate drummed hazardous material furnished from Koppers Industries, Inc. facilities throughout the United States at the Deer Park, Texas incinerator. In addition, seller agrees to dispose of hazardous drums at its Sarnia, Ontario, Canada hazardous waste landfill and bulked material as logistics require. All transactions to be in accordance with all local, state, county, Federal, EPA and DOT regulations. Drummed material is to be furnished to Seller in 55 gallon DOT approved drums.

Waste Stream	Koppers Facilities	Disposal Facility	Disposal Cost
F032, F034, F0335	All	SK-Incinerators & Sarnia, Ontario	$225.00/drum
Various Bulk	All	Sarnia, Ontario	$193.00/ton
PAA Streams	Stickney	Sarnia, Ontario	$287.00/CYD Bag*
F034	Somerville, TX	Dear Park, TX	$250.drum*
F035	Gainesville, FL	Dear Park, TX	$298.00/drum*
F034	Superior, WI	Sarnia, Ontario	$298.00/drum*

NOTE: Disposal costs noted with "*" are F.O.B. delivered streams with freight included in the disposal cost.

Confirming verbal order to Mr. Douglas Bayuk – DO NOT DUPLICATE

Send original and one copy of all invoices to:

KOPPERS INDUSTRIES, INC.
ATTENTION: JACK L. STEPHENSON
PURCHASING DEPARTMENT
ROOM 1700, 436 SEVENTH AVENUE
PITTSBURGH, PA 15219-11800

PRICE: Based on Seller's quote dated 11/1/01 – Price firm through 12/31/02
FOB: Shipping Point
SHIP: As required
TERMS: Net 45 days

Koppers Industries, Inc.
436 Seventh Avenue
Pittsburgh, PA 15219-11800

Purchase Order

Date: 7/30/02 Purchase Order # 14-2-51084

Page: 2 Contact: JACK L. STEPHENSON – 412/227-2265 - Fax: 412/227-2935

To: Safety Kleen
312 Scarlet Peak Court
Cranberry Twp, PA 16066
Attn: Mr. Doug Bayuk

Ship To:

Koppers requests that Seller furnish the material and/or services listed below. Acceptance of this purchase order is expressly limited to the terms and conditions on the face and on the reverse side hereof.

The purchase order number must be shown on all correspondence, shipping papers, invoices, etc.

QUANTITY	DESCRIPTION	PRICE
	PLEASE ACKNOWLEDGE YOUR ACCEPTANCE OF THIS ORDER BY SIGNING AND RETURNING THE ATTACHED COPY.	
	ACCEPTED BY:	
	KOPPERS INDUSTRIES, INC. AUTHORIZED SIGNATURE JACK L. STEPHENSON CC: All KII Plant Managers	SELLER'S AUTHORIZED SIGNATURE TITLE _____ DATE _____
	ESTIMATED TOTAL	$1,000,000

Contractors Training 2007
Jammies Environmental Inc

Koppers004263

Form

KOPPERS

SH&E
Contractor Qualification Form

Written by: T.I. Self
Approved by: S.R. Lacy

Section 4 -- Employee Qualifications (completed by contractor):

Based on your analysis of the SH&E issues on this job, identify employee (or agent) experience, training and educational requirements which qualify you to safely complete the project, as required by law, regulation or Koppers policy (Koppers policies to be provided by site contact). Training requirements identified must be specific to the project or activity being undertaken. *(Examples: Hazardous waste training for personnel who generate or handle hazardous waste; training in recognition and reporting of releases of hazardous substances caused by contractor activities; Hazardous Communication, Powered Industrial Truck(PIT) for operation of mobile equipment).*

In providing employees or agents for work at any Koppers facility, the contractor warrants and represents to Koppers that these personnel are trained and qualified for the specific assignment. Evidence of training shall be furnished to Koppers upon request and copies of such evidence shall become the property of Koppers.

Describe training, education, experience and skills of your employees that qualify them to perform the work described: All of our employees have been 40 hour HAZMAT Trained, Confined Space Rescue trained HAZ Com trained

Combined experience of approximately 55 years of experience.

Required employee/industry specified licenses/certifications to complete the work described:
HazMat - 40 Confined Space Rescue
Confined Space fit tested
this year physicals

"All information contained in and supplied with this document is true and correct. I also understand that Koppers personnel have the right to verify, inspect/audit our activities and those of our Suppliers/Contractors with regards to our on-site activities. I further understand that activities pertaining to service and/or maintenance contracts may require submission of this form on an annual basis. The facility representative should be contacted to make this determination."

Signature of Contractor's Representative

12/7/07
Date

Completed form(s) must be signed and submitted with bid or quote.

Form

KOPPERS

Koppers Inc.
Scope: US
Document No.: K-SHE-FORM-004
Revision No.: 0
Effective Date: 6/1/06
Page 1 of 2

Written by: T.I. Self
Approved by: S.R. Lacy

SH&E Contractor Qualification Form

Koppers is an ISO 14001 compliant company and has developed specific safety, health and environmental requirements for work conducted for or on its behalf. Koppers policy requires compliance with all laws and regulations in the performance of any work on our sites and measures to make certain the protection of the environment. In order to help us meet these policy goals, we require every prospective contractor who has been determined to have the potential to impact a significant environmental aspect or safety hazard to complete this form to assist in verifying the competence of those individuals who work for or on the behalf of Koppers.

Section 1 – Project Information (completed by Koppers):

Koppers Facility: Portland, OR

Description of Work / Project:

Remove approx. 6-10" of creosote tank bottoms (U051) from tank and feed to Adjacent contractor's liquification process. Pressure wash & clean tank, transport and dispose of wash water at Waste Mgt. Arlington, OR.

Section 2 – Contractor General Information (completed by contractor):

Contractor Representative: MARV HURH	Phone/Cell: 360 442-0203
Contractor/Construction Manager: Owen Scott	Phone/Cell: 360-431-0464
Emergency Contractor Contact: Owen Scott or Jammie	Phone/Cell: 1-800-577-5691

Have you been pre-qualified to conduct this type of work / project? (Y) / N | Date:

Section 3 – Project SH&E Information (completed by contractor):

Based on your knowledge of the project and your expertise, identify potential Safety, Health and Environmental hazards or issues for the project, including any chemicals or equipment to be used on-site (attach applicable MSDS's):

Will be working in Anthracene Paste so we will be using proper PPE required for the project. We will utilize tyvek, Rain. Boots. Gloves. Eye protection. Resp. Protection if needed.
We will be using Big O for a cleaner - MSDS Attached
We will be using between 4,000 to 20,000 PSI to clean the tank with.

DEPARTMENT OF ENVIRONMENTAL QUALITY
SOURCE INSPECTION FORM

☒ WQ ☐ SW ☐ AQ ☐ NC

COUNTY: MULTNOMAH

SOURCE NAME: KOPPERS INDUSTRIES

SOURCE ADDRESS: 7540 N.W. ST. HELENS RD. PORTLAND, OR 97210-3663

OFFICIAL CONTACTED: T. J. TURNER

TABLE A PARA	PREP. TIME	TRANS TIME	INSPECTION TIME	PAPER TIME

PERMIT NUMBER CO.	PERMIT NUMBER SOURCE	POINT	ACTION NO.	ACTION	ACTION TYPE	DATE SCHEDULED MO. DAY YR.	DATE ACHIEVED MO. DAY YR.	RESULT	INSPEC. NO.
	100419			7			10 07 92	X	

8,1 NPDES
8,2
8,3
8,4

COMPLIANCE STATUS *(RESULT CODE)*

	IN COMP.	NOT IN COMPLIANCE	ON SCHEDULE
All permit conditions	☒		
Permit emission limits	R	A	I
Emission standards	S	B	J
Performance reqts.	T	C	K
Monitoring & Reporting	U	D	L
Open burning limits	V	E	M
Procedural Reqts.	W	F	N
Fugitive emissions	X	G	O
Other	Y	H	P

TREATMENT/PROCESS EQUIPMENT – ADDITIONAL REMARKS – OPERATING CONDITIONS

ALL SITE RUNOFF DISCHARGES INTO MAIN TANK CONTAINMENT AREA – BOILER CONDENSATE (FROM TANK HEATERS) DISCHARGES TO SAME AREA. ALL WATER THEN COLLECTED IN TANKS AND TESTED PRIOR TO DISCHARGE TO STORM DRAIN SYSTEM. STORM SYSTEM DISCHARGES TO WILLAMETTE RIVER.

PERMIT ALLOWS DISCHARGE OF BOILER BLOW-DOWN, ~~OR BUT IF APPEA~~ BLOW-DOWN DISCHARGED TO GROUND SURFACE THEN RUNS TO MAIN CONTAINMENT AREA.

NO PROBLEMS NOTED, PERMIT MONITORING RECORDS AVAILABLE ON SITE

SOURCES IN VIOLATION & LIMITS VIOLATED

RECEIVED
OCT 14 1992
KOPPERS INDS., INC.
PORTLAND, OR

George F. Davis 10/7/92
SIGNATURE OF INSPECTOR AND DATE

SIGNATURE OF PERSON INTERVIEWED AND DATE

DEQ/RQ-101 (1-88)

DIVISION COPY

Koppers004266

File
DEQ/NPDES

FILE COPY

. ON AUGUST 2, 1993 JOHN OXFORD TESTED THE CHLORINE/PH TEST KIT CHEMICALS. THE TEST KIT CHEMICALS WERE FOUND TO BE IN GOOD WORKING ORDER. THE 8 AM, 10 AM, 12 NOON PM WATER SAMPLES ALL SHOWED 0 CHLORINE, RESIDUAL AND PH OF 6.5 AND 6.8. THE PH TEST WAS VERIFIED ON THE LABORATORY PH METER WHICH SHOWED RESULTS IN ALL 3 CASES 6.6.

BASED UPON THESE RESULTS THE WATER WAS APPROVED BY JOHN OXFORD FOR PUMPING TO THE WILLIAMETTE RIVER THROUGH THE OUTFALL.

PUMPING BEGAN AT 1:30 PM AUGUST 2, 1993, NUMEROUS CHECKS OF THE OUTFALL CREEK SHOWED NOTHING REMARKABLE.

CC: AMOS KAMERER
CC: JOHN OXFORD

Dial Dependability... Koppers Creosote

5 0 3 2 8 6 3 6 8 1

8/31/93

George Davis - DEQ

1) has PAH for March - 1ST qtr.
April - 2nd qtr.

Nothing for second qtr.
" on the 6/17/93 results

* Rules state if you run a test, results
And to be shared with DEQ

2) in the future, simply note and ~~attach~~
the PAH report (A copy of the lab
Results is sufficient) to the monthly
monitor report.

KOPPERS INDUSTRIES **ENVIRONMENTAL SERVICES DEPARTMENT**
436 Seventh Avenue-Pittsburgh, PA 15219-1800

DELIVER IMMEDIATELY TO:

AMOS KAMERER
PORTLAND
503-285-2831

6 TOTAL PAGES CONTAINED IN THIS TRANSMISSION!

MESSAGE:

I am faxing you copies of the quarterly PAH reports current for 1993 that are on file in my office.

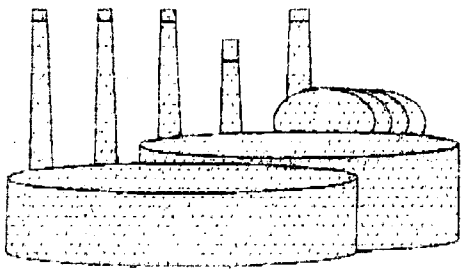
Look in Word Perfect on your office computer for a copy of the June 22, 1993 letter to DEQ. I suspect that the letter content stays the same but a new date is supplied for each submittal. Nothing wrong with that!

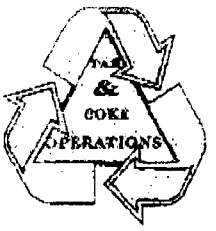
Call me if you need any more info.

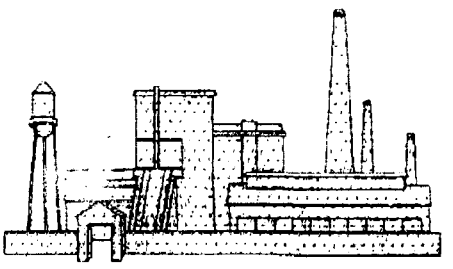
Regards,

WES

PHONE 412-227-2883 ***W. E. SWEARINGEN*** **FAX 412-227-2423**



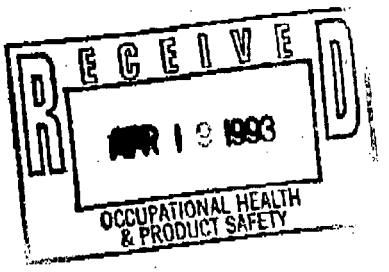




KOPPERS INDUSTRIES

Koppers Industries, Inc.
7540 N.W. Saint Helens Road
Portland, OR 97210-3663

Telephone: (503) 286-3681
FAX: (503) 285-2631



April 14, 1993

Mr. George Davis
Department of Environmental Quality
Northwest Regional Office
Crown Plaza Building
1500 S.W. 1st, Suite 750
Portland, Oregon
97201-5884

Dear Sir:

The attached is a report of PAH content from Coffey Laboratory submitted to you in compliance with the requirements stated in the N.P.D.E.S. Permit # 997220. Please note that the permit requires that the method of testing shall be EPA # 610. Coffey Labatory informs us that method # 8310 supersedes method # 510.

If any further information is needed please feel free to call.

Regards,

John A. Oxford
Plant Manager

Job#: WG-930302AY-3

Koppers Industry
Page 2

PARAMETER	METHOD	DETECTION LIMITS	W-W T-1 RESULTS	W-W T-2 RESULTS
Oil & Grease	EPA 413.2	0.6	ND	0.6
Total Phenols	EPA 420.1	0.05	ND	0.06

Results expressed as mg/L unless otherwise noted.

Analysis Performed: Polynuclear Aromatic Hydrocarbons, by EPA Method 8310, Liquid Chromatography.

COMPOUND	DETECTION LIMIT	P.A.H. T-1 RESULTS
Acenaphthene	10	ND
Acenaphthylene	10	ND
Anthracene	0.1	ND
Benzo(a)anthracene	1.0	7.2
Benzo(b)fluoranthene	2.0	ND
Benzo(k)fluoranthene	2.0	ND
Benzo(g,h,i)perylene	4.0	ND
Benzo(a)pyrene	2.0	6.3
Chrysene	1.0	4.0
Dibenzo(a,h)anthracene	4.0	ND
Fluoranthene	2.0	12.5
Fluorene	2.0	ND
Indeno(1,2,3-c,d)pyrene	4.0	ND
Naphthalene	8.0	ND
Phenanthrene	2.0	5.4
Pyrene	4.0	11.8

Results expressed as µg/L unless otherwise noted. 47.2 Excellent

ND means none detected at or above the detection limit listed.

COFFEY LABORATORIES, INC.
12423 N.E. Whitaker Way • Portland, OR • 97230 • (503) 254-1794 • FAX (503) 254-1452

KOPPERS INDUSTRIES

Koppers Industries, Inc.
7540 N.W. Saint Helens Road
Portland, OR 97210-3663

Telephone: (503) 200-3081
FAX: (503) 285-2631

6/22/93

Post-it™ brand fax transmittal memo 7671 | # of pages ▸ 3

To Bill Sevenson	From John Oxford
Co. K-1800	Co. Portland
Dept.	Phone #
Fax #	Fax #

June 22, 1993

Mr. George Davis
Department of Environmental Quality
Northwest Regional Office
Crown Plaza Building
1500 S.W. 1st Suite 750
Portland, Oregon
97201-5884

Dear Sir:

The attached is a report for the second quarter of PAH content from Coffey Laboratory submitted to you in compliance with the requirements stated in the N.P.D.E.S. Permit # 997220. Please note that the permit requires that the method of testing shall be EPA # 610. Coffey Labatory informs us that method # 8310 supersedes method # 610.

If any further information is needed please feel free to call.

Regards,

John A. Oxford

John A. Oxford
Plant Manager

Koppers Industry

Job#: WG-930528AT-2
Page 2

PARAMETER	METHOD	DETECTION LIMITS	W-W-T-3 RESULTS	W-W-T-4 RESULTS
Oil & Grease	EPA 413.2	0.7	Trace, <0.7	Trace. <0.7
Total Phenols	SM 420.1	0.05	0.05	0.05

Results expressed as mg/L unless otherwise noted.

SM means Standard Methods for the Examination of Water and Wastewater, 1985, 16th Edition.

The less than "<" symbol means none detected at or above the indicated value and represents the detection limit for the method.

ANALYSIS PERFORMED: Polynuclear Aromatic Hydrocarbons in waste water, by EPA Method 8310, Liquid Chromatography.

Compound	Detection Limit	Laboratory Blank	W-W-T-3 Results
Acenaphthene	200	ND	ND
Acenaphthylene	200	ND	ND
Anthracene	10	ND	ND
Benzo(a)anthracene	2.0	ND	19
Benzo(b)fluoranthene	10	ND	30
Benzo(k)fluoranthene	2.0	ND	24
Benzo(g,h,i)perylene	5.0	ND	31
Benzo(a)pyrene	2.0	ND	44
Chrysene	5.0	ND	20
Dibenzo(a,h)anthracene	20	ND	ND
Fluoranthene	20	ND	40
Fluorene	15	ND	ND
Indeno(1,2,3-c,d)pyrene	10	ND	20
Naphthalene	200	ND	ND
Phenanthrene	20	ND	ND
Pyrene	10	ND	23

Results expressed as µg/L unless otherwise noted.

257 — Good

ND means none detected at or above the detection limit listed.

RECEIVED
JUL 21 1993
KOPPERS INDS., INC.
PORTLAND, OR

COFFEY LABORATORIES, INC.
12423 N.E. Whitaker Way • Portland, OR • 97230 • (503) 254-1794 • FAX (503) 254-1452

Raport Date: June 17, 1993
Job#: WG-930528AT-2
PO#: VERBAL JOHN (O&G/Phenols)
Project#: None Provided
Project: None Provided

Attention: John Oxford
Koppers Industry
7540 NW St. Helens Rd.
Portland, OR 97210

SAMPLE INFORMATION:
Date Samples Were Received By Laboratory: 05/28/93

Lab No.	Field Identification	Sample Matrix	Date	Time
1	W-W-T-3	Waste Water	05-28-93	1330
2	W-W-T-4	Waste Water	05-28-93	1330

ANALYTICAL RESULTS ARE ON THE FOLLOWING PAGE.

Sincerely,

Susan M. Coffey
President

SMC/daj

This report is for the sole and exclusive use of the above-named client. Samples are retained 15 days from the report date, or until holding time expires. Results pertain only to samples submitted.

RECEIVED
JUN 21 1993
KOPPERS INDS. INC.
PORTLAND, OR

COFFEY LABORATORIES, INC.
12423 N.E. Whitaker Way • Portland, OR • 97230 • (503) 254-1794 • FAX (503) 254-1452

KOPPERS INDUSTRIES

Koppers Industries, Inc.
7540 N.W. Saint Helens Road
Portland, OR 97210-3663

Telephone: (503) 286-3681
FAX: (503) 285-2831

May 6, 1991

Richard Wixsom
D.E.Q.-Northwest Region
811 S. W. 6th Ave
Portland, Or. 97204

Dear Sir:

This letter plus the attached report will serve as our annual report to D.E.Q. of Polynuclear Aromatic Hydrocarbons in our effluent water. This satisfies the requirement set forth by D.E.Q. in the regulations governing our N.P.D.E.S. permit.

If any further information is needed please feel free to call me.

Regards,

John A Oxford
Plant Manager

CC. A. Kamerer NW Terminal
L. Flaherty K-1750
W. Swearingen K-1800
Plant File

April 26, 1991
Log # A910410-AO
PO # Verbal John

Attention: John Oxford
Koppers Industry
7540 NW St. Helens Rd.
Portland, OR 97210-3663

Sample(s) Collected: 4/10/91
Sample(s) Received: 4/10/91

Analysis Performed: Polynuclear Aromatic Hydrocarbons in water, by EPA Method 610, capillary GC/FID.

ANALYTE	DETECTION LIMIT	LABORATORY BLANK	W-W-T-3 RESULTS
Acenaphthene	3	ND	22
Acenaphthylene	3	ND	ND
Anthracene	5	ND	ND
Benzo(a)anthracene	3	ND	ND
Benzo(b)fluoranthene	3	ND	ND
Benzo(k)fluoranthene	3	ND	ND
Benzo(g,h,i)perylene	3	ND	ND
Benzo (a)pyrene	3	ND	ND
Chrysene	3	ND	ND
Dibenzo(ah)anthracene	3	ND	ND
Fluoranthene	3	ND	ND
Fluorene	3	ND	12
Indeno(1,2,3-cd)pyrene	5	ND	ND
Naphthalene	9	ND	ND
Phenanthrene	4	ND	ND
Pyrene	3	ND	ND

Results expressed as ug/L unless otherwise noted.

ND means none detected at or above the detection limit listed.

Sincerely,

Victor A. Perry,
Quality Assurance

Sincerely,

Renee Chauvin,
Technical Director

RJC/mlh

This report is for the sole and exclusive use of the client. Samples are retained a maximum of 15 days from the report date, or until the maximum holding time expires.

RECEIVED
APR 30 1991
KOPPERS INDS., INC.
PORTLAND, OR

COFFEY LABORATORIES, INC.
12423 N.E. Whitaker Way • Portland, OR • 97230 • (503) 254-1794 • FAX (503) 254-1452

Report Date: May 8, 1992
Job#: WG-920427X-2
PO#: ~~VERBAL JOHN~~
Project#: ~~Permit Renewal Test~~
Project: None

Attention: John Oxford
Koppers Industry
7540 NW St. Helens Rd.
Portland, OR 97210

SAMPLE INFORMATION:
Date Samples Were Received By Laboratory: 04/27/92

Lab No.	Field Identification	Sample Matrix	Date	Time
1	Grab T-3	Waste Water	04-27-92	1235
2	Grab T-4	Waste Water	04-27-92	1245

ANALYTICAL RESULTS ARE ON THE FOLLOWING PAGE(S)

Sincerely,

Renee Chauvin
Technical Director

RJC/lws

This report is for the sole and exclusive use of the above-named client. Samples are retained 15 days from the report date, or until holding time expires. Results pertain only to samples submitted.

Report Date: May 7, 1992
Job#: WG-920423M-3
PO#: VERBAL JOHN
Project#: None
Project: None

Attention: John Oxford
Koppers Industry
7540 NW St. Helens Rd.
Portland, OR 97210

SAMPLE INFORMATION:
Date Samples Were Received By Laboratory: 04/23/92

Lab No.	Field Identification	Sample Matrix	Date	Time
1	Grab (Api Sump)	Waste Water	04-23-92	1014
2	T-4	Waste Water	04-23-92	1019
3	T-3	Waste Water	04-23-92	1021

ANALYTICAL RESULTS CONTINUE ON THE FOLLOWING PAGE.

Sincerely,

Renee Chauvin
Technical Director

RJC/daj

This report is for the sole and exclusive use of the above-named client. Samples are retained 15 days from the report date, or until holding time expires. Results pertain only to samples submitted.

Koppers Industry

Job#: WG-920423M-3
Page 2

PARAMETER	METHOD	DET. LIMITS	T-4 RESULTS	T-3 RESULTS
Oil & Grease	EPA 413.2	0.6	0.6	0.6
Total Phenols	EPA 420.1	0.05	0.06	0.05

Results expressed as mg/L unless otherwise noted.

ANALYSIS PERFORMED: Polynuclear Aromatic Hydrocarbons, by EPA Method 8310, Liquid Chromatography.

COMPOUND	DETECTION LIMIT	LABORATORY BLANK	GRAB (API SUMP)
Acenaphthene	5.0	ND	90
Acenaphthylene	5.0	ND	140
Anthracene	1.0	ND	8
Benzo(a)Anthracene	0.5	ND	8
Benzo(b)Fluoranthene	1.0	ND	ND
Benzo(k)Fluoranthene	1.0	ND	3
Benzo(g,h,i)Perylene	1.0	ND	ND
Benzo(a)Pyrene	1.0	ND	6
Chrysene	0.5	ND	5
Dibenzo(a,h)Anthracene	1.0	ND	ND
Fluoranthene	2.0	ND	ND
Fluorene	3.0	ND	40
Indeno(1,2,3-c,d)Pyrene	1.0	ND	ND
Naphthalene	5.0	ND	ND
Phenanthrene	1.0	ND	120
Pyrene	1.0	ND	60

Results expressed as µg/L unless otherwise noted.

ND means none detected at or above the detection limit listed.

COFFEY LABORATORIES, INC.
12423 N.E. Whitaker Way • Portland, OR • 97230 • (503) 254-1794 • FAX (503) 254-1452

Job#: WG-920427X-2

Koppers Industry
Page 2

Analysis Performed: Volatile Organics by EPA Method 624, GC/MS

ANALYTE	DETECTION LIMIT	LABORATORY BLANK	GRAB T-3 RESULTS
Acetone	200	ND	ND
Acetonitrile	200	ND	ND
Acrolein	200	ND	ND
Acrylonitrile	200	ND	ND
Benzene	2	ND	trace,< 2
Bromodichloromethane	0.5	ND	ND
Bromoform	1	ND	ND
Bromomethane	10	ND	ND
2-Butanone (MEK)	200	ND	ND
Carbon disulfide	5	ND	ND
Carbon tetrachloride	0.5	ND	ND
Chlorobenzene	0.5	ND	ND
Chloroethane	10	ND	ND
2-Chloroethylvinyl ether	50	ND	ND
Chloroform	0.5	ND	ND
Chloromethane	10	ND	ND
Dibromochloromethane	0.5	ND	ND
Dibromomethane	2	ND	ND
Dichlorodifluoromethane	5	ND	ND
1,2-Dichlorobenzene	1	ND	ND
1,3-Dichlorobenzene	1	ND	ND
1,4-Dichlorobenzene	1	ND	ND
1,1-Dichloroethane	0.5	ND	ND
1,2-Dichloroethane	1	ND	ND
1,1-Dichloroethene	0.5	ND	ND
trans-1,2-Dichloroethene	0.5	ND	ND
cis-1,2-Dichloroethene	0.5	ND	ND
1,2-Dichloropropane	1	ND	ND
cis-1,3-Dichloropropene	0.5	ND	ND
trans-1,3-Dichloropropene	0.5	ND	ND
1,4-Dioxane	400	ND	ND

Results expressed as µg/L unless otherwise noted.

ND means none detected at or above the detection limit listed.

REPORT CONTINUES

COFFEY LABORATORIES, INC.
12423 N.E. Whitaker Way • Portland, OR • 97230 • (503) 254-1794 • FAX (503) 254-1452

Job#: WG-920427X-2

Koppers Industry
Page 3

Analysis Performed: Volatile Organics by EPA Method 624, GC/MS Con't.

ANALYTE	DETECTION LIMIT	LABORATORY BLANK	GRAB T-3 RESULTS
Ethyl acetate	50	ND	ND
Ethyl benzene	1	ND	ND
2-Hexanone	100	ND	ND
Methylene chloride	2	ND	ND
4-Methyl-2-pentanone	20	ND	ND
Styrene	5	ND	ND
1,1,1,2-Tetrachloroethane	0.5	ND	ND
1,1,2,2-Tetrachloroethane	0.5	ND	ND
Tetrachloroethene	0.5	ND	trace,< 0.5
Toluene	0.5	ND	1
1,1,1-Trichloroethane	0.5	ND	ND
1,1,2-Trichloroethane	0.5	ND	ND
Trichloroethene	0.5	ND	ND
Trichlorofluoromethane	1	ND	ND
1,2,3-Trichloropropane	1	ND	ND
Vinyl acetate	100	ND	ND
Vinyl chloride	10	ND	ND
Xylenes (Total)	2	ND	4

Results expressed as µg/L unless otherwise noted.

ND means none detected at or above the detection limit listed.

The less than "<" symbol means none detected at or above the indicated value and represents the detection limit for the method.

REPORT CONTINUES

Job#: WG-920427X-2

Koppers Industry
Page 4

Analysis Performed: Volatile Organics by EPA Method 624, GC/MS

ANALYTE	DETECTION LIMIT	T-3 DUPLICATE RESULTS	T-4 RESULTS
Acetone	200	ND	ND
Acetonitrile	200	ND	ND
Acrolein	200	ND	ND
Acrylonitrile	200	ND	ND
Benzene	2	trace, < 2	29
Bromodichloromethane	0.5	ND	ND
Bromoform	1	ND	ND
Bromomethane	10	ND	ND
2-Butanone (MEK)	200	ND	ND
Carbon disulfide	5	ND	ND
Carbon tetrachloride	0.5	ND	ND
Chlorobenzene	0.5	ND	ND
Chloroethane	10	ND	ND
2-Chloroethylvinyl ether	50	ND	ND
Chloroform	0.5	ND	ND
Chloromethane	10	ND	ND
Dibromochloromethane	0.5	ND	ND
Dibromomethane	2	ND	ND
Dichlorodifluoromethane	5	ND	ND
1,2-Dichlorobenzene	1	ND	ND
1,3-Dichlorobenzene	1	ND	ND
1,4-Dichlorobenzene	1	ND	ND
1,1-Dichloroethane	0.5	ND	ND
1,2-Dichloroethane	1	ND	ND
1,1-Dichloroethene	0.5	ND	ND
trans-1,2-Dichloroethene	0.5	ND	ND
cis-1,2-Dichloroethene	0.5	ND	ND
1,2-Dichloropropane	1	ND	ND
cis-1,3-Dichloropropene	0.5	ND	ND
trans-1,3-Dichloropropene	0.5	ND	ND
1,4-Dioxane	400	ND	ND

Results expressed as µg/L unless otherwise noted.

ND means none detected at or above the detection limit listed.

COFFEY LABORATORIES, INC.
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Job#: WG-920427X-2

Koppers Industry
Page 5

Analysis Performed: Volatile Organics by EPA Method 624, GC/MS Con't.

ANALYTE	DETECTION LIMIT	T-3 DUPLICATE RESULTS	T-4 RESULTS
Ethyl acetate	50	ND	ND
Ethyl benzene	1	ND	1
2-Hexanone	100	ND	ND
Methylene chloride	2	ND	ND
4-Methyl-2-pentanone	20	ND	ND
Styrene	5	ND	trace, < 5
1,1,1,2-Tetrachloroethane	0.5	ND	ND
1,1,2,2-Tetrachloroethane	0.5	ND	ND
Tetrachloroethene	0.5	trace,< 0.5	ND
Toluene	0.5	1	25
1,1,1-Trichloroethane	0.5	ND	ND
1,1,2-Trichloroethane	0.5	ND	ND
Trichloroethene	0.5	ND	ND
Trichlorofluoromethane	1	ND	ND
1,2,3-Trichloropropane	1	ND	ND
Vinyl acetate	100	ND	ND
Vinyl chloride	10	ND	ND
Xylenes (Total)	2	4	22

Results expressed as µg/L unless otherwise noted.

ND means none detected at or above the detection limit listed.

REPORT CONTINUES

Koppers Industry Job#: WG-920427X-2
Page 6

Analysis Performed: Base Neutrals/Acid Extractables,
by EPA Method 625, GC/MS

ANALYTE	DETECTION LIMIT	LABORATORY BLANK	T-3 RESULTS
Acenaphthene	1	ND	trace, < 1
Acenaphthylene	1	ND	trace, < 1
Aldrin	3	ND	ND
Anthracene	1	ND	1
Benzidine	200	ND	ND
Benzo(a)anthracene	3	ND	ND
Benzo(b)fluoranthene	5	ND	ND
Benzo(k)fluoranthene	5	ND	ND
Benzo(a)pyrene	5	ND	ND
Benzo(ghi)perylene	5	ND	ND
alpha-BHC	5	ND	ND
beta-BHC	5	ND	ND
delta-BHC	5	ND	ND
gamma-BHC	5	ND	ND
Bis(2-chloroethoxy)methane	1	ND	ND
Bis(2-chloroethyl)ether	1	ND	ND
Bis(2-chloroisopropyl)ether	1	ND	ND
Bis(2-ethylhexyl)phthalate	2	11	ND
4-Bromophenyl phenyl ether	2	ND	ND
Butyl benzyl phthalate	5	ND	ND
Chlordane	50	ND	ND
4-Chloro-3-methylphenol	2	ND	ND
2-Chloronaphthalene	1	ND	ND
2-Chlorophenol	1	ND	ND
4-Chlorophenyl phenyl ether	1	ND	ND
Chrysene	3	ND	ND
4,4'-DDD	5	ND	ND
4,4'-DDE	5	ND	ND
4,4'-DDT	5	ND	ND
Dibenzo(a,h)anthracene	5	ND	ND
Di-n-butylphthalate	1	ND	ND
1,2-Dichlorobenzene	1	ND	ND
1,3-Dichlorobenzene	1	ND	ND
1,4-Dichlorobenzene	1	ND	ND
3,3'-Dichlorobenzidine	50	ND	ND
2,4-Dichlorophenol	1	ND	ND

Results expressed as µg/L unless otherwise noted.
ND means none detected at or above the detection limit listed.
The less than "<" symbol means none detected at or above the indicated value and represents the detection limit for the method.
REPORT CONTINUES

Koppers Industry Job#: WG-920427X-2
Page 7

Analysis Performed: Base Neutrals/Acid Extractables,
by EPA Method 625, GC/MS

ANALYTE	DETECTION LIMIT	LABORATORY BLANK	T-3 RESULTS
Dieldrin	5	ND	ND
Diethyl phthalate	5	ND	ND
2,4-Dimethylphenol	2	ND	trace, < 2
Dimethylphthalate	1	ND	ND
2,4-Dinitrophenol	50	ND	ND
2,4-Dinitrotoluene	5	ND	ND
2,6-Dinitrotoluene	5	ND	ND
Di-n-octylphthalate	2	3	trace, < 2
Endosulfan sulfate	20	ND	ND
Endrin aldehyde	100	ND	ND
Fluoranthene	1	ND	6
Fluorene	1	ND	trace,< 1
Heptachlor	2	ND	ND
Heptachlor epoxide	5	ND	ND
Hexachlorobenzene	1	ND	ND
Hexachlorobutadiene	2	ND	ND
Hexachlorocyclopentadiene	5	ND	ND
Hexachloroethane	3	ND	ND
Indeno(1,2,3-cd)pyrene	5	ND	ND
Isophorone	2	ND	ND
2-Methyl-4,6-dinitrophenol	10	ND	ND
Naphthalene	1	ND	ND
Nitrobenzene	2	ND	ND
2-Nitrophenol	10	ND	ND
4-Nitrophenol	100	ND	ND
N-Nitrosodimethylamine	50	ND	ND
N-Nitrosodiphenylamine	5	ND	ND
N-Nitrosodi-n-propylamine	5	ND	ND
Pentachlorophenol	5	ND	trace, < 5
Phenanthrene	1	ND	ND
Phenol	5	ND	trace, < 5
Polychlorinated biphenyls	100	ND	ND
Pyrene	1	ND	1
Toxaphene	100	ND	ND
1,2,4-Trichlorobenzene	1	ND	ND
2,4,6-Trichlorophenol	2	ND	ND

Results expressed as µg/L unless otherwise noted.
ND means none detected at or above the detection limit listed.
The less than "<" symbol means none detected at or above the indicated value and represents the detection limit for the method.
REPORT CONTINUES

COFFEY LABORATORIES, INC.
12423 N.E. Whitaker Way • Portland, OR • 97230 • (503) 254-1794 • FAX (503) 254-1452

Job#: WG-920427X-2

Analysis Performed: Base Neutrals/Acid Extractables,
by EPA Method 625, GC/MS

ANALYTE	DETECTION LIMIT	T-3 DUPLICATE RESULTS	T-4 RESULTS
Acenaphthene	1 trace,	< 1	1
Acenaphthylene	1 trace,	< 1	10
Aldrin	3	ND	ND
Anthracene	1	1	2
Benzidine	200	ND	ND
Benzo(a)anthracene	3	ND	trace,< 3
Benzo(b)fluoranthene	5	ND	trace,< 5
Benzo(k)fluoranthene	5	ND	trace,< 5
Benzo(a)pyrene	5	ND	trace,< 5
Benzo(ghi)perylene	5	ND	ND
alpha-BHC	5	ND	ND
beta-BHC	5	ND	ND
delta-BHC	5	ND	ND
gamma-BHC	5	ND	ND
Bis(2-chloroethoxy)methane	1	ND	ND
Bis(2-chloroethyl)ether	1	ND	ND
Bis(2-chloroisopropyl)ether	1	ND	ND
Bis(2-ethylhexyl)phthalate	2	41	ND
4-Bromophenyl phenyl ether	2	ND	ND
Butyl benzyl phthalate	5	ND	ND
Chlordane	50	ND	ND
4-Chloro-3-methylphenol	2	ND	ND
2-Chloronaphthalene	1	ND	ND
2-Chlorophenol	1	ND	ND
4-Chlorophenyl phenyl ether	1	ND	ND
Chrysene	3	ND	trace, < 3
4,4'-DDD	5	ND	ND
4,4'-DDE	5	ND	ND
4,4'-DDT	5	ND	ND
Dibenzo(a,h)anthracene	5	ND	ND
Di-n-butylphthalate	1	ND	ND
1,2-Dichlorobenzene	1	ND	ND
1,3-Dichlorobenzene	1	ND	ND
1,4-Dichlorobenzene	1	ND	ND
3,3'-Dichlorobenzidine	50	ND	ND
2,4-Dichlorophenol	1	ND	ND

Results expressed as µg/L unless otherwise noted.
ND means none detected at or above the detection limit listed.
The less than "<" symbol means none detected at or above the indicated value and represents the detection limit for the method.
REPORT CONTINUES

Koppers Industry
Page 9

Job#: WG-920427X-2

Analysis Performed: Base Neutrals/Acid Extractables,
by EPA Method 625, GC/MS

ANALYTE	DETECTION LIMIT	T-3 DUPLICATE RESULTS	T-4 RESULTS
Dieldrin	5	ND	ND
Diethyl phthalate	5	ND	ND
2,4-Dimethylphenol	2	trace, < 2	trace, < 2
Dimethylphthalate	1	ND	ND
2,4-Dinitrophenol	50	ND	ND
2,4-Dinitrotoluene	5	ND	ND
2,6-Dinitrotoluene	5	ND	ND
Di-n-octylphthalate	2	2	ND
Endosulfan sulfate	20	ND	ND
Endrin aldehyde	100	ND	ND
Fluoranthene	1	5	10
Fluorene	1	trace, < 1	2
Heptachlor	2	ND	ND
Heptachlor epoxide	5	ND	ND
Hexachlorobenzene	1	ND	ND
Hexachlorobutadiene	2	ND	ND
Hexachlorocyclopentadiene	5	ND	ND
Hexachloroethane	3	ND	ND
Indeno(1,2,3-cd)pyrene	5	ND	ND
Isophorone	2	ND	ND
2-Methyl-4,6-dinitrophenol	10	ND	ND
Naphthalene	1	ND	ND
Nitrobenzene	2	ND	ND
2-Nitrophenol	10	ND	ND
4-Nitrophenol	100	ND	ND
N-Nitrosodimethylamine	50	ND	ND
N-Nitrosodiphenylamine	5	ND	ND
N-Nitrosodi-n-propylamine	5	ND	ND
Pentachlorophenol	5	trace, < 5	trace, < 5
Phenanthrene	1	ND	trace, < 1
Phenol	5	trace, < 5	ND
Polychlorinated biphenyls	100	ND	ND
Pyrene	1	1	6
Toxaphene	100	ND	ND
1,2,4-Trichlorobenzene	1	ND	ND
2,4,6-Trichlorophenol	2	ND	ND

Results expressed as µg/L unless otherwise noted.
ND means none detected at or above the detection limit listed.
The less than "<" symbol means none detected at or above the indicated value and represents the detection limit for the method.

COFFEY LABORATORIES, INC.
12423 N.E. Whitaker Way • Portland, OR • 97230 • (503) 254-1794 • FAX (503) 254-1452

Koppers Industry

Job#: WG-920423M-3
Page 2

PARAMETER	METHOD	DET. LIMITS	T-4 RESULTS	T-3 RESULTS
Oil & Grease	EPA 413.2	0.6	0.6	0.6
Total Phenols	EPA 420.1	0.05	0.06	0.05

Results expressed as mg/L unless otherwise noted.

ANALYSIS PERFORMED: Polynuclear Aromatic Hydrocarbons, by EPA Method 8310, Liquid Chromatography.

COMPOUND	DETECTION LIMIT	LABORATORY BLANK	GRAB (API SUMP)
Acenaphthene	5.0	ND	90
Acenaphthylene	5.0	ND	140
Anthracene	1.0	ND	8
Benzo(a)Anthracene	0.5	ND	8
Benzo(b)Fluoranthene	1.0	ND	ND
Benzo(k)Fluoranthene	1.0	ND	3
Benzo(g,h,i)Perylene	1.0	ND	ND
Benzo(a)Pyrene	1.0	ND	6
Chrysene	0.5	ND	5
Dibenzo(a,h)Anthracene	1.0	ND	ND
Fluoranthene	2.0	ND	ND
Fluorene	3.0	ND	40
Indeno(1,2,3-c,d)Pyrene	1.0	ND	ND
Naphthalene	5.0	ND	ND
Phenanthrene	1.0	ND	120
Pyrene	1.0	ND	60

Results expressed as μg/L unless otherwise noted.

ND means none detected at or above the detection limit listed.

COFFEY LABORATORIES, INC.
12423 N.E. Whitaker Way • Portland, OR • 97230 • (503) 254-1794 • FAX (503) 254-1452

05.08.92 02:59PM *COFFEY LAB P03

Report Date: May 7, 1992
Job#: WG-920423M-3
PO#: VERBAL JOHN
Project#: None
Project: None

Attention: John Oxford
Koppers Industry
7540 NW St. Helens Rd.
Portland, OR 97210

SAMPLE INFORMATION:
Date Samples Were Received By Laboratory: 04/23/92

Lab No.	Field Identification	Sample Matrix	Date	Time
1	Grab (Api Sump)	Waste Water	04-23-92	1014
2	T-4	Waste Water	04-23-92	1019
3	T-3	Waste Water	04-23-92	1021

ANALYTICAL RESULTS CONTINUE ON THE FOLLOWING PAGE.

Sincerely,

Renee Chauvin
Technical Director

RJC/daj

This report is for the sole and exclusive use of the above-named client. Samples are retained 15 days from the report date, or until holding time expires. Results pertain only to samples submitted.

COFFEY LABORATORIES, INC.
12423 N.E. Whitaker Way • Portland, OR • 97230 • (503) 254-1794 • FAX (503) 254-1452

05 08. 92 02:59PM *COFFEY LAB P02

Report Date: May 8, 1992
Job#: WG-920427X-2
PO#: VERBAL JOHN
Project#: Permit Renewal Test
Project: None

Attention: John Oxford
Koppers Industry
7540 NW St. Helens Rd.
Portland, OR 97210

SAMPLE INFORMATION:
Date Samples Were Received By Laboratory: 04/27/92

Lab No.	Field Identification	Sample Matrix	Date	Time
1	Grab T-3	Waste Water	04-27-92	1235
2	Grab T-4	Waste Water	04-27-92	1245

ANALYTICAL RESULTS ARE ON THE FOLLOWING PAGE(S)

Sincerely,

Renee Chauvin
Technical Director

RJC/lws

This report is for the sole and exclusive use of the above-named client. Samples are retained 15 days from the report date, or until holding time expires. Results pertain only to samples submitted.

COFFEY LABORATORIES, INC.
12423 N.E. Whitaker Way • Portland, OR • 97230 • (503) 254-1794 • FAX (503) 254-1452

05. 08. 92 02:59PM *COFFEY LAB P04

Job#: WG-920427X-2

Koppers Industry
Page 2

Analysis Performed: Volatile Organics by EPA Method 624, GC/MS

ANALYTE	DETECTION LIMIT	LABORATORY BLANK	GRAB T-3 RESULTS
Acetone	200	ND	ND
Acetonitrile	200	ND	ND
Acrolein	200	ND	ND
Acrylonitrile	200	ND	ND
Benzene	2	ND	trace,< 2
Bromodichloromethane	0.5	ND	ND
Bromoform	1	ND	ND
Bromomethane	10	ND	ND
2-Butanone (MEK)	200	ND	ND
Carbon disulfide	5	ND	ND
Carbon tetrachloride	0.5	ND	ND
Chlorobenzene	0.5	ND	ND
Chloroethane	10	ND	ND
2-Chloroethylvinyl ether	50	ND	ND
Chloroform	0.5	ND	ND
Chloromethane	10	ND	ND
Dibromochloromethane	0.5	ND	ND
Dibromomethane	2	ND	ND
Dichlorodifluoromethane	5	ND	ND
1,2-Dichlorobenzene	1	ND	ND
1,3-Dichlorobenzene	1	ND	ND
1,4-Dichlorobenzene	1	ND	ND
1,1-Dichloroethane	0.5	ND	ND
1,2-Dichloroethane	1	ND	ND
1,1-Dichloroethene	0.5	ND	ND
trans-1,2-Dichloroethene	0.5	ND	ND
cis-1,2-Dichloroethene	0.5	ND	ND
1,2-Dichloropropane	1	ND	ND
cis-1,3-Dichloropropene	0.5	ND	ND
trans-1,3-Dichloropropene	0.5	ND	ND
1,4-Dioxane	400	ND	ND

Results expressed as µg/L unless otherwise noted.

ND means none detected at or above the detection limit listed.

REPORT CONTINUES

Job#: WG-920427X-2

Koppers Industry
Page 3

Analysis Performed: Volatile Organics by EPA Method 624, GC/MS Con't.

ANALYTE	DETECTION LIMIT	LABORATORY BLANK	GRAB T-3 RESULTS
Ethyl acetate	50	ND	ND
Ethyl benzene	1	ND	ND
2-Hexanone	100	ND	ND
Methylene chloride	2	ND	ND
4-Methyl-2-pentanone	20	ND	ND
Styrene	5	ND	ND
1,1,1,2-Tetrachloroethane	0.5	ND	ND
1,1,2,2-Tetrachloroethane	0.5	ND	ND
Tetrachloroethene	0.5	ND	trace,< 0.5
Toluene	0.5	ND	1
1,1,1-Trichloroethane	0.5	ND	ND
1,1,2-Trichloroethane	0.5	ND	ND
Trichloroethene	0.5	ND	ND
Trichlorofluoromethane	1	ND	ND
1,2,3-Trichloropropane	1	ND	ND
Vinyl acetate	100	ND	ND
Vinyl chloride	10	ND	ND
Xylenes (Total)	2	ND	4

Results expressed as µg/L unless otherwise noted.

ND means none detected at or above the detection limit listed.

The less than "<" symbol means none detected at or above the indicated value and represents the detection limit for the method.

REPORT CONTINUES

Job#: WG-920427X-2

Koppers Industry

Analysis Performed: Volatile Organics by EPA Method 624, GC/MS

ANALYTE	DETECTION LIMIT	T-3 DUPLICATE RESULTS	T-4 RESULTS
Acetone	200	ND	ND
Acetonitrile	200	ND	ND
Acrolein	200	ND	ND
Acrylonitrile	200	ND	ND
Benzene	2	trace, < 2	29
Bromodichloromethane	0.5	ND	ND
Bromoform	1	ND	ND
Bromomethane	10	ND	ND
2-Butanone (MEK)	200	ND	ND
Carbon disulfide	5	ND	ND
Carbon tetrachloride	0.5	ND	ND
Chlorobenzene	0.5	ND	ND
Chloroethane	10	ND	ND
2-Chloroethylvinyl ether	50	ND	ND
Chloroform	0.5	ND	ND
Chloromethane	10	ND	ND
Dibromochloromethane	0.5	ND	ND
Dibromomethane	2	ND	ND
Dichlorodifluoromethane	5	ND	ND
1,2-Dichlorobenzene	1	ND	ND
1,3-Dichlorobenzene	1	ND	ND
1,4-Dichlorobenzene	1	ND	ND
1,1-Dichloroethane	0.5	ND	ND
1,2-Dichloroethane	1	ND	ND
1,1-Dichloroethene	0.5	ND	ND
trans-1,2-Dichloroethene	0.5	ND	ND
cis-1,2-Dichloroethene	0.5	ND	ND
1,2-Dichloropropane	1	ND	ND
cis-1,3-Dichloropropene	0.5	ND	ND
trans-1,3-Dichloropropene	0.5	ND	ND
1,4-Dioxane	400	ND	ND

Results expressed as µg/L unless otherwise noted.

ND means none detected at or above the detection limit listed.

05. 08. 93 02:54PM *COFFEY LAB P07

Job#: WG-920427X-2

Koppers Industry
Page 5

Analysis Performed: Volatile Organics by EPA Method 624, GC/MS Con't.

ANALYTE	DETECTION LIMIT	T-3 DUPLICATE RESULTS	T-4 RESULTS
Ethyl acetate	50	ND	ND
Ethyl benzene	1	ND	1
2-Hexanone	100	ND	ND
Methylene chloride	2	ND	ND
4-Methyl-2-pentanone	20	ND	ND
Styrene	5	ND	trace, < 5
1,1,1,2-Tetrachloroethane	0.5	ND	ND
1,1,2,2-Tetrachloroethane	0.5	ND	ND
Tetrachloroethene	0.5	trace,< 0.5	ND
Toluene	0.5	1	25
1,1,1-Trichloroethane	0.5	ND	ND
1,1,2-Trichloroethane	0.5	ND	ND
Trichloroethene	0.5	ND	ND
Trichlorofluoromethane	1	ND	ND
1,2,3-Trichloropropane	1	ND	ND
Vinyl acetate	100	ND	ND
Vinyl chloride	10	ND	ND
Xylenes (Total)	2	4	22

Results expressed as µg/L unless otherwise noted.

ND means none detected at or above the detection limit listed.

REPORT CONTINUES

COFFEY LABORATORIES, INC.
12423 N.E. Whitaker Way • Portland, OR • 97230 • (503) 254-1794 • FAX (503) 254-1452

05. 08. 92 02:59PM *COFFEY LAB P08

Job#: WG-920427X-2

Analysis Performed: Base Neutrals/Acid Extractables, by EPA Method 625, GC/MS

ANALYTE	DETECTION LIMIT	LABORATORY BLANK	T-3 RESULTS
Acenaphthene	1	ND	trace, < 1
Acenaphthylene	1	ND	trace, < 1
Aldrin	3	ND	ND
Anthracene	1	ND	1
Benzidine	200	ND	ND
Benzo(a)anthracene	3	ND	ND
Benzo(b)fluoranthene	5	ND	ND
Benzo(k)fluoranthene	5	ND	ND
Benzo(a)pyrene	5	ND	ND
Benzo(ghi)perylene	5	ND	ND
alpha-BHC	5	ND	ND
beta-BHC	5	ND	ND
delta-BHC	5	ND	ND
gamma-BHC	5	ND	ND
Bis(2-chloroethoxy)methane	1	ND	ND
Bis(2-chloroethyl)ether	1	ND	ND
Bis(2-chloroisopropyl)ether	1	ND	ND
Bis(2-ethylhexyl)phthalate	2	11	ND
4-Bromophenyl phenyl ether	2	ND	ND
Butyl benzyl phthalate	5	ND	ND
Chlordane	50	ND	ND
4-Chloro-3-methylphenol	2	ND	ND
2-Chloronaphthalene	1	ND	ND
2-Chlorophenol	1	ND	ND
4-Chlorophenyl phenyl ether	1	ND	ND
Chrysene	3	ND	ND
4,4'-DDD	5	ND	ND
4,4'-DDE	5	ND	ND
4,4'-DDT	5	ND	ND
Dibenzo(a,h)anthracene	5	ND	ND
Di-n-butylphthalate	1	ND	ND
1,2-Dichlorobenzene	1	ND	ND
1,3-Dichlorobenzene	1	ND	ND
1,4-Dichlorobenzene	1	ND	ND
3,3'-Dichlorobenzidine	50	ND	ND
2,4-Dichlorophenol	1	ND	ND

Results expressed as µg/L unless otherwise noted.
ND means none detected at or above the detection limit listed.
The less than "<" symbol means none detected at or above the indicated value and represents the detection limit for the method.
REPORT CONTINUES

05. 08. 92 02:59PM *COFFEY LAB P09

Job#: WG-920427X-2

Analysis Performed: Base Neutrals/Acid Extractables, by EPA Method 625, GC/MS

ANALYTE	DETECTION LIMIT	LABORATORY BLANK	T-3 RESULTS
Dieldrin	5	ND	ND
Diethyl phthalate	5	ND	ND
2,4-Dimethylphenol	2	ND	trace, < 2
Dimethylphthalate	1	ND	ND
2,4-Dinitrophenol	50	ND	ND
2,4-Dinitrotoluene	5	ND	ND
2,6-Dinitrotoluene	5	ND	ND
Di-n-octylphthalate	2	3	trace, < 2
Endosulfan sulfate	20	ND	ND
Endrin aldehyde	100	ND	ND
Fluoranthene	1	ND	6
Fluorene	1	ND	trace,< 1
Heptachlor	2	ND	ND
Heptachlor epoxide	5	ND	ND
Hexachlorobenzene	1	ND	ND
Hexachlorobutadiene	2	ND	ND
Hexachlorocyclopentadiene	5	ND	ND
Hexachloroethane	3	ND	ND
Indeno(1,2,3-cd)pyrene	5	ND	ND
Isophorone	2	ND	ND
2-Methyl-4,6-dinitrophenol	10	ND	ND
Naphthalene	1	ND	ND
Nitrobenzene	2	ND	ND
2-Nitrophenol	10	ND	ND
4-Nitrophenol	100	ND	ND
N-Nitrosodimethylamine	50	ND	ND
N-Nitrosodiphenylamine	5	ND	ND
N-Nitrosodi-n-propylamine	5	ND	ND
Pentachlorophenol	5	ND	trace, < 5
Phenanthrene	1	ND	ND
Phenol	5	ND	trace, < 5
Polychlorinated biphenyls	100	ND	ND
Pyrene	1	ND	1
Toxaphene	100	ND	ND
1,2,4-Trichlorobenzene	1	ND	ND
2,4,6-Trichlorophenol	2	ND	ND

Results expressed as µg/L unless otherwise noted.
ND means none detected at or above the detection limit listed.
The less than "<" symbol means none detected at or above the indicated value and represents the detection limit for the method.
REPORT CONTINUES

Job#: WG-920427X-2

Analysis Performed: Base Neutrals/Acid Extractables, by EPA Method 625, GC/MS

ANALYTE	DETECTION LIMIT	T-3 DUPLICATE RESULTS	T-4 RESULTS
Acenaphthene	1	trace, < 1	1
Acenaphthylene	1	trace, < 1	10
Aldrin	3	ND	ND
Anthracene	1	1	2
Benzidine	200	ND	ND
Benzo(a)anthracene	3	ND	trace,< 3
Benzo(b)fluoranthene	5	ND	trace,< 5
Benzo(k)fluoranthene	5	ND	trace,< 5
Benzo(a)pyrene	5	ND	trace,< 5
Benzo(ghi)perylene	5	ND	ND
alpha-BHC	5	ND	ND
beta-BHC	5	ND	ND
delta-BHC	5	ND	ND
gamma-BHC	5	ND	ND
Bis(2-chloroethoxy)methane	1	ND	ND
Bis(2-chloroethyl)ether	1	ND	ND
Bis(2-chloroisopropyl)ether	1	ND	ND
Bis(2-ethylhexyl)phthalate	2	41	ND
4-Bromophenyl phenyl ether	2	ND	ND
Butyl benzyl phthalate	5	ND	ND
Chlordane	50	ND	ND
4-Chloro-3-methylphenol	2	ND	ND
2-Chloronaphthalene	1	ND	ND
2-Chlorophenol	1	ND	ND
4-Chlorophenyl phenyl ether	1	ND	ND
Chrysene	3	ND	trace, < 3
4,4'-DDD	5	ND	ND
4,4'-DDE	5	ND	ND
4,4'-DDT	5	ND	ND
Dibenzo(a,h)anthracene	5	ND	ND
Di-n-butylphthalate	1	ND	ND
1,2-Dichlorobenzene	1	ND	ND
1,3-Dichlorobenzene	1	ND	ND
1,4-Dichlorobenzene	1	ND	ND
3,3'-Dichlorobenzidine	50	ND	ND
2,4-Dichlorophenol	1	ND	ND

Results expressed as µg/L unless otherwise noted.
ND means none detected at or above the detection limit listed.
The less than "<" symbol means none detected at or above the indicated value and represents the detection limit for the method.
REPORT CONTINUES

05/08/92 02:59PM *COFFEY LAB P11
Koppers004297

Job#: WG-920427X-2

Analysis Performed: Base Neutrals/Acid Extractables, by EPA Method 625, GC/MS

ANALYTE	DETECTION LIMIT	T-3 DUPLICATE RESULTS	T-4 RESULTS
Dieldrin	5	ND	ND
Diethyl phthalate	5	ND	ND
2,4-Dimethylphenol	2	trace, < 2	trace, < 2
Dimethylphthalate	1	ND	ND
2,4-Dinitrophenol	50	ND	ND
2,4-Dinitrotoluene	5	ND	ND
2,6-Dinitrotoluene	5	ND	ND
Di-n-octylphthalate	2	2	ND
Endosulfan sulfate	20	ND	ND
Endrin aldehyde	100	ND	ND
Fluoranthene	1	5	10
Fluorene	1	trace, < 1	2
Heptachlor	2	ND	ND
Heptachlor epoxide	5	ND	ND
Hexachlorobenzene	1	ND	ND
Hexachlorobutadiene	2	ND	ND
Hexachlorocyclopentadiene	5	ND	ND
Hexachloroethane	3	ND	ND
Indeno(1,2,3-cd)pyrene	5	ND	ND
Isophorone	2	ND	ND
2-Methyl-4,6-dinitrophenol	10	ND	ND
Naphthalene	1	ND	ND
Nitrobenzene	2	ND	ND
2-Nitrophenol	10	ND	ND
4-Nitrophenol	100	ND	ND
N-Nitrosodimethylamine	50	ND	ND
N-Nitrosodiphenylamine	5	ND	ND
N-Nitrosodi-n-propylamine	5	ND	ND
Pentachlorophenol	5	trace, < 5	trace, < 5
Phenanthrene	1	ND	trace, < 1
Phenol	5	trace, < 5	ND
Polychlorinated biphenyls	100	ND	ND
Pyrene	1	1	6
Toxaphene	100	ND	ND
1,2,4-Trichlorobenzene	1	ND	ND
2,4,6-Trichlorophenol	2	ND	ND

Results expressed as µg/L unless otherwise noted.
ND means none detected at or above the detection limit listed.
The less than "<" symbol means none detected at or above the indicated value and represents the detection limit for the method.

Koppers004298

2 Sec V

A. BOD COD TOC TSS ammonia as N

B. Bromide Total Res Chlorine color

C. Fecal Coliforms Fluoride

Nitrate Total organic Nitrogen

Oil & Grease Phosphorus

Sulfate Sulfide as S

Sulfite as SO3

Surfactants, aluminum

Barium Boron Cobalt

Iron Magnesium

Molybdenum

Manganese Tin

Tanium

C. anionic Beryllium

cadmium chromium copper

lead Mercury Nickel Selenium

Silver Thallium Zinc

Total Cyanide Phenols Dioxin

Report Date: May 29, 1992
Job#: WG-920514J-1
PO#: VERBAL JOHN
Project#: None
Project: NPDES Baseline Compliance

Attention: John Oxford
Koppers Industry.
7540 NW St. Helens Rd.
Portland, OR 97210

SAMPLE INFORMATION:
Date Samples Were Received By Laboratory: 05/14/92.

Lab No.	Field Identification	Sample Matrix	Date	Time
T	Tank #4	Waste Water	05-14-92	0930

ANALYTICAL RESULTS ARE ON THE FOLLOWING PAGE(S)

Sincerely,

Renee Chauvin
Technical Director

RJC/lws

This report is for the sole and exclusive use of the above-named client. Samples are retained 15 days from the report date, or until holding time expires. Results pertain only to samples submitted.

COFFEY LABORATORIES, INC.
12423 N.E. Whitaker Way • Portland, OR • 97230 • (503) 254-1794 • FAX (503) 254-1452

05 29 92 02:19PM COFFEY LAB P02

Job#: WG-920514J-1

Koppers Industry
Page 2

PARAMETER	METHOD	DETECTION LIMITS	TANK #4 RESULTS
Fecal Coliform Bacteria (colonies/100mL)	SM 909-C	1	114
Chlorine Residual	SM 408-E	0.05	ND
Color	EPA 110.2	5	300
pH (S.U.)	EPA 150.1	--	6.93
Total Suspended Solids	EPA 160.2	1	13
Biochemical Oxygen Demand	EPA 405.1	5	28
Chemical Oxygen Demand	EPA 410.4	1	50
Total Organic Carbon	EPA 415.1	1	19
Oil & Grease	EPA 413.2	0.5	0.5
Surfactants	EPA 425.1	0.05	0.72
Total Cyanide	EPA 335.2	0.01	0.02
Ammonia	SM 417-A,D	0.1	0.3
Organic Nitrogen	Calc.	0.1	0.8
Nitrate	EPA 300.0	0.3	ND
Nitrite	EPA 354.1	0.002	0.005
Bromide	EPA 300.0	0.5	ND
Fluoride	EPA 340.2	0.2	0.2
Total Phenols	EPA 420.1	0.25	ND
Total Phosphorus	SM 424-A,E	0.1	0.2
Sulfate	EPA 300.0	1.0	8.8
Total Sulfides	SM 427-C	0.01	0.03
Sulfite	EPA 377.1	5.0	ND

Results expressed as mg/L unless otherwise noted.

ND means none detected at or above the detection limit listed.

SM means Standard Methods for the Examination of Water and Wastewater, 1985, 16th Edition.

REPORT CONTINUES

COFFEY LABORATORIES, INC.
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P03
05. 29. 92 02:19PM *COFFEY LAB
Koppers004301

Job#: WG-920514J-1

Koppers Industry
Page 3

Analysis Performed: Metals in Wastewater

ANALYSIS	METHOD	DETECTION LIMIT	TANK #4 RESULTS
Antimony	*	0.1	ND
Arsenic	*	0.1	ND
Barium	*	0.005	0.017
Beryllium	*	0.005	ND
Boron	*	0.1	0.1
Cadmium	*	0.05	ND
Chromium	*	0.05	ND
Cobalt	*	0.05	ND
Copper	*	0.05	ND
Iron	*	0.05	5.8
Lead	*	0.1	ND
Mercury	EPA 245.1	0.0005	ND
Molybdenum	*	0.05	ND
Nickel	*	0.05	ND
Selenium	*	0.1	ND
Silver	*	0.05	ND
Zinc	*	0.05	ND
Aluminum	*	0.1	ND
Magnesium	*	0.05	5.5
Manganese	*	0.01	0.90
Thallium	*	0.1	ND
Tin	*	0.1	ND
Titanium	*	0.05	ND

Results expressed as mg/L unless otherwise noted.

* Federal Register, 40 CFR Part 136, Method 200.7, Friday, October 26, 1984, Part VIII.

ND means none detected at or above the detection limit listed.

COFFEY LABORATORIES, INC.
12423 N.E. Whitaker Way • Portland, OR • 97230 • (503) 254-1794 • FAX (503) 254-1452

05. 29. 92 02:19PM *COFFEY LAB P04

DOC ID: o:\clom\form\log\fax.log
Revision #: 1.01
Revision Date: April 30, 1992

FACSIMILLE TRANSMITTAL LOG

TO: Company Name: Koppers Date: 5/29/92

Attention: John Odell

Phone #: ( ) 285-2831

# of Pages (Including Cover Sheets): 4

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COMMENTS: Please call with a fax number if you want me to fax back East.

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DOC ID: o:\clom\form\log\fax.log
Revision #: 1.01
Revison Date: April 30, 1992

FACSIMILLE TRANSMITTAL LOG

TO: Company Name: Koppers Date: 5/29/92

Attention: Bill Salaniaga

Phone #: (412) 227-2423

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COFFEY LABORATORIES, INC.
12423 N.E. Whitaker Way • Portland, OR • 97230 • (503) 254-1794 • FAX (503) 254-1452

Report Date: May 29, 1992
Job#: WG-920514J-1
PO#: VERBAL JOHN
Project#: None
Project: NPDES Baseline Compliance

Attention: John Oxford
Koppers Industry
7540 NW St. Helens Rd.
Portland, OR 97210

SAMPLE INFORMATION:
Date Samples Were Received By Laboratory: 05/14/92

Lab No.	Field Identification	Sample Matrix	Date	Time
1	Tank #4	Waste Water	05-14-92	0930

ANALYTICAL RESULTS ARE ON THE FOLLOWING PAGE(S)

Sincerely,

Renee Chauvin
Technical Director

RJC/lws

This report is for the sole and exclusive use of the above-named client. Samples are retained 15 days from the report date, or until holding time expires. Results pertain only to samples submitted.

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COFFEY LABORATORIES, INC.
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Job#: WG-920514J-1

Koppers Industry
Page 2

PARAMETER	METHOD	DETECTION LIMITS	TANK #4 RESULTS
Fecal Coliform Bacteria (colonies/100mL)	SM 909-C	1	114
Chlorine Residual	SM 408-E	0.05	ND
Color	EPA 110.2	5	300
pH (S.U.)	EPA 150.1	--	6.93
Total Suspended Solids	EPA 160.2	1	13
Biochemical Oxygen Demand	EPA 405.1	5	28
Chemical Oxygen Demand	EPA 410.4	1	50
Total Organic Carbon	EPA 415.1	1	19
Oil & Grease	EPA 413.2	0.5	0.5
Surfactants	EPA 425.1	0.05	0.72
Total Cyanide	EPA 335.2	0.01	0.02
Ammonia	SM 417-A,D	0.1	0.3
Organic Nitrogen	Calc.	0.1	0.8
Nitrate	EPA 300.0	0.3	ND
Nitrite	EPA 354.1	0.002	0.005
Bromide	EPA 300.0	0.5	ND
Fluoride	EPA 340.2	0.2	0.2
Total Phenols	EPA 420.1	0.25	ND
Total Phosphorus	SM 424-A,E	0.1	0.2
Sulfate	EPA 300.0	1.0	8.8
Total Sulfides	SM 427-C	0.01	0.03
Sulfite	EPA 377.1	5.0	ND

Results expressed as mg/L unless otherwise noted.

ND means none detected at or above the detection limit listed.

SM means Standard Methods for the Examination of Water and Wastewater, 1985, 16th Edition.

REPORT CONTINUES

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Job#: WG-920514J-1

Koppers Industry
Page 3

Analysis Performed: Metals in Wastewater

ANALYSIS	METHOD	DETECTION LIMIT	TANK #4 RESULTS
Antimony	*	0.1	ND
Arsenic	*	0.1	ND
Barium	*	0.005	0.017
Beryllium	*	0.005	ND
Boron	*	0.1	0.1
Cadmium	*	0.05	ND
Chromium	*	0.05	ND
Cobalt	*	0.05	ND
Copper	*	0.05	ND
Iron	*	0.05	5.8
Lead	*	0.1	ND
Mercury	EPA 245.1	0.0005	ND
Molybdenum	*	0.05	ND
Nickel	*	0.05	ND
Selenium	*	0.1	ND
Silver	*	0.05	ND
Zinc	*	0.05	ND
Aluminum	*	0.1	ND
Magnesium	*	0.05	5.5
Manganese	*	0.01	0.90
Thallium	*	0.1	ND
Tin	*	0.1	ND
Titanium	*	0.05	ND

Results expressed as mg/L unless otherwise noted.

* Federal Register, 40 CFR Part 136, Method 200.7, Friday, October 26, 1984, Part VIII.

ND means none detected at or above the detection limit listed.

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PORTLAND, OR

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KOPPERS

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COMPANY NAME: K-1900

FROM: JOHN OXFORD

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Koppers004308

COFFEY LABORATORIES, INC.
4914 N.E. 122nd Ave.
Portland, OR 97230
Phone: (503) 254-1794

July 21, 1988
Log # A880630-S2
PO # Verbal John

Koppers Co., Inc.
7540 NW St. Helens Rd.
Portland, OR 97229
Attention: John Oxford

Samples Received: 06/30/88
Samples Collected: 06/29/88 1515 hrs.
Samples Collected/Delivered by: Client
Sample Id: W-W-T-4
SUBJECT: Polynuclear Aromatic Hydrocarbons

Method: Samples analyzed by EPA Method 8100, Captillary GC/FID

Base Neutral Extractables

COMPOUND	ug/L
Acenaphthene	18
Acenaphthylene	< 10
Anthracene	< 10
Benzo(a)anthracene	< 10
Benzo(a)pyrene	< 10
Benzo(b)fluoranthene	< 10
Benzo(ghi)perylene	< 15
Benzo(k)fluoranthene	< 10
Chrysene	< 10
Dibenzo(ah)anthracene	< 15
Fluoranthene	9
Fluorene	20
Indeno(1,2,3-cd)pyrene	< 15
Naphthalene	< 10
Phenanthrene	< 10
Pyrene	< 10 (trace)

The less than "<" symbol means none detected at or above the indicated value and represents the detection limit for the method.

COFFEY LABORATORIES, INC.
4914 N.E. 122nd Ave.
Portland, OR 97230
Phone: (503) 254-1794

July 21, 1988
Log # A880630-S2

Koppers Co., Inc.
7540 NW St. Helens Rd.
Portland, OR 97229
Sample Id: W-W-T-3
SUBJECT: Polynuclear Aromatic Hydrocarbons

Method: Samples analyzed by EPA Method 8100, Captillary GC/FID

Base Neutral Extractables

COMPOUND	ug/L
Acenaphthene	< 17
Acenaphthylene	< 10
Anthracene	< 10
Benzo(a)anthracene	< 10
Benzo(a)pyrene	< 10
Benzo(b)fluoranthene	< 10
Benzo(ghi)perylene	< 15
Benzo(k)fluoranthene	< 10
Chrysene	< 10
Dibenzo(ah)anthracene	< 15
Fluoranthene	19
Fluorene	24
Indeno(1,2,3-cd)pyrene	< 15
Naphthalene	< 10
Phenanthrene	< 10
Pyrene	10

The less than "<" symbol means none detected at or above the indicated value and represents the detection limit for the method.

Approved,

Richard D. Reid,
Laboratory Director

Sincerely,

Susan M. Coffey,
President

SMC/lws

This report is for the sole and exclusive use of the above client. Samples are retained a maximum of 15 days from the date of this report, or until maximum holding time has expired.

KOPPERS INDUSTRIES

FAX COVER SHEET

KOPPERS INDUSTRIES, INC.
436 Seventh Ave., K-1800
Pittsburgh, PA 15219

Date: May 15, 1998

To: All KII Plant Managers and Environmental Supervisors

From: Stephen Smith
Fax No.: (412)227-2423
Voice No.: (412)227-2677

Number of pages including this page: 3

Subject: EPA Information Request

As you all know, EPA issued an Information Request to KII in late 1996. This action was part of an investigation into KII locations' compliance with Clean Water Act regulations and permits. The process is not over and, as the attached letter from SAIC makes clear, the EPA is still looking for evidence of any non-compliance. We do not know what EPA plans to do with their information or how much longer this investigation will continue.

What can you do? Mainly, ensure we are doing every day just those things we already know we are supposed to do. Do not take for granted that "things are ok" in your plant waste water operations, but make sure they are. Make sure that discharge monitoring reports are filled out accurately and submitted on time. Use a cover letter to submit DMRs and, if any parameter is out of compliance, use the cover letter to explain why we think it is and what is being done to correct it. In a case where exceedances occur with any pattern or regularity and you are unable to correct the problem, ask for help from this department, engineering, another plant, or a consulting firm. Don't let non-compliance continue. Don't accept the normalization of variance!

Please also help us to help you by keeping us informed. Attached for re-emphasis is the Environmental Communications and Documents Guide previously passed out at this year's annual seminar. Please ensure that the Pittsburgh Environmental Manager for your plant receives copies of all submittals to regulatory agencies, including DMRs.

Please ensure the appropriate people at your plant read this. If there is anything I or the Environmental Managers can do to help, please let us know.

Cc: T. D. Loadman, K-2050
J. R. Heller, K-2050
Clark Mitchell, K-2000
Kevin Fitzgerald, K-1600
R. D. Collins, K-1700
T. E. DuPlessis, K-1800
T. I. Self, K-1800
N. J. Prepelka, K-1800

State Fire Marshall
Quarterly MSDS Review

Koppers004312

KOPPERS

Koppers Inc.
Carbon Materials and Chemicals
7540 NW Saint Helens Road
Portland, OR 97210-3663
Tel 503 286 3681
Fax 503 285 2831
www.koppers.com

July 25, 2007

Office of the State Fire Marshal
CR2K Unit
4760 Portland Road NE
Salem, Oregon 97305-1760

To Whom It May Concern:

The Emergency Planning and Community Right-to-Know Act (EPCRA), Subtitle B, Section 311, requires the owner or operator of any facility to prepare or have MSDS's under the OSHA Hazard Communicating Standard. The facility is required to submit an MSDS for each chemical or a list of such chemical to their local fire department, LEPC, and SERC no later than three months after receipt of a new raw material, or after discovering significant new information about a chemical that is on site.

The Koppers Northwest Terminal has not received any new or updated any MSDS's over the past three months.

A complete list of all chemicals that meet the reportable quantities limits established by the state of Oregon have been supplied to you annually via the Hazardous Substance Information Survey. Additionally, copies of all MSDS's for chemicals on site are on file in binders located in the terminal office and the control room.

Please do not hesitate to contact me if you have any questions regarding this correspondence. I can be reached at 503-286-3681 or via email at: turnertj@koppers.com

Sincerely,

T. J. Turner
Plant Superintendent

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April 25, 2007

Office of the State Fire Marshal
CR2K Unit
4760 Portland Road NE
Salem, Oregon 97305-1760

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Sincerely,

T. J. Turner
Plant Superintendent

July 6, 2006

Office of the State Fire Marshal
CR2K Unit
4760 Portland Road NE
Salem, Oregon 97305-1760

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Sincerely,

T. J. Turner
General Foreman

KOPPERS

Koppers Inc.
Carbon Materials and Chemicals
7540 NW Saint Helens Road
Portland, OR 97210 3663
Tel 503 286 3681
Fax 503 285 2831
www.koppers.com

January 12, 2006

Office of the State Fire Marshal
CR2K Unit
4760 Portland Road NE
Salem, Oregon 97305-1760

Dear Sirs,

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Sincerely,

T. J. Turner
General Foreman

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Koppers004317

Month & Year
October-03

PORTLAND INVENTORY (POUNDS)

	Heavy Oil	T-200/68/cars Liq. Korean	Chinese Pencils	Korean Pencils	KII - Reilly Pencils	KII Low QI T-65 Liquid	TOTAL KII	Reilly Anchan Pencil	Intalco Liq. Korean	TOTAL IN PLANT
	17200001	42600001	42300001	42400001	42600001	42600001		43300601	39100001	
Opening Inventory(MIR)	115,444	5,083,731	0	0	0	1,126,822	6,325,997	0	620,378	6,946,375
Purchases(+)	103,000						103,000		8,857,565	8,960,565
Production(+)							0			0
Processed(-)	71,984		0	0			71,984			71,984
Misc. Disbursements(-)							0			0
Shipments - KII(-)		2,875,103				177,600	3,052,703	0		3,052,703
Shipments - Intalco(-)							0		1,441,078	1,441,078
Book Inventory	146,460	2,208,628	0	0	0	949,222	3,304,310	0	8,036,865	11,341,175
Gain / (Loss)(+/-)	0	0	0	0	0	410,945	410,945	0	0	410,945
Physical Inv.	146,460	2,208,628	0	0	0	1,360,167	3,715,255	0	8,036,865	11,752,120

3,568,785

Total Through Put - Liquid Pitch Shipments 4,491,820

Heavy oil

		Avg./mo.
Receipts	430,400 #	35,867 #
Usage (ship)	582,725 #	48,560 #

Gallons (9 #)

R —	47,822 ✓	3,985 ✓
U —	67,747 ✓	5,396

Liquid Pitch

	Avg./mo
36,239,917 #	3,019,993
43,256,990 #	3,604,749 #

Gallons (11 #)

3,294,538 ✓	274,545 ✓
3,932,454 ✓	327,704 ✓

Solid Pitch

	Avg./mo.
0 ✓	0 ✓
5,584,052 # ✓	46,534 # ✓

Gallons (11 #)

~~0~~ 501,641	~~0~~ 4,230

Koppers004318

Month & Year
September-03

PORTLAND INVENTORY (POUNDS)

	Heavy Oil	T-200/68/cars Liq. Korean	Chinese Pencils	Korean Pencils	KII - Reilly Pencils	KII Low QI T-65 Liquid	TOTAL KII	Reilly Anchan Pencil	Intalco Liq. Korean	TOTAL IN PLANT
	17200001	42600001	42300001	42400001	42600001	42600001		43300601	39100001	
Opening Inventory(MIR)	167,790	5,083,731	0	0	0	1,103,460	6,354,981	0	2,944,678	9,299,659
Purchases(+)							0			0
Production(+)							0			0
Processed(-)	52,346		0	0			52,346			52,346
Misc. Disbursements(-)							0			0
Shipments - KII(-)							0	0		0
Shipments - Intalco(-)						340,000	340,000		2,324,300	2,664,300
Book Inventory	115,444	5,083,731	0	0	0	763,460	5,962,635	0	620,378	6,583,013
Gain / (Loss)(+/-)	0	0	0	0	0	363,362	363,362	0	0	363,362
Physical Inv.	115,444	5,083,731	0	0	0	1,126,822	6,325,997	0	620,378	6,946,375

6,210,553

Total Through Put - Liquid Pitch Shipments 2,664,300

Koppers004319

Month & Year
August-03

PORTLAND INVENTORY (POUNDS)

	Heavy Oil	T-200/68/cars Liq. Korean	Chinese Pencils	Korean Pencils	KII - Reilly Pencils	KII Low QI T-65 Liquid	TOTAL	Reilly Anchan Pencil	Intalco Liq. Korean	TOTAL IN
	17200001	42600001	42300001	42400001	42600001	42600001	KII	43300601	39100001	PLANT
Opening Inventory(MIR)	79,617	5,083,731	0	0	0	1,437,260	6,600,608	0 ~~1,030,668~~	5,347,678	12,978,954
Purchases(+)	139,000						139,000			139,000
Production(+)							0			0
Processed(-)	50,827		0	0			50,827			50,827
Misc. Disbursements(-)							0			0
Shipments - KII(-)							0	0 ~~1,030,668~~		1,030,668
Shipments - Intalco(-)						333,800	333,800		2,403,000	2,736,800
Book Inventory	167,790	5,083,731	0	0	0	1,103,460	6,354,981	0	2,944,678	9,299,659
Gain / (Loss)(+/-)	0	0	0	0	0	0	0	0	0	0
Physical Inv.	167,790	5,083,731	0	0	0	1,103,460	6,354,981	0	2,944,678	9,299,659

6,187,191

Total Through Put - Liquid Pitch Shipments 2,736,800

Koppers004320

Month & Year
July-03

PORTLAND INVENTORY (POUNDS)

	Heavy Oil	T-200/68/cars Liq. Korean	Chinese Pencils	Korean Pencils	KII - Reilly Pencils	KII Low QI T-65 Liquid	TOTAL KII	Reilly Anchan Pencil	Intalco Liq. Korean	TOTAL IN PLANT
	17200001	42600001	42300001	42400001	42600001	42600001		43300601	39100001	
Opening Inventory(MIR)	148,565	5,083,731	0	0	0	2,115,060	7,347,356	1,030,668	8,499,938	16,877,962
Purchases(+)							0			0
Production(+)							0			0
Processed(-)	68,948		0	0			68,948			68,948
Misc. Disbursements(-)							0			0
Shipments - KII(-)							0	1,030,668		1,030,668
Shipments - Intalco(-)						677,800	677,800		3,152,260	3,830,060
Book Inventory	79,617	5,083,731	0	0	0	1,437,260	6,600,608	0	5,347,678	11,948,286
Gain / (Loss)(+/-)	0	0	0	0	0	0	0	0	0	0
Physical Inv.	79,617	5,083,731	0	0	0	1,437,260	6,600,608	0	5,347,678	11,948,286

6,520,991

Total Through Put - Liquid Pitch Shipments 3,803,060

Koppers004321

Month & Year
June-03

PORTLAND INVENTORY (POUNDS)

	Heavy Oil	T-200/68/cars Liq. Korean	Chinese Pencils	Korean Pencils	KII - Reilly Pencils	KII Low QI T-65 Liquid	TOTAL	Reilly Anchan Pencil	Intalco Liq. Korean	TOTAL IN
	17200001	42600001	42300001	42400001	42600001	42600001	KII	43300601	39100001	PLANT
Opening Inventory(MIR)	77,000	5,083,731	0	0	0	2,295,060	7,455,791	1,030,668	11,305,988	19,792,447
Purchases(+)	98,900						98,900			98,900
Production(+)							0			0
Processed(-)	27,335		0	0			27,335			27,335
Misc. Disbursements(-)							0			0
Shipments - KII(-)						180,000	180,000			180,000
Shipments - Intalco(-)							0		2,806,050	2,806,050
Book Inventory	148,565	5,083,731	0	0	0	2,115,060	7,347,356	1,030,668	8,499,938	16,877,962
Gain / (Loss)(+/-)	0	0	0	0	0	0	0	0	0	0
Physical Inv.	148,565	5,083,731	0	0	0	2,115,060	7,347,356	1,030,668	8,499,938	16,877,962

7,198,791

Total Through Put - Liquid Pitch Shipments 2,986,050

Koppers004322

Month & Year
May-03

PORTLAND INVENTORY (POUNDS)

	Heavy Oil 17200001	T-200/68/cars Liq. Korean 42600001	Chinese Pencils 42300001	Korean Pencils 42400001	KII - Reilly Pencils 42600001	KII Low QI T-65 Liquid 42600001	TOTAL KII	Reilly Anchan Pencil 43300601	Intalco Liq. Korean 39100001	TOTAL IN PLANT
Opening Inventory(MIR)	164,448	5,083,731	0	0	0	2,643,060	7,891,239	1,030,668	14,456,158	23,378,065
Purchases(+)							0			0
Production(+)							0			0
Processed(-)	87,448		0	0			87,448			87,448
Misc. Disbursements(-)							0			0
Shipments - KII(-)						348,000	348,000			348,000
Shipments - Intalco(-)							0		3,150,170	3,150,170
Book Inventory	77,000	5,083,731	0	0	0	2,295,060	7,455,791	1,030,668	11,305,988	19,792,447
Gain / (Loss)(+/-)	0	0	0	0	0	0	0	0	0	0
Physical Inv.	77,000	5,083,731	0	0	0	2,295,060	7,455,791	1,030,668	11,305,988	19,792,447

7,378,791

Total Through Put - Liquid Pitch Shipments 3,498,170

Koppers004323

Month & Year
April-03

PORTLAND INVENTORY (POUNDS)

	Heavy Oil	T-200/68/cars Liq. Korean	Chinese Pencils	Korean Pencils	KII - Reilly Pencils	KII Low QI T-65 Liquid	TOTAL	Reilly Anchan Pencil	Intalco Liq. Korean	TOTAL IN
	17200001	42600001	42300001	42400001	42600001	42600001	KII	43300601	39100001	PLANT
Opening Inventory(MIR)	210,738	101,798	0	0	0	2,816,560	3,129,096	1,030,668	6,989,632	11,149,396
Purchases(+)		4,935,643					4,935,643		10,959,516	15,895,159
Production(+)		46,290					46,290			46,290
Processed(-)	46,290		0	0			46,290			46,290
Misc. Disbursements(-)							0			0
Shipments - KII(-)						173,500	173,500			173,500
Shipments - Intalco(-)							0		3,492,990	3,492,990
Book Inventory	164,448	5,083,731	0	0	0	2,643,060	7,891,239	1,030,668	14,456,158	23,378,065
Gain / (Loss)(+/-)	0	0	0	0	0	0	0	0	0	0
Physical Inv.	164,448	5,083,731	0	0	0	2,643,060	7,891,239	1,030,668	14,456,158	23,378,065
				7,726,791						
Total Through Put - Liquid Pitch Shipments			3,666,490							

Koppers004324

Month & Year
March-03

PORTLAND INVENTORY (POUNDS)

	Heavy Oil	T-200/68/cars Liq. Korean	Chinese Pencils	Korean Pencils	KII - Reilly Pencils	KII Low QI T-65 Liquid	TOTAL KII	Reilly Anchan Pencil	Intalco Liq. Korean	TOTAL IN PLANT
	17200001	42600001	42300001	42400001	42600001	42600001		43300601	39100001	
Opening Inventory(MIR)	243,159	69,377	0	0	0	3,328,360	3,640,896	1,030,668	9,653,872	14,325,436
Purchases(+)							0			0
Production(+)		32,421					32,421			32,421
Processed(-)	32,421		0	0			32,421			32,421
Misc. Disbursements(-)							0			0
Shipments - KII(-)						511,800	511,800			511,800
Shipments - Intalco(-)							0		2,664,240	2,664,240
Book Inventory	210,738	101,798	0	0	0	2,816,560	3,129,096	1,030,668	6,989,632	11,149,396
Gain / (Loss)(+/-)	0	0	0	0	0	0	0	0	0	0
Physical Inv.	210,738	101,798	0	0	0	2,816,560	3,129,096	1,030,668	6,989,632	11,149,396

2,918,358

Total Through Put - Liquid Pitch Shipments 3,176,040

Koppers004325

Month & Year
February-03

PORTLAND INVENTORY (POUNDS)

	Heavy Oil	T-200/68/cars Liq. Korean	Chinese Pencils	Korean Pencils	KII - Reilly Pencils	KII Low QI T-65 Liquid	TOTAL KII	Reilly Anchan Pencil	Intalco Liq. Korean	TOTAL IN PLANT
	17200001	42600001	42300001	42400001	42600001	42600001		43300601	39100001	
Opening Inventory(MIR)	300,660	524,675	0	0	0	4,138,660	4,963,995	1,030,668	13,747,332	19,741,995
Purchases(+)							0			0
Production(+)		57,501					57,501			57,501
Processed(-)	57,501		0	0			57,501			57,501
Misc. Disbursements(-)							0			0
Shipments - KII(-)		512,799		1,323,099		810,300	1,323,099			1,323,099
Shipments - Intalco(-)							0		4,093,460	4,093,460
Book Inventory	243,159	69,377	0	0	0	3,328,360	3,640,896	1,030,668	9,653,872	14,325,436
Gain / (Loss)(+/-)	0	0	0	0	0	0	0	0	0	0
Physical Inv.	243,159	69,377	0	0	0	3,328,360	3,640,896	1,030,668	9,653,872	14,325,436
				3,397,737						

Total Through Put - Liquid Pitch Shipments 5,416,559

Koppers004326

PORTLAND INVENTORY (POUNDS)

Month & Year
~~December~~-03
JANUARY

	Heavy Oil	T-200/68/cars Liq. Korean	Chinese Pencils	Korean Pencils	KII - Reilly Pencils	KII Low QI T-65 Liquid	TOTAL	Reilly Anchan Pencil	Intalco Liq. Korean	TOTAL IN
	17200001	42600001	42300001	42400001	42600001	42600001	KII	43300601	39100001	PLANT
Opening Inventory(MIR)	303,660	1,038,675	0	0	0	4,138,660	5,480,995	1,030,668	17,566,362	24,078,025
Purchases(+)							0			0
Production(+)		3,000					3,000			3,000
Processed(-)	3,000		0	0			3,000			3,000
Misc. Disbursements(-)							0			0
Shipments - KII(-)		517,000					517,000			517,000
Shipments - Intalco(-)							0		3,819,030	3,819,030
Book Inventory	300,660	524,675	0	0	0	4,138,660	4,963,995	1,030,668	13,747,332	19,741,995
Gain / (Loss)(+/-)	0	0	0	0	0	0	0	0	0	0
Physical Inv.	300,660	524,675	0	0	0	4,138,660	4,963,995	1,030,668	13,747,332	19,741,995

4,663,335

Total Through Put - Liquid Pitch Shipments 4,336,030

Koppers004327

Month & Year
December-~~03~~ 02

PORTLAND INVENTORY (POUNDS)

	Heavy Oil	T-200/68/cars Liq. Korean	Chinese Pencils	Korean Pencils	KII - Reilly Pencils	KII Low QI T-65 Liquid	TOTAL KII	Reilly Anchan Pencil	Intalco Liq. Korean	TOTAL IN PLANT
	17200001	42600001	42300001	42400001	42600001	42600001		43300601	39100001	
Opening Inventory(MIR)	107,560	1,006,275	0	0	0	3,116,242	4,230,077	2,908,836	8,772,649	15,911,562
Purchases(+)	228,500						228,500		11,120,893	11,349,393
Production(+)		32,400		1,910,568		1,878,168	1,910,568			1,910,568
Processed(-)	32,400		0	0			32,400	1,878,168		1,910,568
Misc. Disbursements(-)							0			0
Shipments - KII(-)						855,750	855,750			855,750
Shipments - Intalco(-)							0		2,327,180	2,327,180
Book Inventory	303,660	1,038,675	0	0	0	4,138,660	5,480,995	1,030,668	17,566,362	24,078,025
Gain / (Loss)(+/-)	0	0	0	0	0	0	0	0	0	0
Physical Inv.	303,660	1,038,675	0	0	0	4,138,660	5,480,995	1,030,668	17,566,362	24,078,025
Total Through Put - Liquid Pitch Shipments			3,182,930				5,177,335			

Hvy. oil - MAX
33,739 gals. ✓

Liq. Pitch - MAX
22,743,697 #
2,067,609 gals ✓

Koppers004328

Month & Year
November-02

PORTLAND INVENTORY (POUNDS)

	Heavy Oil	T-200/68/cars Liq. Korean	Chinese Pencils	Korean Pencils	KII - Reilly Pencils	KII Low QI T-65 Liquid	TOTAL KII	Reilly Anchan Pencil	Intalco Liq. Korean	TOTAL IN PLANT
	17200001	42600001	42300001	42400001	42600001	42600001		43300601	39100001	
Opening Inventory(MIR)	159,765	2,356,512	0	0	231,784	0	2,748,061	5,584,052	10,482,929	18,815,042
Purchases(+)		368,300					366,300			366,300
Production(+)		682,205				3,626,242	4,308,447			4,308,447
Processed(-)	52,205	1,349,242	0	0	231,784		1,633,231	2,675,216		4,308,447
Misc. Disbursements(-)							0			0
Shipments - KII(-)		1,049,500				510,000	1,559,500			1,559,500
Shipments - Intalco(-)							0		1,710,280	1,710,280
Book Inventory	107,560	1,006,275	0	0	0	3,116,242	4,230,077	2,908,836	8,772,649	15,911,562
Gain / (Loss)(+/-)	0	0	0	0	0	0	0	0	0	0
Physical Inv.	107,560	1,006,275	0	0	0	3,116,242	4,230,077	2,908,836	8,772,649	15,911,562

Total Through Put - Liquid Pitch Shipments 3,269,780

2,588,296
4,308,447
1,591,026
1,559,500
4,122,517
4,122,517

Solid Pitch - MAX
3,140,620 # ✓

Koppers004329

KOPPERS
7540 N.W. St. Helens Rd.
Portland, Oregon 97210
Phone: (503) 286-3681
Fax: (503) 285-2831
E-mail: amos_kamerer@koppers.com

11/19/02

Tank farm - Location Reporting

Build - closest to

Room - blank

Area - Tank farm or other

Room - T- #

Quad -

AMOS S. KAMERER

Nitrogen Deliveries

Month	Day	scf Delivered	Days between Deliveries (working)	Avg. scf/day usage between deliveries	YTD - scf
1-Jan	24	120,000	15	8,000	120,000
January	18	85,600	15	5,707	205,600
February	19	102,500	17	6,029	308,100
March	12	105,000	13	8,077	413,100
April	9	125,000	16	7,813	538,100
May	7	114,100	15	7,607	652,200
June	5	115,800	15	7,720	768,000
July	20	174,600	25	6,984	942,600
August	23	176,400	20	8,820	1,119,000
September	24	143,800	16	8,988	1,262,800
October	24	130,100	18	7,228	1,392,900
November	26	128,700	19	6,774	1,521,600
December	28	122,700	22	5,577	1,644,300
Jan-02	21	131,000	16	8,188	131,000
February	21	115,000	23	5,000	246,000
March	22	134,500	21	6,405	380,500
April	23	167,500	22	7,614	548,000
June	10	125,500	29	4,328	673,500
July	5	144,500	18	8,028	818,000
August	6	149,300	21	7,110	967,300
September	14	190,800	29	6,579	1,158,100
October	23	188,100	28	6,718	1,346,200

Avg = 2049

1,727,700

÷ 93.11

18,555 gals.

1.01074

Koppers004331

Month & Year
November-01

PORTLAND INVENTORY (POUNDS)

	Heavy Oil 17200001	200/65/68/cars Liq. Korean 42600001	Chinese Pencils 42300001	Korean Pencils 42400001	Target Pitch 49250001	Japanese Pencils 42840001	TOTAL KII	Reilly Chin. Penc. 43300601	Intalco Liq. Korean 39100001	TOTAL IN PLANT
Opening Inventory(MIR)	718,682	4,974,053	108,072	2,609,703	0	154,322	8,564,832	9,703,280	302,710	18,570,822
Purchases(+)							0			0
Production(+)							0			0
Processed(-)							0			0
Misc. Disbursements(-)							0			0
Shipments - KII(-)		679,300					679,300			679,300
Shipments - Intalco(-)							0			0
Book Inventory	718,682	4,294,753	108,072	2,609,703	0	154,322	7,885,532	9,703,280	302,710	17,891,522
Gain / (Loss)(+/-)	0	-101,048	0	0	0	0	-101,048	0	0	-101,048
Physical Inv.	718,682	4,193,705	108,072	2,609,703	0	154,322	7,784,484	9,703,280	302,710	17,790,474
	79854 gals									
Total Through Put - Liquid Pitch Shipments			679,300							

Under the KII liquid Korean pitch, the actual book inventory is greater than the physical inventory by 202.095 #'s. However, we are currently in the process of cleaning out the pitch residues from tanks T-65 & T-68 and it is our feeling that these residues will amount to this much, or more. Unfortunately, it will be some time, before this material will be loaded out and sent off for recycling. Thus, it has been decided to write off this difference, over the last 3 months of 2001 and not carry it over to next year.
The second portion of this write off, is the 101,048# loss reflected above

Heavy oil	Avg/mo.
Receipts - 159,500 #	13,292 #
Usage - 712,919 #	59,400 #
Gallons (9#)	
17,722	1477
79,213	6601

Liquid Pitch	Avg
25,741,129 #	2,145,094 #
28,867,829 #	2,405,652 #
Gallons (11#)	
2,340,103	195,009
2,624,348	218,696

Solid Pitch	Avg
4,837,304 #	403,109 #
6,112,097 #	509,341 #
Gallons (11#)	
439,755	36,646
555,645	46,304

Koppers004332

Month & Year
December-01

PORTLAND INVENTORY (POUNDS)

	Heavy Oil	200/65/68/cars Liq. Korean	Chinese Pencils	Korean Pencils	Target Pitch	Japanese Pencils	TOTAL KII	Reilly Chin. Penc.	Intalco Liq. Korean	TOTAL IN PLANT
	17200001	42600001	42300001	42400001	49250001	42840001		43300601	39100001	
Opening Inventory(MIR)	718,682	4,193,705	108,072	2,609,703	0	154,322	7,784,484	9,703,280	302,710	17,790,474
Purchases(+)							0			0
Production(+)							0			0
Processed(-)							0			0
Misc. Disbursements(-)							0			0
Shipments - KII(-)		676,293		29,160			705,453			705,453
Shipments - Intalco(-)							0			0
Book Inventory	718,682	3,517,412	108,072	2,580,543	0	154,322	7,079,031	9,703,280	302,710	17,085,021
Gain / (Loss)(+/-)	0	-75,015	0	0	0	0	-75,015	0	0	-75,015
Physical Inv.	718,682	3,442,397	108,072	2,580,543	0	154,322	7,004,016	9,703,280	302,710	17,010,006

Total Through Put - Liquid Pitch Shipments 676,293

Under the KII liquid Korean pitch, the actual book inventory is greater than the physical inventory by 75,015 #'s. However, we recently cleaned out the pitch residues from tanks T-65 & T-68 and it is our feeling that these residues will amount to this much, or more. Unfortunately, it will be some time before this material will be loaded out and sent off site for recycling. Thus, it has been decided to write off this difference, over the last 3 months of 2001 and not carry it over to next year.
The last portion of the total write-off, is the 125,753# loss reflected above.

Koppers004333

Month & Year
January-02

PORTLAND INVENTORY (POUNDS)

	Heavy Oil	200/65/68/cars Liq. Korean	Chinese Pencils	Korean Pencils	Target Pitch	Japanese Pencils	TOTAL	Reilly Chin. Penc.	Intalco Liq. Korean	TOTAL IN
	17200001	42600001	42300001	42400001	49250001	42840001	KII	43300601	39100001	PLANT
Opening Inventory(MIR)	718,682	3,442,397	108,072	2,580,543	0	154,322	7,004,016	9,703,280	302,710	17,010,006
Purchases(+)							0			0
Production(+)							0			0
Processed(-)							0			0
Misc. Disbursements(-)							0			0
Shipments - KII(-)		337,176					337,176			337,176
Shipments - Intalco(-)							0			0
Book Inventory	718,682	3,105,221	108,072	2,580,543	0	154,322	6,666,840	9,703,280	302,710	16,672,830
Gain / (Loss)(+/-)	0	186	0	0	0	0	186	0	0	186
Physical Inv.	718,682	3,105,407	108,072	2,580,543	0	154,322	6,667,026	9,703,280	302,710	16,673,016

Total Through Put - Liquid Pitch Shipments 337,176

Koppers004334

Month & Year
February-02

PORTLAND INVENTORY (POUNDS)

	Heavy Oil	200/65/68/cars Liq. Korean	Chinese Pencils	Korean Pencils	Target Pitch	Japanese Pencils	TOTAL KII	Reilly Chin. Penc.	Intalco Liq. Korean	TOTAL IN PLANT
	17200001	42600001	42300001	42400001	49250001	42840001		43300601	39100001	
Opening Inventory(MIR)	718,682	3,105,407	108,072	2,580,543	0	154,322	6,667,026	9,703,280	302,710	16,673,016
Purchases(+)		351,450					351,450			351,450
Production(+)		2,729,142					2,729,142			2,729,142
Processed(-)	40,527		108,072	2,580,543			2,729,142			2,729,142
Misc. Disbursements(-)							0			0
Shipments - KII(-)		1,193,900					1,193,900			1,193,900
Shipments - Intalco(-)							0			0
Book Inventory	678,155	4,992,099	0	0	0	154,322	5,824,576	9,703,280	302,710	15,830,566
Gain / (Loss)(+/-)	0	0	0	0	0	0	0	0	0	0
Physical Inv.	678,155	4,992,099	0	0	0	154,322	5,824,576	9,703,280	302,710	15,830,566

Total Through Put - Liquid Pitch Shipments 1,193,900

Includes 2 loaded cars

UTLX 650795 — 154,221 MMM
UTLX 650829 — 172,170 "
326,391

Koppers004335

Month & Year
March-02

PORTLAND INVENTORY (POUNDS)

	Heavy Oil	200/65/68/cars Liq. Korean	Chinese Pencils	Korean Pencils	Target Pitch	Japanese Pencils	TOTAL KII	Reilly Chin. Penc.	Intalco Liq. Korean	TOTAL IN PLANT
	17200001	42600001	42300001	42400001	49250001	42840001		43300601	39100001	
Opening Inventory(MIR)	678,155	4,992,099	0	0	0	154,322	5,824,576	9,703,280	302,710	15,830,566
Purchases(+)		0					0			0
Production(+)		0					0			0
Processed(-)	0		0	0			0			0
Misc. Disbursements(-)							0			0
Shipments - KII(-)		1,007,800					1,007,800			1,007,800
Shipments - Intalco(-)							0			0
Book Inventory	678,155	3,984,299	0	0	0	154,322	4,816,776	9,703,280	302,710	14,822,766
Gain / (Loss)(+/-)	0	-163,775	0	0	0	0	-163,775	0	0	-163,775
Physical Inv.	678,155	3,820,524	0	0	0	154,322	4,653,001	9,703,280	302,710	14,658,991

Total Through Put - Liquid Pitch Shipments 1,007,800

The physical inventory of Liquid Korean pitch is short by 327,550 pounds form shortages that developed when melting the balance of our solid pitch last month. We will write this off over the next two months.

Koppers004336

Month & Year
~~March~~-02
April

PORTLAND INVENTORY (POUNDS)

	Heavy Oil	200/65/68/cars Liq. Korean	Chinese Pencils	Korean Pencils	Target Pitch	Japanese Pencils	TOTAL KII	Reilly Chin. Penc.	Intalco Liq. Korean	TOTAL IN PLANT
	17200001	42600001	42300001	42400001	49250001	42840001	KII	43300601	39100001	PLANT
Opening Inventory(MIR)	678,155	3,820,524	0	0	0	154,322	4,653,001	9,703,280	302,710	14,658,991
Purchases(+)		0					0	4,110,520		4,110,520
Production(+)		99,000					99,000			99,000
Processed(-)	99,000		0	0			99,000			99,000
Misc. Disbursements(-)							0			0
Shipments - KII(-)		851,800					851,800			851,800
Shipments - Intalco(-)							0			0
Book Inventory	579,155	3,067,724	0	0	0	154,322	3,801,201	13,813,800	302,710	17,917,711
Gain / (Loss)(+/-)	-5,498	-104,299	0	0	0	0	-109,797	0	0	-109,797
Physical Inv.	573,657	2,963,425	0	0	0	154,322	3,691,404	13,813,800	302,710	17,807,914

Total Through Put - Liquid Pitch Shipments 851,800

The physical inventory of Liquid Korean pitch is short by 208,598 pounds form shortages that developed when melting the balance of our solid pitch last month. We will write this off over the next two months.

13,968,122 #

Koppers004337

Month & Year
May-02

PORTLAND INVENTORY (POUNDS)

	Heavy Oil	200/65/68/cars Liq. Korean	Chinese Pencils	Korean Pencils	KII - Reilly Pencils	Japanese Pencils	TOTAL KII	Reilly Anchan Pencil	Intalco Liq. Korean	TOTAL IN PLANT
	17200001	42600001	42300001	42400001	42600001	42840001		43300601	39100001	
Opening Inventory(MIR)	573,657	2,963,425	0	0	0	154,322	3,691,404	9,703,280	302,710	13,697,394
Purchases(+)		5,471,414			726,784		6,198,198	4,110,520		10,308,718
Production(+)		263,222					263,222			263,222
Processed(-)	104,107	152,838	0	0		154,322	411,267	5,484,748		5,896,015
Misc. Disbursements(-)							0			0
Shipments - KII(-)		2,093,420					2,093,420			2,093,420
Shipments - Intalco(-)							0			0
Book Inventory	469,550	6,451,803	0	0	726,784	0	7,648,137	8,329,052	302,710	16,279,899
Gain / (Loss)(+/-)	0	0	0	0	0	0	0	0	0	0
Physical Inv.	469,550	6,451,803	0	0	726,784	0	7,648,137	8,329,052	302,710	16,279,899

Total Through Put - Liquid Pitch Shipments 2,093,420

The KII - Reilly pencil pitch is the balance of the Adchemco pencil pitch that has been purchesed, but has not been melted.

Koppers004338

Month & Year
May-02

PORTLAND INVENTORY (POUNDS)

	Heavy Oil	200/65/68/cars Liq. Korean	Chinese Pencils	Korean Pencils	KII - Reilly Pencils	Japanese Pencils	TOTAL KII	Reilly Anchan Pencil	Intalco Liq. Korean	TOTAL IN PLANT
	17200001	42600001	42300001	42400001	42600001	42840001		43300601	39100001	
Opening Inventory(MIR)	573,657	2,963,425	0	0	0	154,322	3,691,404	9,703,280	302,710	13,697,394
Purchases(+)		~~6,471,414~~ Shreknor - 713,450			726,784		6,198,198	4,110,520		10,308,718
Production(+)		263,222					263,222			263,222
Processed(-)	104,107	152,838	0	0		154,322	411,267	5,484,748		5,896,015
Misc. Disbursements(-)							0			0
Shipments - KII(-)		2,093,420					2,093,420			2,093,420
Shipments - Intalco(-)							0			0
Book Inventory	469,550	6,451,803	0	0	726,784	0	7,648,137	8,329,052	302,710	16,279,899
Gain / (Loss)(+/-)	0	0	0	0	0	0	0	0	0	0
Physical Inv.	469,550	6,451,803	0	0	726,784	0	7,648,137	8,329,052	302,710	16,279,899
		+ 726,784								
Total Through Put - Liquid Pitch Shipments		7,178,587	2,093,420							

The KII - Reilly pencil pitch is the balance of the Adchemco pencil pitch that has been purchesed, but has not been melted.

Koppers004339

Month & Year
June-02

PORTLAND INVENTORY (POUNDS)

	Heavy Oil	200/65/68/cars Liq. Korean	Chinese Pencils	Korean Pencils	KII - Reilly Pencils	Japanese Pencils	TOTAL KII	Reilly Anchan Pencil	Intalco Liq. Korean	TOTAL IN PLANT
	17200001	42600001	42300001	42400001	42600001	42840001		43300601	39100001	
Opening Inventory(MIR)	469,550	6,451,803	0	0	726,784	0	7,648,137	8,329,052	302,710	16,279,899
Purchases(+)		731,200					731,200		13,633,914	14,365,114
Production(+)		797,400					797,400			797,400
Processed(-)	166,644	213,615	0 + 393,615	0	180,000	0	560,259	450,000		1,010,259
Misc. Disbursements(-)							0			0
Shipments - KII(-)		2,130,980					2,130,980			2,130,980
Shipments - Intalco(-)							0		414,660	414,660
Book Inventory	302,906	5,635,808	0	0	546,784	0	6,485,498	7,879,052	13,521,964	27,886,514
Gain / (Loss)(+/-)	0	0	0	0	0	0	0	0	0	0
Physical Inv.	302,906	5,635,808	0	0	546,784	0	6,485,498	7,879,052	13,521,964	27,886,514
		+ 546,784								
		6,182,592								
Total Through Put - Liquid Pitch Shipments			2,130,980							

The KII - Reilly pencil pitch is the balance of the Adchemco pencil pitch that has been purchesed, but has not been melted.

Liquid
19,157,772 #'s
1,741,616 gals.

Koppers004340

Month & Year
July-02

PORTLAND INVENTORY (POUNDS)

	Heavy Oil	200/65/68/cars Liq. Korean	Chinese Pencils	Korean Pencils	KII - Reilly Pencils	Japanese Pencils	TOTAL KII	Reilly Anchan Pencil	Intalco Liq. Korean	TOTAL IN PLANT
	17200001	42600001	42300001	42400001	42600001	42840001		43300601	39100001	
Opening Inventory(MIR)	302,906	5,635,808	0	0	546,784	0	6,485,498	7,879,052	13,521,964	27,886,514
Purchases(+)		365,950					365,950		0	365,950
Production(+)		565,222					565,222			565,222
Processed(-)	70,222	39,444	0	0	135,000	0	244,666	360,000		604,666
Misc. Disbursements(-)							0			0
Shipments - KII(-)		2,238,650					2,238,650			2,238,650
Shipments - Intalco(-)							0		2,755,110	2,755,110
Book Inventory	232,684	4,288,886	0	0	411,784	0	4,933,354	7,519,052	10,766,854	23,219,260
Gain / (Loss)(+/-)	0	0	0	0	0	0	0	0	0	0
Physical Inv.	232,684	4,288,886	0	0	411,784	0	4,933,354	7,519,052	10,766,854	23,219,260

Report on IAC only
171,444
4,700,670

Total Through Put - Liquid Pitch Shipments 2,238,650

The KII - Reilly pencil pitch is the balance of the Adchemco pencil pitch that has been purchesed, but has not been melted.

Koppers004341

Month & Year
August-02

PORTLAND INVENTORY (POUNDS)

	Heavy Oil	200/65/68/cars Liq. Korean	Chinese Pencils	Korean Pencils	KII - Reilly Pencils	Japanese Pencils	TOTAL KII	Reilly Anchan Pencil	Intalco Liq. Korean	TOTAL IN PLANT
	17200001	42600001	42300001	42400001	42600001	42840001	KII	43300601	39100001	PLANT
Opening Inventory(MIR)	232,684	4,288,886	0	0	411,784	0	4,933,354	7,519,052	10,766,854	23,219,260
Purchases(+)		365,300					365,300		0	365,300
Production(+)		733,210	197,235				733,210			733,210
Processed(-)	103,210	17,235	0	0	180,000	0	300,445	450,000		750,445
Misc. Disbursements(-)			Report on the MIR, only				0			0
Shipments - KII(-)		2,074,600					2,074,600			2,074,600
Shipments - Intalco(-)							0		2,749,620	2,749,620
Book Inventory	129,474	3,295,561	0	0	231,784	0	3,656,819	7,069,052	8,017,234	18,743,105
Gain / (Loss)(+/-)	0	0	0	0	0	0	0	0	0	0
Physical Inv.	129,474	3,295,561	3,527,345	0	231,784	0	3,656,819	7,069,052	8,017,234	18,743,105
			MIR, only							
Total Through Put - Liquid Pitch Shipments			4,824,220							

The KII - Reilly pencil pitch is the balance of the Adchemco pencil pitch that has been purchesed, but has not been melted.

Koppers004342

Month & Year
September-02

PORTLAND INVENTORY (POUNDS)

	Heavy Oil	200/65/68/cars Liq. Korean	Chinese Pencils	Korean Pencils	KII - Reilly Pencils	Japanese Pencils	TOTAL KII	Reilly Anchan Pencil	Intalco Liq. Korean	TOTAL IN PLANT
	17200001	42600001	42300001	42400001	42600001	42840001		43300601	39100001	
Opening Inventory(MIR)	129,474	3,295,561	0	0	231,784	0	3,656,819	7,069,052	8,017,234	18,743,105
Purchases(+)	159,500	365,450					524,950		0	524,950
Production(+)		836,552					836,552			836,552
Processed(-)	74,552	-92	0	0	0	0	74,460	765,000		839,460
Misc. Disbursements(-)							0			0
Shipments - KII(-)		1,734,500					1,734,500			1,734,500
Shipments - Intalco(-)							0		2,746,000	2,746,000
Book Inventory	214,422	2,763,155	0	0	231,784	0	3,209,361	6,304,052	5,271,234	14,784,647
Gain / (Loss)(+/-)	0	0	0	0	0	0	0	0	0	0
Physical Inv.	214,422	2,763,155	0	0	231,784	0	3,209,361	6,304,052	5,271,234	14,784,647
Total Through Put - Liquid Pitch Shipments			4,480,500							

-92

MIR only

2,994,939 - MIR only

The KII - Reilly pencil pitch is the balance of the Adchemco pencil pitch that has been purchesed, but has not been melted.

Koppers004343

Month & Year
October-02

PORTLAND INVENTORY (POUNDS)

	Heavy Oil	200/65/68/cars Liq. Korean	Chinese Pencils	Korean Pencils	KII - Reilly Pencils	Japanese Pencils	TOTAL KII	Reilly Anchan Pencil	Intalco Liq. Korean	TOTAL IN PLANT
	17200001	42600001	42300001	42400001	42600001	42840001		43300601	39100001	
Opening Inventory(MIR)	214,422	2,763,155	0	0	231,784	0	3,209,361	6,304,052	5,271,234	14,784,647
Purchases(+)		365,700					365,700		8,848,715	9,214,415
Production(+)		774,657					774,657			774,657
Processed(-)	54,657		0	0	0	0	54,657	720,000		774,657
Misc. Disbursements(-)							0			0
Shipments - KII(-)		1,547,000					1,547,000			1,547,000
Shipments - Intalco(-)							0		3,637,020	3,637,020
Book Inventory	159,765	2,356,512	0	0	231,784	0	2,748,061	5,584,052	10,482,929	18,815,042
Gain / (Loss)(+/-)	0	0	0	0	0	0	0	0	0	0
Physical Inv.	159,765	2,356,512	0	0	231,784	0	2,748,061	5,584,052	10,482,929	18,815,042

MIR-only
2,580,296

Total Through Put - Liquid Pitch Shipments 5,184,020

The KII - Reilly pencil pitch is the balance of the Adchemco pencil pitch that has been purchesed, but has not been melted.

Koppers004344

BS/48317/0S483170080

01/13/94

KOPPERS INDUSTRIES
INDUSTRIAL PRODUCTS DIVISION
INTER PLANT PURCHASES
DECEMBER, 1993

BY RECEIVING LOCATION

PAGE

9270 NORTHWEST TAR

SHIP LOC	PKG CODE	COMMODITY CODE	UNIT	***** MONTH INVGN QTY	INV. AMT.	FRGHT AMT	***** YEAR TO DATE INVGN QTY	INV AMT.	FREIGHT AMT
CHICAGO 60	000	16106501	02	Chgo. pitch		458-	370000		10477
						458-	370000		10477
" 60	000	17000001	01	Light unc.			16302	5706	5247
" 60	055	17000001	01						
FOLLANSBEE 80	055	17000001	01				19680	6888	1925
							35982	12594	7172
CHICAGO 60	000	17100001	01	UNC. CREO				13258-	
" 60	055	17100001	01				37881	13259	9591
FOLLANSBEE 80	055	17100001	01				18787	6576	5272
							56668	6577	14863
FOLLANSBEE 80	055	17200001	01	Hvy. oil			18732	6556	7355
							18732	6556	7355
CHICAGO 60	000	17300001	01	P1/P13		1947	736790	257940	202840
60	055	17300001	01		1056		12367	5386	15681
FOLLANSBEE 80	055	17300001	01	38532	13486	17037	173082	60577	64497
				38532	14542	13984	922239	323903	283018
FOLLANSBEE 70	000	20502001	01	NSR			20673	10336	6116-
" 70	055	20502001	01			1947	77437	38719	479
						1947	98110	49055	5637-
CHICAGO 60	000	21101021	01	K-364			350352	39489	14715
60	055	21101021	01				419300	20177	15050
							769652	59666	29765
60	000	28000501	02	Bitumen			160740	13261	4977
60	055	28000501	02				9950-	821-	13570-
							150790	12440	8593-
60	000	49500001	02	Distressed pitch			190750		5457
							190750		5457
		TOTALS		38532	14542	20473	2612923	470791	343877

Amos

SORRY FOR THE DELAY!
(THESE FRIGID TEMPS MUST BE GOING TO MY BRAIN!!)

Jim Schaum 01/24/94

If any questions - please call

PORTLAND INVENTORY

YEAR END

DATE:	12-30-93										PAILS	
											DRUMS	
					TANK						ROLLS	
TANK #	NAME	NUMBER	PKG	GUAGE	CAPACITY	OUT	IN	TEMP	GALS	CORR.	GALS	POUNDS
				HEIGHT	000's					FACTOR	@60	IF APPL.
3	METHYL-SOLVENT	20301001-01	000	29'7	99	26-7	3-0	60°	10,158	1	10,158	
4	LITE UNC	17000001-01	000	30'9	99	30-2	0-7	60°	1,975	1	1,873	
17	HVY OIL-CREO	17200001-01	000	23'10	20	3-5	20-5	130°	1.0266	1.0266	16,730	
18	EMPTY	0			20							
19	P & R OIL	20107001-01	000	23'10	20	21-2½	2-7½	60°	2227	1	2227	
20	R.T. CREO BTMS	17300001-01	000	29'5	317	29-2½	0-2½	62°	2267	1.0008	2265	
23	LITE UNC BTMS	17300001-01	000	25'1	20	4-7	20-6	75°	17,244	1.006	17,141	
33	HVY. OIL-PITCH	17200001-01	000	24'10	45	13-1	11-9	90	22 329	1.0114	22,077	
34	NSR BTMS	20502001-01	000	25'0	45	24-8½	0-3½	150°	554	1.0364	535	*
39	P1/P13 BTMS	17300001-01	000	23'11	20	23-9½	0-1½	60°	108	1	108	
66	EMPTY	0			180							
67	P1/P13	17300001-01	000	30'7	100	16-8½	13-10½	138°	47 934	1.032	46,390	H₂O=0.2
99	NSR	20502001-01	000	29'2	201	24-8½	4-5½	125°	32,087	1.026	31,274	
101	EMPTY	0			750							
102	NSR-FUME TANK	20502001-01	000	8'0	10	5-10½	2-1½	60°	1234	1	1234	*
65	MELTER PITCH	42850001-01	000	35'7	761	15-3	20-4	303°	435811	1.06804	408,047	4,590,529
68	STORAGE PITCH	42850001-01	000	31'0	245	29-11	1-1	60°	9108	1	9108	102,465
PAILS	P1/P13	17300001-01	301								5	
DRUMS	P1/P13	17300001-01	371								1	
TUBS	BITUMEN	28000501-02	401								86	
ROLLS	BITUMEN 2040M	23504001-03	910								80	
DRUMS	P & R OIL	20107001-01	371								4	
DRUMS	K-15-35	21101061-02	371								12	
BAGS	CHICAGO PITCH	16106501-02	000								0	
EMPTY	5-PAILS	00301001-03	999								57	
EMPTY	55-FRH DRUMS	00352001-03	999								20	
EMPTY	55-TH DRUMS	00372001-03	999								0	
EMPTY	BITUMEN TUBS	00401001-03	999								806	
				CARS IN PLANT								
ACFX-87746	STC BLEND	21101141-02	000									69,891
KPCX-502	K-15-35	21101061-02	000									43,222
ACFX-87743	K-364	21101021-02	000									177,350
KPCX 513	BITUMEN	28000501-02	000									169,740
UTLX650763	BLENDED PITCH											
UTLX650761	BLENDED PITCH											
UTLX 650779	BLENDED PITCH											
UTLX 650773	BLENDED PITCH											
UTLX 650778	BLENDED PITCH											

* TANKS SHOW MORE DUE TO WATER

Koppers004346

K O P P E R ' S C O M P A N Y I N C.

TAR PRODUCTS DIVISION

MONTH TO DATE NET SALES BY PLANT

FOR THE PERIOD DECEMBER'93 PROGRAM ID SLRIP074C

01PLANT : 1670 RESALE CARBON PITCH

COMMODITY	MONTH-TO-DATE			YEAR-TO-DATE			PRIOR YEAR-TO-DATE		
	QUANTITY	AMOUNT	RATE	QUANTITY	AMOUNT	RATE	QUANTITY	AMOUNT	RATE
CARBON PITCH HARD P	0	0	0.0000	0	0	0.0000	12.646.260	1.421.899	0.1124
CARBON PITCH HARD -	0	0	0.0000	0	0	0.0000	993.280	143.606	0.1445
MISC. PITCH - IMPOR	0	0	0.0000	0	0	0.0000	1.171.110	166.515	0.1421
MISC. PITCH	0	0	0.0000	0	0	0.0000	156.740	18.809	0.1200
PLANT TOTAL		0			0			1.750.829	

01DATE: 011296 K O P P E R S I N D U S T R I E S I N C. PAGE: 0015
01 TAR PRODUCTS DIVISION
01 MONTH TO DATE NET SALES BY PLANT
01 FOR THE PERIOD DECEMBER'95 PROGRAM ID SLRIP0740
01PLANT : 9270 NORTHWEST TAR
01

01 COMMODITY	MONTH-TO-DATE QUANTITY	MONTH-TO-DATE AMOUNT	MONTH-TO-DATE RATE	YEAR-TO-DATE QUANTITY	YEAR-TO-DATE AMOUNT	YEAR-TO-DATE RATE	PRIOR YEAR-TO-DATE QUANTITY	PRIOR YEAR-TO-DATE AMOUNT	PRIOR YEAR-TO-DATE RATE
01SUPER SACK EA	0	0	0.0000	0	0	0.0000	22	442	20.0909
01CREOSOTE P1/P13	65	982	15.1076	291,179	366,884	1.2599	414,840	553,408	1.3340
01COAL TAR DISTILLATE	0	0	0.0000	55	442	8.0363	0	0	0.0000
01PRIMING AND REFRACT	0	0	0.0000	605	4,840	8.0000	2,310	18,511	8.0134
01METHYL NAPHTHALENE	0	0	0.0000	110	661	6.0090	0	0	0.0000
01NAPHTHALENE STILL R	0	0	0.0000	0	0	0.0000	55,651	68,289	1.2270
01PAVEMENT SEALER BAS	0	1,745-	0.0000	534,760 •	76,290	0.1426	562,060	80,945	0.1440
01REFINED TAR K-1535	5,500	2,368	0.4305	317,380 •	106,169	0.3345	305,065	90,390	0.2962
01REFINED TAR STC BLE	0	0	0.0000	216,600 •	45,029	0.2078	492,760	96,415	0.1956
012040-M (WHITE)	0	0	0.0000	11 N/A	330	30.0000	0	0	0.0000
01COAL TAR BITUMEN	0	0	0.0000	0	0	0.0000	67	29,066	433.8208
0128000551	0	0	0.0000	TONS 24 •	11,430	476.2500	72	27,507	382.0416
01CARBON PITCH HARD P	0	0	0.0000	0	0	0.0000	117,984	20,828	0.1765
01CARBON PITCH HARD P	2,039,140	243,647	0.1194	24,889,935 X	2,967,242	0.1192	25,548,023	2,969,216	0.1162
01CARBON PITCH HARD P	0	0	0.0000	936,630 X	117,922	0.1259	1,116,900	118,042	0.1056
01CARBON PITCH LIQUID	0	0	0.0000	96,770 O	12,724	0.1314	47,560	6,089	0.1280
01CARBON PITCH HARD -	0	0	0.0000	0	0	0.0000	0	0	0.0000
01CARBON PITCH MELTED	3,179,265	471,326	0.1482	44,495,337 O	6,463,437	0.1452	33,274,546	4,749,960	0.1427
01DISTRESSED PITCH	0	0	0.0000	0	0	0.0000	196,900	15,260	0.0775
01TARGET PITCH PENCIL	114,980	16,468	0.1432	1,705,600 X	243,843	0.1429	982,380	141,433	0.1439
01NONRET PALTS	0	0	0.0000	0	0	0.0000	88	2,112	24.0000
01RETURN PALTS EA	0	0	0.0000	0	0	0.0000	88	2,200	25.0000
01CREOSOTE CAMPAIGN 2	0	0	0.0000	211,621 N/A	529	0.0024	248,654	621	0.0024
0199800001	0	0	0.0000	0	125	0.0000	0	720	0.0000
01									
01 PLANT TOTAL		733,046			10,417,897			8,991,454	
01									

O Liq. pitch 44,592,107# ÷ 11 = 4,053,828 GALS

X Pencil Pitch 27,532,165#

• Refined TARS 1,116,740# ÷ 10 = 111,674 GALS.

Others.

As Listed - CREO - 291,234 GAL

P+R - 605 GAL.

Meth. Nap - 110 GAL.

Extremely HAZ. substance's (EHS)

Per John Marcinowski

Phenol is highest % of those listed @ .0031% (content in creo)

TOTAL CREO 291,234 GAL.
× 9 # / GAL
2,621,106 #
× .0031%
8,125#
less than 10,000 # - NO

Koppers004348

01DATE: 010997 KOPPERS INDUSTRIES INC. PAGE: 0019
01 CARBON MATERIALS & CHEM. DIVSN
01 MONTH TO DATE NET SALES BY PLANT
01 FOR THE PERIOD DECEMBER'96 PROGRAM ID SLRIP0740
01PLANT : 9270 NORTHWEST TAR
01

01 COMMODITY	MONTH-TO-DATE QUANTITY	MONTH-TO-DATE AMOUNT	MONTH-TO-DATE RATE	YEAR-TO-DATE QUANTITY	YEAR-TO-DATE AMOUNT	YEAR-TO-DATE RATE	PRIOR YEAR-TO-DATE QUANTITY	PRIOR YEAR-TO-DATE AMOUNT	PRIOR YEAR-TO-DATE RATE
01CREOSOTE P1/P13	10	124	12.4000	160,537	220,654	1.3744	291,179	366,884	1.2599
01COAL TAR DISTILLATE	0	0	0.0000	0	0	0.0000	55	442	8.0363
01PRIMING AND REFRACT	0	0	0.0000	2,530	20,228	7.9952	605	4,840	8.0000
01METHYL NAPHTHALENE	0	0	0.0000	0	49-	0.0000	110	661	6.0090
01PAVEMENT SEALER BAS	0	0	0.0000	[illegible]	140,081	0.1383	534,760	76,290	0.1426
01REFINED TAR K-1535	2,200	947	0.4304	[illegible]	59,953	0.4001	317,380	106,169	0.3345
01REFINED TAR STC BLE	0	147-	0.0000	[illegible]	24,173	0.2293	216,600	45,029	0.2078
012040-M (WHITE)	0	0	0.0000	43-	3,717-	86.4418	11	330	30.0000
0128000551	0	0	0.0000	0	0	0.0000	24	11,430	476.2500
01CARBON PITCH HARD P	1,924,220	243,443	0.1265	25,042,880	3,105,252	0.1239	24,889,935	2,967,242	0.1192
01CARBON PITCH HARD P	0	0	0.0000	0	0	0.0000	936,630	117,922	0.1259
01CARBON PITCH LIQUID	0	0	0.0000	0	1,033-	0.0000	96,770	12,724	0.1314
01CARBON PITCH MELTED	3,734,160	561,170	0.1502	50,131,879	7,437,077	0.1483	44,495,337	6,463,437	0.1452
01CARBON PITCH MELTED	2,359,660	362,615	0.1536	5,247,260	806,273	0.1536	0	0	0.0000
0143200001 (Allied Trade)	2,957,860	337,991	0.1142	11,730,020	1,329,391	0.1133	0	0	0.0000
01TARGET PITCH PENCIL	119,160	17,577	0.1475	1,949,480	286,805	0.1471	1,705,600	243,843	0.1429
01RETURN PALTS EA	0	0	0.0000	1	39	39.0000	0	0	0.0000
01CREOSOTE CAMPAIGN 2	0	0	0.0000	139,330	349	0.0025	211,621	529	0.0024
0199800001	0	0	0.0000	0	150	0.0000	0	125	0.0000
01									
01 PLANT TOTAL		1,523,720			13,425,626			10,417,897	
01									

Liquid pitch 55,379,139 # ÷ 11 = 5,034,467 gallons

Solid pitch 38,722,380 #

Refined TARS [redacted] 1,267,671 # ÷ 10 (Avg.) = 126,767 gallons

Creosote 160,537 gallons

P&R oil 2,530 gallons

EHS - Extremely Haz. substances, per Marcinowski

Phenol is highest % of those listed in Creosote @ .0031 %

CRCo sales = 160,537 gallons × 9#/gal. = 1,444,833 # × .0031 = 4,479 # less than the 10,000 # limit, thus - NO

1DATE: 110698 KOPPERS INDUSTRIES INC. PAGE: 0020

CARBON MATERIALS & CHEM. DIVSN

MONTH TO DATE NET SALES BY PLANT

FOR THE PERIOD OCTOBER'98 PROGRAM ID SLRIP0740

1PLANT : 9270 NORTHWEST TAR

COMMODITY	MONTH-TO-DATE QUANTITY	MONTH-TO-DATE AMOUNT	RATE	YEAR QUANTITY	Nov. 97	Dec. 97	Total last 12 Months	Reference #
100000000	0	0	0.0000	0				
1CREOSOTE P1/P13	238,820	32,966	0.1380	2,037,230	47,300	47,520	2,132,050	1
117330001 CREO	0	1,016-	0.0000	471,000			471,000	1
117340001 "	10	90	9.0000	2,505			2,505	1
1PRIMING AND REFRACT	0	0	0.0000	330	440	935	1,705	2
1PAVEMENT SEALER BAS	0	1,087-	0.0000	632,540			632,540	3
1REFINED TAR K-1535	1,650	710	0.4303	12,650			12,650	3
1REFINED TAR STC BLE	0	0	0.0000	0				
12040-M (WHITE)	0	0	0.0000	0				
139100001 (Entarco/Liquid)	1,191	100,474	84.3610	16,965			16,965	5
1CARBON PITCH - HARD	0	0	0.0000	0				
1CARBON PITCH HARD P	2,034,900	257,445	0.1265	12,037,740	1,543,220	1,553,580	15,134,540	4
1CARBON PITCH LIQUID	0	0	0.0000	89,840			89,840	5
1CARBON PITCH MELTED	4,134,589	662,176	0.1601	49,818,600	5,960,540	7,829,430	63,608,570	5
1CARBON PITCH MELTED	2,491,100	392,208	0.1574	2,491,100			2,491,100	5
143200001	0	0	0.0000	0				
1TARGET PITCH PENCIL	120,940	18,149	0.1500	1,155,980	39,440	38,820	1,234,240	4
1NONRET PALTS	0	0	0.0000	0				
1CREOSOTE CAMPAIGN 2	5,258	13	0.0024	47,865				
199800001	0	0	0.0000	0				
PLANT TOTAL		1,462,128						

1 - Creosote 2,605,555# ÷ 9 = 289,506 gals. ✓

2 - P+R 1,705 gals. ✓

3 - Ref. TARS 645,190# ÷ 10 = 64,519 gals. ✓

4 - Solid pitch 16,368,780 lbs. ✓

5 - Liquid pitch 66,206,475 ÷ 11 = 6,018,770 gals. ✓

EHS

Phenol is the highest % of those listed in Creo @ .0031%

2,605,555# X .0031% = 8,077# less than 10,000# Limit.

NO

DATE 01/10/98

KOPPERS INDUSTRIES INC.
CARBON MATERIALS & CHEM. DIVSN
NET SALES BY PLANT
MONTH TO DATE
FOR THE PERIOD DECEMBER'97

SLRCK0740

PLANT: 9270 NORTHWEST TAR

COMMODITY	MONTH-TO-DATE QUANTITY	MONTH-TO-DATE AMOUNT	MONTH-TO-DATE RATE	YEAR-TO-DATE QUANTITY	YEAR-TO-DATE AMOUNT	YEAR-TO-DATE RATE	PRIOR YEAR-TO-DATE QUANTITY	PRIOR YEAR-TO-DATE AMOUNT	PRIOR YEAR-TO-DATE RATE
	0	0	0.0000	0	65-	0.0000	0	0	0.0000
CREOSOTE P1/P13	47,520	9,152	0.1925	2,719,335	299,710	0.1102	1,444,833	220,654	0.1527
PRIMING AND REFRACTORY OIL	935	7,598	8.1262	3,960	33,118	8.3631	2,530	20,228	7.9952
METHYL NAPHTHALENE FRACTION	0	0	0.0000	0	0	0.0000	0	49-	0.0000
PAVEMENT SEALER BASE	0	-0	0.0000	789,080	121,274	0.1536	1,012,480	140,081	0.1383
REFINED TAR K-1535	0	0	0.0000	121,190	46,801	0.3861	149,814	59,953	0.4001
REFINED TAR STC BLEND	0	0	0.0000	424,180	104,467	0.2462	105,377	24,173	0.2293
2040-M (WHITE)	0	0	0.0000	68	1,360	20.0000	43-	3,717-	86.4418
CARBON PITCH - HARD	0	1	0.0000	533,144	81,847	0.1535	0	0	0.0000
CARBON PITCH HARD PNCL CHINESE	1,553,580	196,551	0.1265	10,557,540	1,335,687	0.1265	25,042,880	3,105,252	0.1239
CARBON PITCH LIQUID	0	0	0.0000	0	0	0.0000	0	1,033-	0.0000
CARBON PITCH MELTED-INTALCO	7,829,430	1,203,031	0.1536	63,387,100	9,723,248	0.1533	50,131,879	7,437,077	0.1483
CARBON PITCH MELTED-ALCOA	0	3,041	0.0000	12,104,654	1,903,848	0.1572	5,247,260	806,273	0.1536
CARBON PITCH PENCIL-ALLIED	0	0	0.0000	1,008,640	117,941	0.1169	11,730,020	1,329,391	0.1133
TARGET PITCH PENCIL	38,820	5,726	0.1475	1,673,500	247,675	0.1479	1,949,480	286,805	0.1471
PLUS NON RETURNABLE PALLET CHG	1	10	10.0000	2	20	10.0000	0	0	0.0000
PLUS RETURNABLE PALLET CHARGE	0	0	0.0000	0	0	0.0000	1	39	39.0000
CAMPAIGN 2000 INVESTMENT	5,260	13	0.0024	119,990	298	0.0024	139,330	349	0.0025
	0	25	0.0000	0	175	0.0000	0	150	0.0000
PLANT TOTAL		1,425,148			14,017,404			13,425,626	

FROM :KII TAR & CHEMICAL

Post-it™ brand fax transmittal memo 7671 | # of pages ▸

To AMOS	From JOHN
Co.	Co.
Dept.	Phone #
Fax #	Fax #

Koppers004351

01 KOPPERS INDUSTRIES INC.
01 CARBON MATERIALS & CHEM. DIVSN
01 MONTH TO DATE NET SALES BY PLANT
01 FOR THE PERIOD NOVEMBER'97 PROGRAM ID SLRIP0740

01PLANT : 9270 NORTHWEST TAR

01 COMMODITY	MONTH-TO-DATE QUANTITY	MONTH-TO-DATE AMOUNT	MONTH-TO-DATE RATE	YEAR-TO-DATE QUANTITY	YEAR-TO-DATE AMOUNT	YEAR-TO-DATE RATE	PRIOR YEAR-TO-DATE QUANTITY	PRIOR YEAR-TO-DATE AMOUNT	PRIOR YEAR-TO-DATE RATE
0100000000	0	0	0.0000	0	65-	0.0000	0	0	0.0000
01CREOSOTE P1/P13	47,300	7,730	0.1634	2,671,815	290,558	0.1087	1,444,743	220,530	0.1526
01PRIMING AND REFRACT	440	3,836	8.7181	3,025	25,520	8.4363	2,530	20,228	7.9952
01METHYL NAPHTHALENE	0	0	0.0000	0	0	0.0000	0	49-	0.0000
01PAVEMENT SEALER BAS	0	0	0.0000	789,080	121,274	0.1536	1,012,480	140,081	0.1383
01REFINED TAR K-1535	0	0	0.0000	121,190	46,801	0.3861	147,614	59,006	0.3997
01REFINED TAR STC BLE	0	360-	0.0000	424,180	104,467	0.2462	105,377	24,320	0.2307
012040-M (WHITE)	0	0	0.0000	68	1,360	20.0000	43-	3,717-	86.4418
01CARBON PITCH - HARD	0	0	0.0000	533,144	81,846	0.1535	0	0	0.0000
01CARBON PITCH HARD P	1,543,220	195,240	0.1265	9,003,960	1,139,136	0.1265	23,118,660	2,861,809	0.1237
01CARBON PITCH LIQUID	0	0	0.0000	0	0	0.0000	0	1,033-	0.0000
01CARBON PITCH MELTED	5,960,540	915,867	0.1536	55,557,670	8,520,217	0.1533	46,397,719	6,875,907	0.1481
01CARBON PITCH MELTED	0	338-	0.0000	12,104,654	1,900,807	0.1570	2,887,600	443,658	0.1536
0143200001	0	0	0.0000	1,008,640	117,941	0.1169	8,772,160	991,400	0.1130
01TARGET PITCH PENCIL	39,440	5,955	0.1509	1,634,680	241,949	0.1480	1,830,320	269,228	0.1470
01NONRET PALTS	0	0	0.0000	1	10	10.0000	0	0	0.0000
01RETURN PALTS EA	0	0	0.0000	0	0	0.0000	1	39	39.0000
01CREOSOTE CAMPAIGN 2	5,253	13	0.0024	114,730	285	0.0024	139,330	349	0.0025
0199800001	0	0	0.0000	0	150	0.0000	0	150	0.0000
01 PLANT TOTAL		1,127,943			12,592,256			11,901,906	

NFPA Rating:* Health 2 Flammability 2 Reactivity 0 Special 0

HMIS2 Rating:* Health 2 Flammability 2 Reactivity 0 Personal Protection B

Material Safety Data Sheet

This MSDS complies with OSHA's Hazard Communication Standard 29 CFR 1910, 1200 and OSHA FORM 174

MANUFACTURER'S NAME: Brody Chemical

ADDRESS: 4825 S 6200 W, SLC, UT 84118

Phone Number (For Information): (801) 963-2436

Emergency Phone Number: 1-800-424-9300

DOT HAZARD CLASSIFICATION:* COMBUSTIBLE MATERIAL

Identity (Trade Name as Used on Label): ORANGE SOLVENT

MSDS Number:* 4028

CHEM TREC: 1-800-424-9300

Date Prepared: 07/24/96

Prepared By: LMc

NOTICE: JUDGMENT BASED ON INDIRECT TEST DATA

SECTION 1 - MATERIAL IDENTIFICATION AND INFORMATION

COMPONENTS—Chemical Name & Common Names (Hazardous Components 1% or greater, Carcinogens 0.1% or greater)	CAS Number	APPROX. % (wt)*	OSHA PEL (ppm)	ACGIH TLV (ppm)	CARCINOGEN REFERENCE SOURCE**
Monocyclic Terpene	5989-27-5	< 80	Not Established	Not Established	d
Ethylene Glycol Monobutyl Ether	111-76-2	10	50	25	d

*Optional N/A = Not Applicable N/D = Not Determined

** Chemical Listed as Carcinogen or Potential Carcinogen [a] NTP [b] IARC Monograph [c] OSHA [d] Not Listed [e] Animal Data Only

SECTION 2 - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point	> 340° F.	Specific Gravity (H_2O = 1)	.88
Vapor Pressure PSIG @ 70° F (Aerosols)	N/A	Vapor Pressure (Non-Aerosols) (mm Hg and Temperature)	5 @ 100° C.
Vapor Density (Air = 1)	4.7	Evaporation Rate (Butyl Acetate = 1)	< 1
Solubility in Water	Emulsifies	Water Reactive	Emulsifies

Appearance and Odor: Clear fluid, orange color with citrus odor.

SECTION 3 - FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY as per USA FLAME PROJECTION TEST (AEROSOLS) N/A	Auto-Ignition Temperature	Flammability Limits in Air % by Volume	LEL .7	UEL 6.1

Flash Point and Method Used (Non-Aerosols): 145°F

Explosive Limits:

Extinguisher Media: Dry powder, foam carbon dioxide.

Special Fire Fighting Procedures: Avoid use of water as it may spread flame. Class B fire procedures.

Unusual Fire and Explosion Hazards: Combustible liquid, keep away from sparks and open flame.

SECTION 4 - REACTIVITY HAZARD DATA

4028

STABILITY	Conditions To Avoid	HAZARDOUS POLYMERIZATION
■ Stable ☐ Unstable	Avoid strong oxidizing agents, flame or elevated temperatures. Polymerization catalysts such as aluminum chloride.	■ May Occur ☐ Will Not Occur

Incompatibility (Materials to Avoid)	See above.
Hazardous Decomposition Products	None known other than oxides of carbon.

SECTION 5 - HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY: ☐ Inhalation ■ Skin Absorption ■ Ingestion ■ Eye ☐ Not Hazardous

ACUTE EFFECTS

Inhalation	Not considered harmful.
Eye Contact	Corrosive to eyes.
Skin Contact	Irritant
Ingestion	May cause nausea, vomiting or diarrhea.
CHRONIC EFFECTS	None identified.
Medical Conditions Generally Aggravated by Exposure	

EMERGENCY FIRST AID PROCEDURES

Eye Contact (Call a Physician immediately for first aid needs)	None identified.
Skin Contact	Wash with cool water 15 minutes. If irritation persists call a physician.
Inhalation	Wash with soap and water for 15 minutes if irritation develops.
Ingestion	Remove to fresh air. Drink large volumes of milk or other liquid. Consult a physician.

SECTION 6 - CONTROL AND PROTECTIVE MEASURES

Respiratory Protection (Specify Type)	Not normally required. If vapor level becomes high use self contained breathing mask.		
Protective Gloves	Chemical resistant.	Eye Protection	Splash goggles or face shield.
VENTILATION REQUIREMENTS	Local exhaust should be adequate.		
Other Protective Clothing and Equipment	Usually not needed.		
Hygienic Work Practices	Wash hands after use - avoid smoking in area.		

SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE/LEAK PROCEDURES

Steps to be Taken if Material Is Spilled Or Released	Absorb on inert material and collect in suitable containers for disposal. Spills may be diluted 1:20 with water and washed down sanitary sewers.
Waste Disposal Methods	Incineration in accordance with local, state and federal regulations.
Precautions to be Taken in Handling and Storage	Handle as a combustible liquid. Store away from heat and open flames. Store in sealed original containers in a cool dry area.
Other Precautions and / or Special Hazards	Do not allow fish or other wildlife to be directly exposed to undiluted product. Dilute 1:20 or more with water before flushing to fish bearing waterways.

SECTION 8 - TOXICITY DATA

Carcinogenicity:	NTP?	IARC Monographs?	OSHA Regul.?
Oral:	Dermal:	Inhalation:	

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind, express or implied.

AMPAD EFFICIENCY LINE® 22-210

	Heavy oil #'s ~~Creo (Distillate)~~			R. Tar #'s			Solid Pitch #'s			Liquid pitch #'s			
	1 Receipts	2 Sales/usage	3	4 Receipts	5 Sales/usage	6	7 Receipts	8 Sales/usage	9	10 Receipts	11 Sales/usage	12	13
11-98	0	207750			50360		8818400	10598799		11270719	9916780		
12-98	160800	280780		0	0		6787500	11628386		11202314	9774417		
1-99	0	70650		0	32450		24922972	12167044		11560959	11128783		
2-99	0	162240		0	118340		6613800	10119414		9901680	10912603		
3-99	156700	45990		0	0		6613800	10822667		10577558	9986040		
4-99	170500	48600		0	0		4595100	10278781		9767329	10243855		
5-99	0	35100		0	0		13227600	11797286		11367023	11042840		
6-99	0	40500		0	0		440922	11061570		10685745	12334620		
7-99	168100	32950		0	0		15432200	6587966		5746983	9501820		
8-99	0	54000		0	0		6483753	16679514		16120273	12221720		
9-99	0	47250		0	0		7321750	10330606		9868768	12736150		
10-99	0	50400		0	0		15432200	12685261		12197846	9970686		
	656,100	1,076,210	579,010	0	201,150		116,689,997	/Avg. 9,725,000		130,267,197	/Avg.	10,856,000	
										11,843,472 gals.		987,000 gals.	
Gallons	72,900	~~119,579~~	64,334	Gallons =	20,115			134,757,021			129,769,714		
	AVG	~~AVG~~		Avg. 4 mo =	5,029			/Avg. 11,230,000			/Avg.	10,914,000	
	6,075	~~9,965~~	5,361										
											11,797,247 gals.	1,075,000 gals.	
						Key →	/	1		X	0		
	Creosote in the Above												
	0	497,200#											
		55,244	gals.										
		4,604	" - Avg.										

Koppers004355

ORTLAND TAR PLANT
RUN DATE: Nov 03 99 09:01
REPORT NAME : INVRP2RE

MONTHLY INVENTORY REPORT
OCTOBER 1999

COMMODITY	UN	PKG	DESCRIPTION	OPENING BALANCE	***** RECEIPTS ***** PURCHASES	PRODUCTION	******* DISBURSEMENTS ******* PROCESSED	MISC.	SHIPPED	***** CLOSING INVENTORY ****** BOOK	GAIN/LOSS	PHYSICAL
17200001	1		HEAVY OIL TANKS AND CA	448756			50400			398356		398356
39100001		100	CARBON PITCH/INTALCO T	1804350	6613800				3795760	4622390		4622390
42100001	2		STICKNEY-LIQUID PITCH	531350						531350		531350
42300001	2		CHINESE PITCH	2080714			673237			1407477		1407477
42400001	2		IMPORT PEN PTCH	129538	8818400	213015	8053864			1107089	43180-	1063909
42800001	2		MELTER PTCH LQ	4096267		8402086			6174926	6323427		6323427
43400001	2	55	HC PITCH FINES	158800						158800		158800
49250001	2	100	IMP TARGET PITC			162400			162400			
42800001	2		MELTER PITCH (KAITACOM	2029206	1102920				1185448	1946678		1946678
42800001	2		MELTER PITCH (KAIMEAD	7102870	3545000				3815000	6832870		6832870
			TOTALS.....	18381851	20080120	8777501	8777501		15133534	23328437	43180-	23285257

RUN DATE: Oct 05 99 12:08
REPORT NAME : INVRPTREP

PORTLAND TAR PLANT
MONTHLY INVENTORY REPORT
SEPTEMBER 1999

COMMODITY	UN	PKG	DESCRIPTION	OPENING BALANCE	***** RECEIPTS ***** PURCHASES	PRODUCTION	******* DISBURSEMENTS ******* PROCESSED	MISC.	SHIPPED	***** CLOSING INVENTORY ****** BOOK	GAIN/LOSS	PHYSICAL
17200001	1		HEAVY OIL TANKS AND CA	477817			47230			430587	18139	448726
39100001		100	CARBON PITCH/INTALCO T	6156480					4352130	1804350		1804350
42100001	2		STICKNEY-LIQUID PITCH		707950		176600			531350		531350
42300001	2		CHINESE PITCH	2762415			681701			2080714		2080714
42400001	2		IMPORT PEN PTCH	1712675-	6613300	391788	5120175			172718	43180-	129538
42800001	2		MELTER PTCH LQ	6963649		5516638			8384020	4096267		4096267
43400001	2	55	HC PITCH FINES	158800						158800		158800
49250001	2	100	IMP TARGET PITC			117300			117300			
42800001	2		MELTER PITCH (KAITACOM	1566330	1750432				1287606	2029206		2029206
42900001	2		MELTER PITCH (KAIMEAD	4111850	5937020				2946000	7102870		7102870
			TOTALS.....	20494696	15009202	6025726	6025726		17087036	18406842	24791-	18381851

Koppers004357

RUN DATE: Sep 02 79 12:45
REPORT NAME : INVRPTREP

PORTLAND TAR PLANT
MONTHLY INVENTORY REPORT
AUGUST 1979

COMMODITY	UN	PKG	DESCRIPTION	OPENING BALANCE	***** RECEIPTS ***** PURCHASES	PRODUCTION	******* DISBURSEMENTS ******* PROCESSED	MISC.	SHIPPED	***** CLOSING INVENTORY ****** BOOK	GAIN/LOSS	PHYSICAL
17200001	1		HEAVY OIL TANKS AND CA	531817			54000			477817		477817
37100001		100	CARBON PITCH/INTALCO T	3757660	6613300				4214480	6156480		6156480
42300001	2		CHINESE PITCH	4246487	288847-		1075115	1P0110		2762415		2762415
42400001	2		IMPORT PEN PTCH	9107524		405260	11225479			1712695-		1712695-
42800001	2		MELTER PTCH LQ	3065096		11905293			8006740	6963649		6963649
43400001	2	55	HC PITCH FINES		158800					158800		158800
49250001	2	100	IMP TARGET PITC			163940			163940			
42300001	2		MELTER PITCH (KAITACOM	1566380	1511240				1511240	1566380		1566380
42800001	2		MELTER PITCH (KAIMEAD	4111850	3564200				3564200	4111850		4111850
			TOTALS.....	26386814	11557193	12474493	12354394	120110	17461100	20484696		20484696

Koppers004358

RUN DATE: Aug 04 99 08:57
REPORT NAME : INVRPTREP

PORTLAND TAR PLANT
MONTHLY INVENTORY REPORT
JULY 1999

COMMODITY	UN	PKG	DESCRIPTION	OPENING BALANCE	***** RECEIPTS ***** PURCHASES	PRODUCTION	******* DISBURSEMENTS ******* PROCESSED	MISC.	SHIPPED	***** CLOSING INVENTORY ****** BOOK	GAIN/LOSS	PHYSICAL
17200001	1		HEAVY OIL TANKS AND CA	386667	168100		82950			531817		531817
39100001		100	CARBON PITCH/INTALCO T	808810	6613800				3658950	3757660		3757660
42300001	2		CHINESE PITCH	2756676	3204600		714789			4246487		4246487
42400001	2		IMPORT PEN PITCH	3893437	6613800	469793	1869506			9107524		9107524
42300001	2		MELTER PTCH LQ	4819933		2033033			5842870	3065096		3065096
43400001	2	55	HC PITCH FINES	108190			147651			39461-	39461	
42250001	2	100	IMP TARGET PITC			197070			197070			
42800001	2		MELTER PITCH (KAITACUM	1566380	1306770				1306770	1566380		1566380
42900001	2		MELTER PITCH (KAIMEAD	4111850	2614400				2614400	4111850		4111850
			TOTALS.....	20445943	19521470	2754896	2754896		13620060	26347353	39461	26386814

Koppers004359

PORTLAND TAR PLANT

RUN DATE: Jul 07 99 07:58 — MONTHLY INVENTORY REPORT — PAGE 1

REPORT NAME : INVRP2REP — JUNE 1999

COMMODITY	UN	PKG	DESCRIPTION	OPENING BALANCE	***** RECEIPTS ***** PURCHASES	PRODUCTION	******* DISBURSEMENTS ******* PROCESSED	MISC.	SHIPPED	***** CLOSING INVENTORY ***** BOOK	GAIN/LOSS	PHYSICAL
17200001	1		HEAVY OIL TANKS AND CA	397670			40500			357170	29497	386667
39100001		100	CARBON PITCH/INTALCO T	1080330	4409200				4686720	802810		802810
42300001	2		CHINESE PITCH	3416681			660005			2756676		2756676
42400001	2		IMPORT PEN PITCH	9189247		341325	5637135			3893437		3893437
42300001	2		MELTER PTCH LQ	8468808		5999025			7647900	6819933		6819933
43400001	2	55	HC PITCH FINES	185900			77710			108190		108190
42800001	2		MELTER PITCH (KAITACOM	1107340	2308540				1350000	1566380		1566380
42800001	2		MELTER PITCH (KAIMEAD	2504150	3559700				1952000	4111850		4111850
42300001	2		VANALCO P PITCH	1771391					1771591			
			TOTALS.....	28122217	10277440	6340350	6415350		17908211	20416446	29497	20445943

Koppers004360

RUN DATE: Jun 03 99 09:51
REPORT NAME : INVRPERLP

PORTLAND TAR PLANT
MONTHLY INVENTORY REPORT
MAY 1999

COMMODITY	UN	PKG	DESCRIPTION	OPENING BALANCE	***** RECEIPTS ***** PURCHASES	PRODUCTION	******* DISBURSEMENTS ******* PROCESSED	MISC.	SHIPPED	***** CLOSING INVENTORY ****** BOOK	GAIN/LOSS	PHYSICAL
17200001	1		HEAVY OIL TANKS AND CA	432770			35100			397670		397670
39100001		100	CARBON PITCH/INTALCO T	4778220-	6613800 ✓				✗ 5056250	10 1080330		1080330
42300001	2		CHINESE PITCH	4035288			688607 ✓			3416681		3416681
42400001	2		IMPORT PEN PITCH	8334868	6613800 ✓	313000	6072429 ✓			9189247		9189247
42300001	2		MELTER PTCH LQ	8144620		6310778 ✗			5986390	0 8468808		8468808
43400001	2	55	HC PITCH FINES	185900						185900		185900
42300001	2		VANALCO P PITCH	3957378					2185987	1771391		1771591
			TOTALS.....	24663804	13227600	6623786	6776136		13228827	24510227		24510227

PORTLAND TAR PLANT

RUN DATE: May 04 99 14:41 MONTHLY INVENTORY REPORT PAGE 1

REPORT NAME : INVRP2REP APRIL 1999

COMMODITY	UN	PKG	DESCRIPTION	OPENING BALANCE	***** RECEIPTS ***** PURCHASES	PRODUCTION	******* DISBURSEMENTS ******* PROCESSED	MISC.	SHIPPED	***** CLOSING INVENTORY ****** BOOK	GAIN/LOSS	PHYSICAL
17200001	1		HEAVY OIL TANKS AND CA	310370	170500		48600			432770		432770
39100001		100	CARBON PITCH/INTALCO T	1831320	2204600				4513140	522780	477220-	477220-
42300001	2		CHINESE PITCH	4808457			723169			4085288		4085288
42400001	2		IMPORT PEN PITCH	10744958	2204600	295512	4910202			8334868		8334868
42800001	2		MELTER PITCH LQ	8621146		5254189			5730715	8144620		8144620
43400001	2	55	HC PITCH FINES		185900					185900		185900
49250001	2	100	IMP TARGET PITC			132270			132270			
42300001	2		VANALCO P PITCH	3957578						3957578		3957578
			TOTALS.....	30274329	4765600	5681971	5681971		10376125	24663804		24663804

RUN DATE: Apr 05 99 14:30
REPORT NAME : INVRPBREF

PORTLAND TAR PLANT
MONTHLY INVENTORY REPORT
MARCH 1999

COMMODITY	UN	PKG	DESCRIPTION	OPENING BALANCE	***** RECEIPTS ***** PURCHASES	PRODUCTION	******* DISBURSEMENTS ******* PROCESSED	MISC.	SHIPPED	***** CLOSING INVENTORY ****** BOOK	GAIN/LOSS	PHYSICAL
17200001	1		HEAVY OIL TANKS AND CA	309742	156700		44350			321892	11022-	310870
17300001	2	371	P1/P13 DRUMS	1440					1440			
39100001		100	CARBON PITCH/INTALCO T	4713050					2881730	1831320		1831320
42300001	2		CHINESE PITCH	6306118			1497661			4808457		4808457
42400001	2		IMPORT PEN PITCH	9935795	6613300	479329	6283876			10744958		10744958
42800001	2		MELTER PTCH LQ	8011558		759749			6927910	8621146		8621146
43300601	2		CARBON PITCH/REILLY TR	176400			176400					
43400001	2	55	HC PITCH FINES	173700			173700					
49250001	2	100	IMP TARGET PITC			159380			159380			
42300001	2		VANALCO P PITCH	3957578						3957578		3957578
			TOTALS.....	33485311	6770500	8176207	8176607		9970460	30285831	11022-	30274809

RUN DATE: Mar 03 99 08:24
REPORT NAME : INVRP2REP

PORTLAND TAR PLANT
MONTHLY INVENTORY REPORT
FEBRUARY 1999

COMMODITY	UN	PKG	DESCRIPTION	OPENING BALANCE	***** RECEIPTS ***** PURCHASES	PRODUCTION	******* DISBURSEMENTS ******* PROCESSED	MISC.	SHIPPED	***** CLOSING INVENTORY ****** BOOK	GAIN/LOSS	PHYSICAL
17200001	1		HEAVY OIL TANKS AND CA	248442			38700			209742		209742
17300001	2		CREO P1/P13-88	114345					93000	21345	21345-	
17300001	2	371	P1/P13 DRUMS	1980			540			1440		1440
21101021	2		PAVEMENT SEALER	118340				118340				
39100001		100	CARBON PITCH/INTALCO T	1567300	6613800 ✓				× 3468050 !	0 4713050		4713050
42300001	2		CHINESE PITCH	7748424			1442306 !			6306118		6306118
42400001	2		IMPORT PEN PITCH	14536949	~~6~~834	607834	5209058 !			9935725		9935725
42800001	2		MELTER PTCH LQ	8788261		6315850 *			7092553	0 8011558		8011558
43300601	2		CARBON PITCH/REILLY TR	527800			351400 0			176400		176400
43400001	2	55	HC PITCH FINES	173700						173700		173700
47250001	2	100	IMP TARGET PITC			117780 ✓			117780 !			
48300001	2		VANALCO P PITCH	3957578						3957578		3957578
			TOTALS.....	37783119	7321634	6433630	7042004	118340	10771383	33506656	21345-	33485311

Koppers004364

RUN DATE: Feb 03 99 09:01
REPORT NAME : INVRPTREP

PORTLAND TAR PLANT
MONTHLY INVENTORY REPORT
JANUARY 1999

COMMODITY	UN	PKG	DESCRIPTION	OPENING BALANCE	***** RECEIPTS ***** PURCHASES	PRODUCTION	******* DISBURSEMENTS ******* PROCESSED	MISC.	SHIPPED	***** CLOSING INVENTORY ****** BOOK	GAIN/LOSS	PHYSICAL
17200001	1		HEAVY OIL TANKS AND CA	319092			70650			248442		248442
17300001	2		CREO P1/P13-88	114345						114345		114345
17300001	2	301	P1/P13 PAILS	90					90			
17300001	2	371	P1/P13 DRUMS	1980						1980		1980
21101021	2		PAVEMENT SEALER	118340						118340		118340
21101061	2	371	K-1535 (DRUMS)	32450					32450			
39100001		100	CARBON PITCH/INTALCO T	3981030	3204600				4618330	1567300		1567300
42300001	2		CHINESE PITCH	1736343	9490772		2102691			9124424	1376000-	7748424
42400001	2		IMPORT PEN PTCH	4292877	13227600	1006875	5366403			13160949	1376000	14536949
42800001	2		MELTER PTCH LQ	8082065		6862949			6156753	8788261		8788261
43300601	2		CARBON PITCH/REILLY TR	881500			353700			527800		527800
43400001	2	55	HC PITCH FINES	173700						173700		173700
49250001	2	100	IMP TARGET PITC			79620			79620			
42300001	2		VANALCO P PITCH	650228		3307350				3957578		3957578
			TOTALS.....	20384040	24922772	11256794	7893444		10887243	37783119		37783119

Koppers004365

RUN DATE: Jan 06 99 10:43
REPORT NAME : INVRP2REP

PORTLAND TAR PLANT
MONTHLY INVENTORY REPORT
DECEMBER 1998

COMMODITY	UN	PKG	DESCRIPTION	OPENING BALANCE	***** RECEIPTS ***** PURCHASES	PRODUCTION	******* DISBURSEMENTS ******* PROCESSED	MISC.	SHIPPED	***** CLOSING INVENTORY ****** BOOK	GAIN/LOSS	PHYSICAL
17200001	1		HEAVY OIL TANKS AND CA	203490	160800		42750			321540	2448-	319092
17300001	2		CREO P1/P13-88	352390					237580	115310	965-	114345
17300001	2	301	P1/P13 PAILS	540					450	90		90
17300001	2	371	P1/P13 DRUMS	1980						1980		1980
21101021	2		PAVEMENT SEALER	118340						118340		118340
21101061	2	371	K-1535 (DRUMS)	32450						32450		32450
39100001		100	CARBON PITCH/INTALCO T	5783550	2204600				4007120	3981030		3981030
~~39200001~~	~~2~~	~~100~~	~~INTALCO/KOREAN PENCILS~~	~~5783550~~	~~2204600~~				~~4007120~~	~~3981030~~		~~3981030~~
42300001	2		CHINESE PITCH	2862241			1340128	214230		1736343		1736343
42400001	2		IMPORT PEN PTCH	4737801	4409200	468822	6281138	958192		4292877		4292877
42800001	2		MELTER PTCH LQ	9042170		7113514		2306332-	5767277	8082065		8082065
43300601	2		CARBON PITCH/REILLY TR	881500						881500		881500
43400001	2	35	HC PITCH FINES		173700					173700		173700
49250001	2	100	IMP TARGET PITC			81680			81680			
42300001	2		VANALCO P PITCH	2630053					1979825	650228		650228
			TOTALS.....	32430555	9152900	7664016	7664016	1233900-	16081072	24368483	3413-	24365070

[redacted]

RUN DATE: Dec 03 98 10:04
REPORT NAME : INVRP2REP

PORTLAND TAR PLANT
MONTHLY INVENTORY REPORT
NOVEMBER 1998

COMMODITY	UN	PKG	DESCRIPTION	OPENING BALANCE	***** RECEIPTS ***** PURCHASES	PRODUCTION	******* DISBURSEMENTS ******* PROCESSED	MISC.	SHIPPED	***** CLOSING INVENTORY ****** BOOK	GAIN/LOSS	PHYSICAL
17200001	1		HEAVY OIL TANKS AND CA	247140			43650			203490		203490
17300001	2		CRED P1/P13-88	516990					164100	352890		352890
17300001	2	301	P1/P13 PAILS	540						540		540
17300001	2	371	P1/P13 DRUMS	1980						1980		1980
21101021	2		PAVEMENT SEALER	164300	147100		147100		45960	118340		118340
21101061	2	371	K-1535 (DRUMS)	36850					4400	32450		32450
39100001		100	CARBON PITCH/INTALCO T	7718340	2204600 ✓				X 4139390 01	5783550		5783550
~~39200001~~	~~2~~	~~100~~	~~INTALCO/KOREAN PENCILS~~	~~7718340~~	~~2204600~~				~~4139390~~	~~5783550~~		~~5783550~~
42300001	2		CHINESE PITCH	4149754			1287713 1			2862241		2862241
42400001	2		IMPORT PEN PTCH	2422967	6613800 ✓	605310	4904276 1			4737801		4737801
42600001	2		SOFT PITCH			147100	— OFF set —		147100	9,042,170		9,042,170
42800001	2		MELTER PTCH LQ	7864831		6954929 X			~~[illegible]~~	~~5170411~~		~~5170411~~
43300601	2		CARBON PITCH/REILLY TR	705100	176400 X				57775900	881500		881500
43400001	2	55	HC PITCH FINES	190700			190700 1					
49250001	2	100	IMP TARGET PITC			76720			76720 1			
42300001	2		VANALCO P PITCH	4206286	—	Not in the plant		—	1576233	2630053		2630053
			TOTALS.....	35744318	11346500	7784059	6573439		~~19942642~~	~~28558796~~		~~28558796~~
									16070883	-32430555		32430555

Note:

The Month end liquid pitch inventory was in error.
The Average used to calculate the amount of pitch in the 4 TANK CARS WAS INCORRECT.
We used 165,665#/CAR And should have used 172,037#/CAR —
Thus, the inventory was short 25,488 #'s (6372# X 4)
Per John Kunkle, leave it alone, it will self correct in december

AMPAD EFFICIENCY LINE® 22-210

Key — for Attachment
- □ Solid receipts
- ⊠ " sales/usage
- ○ Liquid Receipts
- ⊗ " sales/usage

Month	1	2 Receipts	3 Sales/usage		5 Receipts	6 Sales/usage	7	8 Receipts	9 Sales/usage	10	11	12	13
			Hi Oil (#'s)			Solid Patch (#'s)			Liquid Patch (#'s)				
Nov. 99		143,400	31,950		15432200	9156705		4566169	9186842				
Dec. 99		135,400	35,100			649047		19139222	10041864				
Jan. 00			115,200		2204600	617687			11247642				
Feb. 00			82,800			846289		19428064	9263050				
Mar 00			94,500		28400	891244			8597200				
April 00		283,100	72,900			6484481		16717887	9148557				
May 00			60,750		2828616	851743			9487545				
June 00			16,200		154322	475221		19746272	8481980				
July 00			47,700			504469			6359130				
Aug. 00			32,400			479231		15142110	6084688				
Sept. 00			31,500			461282			7204372				
Oct. 00			23,800			257,780		146600	6199370				
		660,900	644,800		20648138	15839179		94886324	101303240				
GALs (9/#)		73,433	71,644	(GAL-11#)	1877103	1439925		8626029	9209385				
12 Mo. Avg. GALs.		6,119	5,970		156,425	119,994		718,836	767,449				

Koppers004368

RUN DATE: Nov 02 00 17:06
REPORT NAME : INVRPEREP

PORTLAND TAR PLANT
MONTHLY INVENTORY REPORT
OCTOBER 2000

COMMODITY	UN	PKG	DESCRIPTION	OPENING BALANCE	***** RECEIPTS ***** PURCHASES	PRODUCTION	******* DISBURSEMENTS ******* PROCESSED	MISC.	SHIPPED	***** CLOSING INVENTORY ****** BOOK	GAIN/LOSS	PHYSICAL
17200001	1		HEAVY OIL TANKS AND CA	373878			23800			365078		365078
39100001		100	CARBON PITCH/INTALCO T	2831380					3918470	1087090-		1087090-
42100001	2		STICKNEY-LIQUID PITCH		146600		146600					
42300001	2		CHINESE PITCH	1517828			217600			1300228		1300228
42400001	2		IMPORT PEN PITCH	2876683			40180			2836503		2836503
42400001	2	30	LIQUID KOREAN PITCH	7888615		146600	1581364			6453851		6453851
42800001	2		BLENDED PITCH LQ	9919676		1660198			2280900	9298974		9298974
42840001	2	100	JAPANESE PENCIL PITCH	154322						154322		154322
49250001	2	100	IMP TARGET PITC			40180			40180			
42900001	2		BLEND PITCH (KAITACOMA						698340	698340-	698340	
42300001	2		BLEND PITCH (KAIMEAD #						684540	684540-	684540	
			TOTALS.....	25582382	146600	1846978	2014544		7622430	17938986	1382880	19321866

RUN DATE: Oct 04 00 03:59
REPORT NAME : INVRPTREP

PORTLAND TAR PLANT
MONTHLY INVENTORY REPORT
SEPTEMBER 2000

COMMODITY	UN	PKG	DESCRIPTION	OPENING BALANCE	***** RECEIPTS ***** PURCHASES	PRODUCTION	******* DISBURSEMENTS ******* PROCESSED	MISC.	SHIPPED	***** CLOSING INVENTORY ****** BOOK	GAIN/LOSS	PHYSICAL
17200001	1		HEAVY OIL TANKS AND CA	425378		31500				393878		393878
39100001		100	CARBON PITCH/INTALCO T	7919730					5088350	2831380		2831380
42300001	2		CHINESE PITCH	1822010			304182	X		1517828		1517828
42400001	2		IMPORT PEN PTCH	3035783			159100	X		2876683		2876683
42400001	2	30	LIQUID KOREAN PITCH	10267963			2379348			7888615		7888615
42800001	2		BLENDED PITCH LQ	9544613		2490883			2113822	9919676		9919676
42840001	2	100	JAPANESE PENCIL PITCH	154322						154322		154322
42850001	2	100	IMP TARGET PITC			159100			159100			
42800001	2		BLEND PITCH (KAIMEAD #						1382880	1382880-	1382880	
			TOTALS.....	33170001		2649983	2874130		8746352	24199302	1382880	25582382

PORTLAND TAR PLANT

RUN DATE: Sep 06 00 08:57 MONTHLY INVENTORY REPORT PAGE 1

REPORT NAME : INVRPPREP AUGUST 2000

COMMODITY	UN	PKG	DESCRIPTION	OPENING BALANCE	***** RECEIPTS ***** PURCHASES	PRODUCTION	******* DISBURSEMENTS ******* PROCESSED	MISC.	SHIPPED	***** CLOSING INVENTORY ****** BOOK	GAIN/LOSS	PHYSICAL
17200001	1		HEAVY OIL TANKS AND CA	457778			32400			425378		425378
39100001		100	CARBON PITCH/INTALCO T	2539350	3818400				3437820	7919930		7919930
42300001	2		CHINESE PITCH	2141441			319431			1822010		1822010
42400001	2		IMPORT PEN PTCH	3195583			159800			3035783		3035783
42400001	2	30	LIQUID KOREAN PITCH	8277111	6323710		4332858			10267963		10267963
42800001	2		BLENDED PITCH LQ	7641874		4549609			2646868	9544615		9544615
42840001	2	100	JAPANESE PENCIL PITCH	154322						154322		154322
43400001	2	55	HC PITCH FINES	28700			28700					
47250001	2	100	IMP TARGET PITC			159800			159800			
42800001	2		BLEND PITCH (KAIMFAD #	2089852	533200				3633160	1010108-	1010108	
			TOTALS.....	26526011	15673310	4709409	4873189		9877648	32159893	1010108	33170001

Fax: Jerry Patterson K:1650

RUN DATE: Aug 03 00 08:35
REPORT NAME : INVRP2REP

PORTLAND TAR PLANT
MONTHLY INVENTORY REPORT
JULY 2000

COMMODITY	UN	PKG	DESCRIPTION	OPENING BALANCE	RECEIPTS PURCHASES	RECEIPTS PRODUCTION	DISBURSEMENTS PROCESSED	DISBURSEMENTS MISC.	DISBURSEMENTS SHIPPED	CLOSING INVENTORY BOOK	CLOSING INVENTORY GAIN/LOSS	CLOSING INVENTORY PHYSICAL
17200001	1		HEAVY OIL TANKS AND CA	432834			47700			404834	52944	457778
39100001		100	CARBON PITCH/INTALCO T	6802010					4262660	2539350		2539350
42300001	2		CHINESE PITCH	2487990			346349			2141441		2141441
42400001	2		IMPORT PEN PITCH	3353503			157920			3195583		3195583
42400001	2	30	LIQUID KOREAN PITCH	11724768			3447657			8277111		8277111
42800001	2		BLENDED PITCH LQ	6080954		3657390			2096470	7641874		7641874
42340001	2	100	JAPANESE PENCIL PITCH	154322						154322		154322
43400001	2	55	HC PITCH FINES	95900			67200			28700		28700
99230001	2	100	IMP TARGET PITC			157920			157920			
42800001	2		BLEND PITCH (KAITACOMA	787800-					606659	1394459-	1394459	
42800001	2		BLEND PITCH (KAIMEAD 9	3118192	2096470				3119740	2089852		2089852
			TOTALS.....	33477303	2096470	3815310	4067026		10243449	25078608	1447403	26526011

PORTLAND TAR PLANT

RUN DATE: Jul 07 00 09:50 — MONTHLY INVENTORY REPORT — PAGE 1

REPORT NAME : INVRP2REP — JUNE 2000

COMMODITY	UN	PKG	DESCRIPTION	OPENING BALANCE	***** RECEIPTS ***** PURCHASES	PRODUCTION	******* DISBURSEMENTS ******* PROCESSED	MISC.	SHIPPED	***** CLOSING INVENTORY ****** BOOK	GAIN/LOSS	PHYSICAL
17200001	1		HEAVY OIL TANKS AND CA	468734			16200			452534		452534
39100001		100	CARBON PITCH/INTALCO T	2602930	6818400				4619320	6802010		6802010
42100001	2		STICKNEY-LIQUID PITCH		853450		853450					
42300001	2		CHINESE PITCH	2720771			232781			2487990		2487990
42400001	2		IMPORT PEN PITCH	3150213			242440			4907773	1554270-	3353503
42400001	2	30	LIQUID KOREAN PITCH	1993012	10074422	853450	1196116			11724768		11724768
42800001	2		BLENDED PITCH LQ	8685200		1238414			3862660	6080954		6080954
42940001	2	100	JAPANESE PENCIL PITCH		154322					154322		154322
43400001	2	55	HC PITCH FINES	137900			42000			95900		95900
49250001	2	100	IMP TARGET PITC			242440			242440			
42900001	2		BLEND PITCH (KAITACOMA	1000000	691460				1770240	78780-	709020-	787800-
42800001	2		BLEND PITCH (KAIMEAD #	3865282	3171200				3923360	3113122		3113122
			TOTALS.....	26624042	23763234	2334304	2582987		14418020	35740593	2263290-	33477303

RUN DATE: Jun 05 00 10:06
REPORT NAME : INVRPREP

PORTLAND TAR PLANT
MONTHLY INVENTORY REPORT
MAY 2000

COMMODITY	UN	PKG	DESCRIPTION	OPENING BALANCE	***** RECEIPTS ***** PURCHASES	PRODUCTION	******* DISBURSEMENTS ******* PROCESSED	MISC.	SHIPPED	***** CLOSING INVENTORY ****** BOOK	GAIN/LOSS	PHYSICAL
17200001	1		HEAVY OIL TANKS AND CA	529484			60750			468734		468734
39100001		100	CARBON PITCH/INTALCO T	7025510					4422580	2602930		2602930
42300001	2		CHINESE PITCH	378008	2828616		685853			2720771		2720771
42400001	2		IMPORT PEN PTCH	5316103			165890			5150213		5150213
42400001	2	30	LIQUID KOREAN PITCH	8633443		0 ~~278855~~	~~4123685~~	6,640,431		~~4808653~~	1,993,012	~~4808653~~
42800001	2		BLENDED PITCH LQ	6628426		7121739			5064965	8685200		8685200
43400001	2	55	HC PITCH FINES	171500			33600			137900		137900
49250001	2	100	IMP TARGET PITC			163890			165890			
42800001	2		BLEND PITCH (KAITACOMA	1889886	1868200				1563660	2194426	1194426-	1000000
42800001	2		BLEND PITCH (KAIMEAD #	3673717	3196765				3005200	3865282		3865282
			TOTALS.....	34446077	7893581	7586524	5069778		14222295	~~30634109~~ 27818468	1194426-	~~2943683~~ 26623042

FAX: J. Kuntle, K-1600

Call if any questions ——

Amos
6/5/00

RUN DATE: May 02 00 15:19
REPORT NAME : INVRP2REP

PORTLAND TAR PLANT
MONTHLY INVENTORY REPORT
APRIL 2000

COMMODITY	UN	PKG	DESCRIPTION	OPENING BALANCE	***** RECEIPTS ***** PURCHASES	PRODUCTION	******* DISBURSEMENTS ******* PROCESSED	MISC.	SHIPPED	***** CLOSING INVENTORY ****** BOOK	GAIN/LOSS	PHYSICAL
17200001	1		HEAVY OIL TANKS AND CA	319284	283100		72900			529484		529484
39100001		100	CARBON PITCH/INTALCO T	4351770	6613800 O				4140060	7025510		7025510
42100001	2		STICKNEY-LIQUID PITCH	507930			507930					
42300001	2		CHINESE PITCH	921227			343219			578008		578008
42400001	2		IMPORT PEN PTCH	5621365			305262			5316103		5316103
42400001	2	30	LIQUID KOREAN PITCH	1385530	10104087 O	343630	3699804			8633443		8633443
42800001	2		BLENDED PITCH LQ	7557945		4078978			5008497	6628426		6628426
43400001	2	33	HC PITCH FINES	171500						171500		171500
49250001	2	100	IMP TARGET PITC			121680			121680			
42800001	2		BLEND PITCH (KAITACOMA	1836346	1660960				1607420	1889886		1889886
42800001	2		BLEND PITCH (KAIMEAD #	6814235	3347537				3365340	6796432	3122715-	3673717
			TOTALS.....	30187132	22009484	4544288	4929115		14242997	37568792	3122715-	34446077

RUN DATE: Apr 05 00 07:48
REPORT NAME : INVRP2REP

PORTLAND TAR PLANT
MONTHLY INVENTORY REPORT
MARCH 2000

COMMODITY	UN	PKG	DESCRIPTION	OPENING BALANCE	***** RECEIPTS ***** PURCHASES	PRODUCTION	******* DISBURSEMENTS ******* PROCESSED	MISC.	SHIPPED	***** CLOSING INVENTORY ****** BOOK	GAIN/LOSS	PHYSICAL
17200001	1		HEAVY OIL TANKS AND CA	413784			94500			319284		319284
39100001		100	CARBON PITCH/INTALCO T	8401990					3850220	4551770		4551770
42100001	2		STICKNEY-LIQUID PITCH	873420			365490			507930		507930
42300001	2		CHINESE PITCH	1663561	28400		770734			921227		921227
42400001	2		IMPORT PEN PTCH	5741875			120510			5621365		5621365
42400001	2	30	LIQUID KOREAN PITCH	7852806			5967276			1885530		1885530
42800001	2		BLENDED PITCH LQ	5553924		6751001			4746980	7557945		7557945
43400001	2	55	HC PITCH FINES		171500					171500		171500
49250001	2	100	IMP TARGET PITC			120510			120510			
42800001	2		BLEND PITCH (KAITACOMA	1835466	1579480				1578600	1836346		1836346
42800001	2		BLEND PITCH (KAIMEAD #	7191735	3167500				3545000	6814235		6814235
			TOTALS.....	39528561	4946880	6871511	7318510		13841310	30187132		30187132

PORTLAND TAR PLANT
MONTHLY INVENTORY REPORT
FEBRUARY 2000

RUN DATE: Mar 03 00 08:53
REPORT NAME : INVRP2REP

COMMODITY	UN	PKG	DESCRIPTION	OPENING BALANCE	***** RECEIPTS ***** PURCHASES	PRODUCTION	******* DISBURSEMENTS ******* PROCESSED	MISC.	SHIPPED	***** CLOSING INVENTORY ****** BOOK	GAIN/LOSS	PHYSICAL
17200001	1		HEAVY OIL TANKS AND CA	496584			82800			413784		413784
39100001		100	CARBON PITCH/INTALCO T	3906210	9818400				4322620	8401990		8401990
42100001	2		STICKNEY-LIQUID PITCH	531350	342070					873420		873420
42300001	2		CHINESE PITCH	2272910			609349			1663561		1663561
42400001	2		IMPORT PEN PTCH	5820015			78140			5741875		5741875
42400001	2	30	LIQUID KOREAN PITCH	1617702	10267594		4032490			7852806		7852806
42800001	2		MELTER PTCH LQ	6029903	4464451				4940430	5553924		5553924
43400001	2	35	HC PITCH FINES	158800			158800					
49250001	2	100	IMP TARGET PITC			78140			78140			
42800001	2		MELTER PITCH (KAITACOM	2093286	1438900				1496720	2035466	200000-	1835466
42800001	2		MELTER PITCH (KAIMEAD	7339745	3501530				3649540	7191735		7191735
			TOTALS.....	30266505	28832945	78140	4961579		14487450	39728561	200000-	39528561

RUN DATE: Feb 03 00 11:29
REPORT NAME : INVRP2REP

PORTLAND TAR PLANT
MONTHLY INVENTORY REPORT
JANUARY 2000

COMMODITY	UN	PKG	DESCRIPTION	OPENING BALANCE	***** RECEIPTS ***** PURCHASES	PRODUCTION	******* DISBURSEMENTS ******* PROCESSED	MISC.	SHIPPED	***** CLOSING INVENTORY ****** BOOK	GAIN/LOSS	PHYSICAL
17200001	1		HEAVY OIL TANKS AND CA	610106			115200			494906	1678	496584
39100001		100	CARBON PITCH/INTALCO T	9131250					5225040	3906210		3906210
42100001	2		STICKNEY-LIQUID PITCH	531350						531350		531350
42300001	2		CHINESE PITCH	562327	2204600		494017			2272910		2272910
42400001	2		IMPORT PEN PTCH	5943685			123670			5820015		5820015
42400001	2	30	LIQUID KOREAN PITCH	7742532		269884	6229714			1782702	165000-	1617702
42800001	2		MELTER PTCH LQ	5483438	6569047				6022602	6029903		6029903
43400001	2	55	HC PITCH FINES	158800						158800		158800
49250001	2	100	IMP TARGET PITC			123670			123670			
42800001	2		MELTER PITCH (KAITACOM	1977932	1649280				1533926	2093286		2093286
42800001	2		MELTER PITCH (KAIMEAD	7235723		4373322			4269300	7339745		7339745
			TOTALS.....	39377163	10422927	4766876	6962601		17174538	30429927	163322-	30266505

RUN DATE: Dec 29 99 16:03
REPORT NAME : INVRP2REP

PORTLAND TAR PLANT
MONTHLY INVENTORY REPORT
DECEMBER 1999

COMMODITY	UN	PKG	DESCRIPTION	OPENING BALANCE	***** RECEIPTS ***** PURCHASES	PRODUCTION	******* DISBURSEMENTS ******* PROCESSED	MISC.	SHIPPED	***** CLOSING INVENTORY ****** BOOK	GAIN/LOSS	PHYSICAL
17200001	1		HEAVY OIL TANKS AND CA	509806	135400		35100			610106		610106
39100001		100	CARBON PITCH/INTALCO T	4913530	8818400 O				4600680 ⊗	9131250		9131250
42100001	2		STICKNEY-LIQUID PITCH	531350						531350		531350
42300001	2		CHINESE PITCH	1004384			442057 ⊠			562327		562327
42400001	2		IMPORT PEN PTCH	7783063		206990 ⊠	2003188			5986865	43180-	5943685
42400001	2	30	LIQUID KOREAN PITCH		10320822 O	1314201	3892491			7742532		7742532
42800001	2		MELTER PTCH LQ	6234327	6004516		1314201		5441184 ⊗	5483458		5483458
43400001	2	55	HC PITCH FINES	158800						158800		158800
49250001	2	100	IMP TARGET PITC			161330			161330			
42800001	2		MELTER PITCH (KAITACOM	1820538	1437240				1279846	1977932		1977932
42800001	2		MELTER PITCH (KAIMEAD	6818079	4003944				3586300	7235723		7235723
			TOTALS.....	29773877	30720322	1682521	7687037		15069340	39420343	43180-	39377163

RUN DATE: Dec 03 99 08:16
REPORT NAME : INVRP2REP

PORTLAND TAR PLANT
MONTHLY INVENTORY REPORT
NOVEMBER 1999

COMMODITY	UN	PKG	DESCRIPTION	OPENING BALANCE	***** RECEIPTS ***** PURCHASES	PRODUCTION	******* DISBURSEMENTS ******* PROCESSED	MISC.	SHIPPED	***** CLOSING INVENTORY ****** BOOK	GAIN/LOSS	PHYSICAL
17200001	1		HEAVY OIL TANKS AND CA	398356	143400		31950			509806		509806
39100001		100	CARBON PITCH/INTALCO T	4622390	4409200				4118060	4913530		4913530
42100001	2		STICKNEY-LIQUID PITCH	531350						531350		531350
42300001	2		CHINESE PITCH	1407477			403093			1004384		1004384
42400001	2		IMPORT PEN PTCH	1063909	11023000	187443	4448109			7826243	43180-	7783063
42800001	2		MELTER PTCH LQ	6323427	4576389		4665689			6234327		6234327
43400001	2	55	HC PITCH FINES	158800						158800		158800
49250001	2	100	IMP TARGET PITC			119120			119120			
42800001	2		MELTER PITCH (KAITACOM	1946678	1307780				1433920	1820538		1820538
42800001	2		MELTER PITCH (KAIMEAD	6832870	3357909				3372700	6818079		6818079
			TOTALS.....	23285257	24817878	306563	9548841		9043800	29817057	43180-	29773877

RETAIN A COPY OF THIS SURVEY FOR 3 YEARS

Due Date: December 02, 2005

Facility ID Number: 006202

2005
OREGON STATE FIRE MARSHAL
HAZARDOUS SUBSTANCE INFORMATION SURVEY

Cross off the old or incorrect information and type or print changes or additions in the [bracketed] areas.

SECTION A HAZARDOUS SUBSTANCE PRESENCE Check the correct box to the left.

- ☒ YES ☐ NO 1. Were there hazardous substances present at this site in reportable quantities during this survey period?
- ☒ YES ☐ NO 2. Were Extremely Hazardous Substances (EHS) present at this site at or above the threshold planning quantities during this survey period?
- ☐ YES ☒ NO 3. Is this facility subject to the reporting requirements of Section 112(r) of the Clean Air Act?
- ☐ YES ☒ NO 4. Is this facility subject to the Process Safety Management (PSM) requirements of OR-OSHA?

SECTION B DEMOGRAPHIC DATA Complete, correct or add information in the [bracketed] areas.

1. NAICS CODE 1: 325192 DEFINITION: CYCLIC CRUDE & INTERMEDIATE MFG
2. NAICS CODE 2: DEFINITION:
3. BUSINESS ACTIVITY AT THIS SITE: COAL TAR PITCH TERMINAL
4. DUN & BRADSTREET #: 02-773-4359
5. OWNER/CEO/REG AGENT: W W TURNER CEO
6. SEND TO ATTENTION OF: T J TURNER
7. E-MAIL ADDRESS: TURNERTJ@KOPPERS.COM
8. BUSINESS NAME: KOPPERS INC
9. DEPT OR DIV:
10. SITE ADDRESS: 7540 NW ST HELENS RD
    CITY: PORTLAND
    COUNTY: MULTNOMAH
    STATE: OR ZIP CODE: 97210-3663
11. MAILING ADDRESS: 7540 NW ST HELENS RD
    CITY: PORTLAND
    COUNTY: MULTNOMAH
    STATE: OR ZIP CODE: 97210-3663
12. BUSINESS PHONE: 503-286-3681
13. NUMBER OF EMPLOYEES AT THIS SITE: 3
14. EMERGENCY ASSISTANCE CONTACT PERSON FOR THIS SITE: T J TURNER
15. EMERGENCY CONTACT PHONES: DAY: 503-286-3681 NIGHT: 360-396-5139
16. RESPONSIBLE FIRE DEPARTMENT: PORTLAND BUREAU OF F&R & EMS

SPECIAL FIRE DEPARTMENT INFORMATION This section is for information the fire service needs to know in case of an emergency.

17. ☒ YES ☐ NO WRITTEN EMERGENCY PLAN. IF YES, WHERE AT SITE: Office and Control Room
18. ☐ YES ☒ NO AUTOMATIC FIRE SUPPRESSION SYSTEM PRESENT; e.g., sprinklered, halon system, etc.
19. ☒ YES ☐ NO ARE STORAGE BUILDINGS/TANKS/AREAS PLACARDED ACCORDING TO NFPA 704?
20. ☐ YES ☒ NO ARE OTHER TYPES OF PLACARDS USED?

SECTION C PERSON COMPLETING FORM

Signature required: I certify that the information provided is true and accurate to the best of my knowledge. This person will be contacted to answer any questions needing clarification.

1. PRINT NAME: T J TURNER
2. SIGNATURE: T J Turner
3. Date: 11/29/05 Phone: 503-286-3681 Ext: 15

T J TURNER
KOPPERS INC

7540 NW ST HELENS RD
PORTLAND, OR 97210-3663

For office use only: R F DE / C

1754

Heavy Oil

Receipts — 2004 (Nov/Dec) 156,000 #
" — 2005 (Jan/Oct) 480,100 #
636,100 # ÷ 12 = 53,008 #/mo. Avg.

Usage — 2004 (✓) 94,500 #
" — 2005 (✓) 312,550 #
407,050 # ÷ 12 = 33,921 #/mo. Avg.

9 #/Gallon

Receipts 70,678 gals. ÷ 12 = 5,890 gals./mo. Avg.
Usage 45,228 gals. ÷ 12 = 3,769 gals/mo. Avg

Coated Pitch

Receipts — 2004 (✓) 9,219,011 #
" — 2005 (✓) 28,634,636 #
37,853,647 # ÷ 12 = 3,154,471 #/mo. Avg.

Usage/ship — 2004 (✓) 5,543,490 #
" — 2005 (✓) 31,151,225 #
36,694,715 # ÷ 12 = 3,057,893 #/mo. Avg.

11 #/gallon

Receipts ✓ 3,441,241 gals. ÷ 12 = 286,770 gals/mo. Avg. ✓
Usage/ship ✓ 3,335,883 gals. ÷ 12 = 277,990 gals/mo. Avg. ✓

Nitrogen

11/04	218,400, 97,100 = 315,500
12/04	146,100
1/05	0
2/05	216,700
3/05	221,400
4/05	128,400
5/05	209,100
6/05	84,600
7/05	112,400
8/05	146,400
9/05	0
10/05	127,800

T-TAC = 1,708,300 ÷ 93.11 = 18,347 gals ÷ 12 = 1,529 gals/mo.

CHEMPRO
GENERATOR'S WASTE MATERIAL PROFILE SHEET

PLEASE PRINT IN INK OR TYPE

CP# 56135
WASTE PROFILE SHEET CODE

CHEMPRO Facility: WASHOUGAL (SHADED AREAS FOR CHEMPRO USE ONLY) **CP Sales Rep.** R. ORR

A. GENERATOR INFORMATION

1. Generator Name: KOPPERS INDUSTRIES 2. Generator. USEPA/ ID: ORD 027734359
3. Facility Address: 7540 N.W. SAINT HELENS ROAD
City: PORTLAND State OR Zip Code 97210-3663
4. Generator Contact JOHN OXFORD 5. Title: MANAGER 6. Phone: (503) 286 - 3681

B. MAIL CHEMPRO INVOICES TO: 1. ☒ Generating Facility (A. above), or
2. Company Name: _____ 3. Phone: ( ) _____ - _____
4. Address: _____
City: _____ State _____ Zip Code _____
5. Atten: _____

C. 1. **NAME OF WASTE** CREOSOTE TANK BOTTOMS
2. **PROCESS GENERATING WASTE** STORAGE TANK CLEAN-OUT
#. Is this waste a Dioxin listed waste as defined in 40 CFR 261.31 (e.g., F020, F021, F022, F023, F026, F027, or F028)?
☐ Yes ☒ No If yes, contact your CHEMPRO sales representative for assistance before completing this form.

D. PHYSICAL CHARACTERISTICS OF WASTE

1. COLOR:	2. PHYSICAL STATE @ 70°F:	3. Layers:	4. Specific Gravity:	5. Free Liquids
BLACK	☐ Solid ☐ Semi-Solid ☒ Liquid ☐ Power Other: _____	☐ Multilayered ☐ Bi-Layered ☒ Single Phased	Range: 1.05 MIN	☒ Yes ☐ No Volume: 0-2 %

6. pH: ☐ < 2 ☐ 2-4 ☒ 4-6 ☐ 6-8 ☐ 8-10 ☐ 10-12.5 ☐ > 12.5 ☐ Range _____ NA

7. Liquid Flash Point: ☐ < 70°F ☐ 70-99°F ☐ 100-139°F ☐ 140-199°F ☒ > 200°F ☐ None ☒ Closed Cup ☐ Open Cup

E. CHEMICAL COMPOSITION

1.	RANGE MIN. - MAX.
CREOSOTE *	- 100 %
	- %
* SEE COMPONENT LIST	- %
ATTACHED	- %
	- %
	- %
	- %
	- %
	- %
	- %
	- %
	- %

Please note: The chemical composition total in the maximum coiumn must be greater than or equal to 100%. TOTAL _____ %

2. Indicate if this waste contains any of the following:

	NONE	OR	LESS THAN	OR	ACTUAL	
PCB's	☒		☐ < 50 ppm		_____	ppm
Cyanides	☒		☐ < 50 ppm		_____	ppm
Phenolics	☐	NT	☐ < 50 ppm		_____	ppm
Sulfides	☒		☐ < 50 ppm		_____	ppm

F. METALS Indicate if this waste contains any of the following:
1. ☐ EP TOX/TCLP or 2. ☒ Total

METAL	LESS THAN	or	ACTUAL (Parts Per Million)
Arsenic	☒ < 5	☐ < 500	
Barium	☒ < 100		
Cadmium	☒ < 1	☐ < 100	
Chromium	☒ < 5		
Lead	☒ < 5	☐ < 500	
Mercury	☒ < 0.2	☐ < 20	
Selenium	☒ < 1	☐ < 100	
Silver	☒ < 5		
Chromium-Hex	☒ < 5	☐ < 500	
Copper	☒ < 5		
Nickel	☒ < 5	☐ < 134	
Thallium	☒ < 5	☐ < 130	
Zinc	☒ < 5		
_____	☐ <		
_____	☐ <		
_____	☐ <		

TURN PAGE AND COMPLETE OTHER SIDE

GENERATOR'S WASTE MATERIAL PROFILE SHEET (Continued)

CP# 56135
WASTE PROFILE SHEET CODE

G. OTHER HAZARDOUS CHARACTERISTICS

1. Is this waste a listed solvent waste as defined by 40 CFR 261.31 (F001, F002, F003, F004, or F005)? ☐ Yes ☒ No UNUSED
2. Does this waste contain greater than 1000 ppm total halogenated organic compounds? ☐ Yes ☒ No
3. Indicate if this waste is any of the following:

☐ RCRA Reactive	☐ Shock Sensitive	☐ Ecological	☐ Other _____
☐ Water Reactive	☐ Pyrophoric	☐ Pesticide Manufacturing Waste	_____
☐ Explosive	☐ Radioactive	☐ Flammable Solid	☒ None of the Above

H. USEPA/STATE INFORMATION

1. USEPA Hazardous Waste? ☒ Yes ☐ No 2. USEPA Hazardous Waste Number(s): U051
3. State Hazardous Waste? ☒ Yes ☐ No 4. State Hazardous Waste Number(s): EHW

I. SHIPPING INFORMATION

1. Is this a DOT Hazardous Material? ☒ Yes ☐ No 2. CERCLA Reportable Quantity (RQ): 1 (lb)
3. Method of Shipment: ☒ Bulk Liquid ☐ Bulk Solid ☐ Drum Type/Size: _____ Other: _____
4. Amount to ship now / units 90,000 - 300,000 GAL 5. Anticipated Annual Volume/Units: BLK QT.

US DOT DESCRIPTION:

(RQ) HAZARDOUS WASTE, LIQUID, NOS.
6. RQ 7. PROPER SHIPPING NAME

ORM-E NA 9189 (U051)
8. HAZARD CLASS 9. DOT ID NUMBER 10. ADDITIONAL DESCRIPTION

J. SPECIAL HANDLING INFORMATION _____

☐ Additional Page(s) Attached

K. GENERATOR CERTIFICATION I hereby certify that all information submitted in this and all attached documents contains true and accurate descriptions of this waste material, and all relevant information regarding known or suspected hazards in the possession of the generator has been disclosed.

1. * John A Oxford SIGNATURE
2. Plant Mgr. TITLE
3. JOHN A OXFORD NAME (TYPE OR PRINT)
4. 5/23/89 DATE

SHADED AREA FOR CHEMPRO USE ONLY:

SAFETY & HEALTH SCREEN

Additional Analysis

Minimum TLV_____ STEL_____ Ceiling_____ by_____ Vapor Pressure_____

Vapor Density_____

Classification

Codes_____ Health_____ Fire_____ Reactivity_____ PPE_____ Target Organ

Primary Potential Toxic Effect

Signature: _____

H HEALTH
R REACTIVITY
PERSONAL PROTECTION

CHEMICAL PROCESSORS, INC
WASTE TRANSPORTATION AND MANAGEMENT AGREEMENT

THIS AGREEMENT is made and entered into this 21st day of June, 1989, by and between KOPPERS INDUSTRIES, a Oregon corporation with its principal offices at 7540 NW Saint Helens Road - Portland, OR 97210-3663 ("Generator"), and CHEMICAL PROCESSORS, INC., a Washington corporation with its principal offices located at 2203 Airport Way South, Suite 400, Seattle, Washington 98134 ("Chemical Processors").

The parties agree as follows:

1. WASTE MATERIALS.

During the term of this Agreement, Generator will provide to Chemical Processors certain waste materials generated at Generator's facilities located at 7540 NW Saint Helens Road - Portland, OR 97210. Such waste materials, their chemical composition, physical characteristics, and estimated volume are described in the "Generator's Waste Material Profile Sheet(s)" that are part of Exhibit A of the Supplement attached hereto and incorporated herein by reference (the "Supplement"). (The waste materials described in the Waste Material Profile Sheet(s) are referred to in this Agreement as the "Waste Materials".) Generator is not required to deliver its entire output of the Waste Materials to Chemical Processors but may, in its sole discretion, manage a portion of the Waste Materials itself or through its agents or other independent contractors.

2. CHEMICAL PROCESSORS' SERVICES.

Generator authorizes Chemical Processors to provide the services set forth in Exhibit A of the Supplement and, in connection with such services, to transport, reclaim, recover, sell, treat, distribute, dispose of, store or use the Waste Materials, their components, and residues.

3. FEES AND BILLING.

3.1 For the services provided to Generator under this Agreement, Generator shall pay Chemical Processors fees as set forth in Exhibit B of the Supplement. In the event any governmental tax, tariff, fee, or surcharge is to be assessed on the transportation, storage, treatment or disposal of the Waste Materials, the fees charged by Chemical Processors will be increased by the amount of such tax, tariff fee or surcharge. Any such increase in fees will be set forth as a separate item on the invoices submitted to Generator.

3.2 Chemical Processors may, at any time upon thirty (30) days' prior written notice to Generator, increase or decrease the fees set forth in Exhibit B of the Supplement.

3.3 Invoices submitted by Chemical Processors to Generator shall be paid not later than thirty (30) days from the date of invoice. Chemical Processors shall retain copies of invoices for at least five (5) years as a record of disposal.

4. TERM AND TERMINATION.

This agreement shall commence on the date set forth above and continue in effect for a period of two (2) years, and shall automatically be extended from year to year therafter for successive one-year extensions unless either party gives thirty (30) day's prior written notice to the other party of its intent to terminate, with or without cause, this agreement. Termination as herein provided shall be in addition to, and not in lieu of, a party's right to terminate for breach. Termination shall operate to discharge all obligations that are executory by either party on or after the effective date of termination, but any right of a party based upon performance or breach of this agreement, including but not limited to reimbursement for any services rendered, prior to the effective date of termination shall survive.

5. TRANSFER OF WASTES AND TITLE.

5.1 Waste Materials will be tendered by Generator as set forth in Exhibit A of the Supplement. Subject to Section 5.2, at the time Chemical Processors (or its delegatee) signs a standard form of manifest indicating an acceptance of delivery of the Waste Materials, title, risk of loss and all other incidents of ownership with respect to those Waste Materials shall be transferred from Generator to Chemical Processors.

5.2 If, following signature of a manifest pertaining to Generator's waste materials, such waste material are discovered to be "non-conforming" in whole or in part, Chemical Processors may revoke its acceptance of all such waste materials. A revocation of acceptance shall operate to revest title, risk of loss and all other incidents of ownership in Generator at the time revocation is communicated, either orally or in writing, to Generator. Waste materials shall be considered "non-conforming", for purposes of this Agreement: (i) if they are not in accordance with the descriptions, limitations or specifications stated in the Generator's Waste Material Profile Sheet(s) attached hereto as part of Exhibit A of the Supplement, or (ii) if they have constituents or components, not specifically identified in the Generator's Waste Material Profile Sheet(s), (a) which increase the nature or extent of the hazard and risk undertaken by Chemical Processors in agreeing to handle, load, transport, store, treat or dispose of the Waste Materials, or (b) which cannot, for reasons relating to the design or permitting of the facility, be stored, treated, or disposed of at the relevant waste management facility identified in Exhibit A of the Supplement.

5.3 Generator shall remove non-conforming waste materials from the possession of Chemical Processors (or its delegatee) within a reasonable time, not to exceed seven (7) days, after revocation of acceptance has been communicated to Generator, unless within such time the parties agree to some alternative lawful manner of disposition of those waste materials. Generator shall pay Chemical Processors its reasonable expenses and charges for handling, loading, preparing, transporting, storing and caring for non-conforming waste materials the ownership of which is revested in Generator.

6. CHEMICAL PROCESSORS' WARRANTIES.

Chemical Processors warrants that:

(a) it understands the currently known hazards which are presented to persons, property and the environment in the transportation, reclamation, recovery, sale, treatment, distribution, storage and disposal of the Waste Materials;

(b) it will transport, store and dispose of the Waste Materials in full compliance with all governmental laws, regulations and orders;

(c) the waste management facilities described in Exhibit A of the Supplement are now licensed and permitted to store and dispose of waste materials within the description of the Waste Materials; and

(d) in the event such waste management facilities lose permitted status during the term of this Agreement, Chemical Processors will promptly notify Generator of such loss.

7. GENERATOR'S WARRANTIES.

Generator warrants that:

(a) the description of its waste materials, made in Section 1 and the Generator's Waste Material Profile Sheet(s) attached hereto as part of Exhibit A of the Supplement, is true and correct;

(b) all waste materials to be tendered by Generator hereunder will conform to such description;

(c) containers of waste materials transferred by Generator hereunder will be marked, labeled, and otherwise in conformance with governmental laws, regulations and orders;

(d) it holds (or will hold at the time of transfer) clear title to all waste materials transferred hereunder, and it is under no legal restraint or order which would prohibit transfer of possession or title to Chemical Processors for transportation, reclamation, recovery, sale, treatment, distribution, storage, or disposal;

(e) it has communicated, and will during the term hereof continue to communicate, to Chemical Processors those hazards and risks known to or learned by Generator to be incident to the handling, transportation, storage, treatment and disposal of the Waste Materials;

(f) if the Waste Materials are hazardous wastes as defined pursuant to Section 3001 of the Resource Conservation and Recovery Act, Generator has made any notifications required by Section 3010 of that Act and will comply with pertinent regulatory requirements established pursuant to Section 3002 of that Act, including the manifest requirement;

(g) if the Waste Materials are, or contain, hazardous substances as defined pursuant to Section 101 of the Federal Comprehensive Environmental Response, Compensation and Liability Act of 1980, Generator will advise chemical Processors in writing, prior to tendering or delivering to Chemical Processors (or its delegatee) any vehicular load of Waste Materials containing a reportable quantity of any hazardous substance or substance pursuant to Section 102 of said Act, specifying those hazardous substances present in a reportable quantity;

(h) if the Waste materials are covered by requirements of any state laws or regulations relating to hazardous wastes or hazardous materials, it will comply with all applicable requirements of such laws or regulations.

8. INDEMNIFICATION.

8.1 Chemical Processors agrees to indemnify, save harmless and defend Generator from and against any and all claims, penalties, forfeitures, suits, and the costs and expenses incident thereto (including costs of defense, settlement and reasonable attorneys' fees), which it may hereafter incur, become responsible for or pay out as a result of death or bodily injuries to any person, destruction or damage to any property or property rights, contamination of or adverse effects on the environment, or any violation of governmental laws, regulations or orders, caused, in whole or in part, by (i) Chemical Processors' breach of any term or provision of this Agreement or (ii) any negligent or willful act or omission of Chemical Processors, its employees or delegatees in the performance of this Agreement.

8.2 Generator agrees to indemnify, save harmless and defend Chemical Processors from and against any and all liabilities, claims, penalties, forfeitures, suits, and the costs and expenses incident thereto (including costs of defense, settlement and reasonable attorney's fees), which it may hereafter incur, become responsible for or pay out as a result of death or bodily injuries to any person, destruction or damage to any property, contamination of or adverse effects on the environment, or any violation of governmental laws, regulations or orders, caused in whole or in part, by (i) Generator's breach of any term or provision of this Agreement or (ii) any negligent or willful act or omission of Generator, its employees or subcontractors in the performance of this Agreement.

9. INSURANCE.

Chemical Processors shall procure and maintain, at its expense during the term of this Agreement, at least the following insurance, covering activities performed under, and contractual obligations undertaken in, this Agreement:

COVERAGE	LIMITS
(a) Workmen's Compensation	Statutory
(b) Employer's Liability	100,000 each accident
(c) General Liability (combined bodily injury & property damage liability)	$500,000 each occurrence
(d) Truck Liability (combined bodily injury & property damage)	$5,000,000 each occurrence $5,000,000 aggregate

10. WORK ON GENERATOR'S PREMISES.

Generator agrees to provide Chemical Processors and Chemical Processors' employees and delegatees a safe working environment for any work, in performance of this Agreement, which must be undertaken on premises owned or controlled by Generator. Chemical Processors and its employees and delegatees shall comply with Generator's safety procedures while in Generator's premises, provided such procedures are conspicuously and legibly posted in the working area or have been delivered, in writing, to Chemical Processors prior to the commencement of work on Generator's premises.

11. INDEPENDENT CONTRACTOR.

Chemical Processors is and shall perform this Agreement as an independent contractor, and as such, shall have and maintain complete control over all of its employees, agents, and operations. Neither Chemical Processors nor anyone employed by it or its delegatees shall be or be deemed to be, or act or purport to act as, the agent, representative, employee or servant of Generator.

12. INSPECTIONS.

Generator shall have the right to inspect and obtain copies of all written licenses, permits or approvals issued by any governmental entity or agency to Chemical Processor or its delegatees which are applicable to the performance of this Agreement; to inspect and test, at its own expense, transportation vehicles or vessels, containers, or disposal facilities provided by Chemical Processors or its delegatees; and to inspect the handling, loading, transportation, storage or disposal operations conducted by Chemical Processors or its delegatees in the performance of this Agreement. Such inspections are encouraged by Chemical Processors.

13. EXCUSE OF PERFORMANCE.

The performance of this Agreement, except for the obligations to comply with all laws and regulations and the payment of money for services already rendered, may be suspended by either party in the event the delivery or transportation of the Waste Materials by Generator, or the transportation, storage or disposal of the Waste Materials by Chemical Processors, are prevented by a cause or causes beyond the reasonable control of such party. Such causes shall include, but not be limited to, acts of God, acts of war, riot, fire, explosion, accident, flood, or sabotage; lack of adequate fuel, power, raw materials, labor or transportation facilities; governmental laws, regulations, requirements, orders or actions; breakage or failure of machinery or apparatus; national defense requirements; injunction or restraining orders; labor trouble, strike, lockout or injunction. Neither party shall be required by virtue of this Agreement to settle a labor dispute against its own best judgement.

14. DELEGATION AND ASSIGNMENT.

Chemical Processors may at any time delegate, orally or in writing, performance of the work, or any portion thereof, including but not limited to the transportation of the Waste Materials, which is by this Agreement undertaken by Chemical Processors; provided, however, that such delegation, unless in an emergency case in which delegation is necessary to mitigate or minimize harm or the threat of harm to human health or the environment, must be to a person or entity that has obtained all governmental permits and approvals that are required in order to perform such work. Without limiting the generality of the foregoing, (i) transportation services to be provided, to Generator under this Agreement shall be performed by Resource Recovery Corporation, a wholly-owned subsidiary of Chemical Processors, and/or by Termco Corporation, an affiliate of Chemical Processors, and its subsidiaries, Gasoline Tank Service Company, Inc. and United Drain Oil Service, Inc., and (ii) treatment, disposal, and related services to be provided to Generator under this Agreement may be performed by McClary Columbia Corporation, a subsidiary of Chemical Processors. Any such delegation shall not operate to relieve Chemical Processors of its responsibility hereunder. Either party may, at any time, upon written notice to the other party, assign its rights under this Agreement.

15. WASTE MATERIAL INFORMATION UPDATES.

Upon the written request of Chemical Processors, Generator shall provide to Chemical Processors one or more of the following: (a) a new Generator's Waste Material Profile Sheet describing the Waste Materials or a certification that the previously supplied Profile Sheet(s) remain true and accurate; (b) a certification that a specified load of waste materials delivered to Chemical Processors is representative of the Waste Materials as described on Generator's last Waste Material Profile Sheet(s); or (c) a certified representative sample of the Waste Materials. Chemical Processors shall provide forms to be used in supplying the above information or samples.

16. NOTICE.

Any notice to be given under this Agreement shall be in writing and delivered in person or by certified or registered mail to the respective party at the address below:

(Generator)

KOPPERS INDUSTRIES
7540 NW Saint Helens Road
Portland, OR 97210-3663

Attention: _____

CHEMICAL PROCESSORS
2203 Airport Way South, Suite 400
Seattle, Washington 98134

Attention: Roger E. Nelson

17. NO WAIVER.

Any failure of a party to enforce any provision of this Agreement will not constitute a waiver of such provision or prejudice the right of that party to enforce such provision at any subsequent time.

18. ENFORCEMENT.

If a suit or action is instituted in connection with any controversy arising out of this Agreement, the prevailing party shall be entitled to recover, in addition to costs, such sums as the court may adjudge reasonable as attorneys' fees.

19. RECORDS.

During the term of this Agreement and any such longer period as is required by law, Chemical Processors shall maintain records pertaining to the services it provides with respect to the Waste Materials under this Agreement. Such records shall be available for inspection by Generator at such reasonable time and place as Generator may request in writing.

20. CONFIDENTIALITY.

Each party shall treat as confidential and not disclose to others during or subsequent to the term of this Agreement, except as is required by law or is necessary to properly perform this Agreement (and then only on a confidential basis satisfactory to the other party) any information regarding the Waste Materials. Neither party shall make any news release, advertisement, or public announcement regarding the subject matter of this Agreement without the prior written approval of the other party.

21. LAW TO APPLY.

The validity, interpretation and performance of this Agreement shall be governed and construed in accordance with the laws of the Sate of Washington, and applicable Federal laws and regulations.

22. ENTIRE AGREEMENT.

This Agreement incorporates the entire understanding and agreement of the parties regarding the transportation, reclamation, recovery, sale, treatment, distribution, disposal, storage, and use of the Waste Materials and supersedes any and all terms and conditions which may be contained in any purchase orders issued by Generator prior or subsequent to this Agreement.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized representatives as of the day and year first above written.

KOPPERS INDUSTRIES

a Oregon corporation

By_____

Title:_____

CHEMICAL PROCESSORS, INC.,

a Washington corporation

By_____

Title: Director of Sales

EXHIBIT A

Generator: KOPPERS INDUSTRIES
Waste Material Profile Sheet(s) No(s).: 56135, 56136
Services to be Provided:

a. (X) Loading of the described waste materials (the "Waste Materials") onto transportation vehicles, cars or vessels.

b. (X) Transportation of the Waste Materials from
7540 NW Saint Helens Road
Portland, OR 97210-3663
to the permitted waste management facility at
McClary Columbia Corporation
Washougal, WA
by Resource Recovery and/or
Other authorized hauler **

c. (X) Receipt of the Waste Materials from
7540 NW Saint Helens Road
Portland, OR 97210-3663
to the permitted waste management facility at
McClary Columbia
Washougal, WA

Place, Time, and Frequency and Quantity(ies) & Transfer of Title to Waste Materials: 8:00 AM - 4:30 PM weekdays, except holidays, weather permitting.

KOPPERS INDUSTRIES
7540 NW Saint Helens Road
Portland, OR 97210-3663

EXHIBIT B

FEES: FREIGHT FOR ALL WASTE SHIPMENTS TO BE PREPAID BY THE GENERATOR TO THE MCCLARY COLUMBIA FACILITY IN WASHOUGAL.

PROFILE #56135:	Waste Creosote Tank Bottoms for Alternate Fuels	$ 2.00/gallon (bulk)
	Non-pumpable Solids & Sludges for Destructive Incineration	$ 12.00/gallon
PROFILE #56136:	Waste Creosote/Soils for Disposal	$155.00/drum (no free liquids present)
		$219.00/drum (free liquids present)
	Profile Fees	$ 75.00/profile

TRANSPORTATION BY TARIFF:

By their signatures hereto, the parties agree that these Exhibits A and B of this Supplement, including the referenced Waste Material Profile Sheet(s), shall be considered an attachment to, and part of, that certain "Waste Transportation and Management Agreement" identified above.

Date: _____

CHEMICAL PROCESSORS, INC. KOPPERS INDUSTRIES

By _____ By _____
Title Director of Sales Title _____

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number ORD027734359	2. Page 1 of 1	3. Emergency Response Phone (206) 363-9000	4. Manifest Tracking Number 001323235 JJK

GENERATOR

5. Generator's Name and Mailing Address
KOPPERS IND
7540 NW ST HELENS
PORTLAND, OR 97210
Generator's Phone: 360-907-8162

Generator's Site Address (if different than mailing address)
KOPPERS IND. PORTLAND TAR PLANT
7540 NW ST HELENS RD
PORTLAND OR 97210
360-907-8162

6. Transporter 1 Company Name: ENVIROTECH SYSTEMS — U.S. EPA ID Number: WAH000012450

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
BURLINGTON ENVIRONMENTAL, INC.
20245 77TH AVE. SOUTH
KENT, WA 98032
Facility's Phone: 253-872-8030
U.S. EPA ID Number: WAD991281767

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
	1. WASTE CARBON DISULFIDE 3(6.1) UN1131 PGI	001	CF	00015	P	P022		
	2. WASTE TOXIC LIQUID, ORGANIC, N.O.S. 6.1 UN2810 PGIII	001	DM	00120	P	U080	U210	D039
	3. WASTE HYDROCHLORIC ACID 8 UN1789 PGII	001	DF	00005	P	D002		
	4. WASTE CALCIUM CARBIDE MIXTURE 4.3 UN1402 PGII	001	DF	00015	P	D003		

14. Special Handling Instructions and Additional Information
A. PSC# ETSI 3(6.1)D-03, DM# KI-L01, WSTWT6#, ERG#131
B. PSC# ETSI6.1-D-05, DM# KI-L02, WSTWT9#, ERG#153
C. PSC# ETSI-8AD-05, DM# KI-L03, WSTWT 1#, ERG#157
D. PSC# ETSI-4.3D-04, DM# KI-L04, WSTWT 2#, ERG#138
WSTWT 7##
CERTIFICATE OF TREATMENT REQUIRED

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: [illegible] — Signature: [signature] — Month 4 Day 19 Year 07

INTL

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Leonard J. Warnock — Signature: [signature] — Month 04 Day 19 Year 07

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H141	H141	H141	H141

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: [illegible] — Signature: [signature] — Month 04 Day 26 Year 07

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR
APR 26 AM 11:11

Koppers004395

CleanHarbors
ENVIRONMENTAL SERVICES®

BENZENE NESHAP QUESTIONNAIRE **Profile Number**_____

This form is for industries with SIC codes that are potentially subject to the Benzene NESHAP regulation that requires Clean Harbors to follow additional recordkeeping procedures (40CFR61Subpart FF)

1. Does the hazardous waste stream come from a facility with one of the following SIC codes listed under the NESHAP?

NESHAP SIC CODES

2812	2813	2816	2819	2821	2822	2823	2824	2833	2834
2835	2836	2841	2842	2843	2844	2851	2861	**2865**	2869
2873	2874	2879	2891	2892	2893	2895	2899	2911	3312
4953									

A. Yes If yes, please circle the appropriate SIC code(s). B. No If no, skip to #6
If your SIC code is 3312, do you perform COKE oven byproduct recovery operations? A. Yes B. No

If your SIC code is 4953, does your facility accept wastes from chemical manufacturing plants, coke by-product recovery plants or petroleum refineries? A. Yes B. No

2. Does this hazardous waste contain benzene? A. Yes (Go to #3) B. No (Go to #6)

3. What is the Total Annual Benzene (TAB) for the facility that generated this waste?

A. _____ Megagrams[1]/year (1 Mg = 2200 lbs.)

B. For what calendar year was the TAB calculated? _____

4. What is the Total Benzene concentration in your waste?

A. _____percent B. _____ppmw

The basis for this benzene concentration is: Knowledge of the Waste **OR** Test Data

If knowledge, please describe the knowledge that you rely upon in making this claim: _____

_____

If testing, please attach analytical. Date of the sampling data_____

Has the process that generates the benzene-containing waste stream materially changed since the time of your evaluation based on testing or knowledge? Yes No

5. Does the waste contain >10% water? A. Yes B. No
If yes, the average concentration of water is _____%.

6. CERTIFICATION:

I certify that all information (including attachments) is complete and factual and is accurate representation of the known and suspected hazards, pertaining to the waste described herein. If the concentration of benzene in this waste stream is represented as a range, I certify that the actual benzene concentration in the waste being shipped is not greater than the maximum of the range listed. I will notify Clean Harbors if any of the above information changes.

Signature: _____ Company Name: Koppers Inc.

Printed Name: T.J. Turner Title: Plant Superintendent Date: 4-18-07

[1] Benzene NESHAP wastes generated at 10 Megagram or greater facilities require a notification statement to accompany each shipment [40 CFR 61.342(f)(2)]

CleanHarbors
ENVIRONMENTAL SERVICES®

BENZENE NESHAP QUESTIONNAIRE **Profile Number**_____

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2835	2836	2841	2842	2843	2844	2851	2861	**2865**	2869
2873	2874	2879	2891	2892	2893	2895	2899	2911	3312
4953									

A. Yes If yes, please circle the appropriate SIC code(s). B. No If no, skip to #6
If your SIC code is 3312, do you perform COKE oven byproduct recovery operations? A. Yes B. No

If your SIC code is 4953, does your facility accept wastes from chemical manufacturing plants, coke by-product recovery plants or petroleum refineries? A. Yes B. No

2. Does this hazardous waste contain benzene? A. Yes (Go to #3) B. **No** (Go to #6)

3. What is the Total Annual Benzene (TAB) for the facility that generated this waste?

A. _____ Megagrams[1]/year (1 Mg = 2200 lbs.)

B. For what calendar year was the TAB calculated? _____

4. What is the Total Benzene concentration in your waste?

A. _____percent B. _____ppmw

The basis for this benzene concentration is: Knowledge of the Waste **OR** Test Data

If knowledge, please describe the knowledge that you rely upon in making this claim: _____

_____

If testing, please attach analytical. Date of the sampling data_____

Has the process that generates the benzene-containing waste stream materially changed since the time of your evaluation based on testing or knowledge? Yes No

5. Does the waste contain >10% water? A. Yes B. No
If yes, the average concentration of water is _____%.

6. CERTIFICATION:

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Signature: _____ Company Name: Koppers Inc.

Printed Name: T.J. Turner Title: Plant Superintendent Date: 4-18-07

[1] Benzene NESHAP wastes generated at 10 Megagram or greater facilities require a notification statement to accompany each shipment [40 CFR 61.342(f)(2)]

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
ORD027734359	1	(206) 363-9000	001323247 JJK

GENERATOR

5. Generator's Name and Mailing Address
KOPPERS IND
7540 NW ST HELENS
PORTLAND, OR 97210
Generator's Phone: 360-407-8162

Generator's Site Address (if different than mailing address)
KOPPERS IND. PORTLAND TAR PLANT
7540 NW ST HELENS RD
PORTLAND OR 97210
360-907-8162

6. Transporter 1 Company Name: ENVIROTECH SYSTEMS — U.S. EPA ID Number: WAH000012450

7. Transporter 2 Company Name: TRI STATE MOTOR TRANSIT CO. — U.S. EPA ID Number: MOD985036998

8. Designated Facility Name and Site Address
POLLUTION CONTROL INDUSTRIES
4343 KENNEDY AVE
EAST CHICAGO, IN 46312
Facility's Phone: 219-397-3661
U.S. EPA ID Number: INDOOR646943

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
	1. RQ WASTE FLAMMABLE LIQUIDS, N.O.S. 9 UN1993 PG II RQ (D001) (TOLUENE, XYLENE)	001	DM	00009	G	D001 U220	F003, F U359	U002 F105
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
1. PO#3286621F, ESI# 07-083-17-01, ERG# 126
CERTIFICATE OF DISPOSAL REQUIRED

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: T. J. Tarnock — Signature — Month: 4 Day: 14 Year: 17

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Leonard J. Warnock — Signature — Month: 04 Day: 14 Year: 17

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month — Day — Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name — Signature — Month — Day — Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete. **GENERATOR'S INITIAL COPY**

U.S. EPA Form 8700-22

Read all instructions before completing this form.

1. This form has been designed for use on a 12-pitch (elite) typewriter which is also compatible with standard computer printers; a firm point pen may also be used—press down hard.
2. Federal regulations require generators and transporters of hazardous waste and owners or operators of hazardous waste treatment, storage, and disposal facilities to complete this form (EPA Form 8700–22) and, if necessary, the continuation sheet (EPA Form 8700–22A) for both inter- and intrastate transportation of hazardous waste.

Public reporting burden for this collection of information is estimated to average: 30 minutes for generators, 10 minutes for transporters, and 25 minutes for owners or operators of treatment, storage, and disposal facilities. This includes time for reviewing instructions, gathering data, completing, reviewing and transmitting the form. Any correspondence regarding the PRA burden statement for the manifest must be sent to the Director of the Collection Strategies Division in EPA's Office of Information Collection at the following address: U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW., Washington, DC 20460. Do not send the completed form to this address.

I. Instructions for Generators

Item 1. Generator's U.S. EPA Identification Number

Enter the generator's U.S. EPA twelve digit identification number, or the State generator identification number if the generator site does not have an EPA identification number.

Item 2. Page 1 of ___

Enter the total number of pages used to complete this Manifest (*i.e.*, the first page (EPA Form 8700-22) plus the number of Continuation Sheets (EPA Form 8700-22A), if any).

Item 3. Emergency Response Phone Number

Enter a phone number for which emergency response information can be obtained in the event of an incident during transportation. The emergency response phone number must:

1. Be the number of the generator or the number of an agency or organization who is capable of and accepts responsibility for providing detailed information about the shipment;
2. Reach a phone that is monitored 24 hours a day at all times the waste is in transportation (including transportation-related storage); and
3. Reach someone who is either knowledgeable of the hazardous waste being shipped and has comprehensive emergency response and spill cleanup/incident mitigation information for the material being shipped or has immediate access to a person who has that knowledge and information about the shipment.

Note: Emergency Response phone number information should only be entered in Item 3 when there is one phone number that applies to all the waste materials described in Item 9b. If a situation (*e.g.*, consolidated shipments) arises where more than one Emergency Response phone number applies to the various wastes listed on the manifest, the phone numbers associated with each specific material should be entered after its description in Item 9b.

Item 4. Manifest Tracking Number

This unique tracking number must be pre-printed on the manifest by the forms printer.

Item 5. Generator's Mailing Address, Phone Number and Site Address

Enter the name of the generator, the mailing address to which the completed manifest signed by the designated facility should be mailed, and the generator's telephone number. Note, the telephone number (including area code) should be the normal business number for the generator, or the number where the generator or his authorized agent may be reached to provide instructions in the event the designated and/or alternate (if any) facility rejects some or all of the shipment. Also enter the physical site address from which the shipment originates only if this address is different than the mailing address.

Item 6. Transporter 1 Company Name, and U.S. EPA ID Number

Enter the company name and U.S. EPA ID number of the first transporter who will transport the waste. Vehicle or driver information may not be entered here.

Item 7. Transporter 2 Company Name and U.S. EPA ID Number

If applicable, enter the company name and U.S. EPA ID number of the second transporter who will transport the waste. Vehicle or driver information may not be entered here.

If more than two transporters are needed, use a Continuation Sheet(s) (EPA Form 8700-22A).

Item 8. Designated Facility Name, Site Address, and U.S. EPA ID Number

Enter the company name and site address of the facility designated to receive the waste listed on this manifest. Also enter the facility's phone number and the U.S. EPA twelve digit identification number of the facility.

Item 9. U.S. DOT Description (Including Proper Shipping Name, Hazard Class or Division, Identification Number, and Packing Group)

Item 9a. If the wastes identified in Item 9b consist of both hazardous and nonhazardous materials, then identify the hazardous materials by entering an "X" in this Item next to the corresponding hazardous material identified in Item 9b.

Item 9b. Enter the U.S. DOT Proper Shipping Name, Hazard Class or Division, Identification Number (UN/NA) and Packing Group for each waste as identified in 49 CFR 172. Include technical name(s) and reportable quantity references, if applicable.

Note: *If additional space is needed for waste descriptions, enter these additional descriptions in Item 27 on the Continuation Sheet (EPA Form 8700-22A).* Also, if more than one Emergency Response phone number applies to the various wastes described in either Item 9b or Item 27, enter applicable Emergency Response phone numbers immediately following the shipping descriptions for those items.

Item 10. Containers (Number and Type)

Enter the number of containers for each waste and the appropriate abbreviation from Table I (below) for the type of container.

TABLE I.–TYPES OF CONTAINERS

BA = Burlap, cloth, paper, or plastic bags.	DT = Dump truck.
CF = Fiber or plastic boxes, cartons, cases.	DW = Wooden drums, barrels, kegs.
CM = Metal boxes, cartons, cases (including roll-offs).	HG = Hopper or gondola cars.
CW = Wooden boxes, cartons, cases.	TC = Tank cars.
CY = Cylinders.	TP = Portable tanks.
DF = Fiberboard or plastic drums, barrels, kegs.	TT = Cargo tanks (tank trucks).
DM = Metal drums, barrels, kegs.	

Item 11. Total Quantity

Enter, in designated boxes, the total quantity of waste. Round partial units to the nearest whole unit, and *do not* enter decimals or fractions. To the extent practical, report quantities using appropriate units of measure that will allow you to report quantities with precision. Waste quantities entered should be based on actual measurements or reasonably accurate estimates of actual quantities shipped. Container capacities are not acceptable as estimates.

Item 12. Units of Measure (Weight/Volume)

Enter, in designated boxes, the appropriate abbreviation from Table II (below) for the unit of measure.

TABLE II.–UNITS OF MEASURE

G = Gallons (liquids only).	N = Cubic Meters.
K = Kilograms.	P = Pounds.
L = Liters (liquids only).	T = Tons (2000 Pounds).
M = Metric Tons (1000 kilograms).	Y = Cubic Yards.

Note: Tons, Metric Tons, Cubic Meters, and Cubic Yards should only be reported in connection with very large bulk shipments, such as rail cars, tank trucks, or barges.

Item 13. Waste Codes

Enter up to six federal and state waste codes to describe each waste stream identified in Item 9b. State waste codes that are not redundant with federal codes must be entered here, in addition to the federal waste codes which are most representative of the properties of the waste.

Item 14. Special Handling Instructions and Additional Information

1. Generators may enter any special handling or shipment-specific information necessary for the proper management or tracking of the materials under the generator's or other handler's business processes, such as waste profile numbers, container codes, bar codes, or response guide numbers. Generators also may use this space to enter additional descriptive information about their shipped materials, such as chemical names, constituent percentages, physical state, or specific gravity of wastes identified with volume units in Item 12.
2. This space may be used to record limited types of federally required information for which there is no specific space provided on the manifest, including any alternate facility designations, the manifest tracking number of the original manifest for rejected wastes and residues that are re-shipped under a second manifest, and the specification of PCB waste descriptions and PCB out-of-service dates required under 40 CFR 761.207. Generators, however, cannot be required to enter information in this space to meet state regulatory requirements.

Item 15. Generator's/Offeror's Certification

1. The generator must read, sign, and date the waste minimization certification statement. In signing the waste minimization certification statement, those generators who have not been exempted by statute or regulation from the duty to make a waste minimization certification under section 3002(b) of RCRA are also certifying that they have complied with the waste minimization requirements. The Generator's Certification also contains the required attestation that the shipment has been properly prepared and is in proper condition for transportation (the shipper's certification). The content of the shipper's certification statement is as follows: "I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent." When a party other than the generator prepares the shipment for transportation, this party may also sign the shipper's certification statement as the offeror of the shipment.
2. Generator or Offeror personnel may preprint the words, "On behalf of" in the signature block or may hand write this statement in the signature block prior to signing the generator/offeror certification, to indicate that the individual signs as the employee or agent of the named principal.

Note: All of the above information except the handwritten signature required in Item 15 may be pre-printed.

Koppers004399

POLLUTION CONTROL INDUSTRIES, INC.

LAND DISPOSAL RESTRICTION NOTIFICATION FORM 1

Page 1 of 1

Generator Name/Location Koppers Ind. Portland Tar Plant

EPA ID Number ORD027734359 Manifest Number 001323047

Waste Analysis Available: ____ Yes ✓ No ____ On file at facility

PROFILE #	RCRA NON-REGULATED Please check if waste stream is not regulated by RCRA	RCRA WASTE CODES (List all that apply)	SUBCATEGORY (See Table II and Select Key # if applicable)	TREATABILITY GROUP Please check the applicable treatability group		REGULATED CONSTITUENTS FOR F001, F002, F003, F004, F005	UNDERLYING HAZARDOUS CONSTITUENTS FOR D001*, D002, D003* D004-D043
				Non-wastewater >1% TOC & >1% TSS	Wastewater	List all applicable constituents from key below	List all applicable constituents from Table 1
a	b	c	D	e	f	g	h
323862LF		D001, F003, F005 U002, U220, U239	HIGH TOC	✓		26, 32, 5	35 215, 229

REGULATED CONSTITUENTS FOR F001, F002, F003, F004, F005, (for Column g)

5) Acetone
6) Benzene
7) N-Butyl Alcohol
8) Carbon Disulfide
9) Carbon Tetrachloride
10) Chlorobenzene
11) Cresols (o, m, or p isomers)
12) Cresylic Acid
13) Cyclohexanone
14) 1,2-Dichlorobenzene
15) Ethyl Acetate
16) Ethyl Benzene
17) Ethyl Ether
18) Isobutanol (Isobutyl alcohol)
19) Methanol
20) Methylene Chloride
21) Methyl Ethyl Ketone
22) Methyl Isobutyl Ketone
23) Nitrobenzene
24) Pyridine
25) Tetrachloroethylene
26) Toluene
27) 1,1,1 Trichloroethane
28) 1,1,2 Trichloroethane
29) 1,1,2 Trichloro 1,2,2 Trifluoroethane
30) Trichloroethylene
31) Trichlorofluoromethane
32) Xylene (Total)

I certify under penalty of law that the above information is accurate and true.

Signature: [signature] Print Name [signature] Date 4-19-07

Koppers004400

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: ORD027734359
2. Page 1 of 1
3. Emergency Response Phone: (206) 363-9000
4. Manifest Tracking Number: **001323235 JJK**

5. Generator's Name and Mailing Address: KOPPERS IND, 7540 NW ST HELENS, PORTLAND, OR 97210, 360-907-8162

Generator's Site Address (if different than mailing address): KOPPERS IND. PORTLAND TAR PLANT, 7540 NW ST HELENS RD, PORTLAND OR 97210, 360-907-8162

Generator's Phone:

6. Transporter 1 Company Name: ENVIROTECH SYSTEMS — U.S. EPA ID Number: WAH000012450

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address: BURLINGTON ENVIRONMENTAL, INC, 20245 77TH AVE SOUTH, KENT WA 98032, 253-872-8030 — U.S. EPA ID Number: WAD991281767

Facility's Phone:

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
	1. WASTE CARBON DISULFIDE 3(6.1) UN1131 PGI	001	CF	00015	P	P022		
	2. WASTE TOXIC LIQUID, ORGANIC, N.O.S. 6.1 UN2810 PGIII	001	DM	00120	P	D000	D210	D009
	3. WASTE HYDROCHLORIC ACID 8 UN1789 PGII	001	DF	00005	P	D002		
	4. WASTE CALCIUM CARBIDE MIXTURE 4.3 UN1402 PGII	001	DF	00015	P	D003		

14. Special Handling Instructions and Additional Information

A. PSC# ETSI 3(6.1)D-03, DM#KI-L01, WSTWT6#, ERG#131
B. PSC# ETSI6.1-D-05, DM# KI-L02, WSTWT9#, ERG#153 WST WT 7#
C. PSC# ETSI-3AD-05, DM# KI-L03, WSTWT 1#, ERG#157
D. PSC# ETSI-4.3D-04, DM# KI-L04, WSTWT1#, ERG#138

CERTIFICATE OF TREATMENT REQUIRED

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Generator's/Offeror's Printed/Typed Name: X [signature] — Signature: [signature] — Month 4 Day 19 Year 07

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Leonard J. Warnock — Signature: Leonard J. Warnock — Month 04 Day 19 Year 07

Transporter 2 Printed/Typed Name — Signature — Month Day Year

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1. 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name — Signature — Month Day Year

GENERATOR / INT'L / TRANSPORTER / DESIGNATED FACILITY

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

GENERATOR'S INITIAL COPY

U.S. EPA Form 8700-22

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2. Federal regulations require generators and transporters of hazardous waste and owners or operators of hazardous waste treatment, storage, and disposal facilities to complete this form (EPA Form 8700–22) and, if necessary, the continuation sheet (EPA Form 8700–22A) for both inter- and intrastate transportation of hazardous waste.

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I. Instructions for Generators

Item 1. Generator's U.S. EPA Identification Number

Enter the generator's U.S. EPA twelve digit identification number, or the State generator identification number if the generator site does not have an EPA identification number.

Item 2. Page 1 of ___

Enter the total number of pages used to complete this Manifest (*i.e.*, the first page (EPA Form 8700-22) plus the number of Continuation Sheets (EPA Form 8700-22A), if any).

Item 3. Emergency Response Phone Number

Enter a phone number for which emergency response information can be obtained in the event of an incident during transportation. The emergency response phone number must:

1. Be the number of the generator or the number of an agency or organization who is capable of and accepts responsibility for providing detailed information about the shipment;
2. Reach a phone that is monitored 24 hours a day at all times the waste is in transportation (including transportation related storage); and
3. Reach someone who is either knowledgeable of the hazardous waste being shipped and has comprehensive emergency response and spill cleanup/incident mitigation information for the material being shipped or has immediate access to a person who has that knowledge and information about the shipment.

Note: Emergency Response phone number information should only be entered in Item 3 when there is one phone number that applies to all the waste materials described in Item 9b. If a situation (*e.g.*, consolidated shipments) arises where more than one Emergency Response phone number applies to the various wastes listed on the manifest, the phone numbers associated with each specific material should be entered after its description in Item 9b.

Item 4. Manifest Tracking Number

This unique tracking number must be pre-printed on the manifest by the forms printer.

Item 5. Generator's Mailing Address, Phone Number and Site Address

Enter the name of the generator, the mailing address to which the completed manifest signed by the designated facility should be mailed, and the generator's telephone number. Note, the telephone number (including area code) should be the normal business number for the generator, or the number where the generator or his authorized agent may be reached to provide instructions in the event the designated and/or alternate (if any) facility rejects some or all of the shipment. Also enter the physical site address from which the shipment originates only if this address is different than the mailing address.

Item 6. Transporter 1 Company Name, and U.S. EPA ID Number

Enter the company name and U.S. EPA ID number of the first transporter who will transport the waste. Vehicle or driver information may not be entered here.

Item 7. Transporter 2 Company Name and U.S. EPA ID Number

If applicable, enter the company name and U.S. EPA ID number of the second transporter who will transport the waste. Vehicle or driver information may not be entered here.

If more than two transporters are needed, use a Continuation Sheet(s) (EPA Form 8700-22A).

Item 8. Designated Facility Name, Site Address, and U.S. EPA ID Number

Enter the company name and site address of the facility designated to receive the waste listed on this manifest. Also enter the facility's phone number and the U.S. EPA twelve digit identification number of the facility.

Item 9. U.S. DOT Description (Including Proper Shipping Name, Hazard Class or Division, Identification Number, and Packing Group)

Item 9a. If the wastes identified in Item 9b consist of both hazardous and nonhazardous materials, then identify the hazardous materials by entering an "X" in this Item next to the corresponding hazardous material identified in Item 9b.

Item 9b. Enter the U.S. DOT Proper Shipping Name, Hazard Class or Division, Identification Number (UN/NA) and Packing Group for each waste as identified in 49 CFR 172. Include technical name(s) and reportable quantity references, if applicable.

Note: If additional space is needed for waste descriptions, enter these additional descriptions in Item 27 on the Continuation Sheet (EPA Form 8700-22A). Also, if more than one Emergency Response phone number applies to the various wastes described in either Item 9b or Item 27, enter applicable Emergency Response phone numbers immediately following the shipping descriptions for those Items.

Item 10. Containers (Number and Type)

Enter the number of containers for each waste and the appropriate abbreviation from Table I (below) for the type of container.

TABLE I.--TYPES OF CONTAINERS

BA = Burlap, cloth, paper, or plastic bags.	DT = Dump truck.
CF = Fiber or plastic boxes, cartons, cases.	DW = Wooden drums, barrels, kegs.
CM = Metal boxes, cartons, cases (including roll-offs).	HG = Hopper or gondola cars.
CW = Wooden boxes, cartons, cases.	TC = Tank cars.
CY = Cylinders.	TP = Portable tanks.
DF = Fiberboard or plastic drums, barrels, kegs.	TT = Cargo tanks (tank trucks).
DM = Metal drums, barrels, kegs.	

Item 11. Total Quantity

Enter, in designated boxes, the total quantity of waste. Round partial units to the nearest whole unit, and *do not* enter decimals or fractions. To the extent practical, report quantities using appropriate units of measure that will allow you to report quantities with precision. Waste quantities entered should be based on actual measurements or reasonably accurate estimates of actual quantities shipped. Container capacities are not acceptable as estimates.

Item 12. Units of Measure (Weight/Volume)

Enter, in designated boxes, the appropriate abbreviation from Table II (below) for the unit of measure.

TABLE II.--UNITS OF MEASURE

G = Gallons (liquids only).	N = Cubic Meters.
K = Kilograms.	P = Pounds.
L = Liters (liquids only).	T = Tons (2000 Pounds).
M = Metric Tons (1000 kilograms).	Y = Cubic Yards.

Note: Tons, Metric Tons, Cubic Meters, and Cubic Yards should only be reported in connection with very large bulk shipments, such as rail cars, tank trucks, or barges.

Item 13. Waste Codes

Enter up to six federal and state waste codes to describe each waste stream identified in Item 9b. State waste codes that are not redundant with federal codes must be entered here, in addition to the federal waste codes which are most representative of the properties of the waste.

Item 14. Special Handling Instructions and Additional Information

1. Generators may enter any special handling or shipment-specific information necessary for the proper management or tracking of the materials under the generator's or other handler's business processes, such as waste profile numbers, container codes, bar codes, or response guide numbers. Generators also may use this space to enter additional descriptive information about their shipped materials, such as chemical names, constituent percentages, physical state, or specific gravity of wastes identified with volume units in Item 12.
2. This space may be used to record limited types of federally required information for which there is no specific space provided on the manifest, including any alternate facility designations; the manifest tracking number of the original manifest for rejected wastes and residues that are re-shipped under a second manifest; and the specification of PCB waste descriptions and PCB out-of-service dates required under 40 CFR 761.207. Generators, however, cannot be required to enter information in this space to meet state regulatory requirements.

Item 15. Generator's/Offeror's Certifications

1. The generator must read, sign, and date the waste minimization certification statement. In signing the waste minimization certification statement, those generators who have not been exempted by statute or regulation from the duty to make a waste minimization certification under section 3002(b) of RCRA are also certifying that they have complied with the waste minimization requirements. The Generator's Certification also contains the required attestation that the shipment has been properly prepared and is in proper condition for transportation (the shipper's certification). The content of the shipper's certification statement is as follows: "I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent." When a party other than the generator prepares the shipment for transportation, this party may also sign the shipper's certification statement as the offeror of the shipment.
2. Generator or Offeror personnel may preprint the words, "On behalf of" in the signature block or may hand write this statement in the signature block prior to signing the generator/offeror certification, to indicate that the individual signs as the employee or agent of the named principal.

Note: All of the above information except the handwritten signature required in Item 15 may be pre-printed.

Burlington Environmental Inc.

RCRA Land Disposal Restriction Notification Form EZ

This form is applicable to characteristic wastes (D codes), listed wastes (F, K, U and P codes), California List Wastes, and Hazardous Debris.

Generator: Koppers/NS Portland U.S. EPA I.D. #: ORD027734359

Burlington Profile #: ETSI 3(6.1)S-03 Manifest #: 001373335

The wastes identified on this form are subject to the land disposal restrictions of 40 CFR Part 268. The wastes do not meet the treatment standards specified in Part 268, Subpart D or do not meet the applicable prohibition levels specified in 268.32 or RCRA Section 3004(d). Pursuant to 40 CFR 268.7(a), the required information applicable to each waste is identified below (check all boxes that apply):

Treatability Group: ☐ Wastewater ☒ Nonwastewater

(Wastewaters contain less than 1% filterable solids and less than 1% Total Organic Carbon)

- ☐ D001 Ignitable (except for High TOC) managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems
  (If this box is checked, complete and attach Form UC to address underlying hazardous constituents)
- ☐ D001 Ignitable (except for High TOC) managed in CWA/ CWA-equivalent/Class I SDWA systems
- ☒ D001 High TOC Ignitable (greater than 10% total organic carbon)
- ☐ D002 Corrosive managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems
  (If this box is checked, complete and attach Form UC to address underlying hazardous constituents)
- ☐ D002 Corrosive managed in CWA/ CWA-equivalent/Class I SDWA systems
- ☐ D003 Reactive Sulfides based on 261.23(a)(5)
- ☐ D003 Reactive Cyanides based on 261.23(a)(5)
- ☐ D003 Water Reactives based on 261.23(a)(2),(3) and (4)
- ☐ D003 Explosives based on 261.23(a)(6),(7) and (8)
- ☐ D003 Other Reactives based on 261.23(a)(1)
- ☐ D004 Arsenic ☐ D005 Barium ☐ D006 Cadmium ☐ D006 Cadmium-containing batteries
- ☐ D007 Chromium ☐ D008 Lead ☐ D008 Lead acid batteries
- ☐ D009 High-mercury inorganic (>260 mg/kg total), including incinerator residue and residues from RMERC
- ☐ D009 High-mercury organic (>260 mg/kg total), not including incinerator residue
- ☐ D009 Low-mercury (<260 mg/kg total) ☐ D009 All D009 wastewaters
- ☐ D010 Selenium ☐ D011 Silver

If D012-43 boxes are checked, complete and attach Form UC to address underlying hazardous constituents (unless these wastes are to be managed in CWA/CWA-equivalent/Class I SDWA systems):

☐ D012 Endrin	☐ D023 *o*-Cresol	☐ D033 Hexachlorobutadiene
☐ D013 Lindane	☐ D024 *m*-Cresol	☐ D034 Hexachloroethane
☐ D014 Methoxychlor	☐ D025 *p*-Cresol	☐ D035 Methyl ethyl ketone
☐ D015 Toxaphene	☐ D026 Cresols (Total)	☐ D036 Nitrobenzene
☐ D016 2,4-D	☐ D027 *p*-Dichlorobenzene	☐ D037 Pentachlorophenol
☐ D017 2,4,5-TP (Silvex)	☐ D028 1,2-Dichloroethane	☐ D038 Pyridine
☐ D018 Benzene	☐ D029 1,1-Dichloroethylene	☐ D039 Tetrachloroethylene
☐ D019 Carbon tetrachloride	☐ D030 2,4-Dinitrotoluene	☐ D040 Trichloroethylene
☐ D020 Chlordane	☐ D031 Heptachlor	☐ D041 2,4,5-Trichlorophenol
☐ D021 Chlorobenzene	☐ D032 Hexachlorobenzene	☐ D042 2,4,6-Trichlorophenol
☐ D022 Chloroform		☐ D043 Vinyl chloride

In addition, the following wastes are included in this shipment:

- ☐ F001-F005 spent solvents. *(If this box is checked, complete the F001-F005 section on the back of this form. Check the hazardous waste number(s) that applies, and identify the constituents likely to be present in the waste.)*
- ☐ F039 multisource leachate. *(If this box is checked, complete and attach Form UC to identify the individual constituents.)*
- ☐ RCRA Section 3004(d) California list wastes. *(If this box is checked, complete the California List section on the back page of this form.)*
- ☐ Hazardous Debris *(If this box is checked, complete the Hazardous Debris section on the back page of this form.)*

If this shipment carries additional waste codes that are not addressed above, identify them here:

EPA Waste Code	Subcategory (if applicable)	EPA Waste Code	Subcategory (if applicable)
D022			

Burlington Environmental Inc.

RCRA Land Disposal Restriction Notification Form EZ

This form is applicable to characteristic wastes (D codes), listed wastes (F, K, U and P codes), California List Wastes, and Hazardous Debris.

Generator: KOPPERS IND. TAR PLANT U.S. EPA I.D. #: ORD027734359

Burlington Profile #: 175161.1D-05 Manifest #: 001323235

The wastes identified on this form are subject to the land disposal restrictions of 40 CFR Part 268. The wastes do not meet the treatment standards specified in Part 268, Subpart D or do not meet the applicable prohibition levels specified in 268.32 or RCRA Section 3004(d). Pursuant to 40 CFR 268.7(a), the required information applicable to each waste is identified below (check all boxes that apply):

Treatability Group: ☐ Wastewater ☒ Nonwastewater

(Wastewaters contain less than 1% filterable solids and less than 1% Total Organic Carbon)

- ☐ D001 Ignitable (except for High TOC) managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems
  (If this box is checked, complete and attach Form UC to address underlying hazardous constituents)
- ☐ D001 Ignitable (except for High TOC) managed in CWA/ CWA-equivalent/Class I SDWA systems
- ☒ D001 High TOC Ignitable (greater than 10% total organic carbon)
- ☐ D002 Corrosive managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems
  (If this box is checked, complete and attach Form UC to address underlying hazardous constituents)
- ☐ D002 Corrosive managed in CWA/ CWA-equivalent/Class I SDWA systems
- ☐ D003 Reactive Sulfides based on 261.23(a)(5)
- ☐ D003 Reactive Cyanides based on 261.23(a)(5)
- ☐ D003 Water Reactives based on 261.23(a)(2),(3) and (4)
- ☐ D003 Explosives based on 261.23(a)(6),(7) and (8)
- ☐ D003 Other Reactives based on 261.23(a)(1)
- ☐ D004 Arsenic ☐ D005 Barium ☐ D006 Cadmium ☐ D006 Cadmium-containing batteries
- ☐ D007 Chromium ☐ D008 Lead ☐ D008 Lead acid batteries
- ☐ D009 High-mercury inorganic (>260 mg/kg total), including incinerator residue and residues from RMERC
- ☐ D009 High-mercury organic (>260 mg/kg total), not including incinerator residue
- ☐ D009 Low-mercury (<260 mg/kg total) ☐ D009 All D009 wastewaters
- ☐ D010 Selenium ☐ D011 Silver

If D012-43 boxes are checked, complete and attach Form UC to address underlying hazardous constituents (unless these wastes are to be managed in CWA/CWA-equivalent/Class I SDWA systems):

☐ D012 Endrin	☐ D023 *o*-Cresol	☐ D033 Hexachlorobutadiene
☐ D013 Lindane	☐ D024 *m*-Cresol	☐ D034 Hexachloroethane
☐ D014 Methoxychlor	☐ D025 *p*-Cresol	☐ D035 Methyl ethyl ketone
☐ D015 Toxaphene	☐ D026 Cresols (Total)	☐ D036 Nitrobenzene
☐ D016 2,4-D	☐ D027 *p*-Dichlorobenzene	☐ D037 Pentachlorophenol
☐ D017 2,4,5-TP (Silvex)	☐ D028 1,2-Dichloroethane	☐ D038 Pyridine
☐ D018 Benzene	☐ D029 1,1-Dichloroethylene	☒ D039 Tetrachloroethylene
☐ D019 Carbon tetrachloride	☐ D030 2,4-Dinitrotoluene	☐ D040 Trichloroethylene
☐ D020 Chlordane	☐ D031 Heptachlor	☐ D041 2,4,5-Trichlorophenol
☐ D021 Chlorobenzene	☐ D032 Hexachlorobenzene	☐ D042 2,4,6-Trichlorophenol
☐ D022 Chloroform		☐ D043 Vinyl chloride

In addition, the following wastes are included in this shipment:

☐ F001-F005 spent solvents. *(If this box is checked, complete the F001-F005 section on the back of this form. Check the hazardous waste number(s) that applies, and identify the constituents likely to be present in the waste.)*

☐ F039 multisource leachate. *(If this box is checked, complete and attach Form UC to identify the individual constituents.)*

☐ RCRA Section 3004(d) California list wastes. *(If this box is checked, complete the California List section on the back page of this form.)*

☐ Hazardous Debris *(If this box is checked, complete the Hazardous Debris section on the back page of this form.)*

If this shipment carries additional waste codes that are not addressed above, identify them here:

EPA Waste Code	Subcategory (if applicable)	EPA Waste Code	Subcategory (if applicable)
U080			
U210			

Burlington Environmental Inc.

RCRA Land Disposal Restriction Notification Form EZ

This form is applicable to characteristic wastes (D codes), listed wastes (F, K, U and P codes), California List Wastes, and Hazardous Debris.

Generator: KOPPERS IND. TAR PLANT U.S. EPA I.D. #: ORD027734359

Burlington Profile #: 87518AD-05 Manifest #: 001323235

The wastes identified on this form are subject to the land disposal restrictions of 40 CFR Part 268. The wastes do not meet the treatment standards specified in Part 268, Subpart D or do not meet the applicable prohibition levels specified in 268.32 or RCRA Section 3004(d). Pursuant to 40 CFR 268.7(a), the required information applicable to each waste is identified below (check all boxes that apply):

Treatability Group: ☐ Wastewater ☒ Nonwastewater

(Wastewaters contain less than 1% filterable solids and less than 1% Total Organic Carbon)

- ☐ D001 Ignitable (except for High TOC) managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems
  (If this box is checked, complete and attach Form UC to address underlying hazardous constituents)
- ☐ D001 Ignitable (except for High TOC) managed in CWA/ CWA-equivalent/Class I SDWA systems
- ☒ D001 High TOC Ignitable (greater than 10% total organic carbon)
- ☐ D002 Corrosive managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems
  (If this box is checked, complete and attach Form UC to address underlying hazardous constituents)
- ☒ D002 Corrosive managed in CWA/ CWA-equivalent/Class I SDWA systems
- ☐ D003 Reactive Sulfides based on 261.23(a)(5)
- ☐ D003 Reactive Cyanides based on 261.23(a)(5)
- ☐ D003 Water Reactives based on 261.23(a)(2),(3) and (4)
- ☐ D003 Explosives based on 261.23(a)(6),(7) and (8)
- ☐ D003 Other Reactives based on 261.23(a)(1)
- ☐ D004 Arsenic ☐ D005 Barium ☐ D006 Cadmium ☐ D006 Cadmium-containing batteries
- ☐ D007 Chromium ☐ D008 Lead ☐ D008 Lead acid batteries
- ☐ D009 High-mercury inorganic (>260 mg/kg total), including incinerator residue and residues from RMERC
- ☐ D009 High-mercury organic (>260 mg/kg total), not including incinerator residue
- ☐ D009 Low-mercury (<260 mg/kg total) ☐ D009 All D009 wastewaters
- ☐ D010 Selenium ☐ D011 Silver

If D012-43 boxes are checked, complete and attach Form UC to address underlying hazardous constituents (unless these wastes are to be managed in CWA/CWA-equivalent/Class I SDWA systems):

☐ D012 Endrin	☐ D023 *o*-Cresol	☐ D033 Hexachlorobutadiene
☐ D013 Lindane	☐ D024 *m*-Cresol	☐ D034 Hexachloroethane
☐ D014 Methoxychlor	☐ D025 *p*-Cresol	☐ D035 Methyl ethyl ketone
☐ D015 Toxaphene	☐ D026 Cresols (Total)	☐ D036 Nitrobenzene
☐ D016 2,4-D	☐ D027 *p*-Dichlorobenzene	☐ D037 Pentachlorophenol
☐ D017 2,4,5-TP (Silvex)	☐ D028 1,2-Dichloroethane	☐ D038 Pyridine
☐ D018 Benzene	☐ D029 1,1-Dichloroethylene	☐ D039 Tetrachloroethylene
☐ D019 Carbon tetrachloride	☐ D030 2,4-Dinitrotoluene	☐ D040 Trichloroethylene
☐ D020 Chlordane	☐ D031 Heptachlor	☐ D041 2,4,5-Trichlorophenol
☐ D021 Chlorobenzene	☐ D032 Hexachlorobenzene	☐ D042 2,4,6-Trichlorophenol
☐ D022 Chloroform		☐ D043 Vinyl chloride

In addition, the following wastes are included in this shipment:

- ☐ F001-F005 spent solvents. *(If this box is checked, complete the F001-F005 section on the back of this form. Check the hazardous waste number(s) that applies, and identify the constituents likely to be present in the waste.)*
- ☐ F039 multisource leachate. *(If this box is checked, complete and attach Form UC to identify the individual constituents.)*
- ☐ RCRA Section 3004(d) California list wastes. *(If this box is checked, complete the California List section on the back page of this form.)*
- ☐ Hazardous Debris *(If this box is checked, complete the Hazardous Debris section on the back page of this form.)*

If this shipment carries additional waste codes that are not addressed above, identify them here:

EPA Waste Code	Subcategory (if applicable)	EPA Waste Code	Subcategory (if applicable)

Burlington Environmental Inc.

RCRA Land Disposal Restriction Notification Form EZ

This form is applicable to characteristic wastes (D codes), listed wastes (F, K, U and P codes), California List Wastes, and Hazardous Debris.

Generator: Koppers Ind. Tar Plant U.S. EPA I.D. #: ORD027734359

Burlington Profile #: ETSI 4.3D-04 Manifest #: 001323235

The wastes identified on this form are subject to the land disposal restrictions of 40 CFR Part 268. The wastes do not meet the treatment standards specified in Part 268, Subpart D, or do not meet the applicable prohibition levels specified in 268.32 or RCRA Section 3004(d). Pursuant to 40 CFR 268.7(a), the required information applicable to each waste is identified below (check all boxes that apply):

Treatability Group: ☐ Wastewater ☑ Nonwastewater

(Wastewaters contain less than 1% filterable solids and less than 1% Total Organic Carbon)

- ☐ D001 Ignitable (except for High TOC) managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems
  (If this box is checked, complete and attach Form UC to address underlying hazardous constituents)
- ☐ D001 Ignitable (except for High TOC) managed in CWA/ CWA-equivalent/Class I SDWA systems
- ☑ D001 High TOC Ignitable (greater than 10% total organic carbon)
- ☐ D002 Corrosive managed in non-CWA/non-CWA-equivalent/non Class I SDWA systems
  (If this box is checked, complete and attach Form UC to address underlying hazardous constituents)
- ☐ D002 Corrosive managed in CWA/ CWA-equivalent/Class I SDWA systems
- ☐ D003 Reactive Sulfides based on 261.23(a)(5)
- ☐ D003 Reactive Cyanides based on 261.23(a)(5)
- ☑ D003 Water Reactives based on 261.23(a)(2),(3) and (4)
- ☐ D003 Explosives based on 261.23(a)(6),(7) and (8)
- ☐ D003 Other Reactives based on 261.23(a)(1)
- ☐ D004 Arsenic ☐ D005 Barium ☐ D006 Cadmium ☐ D006 Cadmium-containing batteries
- ☐ D007 Chromium ☐ D008 Lead ☐ D008 Lead acid batteries
- ☐ D009 High mercury inorganic (>260 mg/kg total), including incinerator residue and residues from RMERC
- ☐ D009 High-mercury organic (>260 mg/kg total), not including incinerator residue
- ☐ D009 Low-mercury (<260 mg/kg total) ☐ D009 All D009 wastewaters
- ☐ D010 Selenium ☐ D011 Silver

If D012-43 boxes are checked, complete and attach Form UC to address underlying hazardous constituents (unless these wastes are to be managed in CWA/CWA-equivalent/Class I SDWA systems):

☐ D012 Endrin	☐ D023 *o*-Cresol	☐ D033 Hexachlorobutadiene
☐ D013 Lindane	☐ D024 *m*-Cresol	☐ D034 Hexachloroethane
☐ D014 Methoxychlor	☐ D025 *p*-Cresol	☐ D035 Methyl ethyl ketone
☐ D015 Toxaphene	☐ D026 Cresols (Total)	☐ D036 Nitrobenzene
☐ D016 2,4-D	☐ D027 *p*-Dichlorobenzene	☐ D037 Pentachlorophenol
☐ D017 2,4,5-TP (Silvex)	☐ D028 1,2-Dichloroethane	☐ D038 Pyridine
☐ D018 Benzene	☐ D029 1,1-Dichloroethylene	☐ D039 Tetrachloroethylene
☐ D019 Carbon tetrachloride	☐ D030 2,4-Dinitrotoluene	☐ D040 Trichloroethylene
☐ D020 Chlordane	☐ D031 Heptachlor	☐ D041 2,4,5-Trichlorophenol
☐ D021 Chlorobenzene	☐ D032 Hexachlorobenzene	☐ D042 2,4,6-Trichlorophenol
☐ D022 Chloroform		☐ D043 Vinyl chloride

In addition, the following wastes are included in this shipment:

- ☐ F001-F005 spent solvents. *(If this box is checked, complete the F001-F005 section on the back of this form. Check the hazardous waste number(s) that applies, and identify the constituents likely to be present in the waste.)*
- ☐ F039 multisource leachate. *(If this box is checked, complete and attach Form UC to identify the individual constituents.)*
- ☐ RCRA Section 3004(d) California list wastes. *(If this box is checked, complete the California List section on the back page of this form.)*
- ☐ Hazardous Debris *(If this box is checked, complete the Hazardous Debris section on the back page of this form.)*

If this shipment carries additional waste codes that are not addressed above, identify them here:

EPA Waste Code	Subcategory (if applicable)	EPA Waste Code	Subcategory (if applicable)

ENVIROTECH SYSTEMS INC.

CHEMICAL INVENTORY DOT E PAGE 1 OF 1

GENERATOR: Koppers Industries Portland Tar Plant EPA ID#: ORD 027 734 359

LOCATION: Portland, OR CHEMIST: Leonard Warnock

DATE: 3/20/2007

LABPACK DRUM INVENTORY? YES DRUM NUMBER: KI-L01

DOT CONTAINER: UN1A2-16 GAL./BOX

DOT PROPER SHIPPING NAME/NAMES: WASTE CARBON DISULFIDE

HAZ. CLASS: 3(6.1) UN/NA: UN1131 PG: I

WASTE WEIGHT: 6 lbs.

GROSS WEIGHT: ~~80~~ 15 lbs.

HAZ. CLASS: UN/NA: PG:

WA STATE WASTE CODE AND DESIGNATION: WL01 / WL02 DW / EHW

HAZ. CLASS: UN/NA: PG:

M = metal, G = glass, P = plastic, CB = cardboard

RECEIVING STATE WASTE CODES:

Gal. = gallon, QT = quart, PT = pint, L = liter, ml = milliliter, lb or # = pound, oz = once, g = gram, mg = milligram

ITEM #	DESCRIPTION (CHEMICAL & PHYSICAL)	WASTE CODES: RCRA & STATE	HAZARD CLASS	PKG GRP	PHYS. STATE	QTY	CONTAINER SIZE	TYPE	WASTE AMOUNT	RQ AMOUNT
	Carbon Disulfide	P022	3(6.1)	I	L	5	500ml	gl	2.5L	

PSC ETSI 3(6.1)D-03

ENVIROTECH SYSTEMS INC.

CHEMICAL INVENTORY DOT E PAGE 1 OF 1

GENERATOR: Koppers Industries Portland Tar Plant EPA ID#: ORD 027 734 359

LOCATION: Portland, OR CHEMIST: Leonard Warnock

DATE: 3/20/2007

LABPACK DRUM INVENTORY? YES DRUM NUMBER: KI-L02

DOT CONTAINER: UN1A2-30 GAL./BOX

DOT PROPER SHIPPING NAME/NAMES: WASTE TOXIC LIQUID, ORGANIC, N.O.S.

WASTE WEIGHT: ~~90~~ 74 lbs. HAZ. CLASS: 6.1 UN/NA: UN2810 PG: III

GROSS WEIGHT: ~~180~~ 120 lbs. HAZ. CLASS: UN/NA: PG:

WA STATE WASTE CODE AND DESIGNATION: WL01 / WL02 DW / EHW HAZ. CLASS: UN/NA: PG:

M = metal, G = glass, P = plastic, CB = cardboard RECEIVING STATE WASTE CODES:

Gal. = gallon, QT = quart, PT = pint, L = liter, ml = milliliter, lb or # = pound, oz = once, g = gram, mg = milligram

ITEM #	DESCRIPTION (CHEMICAL & PHYSICAL)	WASTE CODES: RCRA & STATE	HAZARD CLASS	PKG GRP	PHYS. STATE	QTY	CONTAINER SIZE	TYPE	WASTE AMOUNT	RQ AMOUNT
	Quinoline		6.1	III	L	1	5 gal.,	m	5 gal.	
	Quinoline		6.1	III	L	4	500ml	gl	1500ml	
	Quinoline		6.1	III	L	~~2~~ 12	1 gal	m	~~2~~ 12 gal.	
	Quinoline, clean and used		6.1	III	L	3	4L	gl	~~4.2L~~ 4.2L	
	Quinoline, clean and used		6.1	III	L	~~1~~ 8	2.5L	gl	~~2.5L~~ None	
	methylene chloride	U080	6.1	III	L	1	1L	gl	<1L	
	~~perchloroethylene~~	~~U210, D039~~	~~6.1~~	~~III~~	~~L~~	~~2~~	~~1 gal~~	~~m~~	~~1 gal~~	
	Dow Corning 200 Fluid with siloxanes		NR		L	1	1 pt	m	1 pt	

PSC ETSI 6.1D-05

ENVIROTECH SYSTEMS INC.

CHEMICAL INVENTORY DOT E PAGE 1 OF 1

GENERATOR: Koppers Industries Portland Tar Plant EPA ID#: ORD 027 734 359

LOCATION: Portland, OR CHEMIST: Leonard Warnock

DATE: 3/20/2007

LABPACK DRUM INVENTORY? YES DRUM NUMBER: KI-L03

DOT CONTAINER: UN1H2-5 GAL./BOX

DOT PROPER SHIPPING NAME/NAMES: WASTE HYDROCHLORIC ACID

HAZ. CLASS: 8 UN/NA: UN1789 PG: II

WASTE WEIGHT: 1 lbs.

GROSS WEIGHT: 5 lbs.

HAZ. CLASS: UN/NA: PG:

WA STATE WASTE CODE AND DESIGNATION: WL01 / WL02 DW / EHW

HAZ. CLASS: UN/NA: PG:

M = metal, G = glass, P = plastic, CB = cardboard

RECEIVING STATE WASTE CODES:

Gal. = gallon, QT = quart, PT = pint, L = liter, ml = milliliter, lb or # = pound, oz = once, g = gram, mg = milligram

ITEM #	DESCRIPTION (CHEMICAL & PHYSICAL)	WASTE CODES: RCRA & STATE	HAZARD CLASS	PKG GRP	PHYS. STATE	QTY	CONTAINER SIZE	TYPE	WASTE AMOUNT	RQ AMOUNT
	hydrochloric acid 50% solution	D002	8	III	L	1	500ml	gl	500ml	

PSC ETSI 840-05

1850C

ENVIROTECH SYSTEMS INC.

CHEMICAL INVENTORY DOT E-13937 PAGE 1 OF 1

GENERATOR: **Koppers Industries Portland Tar Plant** EPA ID#: **ORD 027 734 359**

LOCATION: **Portland, OR** CHEMIST: **Leonard Warnock**

DATE: **3/20/2007**

LABPACK DRUM INVENTORY? YES DRUM NUMBER: **KI-L04**

DOT CONTAINER: **UN4G-10** GAL./BOX

DOT PROPER SHIPPING NAME/NAMES: **WASTE CALCIUM CARBIDE MIXTURE**

HAZ. CLASS: **4.3** UN/NA: **UN1402** PG: **II**

WASTE WEIGHT: 12 lbs.

GROSS WEIGHT: 15 lbs.

HAZ. CLASS: _____ UN/NA: _____ PG: _____

WA STATE WASTE CODE AND DESIGNATION: WL01 / WL02 DW / EHW HAZ. CLASS: _____ UN/NA: _____ PG: _____

M = metal, G = glass, P = plastic, CB = cardboard RECEIVING STATE WASTE CODES: _____

Gal. = gallon, QT = quart, PT = pint, L = liter, ml = milliliter, lb or # = pound, oz = once, g = gram, mg = milligram

ITEM #	DESCRIPTION (CHEMICAL & PHYSICAL)	WASTE CODES: RCRA & STATE	HAZARD CLASS	PKG GRP	PHYS. STATE	QTY	CONTAINER SIZE	TYPE	WASTE AMOUNT	RQ AMOUNT
	Speedy Moisture Tester Reagent, containing calcium carbide	D003	4.3	II	S	~~10~~ 12	1 lb	m	~~10~~ 12 lb	

PSC ETSI 4.3D-04

12501J

ENVIROTECH SYSTEMS, INC.
3601 - 121st STREET SW
LYNNWOOD, WA 98037
TELEPHONE: (206) 363-9000 FAX: (425) 513-5839

WASTE PRODUCT QUESTIONNAIRE

PROFILE ESI WPQ 07-088-17-LP

GENERATOR NAME: KOPPERS IND. PORTLAND TAR PLANT
SITE ADDRESS: 7540 NW ST HELENS RD
PORTLAND , OR 97210

INVOICE TO: EMERALD SERVICES
ADDRESS: PO BOX 1306
VANCOUVER , WA 98666

DATE: 3/29/2007
SIC CODE: 325912
GEN EPA ID: ORD027734359
CONTACT:
PHONE: 360-693-4317

WASTE PRODUCT DESCRIPTION AND CHARACTERISTICS

WASTE PRODUCT NAME: LAB PACK - SEE PACKING LISTS
SOURCE: G11
PROCESS GENERATING WASTE: CLOSING LAB, DISCARDING CHEMICALS
FORM: W001

ODOR
(○) NONE (◎) MILD (◎) STRONG
DESCRIBE:

COLOR AND CLARITY
COLOR:
CLARITY:

PHYSICAL STATE AT 70F
(○) SOLID (○) SLUDGE
(○) LIQUID (○) POWDER
AVERAGE CONSISTENCY:

TOXIC CATEGORIES PRESENT
WDOECONC:
WEIGHT:
TOXICCAT:

LAYERS
(◎) MULTI-LAYERED
(○) BI-LAYERED
(◎) HOMOGENOUS
FREE LIQUIDS:

pH
(◎) 10.1 - 12.4
(○) <= 2
(◎) >= 12.5
(◎) 2 - 4
(○) EXACT:
(◎) 4.1 - 10

DENSITY OR SPECIFIC GRAVITY
(○) LIQUID lbs/gal
(◎) SOLID lbs/ft3

FLASH POINT
(○) < 73 F (○) > 200 F ☐ CC ☐ EPA
(◎) 73 - 141 F (○) NO FLASH ☐ OC ☐ DOT
(○) 142 - 199 F (○) EXACT:

CONSTITUENTS
CHEMICAL COMPOSITION (ACCOUNT FOR 100% OF TOTAL)

	%
LAB PACK - SEE PACKING LISTS	100
CONTAINER KI-L01: UN1A2-16 (3(6.1)) PGI	
-L02: UN1A2-30 (6.1) PGIII	
-L03: UN1H2-5: (8 acid) PGII	
-L04: UN4G-10 (4.3) PGII DOT E-13937	

CHEMICAL NATURE
○ I
○ O
◉ I/O

METALS (PPM)
(○) TOTAL (◎) EPA TCLP
(○) GEN KNOWLEDGE

ARSENIC (As)	
BARIUM (Ba)	
CADMIUM (Cd)	
CHROMIUM (Cr)	
COPPER (Cu)	
LEAD (Pb)	
MERCURY (Hg)	
NICKEL (Ni)	
SELENIUM (Se)	
SILVER (Ag)	
ZINC (Zn)	
HEXCHROME	
OTHER	

GENERATOR HAS PROVIDED THE FOLLOWING
☐ SAMPLE ☒ MSDS ☐ WASTE ANALYSIS

SHIPPING INSTRUCTIONS
IS THIS A DOT HAZARDOUS MATERIAL
◉ YES
○ NO
DOT RQ
BULK LIQUID: ☐
BULK SOLID: ☐
DRUM/CONTAINER TYPE: SEE PACKING LISTS
VOLUME: 4 CONTAINERS

RCRA HAZ WASTE ☑ EXEMPT WASTE ☐
STATE ONLY WASTE ☐ TSCA ☐

WASHINGTON STATE DESIGNATION
(○) EHW (◎) EXEMPT (○) DW

WASTE CODES
US EPA WASTE CODE: SEE PACKING LISTS
WA DOE WASTE CODES:
CA WASTE CODES:
OR WASTE CODES:
SUBJECT TO LAND DISPOSAL RESTRICTIONS ☑

US DOT DESCRIPTION

PROPER SHIPPING NAME: , LAB PACK - SEE PACKING LISTS ,
ADDITIONAL DESCRIPTION:
HAZARD CLASS: DOT ID NUMBER: PACKING GROUP NUMBER:

GENERATOR CERTIFICATION STATEMENT

I HEREBY CERTIFY THAT ALL INFORMATION SUBMITTED IN THIS DOCUMENT AND THOSE ATTACHED HERETO ARE TRUE AND CORRECT. ALL WASTE TENDERED UNDER THIS WASTE PROFILE SHALL CONFORM TO THE SPECIFICATIONS ABOVE. TO THE BEST OF MY KNOWLEDGE, ALL KNOWN AND SUSPECTED HAZARDOUS COMPONENTS (40 CFR 261 268) OF THIS WASTE STREAM HAVE BEEN IDENTIFIED ABOVE.

SIGNATURE X [signature] TITLE Plant Engineer DATE 4-19-07

THE UNDERSIGNED CERTIFIES THAT HE/SHE OBTAINED A REPRESENTATIVE SAMPLE OF THE WASTE MATERIAL DESCRIBED ABOVE, AND THAT THE FOLLOWING REPRESENTATIONS ARE TRUE AND CORRECT.

SAMPLING METHOD: SAMPLE QUANTITY: NAME:
SOURCE OF MATERIAL SAMPLED: DRUMS KI-L01 TO -L04 DATE:

WORK ORDER

ENVIROTECH SYSTEMS
A DIVISION OF EMERALD SERVI
9010 EAST MARGINAL WAY SOUTH
SUITE 200
SEATTLE, WA 98108
Tel. (206) 832-3000 Fax No. (206) 832-3030

WORK ORDER NUMBER: 2510

WORK ORDER DATE: 04/11/07

SOLD TO:
EMERALD FIELD SERVICES
ACCOUNTS PAYABLE
9010 E MARGINAL WAY S #200
SEATTLE, WA 98108

PHONE: (206) 832-3000

SITE:
KOPPERS IND. PORTLAND TAR PLANT
NESS AGUILAR
7540 NW ST HELENS RD
PORTLAND, OR 97210

SITE PHONE: (360) 693-4317

Customer ID: EMERALDSWA P.O. No. Job No. 07-088-17
EPA ID No. Acct. Rep. HOUSE ACCOUNT

Item No.	Description	Manifest No.	Quantity	Unit	Unit Price	Total Price
12500 DOC #8						
DIND-3	DM CONS. SOLVENTS /12500	001323~~334~~247	1	DRUM ~~28~~ 16		
DIND-1	DM WASTE CARBON DISULFIDE / 12501A	001323235	1	DRUM ~~16~~ 10		
DIND-3	DM WASTE TOXIC LIQ, ORG / 12501T		1	DRUM 30		
DIND-0	DM WST HYDROCHLORIC ACID / 12501C		1	DRUM 05		
DIND-1	DM WST CALCIUM CARBIDE MIX/12501D		~~5 GREEN~~	1 Drum 05		
LABOR	LABOR PACK WASTE HRLY	Travel 3½ hrs.	2	EACH		
~~FSTL30~~	~~30 GAL UN1A1 NEW STL DM BU~~		~~1~~	~~DRUM 30~~		
FSTL16	16 GAL UN1A2 NEW STL DRUM		1	DRUM 16		
FPOL05	5 GAL UN1H2 POLY PAIL SNAP LID		2	DRUM 05		
~~F4G 4G~~	~~4G BOX - COPACK LAB PK~~		~~1~~	~~LBPK BX1~~		
FSTL55	30 GAL UN1A2 REC STL DRUM OT		1	DRUM 30		
FPIH4G	PIH 4G ZONE D ~~WM~~		1	BOX		
FVERMI	VERMICULITE		1	BAGS		

Amount Subject to Sales Tax

Amount Exempt from Sales Tax

Subtotal:
Sales Tax:
Total:

CUSTOMER CHANGES

WORK AUTHORIZATION

The undersigned hereby authorized and acknowledges receipt of the materials and/or commencement of services described above on behalf of the parties indicated as 'SOLD TO' above (Generator). On behalf of Generator, I hereby make an appoint Envirotech Systems Generator's true and lawful agent for the purpose of managing the above waste responsibilities. I understand that this does not relieve Generator of its responsibilities as a generator even though title of the waste transfers to Envirotech Systems. Prices quoted herein are subject to the waste's inspection and acceptance at the destination waste management facility.

BY _____ DATE: 4/19/07

PCI

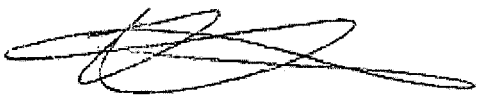
Certificate

This certificate is to verify that the waste specified will be handled in accordance with all local, state, and federal regulations

Manifest: 001323247JJK
Generator: KOPPERS INDUSTRIES PORTLAND TAR PLANT

Page/Line	Waste Stream	PCI H CODE
1 1	323862	H061

Facility Name: Pollution Control Industries
Facility Address: 4343 Kennedy Avenue
East Chicago, IN 46312
Facility EPA ID: IND000646943

Signature: 

Typed: Tita LaGrimas
Title: Executive Vice President of Regulatory Affairs
Date: 5/22/2007

Invoice #: 10083515

Pollution Control Industries
4343 Kennedy Avenue, East Chicago, IN 46312
(219)397-3951 FAX: (219)397-6411
www.pollutioncontrol.com

RESPONSIBLE℠ RECYCLING
A commitment to our generators, our employees, and our community.

14. Provide the following information for each off-site shipment of waste.
(Include all shipments in 2002 for this waste stream even if it was generated in the previous year.)

Please Enter:
Facility Name: Koppers Industries Inc.
DEQ ID Number: ORD 027734359

2002 Manifest Shipment Date (enter month/day)	Manifest Document Number	Quantity Shipped of this Waste Stream (use unit of measure from Question #9)	DEQ/U.S. EPA ID # of First Transporter	Final management (enter mgmt. code, other than M141)	DEQ/U.S. EPA ID # of Receiving Facility (Designated Facility)
08/26/02	03726	21,262	WAD058364647	MO42	UTD 981552177
11/09/02	10304	44,820	WAD058364647	MO42	UTD981552177
11/13/02	10305	29,220	WAD058364647	MO42	UTD981552177
11/19/02	10307	42,540	WAD058364647	MO42	UTD981552177
12/02/02	10306	41,360	WAD058364647	MO42	UTD981552177
12/06/02	10342	45,180	WAD058364647	MO42	UTD981552177
12/11/02	10340	46,420	WAD058364647	MO42	UTD981552177
12/11/02	10324	21,834	WAD058364647	MO43	UTD981552177
12/11/02	10324	4,613	WAD058364647	MO41	UTD981552177

Comments: This work was done to recover usable product from several tanks, which resulted in having tank residues that required disposal. This was a one time event. We expect to return to conditionally Exempt Generator status in the year 2003 and beyond.

Koppers004414

2002 Waste Generation and Management—Answer Sheet

PLEASE ENTER:
Facility Name: Koppers Industries Inc.
DEQ ID Number: ORD 027734359

NOTE: Make as many two-sided copies of the answer sheet as you need BEFORE answering any questions. REVIEW QUESTIONS ON PAGES 22-24 BEFORE COMPLETING ANSWER SHEET.

1. Waste Stream Description Tank Residues

2. Waste Code(s) U051 D018

3. State-Only Code OR ORD 051 ORD018

4. Mixed Waste? ☒No ☐Yes

5. Source Code: A A38 6. Form Code: B 606

7. Waste Origin 1☐ 2☒ 3☐ 4☐ (If box 4, answer 7A)

7A. Residual Management Code M

8. Reported toxic substances in waste? 1☐ 2☐ 3☐ (If box 3, answer 8A)

8A. CAS Number (s) 8001-58-9 71-43-2

9. Total quantity generated in 2002 for this waste stream 297,249

Unit of Measure P☒ G☐ ST☐ C☐ K☐ L☐ MT☐

9A. Density 8.7 ☐Pounds/gallon ☐Specific gravity ☐Pounds/cubic yard

10. Did this waste stream contain mercury? ☒No ☐Yes (If Yes, answer 10A)

10A. What percentage of mercury?

11. Managed on or off-site? ☐On-site (Answer 11A) ☒Off-site (Answer 14) ☐Both On-site & Off-site (Answer both 11A and 14)

11A. Quantity managed or recycled on-site Management Code M

12. Total quantity of waste remaining on-site at the end of 2002 0 (Not otherwise managed on-or off-site, but accumulated or stored)

13. Total quantity of waste carried over from 2001 0

Monthly Generation Worksheet (Optional)

*Provide the actual monthly hazardous waste generation amounts for this waste stream (should not be a yearly average) Recommended for Small Quantity Generators.

January		July	
February		August	21,262
March		September	
April		October	
May		November	275,987
June		December	

Total Quantity Generated for 2002: 297,249

(Report shipments and comments on reverse side of sheet)

Koppers004415

Registration Verification Report 2002

3 857

1. DEQ ID No: ORD027734359 Name: Koppers Industries Inc
Location: 7540 NW ST HELENS RD
PORTLAND, OR 97210
Site Contact Name: Amos Kamerer Site Contact Phone: (503) 286-3681
Current information, if different from above:

Your Standard Industrial Classification (SIC) code is currently:
2865: Cyclic Crudes & Intermediates
Current code if different:

State of Oregon Department of Environmental Quality

Your current employee count is listed as 2 Please indicate the correct count if it has change 4

Verify the information in the left column, and make any corrections in the right column:

The owner of Koppers Industries Inc is:

2. Indvidual or Organization: Koppers Industries Inc Address: 436 7th Ave Pittsburgh, PA 15219 Phone: (412) 227-2883	Indvidual or Organization: Address: Phone:

The owner of the property on which Koppers Industries Inc is located is:

3. Individual or Organization: Northwest Natural Gas Co Address: 220 NW 2nd Avenue Portland, OR 97209 Phone: (503) 226-4211	Individual or Organization: Address: Phone:

The address for DEQ to send hazardous waste information to Koppers Industries Inc is:

4. Forms Contact: Amos Kamerer Organization: Koppers Industries Inc Address: 7540 NW St Helens Rd Portland, OR 97210-3663 Internet E-Mail: kamereras@koppers.com Phone: (503) 286-3681	Forms Contact: Organization: Address: Internet E-Mail: Phone:

The address for DEQ to send hazardous waste fee invoices for Koppers Industries Inc is:

5. Fee Contact: Amos Kamerer Organization Koppers Industries Inc Address: 7540 NW St Helens Rd Portland, OR 97210-3663 Phone: (503) 286-3681	Fee Contact: Organization: Address: Phone:

Hazardous waste generator status:

6. Koppers Industries Inc last reported as a Conditionally Exempt Generator on the 2001 Annual Report.
What was the generator status for Koppers Industries Inc in 2002, based on monthly generation records?

[X] Large Quantity Generato [ ] Small Quantity Generato [ ] Conditionally Exempt Generato

mailed 2/10/03

12/16/2002

7. If the information for this facility has changed from what is preprinted in **Box 1** from the front of this form, then check all that apply. If no changes occurred, then skip to Box 8.

- ☐ The business (as preprinted) is no longer active at this location. We are a different company or a company new to this location. Date we opened for business: _____
- ☐ The business is the same; we have a new name.
- ☐ The location of the business has not changed. The local government modified the address.
- ☐ The business moved to a new location. ☐ I wish to apply for a new site-specific DEQ/EPA ID Number for the company's new location.

8. Has the ownership of this facility changed from what is preprinted in **Box 2** from the front of this form?

☐ **Yes** (If yes, Answer Questions 8a-8b) ☒ **No** (Skip to Box 9)

8a. What was the date of the ownership change? _____

8b. Are you completing this report for:

- ☐ The previous (preprinted name) company up to the time of closure? (Complete Box 9.)
- ☐ The current (new) company?
- ☐ Filing for the full calendar year?
- ☐ Filing for only that part of the year following purchase?

9. Indicate one of the following:

- ☒ I wish to keep the assigned DEQ/EPA Identification Number Active. (Skip to Box 10)
- ☐ I wish to cancel the assigned DEQ/EPA Identification Number because this facility does not generate or manage hazardous waste for the following reason (**Date must be provided**):
  - ☐ Closure of business (Date of Closure: _____)
  - ☐ Completion of a one-time cleanup and waste management activity (Date Completed: _____)
  - ☐ Change in business activity (Explain and Provide Date: _____ _____)
  - ☐ Other (Explain and Provide Date: _____ _____)

Note: The DEQ/EPA Identification Number is assigned to the physical location of the site and cannot be reassigned to a different location. The ID number is required for certain facilities such as: Hazardous Waste (HW) Transporters; Large Quantity HW Generators; Small Quantity HW Generators; Treatment, Storage, Disposal Facilities; HW Recycling Facilities; Marketers or Burners of HW Fuel; and facilities that engaged in some Used Oil or Universal Waste Activities. Conditionally Exempt Generators may also need an ID number for certain waste management activities.

10. ***I certify** under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.*

Signature	Date
	January 31, 2003
Amos S. Kamerer	Plant Manager
Name (please print)	Title

Mail completed form to:
Oregon DEQ
Land Quality Division
Attn: Hazardous Waste Forms Clerk
811 SW Sixth Avenue
Portland, OR 97204-1390

***Remember:** If you were a small or large quantity generator during any part of 2002, you must complete the Waste Generation & Management Answer Sheets and attach them to this form. If filing Answer Sheets electronically, an Electronic Certification must be attached.*

Questions: (503) 229-5470 or (800) 452-4011 or visit our Website at www.deq.state.or.us/wmc/hw/hwrptonlineforms.htm

OCTOBER 09, 2003

Environmental Manager
KOPPERS INDUSTRIES INC
7540 NW ST HELENS ROAD
PORTLAND, OREGON 97210

RE: Certificates of Disposal

Dear Environmental Manager:

Enclosed please find your Certificate(s) of Disposal and accompanying detailed report(s) for the waste that was shipped to our facility for treatment. Your original manifest number is referenced on both of these documents along with a Clean Harbors Aragonite document number.

Your waste has been properly treated and the residue from this waste has been disposed of at an approved and permitted hazardous waste landfill.

Clean Harbors appreciates you as a valued customer. If you should have any questions or concerns please do not hesitate to contact one of our customer/facility representatives at (801) 323-8100.

Sincerely,

Facility Sales Manager

Enclosures

OCTOBER 09, 2003

KOPPERS INDUSTRIES INC
7540 NW ST HELENS ROAD
PORTLAND, OREGON 97210

FILE COPY

EPA ID: ORD 027 734 359

Certificate of Disposal

No. 191997

Customer Manifest: 98454 Document: M8270 destroyed as of OCTOBER 07, 2003

This is to certify that the hazardous material manifested to Clean Harbors on the above Clean Harbors Aragonite Document Number was disposed of by incineration in accordance with 40 CFR 761 (and 40 CFR 264 if applicable) as of the above certification date.

Attached is a detailed report which identifies the date(s) of disposal. Residue from this waste has been disposed of at an approved and permitted Hazardous Waste Landfill.

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615), I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.

Clean Harbors, Aragonite UT
EPA ID # UTD 981 552 177

Facility Sales Manager

Page: 1 Certificate of Disposal - Detail Report 10/09/2003 04:00

Generator: 704090 KOPPERS INDUSTRIES INC

CD #	Document #	Item	State #	Customer #	Type	Weight	Received	Destroyed	Drum Srl Num
191997	M8270	1	OR098454	98454	DM	619	10/01/2003	10/07/2003	

*** IN CASE OF EMERGENCY CALL 1-800-424-9300 ***

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. ORD027734359845 — Manifest Document No.

2. Page 1 of 1/2 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
KOPPERS INDUSTRIES
7540 NW ST. HELENS ROAD
PORTLAND, OR 97310

4. Generator's Phone (503) 286-2681

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: EMERALD SERVICES, INC.
6. US EPA ID Number: WAD058364647
C. State Transporter's ID
D. Transporter's Phone (206) 832-3000

7. Transporter 2 Company Name: CLEAN HARBORS ENVIRONMENTAL
8. US EPA ID Number: HAD039322250
E. State Transporter's ID
F. Transporter's Phone (253) 288-2300

9. Designated Facility Name and Site Address
CLEAN HARBORS (ARAGONITE), LLC
11600 N. APTUS ROAD, EXIT 56
ARAGONITE, UT 84029
10. US EPA ID Number: UTD981552177
G. State Facility's ID
H. Facility's Phone (801) 323-8161

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Hazardous waste, solid, n.o.s. (BENZENE), 9, NA3077, PG-III, ERG#171	X	1	DM	500	P	U051, D018
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above
a) CH25918 PPE & DEBRIS 1 X55 DM
D018293

K. Handling Codes for Wastes Listed Above
107

15. Special Handling Instructions and Additional Information
REPORT ANY 'RQ' DISCHARGE TO NATIONAL RESPONSE CENTER 800-424-8802, AND 911 EMERGENCY NUMBER OR LOCAL OPERATOR. EMERGENCY CONTACT: AMOS KAMERER (503) 286-2681

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR**, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month	Day	Year
A. S. KAMERER		09	11	03

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Kailand Ervins	Kailand S. Ervins	09	11	03

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
W. L. Scott FOR CHRIS		09	23	03

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
Glenna Lawrence		09	29	03

Style CF 17 LABELMASTER® (800) 621-5808 www.labelmaster.com

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

ORIGINAL - RETURN TO GENERATOR

PRINTED ON RECYCLED PAPER USING SOYBEAN INK — PRINTED WITH SOY INK

Koppers004421

Public reporting burden for this collection of information is estimated to average: 37 minutes for generators, 15 minutes for transporters, and 10 minutes for treatment, storage and disposal facilities. This includes time for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM–223, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, D.C. 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.

*** IN CASE OF EMERGENCY CALL 1-800-424-9300 ***

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. / Manifest Document No.: O R D 0 2 7 7 3 4 3 5 9 9 8 4 5 4

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
KOPPERS INDUSTRIES
7540 NW ST. HELENS ROAD
PORTLAND, OR 97310

4. Generator's Phone (503) 286-2681

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: EMERALD SERVICES, INC.

6. US EPA ID Number: W A D 0 5 8 3 6 4 6 4 7

C. State Transporter's ID

D. Transporter's Phone (206) 832-3004

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
CLEAN HARBORS (ARAGONITE), LLC
11600 N. APTUS ROAD, EXIT 56
ARAGONITE, UT 84029

10. US EPA ID Number: U T D 9 8 1 5 5 2 1 7 7

G. State Facility's ID

H. Facility's Phone (801) 323-8161

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Hazardous waste, solid, n.o.s. (BENZENE), 9, NA3077, PG-III, ERG#171	X	1	DM	500	P	D051, D018
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above
a) CH2591A PPE & DEBRIS

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
REPORT ANY 'RQ' DISCHARGE TO NATIONAL RESPONSE CENTER 800-424-8802, AND 911 EMERGENCY NUMBER OR LOCAL OPERATOR. EMERGENCY CONTACT: AMOS KAMERER (503) 286-2681

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR**, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month Day Year
A. S. Kamerer	[signature]	09 17 03

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month Day Year
Kilad Gris	Kilad S. Gris	09 11 03

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month Day Year

GENERATOR

TRANSPORTER

FACILITY

Style CF 17 LABELMASTER® (800) 621-5808 www.labelmaster.com

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

GENERATOR COPY

PRINTED ON RECYCLED PAPER USING SOYBEAN INK

PRINTED WITH SOY INK

Public reporting burden for this collection of information is estimated to average: 37 minutes for generators, 15 minutes for transporters, and 10 minutes for treatment, storage and disposal facilities. This includes time for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM–223, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, D.C. 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.

LDR NOTIFICATION FORM

Generator KOPPERS INDUSTRIES **Manifest** 98454

Pursuant to 40 CFR §268.7(a), I hereby notify that this shipment contains waste restricted under 40 CFR Part 268 Land Disposal Restrictions (LDR).

A. GENERAL WASTE NOTIFICATION

Form Line No.	Profile No.	EPA Waste Codes & LDR Subcategories (if any) *List codes or use Attachment 1*	NWW	WW	Waste Constituent Notification *Check the "None" box or List Legend Constituent # or use Attachment 2*
1	*CH25918*	D018, U051 ☐ Check if Attachment 1 has been used	☒	☐	☒ None ☐ Check if Attachment 2 has been used
2		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used
3		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used
4		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used
5		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used
6		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used

B. HAZARDOUS DEBRIS NOTIFICATION

☐ This hazardous debris, as identified above on Line No(s). _____ is subject to the alternative treatment standards of 40 CFR §268.45.

The waste contains the following contaminants subject to treatment (check all that apply):

☐ Toxicity characteristic debris ☐ Debris contaminated with listed waste ☐ Cyanide reactive debris

C. CONTAMINATED SOIL NOTIFICATION & CERTIFICATION

☐ This contaminated soil, as identified above on Line No(s). _____ is subject to the alternative treatment standards of 40 CFR §268.49(c).

Complete the following: "I certify under penalty of law that I personally have examined this contaminated soil & it [☐does/ ☐does not] contain listed hazardous waste & [☐does / ☐does not] exhibit a characteristic of hazardous waste & [☐is subject to / ☐complies with] soil treatment standards as provided by §268.49(c) or the universal treatment standards". *Note: Constituents subject to treatment are any constituents listed in 40 CFR §268.48 Universal Treatment Standards that are reasonably expected to be present in any given volume of contaminated soil, except fluoride, selenium, sulfides, vanadium & zinc, & are present at concentrations greater than ten times the universal treatment standard.*

D. LAB PACK (INCINERATION) NOTIFICATION & CERTIFICATION

☐ This lab pack, as identified above on Line No(s). _____ is subject to the alternative treatment standards of 40 CFR §268.42(c).

"I certify under penalty of law that I personally have examined & am familiar with the waste & that the lab pack contains only wastes that have not been excluded under Appendix IV to 40 CFR Part 268 & that this lab pack will be sent to a combustion facility in compliance with the alternative treatment standards for lab packs at 40 CFR §268.42(c). I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment".

E. EXTENSIONS & VARIANCES

☐ This waste, as identified above on Line No(s). _____ is not prohibited from land disposal & is subject to a deadline extension or variance, e.g., treatability variance, case-by-case extension. *Describe below any extension or variance that applies to this waste & include applicable dates:*

Generator's Authorized Signature	A.S. Kamocki, Plant Mgr. Name & Title (Printed or Typed)	09 / 11 / 03 Date

IN CASE OF EMERGENCY CALL 1-800-424-8802

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) M8270 Form Approved. OMB No. 1050-0039. 1789C

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: GRQ027734359845 4
Manifest Document No.:
2. Page 1 of 1/2
Information in the shaded area is not required by Federal law

3. Generator's Name and Mailing Address:
KOPPERS INDUSTRIES
7540 NW ST. HELENS ROAD
PORTLAND, OR 97210

4. Generator's Phone (503) 286-2681

A. State Manifest Document Number
B. State Generator's ID

5. Transporter 1 Company Name: EMERALD SERVICES, INC.
6. US EPA ID Number: WAD058364647
C. State Transporter's ID
D. Transporter's Phone (206) 832-3

7. Transporter 2 Company Name: CLEAN HARBORS ENV. SERV. INC.
8. US EPA ID Number: HAD039322250
E. State Transporter's ID
F. Transporter's Phone (253) 285-25

9. Designated Facility Name and Site Address:
CLEAN HARBORS (ARAGONITE), LLC
11600 N. APTUS ROAD, EXIT 56
ARAGONITE, UT 84029
10. US EPA ID Number: UTD981552177
G. State Facility's ID
H. Facility's Phone (801) 323-816

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	15. Waste No.
a.	X	Hazardous waste, solid, n.o.s. (BENZENE), 9, NA3077, PG-III, ERG#171	1	DM	500	P	U051; DO
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
a) CH25918 PPE & DEBRIS 1X55gDM
D1443293

K. Handling Codes for Wastes Listed Above
707

15. Special Handling Instructions and Additional Information
REPORT ANY 'RQ' DISCHARGE TO NATIONAL RESPONSE CENTER 800-424-8802, AND 911 EMERGENCY NUMBER OR LOCAL OPERATOR. EMERGENCY CONTACT: AMOS KAMERER (503) 286-2681

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present a future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and sel the best waste management method that is available to me and that I can afford.

Printed/Typed Name: A.S. KAMERER
Signature: [signature]
Month Day Y: 09 11 03

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Kailand Ervins
Signature: Kailand S. Ervins
Month Day Y: 09 11 03

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: W. L. Scott FOR CHES
Signature: [signature]
Month Day Y: 09 23 03

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Glenna Lawrence
Signature: [signature]
Month Day Y: 09 01 03

GENERATOR / TRANSPORTER / FACILITY

Style CF 17 LABELMASTER ® (800) 621-5808 www.labelmaster.com
EPA Form 8700-22 (Rev 9-88) Previous editions are obs
ORIGINAL - RETURN TO GENERATO

PRINTED ON RECYCLED PAPER

*** IN CASE OF EMERGENCY CALL 1-800-424-9300 *** M14342 18927

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UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. ORD027734359845 — Manifest Document No.
2. Page 1 of 2 — Information in the shaded areas is not required by Federal law.

GENERATOR

3. Generator's Name and Mailing Address
KOPPERS INDUSTRIES
7540 NW ST. HELENS ROAD
PORTLAND, OR 97310

4. Generator's Phone (503) 286-2681

A. State Manifest Document Number
B. State Generator's ID

5. Transporter 1 Company Name: EMERALD SERVICES, INC.
6. US EPA ID Number: WAD058364647
C. State Transporter's ID
D. Transporter's Phone (206) 832-3000

7. Transporter 2 Company Name: CLEAN HARBORS ENV. SERV., INC.
8. US EPA ID Number: NAD039322250
E. State Transporter's ID
F. Transporter's Phone 965-288-2800

9. Designated Facility Name and Site Address
CLEAN HARBORS (ARAGONITE), LLC
11600 N. APTUS ROAD, EXIT 56
ARAGONITE, UT 84029

10. US EPA ID Number: UTD981552177
G. State Facility's ID
H. Facility's Phone (801) 323-8161

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Hazardous waste, solid, n.o.s. (BENZENE), 9, NA3077, PG-III, ERG#171	X	001	DM	00455	P	U051, D018
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above
a) CH25918 PPE & DEBRIS, (1)55gDM
D171193Lo

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
REPORT ANY 'RQ' DISCHARGE TO NATIONAL RESPONSE CENTER 800-424-8802, AND 911 EMERGENCY NUMBER OR LOCAL OPERATOR. EMERGENCY CONTACT: AMOS KAMERER (503) 286-2681

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR**, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month	Day	Year
T.J. Tanner		12	11	03

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Kailund Ervins	Kailund S. Ervins	12	11	03

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
W.L. SCOTT FOR CHES, INC.		12	20	03

FACILITY

19. Discrepancy Indication Space
Load was actually received on 12/30/03 KS

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
Kari Scott	Kari Scott	01	09	04

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EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

ORIGINAL - RETURN TO GENERATOR

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Koppers004427

Public reporting burden for this collection of information is estimated to average: 37 minutes for generators, 15 minutes for transporters, and 10 minutes for treatment, storage and disposal facilities. This includes time for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM–223, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, D.C. 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.

*** IN CASE OF EMERGENCY CALL 1-800-424-9300 ***

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. / Manifest Document No.: OR0022734359984 5 2

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
KOPPERS INDUSTRIES
7540 NW ST. HELENS ROAD
PORTLAND, OR 97310

4. Generator's Phone (503) 286-2681

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: EMERALD SERVICES, INC.

6. US EPA ID Number: WAD058364647

C. State Transporter's ID

D. Transporter's Phone (206) 832-3000

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
CLEAN HARBORS (ARAGONITE), LLC
11600 N. APTUS ROAD, EXIT 56
ARAGONITE, UT 84029

10. US EPA ID Number: UT0981552177

G. State Facility's ID

H. Facility's Phone (801) 323-8161

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	Hazardous waste, solid, n.o.s. (BENZENE), 9, NA3077, PG-III, ERG#171	X	1	DM	55	P	U051, D018
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
a) CH25918 PPE & DEBRIS

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
REPORT ANY 'RQ' DISCHARGE TO NATIONAL RESPONSE CENTER 800-424-8802, AND 911 EMERGENCY NUMBER OR LOCAL OPERATOR. EMERGENCY CONTACT: AMOS KAMERER (503) 286-2681

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR**, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: T J Turner | Signature: [signature] | Month Day Year: 12 11 03

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Kailand Ervins | Signature: Kailand S. Ervins | Month Day Year: 12 11 03

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name | Signature | Month Day Year

GENERATOR / TRANSPORTER / FACILITY

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EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

GENERATOR COPY

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Public reporting burden for this collection of information is estimated to average: 37 minutes for generators, 15 minutes for transporters, and 10 minutes for treatment, storage and disposal facilities. This includes time for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM–223, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, D.C. 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.

Emerald

LDR NOTIFICATION FORM

Generator KOPPERS INDUSTRIES **Manifest** 98452

Pursuant to 40 CFR §268.7(a), I hereby notify that this shipment contains waste restricted under 40 CFR Part 268 Land Disposal Restrictions (LDR).

A. GENERAL WASTE NOTIFICATION

Form Line No.	Profile No.	EPA Waste Codes & LDR Subcategories (if any) *List codes or use Attachment 1*	NWW	WW	Waste Constituent Notification *Check the "None" box or List Legend Constituent # or use Attachment 2*
1	*CH25918*	D018, U051 ☐ Check if Attachment 1 has been used	☒	☐	☒ None ☐ Check if Attachment 2 has been used
2		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used
3		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used
4		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used
5		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used
6		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used

B. HAZARDOUS DEBRIS NOTIFICATION

☐ This hazardous debris, as identified above on Line No(s). _____ is subject to the alternative treatment standards of 40 CFR §268.45.

The waste contains the following contaminants subject to treatment (check all that apply):

☐ Toxicity characteristic debris ☐ Debris contaminated with listed waste ☐ Cyanide reactive debris

C. CONTAMINATED SOIL NOTIFICATION & CERTIFICATION

☐ This contaminated soil, as identified above on Line No(s). _____ is subject to the alternative treatment standards of 40 CFR §268.49(c).

Complete the following: "I certify under penalty of law that I personally have examined this contaminated soil & it [☐does/ ☐does not] contain listed hazardous waste & [☐does / ☐does not] exhibit a characteristic of hazardous waste & [☐is subject to / ☐complies with] soil treatment standards as provided by §268.49(c) or the universal treatment standards". *Note: Constituents subject to treatment are any constituents listed in 40 CFR §268.48 Universal Treatment Standards that are reasonably expected to be present in any given volume of contaminated soil, except fluoride, selenium, sulfides, vanadium & zinc, & are present at concentrations greater than ten times the universal treatment standard.*

D. LAB PACK (INCINERATION) NOTIFICATION & CERTIFICATION

☐ This lab pack, as identified above on Line No(s). _____ is subject to the alternative treatment standards of 40 CFR §268.42(c).

"I certify under penalty of law that I personally have examined & am familiar with the waste & that the lab pack contains only wastes that have not been excluded under Appendix IV to 40 CFR Part 268 & that this lab pack will be sent to a combustion facility in compliance with the alternative treatment standards for lab packs at 40 CFR §268.42(c). I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment".

E. EXTENSIONS & VARIANCES

☐ This waste, as identified above on Line No(s). _____ is not prohibited from land disposal & is subject to a deadline extension or variance, e.g., treatability variance, case-by-case extension. *Describe below any extension or variance that applies to this waste & include applicable dates:*

Generator's Authorized Signature	T C Tarver Gen For.	12 / 11 / 03
	Name & Title (Printed or Typed)	Date

EMERGENCY CONTACT TELEPHONE NUMBER

UNIFORM HAZARDOUS WASTE MANIFEST
(Continuation Sheet)

21. Generator's US EPA ID No.	Manifest Document No.	22. Page	Information in the shaded areas is not required by Federal law.
O.R.D.0.2.7.7.3.4.3.5.9	98452	2 OF 2	

23. Generator's Name
KOPPERS INDUSTRIES
7540 NW ST. HELENS RD.
PORTLAND, OR 97210

L. State Manifest Document Number

M. State Generator's ID

24. Transporter 3 Company Name	25. US EPA ID Number	N. State Transporter's ID
TW COMPANY	UTD.988.074.712	O. Transporter's Phone 801-299-1900
26. Transporter ____ Company Name	27. US EPA ID Number	P. State Transporter's ID
		Q. Transporter's Phone

	28. US DOT Description *(Including Proper Shipping Name, Hazard Class, and ID Number)*	HM	29. Containers No	Type	30. Total Quantity	31. Unit Wt/Vol	R. Waste No.
a.							
b.							
c.							
d.							
e.							
f.							
g.							
h.							
i.							

S. Additional Descriptions for Materials Listed Above

T. Handling Codes for Wastes Listed Above

32. Special Handling Instructions and Additional Information

(FOR TRANSPORT ONLY

TRANSPORTER

33. Transporter 3 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month / Date / Year)
RANDY BARR		12 / 22 / 03

34. Transporter ____ Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Date (Month / Date / Year)
		. / . / .

FACILITY

35. Discrepancy Indication Space

GENERATOR

ORIGINAL RETURN TO GENERATOR

Instructions — Continuation Sheet, U.S. EPA Form 8700-22A

Read all instructions before completing this form.

This form has been designed for use on a 12 pitch (elite) typewriter; a firm point pen may also be used — press down hard.

This form must be used as a continuation sheet to U.S. EPA Form 8700-22 if:

- More than two transporters are to be used to transport the waste;
- More space is required for the U.S. DOT description and related information in Item 11 of U.S. EPA Form 8700-22.

Federal regulations require generators and transporters of hazardous waste and owners or operators of hazardous waste treatment, storage, or disposal facilities to use the uniform hazardous waste manifest (EPA Form 8700-22) and, if necessary, this continuation sheet (EPA Form 8700-22A) for both inter- and intrastate transportation.

GENERATORS

Item 21. Generator's U.S. EPA ID Number — Manifest Document Number

Enter the generator's U.S. EPA twelve digit identification number and the unique five digit number assigned to this Manifest (e.g., 00001) as it appears in item 1 on the first page of the Manifest.

Item 22. Page —

Enter the page number of this Continuation Sheet.

Item 23. Generator's Name

Enter the generator's name as it appears in item 3 on the first page of the Manifest.

Item 24. Transporter — Company Name

If additional transporters are used to transport the waste described on this Manifest, enter the company name of each additional transporter in the order in which they will transport the waste. Enter after the word "Transporter" the order of the transporter. For example, Transporter 3 Company Name. Each Continuation Sheet will record the names of two additional transporters.

Item 25. U.S. EPA ID Number

Enter the U.S. EPA twelve digit identification number of the transporter described in item 24.

Item 26. Transporter — Company Name

If additional transporters are used to transport the waste described on this Manifest, enter the company name of each additional transporter in the order in which they will transport the waste. Enter after the word "Transporter" the order of the transporter. For example, Transporter 4 Company Name. Each Continuation Sheet will record the names of two additional transporters.

Item 27. U.S. EPA ID Number

Enter the U.S. EPA twelve digit identification number of the transporter described in item 26.

Item 28. U.S. DOT Description Including Proper Shipping Name, Hazardous Class, and ID Number (UN/NA)

Refer to item 11.

Item 29. Containers (No. and Type)

Refer to item 12.

Item 30. Total Quantity

Refer to item 13.

Item 31. Unit (Wt./Vol.)

Refer to item 14.

Item 32. Special Handling Instructions

Generators may use this space to indicate special transportation, treatment, storage, or disposal information or Bill of Lading information. States are *not* authorized to require additional, new, or different information in this space.

TRANSPORTERS

Item 33. Transporter — Acknowledgement of Receipt of Materials

Enter the same number of the Transporter as identified in item 24. Enter also the name of the person accepting the waste on behalf of the Transporter (Company Name) identified in item 24. That person must acknowledge acceptance of the waste described on the Manifest by signing and entering the date of receipt.

Item 34. Transporter — Acknowledgement of Receipt of Materials

Enter the same number as identified in item 26. Enter also the name of the person accepting the waste on behalf of the Transporter (Company Name) identified in item 26. That person must acknowledge acceptance of the waste described on the Manifest by signing and entering the date of receipt.

OWNERS AND OPERATORS OF TREATMENT, STORAGE, OR DISPOSAL FACILITIES

Item 35. Discrepancy Indication Space

Refer to item 19.

Items L-R are not required by Federal regulations for intra- or interstate transportation. However, States may require generators and owners or operators of treatment, storage, or disposal facilities to complete some or all of items L-R as part of State manifest reporting requirements. Generators and owners and operators of treatment, storage, or disposal facilities are advised to contact State officials for guidance on completing the shaded areas of the manifest.

Public reporting burden for this collection of information is estimated to average 37 minutes for generators, 15 minutes for transporters, and 10 minutes for treatment, storage and disposal facilities. This includes time for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M Street SW., Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office Management and Budget, Washington, DC 20503.

CleanHarbors®
ENVIRONMENTAL SERVICES, INC.

11600 North Aptus Road
Aragonite, UT 84029
801.323.8100
Fax 801.323.8877
www.cleanharbors.com

DATE: 1/9/04

MANIFEST No: OR98452

Dear Generator/Facility;

In an effort to ensure manifest copies are returned as expeditiously as possible, Clean Harbors may return a manifest copy before the manifested shipment is processed. Therefore, the actual weight or piece count of the shipment has not yet been determined.

After the shipment has been processed and the actual weight or piece count of the shipment is known, Clean Harbors may then find a discrepancy that requires resolution from the generator (e.g., weight discrepancy greater than 10%).

The manifested shipment for the attached manifest has not been processed as of this date.

Please contact Mr. Ladislao Garcia, Technical Manager, at (801) 323-8113 should you have any questions or wish to discuss this matter further.

Sincerely,

Mr. Ladislao Garcia
Technical Manager
Clean Harbors

Koppers004434

*** IN CASE OF EMERGENCY CALL 1-800-424-9300 *** L7575C 144444

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. ORD027734359 Manifest Document No. 10304

2. Page 1 of 1 | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
KOPPERS INDUSTRIES
7540 NW ST. HELENS ROAD
PORTLAND, OR 97310

4. Generator's Phone (503) 286-2681

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: EMERALD SERVICES, INC.

6. US EPA ID Number: WAD058364647

C. State Transporter's ID

D. Transporter's Phone (206) 832-3000

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
CLEAN HARBORS (ARAGONITE), LLC
11600 N. APTUS ROAD, EXIT 56
ARAGONITE, UT 84029

10. US EPA ID Number: UTD981552177

G. State Facility's ID

H. Facility's Phone (801) 323-8161

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	15. Waste No.
a. Waste toxic, liquids, organic, n.o.s. (CREOSOTE), 6.1, UN2810, PG-III, ERG#153		2	DM	41500	P	U051, D018
b.						
c.						
d.						

CR
FS 124
OFFC

J. Additional Descriptions for Materials Listed Above
a) CH8009478-B CREOSOTE SOLIDS
R2163ML
2518L

K. Handling Codes for Wastes Listed Above
T07

15. Special Handling Instructions and Additional Information
REPORT ANY 'RQ' DISCHARGE TO NATIONAL RESPONSE CENTER 800-424-8802, AND 911 EMERGENCY NUMBER OR LOCAL OPERATOR. EMERGENCY CONTACT: AMOS KAMERER (503) 286-2681

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

GENERATOR

Printed/Typed Name	Signature	Month	Day	Year
T.J. TURNER	T.J. Turner	1	2	02

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Dale Leick	Dale Leick	1	2	02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
Carrie Thomas	Carrie Thomas	1	8	02

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EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

ORIGINAL - RETURN TO GENERATOR

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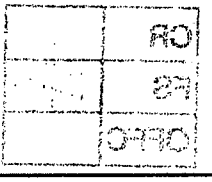

Public reporting burden for this collection of information is estimated to average: 37 minutes for generators, 15 minutes for transporters, and 10 minutes for treatment, storage and disposal facilities. This includes time for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM–223, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, D.C. 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. 0 6 0 0 0 2 7 7 3 4 3 5 9 — Manifest Document No. 10206

2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: KOPPERS INDUSTRIES, 7540 NW ST. HELENS ROAD, PORTLAND, OR 97210

4. Generator's Phone (503) 286-2681

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: EMERALD SERVICES, INC.

6. US EPA ID Number: W A D 0 5 8 3 6 4 6 4 7

C. State Transporter's ID

D. Transporter's Phone (206) 832-3000

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address: CLEAN HARBORS (ARAGONITE), LLC, 11600 N. APTUS ROAD, EXIT 56, ARAGONITE, UT 84029

10. US EPA ID Number: U T 0 9 8 1 5 5 2 1 7 7

G. State Facility's ID

H. Facility's Phone (801) 323-8161

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Waste toxic, liquids, organic, n.o.s. (CREOSOTE), 6.1, UN2810, PG-III, ERG#153		2	DM	41500	P	D018
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above: a) 34800947B-5 CREOSOTE SOLIDS

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information: REPORT ANY 'RQ' DISCHARGE TO NATIONAL RESPONSE CENTER 800-424-8802, AND 911 EMERGENCY NUMBER OR LOCAL OPERATOR. EMERGENCY CONTACT: AMOS KAMERER (503) 286-2681

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR**, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

GENERATOR — Printed/Typed Name: T.J. TURNER — Signature — Month Day Year: 1 2 0 2 0 2

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials — Printed/Typed Name: Dale Leick — Signature — Month Day Year: 1 2 0 2 0 2

18. Transporter 2 Acknowledgement of Receipt of Materials — Printed/Typed Name — Signature — Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19. — Printed/Typed Name — Signature — Month Day Year

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GENERATOR COPY

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Koppers004437

Public reporting burden for this collection of information is estimated to average: 37 minutes for generators, 15 minutes for transporters, and 10 minutes for treatment, storage and disposal facilities. This includes time for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM–223, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, D.C. 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.

Emerald

LDR NOTIFICATION FORM

Generator KOPPERS INDUSTRIES **Manifest** 10306'

Pursuant to 40 CFR §268.7(a), I hereby notify that this shipment contains waste restricted under 40 CFR Part 268 Land Disposal Restrictions (LDR).

A. GENERAL WASTE NOTIFICATION

Form Line No.	Profile No.	EPA Waste Codes & LDR Subcategories (if any) *List codes or use Attachment 1*	NWW	WW	Waste Constituent Notification *Check the "None" box or List Legend Constituent # or use Attachment 2*
1	*CH009478-B*	D018, U051 ☐ Check if Attachment 1 has been used	☒	☐	☒ None ☐ Check if Attachment 2 has been used
2		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used
3		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used
4		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used
5		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used
6		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used

B. HAZARDOUS DEBRIS NOTIFICATION

☐ This hazardous debris, as identified above on Line No(s). _____ is subject to the alternative treatment standards of 40 CFR §268.45.

The waste contains the following contaminants subject to treatment (check all that apply):

☐ Toxicity characteristic debris ☐ Debris contaminated with listed waste ☐ Cyanide reactive debris

C. CONTAMINATED SOIL NOTIFICATION & CERTIFICATION

☐ This contaminated soil, as identified above on Line No(s). _____ is subject to the alternative treatment standards of 40 CFR §268.49(c).

Complete the following: "I certify under penalty of law that I personally have examined this contaminated soil & it [☐does/ ☐does not] contain listed hazardous waste & [☐does / ☐does not] exhibit a characteristic of hazardous waste & [☐is subject to / ☐complies with] soil treatment standards as provided by §268.49(c) or the universal treatment standards". *Note: Constituents subject to treatment are any constituents listed in 40 CFR §268.48 Universal Treatment Standards that are reasonably expected to be present in any given volume of contaminated soil, except fluoride, selenium, sulfides, vanadium & zinc, & are present at concentrations greater than ten times the universal treatment standard.*

D. LAB PACK (INCINERATION) NOTIFICATION & CERTIFICATION

☐ This lab pack, as identified above on Line No(s). _____ is subject to the alternative treatment standards of 40 CFR §268.42(c).

"I certify under penalty of law that I personally have examined & am familiar with the waste & that the lab pack contains only wastes that have not been excluded under Appendix IV to 40 CFR Part 268 & that this lab pack will be sent to a combustion facility in compliance with the alternative treatment standards for lab packs at 40 CFR §268.42(c). I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment".

E. EXTENSIONS & VARIANCES

☐ This waste, as identified above on Line No(s). _____ is not prohibited from land disposal & is subject to a deadline extension or variance, e.g., treatability variance, case-by-case extension. *Describe below any extension or variance that applies to this waste & include applicable dates:*

Generator's Authorized Signature	Name & Title (Printed or Typed)	Date
T Thurman	T J Thurman Foreman	12/02/02

DECEMBER 09, 2002

Environmental Manager
KOPPERS INDUSTRIES INC
7540 NW ST HELENS ROAD
PORTLAND, OREGON 97210

RE: Certificates of Disposal

Dear Environmental Manager:

Enclosed please find your Certificate(s) of Disposal and accompanying detailed report(s) for the waste that was shipped to our facility for treatment. Your original manifest number is referenced on both of these documents along with a Safety-Kleen Aragonite document number.

Your waste has been properly treated and the residue from this waste has been disposed of at an approved and permitted hazardous waste landfill.

Safety-Kleen appreciates you as a valued customer. If you should have any questions or concerns please do not hesitate to contact one of our customer/facility representatives at (801) 323-8100.

Sincerely,

Facility Sales Manager

Enclosures

DECEMBER 09, 2002

KOPPERS INDUSTRIES INC
7540 NW ST HELENS ROAD
PORTLAND, OREGON 97210

EPA ID: ORD 027 734 359

Certificate of Disposal

No. 177461

Customer Manifest: 10306 Document: L7575C destroyed as of DECEMBER 05, 2002

This is to certify that the hazardous material manifested to Safety-Kleen on the above Safety-Kleen Aragonite Document Number was disposed of by incineration in accordance with 40 CFR 761 (and 40 CFR 264 if applicable) as of the above certification date.

Attached is a detailed report which identifies the date(s) of disposal. Residue from this waste has been disposed of at an approved and permitted Hazardous Waste Landfill.

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615), I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.

Safety-Kleen, Aragonite UT
EPA ID # UTD 981 552 177

Facility Sales Manager

Generator: 704090 KOPPERS INDUSTRIES INC

CD #	Document #	Item	State #	Customer #	Types	Weight	Received	Destroyed	Drum Srl Num
177461	L7575C	1	OR010306	10306	CM	20680	12/04/2002	12/04/2002	
177461	L7575C	2	OR010306	10306	CM	20680	12/04/2002	12/05/2002	

41,360

M7424 *** IN CASE OF EMERGENCY CALL 1-800-424-9300 *** 17320

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. ORD027734359973 94 — Manifest Document No. — 2. Page 1 of 2 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
KOPPERS INDUSTRIES
7540 NW ST. HELENS ROAD
PORTLAND, OR 97310

4. Generator's Phone (503) 286-2681

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: EMERALD SERVICES, INC.
6. US EPA ID Number: WAD058364647
C. State Transporter's ID
D. Transporter's Phone (206) 832-3000

7. Transporter 2 Company Name: CLEAN HARBORS ENVIRONMENTAL SVCS
8. US EPA ID Number: MAD039322250
E. State Transporter's ID
F. Transporter's Phone 781-849-1800

9. Designated Facility Name and Site Address
CLEAN HARBORS (ARAGONITE), LLC
11600 N. APTUS ROAD, EXIT 56
ARAGONITE, UT 84029
10. US EPA ID Number: UTD981552177
G. State Facility's ID
H. Facility's Phone (801) 323-8161

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	Hazardous waste, solid, n.o.s. (BENZENE), 9, NA3077, PG-III, ERG#171	X	1	D,M	1.00	P	U051, D018
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
a) CH25918 PPE & DEBRIS, 1X55GDM
D1L049398

CR
FS
OFFC

K. Handling Codes for Wastes Listed Above
T

15. Special Handling Instructions and Additional Information
REPORT ANY 'RQ' DISCHARGE TO NATIONAL RESPONSE CENTER 800-424-8802, AND 911 EMERGENCY NUMBER OR LOCAL OPERATOR. EMERGENCY CONTACT: AMOS KAMERER (503) 286-2681

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
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GENERATOR

Printed/Typed Name	Signature	Month	Day	Year
A.S. KAMERER		09	20	03

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Daniel K Pain		08	20	03

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Daniel R. Boone For CHES		08	25	03

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
Jenna Lawrence		09	02	03

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ORIGINAL-RETURN TO GENERATOR

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Public reporting burden for this collection of information is estimated to average: 37 minutes for generators, 15 minutes for transporters, and 10 minutes for treatment, storage and disposal facilities. This includes time for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM–223, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, D.C. 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.

M704

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039. Expires 9-30-99

UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)

21. Generator's US EPA ID No. ORD027734359 | Manifest Document No. 97394

22. Page 2 of 2 | Information in the shaded areas is not required by Federal law.

23. Generator's Name and Mailing Address
Koppers Industries
7540 NW. St. Helens Rd.
Portland, OR 97210

L. State Manifest Document Number

M. State Generator's ID

24. Transporter 3 Company Name: M.P. Environmental

25. US EPA ID Number: CAT000624247

N. State Transporter's ID

O. Transporter's Phone

26. Transporter ____ Company Name

27. US EPA ID Number

P. State Transporter's ID

Q. Transporter's Phone

	28. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	29. Containers No.	Type	30. Total Quantity	31. Unit Wt/Vol	R. Waste No.
a.							
b.							
c.							
d.							
e.							
f.							
g.							
h.							
i.							

S. Additional Descriptions for Materials Listed Above

T. Handling Codes for Wastes Listed Above

32. Special Handling Instructions and Additional Information

TRANSPORTER

33. Transporter 3 Acknowledgement of Receipt of Materials

Printed/Typed Name: David Renner | Signature: David Renner | Date: Month 08 Day 29 Year 03

34. Transporter Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Date: Month Day Year

FACILITY

35. Discrepancy Indication Space

EPA Form 8700-22 (Rev. 9-88) previous editions obsolete

SAFETY-KLEEN CORP.

90289 (continuation) 6

ORIGINAL-RETURN TO GENERATOR

Koppers004445

Public reporting burden for this collection of information is estimated to average: 37 minutes for generators, 15 minutes for transporters, and 10 minutes for treatment, storage and disposal facilities. This includes time for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

*** IN CASE OF EMERGENCY CALL 1-800-424-9300 ***

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. | Manifest Document No. | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
KOPPERS INDUSTRIES
7540 NW ST. HELENS ROAD
PORTLAND, OR 97310

4. Generator's Phone (503) 286-2681

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name
EMERALD SERVICES, INC

6. US EPA ID Number

C. State Transporter's ID

D. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID (206) 832-3000

F. Transporter's Phone

9. Designated Facility Name and Site Address
CLEAN HARBORS (ARAGONITE), LLC
11600 N. AFTUS ROAD, EXIT 56
ARAGONITE, UT 84029

10. US EPA ID Number

G. State Facility's ID

H. Facility's Phone (801) 322-8161

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Hazardous waste, solid, n.o.s. (BENZENE), 9, NA3077, PG-III, ERG#171	X	1	DM	100	P	D051, D018
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above
a). CH25918 PPE & DEBRIS

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
REPORT ANY 'RQ' DISCHARGE TO NATIONAL RESPONSE CENTER 800-424-8802, AND 911 EMERGENCY NUMBER OR LOCAL OPERATOR. EMERGENCY CONTACT: AMOS KAMERER (503) 286-2681

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

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Printed/Typed Name	Signature	Month	Day	Year
		08	06	12

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Daniel K Pain		08	06	12

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

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Koppers004446

Public reporting burden for this collection of information is estimated to average: 37 minutes for generators, 15 minutes for transporters, and 10 minutes for treatment, storage and disposal facilities. This includes time for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM–223, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, D.C. 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.

Koppers004447

LDR NOTIFICATION FORM

Generator KOPPERS INDUSTRIES **Manifest** 97394

Pursuant to 40 CFR §268.7(a), I hereby notify that this shipment contains waste restricted under 40 CFR Part 268 Land Disposal Restrictions (LDR).

A. GENERAL WASTE NOTIFICATION

Form Line No.	Profile No.	EPA Waste Codes & LDR Subcategories (if any) *List codes or use Attachment 1*	NWW	WW	Waste Constituent Notification *Check the "None" box or List Legend Constituent # or use Attachment 2*
1	CH125918	D018, U051 ☐ Check if Attachment 1 has been used	☒	☐	☒ None ☐ Check if Attachment 2 has been used
2		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used
3		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used
4		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used
5		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used
6		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used

B. HAZARDOUS DEBRIS NOTIFICATION

☐ This hazardous debris, as identified above on Line No(s). _____ is subject to the alternative treatment standards of 40 CFR §268.45.

The waste contains the following contaminants subject to treatment (check all that apply):

☐ Toxicity characteristic debris ☐ Debris contaminated with listed waste ☐ Cyanide reactive debris

C. CONTAMINATED SOIL NOTIFICATION & CERTIFICATION

☐ This contaminated soil, as identified above on Line No(s). _____ is subject to the alternative treatment standards of 40 CFR §268.49(c).

Complete the following: "I certify under penalty of law that I personally have examined this contaminated soil & it [☐does/ ☐does not] contain listed hazardous waste & [☐does / ☐does not] exhibit a characteristic of hazardous waste & [☐is subject to / ☐complies with] soil treatment standards as provided by §268.49(c) or the universal treatment standards". *Note: Constituents subject to treatment are any constituents listed in 40 CFR §268.48 Universal Treatment Standards that are reasonably expected to be present in any given volume of contaminated soil, except fluoride, selenium, sulfides, vanadium & zinc, & are present at concentrations greater than ten times the universal treatment standard.*

D. LAB PACK (INCINERATION) NOTIFICATION & CERTIFICATION

☐ This lab pack, as identified above on Line No(s). _____ is subject to the alternative treatment standards of 40 CFR §268.42(c).

"I certify under penalty of law that I personally have examined & am familiar with the waste & that the lab pack contains only wastes that have not been excluded under Appendix IV to 40 CFR Part 268 & that this lab pack will be sent to a combustion facility in compliance with the alternative treatment standards for lab packs at 40 CFR §268.42(c). I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment".

E. EXTENSIONS & VARIANCES

☐ This waste, as identified above on Line No(s). _____ is not prohibited from land disposal & is subject to a deadline extension or variance, e.g., treatability variance, case-by-case extension. *Describe below any extension or variance that applies to this waste & include applicable dates:*

Generator's Authorized Signature	A. S. Kamdar, Plant Manager	08 / 20 / 2003
	Name & Title (Printed or Typed)	Date

Clean Harbors®
ENVIRONMENTAL SERVICES, INC.

11600 North Aptus Road
Aragonite, UT 84029
801.323.8100

SEPTEMBER 15, 2003

Environmental Manager
KOPPERS INDUSTRIES INC
7540 NW ST HELENS ROAD
PORTLAND, OREGON 97210

RE: Certificates of Disposal

Dear Environmental Manager:

Enclosed please find your Certificate(s) of Disposal and accompanying detailed report(s) for the waste that was shipped to our facility for treatment. Your original manifest number is referenced on both of these documents along with a Clean Harbors Aragonite document number.

Your waste has been properly treated and the residue from this waste has been disposed of at an approved and permitted hazardous waste landfill.

Clean Harbors appreciates you as a valued customer. If you should have any questions or concerns please do not hesitate to contact one of our customer/facility representatives at (801) 323-8100.

Sincerely,

Facility Sales Manager

Enclosures

CleanHarbors®
ENVIRONMENTAL SERVICES, INC.

11600 North Aprus Road
Aragonite, UT 84029
801.323.8100

SEPTEMBER 15, 2003

KOPPERS INDUSTRIES INC
7540 NW ST HELENS ROAD
PORTLAND, OREGON 97210

EPA ID: ORD 027 734 359

Certificate of Disposal

No. 190375

Customer Manifest: 97394 Document: M7424 destroyed as of SEPTEMBER 14, 2003

This is to certify that the hazardous material manifested to Clean Harbors on the above Clean Harbors Aragonite Document Number was disposed of by incineration in accordance with 40 CFR 761 (and 40 CFR 264 if applicable) as of the above certification date.

Attached is a detailed report which identifies the date(s) of disposal. Residue from this waste has been disposed of at an approved and permitted Hazardous Waste Landfill.

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615), I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.

Clean Harbors, Aragonite UT
EPA ID # UTD 981 552 177

Facility Sales Manager

Generator: 704090 KOPPERS INDUSTRIES INC

CD #	Document #	Item	State #	Customer #	Types	Weight	Received	Destroyed	Drum Srl Num
190375	M7424	1	OR97394	97394	DM	195	09/02/2003	09/14/2003	

*** IN CASE OF EMERGENCY CALL 1-800-424-9300 ***

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved: OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. / Manifest Document No.: ORD027734359867 66

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
KOPPERS INDUSTRIES
7540 NW ST. HELENS ROAD
PORTLAND, OR 97310

4. Generator's Phone (503) 286-2681

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: EMERALD SERVICES, INC.

6. US EPA ID Number: WAD058364647

C. State Transporter's ID

D. Transporter's Phone (206) 832-3000

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
CLEAN HARBORS (ARAGONITE), LLC
11600 N. APTUS ROAD, EXIT 56
ARAGONITE, UT 84029

10. US EPA ID Number: UTD981552177

G. State Facility's ID

H. Facility's Phone (801) 323-8161

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Waste toxic, liquids, organic, n.o.s. (CREOSOLE), 6.1, UN2810, PG-III, ERG#55	X	08	DM	440	G	D018
b.						
c.						
d.						

CR / FS X / OFFC

J. Additional Descriptions for Materials Listed Above
a) AR8009478 CREOSOTE
B1554492

K. Handling Codes for Wastes Listed Above
T07

15. Special Handling Instructions and Additional Information
REPORT ANY 'RQ' DISCHARGE TO NATIONAL RESPONSE CENTER 800-424-8802 AND 911 EMERGENCY NUMBER OR LOCAL OPERATOR. EMERGENCY CONTACT: AMOS KAMERER (503) 286-2681

RECEIVED MAR 10 2003 KOPPERS INC. PORTLAND OR

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR**, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month Day Year
A.S. KAMERER	[signature]	02 28 03

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month Day Year
Dale Leick	[signature]	02 28 03

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month Day Year
Glenna Lawrence	[signature]	03 05 04

GENERATOR / TRANSPORTER / FACILITY

Style CF 17 LABELMASTER® (800) 621-5808 www.labelmaster.com

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

ORIGINAL - RETURN TO GENERATOR

PRINTED ON RECYCLED PAPER USING SOYBEAN INK — PRINTED WITH SOY INK

Koppers004452

Public reporting burden for this collection of information is estimated to average: 37 minutes for generators, 15 minutes for transporters, and 10 minutes for treatment, storage and disposal facilities. This includes time for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM–223, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, D.C. 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.

*** IN CASE OF EMERGENCY (A.) 1-800-424-9300 ***

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.
ORD027734359867			

3. Generator's Name and Mailing Address
KOPPERS INDUSTRIES
7540 NW ST. HELENS ROAD
PORTLAND, OR 97310

4. Generator's Phone (503) 286-2681

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: EMERALD SERVICES, INC
6. US EPA ID Number: WAD058364647
C. State Transporter's ID
D. Transporter's Phone (206) 832-3000

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address
CLEAN HARBORS (ARAGONITE), LLC
11600 N. APTUS ROAD, EXIT 56
ARAGONITE, UT 84029
10. US EPA ID Number: UTD981552177
G. State Facility's ID
H. Facility's Phone (801) 375-8721

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Hazardous waste, solid, n.o.s. (BENZENE), 9, NA3077, PG-III, ERG#171		08	M	440	G	U051, D018
b.						
c.						
d.						

RECEIVED
MAR 0 6 2003
KOPPERS INDUSTRIES INC.
PORTLAND OR

J. Additional Descriptions for Materials Listed Above
a) CH25918 PPE & DEBRIS
D1553125

CP
FS Y
OFFC

K. Handling Codes for Wastes Listed Above
T07

15. Special Handling Instructions and Additional Information
REPORT ANY 'RQ' DISCHARGE TO NATIONAL RESPONSE CENTER 800-424-8802, AND 911 EMERGENCY NUMBER OR LOCAL OPERATOR. EMERGENCY CONTACT: AMOS KAMERER (503) 286-2681

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR**, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month	Day	Year
A.S. KAMERER		02	28	03

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
DALE LEICK		02	28	03

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
Glenna Lawrence		03	03	03

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EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

ORIGINAL - RETURN TO GENERATOR

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IN CASE OF EMERGENCY CALL 1-800-424-9300

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. | Manifest Document No.: 0 R D 0 2 7 2 3 4 2 5 9 8 6 7 6 5

2. Page 1 of 1 | Information in the shaded areas is not required by Federal law.

GENERATOR

3. Generator's Name and Mailing Address:
KOPPERS INDUSTRIES
7540 NW ST. HELENS ROAD
PORTLAND, OR 97210

4. Generator's Phone: (503) 286-2681

A. State Manifest Document Number:

B. State Generator's ID:

5. Transporter 1 Company Name: EMERALD SERVICES, INC.

6. US EPA ID Number: W A D 0 5 8 3 6 4 6 4 7

C. State Transporter's ID:

D. Transporter's Phone: (206) 872-3000

7. Transporter 2 Company Name:

8. US EPA ID Number:

E. State Transporter's ID:

F. Transporter's Phone:

9. Designated Facility Name and Site Address:
CLEAN HARBORS (ARAGONITE), LLC
11600 N. APTUS ROAD, EXIT 56
ARAGONITE, UT 84029

10. US EPA ID Number: U T D 9 8 1 5 5 2 1 2 7

G. State Facility's ID:

H. Facility's Phone: (801) 323-8161

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Waste toxic, liquids, organic, n.o.s. (CREOSOLE), 6.1, UN2810, PG-III, ERG#55		08	DM	440	G	D018
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
REPORT ANY 'RQ' DISCHARGE TO NATIONAL RESPONSE CENTER 800-424-8802, AND 911 EMERGENCY NUMBER OR LOCAL OPERATOR. EMERGENCY CONTACT: AMOS KAMERER (503) 286-2681

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Printed/Typed Name	Signature	Month	Day	Year
[illegible]	[signature]	12	20	07

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Dale Leier	[signature]	12	28	03

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

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GENERATOR COPY

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Koppers004456

Public reporting burden for this collection of information is estimated to average: 37 minutes for generators, 15 minutes for transporters, and 10 minutes for treatment, storage and disposal facilities. This includes time for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM–223, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, D.C. 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.

IN CASE OF EMERGENCY, CALL 1 800 424 8802

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. | Manifest Document No.

2. Page 1 of 1 | Information in the shaded areas is not required by Federal law.

GENERATOR

3. Generator's Name and Mailing Address
KOPPERS INDUSTRIES
7540 NW ST. HELENS ROAD
PORTLAND, OR 97210

4. Generator's Phone (503) 286-2681

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name
EMERALD SERVICES, INC.

6. US EPA ID Number
W A D 0 5 8 3 6 4 6 4 7

C. State Transporter's ID

D. Transporter's Phone (206) 872-3000

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
CLEAN HARBORS (ARAGONITE), LLC
11600 N. APTUS ROAD, EXIT 56
ARAGONITE, UT 84029

10. US EPA ID Number
U T D 9 8 1 4 5 2 1 7 7

G. State Facility's ID

H. Facility's Phone (801) 325-8161

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
a. RM Hazardous waste, solid, n.o.s. (BENZENE), 9, NA3077, PG-III, ERG#171	68	DM	440	G	D051, D018
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
REPORT ANY 'RQ' DISCHARGE TO NATIONAL RESPONSE CENTER 800-424-8802, AND 911 EMERGENCY NUMBER OR LOCAL OPERATOR. EMERGENCY CONTACT: AMOS KAMERER (503) 286-2681

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR**, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month	Day	Year
A. J. KAMERER		12	24	97

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
DALE CLICK		12	29	97

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

Public reporting burden for this collection of information is estimated to average: 37 minutes for generators, 15 minutes for transporters, and 10 minutes for treatment, storage and disposal facilities. This includes time for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM–223, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, D.C. 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.

CleanHarbors®
ENVIRONMENTAL SERVICES, INC.

1600 North Aptus Road
Aragonite, UT 84029
801.323.8100
Fax 801.323.8877

MARCH 27, 2003

Environmental Manager
KOPPERS INDUSTRIES INC
7540 NW ST HELENS ROAD
PORTLAND, OREGON 97210

RE: Certificates of Disposal

Dear Environmental Manager:

Enclosed please find your Certificate(s) of Disposal and accompanying detailed report(s) for the waste that was shipped to our facility for treatment. Your original manifest number is referenced on both of these documents along with a Clean Harbors Aragonite document number.

Your waste has been properly treated and the residue from this waste has been disposed of at an approved and permitted hazardous waste landfill.

Clean Harbors appreciates you as a valued customer. If you should have any questions or concerns please do not hesitate to contact one of our customer/facility representatives at (801) 323-8100.

Sincerely,

Facility Sales Manager

Enclosures

CleanHarbors®
ENVIRONMENTAL SERVICES, INC.

1600 North Aptus Road
Aragonite, UT 84029
801.323.8100
Fax 801.323.8877

MARCH 27, 2003

KOPPERS INDUSTRIES INC
7540 NW ST HELENS ROAD
PORTLAND, OREGON 97210

EPA ID: ORD 027 734 359

Certificate of Disposal

No. 182215

Customer Manifest: 86766 Document: M2221 destroyed as of MARCH 25, 2003

This is to certify that the hazardous material manifested to Clean Harbors on the above Clean Harbors Aragonite Document Number was disposed of by incineration in accordance with 40 CFR 761 (and 40 CFR 264 if applicable) as of the above certification date.

Attached is a detailed report which identifies the date(s) of disposal. Residue from this waste has been disposed of at an approved and permitted Hazardous Waste Landfill.

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615), I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.

Clean Harbors, Aragonite UT
EPA ID # UTD 981 552 177

Facility Sales Manager

Generator: 704090 KOPPERS INDUSTRIES INC

CD #	Document #	Item	State #	Customer #	Types	Weight	Received	Destroyed	Drum Srl Num
182215	M2221	1	OR086766	86766	DM	505	03/05/2003	03/25/2003	
182215	M2221	2	OR086766	86766	DM	539	03/05/2003	03/25/2003	
182215	M2221	3	OR086766	86766	DM	307	03/05/2003	03/25/2003	
182215	M2221	4	OR086766	86766	DM	507	03/05/2003	03/25/2003	
182215	M2221	5	OR086766	86766	DM	486	03/05/2003	03/25/2003	
182215	M2221	6	OR086766	86766	DM	553	03/05/2003	03/25/2003	
182215	M2221	7	OR086766	86766	DM	498	03/05/2003	03/25/2003	
182215	M2221	8	OR086766	86766	DM	530	03/05/2003	03/25/2003	

3825

CleanHarbors®
ENVIRONMENTAL SERVICES, INC.

11600 North Aptus Road
Aragonite, UT 84029
801.323.8100
Fax 801.323.8877

MARCH 27, 2003

KOPPERS INDUSTRIES INC
7540 NW ST HELENS ROAD
PORTLAND, OREGON 97210

EPA ID: ORD 027 734 359

Certificate of Disposal

No. 182216

Customer Manifest: 86767 Document: M2222 destroyed as of MARCH 25, 2003

This is to certify that the hazardous material manifested to Clean Harbors on the above Clean Harbors Aragonite Document Number was disposed of by incineration in accordance with 40 CFR 761 (and 40 CFR 264 if applicable) as of the above certification date.

Attached is a detailed report which identifies the date(s) of disposal. Residue from this waste has been disposed of at an approved and permitted Hazardous Waste Landfill.

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615), I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.

Clean Harbors, Aragonite UT
EPA ID # UTD 981 552 177

Facility Sales Manager

Generator: 704090 KOPPERS INDUSTRIES INC

CD #	Document #	Item	State #	Customer #	Types	Weight	Received	Destroyed	Drum Srl Num
182216	M2222	1	OR086767	86767	DM	179	03/05/2003	03/25/2003	
182216	M2222	2	OR086767	86767	DM	195	03/05/2003	03/25/2003	
182216	M2222	3	OR086767	86767	DM	188	03/05/2003	03/25/2003	
182216	M2222	4	OR086767	86767	DM	188	03/05/2003	03/25/2003	
182216	M2222	5	OR086767	86767	DM	219	03/05/2003	03/25/2003	
182216	M2222	6	OR086767	86767	DM	144	03/05/2003	03/25/2003	
182216	M2222	7	OR086767	86767	DM	192	03/05/2003	03/25/2003	
182216	M2222	8	OR086767	86767	DM	144	03/05/2003	03/25/2003	

1449 #

*** IN CASE OF EMERGENCY CALL 1-800-424-9300 ***

R2190 25019L

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.	Manifest Document No.	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.
ORD027734359	10342		

GENERATOR

3. Generator's Name and Mailing Address: KOPPERS INDUSTRIES, 7540 NW ST. HELENS ROAD, PORTLAND, OR 97310

4. Generator's Phone (503) 286-2681

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: EMERALD SERVICES, INC.

6. US EPA ID Number: WAD058364647

C. State Transporter's ID

D. Transporter's Phone (206) 832-3000

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address: CLEAN HARBORS (ARAGONITE), LLC, 11600 N. APTUS ROAD, EXIT 56, ARAGONITE, UT 84029

10. US EPA ID Number: UTD981552177

G. State Facility's ID

H. Facility's Phone (801) 323-8161

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Waste toxic, liquids, organic, n.o.s. (CREOSOTE), 6.1, UN2810, PG-III, ERG#153		2	CY	42500	P	U051, D018
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above: a) CH8009478-B CREOSOTE SOLIDS

K. Handling Codes for Wastes Listed Above: T07

15. Special Handling Instructions and Additional Information: REPORT ANY 'RQ' DISCHARGE TO NATIONAL RESPONSE CENTER 800-424-8802, AND 911 EMERGENCY NUMBER OR LOCAL OPERATOR. EMERGENCY CONTACT: AMOS KAMERER (503) 286-2681

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR**, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month	Day	Year
[illegible]	[signature]	12	16	01

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Dale Leach	[signature]	12	06	01

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
Carrie Thomas	Carrie Thomas	12	10	01

Style CF 17 LABELMASTER® (800) 621-5808 www.labelmaster.com

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

ORIGINAL - RETURN TO GENERATOR

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Public reporting burden for this collection of information is estimated to average: 37 minutes for generators, 15 minutes for transporters, and 10 minutes for treatment, storage and disposal facilities. This includes time for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM–223, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, D.C. 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. [illegible] Manifest Document No. 10342

2. Page 1 of [illegible] Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
KOPPERS INDUSTRIES
7540 NW ST. HELENS ROAD
PORTLAND, OR 97210

A. State Manifest Document Number

B. State Generator's ID

4. Generator's Phone (503) 286-2681

5. Transporter 1 Company Name
EMERALD SERVICES, INC.

6. US EPA ID Number
W A D 0 5 8 3 6 4 6 4 7

C. State Transporter's ID

D. Transporter's Phone (206) 432-2000

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
CLEAN HARBORS (ARAGONITE), LLC
11600 N. APTUS ROAD, EXIT 56
ARAGONITE, UT 84029

10. US EPA ID Number
U T 0 9 8 1 5 5 2 1 7 7

G. State Facility's ID

H. Facility's Phone (801) 323-8161

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	15. Waste No.
a. Waste toxic, liquids, organic, n.o.s. (CREOSOTE), 6.1, UN2810, PG-III, ERG#153		2	CY	42500	P	D051, D018
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above
a) CREOSOTE CREOSOTE SOLIDS

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
REPORT ANY 'RQ' DISCHARGE TO NATIONAL RESPONSE CENTER 800-424-8802, AND 911 EMERGENCY NUMBER OR LOCAL OPERATOR. EMERGENCY CONTACT: AMOS KAMERER (503) 286-2681

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Printed/Typed Name	Signature	Month	Day	Year
[illegible]	[signature]	12	16	12

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Dale Leiah	[signature]	12	16	12

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

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EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

GENERATOR COPY

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Koppers004467

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DECEMBER 10, 2002

Environmental Manager
KOPPERS INDUSTRIES INC
7540 NW ST HELENS ROAD
PORTLAND, OREGON 97210

RE: Certificates of Disposal

Dear Environmental Manager:

Enclosed please find your Certificate(s) of Disposal and accompanying detailed report(s) for the waste that was shipped to our facility for treatment. Your original manifest number is referenced on both of these documents along with a Safety-Kleen Aragonite document number.

Your waste has been properly treated and the residue from this waste has been disposed of at an approved and permitted hazardous waste landfill.

Safety-Kleen appreciates you as a valued customer. If you should have any questions or concerns please do not hesitate to contact one of our customer/facility representatives at (801) 323-8100.

Sincerely,

Facility Sales Manager

Enclosures

DECEMBER 10, 2002

KOPPERS INDUSTRIES INC
7540 NW ST HELENS ROAD
PORTLAND, OREGON 97210

EPA ID: ORD 027 734 359

Certificate of Disposal

No. 177620

Customer Manifest: 10342 Document: L7735C destroyed as of DECEMBER 09, 2002

This is to certify that the hazardous material manifested to Safety-Kleen on the above Safety-Kleen Aragonite Document Number was disposed of by incineration in accordance with 40 CFR 761 (and 40 CFR 264 if applicable) as of the above certification date.

Attached is a detailed report which identifies the date(s) of disposal. Residue from this waste has been disposed of at an approved and permitted Hazardous Waste Landfill.

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615), I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.

Safety-Kleen, Aragonite UT
EPA ID # UTD 981 552 177

Facility Sales Manager

Generator: 704090 KOPPERS INDUSTRIES INC

CD #	Document #	Item	State #	Customer #	Types	Weight	Received	Destroyed	Drum Srl Num
177620	L7735C	1	OR010342	10342	CM	22590	12/09/2002	12/09/2002	
177620	L7735C	2	OR010342	10342	CM	22590	12/09/2002	12/09/2002	

45,180

*** IN CASE OF EMERGENCY CALL 1-800-424-9300 *** L-9936C 14446 R2171 / 250201

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: ORD027734359 Manifest Document No.: 10390
2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

GENERATOR

3. Generator's Name and Mailing Address: KOPPERS INDUSTRIES, 7540 NW ST. HELENS ROAD, PORTLAND, OR 97310
4. Generator's Phone: (503) 286-2681
A. State Manifest Document Number
B. State Generator's ID

5. Transporter 1 Company Name: EMERALD SERVICES, INC.
6. US EPA ID Number: WAD058364647
C. State Transporter's ID
D. Transporter's Phone: (206) 832-3000

7. Transporter 2 Company Name
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Phone

9. Designated Facility Name and Site Address: CLEAN HARBORS (ARAGONITE), LLC, 11600 N. APTUS ROAD, EXIT 56, ARAGONITE, UT 84029
10. US EPA ID Number: UTD981552177
G. State Facility's ID
H. Facility's Phone: (801) 323-8161

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	Waste toxic, liquids, organic, n.o.s. (CREOSOTE), 6.1, UN2810, PG-III, ERG#153		2	CY	43500	P	U051, D018
b.							
c.							
d.							

CR
FS 12/13
OFFC

J. Additional Descriptions for Materials Listed Above
a) CH8009478-B CREOSOTE SOLIDS

K. Handling Codes for Wastes Listed Above
T01

15. Special Handling Instructions and Additional Information
REPORT ANY 'RQ' DISCHARGE TO NATIONAL RESPONSE CENTER 800-424-8802, AND 911 EMERGENCY NUMBER OR LOCAL OPERATOR. EMERGENCY CONTACT: AMOS KAMERER (503) 286-2681

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: A.S. Kamerer — Signature — Month Day Year: 11 21 02

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: DALE LEICK — Signature — Month Day Year: 11 21 02

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Carrie Thomas — Signature: Carrie Thomas — Month Day Year: 12 13 02

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EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

ORIGINAL - RETURN TO GENERATOR

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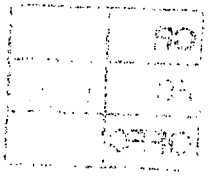

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Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. [illegible] Manifest Document No. 10340

2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: KOPPERS INDUSTRIES, 7540 NW ST. HELENS ROAD, PORTLAND, OR 97210

4. Generator's Phone (503) 286-2681

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: EMERALD SERVICES, INC.

6. US EPA ID Number: W A D 0 5 8 3 6 4 6 4 7

C. State Transporter's ID

D. Transporter's Phone (206) 832-9000

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address: CLEAN HARBORS (ARAGONITE), LLC, 11600 N. APTUS ROAD, EXIT 56, ARAGONITE, UT 84029

10. US EPA ID Number: U T 0 9 8 1 5 5 2 1 7 7

G. State Facility's ID

H. Facility's Phone (801) 323-8161

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	Waste toxic, liquids, organic, n.o.s. (CREOSOTE), 6.1, UN2810, PG-III, ERG#153		2	CY	43500	P	D051, D018
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
REPORT ANY 'RQ' DISCHARGE TO NATIONAL RESPONSE CENTER 800-424-8802, AND 911 EMERGENCY NUMBER OR LOCAL OPERATOR. EMERGENCY CONTACT: AMOS KAMERER (503) 286-2681

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
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Printed/Typed Name	Signature	Month	Day	Year
A. Kamerer		1 2	1 1	0 2

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
DALE LEIELE		1 2	1 1	0 2

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

GENERATOR / TRANSPORTER / FACILITY

Style CF 17 LABELMASTER® (800) 621-5808 www.labelmaster.com

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

GENERATOR COPY

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Koppers004474

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Emerald

LDR NOTIFICATION FORM

Generator KOPPERS INDUSTRIES **Manifest** 10340

Pursuant to 40 CFR §268.7(a), I hereby notify that this shipment contains waste restricted under 40 CFR Part 268 Land Disposal Restrictions (LDR).

A. GENERAL WASTE NOTIFICATION

Form Line No.	Profile No.	EPA Waste Codes & LDR Subcategories (if any) *List codes or use Attachment 1*	NWW	WW	Waste Constituent Notification *Check the "None" box or List Legend Constituent # or use Attachment 2*
1	*CH009478-B*	D018, U051 ☐ Check if Attachment 1 has been used	☒	☐	☒ None ☐ Check if Attachment 2 has been used
2		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used
3		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used
4		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used
5		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used
6		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used

B. HAZARDOUS DEBRIS NOTIFICATION

☐ This hazardous debris, as identified above on Line No(s). _____ is subject to the alternative treatment standards of 40 CFR §268.45.

The waste contains the following contaminants subject to treatment (check all that apply):

☐ Toxicity characteristic debris ☐ Debris contaminated with listed waste ☐ Cyanide reactive debris

C. CONTAMINATED SOIL NOTIFICATION & CERTIFICATION

☐ This contaminated soil, as identified above on Line No(s). _____ is subject to the alternative treatment standards of 40 CFR §268.49(c).

Complete the following: "I certify under penalty of law that I personally have examined this contaminated soil & it [☐does/ ☐does not] contain listed hazardous waste & [☐does / ☐does not] exhibit a characteristic of hazardous waste & [☐is subject to / ☐complies with] soil treatment standards as provided by §268.49(c) or the universal treatment standards". *Note: Constituents subject to treatment are any constituents listed in 40 CFR §268.48 Universal Treatment Standards that are reasonably expected to be present in any given volume of contaminated soil, except fluoride, selenium, sulfides, vanadium & zinc, & are present at concentrations greater than ten times the universal treatment standard.*

D. LAB PACK (INCINERATION) NOTIFICATION & CERTIFICATION

☐ This lab pack, as identified above on Line No(s). _____ is subject to the alternative treatment standards of 40 CFR §268.42(c).

"I certify under penalty of law that I personally have examined & am familiar with the waste & that the lab pack contains only wastes that have not been excluded under Appendix IV to 40 CFR Part 268 & that this lab pack will be sent to a combustion facility in compliance with the alternative treatment standards for lab packs at 40 CFR §268.42(c). I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment".

E. EXTENSIONS & VARIANCES

☐ This waste, as identified above on Line No(s). _____ is not prohibited from land disposal & is subject to a deadline extension or variance, e.g., treatability variance, case-by-case extension. *Describe below any extension or variance that applies to this waste & include applicable dates:*

Generator's Authorized Signature	A. S. Kamerer Name & Title (Printed or Typed)	12 / 11 / 02 Date

DECEMBER 17, 2002

Environmental Manager
KOPPERS INDUSTRIES INC
7540 NW ST HELENS ROAD
PORTLAND, OREGON 97210

RE: Certificates of Disposal

Dear Environmental Manager:

Enclosed please find your Certificate(s) of Disposal and accompanying detailed report(s) for the waste that was shipped to our facility for treatment. Your original manifest number is referenced on both of these documents along with a Safety-Kleen Aragonite document number.

Your waste has been properly treated and the residue from this waste has been disposed of at an approved and permitted hazardous waste landfill.

Safety-Kleen appreciates you as a valued customer. If you should have any questions or concerns please do not hesitate to contact one of our customer/facility representatives at (801) 323-8100.

Sincerely,

Facility Sales Manager

Enclosures

DECEMBER 17, 2002

KOPPERS INDUSTRIES INC
7540 NW ST HELENS ROAD
PORTLAND, OREGON 97210

EPA ID: ORD 027 734 359

Certificate of Disposal

No. 177926

Customer Manifest: 10340 Document: L7936C destroyed as of DECEMBER 16, 2002

This is to certify that the hazardous material manifested to Safety-Kleen on the above Safety-Kleen Aragonite Document Number was disposed of by incineration in accordance with 40 CFR 761 (and 40 CFR 264 if applicable) as of the above certification date.

Attached is a detailed report which identifies the date(s) of disposal. Residue from this waste has been disposed of at an approved and permitted Hazardous Waste Landfill.

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615), I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.

Safety-Kleen, Aragonite UT
EPA ID # UTD 981 552 177

Facility Sales Manager

Generator: 704090 KOPPERS INDUSTRIES INC

CD #	Document #	Item	State #	Customer #	Types	Weight	Received	Destroyed	Drum Srl Num
177926	L7936C	1	OR010340	10340	CM	23210	12/13/2002	12/16/2002	
177926	L7936C	2	OR010340	10340	CM	23210	12/13/2002	12/15/2002	

46,420

L7172C *** IN CASE OF EMERGENCY CALL 1-800-424-9300 *** 14183

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. ORD027734359103077 — Manifest Document No.

2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
KOPPERS INDUSTRIES
7540 NW ST. HELENS ROAD
PORTLAND, OR 97310

4. Generator's Phone (503) 286-2681

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: EMERALD SERVICES, INC.

6. US EPA ID Number: WAD058364647

C. State Transporter's ID

D. Transporter's Phone (206) 832-3000

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
CLEAN HARBORS (ARAGONITE), LLC
11600 N. APTUS ROAD, EXIT 56
ARAGONITE, UT 84029

10. US EPA ID Number: UTD981552177

G. State Facility's ID

H. Facility's Phone (801) 323-8161

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Waste toxic, liquids, organic, n.o.s. (CREOSOTE), 6.1, UN2810, PG-III, ERG#153		2	DM	39000	P	U051, D018
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above
a) CH8009478-B CREOSOTE SOLIDS

K. Handling Codes for Wastes Listed Above
T07

15. Special Handling Instructions and Additional Information
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16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

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GENERATOR

Printed/Typed Name	Signature	Month	Day	Year
Howard S. Rue III		12	16	02

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Dale Leick		12	19	02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
Carrie Thomas		12	12	02

R2168/25013

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EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

ORIGINAL - RETURN TO GENERATOR

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IN CASE OF EMERGENCY CALL 1-800-424-9300

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. / Manifest Document No.: ORD027343591030

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: KOPPERS INDUSTRIES, 7540 NW ST. HELENS ROAD, PORTLAND, OR 97310

4. Generator's Phone (503) 286-2681

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: EMERALD SERVICES, INC.

6. US EPA ID Number: WAD058364647

C. State Transporter's ID

D. Transporter's Phone (206) 832-3000

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address: CLEAN HARBORS (ARAGONITE), LLC, 11600 N. APTUS ROAD, EXIT 56, ARAGONITE, UT 84029

10. US EPA ID Number: UTD981552177

G. State Facility's ID

H. Facility's Phone (801) 323-8161

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
a. Waste toxic, liquids, organic, n.o.s. (CREOSOTE), 6.1, UN2810, PG-III, ERG#153		2	DM	3 7000	G	U051, D018
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above

a) CH8009478-S CREOSOTE SOLIDS

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

REPORT ANY 'RQ' DISCHARGE TO NATIONAL RESPONSE CENTER 800-424-8802, AND 911 EMERGENCY NUMBER OR LOCAL OPERATOR. EMERGENCY CONTACT: AMOS KAMERER (503) 286-2681

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR**, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: [illegible] | Signature: [signature] | Month Day Year: 11 11 02

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Dale Leick | Signature: [signature] | Month Day Year: 11 19 02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name | Signature | Month Day Year

GENERATOR / TRANSPORTER / FACILITY

Style CF 17 LABELMASTER® (800) 621-5808 www.labelmaster.com

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

GENERATOR COPY

PRINTED ON RECYCLED PAPER USING SOYBEAN INK — PRINTED WITH SOY INK

Koppers004482

Public reporting burden for this collection of information is estimated to average: 37 minutes for generators, 15 minutes for transporters, and 10 minutes for treatment, storage and disposal facilities. This includes time for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM–223, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, D.C. 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.

Emerald

LDR NOTIFICATION FORM

Generator KOPPERS INDUSTRIES **Manifest** 10307

Pursuant to 40 CFR §268.7(a), I hereby notify that this shipment contains waste restricted under 40 CFR Part 268 Land Disposal Restrictions (LDR).

A. GENERAL WASTE NOTIFICATION

Form Line No.	Profile No.	EPA Waste Codes & LDR Subcategories (if any) *List codes or use Attachment 1*	NWW	WW	Waste Constituent Notification *Check the "None" box or List Legend Constituent # or use Attachment 2*
1	*CH009478-B*	D018, U051 ☐ Check if Attachment 1 has been used	☒	☐	☒ None ☐ Check if Attachment 2 has been used
2		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used
3		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used
4		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used
5		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used
6		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used

B. HAZARDOUS DEBRIS NOTIFICATION

☐ This hazardous debris, as identified above on Line No(s). _____ is subject to the alternative treatment standards of 40 CFR §268.45.

The waste contains the following contaminants subject to treatment (check all that apply):

☐ Toxicity characteristic debris ☐ Debris contaminated with listed waste ☐ Cyanide reactive debris

C. CONTAMINATED SOIL NOTIFICATION & CERTIFICATION

☐ This contaminated soil, as identified above on Line No(s). _____ is subject to the alternative treatment standards of 40 CFR §268.49(c).

Complete the following: "I certify under penalty of law that I personally have examined this contaminated soil & it |☐does/ ☐does not| contain listed hazardous waste & |☐does / ☐does not| exhibit a characteristic of hazardous waste & |☐is subject to / ☐complies with| soil treatment standards as provided by §268.49(c) or the universal treatment standards". *Note: Constituents subject to treatment are any constituents listed in 40 CFR §268.48 Universal Treatment Standards that are reasonably expected to be present in any given volume of contaminated soil, except fluoride, selenium, sulfides, vanadium & zinc, & are present at concentrations greater than ten times the universal treatment standard.*

D. LAB PACK (INCINERATION) NOTIFICATION & CERTIFICATION

☐ This lab pack, as identified above on Line No(s). _____ is subject to the alternative treatment standards of 40 CFR §268.42(c).

"I certify under penalty of law that I personally have examined & am familiar with the waste & that the lab pack contains only wastes that have not been excluded under Appendix IV to 40 CFR Part 268 & that this lab pack will be sent to a combustion facility in compliance with the alternative treatment standards for lab packs at 40 CFR §268.42(c). I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment".

E. EXTENSIONS & VARIANCES

☐ This waste, as identified above on Line No(s). _____ is not prohibited from land disposal & is subject to a deadline extension or variance, e.g., treatability variance, case-by-case extension. *Describe below any extension or variance that applies to this waste & include applicable dates:*

Generator's Authorized Signature	Name & Title (Printed or Typed)	Date
[signature]	Howard St Rue	11 / 19 / 02

NOVEMBER 26, 2002

Environmental Manager
KOPPERS INDUSTRIES INC
7540 NW ST HELENS ROAD
PORTLAND, OREGON 97210

RE: Certificates of Disposal

Dear Environmental Manager:

Enclosed please find your Certificate(s) of Disposal and accompanying detailed report(s) for the waste that was shipped to our facility for treatment. Your original manifest number is referenced on both of these documents along with a Safety-Kleen Aragonite document number.

Your waste has been properly treated and the residue from this waste has been disposed of at an approved and permitted hazardous waste landfill.

Safety-Kleen appreciates you as a valued customer. If you should have any questions or concerns please do not hesitate to contact one of our customer/facility representatives at (801) 323-8100.

Sincerely,

Facility Sales Manager

Enclosures

NOVEMBER 26, 2002

KOPPERS INDUSTRIES INC
7540 NW ST HELENS ROAD
PORTLAND, OREGON 97210

EPA ID: ORD 027 734 359

Certificate of Disposal

No. 177037

Customer Manifest: 10307 Document: L7172C destroyed as of NOVEMBER 24, 2002

This is to certify that the hazardous material manifested to Safety-Kleen on the above Safety-Kleen Aragonite Document Number was disposed of by incineration in accordance with 40 CFR 761 (and 40 CFR 264 if applicable) as of the above certification date.

Attached is a detailed report which identifies the date(s) of disposal. Residue from this waste has been disposed of at an approved and permitted Hazardous Waste Landfill.

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615), I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.

Safety-Kleen, Aragonite UT
EPA ID # UTD 981 552 177

Facility Sales Manager

Generator: 704090 KOPPERS INDUSTRIES INC

CD #	Document #	Item	State #	Customer #	Types	Weight	Received	Destroyed	Drum Srl Num
177037	L7172C	1	OR010307	10307	CM	21270	11/21/2002	11/24/2002	
177037	L7172C	2	OR010307	10307	CM	21270	11/21/2002	11/24/2002	

~~[illegible]~~ 42,540

*** IN CASE OF EMERGENCY CALL 1-800-424-9300 *** 14182

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. O R D 0 2 7 7 3 4 3 5 9 — Manifest Document No. 10305

2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
KOPPERS INDUSTRIES
7540 NW ST. HELENS ROAD
PORTLAND, OR 97310

4. Generator's Phone (503) 286-2681

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: EMERALD SERVICES, INC.

6. US EPA ID Number: W A D 0 5 8 3 6 4 6 4 7

C. State Transporter's ID

D. Transporter's Phone (206) 832-3000

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
CLEAN HARBORS (ARAGONITE), LLC
11600 N. APTUS ROAD, EXIT 56
ARAGONITE, UT 84029

10. US EPA ID Number: U T D 9 8 1 5 5 2 1 7 7

G. State Facility's ID

H. Facility's Phone (801) 323-8161

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Waste toxic, liquids, organic, n.o.s. (CREOSOTE), 6.1, UN2810, PG-III, ERG#153		02	DM	040	CY	U051, D018
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above
a) CH8009478-B CREOSOTE SOLIDS
25011L / 25007

CR ✓
FS ✓
OFFC

K. Handling Codes for Wastes Listed Above: T07

15. Special Handling Instructions and Additional Information
REPORT ANY 'RQ' DISCHARGE TO NATIONAL RESPONSE CENTER 800-424-8802, AND 911 EMERGENCY NUMBER OR LOCAL OPERATOR. EMERGENCY CONTACT: AMOS KAMERER (503) 286-2681

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR**, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month	Day	Year
H. S. KAMERER		1	1	02

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
B KRAUK		1	1	02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
Carrie Thomas	Carrie Thomas	1	11	02

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EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

ORIGINAL - RETURN TO GENERATOR

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Public reporting burden for this collection of information is estimated to average: 37 minutes for generators, 15 minutes for transporters, and 10 minutes for treatment, storage and disposal facilities. This includes time for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM–223, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, D.C. 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.

*** IN CASE OF EMERGENCY CALL 1-800-424-9300 ***

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. OZR D 0 2 7 7 3 4 3 5 9 — Manifest Document No. 10305 — 2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: KOPPERS INDUSTRIES, 7540 NW ST. HELENS ROAD, PORTLAND, OR 97210

4. Generator's Phone (503) 286-2681

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: EMERALD SERVICES, INC.

6. US EPA ID Number: W A D 0 5 8 3 6 4 6 4 7

C. State Transporter's ID

D. Transporter's Phone (206) 832-3000

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address: CLEAN HARBORS (ARAGONITE), LLC, 11600 N. APTUS ROAD, EXIT 56, ARAGONITE, UT 84029

10. US EPA ID Number: U T D 9 8 1 5 5 2 1 7 7

G. State Facility's ID

H. Facility's Phone (801) 123-8161

GENERATOR

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. waste toxic, liquids, organic, n.o.s. (CREOSOTE), 6.1, UN2810, PG-III, ERG#153			D M		G	U051, D018
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
REPORT ANY 'RQ' DISCHARGE TO NATIONAL RESPONSE CENTER 800-424-8802, AND 911 EMERGENCY NUMBER OR LOCAL OPERATOR. EMERGENCY CONTACT: AMOS KAMERER (503) 286-2681

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: A.S. Kamerer — Signature — Month 1 1 Day 1 3 Year 9 2

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: R. Kaulk — Signature — Month 1 1 Day 1 3 Year 9 2

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name — Signature — Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name — Signature — Month Day Year

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EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

GENERATOR COPY

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Koppers004490

Public reporting burden for this collection of information is estimated to average: 37 minutes for generators, 15 minutes for transporters, and 10 minutes for treatment, storage and disposal facilities. This includes time for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM–223, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, D.C. 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.

Emerald

LDR NOTIFICATION FORM

Generator KOPPERS INDUSTRIES **Manifest** 10305

Pursuant to 40 CFR §268.7(a), I hereby notify that this shipment contains waste restricted under 40 CFR Part 268 Land Disposal Restrictions (LDR).

A. GENERAL WASTE NOTIFICATION

Form Line No.	Profile No.	EPA Waste Codes & LDR Subcategories (if any) *List codes or use Attachment 1*	NWW	WW	Waste Constituent Notification *Check the "None" box or List Legend Constituent # or use Attachment 2*
1	*CH009478-B*	D018, U051 ☐ Check if Attachment 1 has been used	☒	☐	☒ None ☐ Check if Attachment 2 has been used
2		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used
3		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used
4		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used
5		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used
6		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used

B. HAZARDOUS DEBRIS NOTIFICATION

☐ This hazardous debris, as identified above on Line No(s). _____ is subject to the alternative treatment standards of 40 CFR §268.45.

The waste contains the following contaminants subject to treatment (check all that apply):

☐ Toxicity characteristic debris ☐ Debris contaminated with listed waste ☐ Cyanide reactive debris

C. CONTAMINATED SOIL NOTIFICATION & CERTIFICATION

☐ This contaminated soil, as identified above on Line No(s). _____ is subject to the alternative treatment standards of 40 CFR §268.49(c).

Complete the following: "I certify under penalty of law that I personally have examined this contaminated soil & it [☐does/ ☐does not] contain listed hazardous waste & [☐does / ☐does not] exhibit a characteristic of hazardous waste & [☐is subject to / ☐complies with] soil treatment standards as provided by §268.49(c) or the universal treatment standards". *Note: Constituents subject to treatment are any constituents listed in 40 CFR §268.48 Universal Treatment Standards that are reasonably expected to be present in any given volume of contaminated soil, except fluoride, selenium, sulfides, vanadium & zinc, & are present at concentrations greater than ten times the universal treatment standard.*

D. LAB PACK (INCINERATION) NOTIFICATION & CERTIFICATION

☐ This lab pack, as identified above on Line No(s). _____ is subject to the alternative treatment standards of 40 CFR §268.42(c).

"I certify under penalty of law that I personally have examined & am familiar with the waste & that the lab pack contains only wastes that have not been excluded under Appendix IV to 40 CFR Part 268 & that this lab pack will be sent to a combustion facility in compliance with the alternative treatment standards for lab packs at 40 CFR §268.42(c). I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment".

E. EXTENSIONS & VARIANCES

☐ This waste, as identified above on Line No(s). _____ is not prohibited from land disposal & is subject to a deadline extension or variance, e.g., treatability variance, case-by-case extension. *Describe below any extension or variance that applies to this waste & include applicable dates:*

Generator's Authorized Signature	A. S. Kamenek	11 / 13 / 02
	Name & Title (Printed or Typed)	Date

DECEMBER 02, 2002

Environmental Manager
KOPPERS INDUSTRIES INC
7540 NW ST HELENS ROAD
PORTLAND, OREGON 97210

RE: Certificates of Disposal

Dear Environmental Manager:

Enclosed please find your Certificate(s) of Disposal and accompanying detailed report(s) for the waste that was shipped to our facility for treatment. Your original manifest number is referenced on both of these documents along with a Safety-Kleen Aragonite document number.

Your waste has been properly treated and the residue from this waste has been disposed of at an approved and permitted hazardous waste landfill.

Safety-Kleen appreciates you as a valued customer. If you should have any questions or concerns please do not hesitate to contact one of our customer/facility representatives at (801) 323-8100.

Sincerely,

Facility Sales Manager

Enclosures

DECEMBER 02, 2002

KOPPERS INDUSTRIES INC
7540 NW ST HELENS ROAD
PORTLAND, OREGON 97210

EPA ID: ORD 027 734 359

Certificate of Disposal

No. 177107

Customer Manifest: 10305 Document: L6926C destroyed as of NOVEMBER 25, 2002

This is to certify that the hazardous material manifested to Safety-Kleen on the above Safety-Kleen Aragonite Document Number was disposed of by incineration in accordance with 40 CFR 761 (and 40 CFR 264 if applicable) as of the above certification date.

Attached is a detailed report which identifies the date(s) of disposal. Residue from this waste has been disposed of at an approved and permitted Hazardous Waste Landfill.

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615), I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.

Safety-Kleen, Aragonite UT
EPA ID # UTD 981 552 177

Facility Sales Manager

Generator: 704090 KOPPERS INDUSTRIES INC

CD #	Document #	Item	State #	Customer #	Types	Weight	Received	Destroyed	Drum Srl Num
177107	L6926C	1	OR010305	10305	CM	14610	11/15/2002	11/25/2002	
177107	L6926C	2	OR010305	10305	CM	14610	11/15/2002	11/16/2002	

29220

250157/250016 IN CASE OF EMERGENCY, CALL 1-800-424-9300

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: ORD027734359 — Manifest Document No.: 10304
2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

GENERATOR

3. Generator's Name and Mailing Address: KOPPERS INDUSTRIES, 7540 NW ST. HELENS ROAD, PORTLAND, OR 97310
4. Generator's Phone (503) 286-2681

A. State Manifest Document Number:
B. State Generator's ID:

5. Transporter 1 Company Name: EMERALD SERVICES, INC.
6. US EPA ID Number: WAD058364647
C. State Transporter's ID:
D. Transporter's Phone: (206) 832-3000

7. Transporter 2 Company Name:
8. US EPA ID Number:
E. State Transporter's ID:
F. Transporter's Phone:

9. Designated Facility Name and Site Address: CLEAN HARBORS (ARAGONITE), LLC, 11600 N. APTUS ROAD, EXIT 56, ARAGONITE, UT 84029
10. US EPA ID Number: UTD981552177
G. State Facility's ID:
H. Facility's Phone: (801) 323-8161

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Waste toxic, liquids, organic, n.o.s. (CREOSOTE), 6.1, UN2810, PG-III, ERG#153		2	DM	53600	P	U051, D018
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above: a) CH8009478-B CREOSOTE SOLIDS

K. Handling Codes for Wastes Listed Above: T07

15. Special Handling Instructions and Additional Information: REPORT ANY 'RQ' DISCHARGE TO NATIONAL RESPONSE CENTER 800-424-8802, AND 911 EMERGENCY NUMBER OR LOCAL OPERATOR. EMERGENCY CONTACT: AMOS KAMERER (503) 286-2681

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR**, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month	Day	Year
Howard S Rice		1	11	09

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Dale Leach	Dale Leach	1	11	09

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
Carrie Thomas	Carrie Thomas	1	11	09

Style CF 17 LABELMASTER® (800) 621-5808 www.labelmaster.com

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

ORIGINAL - RETURN TO GENERATOR

PRINTED ON RECYCLED PAPER USING SOYBEAN INK — PRINTED WITH SOY INK

Public reporting burden for this collection of information is estimated to average: 37 minutes for generators, 15 minutes for transporters, and 10 minutes for treatment, storage and disposal facilities. This includes time for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM–223, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, D.C. 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.

*** IN CASE OF EMERGENCY CALL 1-800-424-9300

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: O R D 0 2 7 7 3 4 3 5 9
Manifest Document No.: 10304

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
KOPPERS INDUSTRIES
7540 NW ST. HELENS ROAD
PORTLAND, OR 97310

4. Generator's Phone (503) 286-2681

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: EMERALD SERVICES, INC.

6. US EPA ID Number: W A D 0 5 8 3 6 4 6 4 7

C. State Transporter's ID

D. Transporter's Phone (206) 832-3000

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
CLEAN HARBORS (ARAGONITE), LLC
11600 N. APTUS ROAD, EXIT 56
ARAGONITE, UT 84029

10. US EPA ID Number: U T D 9 8 1 5 5 2 1 7 7

G. State Facility's ID

H. Facility's Phone (801) 323-8161

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. waste toxic, liquids, organic, n.o.s. (CREOSOTE), 6.1, UN2810, PG-III, ERG#153		2	DM	53600	PG	U051, D018
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above
a) [illegible] CREOSOTE SOLIDS

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
REPORT ANY 'RQ' DISCHARGE TO NATIONAL RESPONSE CENTER 800-424-8802, AND 911 EMERGENCY NUMBER OR LOCAL OPERATOR. EMERGENCY CONTACT: AMOS KAMERER (503) 286-2681

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR**, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month Day Year
Hoo[illegible] S Ruc	[signature]	11 01 02

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month Day Year
Dale Leich	Dale Leich	11 09 02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month Day Year

GENERATOR

TRANSPORTER

FACILITY

Style CF 17 LABELMASTER® (800) 621-5808 www.labelmaster.com

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

GENERATOR COPY

PRINTED ON RECYCLED PAPER USING SOYBEAN INK
PRINTED WITH SOY INK

Public reporting burden for this collection of information is estimated to average: 37 minutes for generators, 15 minutes for transporters, and 10 minutes for treatment, storage and disposal facilities. This includes time for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM–223, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, D.C. 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.

Emerald

LDR NOTIFICATION FORM

Generator KOPPERS INDUSTRIES **Manifest** 10304

Pursuant to 40 CFR §268.7(a), I hereby notify that this shipment contains waste restricted under 40 CFR Part 268 Land Disposal Restrictions (LDR).

A. GENERAL WASTE NOTIFICATION

Form Line No.	Profile No.	EPA Waste Codes & LDR Subcategories (if any) *List codes or use Attachment 1*	NWW	WW	Waste Constituent Notification *Check the "None" box or List Legend Constituent # or use Attachment 2*
1	*CH009478-B*	D018, U051 ☐ Check if Attachment 1 has been used	☒	☐	☒ None ☐ Check if Attachment 2 has been used
2		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used
3		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used
4		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used
5		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used
6		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used

B. HAZARDOUS DEBRIS NOTIFICATION

☐ This hazardous debris, as identified above on Line No(s). _____ is subject to the alternative treatment standards of 40 CFR §268.45.

The waste contains the following contaminants subject to treatment (check all that apply):

☐ Toxicity characteristic debris ☐ Debris contaminated with listed waste ☐ Cyanide reactive debris

C. CONTAMINATED SOIL NOTIFICATION & CERTIFICATION

☐ This contaminated soil, as identified above on Line No(s). _____ is subject to the alternative treatment standards of 40 CFR §268.49(c).

Complete the following: "I certify under penalty of law that I personally have examined this contaminated soil & it [☐does/ ☐does not] contain listed hazardous waste & [☐does / ☐does not] exhibit a characteristic of hazardous waste & [☐is subject to / ☐complies with] soil treatment standards as provided by §268.49(c) or the universal treatment standards". *Note: Constituents subject to treatment are any constituents listed in 40 CFR §268.48 Universal Treatment Standards that are reasonably expected to be present in any given volume of contaminated soil, except fluoride, selenium, sulfides, vanadium & zinc, & are present at concentrations greater than ten times the universal treatment standard.*

D. LAB PACK (INCINERATION) NOTIFICATION & CERTIFICATION

☐ This lab pack, as identified above on Line No(s). _____ is subject to the alternative treatment standards of 40 CFR §268.42(c).

"I certify under penalty of law that I personally have examined & am familiar with the waste & that the lab pack contains only wastes that have not been excluded under Appendix IV to 40 CFR Part 268 & that this lab pack will be sent to a combustion facility in compliance with the alternative treatment standards for lab packs at 40 CFR §268.42(c). I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment".

E. EXTENSIONS & VARIANCES

☐ This waste, as identified above on Line No(s). _____ is not prohibited from land disposal & is subject to a deadline extension or variance, e.g., treatability variance, case-by-case extension. *Describe below any extension or variance that applies to this waste & include applicable dates:*

Generator's Authorized Signature	Name & Title (Printed or Typed)	Date
[signature]	[signature]	11 / 9 / 02

NOVEMBER 14, 2002

Environmental Manager
KOPPERS INDUSTRIES INC
7540 NW ST HELENS ROAD
PORTLAND, OREGON 97210

RE: Certificates of Disposal

Dear Environmental Manager:

Enclosed please find your Certificate(s) of Disposal and accompanying detailed report(s) for the waste that was shipped to our facility for treatment. Your original manifest number is referenced on both of these documents along with a Safety-Kleen Aragonite document number.

Your waste has been properly treated and the residue from this waste has been disposed of at an approved and permitted hazardous waste landfill.

Safety-Kleen appreciates you as a valued customer. If you should have any questions or concerns please do not hesitate to contact one of our customer/facility representatives at (801) 323-8100.

Sincerely,

Facility Sales Manager

Enclosures

NOVEMBER 14, 2002

KOPPERS INDUSTRIES INC
7540 NW ST HELENS ROAD
PORTLAND, OREGON 97210

EPA ID: ORD 027 734 359

Certificate of Disposal

No. 176843

Customer Manifest: 10304 Document: L6829C destroyed as of NOVEMBER 12, 2002

This is to certify that the hazardous material manifested to Safety-Kleen on the above Safety-Kleen Aragonite Document Number was disposed of by incineration in accordance with 40 CFR 761 (and 40 CFR 264 if applicable) as of the above certification date.

Attached is a detailed report which identifies the date(s) of disposal. Residue from this waste has been disposed of at an approved and permitted Hazardous Waste Landfill.

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615), I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.

Safety-Kleen, Aragonite UT
EPA ID # UTD 981 552 177

Facility Sales Manager

Generator: 704090 KOPPERS INDUSTRIES INC

CD #	Document #	Item	State #	Customer #	Types	Weight	Received	Destroyed	Drum Srl Num
176843	L6829C	1	OR010304	10304	CM	22410	11/11/2002	11/11/2002	
176843	L6829C	2	OR010304	10304	CM	22410	11/11/2002	11/12/2002	

44820

415 *** IN CASE OF EMERGENCY CALL 1-800-424-9300 *** 14447

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) L1937C Form Approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. ORD027734359 Manifest Document No. 10324

2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: KOPPERS INDUSTRIES, 7540 NW ST. HELENS ROAD, PORTLAND, OR 97310

4. Generator's Phone (503) 286-2681 100710

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name: EMERALD SERVICES, INC.

6. US EPA ID Number: WAD058364647

C. State Transporter's ID

D. Transporter's Phone (206) 832-3000

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address: CLEAN HARBORS (ARAGONITE), LLC, 11600 N. APTUS ROAD, EXIT 56, ARAGONITE, UT 84029

10. US EPA ID Number: UTD981552177

G. State Facility's ID

H. Facility's Phone (801) 323-8161

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
a.	Hazardous waste, solid, n.o.s. (BENZENE), 9, NA3077, PG-III, ERG#171	X	109 ~~108~~	DM	5450 ~~[illegible]~~	G	U051, D018
b.	Hazardous waste Liquids, N.O.S (BENZENE), 9, NA 3082, PG-II, ERG#171	X	10	Dm	5.00	G	U051, D018
c.							
d.							

CR

FS 12/13

OFFC

J. Additional Descriptions for Materials Listed Above
a) CH259[illegible] PPE & DEBRIS
B) CH 27681

K. Handling Codes for Wastes Listed Above
TOT

15. Special Handling Instructions and Additional Information
REPORT ANY 'RQ' DISCHARGE TO NATIONAL RESPONSE CENTER 800-424-8802, AND 911 EMERGENCY NUMBER OR LOCAL OPERATOR. EMERGENCY CONTACT: AMOS KAMERER (503) 286-2681

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: A.S. KAMERER — Signature: [signature] — Month Day Year: 12 11 02

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: DAVID A SOROS — Signature: David A Soros — Month Day Year: 12 11 02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space
12. NO. of containers is 109
13. TOTAL Quantity is 5450

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name: Carrie Thomas — Signature: Carrie Thomas — Month Day Year: 12 13 02

GENERATOR / TRANSPORTER / FACILITY

Style CF 17 LABELMASTER® (800) 621-5808 www.labelmaster.com

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

ORIGINAL - RETURN TO GENERATOR

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Koppers004504

Public reporting burden for this collection of information is estimated to average: 37 minutes for generators, 15 minutes for transporters, and 10 minutes for treatment, storage and disposal facilities. This includes time for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM–223, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, D.C. 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.

*** IN CASE OF EMERGENCY CALL 1-800-424-9300 ***

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. OR0027734305 — Manifest Document No. 910324

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
KOPPERS INDUSTRIES
7540 NW ST. HELENS ROAD
PORTLAND, OR 97310
100710

4. Generator's Phone (503) 286-2681

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name
EMERALD SERVICES, INC.

6. US EPA ID Number
WAD058364647

C. State Transporter's ID

D. Transporter's Phone (206) 832-3000

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
CLEAN HARBORS (ARAGONITE), LLC
11600 N. APTUS ROAD, EXIT 56
ARAGONITE, UT 84029

10. US EPA ID Number
UTD981552177

G. State Facility's ID

H. Facility's Phone (801) 323-8161

	HM	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
a.	X	Hazardous waste, solid, n.o.s. (BENZENE), 9, NA3077, PG-III, ERG#171	109 ~~109~~	DM	5450	G	U051, D018
b.	X	Hazardous waste Liquids, N.O.S (BENZENE) 9, NA 3082, PG-II, ERG#171	10	Dm	5.00		U051, D018
c.							
d.							

J. Additional Descriptions for Materials Listed Above
a) CH25918 PPE & DEBRIS

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
REPORT ANY 'RQ' DISCHARGE TO NATIONAL RESPONSE CENTER 800-424-8802, AND 911 EMERGENCY NUMBER OR LOCAL OPERATOR. EMERGENCY CONTACT: AMOS KAMERER (503) 286-2681

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR**, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month	Day	Year
A. E. Kamerer	[signature]	12	11	02

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
DAVID A SOROS	[signature]	12	11	02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space
12. NO. of containers is 109
13. TOTAL Quantity is 5450

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

GENERATOR — TRANSPORTER — FACILITY

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EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

GENERATOR COPY

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Public reporting burden for this collection of information is estimated to average: 37 minutes for generators, 15 minutes for transporters, and 10 minutes for treatment, storage and disposal facilities. This includes time for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM–223, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, D.C. 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.

Emerald SERVICES INC.

LDR NOTIFICATION FORM

Generator Koppers Industries. Manifest 10324

Pursuant to 40 CFR §268.7(a), I hereby notify that this shipment contains waste restricted under 40 CFR Part 268 Land Disposal Restrictions (LDR).

A. GENERAL WASTE NOTIFICATION

Form Line No.	Profile No.	EPA Waste Codes & LDR Subcategories (if any) *List codes or use Attachment 1*	NWW	WW	Waste Constituent Notification *Check the "None" box or List Legend Constituent # or use*
1	CHJ5918	U051, D018 ☐ Check if Attachment 1 has been used	☒	☐	☒ None ☐ Check if Attachment 2 has been used
2		U051, D018 ☐ Check if Attachment 1 has been used	☒	☐	☒ None ☐ Check if Attachment 2 has been used
3		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used
4		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used
5		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used
6		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used

B. HAZARDOUS DEBRIS NOTIFICATION

☒ This hazardous debris, as identified above on Line No(s). 1 is subject to the alternative treatment standards of 40 CFR §268.45.

The waste contains the following contaminants subject to treatment (check all that apply):

☐ Toxicity characteristic debris ☒ Debris contaminated with listed waste ☐ Cyanide reactive debris

C. CONTAMINATED SOIL NOTIFICATION & CERTIFICATION

☐ This contaminated soil, as identified above on Line No(s). _____ is subject to the alternative treatment standards of 40 CFR §268.49(c).

Complete the following: "I certify under penalty of law that I personally have examined this contaminated soil & it [☐does/ ☐does not] contain listed hazardous waste & [☐does / ☐does not] exhibit a characteristic of hazardous waste & [☐is subject to / ☐complies with] soil treatment standards as provided by §268.49(c) or the universal treatment standards". *Note: Constituents subject to treatment are any constituents listed in 40 CFR §268.48 Universal Treatment Standards that are reasonably expected to be present in any given volume of contaminated soil, except fluoride, selenium, sulfides, vanadium & zinc, & are present at concentrations greater than ten times the universal treatment standard.*

D. LAB PACK (INCINERATION) NOTIFICATION & CERTIFICATION

☐ This lab pack, as identified above on Line No(s). _____ is subject to the alternative treatment standards of 40 CFR §268.42(c).

"I certify under penalty of law that I personally have examined & am familiar with the waste & that the lab pack contains only wastes that have not been excluded under Appendix IV to 40 CFR Part 268 & that this lab pack will be sent to a combustion facility in compliance with the alternative treatment standards for lab packs at 40 CFR §268.42(c). I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment".

E. EXTENSIONS & VARIANCES

☐ This waste, as identified above on Line No(s). _____ is not prohibited from land disposal & is subject to a deadline extension or variance, e.g., treatability variance, case-by-case extension. *Describe below any extension or variance that applies to this waste & include applicable dates:*

Generator's Authorized Signature	A.S. Kamerer Name & Title (Printed or Typed)	12/11/02 Date

JANUARY 06, 2003

Environmental Manager
KOPPERS INDUSTRIES INC
7540 NW ST HELENS ROAD
PORTLAND, OREGON 97210

RE: Certificates of Disposal

Dear Environmental Manager:

Enclosed please find your Certificate(s) of Disposal and accompanying detailed report(s) for the waste that was shipped to our facility for treatment. Your original manifest number is referenced on both of these documents along with a Safety-Kleen Aragonite document number.

Your waste has been properly treated and the residue from this waste has been disposed of at an approved and permitted hazardous waste landfill.

Safety-Kleen appreciates you as a valued customer. If you should have any questions or concerns please do not hesitate to contact one of our customer/facility representatives at (801) 323-8100.

Sincerely,

Facility Sales Manager

Enclosures

JANUARY 06, 2003

KOPPERS INDUSTRIES INC
7540 NW ST HELENS ROAD
PORTLAND, OREGON 97210

EPA ID: ORD 027 734 359

Certificate of Disposal

No. 178426

Customer Manifest: 10324 Document: L7937C destroyed as of JANUARY 01, 2003

This is to certify that the hazardous material manifested to Safety-Kleen on the above Safety-Kleen Aragonite Document Number was disposed of by incineration in accordance with 40 CFR 761 (and 40 CFR 264 if applicable) as of the above certification date.

Attached is a detailed report which identifies the date(s) of disposal. Residue from this waste has been disposed of at an approved and permitted Hazardous Waste Landfill.

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615), I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.

Safety-Kleen, Aragonite UT
EPA ID # UTD 981 552 177

Facility Sales Manager

Generator: 704090 KOPPERS INDUSTRIES INC

CD #	Document #	Item	State #	Customer #	Types	Weight	Received	Destroyed	Drum Srl Num
178426	L7937C	1	OR010324	10324	DM	154	12/13/2002	12/20/2002	
178426	L7937C	2	OR010324	10324	DM	154	12/13/2002	12/16/2002	
178426	L7937C	3	OR010324	10324	DM	167	12/13/2002	12/16/2002	
178426	L7937C	4	OR010324	10324	DM	167	12/13/2002	12/16/2002	
178426	L7937C	5	OR010324	10324	DM	167	12/13/2002	12/16/2002	
178426	L7937C	6	OR010324	10324	DM	167	12/13/2002	12/16/2002	
178426	L7937C	7	OR010324	10324	DM	220	12/13/2002	12/20/2002	
178426	L7937C	8	OR010324	10324	DM	220	12/13/2002	12/16/2002	
178426	L7937C	9	OR010324	10324	DM	200	12/13/2002	12/16/2002	
178426	L7937C	10	OR010324	10324	DM	200	12/13/2002	12/20/2002	
178426	L7937C	11	OR010324	10324	DM	200	12/13/2002	12/20/2002	
178426	L7937C	12	OR010324	10324	DM	200	12/13/2002	12/20/2002	
178426	L7937C	13	OR010324	10324	DM	211	12/13/2002	12/20/2002	
178426	L7937C	14	OR010324	10324	DM	211	12/13/2002	12/20/2002	
178426	L7937C	15	OR010324	10324	DM	155	12/13/2002	12/16/2002	
178426	L7937C	16	OR010324	10324	DM	155	12/13/2002	12/16/2002	
178426	L7937C	17	OR010324	10324	DM	200	12/13/2002	12/20/2002	
178426	L7937C	18	OR010324	10324	DM	200	12/13/2002	12/20/2002	
178426	L7937C	19	OR010324	10324	DM	260	12/13/2002	12/20/2002	
178426	L7937C	20	OR010324	10324	DM	265	12/13/2002	12/20/2002	
178426	L7937C	21	OR010324	10324	DM	160	12/13/2002	12/16/2002	
178426	L7937C	22	OR010324	10324	DM	155	12/13/2002	12/16/2002	
178426	L7937C	23	OR010324	10324	DM	215	12/13/2002	12/16/2002	
178426	L7937C	24	OR010324	10324	DM	216	12/13/2002	12/18/2002	
178426	L7937C	25	OR010324	10324	DM	210	12/13/2002	12/16/2002	
178426	L7937C	26	OR010324	10324	DM	210	12/13/2002	12/16/2002	
178426	L7937C	27	OR010324	10324	DM	210	12/13/2002	12/16/2002	
178426	L7937C	28	OR010324	10324	DM	210	12/13/2002	12/16/2002	
178426	L7937C	29	OR010324	10324	DM	200	12/13/2002	12/16/2002	
178426	L7937C	30	OR010324	10324	DM	200	12/13/2002	12/16/2002	
178426	L7937C	31	OR010324	10324	DM	205	12/13/2002	12/16/2002	
178426	L7937C	32	OR010324	10324	DM	205	12/13/2002	12/16/2002	
178426	L7937C	33	OR010324	10324	DM	165	12/13/2002	12/16/2002	
178426	L7937C	34	OR010324	10324	DM	165	12/13/2002	12/20/2002	
178426	L7937C	35	OR010324	10324	DM	270	12/13/2002	12/20/2002	
178426	L7937C	36	OR010324	10324	DM	265	12/13/2002	12/20/2002	
178426	L7937C	37	OR010324	10324	DM	150	12/13/2002	12/20/2002	
178426	L7937C	38	OR010324	10324	DM	150	12/13/2002	12/16/2002	
178426	L7937C	39	OR010324	10324	DM	200	12/13/2002	12/16/2002	
178426	L7937C	40	OR010324	10324	DM	200	12/13/2002	12/16/2002	
178426	L7937C	41	OR010324	10324	DM	230	12/13/2002	12/16/2002	
178426	L7937C	42	OR010324	10324	DM	230	12/13/2002	12/16/2002	
178426	L7937C	43	OR010324	10324	DM	120	12/13/2002	12/16/2002	
178426	L7937C	44	OR010324	10324	DM	120	12/13/2002	12/20/2002	
178426	L7937C	45	OR010324	10324	DM	210	12/13/2002	12/20/2002	
178426	L7937C	46	OR010324	10324	DM	210	12/13/2002	12/20/2002	
178426	L7937C	47	OR010324	10324	DM	160	12/13/2002	12/20/2002	
178426	L7937C	48	OR010324	10324	DM	160	12/13/2002	12/20/2002	
178426	L7937C	49	OR010324	10324	DM	200	12/13/2002	12/16/2002	
178426	L7937C	50	OR010324	10324	DM	190	12/13/2002	12/16/2002	
178426	L7937C	51	OR010324	10324	DM	140	12/13/2002	12/16/2002	

9804

Generator: 704090 KOPPERS INDUSTRIES INC

CD #	Document #	Item	State #	Customer #	Types	Weight	Received	Destroyed	Drum Srl Num
178426	L7937C	52	OR010324	10324	DM	120	12/13/2002	12/16/2002	
178426	L7937C	53	OR010324	10324	DM	150	12/13/2002	12/16/2002	
178426	L7937C	54	OR010324	10324	DM	165	12/13/2002	12/16/2002	
178426	L7937C	55	OR010324	10324	DM	230	12/13/2002	12/16/2002	
178426	L7937C	56	OR010324	10324	DM	210	12/13/2002	12/16/2002	
178426	L7937C	57	OR010324	10324	DM	132	12/13/2002	12/16/2002	
178426	L7937C	58	OR010324	10324	DM	132	12/13/2002	12/16/2002	
178426	L7937C	59	OR010324	10324	DM	132	12/13/2002	12/16/2002	
178426	L7937C	60	OR010324	10324	DM	232	12/13/2002	12/18/2002	
178426	L7937C	61	OR010324	10324	DM	175	12/13/2002	12/20/2002	
178426	L7937C	62	OR010324	10324	DM	175	12/13/2002	12/20/2002	
178426	L7937C	63	OR010324	10324	DM	175	12/13/2002	12/20/2002	
178426	L7937C	64	OR010324	10324	DM	175	12/13/2002	12/20/2002	
178426	L7937C	65	OR010324	10324	DM	186	12/13/2002	12/16/2002	
178426	L7937C	66	OR010324	10324	DM	186	12/13/2002	12/16/2002	
178426	L7937C	67	OR010324	10324	DM	186	12/13/2002	12/16/2002	
178426	L7937C	68	OR010324	10324	DM	186	12/13/2002	12/16/2002	
178426	L7937C	69	OR010324	10324	DM	114	12/13/2002	12/16/2002	
178426	L7937C	70	OR010324	10324	DM	114	12/13/2002	12/16/2002	
178426	L7937C	71	OR010324	10324	DM	114	12/13/2002	12/16/2002	
178426	L7937C	72	OR010324	10324	DM	114	12/13/2002	12/16/2002	
178426	L7937C	73	OR010324	10324	DM	264	12/13/2002	12/16/2002	
178426	L7937C	74	OR010324	10324	DM	264	12/13/2002	12/16/2002	
178426	L7937C	75	OR010324	10324	DM	264	12/13/2002	12/16/2002	
178426	L7937C	76	OR010324	10324	DM	264	12/13/2002	12/16/2002	
178426	L7937C	77	OR010324	10324	DM	192	12/13/2002	12/16/2002	
178426	L7937C	78	OR010324	10324	DM	192	12/13/2002	12/20/2002	
178426	L7937C	79	OR010324	10324	DM	310	12/13/2002	12/20/2002	
178426	L7937C	80	OR010324	10324	DM	310	12/13/2002	12/20/2002	
178426	L7937C	81	OR010324	10324	DM	310	12/13/2002	12/16/2002	
178426	L7937C	82	OR010324	10324	DM	280	12/13/2002	12/16/2002	
178426	L7937C	83	OR010324	10324	DM	280	12/13/2002	12/16/2002	
178426	L7937C	84	OR010324	10324	DM	280	12/13/2002	12/16/2002	
178426	L7937C	85	OR010324	10324	DM	280	12/13/2002	12/20/2002	
178426	L7937C	86	OR010324	10324	DM	280	12/13/2002	12/20/2002	
178426	L7937C	87	OR010324	10324	DM	275	12/13/2002	12/20/2002	
178426	L7937C	88	OR010324	10324	DM	150	12/13/2002	12/16/2002	
178426	L7937C	89	OR010324	10324	DM	156	12/13/2002	12/16/2002	
178426	L7937C	90	OR010324	10324	DM	150	12/13/2002	12/16/2002	
178426	L7937C	91	OR010324	10324	DM	150	12/13/2002	12/16/2002	
178426	L7937C	92	OR010324	10324	DM	175	12/13/2002	12/16/2002	
178426	L7937C	93	OR010324	10324	DM	165	12/13/2002	12/16/2002	
178426	L7937C	94	OR010324	10324	DM	215	12/13/2002	12/16/2002	
178426	L7937C	95	OR010324	10324	DM	215	12/13/2002	12/16/2002	
178426	L7937C	96	OR010324	10324	DM	215	12/13/2002	12/16/2002	
178426	L7937C	97	OR010324	10324	DM	215	12/13/2002	12/16/2002	
178426	L7937C	98	OR010324	10324	DM	236	12/13/2002	12/16/2002	
178426	L7937C	99	OR010324	10324	DM	236	12/13/2002	12/16/2002	
178426	L7937C	100	OR010324	10324	DM	236	12/13/2002	12/16/2002	
178426	L7937C	101	OR010324	10324	DM	236	12/13/2002	12/16/2002	

10198

Generator: 704090 KOPPERS INDUSTRIES INC

CD #	Document #	Item	State #	Customer #	Types	Weight	Received	Destroyed	Drum Srl Num
178426	L7937C	102	OR010324	10324	DM	258	12/13/2002	12/16/2002	Solid
178426	L7937C	103	OR010324	10324	DM	258	12/13/2002	12/16/2002	
178426	L7937C	104	OR010324	10324	DM	258	12/13/2002	12/16/2002	
178426	L7937C	105	OR010324	10324	DM	258	12/13/2002	12/16/2002	
178426	L7937C	106	OR010324	10324	DM	200	12/13/2002	12/20/2002	
178426	L7937C	107	OR010324	10324	DM	200	12/13/2002	12/20/2002	
178426	L7937C	108	OR010324	10324	DM	200	12/13/2002	12/20/2002	
178426	L7937C	109	OR010324	10324	DM	200	12/13/2002	12/20/2002	
178426	L7937C	110	OR010324	10324	DM	354	12/13/2002	12/24/2002	Liquid
178426	L7937C	111	OR010324	10324	DM	354	12/13/2002	12/24/2002	4,613 #
178426	L7937C	112	OR010324	10324	DM	310	12/13/2002	01/01/2003	
178426	L7937C	113	OR010324	10324	DM	505	12/13/2002	12/24/2002	
178426	L7937C	114	OR010324	10324	DM	505	12/13/2002	12/24/2002	
178426	L7937C	115	OR010324	10324	DM	505	12/13/2002	12/24/2002	
178426	L7937C	116	OR010324	10324	DM	505	12/13/2002	12/24/2002	
178426	L7937C	117	OR010324	10324	DM	525	12/13/2002	01/01/2003	
178426	L7937C	118	OR010324	10324	DM	525	12/13/2002	01/01/2003	
178426	L7937C	119	OR010324	10324	DM	525	12/13/2002	01/01/2003	

6445

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- 4613
21,834

*** IN CASE OF EMERGENCY CALL 1-800-424-9300 ***

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. ORD 027 734 037 262 — Manifest Document No. 13423

2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

GENERATOR

3. Generator's Name and Mailing Address
KOPPERS INDUSTRIES
7540 NW ST. HELENS ROAD
PORTLAND, OR 97310

4. Generator's Phone (503) 286-2681 — 100710

5. Transporter 1 Company Name: EMERALD SERVICES, INC.

6. US EPA ID Number: WAD058364647

7. Transporter 2 Company Name

8. US EPA ID Number

9. Designated Facility Name and Site Address
SAFETY KLEEN (ARAGONITE), INC.
11600 N. APTUS ROAD, EXIT 56
ARAGONITE, UT 84029

10. US EPA ID Number: UTD981552177

A. State Manifest Document Number

B. State Generator's ID

C. State Transporter's ID

D. Transporter's Phone (206) 832-3000

E. State Transporter's ID

F. Transporter's Phone

G. State Facility's ID

H. Facility's Phone (801) 323-8161

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. Waste toxic, liquids, organic, n.o.s. (CREOSOLE), 6.1, UN2810, PG-III, ERG#55	X	32	D M	1760	G	D018
b. Waste toxic, liquids, organic, n.o.s. (CREOSOLE), 6.1, UN2810, PG-III, ERG#55	X	18	D M	8500	P	D018
c.						
d.						

J. Additional Descriptions for Materials Listed Above
a) AP8009479 CREOSOLE LIQUIDS
b) AP8009478 CREOSOLE

K. Handling Codes for Wastes Listed Above
T1

15. Special Handling Instructions and Additional Information
REPORT ANY 'RQ' DISCHARGE TO NATIONAL RESPONSE CENTER 800-424-8802, AND 911 EMERGENCY NUMBER OR LOCAL OPERATOR. EMERGENCY CONTACT: ANDS KAMERER (503) 286-2681 KOP1000

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR**, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month	Day	Year
A.S. KAMERER		08	26	02

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Dale Leick		08	26	02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space
Last 3 digits of EPA ID are 359 per DataProfile records 8/28/02 MWilkowske

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
Glenn Lawrence		08	28	02

Style CF 7 LABELMASTER® (800) 621-5808 www.labelmaster.com

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

ORIGINAL - RETURN TO GENERATOR

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Public reporting burden for this collection of information is estimated to average: 37 minutes for generators, 15 minutes for transporters; and 10 minutes for treatment, storage and disposal facilities. This includes time for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM–223, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, D.C. 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.

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03/2002 08:56

e: 1, SAFETY-KLEEN - Document Report

erator: KOPPERS INDUSTRIES INC
d ID: 13432 Sales Order: 1

ument	Item	Profile	Batch #	Description	Proc. Class	Container Type	Size	Location	Weight	Dates: Stored	Accepted	PCB Date	Destroy	Orig Dcnt
96	34	AP8009478		WASTE TOXIC LIQUIDS, ORG	GENSLA	DM	55	BW-B17-L2	122	08/28/2002	08/28/2002			
96	50	AP8009478		WASTE TOXIC LIQUIDS, ORG	GENSLA	DM	55	BW-B17-L2	127	08/28/2002	08/28/2002			
96	33	AP8009478		WASTE TOXIC LIQUIDS, ORG	GENSLA	DM	55	BW-B17-L2	147	08/28/2002	08/28/2002			
96	41	AP8009478		WASTE TOXIC LIQUIDS, ORG	GENSLA	DM	55	BW-B17-L1	175	08/28/2002	08/28/2002			
96	47	AP8009478		WASTE TOXIC LIQUIDS, ORG	GENSLA	DM	55	E3-C15-L2	363	08/28/2002	08/29/2002			
96	40	AP8009478		WASTE TOXIC LIQUIDS, ORG	GENSLA	DM	55	E3-C16-L2	506	08/28/2002	08/31/2002			
96	44	AP8009478		WASTE TOXIC LIQUIDS, ORG	GENSLA	DM	55	E3-G06-L1	516	08/28/2002	08/29/2002			
96	46	AP8009478		WASTE TOXIC LIQUIDS, ORG	GENSLA	DM	55	E3-G06-L1	536	08/28/2002	08/29/2002			
96	43	AP8009478		WASTE TOXIC LIQUIDS, ORG	GENSLA	DM	55	E3-G06-L1	537	08/28/2002	08/29/2002			
96	48	AP8009478		WASTE TOXIC LIQUIDS, ORG	GENSLA	DM	55	E3-C15-L2	538	08/28/2002	08/29/2002			
96	45	AP8009478		WASTE TOXIC LIQUIDS, ORG	GENSLA	DM	55	E3-G06-L1	546	08/28/2002	08/29/2002			
96	35	AP8009478		WASTE TOXIC LIQUIDS, ORG	GENSLA	DM	55	E3-D17-L2	557	08/28/2002	08/29/2002			
96	49	AP8009478		WASTE TOXIC LIQUIDS, ORG	GENSLA	DM	55	E3-C15-L2	557	08/28/2002	08/31/2002			
96	39	AP8009478		WASTE TOXIC LIQUIDS, ORG	GENSLA	DM	55	E3-C16-L2	559	08/28/2002	08/29/2002			
96	38	AP8009478		WASTE TOXIC LIQUIDS, ORG	GENSLA	DM	55	E3-D17-L2	561	08/28/2002	08/29/2002			
96	42	AP8009478		WASTE TOXIC LIQUIDS, ORG	GENSLA	DM	55	E3-C16-L2	561	08/28/2002	08/29/2002			
96	37	AP8009478		WASTE TOXIC LIQUIDS, ORG	GENSLA	DM	55	E3-D17-L2	583	08/28/2002	08/29/2002			
96	36	AP8009478		WASTE TOXIC LIQUIDS, ORG	GENSLA	DM	55	E3-D17-L2	586	08/28/2002	08/29/2002			

3 item(s) for profile AP8009478, total weight = 8077

96	20	AP8009479		WASTE TOXIC LIQUIDS, ORG	GENDCW	DM	55	E3-C14-L2	464	08/28/2002	08/29/2002			
96	16	AP8009479		WASTE TOXIC LIQUIDS, ORG	GENDCW	DM	55	E3-D16-L2	468	08/28/2002	08/29/2002			
96	26	AP8009479		WASTE TOXIC LIQUIDS, ORG	GENDCW	DM	55	E3-C13-L2	469	08/28/2002	08/29/2002			
96	29	AP8009479		WASTE TOXIC LIQUIDS, ORG	GENDCW	DM	55	E3-D15-L2	474	08/28/2002	08/29/2002			
96	22	AP8009479		WASTE TOXIC LIQUIDS, ORG	GENDCW	DM	55	E3-C14-L2	475	08/28/2002	08/29/2002			
96	11	AP8009479		WASTE TOXIC LIQUIDS, ORG	GENDCW	DM	55	E3-G03-L1	476	08/28/2002	08/29/2002			
96	19	AP8009479		WASTE TOXIC LIQUIDS, ORG	GENDCW	DM	55	E3-C14-L2	476	08/28/2002	08/29/2002			
96	4	AP8009479		WASTE TOXIC LIQUIDS, ORG	GENDCW	DM	55	E3-C06-L2	477	08/28/2002	08/29/2002			
96	5	AP8009479		WASTE TOXIC LIQUIDS, ORG	GENDCW	DM	55	E3-C12-L2	478	08/28/2002	08/29/2002			
96	7	AP8009479		WASTE TOXIC LIQUIDS, ORG	GENDCW	DM	55	E3-C12-L2	480	08/28/2002	08/29/2002			
96	10	AP8009479		WASTE TOXIC LIQUIDS, ORG	GENDCW	DM	55	E3-B10-L1	480	08/28/2002	08/29/2002			
96	27	AP8009479		WASTE TOXIC LIQUIDS, ORG	GENDCW	DM	55	E3-C13-L2	482	08/28/2002	08/29/2002			
96	12	AP8009479		WASTE TOXIC LIQUIDS, ORG	GENDCW	DM	55	E3-G03-L1	486	08/28/2002	08/29/2002			
96	25	AP8009479		WASTE TOXIC LIQUIDS, ORG	GENDCW	DM	55	E3-C13-L2	486	08/28/2002	08/29/2002			
96	15	AP8009479		WASTE TOXIC LIQUIDS, ORG	GENDCW	DM	55	E3-D16-L2	486	08/28/2002	08/29/2002			
96	21	AP8009479		WASTE TOXIC LIQUIDS, ORG	GENDCW	DM	55	E3-C14-L2	487	08/28/2002	08/29/2002			
96	1	AP8009479		WASTE TOXIC LIQUIDS, ORG	GENDCW	DM	55	E3-C06-L2	488	08/28/2002	08/29/2002			
96	24	AP8009479		WASTE TOXIC LIQUIDS, ORG	GENDCW	DM	55	E3-D14-L2	488	08/28/2002	08/29/2002			
96	14	AP8009479		WASTE TOXIC LIQUIDS, ORG	GENDCW	DM	55	E3-G03-L1	488	08/28/2002	08/29/2002			
96	17	AP8009479		WASTE TOXIC LIQUIDS, ORG	GENDCW	DM	55	E3-D16-L2	489	08/28/2002	08/29/2002			

Koppers004516

erator: KOPPERS INDUSTRIES INC
d ID: 13432 Sales Order: 1

ument	Item	Profile	Batch #	Description	Proc. Class	Container Type	Size	Location	Weight	Dates Stored	Accepted	PCB Date	Destroy	Orig Dcnt
196	6	AP8009479		WASTE TOXIC LIQUIDS, ORG	GENDCW	DM	55	E3-C12-L2	490	08/28/2002	08/29/2002			
196	8	AP8009479		WASTE TOXIC LIQUIDS, ORG	GENDCW	DM	55	E3-C12-L2	490	08/28/2002	08/29/2002			
196	3	AP8009479		WASTE TOXIC LIQUIDS, ORG	GENDCW	DM	55	E3-C06-L2	491	08/28/2002	08/29/2002			
196	9	AP8009479		WASTE TOXIC LIQUIDS, ORG	GENDCW	DM	55	E3-B10-L1	492	08/28/2002	08/29/2002			
196	23	AP8009479		WASTE TOXIC LIQUIDS, ORG	GENDCW	DM	55	E3-D14-L2	492	08/28/2002	08/29/2002			
196	28	AP8009479		WASTE TOXIC LIQUIDS, ORG	GENDCW	DM	55	E3-C13-L2	492	08/28/2002	08/29/2002			
196	13	AP8009479		WASTE TOXIC LIQUIDS, ORG	GENDCW	DM	55	E3-G03-L1	493	08/28/2002	08/29/2002			
196	31	AP8009479		WASTE TOXIC LIQUIDS, ORG	GENDCW	DM	55	E3-D15-L2	497	08/28/2002	08/29/2002			
196	18	AP8009479		WASTE TOXIC LIQUIDS, ORG	GENDCW	DM	55	E3-D16-L2	501	08/28/2002	08/29/2002			
196	30	AP8009479		WASTE TOXIC LIQUIDS, ORG	GENDCW	DM	55	E3-D15-L2	503	08/28/2002	08/29/2002			
196	32	AP8009479		WASTE TOXIC LIQUIDS, ORG	GENDCW	DM	55	E3-D15-L2	504	08/28/2002	08/29/2002			
196	2	AP8009479		WASTE TOXIC LIQUIDS, ORG	GENDCW	DM	55	E3-C06-L2	505	08/28/2002	08/29/2002			

2 item(s) for profile AP8009479, total weight = 15547

) item(s) for document , total weight = 23624

e last column of the report indicates if this item has been decanted and shows the original item if it has

P.03 8877 323 801
S K ARAGONITE
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Koppers004517

*** IN CASE OF EMERGENCY CALL 1-800-424-9300 ***

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. O.R.D. 0.2.7. 2.3.4. 0.3.7.2.6 — Manifest Document No. 100210

2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
KOPPERS INDUSTRIES
7540 NW ST. HELENS ROAD
PORTLAND, OR 97210

4. Generator's Phone (503) 286-2681

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name
EMERALD SERVICES, INC.

6. US EPA ID Number
W.A.D.0.5.8.3.6.4.6.4.7

C. State Transporter's ID

D. Transporter's Phone (206) 822-3000

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
SAFETY KLEEN (ARAGONITE), INC.
11600 N. APTUS ROAD, EXIT 56
ARAGONITE, UT 84029

10. US EPA ID Number
U.T.D.9.8.1.5.5.2.1.7.7

G. State Facility's ID

H. Facility's Phone (801) 323-8161

	11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	HM x Waste toxic, liquids, organic, n.o.s. (CREOSOLE), 6.1, UN2810, PG-III, ERG#55	32	D M	1760	G	D018
b.	x Waste toxic, liquids, organic, n.o.s. (CREOSOLE), 6.1, UN2810, PG-III, ERG#55	18	D M	8500	P	D018
c.						
d.						

J. Additional Descriptions for Materials Listed Above
a) AP8009479 CREOSOLE LIQUIDS
b) AP8009478 CREOSOLE

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
REPORT ANY 'RQ' DISCHARGE TO NATIONAL RESPONSE CENTER 800-424-8802, AND 911 EMERGENCY NUMBER OR LOCAL OPERATOR. EMERGENCY CONTACT: AMOS KAMERER (503) 286-2681 KOP1000

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

GENERATOR

Printed/Typed Name	Signature	Month	Day	Year
A.S. KAMERER		08	26	02

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Dale Lenk		08	26	02

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year

Style CF-17 LABELMASTER® (800) 621-5808 www.labelmaster.com

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

GENERATOR COPY

PRINTED ON RECYCLED PAPER USING SOYBEAN INK — PRINTED WITH SOY INK

Koppers004518

Public reporting burden for this collection of information is estimated to average: 37 minutes for generators, 15 minutes for transporters, and 10 minutes for treatment, storage and disposal facilities. This includes time for reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM–223, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, D.C. 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503.

Envirite Services Inc.

LDR NOTIFICATION FORM

Generator *KOPPERS INDUSTRIES.* **Manifest** *03726*

Pursuant to 40 CFR §268.7(a), I hereby notify that this shipment contains waste restricted under 40 CFR Part 268 Land Disposal Restrictions (LDR).

A. GENERAL WASTE NOTIFICATION

Form Line No.	Profile No.	EPA Waste Codes & LDR Subcategories (if any) *List codes or use Attachment 1*	NWW	WW	Waste Constituent Notification *Check the "None" box or List Legend Constituent # or use Attachment 2*
1	*AP8009479*	*D018* ☐ Check if Attachment 1 has been used	☐	☒	*67* ☒ None ☐ Check if Attachment 2 has been used
2	*AP8009478*	*D018* ☐ Check if Attachment 1 has been used	☐	☒	☐ None ☐ Check if Attachment 2 has been used
3		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used
4		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used
5		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used
6		☐ Check if Attachment 1 has been used	☐	☐	☐ None ☐ Check if Attachment 2 has been used

B. HAZARDOUS DEBRIS NOTIFICATION

☐ This hazardous debris, as identified above on Line No(s). _____ is subject to the alternative treatment standards of 40 CFR §268.45.

The waste contains the following contaminants subject to treatment (check all that apply):

☐ Toxicity characteristic debris ☐ Debris contaminated with listed waste ☐ Cyanide reactive debris

C. CONTAMINATED SOIL NOTIFICATION & CERTIFICATION

☐ This contaminated soil, as identified above on Line No(s). _____ is subject to the alternative treatment standards of 40 CFR §268.49(c).

Complete the following: "I certify under penalty of law that I personally have examined this contaminated soil & it [☐does/ ☐does not] contain listed hazardous waste & [☐does / ☐does not] exhibit a characteristic of hazardous waste & [☐is subject to / ☐complies with] soil treatment standards as provided by §268.49(c) or the universal treatment standards". *Note: Constituents subject to treatment are any constituents listed in 40 CFR §268.48 Universal Treatment Standards that are reasonably expected to be present in any given volume of contaminated soil, except fluoride, selenium, sulfides, vanadium & zinc, & are present at concentrations greater than ten times the universal treatment standard.*

D. LAB PACK (INCINERATION) NOTIFICATION & CERTIFICATION

☐ This lab pack, as identified above on Line No(s). _____ is subject to the alternative treatment standards of 40 CFR §268.42(c).

"I certify under penalty of law that I personally have examined & am familiar with the waste & that the lab pack contains only wastes that have not been excluded under Appendix IV to 40 CFR Part 268 & that this lab pack will be sent to a combustion facility in compliance with the alternative treatment standards for lab packs at 40 CFR §268.42(c). I am aware that there are significant penalties for submitting a false certification, including the possibility of fine or imprisonment".

E. EXTENSIONS & VARIANCES

☐ This waste, as identified above on Line No(s). _____ is not prohibited from land disposal & is subject to a deadline extension or variance, e.g., treatability variance, case-by-case extension. *Describe below any extension or variance that applies to this waste & include applicable dates:*

Generator's Authorized Signature	A.S. Kamerer, Plant Manager	08 / 26 / 02
	Name & Title (Printed or Typed)	Date

Chemical Services Division

safety-kleen.

August 8, 2002

NOTIFICATION OF WASTE ACCEPTANCE
Safety-Kleen (Aragonite)

GENERATOR INFORMATION
EPA ID# ORD 027 734 359
PHONE: (503)286-3681

KOPPERS INDUSTRIES INC
CONTACT:AMOS KAMERER
7540 NW ST HELENS ROAD

PORTLAND, OR 97210

INVOICE INFORMATION
REF# 700764
PHONE: (206)832-3225

EMERALD SERVICES INC
CONTACT:TIM BERRENS
9010 E AST MARGINAL WAY SOUTH
SUITE 200
SEATTLE, WA 98108

PROFILE SHEET# ACCEPTANCE AP8009479
WASTE STREAM: CREOSOTE LIQUIDS SAMPLE NUMBER:

Thank you for selecting Safety-Kleen (Aragonite), for your waste management requirements. Your waste stream has been reviewed and is acceptable for management at our facility based on the information provided on the profile sheet number listed above and condi - tions listed below. In accordance with 40 CFR 264.12(b), our facility has all the appropriate licenses and permits to allow for storage, treatment, or disposal and will accept this waste in accordance with all applicable Federal and State Regulation. The above referenced acceptance number should be listed on all shipping documents and correspondence. Please retain these documents for your records and future reference.

To schedule a shipment or should you have any questions, please contact:
Aragonite Customer Service (801) 323-8100.

ACCEPTANCE INFORMATION

The waste stream identified by the reference number above is acceptable for incineration in the following process:
Description: PROCESS CLASS:165

This waste is acceptable for delivery beginning on August 8, 2002 through August 8, 2003 at which time an update review may be required for continued acceptability.
Container Type: DRUM METAL,BARRELS, KEGS Container Size: 55

COMMENTS:

Shipping Requirements:
A Notification and Certification is required with each shipment in accordance with 40 CFR Section 268.7

AUTHORIZATION

Approval: Robert J Conroy Date 8/8/02

Chemical Services Division

safety-kleen.

August 8, 2002

NOTIFICATION OF WASTE ACCEPTANCE
Safety-Kleen (Aragonite)

GENERATOR INFORMATION
EPA ID# ORD 027 734 359
PHONE: (503)286-3681

KOPPERS INDUSTRIES INC
CONTACT:AMOS KAMERER
7540 NW ST HELENS ROAD

PORTLAND, OR 97210

INVOICE INFORMATION
REF# 700764
PHONE: (206)832-3225

EMERALD SERVICES INC
CONTACT:TIM BERRENS
9010 E AST MARGINAL WAY SOUTH
SUITE 200
SEATTLE, WA 98108

PROFILE SHEET# ACCEPTANCE AP8009478
WASTE STREAM: CREOSOTE SAMPLE NUMBER:

Thank you for selecting Safety-Kleen (Aragonite), for your waste management requirements. Your waste stream has been reviewed and is acceptable for management at our facility based on the information provided on the profile sheet number listed above and condi - tions listed below. In accordance with 40 CFR 264.12(b), our facility has all the appropriate licenses and permits to allow for storage, treatment, or disposal and will accept this waste in accordance with all applicable Federal and State Regulation. The above referenced acceptance number should be listed on all shipping documents and correspondence. Please retain these documents for your records and future reference.

To schedule a shipment or should you have any questions, please contact:
Aragonite Customer Service (801) 323-8100.

ACCEPTANCE INFORMATION

The waste stream identified by the reference number above is acceptable for incineration in the following process:
Description: PROCESS CLASS:402

This waste is acceptable for delivery beginning on August 8, 2002 through August 8, 2003 at which time an update review may be required for continued acceptability.
Container Type: DRUM METAL,BARRELS, KEGS Container Size: 55

COMMENTS:

Shipping Requirements:
A Notification and Certification is required with each shipment in accordance with 40 CFR Section 268.7

AUTHORIZATION

Approval: Robert J Conroy Date 8/8/02

Chemical Services Division

safety-kleen.

SEPTEMBER 26, 2002

Environmental Manager
KOPPERS INDUSTRIES INC
7540 NW ST HELENS ROAD
PORTLAND, OREGON 97210

RE: Certificates of Disposal

Dear Environmental Manager:

Enclosed please find your Certificate(s) of Disposal and accompanying detailed report(s) for the waste that was shipped to our facility for treatment. Your original manifest number is referenced on both of these documents along with a Safety-Kleen Aragonite document number.

Your waste has been properly treated and the residue from this waste has been disposed of at an approved and permitted hazardous waste landfill.

Safety-Kleen appreciates you as a valued customer. If you should have any questions or concerns please do not hesitate to contact one of our customer/facility representatives at (801) 323-8100.

Sincerely,

Facility Sales Manager

Enclosures

Chemical Services Division

Safety-Kleen.

SEPTEMBER 26, 2002

KOPPERS INDUSTRIES INC
7540 NW ST HELENS ROAD
PORTLAND, OREGON 97210

EPA ID: ORD 027 734 359

Certificate of Disposal

No. 174670

Customer Manifest: 03726 Document: L5396 destroyed as of SEPTEMBER 24, 2002

This is to certify that the hazardous material manifested to Safety-Kleen on the above Safety-Kleen Aragonite Document Number was disposed of by incineration in accordance with 40 CFR 761 (and 40 CFR 264 if applicable) as of the above certification date.

Attached is a detailed report which identifies the date(s) of disposal. Residue from this waste has been disposed of at an approved and permitted Hazardous Waste Landfill.

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615), I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.

Safety-Kleen, Aragonite UT
EPA ID # UTD 981 552 177

Facility Sales Manager

P.O. Box 22890 • Salt Lake City, UT 84122-0890 • 801.323.8100 • Fax 801.323.8877

Generator: 704090 KOPPERS INDUSTRIES INC

CD #	Document #	Item	State #	Customer #	Types	Weight	Received	Destroyed	Drum Srl Num
174670	L5396	1	OR003726	03726	DM	488	08/28/2002	09/23/2002	
174670	L5396	2	OR003726	03726	DM	505	08/28/2002	09/24/2002	
174670	L5396	3	OR003726	03726	DM	491	08/28/2002	09/24/2002	
174670	L5396	4	OR003726	03726	DM	477	08/28/2002	09/23/2002	
174670	L5396	5	OR003726	03726	DM	478	08/28/2002	09/24/2002	
174670	L5396	6	OR003726	03726	DM	490	08/28/2002	09/24/2002	
174670	L5396	7	OR003726	03726	DM	480	08/28/2002	09/24/2002	
174670	L5396	8	OR003726	03726	DM	490	08/28/2002	09/23/2002	
174670	L5396	9	OR003726	03726	DM	492	08/28/2002	09/23/2002	
174670	L5396	10	OR003726	03726	DM	480	08/28/2002	09/23/2002	
174670	L5396	11	OR003726	03726	DM	476	08/28/2002	09/23/2002	
174670	L5396	12	OR003726	03726	DM	486	08/28/2002	09/24/2002	
174670	L5396	13	OR003726	03726	DM	493	08/28/2002	09/23/2002	
174670	L5396	14	OR003726	03726	DM	488	08/28/2002	09/23/2002	
174670	L5396	15	OR003726	03726	DM	486	08/28/2002	09/23/2002	
174670	L5396	16	OR003726	03726	DM	468	08/28/2002	09/23/2002	
174670	L5396	17	OR003726	03726	DM	489	08/28/2002	09/24/2002	
174670	L5396	18	OR003726	03726	DM	501	08/28/2002	09/24/2002	
174670	L5396	19	OR003726	03726	DM	476	08/28/2002	09/23/2002	
174670	L5396	20	OR003726	03726	DM	464	08/28/2002	09/23/2002	
174670	L5396	21	OR003726	03726	DM	487	08/28/2002	09/24/2002	
174670	L5396	22	OR003726	03726	DM	475	08/28/2002	09/23/2002	
174670	L5396	23	OR003726	03726	DM	492	08/28/2002	09/24/2002	
174670	L5396	24	OR003726	03726	DM	488	08/28/2002	09/23/2002	
174670	L5396	25	OR003726	03726	DM	486	08/28/2002	09/23/2002	
174670	L5396	26	OR003726	03726	DM	469	08/28/2002	09/24/2002	
174670	L5396	27	OR003726	03726	DM	482	08/28/2002	09/23/2002	
174670	L5396	28	OR003726	03726	DM	492	08/28/2002	09/23/2002	
174670	L5396	29	OR003726	03726	DM	474	08/28/2002	09/23/2002	
174670	L5396	30	OR003726	03726	DM	503	08/28/2002	09/23/2002	
174670	L5396	31	OR003726	03726	DM	497	08/28/2002	09/23/2002	
174670	L5396	32	OR003726	03726	DM	504	08/28/2002	09/23/2002	
174670	L5396	33	OR003726	03726	DM	147	08/28/2002	09/03/2002	
174670	L5396	34	OR003726	03726	DM	122	08/28/2002	09/03/2002	
174670	L5396	35	OR003726	03726	DM	557	08/28/2002	09/04/2002	
174670	L5396	36	OR003726	03726	DM	586	08/28/2002	09/04/2002	
174670	L5396	37	OR003726	03726	DM	583	08/28/2002	09/04/2002	
174670	L5396	38	OR003726	03726	DM	561	08/28/2002	09/04/2002	
174670	L5396	39	OR003726	03726	DM	559	08/28/2002	09/04/2002	
174670	L5396	40	OR003726	03726	DM	506	08/28/2002	09/04/2002	
174670	L5396	41	OR003726	03726	DM	175	08/28/2002	09/03/2002	
174670	L5396	42	OR003726	03726	DM	561	08/28/2002	09/04/2002	
174670	L5396	43	OR003726	03726	DM	537	08/28/2002	09/04/2002	
174670	L5396	44	OR003726	03726	DM	516	08/28/2002	09/04/2002	
174670	L5396	45	OR003726	03726	DM	546	08/28/2002	09/04/2002	
174670	L5396	46	OR003726	03726	DM	536	08/28/2002	09/04/2002	
174670	L5396	47	OR003726	03726	DM	363	08/28/2002	09/04/2002	
174670	L5396	48	OR003726	03726	DM	538	08/28/2002	09/04/2002	
174670	L5396	49	OR003726	03726	DM	557	08/28/2002	09/04/2002	
174670	L5396	50	OR003726	03726	DM	127	08/28/2002	09/03/2002	

23,624 # 10% Drums - 90% product = 21,262 #

2,362 gals

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION

HAZARDOUS MATERIALS CERTIFICATE OF REGISTRATION FOR REGISTRATION YEAR(S) 2005-2006

Registrant: KOPPERS INC.
Attn: JOSEPH S SEBBENS
436 SEVENTH AVE RM 1624
PITTSBURG, PA 15219

This certifies that the registrant is registered with the U.S. Department of Transportation as required by 49 CFR Part 107, Subpart G.

This certificate is issued under the authority of 49 U.S.C. 5108. It is unlawful to alter or falsify this document.

Reg. No: 060605 011 009N **Issued: 06/07/2005** **Expires: 06/30/2006**
Reissued: 06/28/2005

Record Keeping Requirements for the Registration Program

The following must be maintained at the principal place of business for a period of three years from the date of issuance of this Certificate of Registration:

(1) A copy of the registration statement filed with PHMSA; and
(2) This Certificate of Registration

Each person subject to the registration requirement must furnish that person's Certificate of Registration (or a copy) and all other records and information pertaining to the information contained in the registration statement to an authorized representative or special agent of the U. S. Department of Transportation upon request.

Each motor carrier (private or for-hire) and each vessel operator subject to the registration requirement must keep a copy of the current Certificate of Registration or another document bearing the registration number identified as the "U.S. DOT Hazmat Reg. No." in each truck and truck tractor or vessel (trailers and semi-trailers not included) used to transport hazardous materials subject to the registration requirement. The Certificate of Registration or document bearing the registration number must be made available, upon request, to enforcement personnel.

For information, contact the Hazardous Materials Registration Manager, DHM-60, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, 400 Seventh Street, SW, Washington, DC 20590, telephone (202) 366-4109.

Haz. Waste Disposal - 2003

Koppers004527

KOPPERS INDUSTRIES, INC
Portland, Oregon Terminal
WASTE MINIMIZATION REPORT

Quarter (2003)	Waste Type (in pounds				Production (units)	Comparison Ratio
	Remediation Waste	Tank Sludge	Operational Waste	Non-Haz Industrial Waste		
1	0	1449	0	0	12928629	0.00
2	0	0	0	0	10150710	0.00
3	0 ~~619~~	814	0	0	9204160	0.00
4	0	645	0	0	8757860	0.00
Total	619	2908	0	0	41041359	0.00
Base Year (2000)						
1	0	0	0		31184000	0.00
2	0	0	0		25640000	0.00
3	600	0	0		23488000	0.00
4	0	0	0		16756000	0.00
Total	600	0	0		97068000	0.0000

Page: 1 Certificate of Disposal - Detail Report 02/18/2004 10:41

Generator: 704030 KOPPERS INDUSTRIES INC

CD #	Document #	Item	State #	Customer #	Types	Weight	Received	Destroyed	Drum Sz1 Num
198663	M14342	1	OR98453	98452	DM	645	12/30/2003	02/01/2004	

Clean Harbors
ENVIRONMENTAL SERVICES, INC.

11600 North Aptus Road
Aragonite, UT 84029
801.323.8100
Fax 801.323.8877
www.cleanharbors.com

APRIL 16, 2004

Environmental Manager
KOPPERS INDUSTRIES INC
7540 NW ST HELENS ROAD
PORTLAND, OREGON 97210

RE: Certificates of Disposal

Dear Environmental Manager:

Enclosed please find your Certificate(s) of Disposal and accompanying detailed report(s) for the waste that was shipped to our facility for treatment. Your original manifest number is referenced on both of these documents along with a Clean Harbors Aragonite document number.

Your waste has been properly treated and the residue from this waste has been disposed of at an approved and permitted hazardous waste landfill.

Clean Harbors appreciates you as a valued customer. If you should have any questions or concerns please do not hesitate to contact one of our customer/facility representatives at (801) 323-8100.

Sincerely,

Facility Sales Manager

Enclosures

Clean Harbors
ENVIRONMENTAL SERVICES, INC.

11600 North Aptus Road
Aragonite, UT 84029
801.323.8100
Fax 801.323.8877
www.cleanharbors.com

APRIL 16, 2004

KOPPERS INDUSTRIES INC
7540 NW ST HELENS ROAD
PORTLAND, OREGON 97210

EPA ID: ORD 027 734 359

Certificate of Disposal

No. 198663

Customer Manifest: 98452 Document: M14342 destroyed as of FEBRUARY 01, 2004

This is to certify that the hazardous material manifested to Clean Harbors on the above Clean Harbors Aragonite Document Number was disposed of by incineration in accordance with 40 CFR 761 (and 40 CFR 264 if applicable) as of the above certification date.

Attached is a detailed report which identifies the date(s) of disposal. Residue from this waste has been disposed of at an approved and permitted Hazardous Waste Landfill.

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615), I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.

Clean Harbors, Aragonite UT
EPA ID # UTD 981 552 177

Facility Sales Manager

Generator: 704090 KOPPERS INDUSTRIES INC

CD #	Document #	Item	State #	Customer #	Types	Weight	Received	Destroyed	Drum Srl Num
198663	M14342	1	OR98452	98452	DM	645	12/30/2003	02/01/2004	

14. Provide the following information for each off-site shipment of waste.
(Include all shipments in 2002 for this waste stream even if it was generated in the previous year.)

Please Enter:
Facility Name: Koppers Industries Inc.
DEQ ID Number: ORD 027734359

2002 Manifest Shipment Date (enter month/day)	Manifest Document Number	Quantity Shipped of this Waste Stream (use unit of measure from Question #9)		DEQ/U.S. EPA ID # of First Transporter	Final management (enter mgmt. code, other than M141)	DEQ/U.S. EPA ID # of Receiving Facility (Designated Facility)
08/26/02	03726	21,262	15097	WAD058364647	M042	UTD 981552177
11/09/02	10304	44,820	19497	WAD058364647	M042	UTD981552177
~~11/13/02~~	~~10305~~	~~29,220~~	29220	WAD058364647	M042	UTD981552177
11/19/02	10307	42,540	18671	WAD058364647	M042	UTD981552177
12/02/02	10306	41,360	18369	WAD058364647	M042	UTD981552177
12/06/02	10342	45,180	19737	WAD058364647	M042	UTD981552177
12/11/02	10340	46,420	20185	WAD058364647	M042	UTD981552177
12/11/02	10324	21,834		WAD058364647	M043	UTD981552177
12/11/02	10324	4,613	28910	WAD058364647	M041	UTD981552177
INV # 29245 - TRANSFER		17731				
		#186,817				

Comments: This work was done to recover usable product from several tanks, which resulted in having tank residues that required disposal. This was a one time event. We expect to return to conditionally Exempt Generator status in the year 2003 and beyond.

Koppers004533

Clean Harbors
ENVIRONMENTAL SERVICES, INC.

11600 North Aptus Road...
Aragonite, UT 84029
801.325.8100
Fax 801.323.8877
www.cleanharbors.com

FEBRUARY 18, 2004

KOPPERS INDUSTRIES INC
7540 NW ST HELENS ROAD
PORTLAND, OREGON 97210

EPA ID: ORD 027 734 359

Certificate of Disposal

No. 198663

Customer Manifest: 98452 Document: M14342 destroyed as of FEBRUARY 01, 2004

This is to certify that the hazardous material manifested to Clean Harbors on the above Clean Harbors Aragonite Document Number was disposed of by incineration in accordance with 40 CFR 761 (and 40 CFR 264 if applicable) as of the above certification date.

Attached is a detailed report which identifies the date(s) of disposal. Residue from this waste has been disposed of at an approved and permitted Hazardous Waste Landfill.

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615), I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.

Clean Harbors, Aragonite UT
EPA ID # UTD 981 552 177

Facility Sales Manager

Clean Harbors
ENVIRONMENTAL SERVICES, INC.

11600 North Aptus Road
Aragonite, UT 84029
801.323.8100
Fax 801.323.8877
www.cleanharbors.com

FEBRUARY 18, 2004

Environmental Manager
KOPPERS INDUSTRIES INC
7540 NW ST HELENS ROAD
PORTLAND, OREGON 97210

RE: Certificates of Disposal

Dear Environmental Manager:

Enclosed please find your Certificate(s) of Disposal and accompanying detailed report(s) for the waste that was shipped to our facility for treatment. Your original manifest number is referenced on both of these documents along with a Clean Harbors Aragonite document number.

Your waste has been properly treated and the residue from this waste has been disposed of at an approved and permitted hazardous waste landfill.

Clean Harbors appreciates you as a valued customer. If you should have any questions or concerns please do not hesitate to contact one of our customer/facility representatives at (801) 323-8100.

Sincerely,

Facility Sales Manager

Enclosures

CleanHarbors®
ENVIRONMENTAL SERVICES, INC.

11600 North Aptus Road
Aragonite, UT 84029
801.323.8100
Fax 801.323.8877
www.cleanharbors.com

February 6, 2004

NOTIFICATION OF WASTE ACCEPTANCE
Clean Harbors (Aragonite)

GENERATOR INFORMATION
EPA ID# ORD 027 734 359
PHONE: (503)286-3681

KOPPERS INDUSTRIES INC
CONTACT:AMOS KAMERER
7540 NW ST HELENS ROAD

PORTLAND, OR 97210

INVOICE INFORMATION
REF# 704090
PHONE: (503)286-3681

KOPPERS INDUSTRIES INC
CONTACT:AMOS KAMERER
7540 NW ST HELENS ROAD

PORTLAND, OR 97210

PROFILE SHEET# ACCEPTANCE CH25918
WASTE STREAM: PPE & DEBRIS SAMPLE NUMBER:

Thank you for selecting Clean Harbors (Aragonite), for your waste management requirements. Your waste stream has been reviewed and is acceptable for management at our facility based on the information provided on the profile sheet number listed above and conditions listed below. In accordance with 40 CFR 264.12(b), our facility has all the appropriate licenses and permits to allow for storage, treatment, or disposal and will accept this waste in accordance with all applicable Federal and State Regulation. The above referenced acceptance number should be listed on all shipping documents and correspondence. Please retain these documents for your records and future reference.

To schedule a shipment or should you have any questions, please contact:
Aragonite Customer Service (801) 323-8100.

ACCEPTANCE INFORMATION

The waste stream identified by the reference number above is acceptable for incineration in the following process:
Description: PROCESS CLASS:402

This waste is acceptable for delivery beginning on December 17, 2003 through December 17, 2004 at which time an update review may be required for continued acceptability.
Container Type: FIBERBOARD/PLASTIC, BARREL,KEG Container Size: 55

COMMENTS:

Shipping Requirements:
A Notification and Certification is required with each shipment in accordance with 40 CFR Section 268.7

AUTHORIZATION

Approval: _____ Date FEB 06 2004

4. Historical waste minimization efforts:

Date: February, 1994
Effort: Started using small loaf pans for liquid pitch sampling.
Result: Eliminated disposal cost of qt. sample cans and contents to landfill. Eliminated cost of purchasing the qt. Sample cans. Pitch samples are fully recycled back to process. The small loaf pans are reused.

Date: December 1995
Effort: Installed hydraulic sliding door covered hopper tops for the bottom dump truck-trailers' that carried solid pencil pitch from the port unloading facilities to the Koppers' Northwest Terminal.
Result: Minimized spillage of pencil pitch, and resolved dust concerns enroute from the port facility through the local neighborhoods to Portland Northwest Terminal.

Date: June 1996
Effort: Developed a truck-trailer-tire-washing station to eliminate the tracking of pencil pitch and pitch dust from the unloaded truck-trailer as it exited the pencil pitch storage warehouse.
Result: Decreased pencil pitch residue on roadways in the terminal and reduced dust concerns.

Date: December 1999
Effort: Laid concrete and asphalt around Tank-200.
Result: Reduced the possibility of potential spillage of product or heat-transfer fluids to the soil.

5. HAZARDOUS AND NON-HAZARDOUS DISPOSAL LOG

a. Types

9/28/95	Creosote spill, rags & absorbents.	3 drums	830 lb.
7/02/97	No longer used laboratory chemicals.	4 lab packs	145 lb.
3/05/98	Creosote spill, rags & absorbents.	2 drums	800 lb.
3/05/98	Refined tar spill, rags & absorbents. (non-hazardous)	6 drums	3600 lb.
1/18/99	Creosote, rags & absorbents.	4 drums	1200 lb.
4/22/99	Paint, non- RCRA and non- DOT hazardous materials.	5 lab packs	400 lb.
4/22/99	Paint, non- RCRA and non- DOT hazardous materials.	3 lab packs	1800 lb.
9/02/99	Aluminum brightner, caustic prewash and acidic brightner.	2 drums	600 lb.
7/25/00	Creosote spill, rags & absorbents.	2 drums	600 lb.
2/15/01	Used & unused quinoline.	1 drum	400 lb.

5. Annual Waste Minimization Report:

Attached as Appendix A

6. Current Wastestream List:

Attached as Appendix B

7. Current Waste Assessments:

Attached as Appendix C

8. Summary of Planned Facility Waste Minimization Actions for 2004:

The Koppers Northwest Terminal will maintain the same practices in 2004, with the goal of a further reduction of 25%.

Koppers004538

Appendix B

Koppers Northwest Terminal

Waste Stream List

2003

#	**Process / Operation**	**Wastestream**
1	Mobile and Process Equipment	Used lube- Heat transfer- Diesel Oils, Parts washing fluid
2	Maintenance- Construction	Scrap; steel, copper; iron, brass& Aluminum
3	Lighting, florescent	Florescent bulbs
4	Office- Maintenance	Paper- Cardboard
5	Product processing and Samples	Coal Tar Pitch

Koppers004539

Appendix C

WASTE ASSESSMENT FORM

PART I

Date of Assessment: 6/26/01

Process, Operation, or Activity: Mobile and Process Equipment.

Waste stream: Used lube- Heat transfer- Diesel Oils, Parts washing fluid.

For each wastestream generated, determine:

- Point of origin; Process and Mobile Operating Equipment.
- Rate of generation (lbs/unit of product); 4-55 Gal. drums per year.
- Variations in generation rate; Determined by Mobile and Process Equipment usage.
- Physical and chemical properties; Liquid Petroleum Products
- Hazardous Waste? Y / N Listed Waste? Y / N Characteristic Waste? Yes
- Other waste streams affected; No
- Mixed with any materials; No
- Disposal method: Disposed of off site through Safety Kleen Inc.

PART II

1. Cost to Dispose: $235.OO per drum
2. List reduction options for this process:

   (1) Recycled off site by Safety Kleen Inc.

3. Which option is economically most feasible? Explain;

   Recycling; Cost- $80.00 per drum. Savings of $155.00 for each drum recycled.

   Which option is technically most feasible? Explain: No measurable difference.

PART III

Option approved for implementation: YES

Reason for acceptance or rejection: Cost reduction.

Manager's Signature:_____ Date_____

Koppers004540

Appendix C

WASTE ASSESSMENT FORM

PART I

Date of Assessment: 6/26/01

Process, Operation, or Activity; Maintenance / Construction

Waste stream; Scrap-steel, copper, iron, brass, & Aluminum

For each wastestream generated, determine:

- Point of origin; Maintenance and construction projects.
- Rate of generation (lbs/unit of product); 5,000 lb. per year,
- Variations in generation rate; Determined by what is repaired, replaced or constructed.
- Physical and chemical properties; Metals, alloys, or composite of.
- Hazardous Waste? Y / N Listed Waste? Y / N Characteristic Waste? Y / N
- Other waste streams affected; No
- Mixed with any materials; No
- Disposal method, be specific; Recycled off site through Scrap dealer.

PART II

1. Cost to Dispose: $O.OO
2. List reduction options for this process:

   (1)

   (2)

3. Which option is economically most feasible? Explain:

   Which option is technically most feasible? Explain:

PART III

Option approved for implementation: YES / NO

Reason for acceptance or rejection:

Manager's Signature:_____ Date_____

Koppers004541

Incident Report's (non-haz)

Koppers004542

Non-Hazardous Incident Report Form

Northwest Terminal, Portland, Oregon

Date and time of the incident: 3/01/04 - 0200 hours Dock unloading line manifold area

Root Cause: Failure by ships' personnel to vent unloading line hose on the ship-side manifold connection, so material would flow and be pumped from unloading line hose into unloading line by the unloading line evacuator pump (P-235) located at the Dock-side manifold connection of unloading line, operated by dock personnel attending.

How the material cleaned up: Once the pitch cooled and hardened, (370 deg.) at time of spill, the material was promptly cleaned up by shoveling material into drums due to inaccessible location of spill. Material was then placed in the pitch storage building for disposal. No material was spilled onto soil or into navigatable waters.

Action taken to prevent a reoccurrence: Ships' personnel will be required to ensure proper venting of unloading line hose, ship-side, at the time unloading line hose evacuation procedures have been commenced, dock-side, by dock personnel attending.

Report date: 3/02/04

Signature and Title: T.J. Turner General Foreman

Non-Hazardous Incident Report Form

Northwest Terminal, Portland, Oregon

Date and time of the incident: 3/01/04 - 0200 hours Dock unloading line manifold area

Root Cause: Failure by ships' personnel to vent unloading line hose on the ship-side manifold connection, so material would flow and be pumped from unloading line hose into unloading line by the unloading line evacuator pump (P-235) located at the Dock-side manifold connection of unloading line, operated by dock personnel attending.

How the material cleaned up: Once the pitch cooled and hardened, (370 deg.) at time of spill, the material was promptly cleaned up by shoveling material into drums due to inaccessible location of spill. Material was then placed in the pitch storage building for disposal. No material was spilled onto soil or into navigatable waters.

Action taken to prevent a reoccurrence: Ships' personnel will be required to ensure proper venting of unloading line hose, ship-side, at the time unloading line hose evacuation procedures have been commenced, dock-side, by dock personnel attending.

Report date: 3/02/04

Signature and Title: T.J. Turner General Foreman

Non-Hazardous Incident Report Form

Northwest Terminal, Portland, Oregon

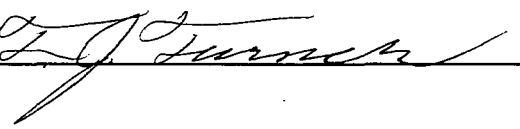
Date and time of the incident: 12/02/04 - 0900 hours Dock unloading line manifold area

Root Cause: Failure by ships' personnel to properly evacuate the unloading line and unloading line hose, so the remaining material in the unloading hose would flow and be pumped from unloading line hose into unloading line by the unloading line evacuator pump (P-235) located at the Dock-side manifold connection of unloading line, operated by dock personnel attending.

How the material cleaned up: Once the pitch cooled and hardened, (390 deg.) at time of spill, the material was promptly cleaned up by shoveling material into drums due to inaccessible location of spill. Material was then placed in the pitch storage building for disposal. No material was spilled onto soil or into navigatable waters.

Action taken to prevent a reoccurrence: Ships' personnel will be required to ensure proper evacuation of unloading line and unloading line hose, at the time of completion of the unloading transfer process. This done to relieve unloading line back pressure, so evacuation pump #235 can finish stripping unloading hose of product.

Report date: 12/06/04

Signature and Title: T.J. Turner  General Foreman

Non-Hazardous Incident Report Form

Northwest Terminal, Portland, Oregon

Date and time of the incident: 2/02/2004 – 0820 hours T-102 to T-67

Root Cause: At 8:20 am after pumping most of T-102 to T-67 we decided to clear the pipeline With steam due to the viscous material being pumped. A cast-iron valve cracked while we were clearing the pipeline spewing material primarily in the containment area at T-67. A small amount approximately 4 to 6 Gallons of material did spray outside of the containment area. This material was a water/pitch emulsion.

How the material cleaned up: Material was promptly cleaned up by shoveling material into drums due to inaccessible location of spill. Material was then placed in the pitch storage building for disposal.

Action taken to prevent a reoccurrence: Cast-iron gate valve was replaced with a steel ball valve capable of handling higher temperatures and more stress.

Report date: 2/7/2004

Signature and Title: T.J. Turner General Foreman

Non-Hazardous Incident Report Form

Northwest Terminal, Portland, Oregon

Date and time of the incident: 1/10/2003 - 1455 hours Car UTLX 650895

Root Cause: Unknown amount of water trapped in the car prior to loading the car with liquid pitch. The car had just arrived from Stickney, after it had been loaded at Portland in December 2002, with tank residues from the tank cleaning project. Visually and through rodding, the car only showed 4" to 5" of tar in the bottom, however, there had to be some water that was out of site, perhaps condensate. Loading was completed without any problems, however, after the loading spout was lifted the operator noticed the pitch was boiling and began to erupt over the side of the car. We estimate that some 2,600 gals. of pitch came out of the car, all was contained on the black topped areas below and around the car. The pitch was sprayed with water to enhance hardening.

How the material cleaned up: After letting the pitch harden; front end loaders were used to scrape up the majority of the pitch. Plant labor cleaned up the balance off the black top and off of the tank car; using scrapers, shovels and wheel barrels. All of the material was recovered and placed in the pencil pitch storage building for re-cycling.

Action taken to prevent a reoccurrence: Generally, this type of thing should not happen, as the pitch cars are dedicated to only pitch service , however, in this case, and with one more pitch car that is now in route to Portland from Stickney, were used to haul tank residues from Portland to Stickney. Thus, when this second car arrives, UTLX 650824, we will check again for residues, but plan to only load about one-forth of the car and then let it sit for an hour or two, to let the hot pitch digest any water/condensate or tar, that is trapped in the car, out of site. Only, when we feel that the digesting has been completed, if there is any, will we resume loading the car.

Report date: 1/11/03

Signature and Title: Plant Manager

Facsimile Transmittal Sheet

J&H Marsh & McLennan of Pennsylvania, Inc.
Six PPG Place, Suite 300
Pittsburgh, PA 15222-5499
412 263 4012 Fax: 412 391 4631

J&H MARSH & MCLENNAN

A Marsh & McLennan Company

Date: May 4, 1998 **Pages, with cover:** 4

To: Amos Kamerer **Fax:** 503-285-2831

Company: Koppers Industries, Inc.

From: Diane B. Usouski

Subject: **Certificate of Insurance for Northwest Natural Gas Company**

The information contained in this facsimile message is confidential, may be privileged, and is intended for the use of the individual or entity named above. If you, the reader of this message, are not the intended recipient, the agent, or employee responsible for delivering this transmission to the intended recipient, you are expressly prohibited from copying, disseminating, distributing, or in any other way using any of the information contained in this facsimile

ACORD. CERTIFICATE OF INSURANCE

ISSUE DATE (MM/DD/YY) 05/04/98

PRODUCER
J&H Marsh & McLennan of PA, Inc.
6 PPG Place, Suite 300
Pittsburgh, PA 15222-5499
(412)552-5199
Attn: Diane B. Usouski
05342-KII6 97-98

INSURED
Koppers Industries, Inc.
1701 Koppers Building
Pittsburgh, PA 15219

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

COMPANIES AFFORDING COVERAGE

COMPANY LETTER	A	Nat'l. Union Fire Insurance Company of Pgh., PA
COMPANY LETTER	B	Insurance Company of the State of PA
COMPANY LETTER	C	Illinois National
COMPANY LETTER	D	Birmingham Fire Insurance Company
COMPANY LETTER	E	

COVERAGES

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED, NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

CO LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS		
A	GENERAL LIABILITY X COMMERCIAL GENERAL LIABILITY CLAIMS MADE [X] OCCUR. OWNER'S & CONTRACTOR'S PROT. X 1,000,000 Self-Insured Retention per occurrence	RMGL1135397	11/1/97	11/1/98	GENERAL AGGREGATE	$	1,000,000
					PRODUCTS-COMP/OP AGG.	$	1,000,000
					PERSONAL & ADV. INJURY	$	1,000,000
					EACH OCCURRENCE	$	1,000,000
					FIRE DAMAGE (Any one fire)	$	50,000
					MED.EXPENSE (Any one person)	$	10,000
	AUTOMOBILE LIABILITY ANY AUTO ALL OWNED AUTOS SCHEDULED AUTOS HIRED AUTOS NON-OWNED AUTOS GARAGE LIABILITY				COMBINED SINGLE LIMIT	$	
					BODILY INJURY (Per person)	$	
					BODILY INJURY (Per accident)	$	
					PROPERTY DAMAGE	$	
A	EXCESS LIABILITY X UMBRELLA FORM OTHER THAN UMBRELLA FORM	BE9324353	11/1/97	11/1/98	EACH OCCURRENCE	$	9,000,000
					AGGREGATE	$	9,000,000
A	WORKER'S COMPENSATION AND EMPLOYERS' LIABILITY	RMWC1163309 (WI) RMWC1163297 (OR) RMWC1163300 (CA) RMWC1163294 (AL)	11/1/97	11/1/98	X STATUTORY LIMITS		
					EACH ACCIDENT	$	2,000,000
					DISEASE-POLICY LIMIT	$	2,000,000
					DISEASE-EACH EMPLOYEE	$	2,000,000
B	OTHER WORK. COMP. AND EMPL.	RMWC1163311 (A/O) RMWC1163298 (VA)	11/1/97	11/1/98			
C	LIAB. (CONTINUED)	RMWC1163299 (IL)					
D		RMWC1163310 (PA)					

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/SPECIAL ITEMS (LIMITS MAY BE SUBJECT TO RETENTIONS)

Northwest Natural Gas Company dba Northwest Natural is named Additional Insured as respects liabilities arising out of Leased premises at 7540 NW Saint Helens Road, Portland, OR 97210. Waiver of Subrogation is included as permitted by law.

CERTIFICATE HOLDER

Northwest Natural Gas Company
dba Northwest Natural
220 N.W. 2nd Avenue
Portland, OR 97207

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE COMPANY, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE

ADDITIONAL INFORMATION

ISSUE DATE (MM/DD/YY)
05/04/98

PRODUCER
J&H Marsh & McLennan of PA, Inc.
6 PPG Place, Suite 300
Pittsburgh, PA 15222-5499
(412)552-5199
Attn: Diane B. Usouski

05342-KII6 97-98

INSURED
Koppers Industries, Inc.
1701 Koppers Building
Pittsburgh, PA 15219

CERTIFICATE HOLDER
Northwest Natural Gas Company
dba Northwest Natural
220 N.W. 2nd Avenue
Portland, OR 97207

TEXT

Longshore and Harbor Workers Compensation Act Coverage Endorsement is included in the Workers Compensation policy.

This cancels and supersedes certifcate dated 11/12/97.

Authorized Representative

PAGE 2

CERTIFICATE OF INSURANCE

Issued To: Northwest Natural Gas Company d/b/a Northwest Natural 220 N.W. 2nd Ave. Portland, OR 97207	**Date:** April 24, 1998

This is to certify that the **Policy** indicated below has been issued to:
KOPPERS INDUSTRIES, INC.
1701 KOPPERS BUILDING
PITTSBURGH, PA 15219

Insurance Company: X.L. Insurance Company, Ltd. ("X.L.")

Policy No: XLRSK-00003-96

Policy Term (Effective and Expiration Dates): 1 NOVEMBER 1996 to 1 NOVEMBER 1999

Kind of Insurance: "ALL RISKS" OF PHYSICAL LOSS OF OR DAMAGE TO REAL AND PERSONAL PROPERTY INCLUDING TIME ELEMENT, FLOOD AND EARTHQUAKE COVERAGE, SUBJECT TO CERTAIN EXCEPTIONS, CONDITIONS AND EXCLUSIONS.

Description Of Operations/Locations/Vehicles/Special Items (limits may have been reduced by paid claims and may have Deductibles or Retentions):
Referencing Real and Personal Property at 7540 NW Saint Helens Road, Portland, OR 97210.

Limit(s) of Liability (subject to erosion or exhaustion by other occurrences and/or losses under other coverages):

$10,152,881 per occurrence and **Policy Term** aggregate with various sublimits for flood and earthquake.

Loss Payee(s):

Should the above described **Policy** be cancelled before the Expiration Date thereof, X.L. Insurance Company, Ltd. will endeavor to mail 10 days prior written notice to the above named **Loss Payee(s)**, but failure to mail such notice shall not affect such cancellation or impose any obligation or liability of any kind upon X.L. Insurance Company, Ltd.

This Certificate of Insurance is furnished as a convenience only. It provides information about the issuance of the above mentioned **Policy** and sets forth certain features of the coverages as they are stated in the **Policy** as it stands on the date of issue hereof. This Certificate confers no rights on the holder(s) as **Loss Payee(s)** beyond the rights of the Insured, and all losses will be adjusted exclusively with the Insured. Said **Policy**, which contains the full provisions of the contract and of the insurance granted thereby, which are controlling, is subject to endorsement and alteration without notice to the above named **Loss Payee(s)**. The Insured may revoke the status of the **Loss Payee(s)** as such at any time.

If the amount of loss hereunder is payable, in whole or in part, to a designated Mortgagee not named herein as the Insured, such interest in the Policy may be Cancelled by giving to such mortgagee ten (10) days' written notice of cancellation. If the Insured fails to render proof of loss, such mortgagee, upon notice, shall render proof of loss in the form herein specified within sixty (60) days thereafter and shall be subject to the Provisions hereof relating to Arbitration for Claims Disputes and time of payment. If the Company shall claim that no liability existed as to the mortgagor or owner, it shall, to the extent of payment of the loss amount to the mortgage, be subrogated to all the mortgagee's rights of recovery, or it may pay off the mortgage debt and require an assignment thereof and of the mortgage. Other provisions relating to the interests and obligations of such mortgagee may be added hereto by agreement in writing.

Representative: By: _____

Title: Vice President, J & H Intermediaries

Author: Walter Turner at PITT
Date: 12/21/97 8:39 PM
Priority: Normal
TO: AMOS KAMERER at PITT
Subject: Re: NORTHWEST NATURAL LEASE
---------- Message Contents ----------

Amos, send me a copy of the new lease and lets discuss it before we do anything with it.

Thanks, Walt

---------- Reply Separator ----------
Subject: NORTHWEST NATURAL LEASE
Author: AMOS KAMERER at PITT
Date: 12/19/97 2:07 PM

F.Y.I. Don Evans favorably reviewed the 90 lease extension, to 3/31/98, i have signed and returned it to them. They have promised to have the draft of the new lease in my hands by the end of January.

Amos

Author: AMOS KAMERER at PITT
Date: 12/19/97 2:02 PM
Priority: Normal
TO: Walter Turner at PITT
TO: Kevin Fitzgerald at CHIMAIN
Subject: NORTHWEST NATURAL LEASE

---------- Message Contents ----------

F.Y.I. Don Evans favorably reviewed the 90 lease extension, to 3/31/98, i have signed and returned it to them. They have promised to have the draft of the new lease in my hands by the end of January.

Amos

NW Natural
220 NW 2ND AVENUE
PORTLAND, OR 97209
TEL 503.226.4211
www.nwnatural.com

December 15, 1997

Mr. Amos K. Kamerer
Koppers Industries, Inc.
7540 N.W. St. Helens Road
Portland, Oregon 97210

RE: Ninety-Day Lease Extension

Dear Mr. Kamerer:

As you know, the original lease between Koppers Industries, Inc, ("Koppers") and Northwest Natural Gas Company ("Company") for the site on St. Helens Road was signed on August 17, 1965 and amended and extended thereafter (as amended and extended the "Lease"). The Lease was most recently extended by letter dated February 25, 1991 from Carla U. Kelley to Koppers. I enclose a copy of that letter agreement. The February 25, 1991 Lease extension granted by Ms. Kelley expires on December 31, 1997.

The Company is in the process of drafting a new lease that will, among other things, incorporate the plant modifications Koppers intends to make to its plant located on Company property. We anticipate delivering the new lease to you for your review and comment on or before January 15, 1998. In the meantime, and to allow for potential additional delays, the Company is willing to extend the existing Lease, as amended for 90 days, from Thursday, January 1, 1998 to and including Tuesday, March 31, 1998. The new lease will begin on Wednesday, April 1, 1998.

This extension will be on the same terms as the original Lease, including all amendments and all of the terms contained in Ms. Kelley's February 25, 1991 letter.

Please indicate your acceptance of this lease extension by signing in the space provided below on the enclosed copy of this letter and returning it to me in the enclosed, self-addressed envelope. If you have any questions, please call me.

Very truly yours,

Sandra K. Hart, Manager
Risk Environment & Land

AGREED:

KOPPERS INDUSTRIES, INC.

By A. S. Kamerer

Date December 19, 1997

KOPPERS INDS., INC.
PORTLAND, OR

SKH:jd

KOPPERS INDUSTRIES

FAX TRANSMITTAL

Koppers Industries, Inc.
7540 N.W. St. Helens Road
Portland, OR 97210-3663
Telephone: 503-286-3681
Fax: 503-285-2831

TO: Don Evans DATE: 12/19/97

FROM: Amos Kamerer TOTAL # OF PAGES: 3

Please give me a call regarding the attached.
Today, if possible.

Thanks

Ok. send copy of draft when received.

IF THIS TRANSMITTAL IS IN ERROR, PLEASE CALL 503-286-3681 FAX # 503-285-2831

1/1/93-12/31/97

NORTHWEST NATURAL GAS COMPANY

ONE PACIFIC SQUARE
220 N.W. SECOND AVENUE · PORTLAND, OREGON 97209

CARLA UTECH KELLEY
Assistant Counsel
(503) 220-2403

February 25, 1991

Mr. Amos S. Kamerer
Koppers Industries, Inc.
7540 N.W. St. Helens Road
Portland, Oregon 97210

Re: Five-Year Lease Extension

Dear Mr. Kamerer:

As we discussed at our meeting of February 11, 1991, at which time you described the plant modifications Koppers intends to make to its plant located on Northwest Natural Gas Company ("Company") property, the Company will commit to extending Koppers Industries lease for a five-year period, to commence at the expiration of the current lease on January 1, 1993.

This extension will be subject to the renegotiation of the monthly rental fee based on the reappraisal of the property site and the incorporation of a Consumer Price Index factor. All terms of the lease will be subject to renegotiation at the time of renewal.

The extension will also be subject to Koppers' agreement to amend the lease to assure Koppers' full cooperation with any environmental investigation by the Company and/or a state or federal agency which includes the property under lease.

The Company acknowledges and has no objection to the new procedures and modifications Koppers intends to make to its equipment as described at the meeting of February 11 and in the Material Safety Data Sheet presented to the Company at that meeting. We assume that you will obtain all necessary environmental permits to modify these facilities.

Very truly yours,

Carla U. Kelley

Carla U. Kelley

bcc: B.B. Samson
S.K. Hart
R.K. Opitz

Kamerer Amos

From: Wyatt, Robert [rjw@nwnatural.com]
Sent: Thursday, August 04, 2005 1:05 PM
To: Kamerer Amos; Wyatt, Robert
Cc: Dietz Jim; Turner TJ; Carl Stivers (Carl Stivers [cstivers@anchorenv.com])
Subject: RE: Tar Body Removal

Hi Amos. Sorry I was not able to make our face to face meeting. Here are the responses that Anchor developed for the questions raised in the document. Please let me know if you have any remaining or additional concerns.

Bob

-----Original Message-----
From: Kamerer Amos [mailto:KamererAS@koppers.com]
Sent: Friday, July 22, 2005 12:44 PM
To: rjw@nwnatural.com
Cc: Dietz Jim; Turner TJ
Subject: Tar Body Removal

Bob,

Cam McKernan has completed his review of the data supplied by Anchor Environmental, LLC on this subject and has developed

some questions that we think need to be addressed. I am attaching a copy of Cam's letter.

<<McKERNAN LETTER GASCO TAR BODY REMOVAL.doc>>

We look forward to your comments on this matter.

Thanks,

Amos Kamerer
Phone: 503-286-3681
Fax: 503-285-2831
kamereras@koppers.com

*** eSafe scanned this email for malicious content ***
*** IMPORTANT: Do not open attachments from unrecognized senders ***

HAND DELIVERED

File No. P97-10
July 21, 2005

Koppers Industries, Inc.
7540 NW St. Helens Road
Portland, Oregon 97210-3663

Attention: Amos Kamerer

Subject: Removal of Tar Body at NW Natural "Gasco" Site

Reference: Public Review Draft – Engineering Evaluation/Cost Analysis dated May 2002

Enclosures: Figures 2, 3, 4, 6 & 8 of the Referenced Public Review Draft

Gentlemen:

As you requested we have reviewed the subject Tar Body Removal with respect to the potential effects on your facility, particularly the pier.

Although the exact procedure is not completely determined at this time, it appears the recommended procedure is to remove the major portion of the tar body by dredging with a floating derrick and a clam shell bucket and then capping the residual material with a layer of 6" minus fill material varying in depth from 12" to 18." Removed contaminated material would be transported from the site by barge for disposal at a hazardous waste facility near Boardman, Oregon. During work in the water on the site, the adjacent river area would be protected from the spread of contaminated material and silt by a two part flexible barrier that would be both anchored and floating.

Response: The major elements of the project have been determined and your description is an accurate summary.

The tar body is upstream and immediately adjacent to your pipeline bridge out to the pier. The pilings for the pipeline bridge and the upstream ship mooring dolphin are at the outer edge of the dredge area. The pilings are within the cap area.

The tar body removal operation has potential effects on your pier as follows:

1. From the tentative scheduling, it appears the pier will be inaccessible to a ship for several weeks.

Response: We have coordinated our work with the ship schedules and do not foresee a major conflict. The next ship will be moored from August 25 to 30 according to information provided by the FAMM dock manager (i.e., Tina Garrett) and this will not interfere with the start of our project, which is Aug 25. The start of our project will involve placing silt curtains well upstream of the ship mooring area. By the time our work proceeds downstream closer to the dock, the ship will be gone (if the schedule above does not slip to a later date). All other work will be completed by early November before any other ships are scheduled to dock (i.e., Tina Garrett informed us that the next scheduled ship is November 20 to 30).

2. Operation of a clam shell dredge adjacent to the access bridge has the potential to damage your pipeline, the pipeline bridge, and the bridge and dolphin support pilings.

   a) Placing a clam shell bucket in the water is usually not a very accurate operation.

Response: We are using dredging equipment which uses satellite DGPS technology to allow highly accurate placement and movement of the dredge bucket. We have included in our design a buffer around the bridge pilings so that at no time would the bucket contact those pilings. We have reviewed the bridge piling design to ensure that subsurface extent of those pilings is considered in this buffer allowance.

   b) A small amount of dredging will be done on the downstream side of the bridge. Operating a clam shell bucket over the top of the bridge could easily damage the pipeline from falling material and contact with the bucket.

Response: No material will be removed from behind/downstream of the pipeline and at no time will it be necessary for any large equipment to be extended out over the pipeline. In addition, no capping material will be placed downstream of the pipeline.

   c) Perhaps use of an excavating backhoe operated from a barge could be considered for work around the pilings.

Response: As noted above, we will have very good control of the bucket at all times and a buffer has been included in the removal to ensure contact is not made with the pilings.

Cont'd . . .

McKernan Letter Continued

3. The pipeline bridge was not designed to handle mooring loads from any vessels. The contractors doing the tar body removal and "capping" work should not tie-off or breast any equipment against the pipeline bridge.

Response: We will inform the contractor of this requirement and will monitor them to ensure that they use independent anchoring and do not moor or breast any equipment against the bridge.

4. The referenced document mentions a Corps of Engineers permit will be required. In addition a State of Oregon permit will be required to place the "cap" fill material. In reviewing the plan, we did not see any "time-line" for the Corps permit review and approval.

Response: Under Superfund the substantive requirements of permits must be met, but the actual permits do not need to be obtained from various agencies. EPA directly provides all approvals for work within the Superfund site and has done so for this project.

This is a really major project that could have an adverse effect on your facility. We recommend that you have some kind of input to the contracting process as a measure to prevent damage to your facility and to prevent future litigation in the event of damage.

Response: The contracting is complete.

Very truly yours,

J. CAMERON McKERNAN COMPANY

By:
J. Cameron McKernan, President

7/21/05
CAM McKennan

- Not approved by ODEQ
- Recommended
  - Remove by clam shell Derrick
  - cap with a dirt/gravel mix (6" minus) 6" to 18"
- Dolphin piles are not shown on center piles on upriver walkway
- has USCG approved this ?

J. CAMERON McKERNAN COMPANY

Engineering & Naval Architecture

2303 North Randolph Avenue • Portland, Oregon 97227 • (503) 232-7211 • FAX (503) 232-7658

HAND DELIVERED

File No. P97-10
July 21, 2005

Koppers Industries, Inc.
7540 NW St. Helens Road
Portland, Oregon 97210-3663

Attention: Amos Kamerer

Subject: Removal of Tar Body at NW Natural "Gasco" Site

Reference: Public Review Draft – Engineering Evaluation/Cost Analysis dated May 2002

Enclosures: Figures 2, 3, 4, 6 & 8 of the Referenced Public Review Draft

Gentlemen:

As you requested we have reviewed the subject Tar Body Removal with respect to the potential effects on your facility, particularly the pier.

Although the exact procedure is not completely determined at this time, it appears the recommended procedure is to remove the major portion of the tar body by dredging with a floating derrick and a clam shell bucket and then capping the residual material with a layer of 6" minus fill material varying in depth from 12" to 18." Removed contaminated material would be transported from the site by barge for disposal at a hazardous waste facility near Boardman, Oregon. During work in the water on the site, the adjacent river area would be protected from the spread of contaminated material and silt by a two part flexible barrier that would be both anchored and floating.

The tar body is upstream and immediately adjacent to your pipeline bridge out to the pier. The pilings for the pipeline bridge and the upstream ship mooring dolphin are at the outer edge of the dredge area. The pilings are within the cap area.

The tar body removal operation has potential effects on your pier as follows:

1. From the tentative scheduling, it appears the pier will be inaccessible to a ship for several weeks.

2. Operation of a clam shell dredge adjacent to the access bridge has the potential to damage your pipeline, the pipeline bridge, and the bridge and dolphin support pilings.

   a) Placing a clam shell bucket in the water is usually not a very accurate operation.
   b) A small amount of dredging will be done on the downstream side of the bridge. Operating a clam shell bucket over the top of the bridge could easily damage the pipeline from falling material and contact with the bucket.
   c) Perhaps use of an excavating backhoe operated from a barge could be considered for work around the pilings.

Cont'd . . .

McKernan Letter Continued

3. The pipeline bridge was not designed to handle mooring loads from any vessels. The contractors doing the tar body removal and "capping" work should not tie-off or breast any equipment against the pipeline bridge.

4. The referenced document mentions a Corps of Engineers permit will be required. In addition a State of Oregon permit will be required to place the "cap" fill material. In reviewing the plan, we did not see any "time-line" for the Corps permit review and approval.

This is a really major project that could have an adverse effect on your facility. We recommend that you have some kind of input to the contracting process as a measure to prevent damage to your facility and to prevent future litigation in the event of damage.

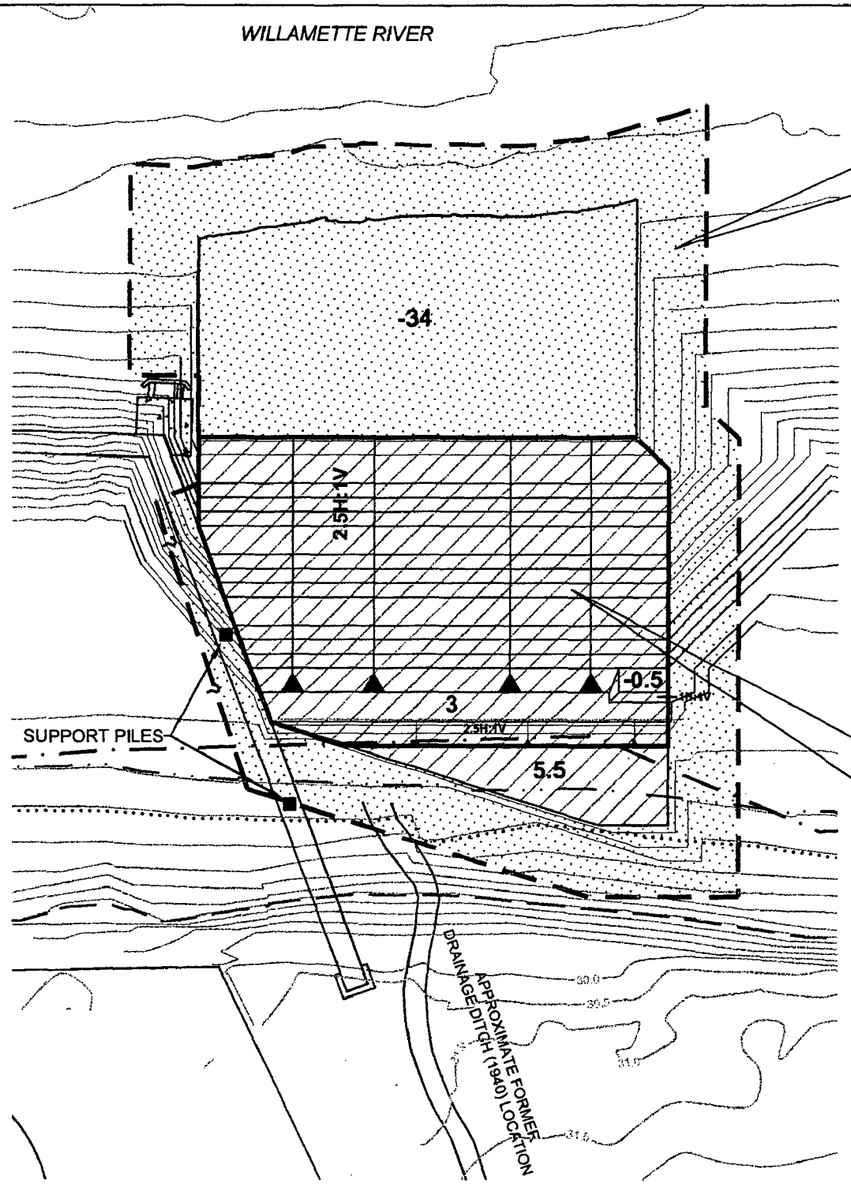
Very truly yours,

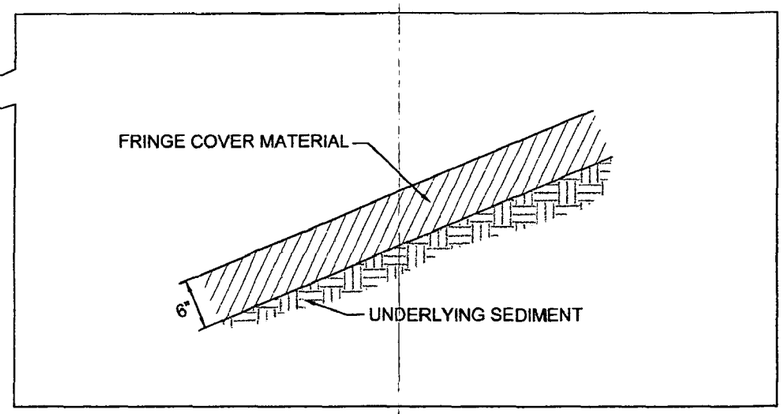
J. CAMERON McKERNAN COMPANY

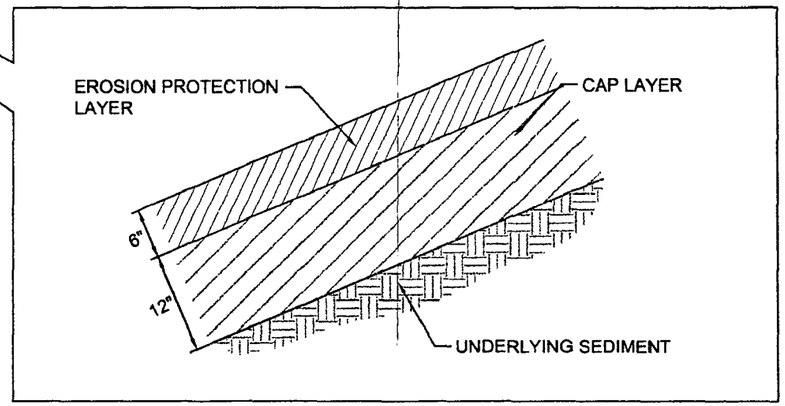
By: Cameron McKernan
J. Cameron McKernan, President

Legend:

- Support Pile Locations (to be protected during dredging)
- Property Line
- OHW = 20.41 ft NAVD 88
- OLW = 7.91 ft NAVD 88
- 50% River Stage Elevation = 10.23 ft NAVD 88
- 3 — Extent and Elevation of 18 in Thick Cap
- -34 — Extent and Elevation of 6 in Thick Cap







Notes:

1. Bathymetric contours provided by the Lower Willamette Group as part of the Portland Harbor Superfund Site study (2003).
2. Upland topography directed by Anchor Environmental as part of upland investigation (2002).
3. Horizontal Datum: Oregon State Plane North NAD 83 (ft).
4. Vertical Datum: NAVD 88 (ft).
5. Former Drainage Ditch location from Phase 1 Remedial Investigation Summary Report (HAI 1998).
6. Slope beneath pipeline support structure allowed to settle to angle of repose - shown at 1H:1V.

Post Cap and Cover Bathymetry

0 50
Scale in Feet

Mar 17, 2005 12:32pm cdavidson K:\Jobs\000029-GASCO\000029021000029021000029021000002902-66.dwg FIG 9

Koppers004564

ANCHOR ENVIRONMENTAL, L.L.C.

Figure 8
Alternatives B, C, D, and E - Post Cap and Cover Bathymetry
NW Natural "Gasco" Site

KOPPERS
Koppers Industries, Inc.

CAPITAL EXPENDITURE REQUEST

				Request No.	9270- 40
Division	Tar Products	Location	Portland, OR	Request Date	4 / 17 /95
Request Initiated By	A. S. Kamerer	Approved By	[signature] 4/25/95		
Title	Truck caps				

Amount of Request	$ 39,000.00	Depreciation Life	3 YRS	Estimated Life	3 YRS	Approval Date	MO.	19 YEAR	
Class of Expenditure	See Reverse: 1 B	Depreciation Acct. No.	305	969	X	9270	769		

Specification & Description:

8 mechanical truck caps and a hoist system to on and off load from the trucks.

Summary of Justification:

These truck caps will increase the loading capacity by at least 50% and will improve the cleanliness of the trucks through the neighborhood. The trucking cost savings is projected to be $1.63 per short ton and the projected volume for 1996 is 36,810 short tons or an annual savings of $60,000.30.

ENGINEERING: By A. S. Kamerer Approval _____ **COSTS:** Cash Expenditure (1) $39,000.00

Trade-In or Salvage (2) _____

ESTIMATE: By A. S. Kamerer Approval _____ Amt. of Requests(1) + (3) $39.000.00

Type of Investment	Building	%	Equipment	100%	Land	%	Type of Equipment	New	X	Used		Age		For Use On	Owned Property		Leased Property	X

EARNINGS OR COST: *(5 Yrs. Average)*

Division Income Before Interest & Taxes _____

% Return On Net Investment _____

Added Working Capital Required If Any _____

RETIREMENTS: *(PDA) Attached*

Total Original Value _____

Years Acquired _____

Total Book Value _____

CONSTRUCTION BY: Est. Schedule of Expense July 1995

Est. Start - Up Date _____

Est. Close to Property _____

Referral to Insurance _____

APPROVAL:

Production Manager		DATE
Capital Planning		DATE
Environmental & Safety		DATE
Engineering	[signature] 4-27-95	DATE
Division Controller	[signature] 4/25/95	DATE
Group Controller		DATE
Other	[signature] 4/25/95 [signature] 4/25/95	DATE

KI - 405 Rev. 5

Truck "Caps"

8 units	@ $7,350.00 each	= $58,800
50% Hall-Lock		<29,400>
	Balance	29,400
Loading hoist		9,600
	Total Capital	$39,000

Trucking Costs

Current cost (without "Caps")	$3.92 S. Ton
Projected Cost (with "Caps")	2.29 S. Ton
Savings	1.62 S. Ton

Annual Pitch Volume (1996)

Intalco	(100%)	27,000 S. Tons
CFAC	(20% of 27,000)	5,400 S. Tons
Vanalco	(storage portion off 2 Vessels)	4,410 S. Tons
		36,810 S. Tons

Annual Savings: $60,000.30

Pay back: 7.8 months

Koppers004566

Post-it™ brand fax transmittal memo 7671	# of pages ▸ 6
To L. Flaherty	From Ames
Co.	Co.
Dept.	Phone #
Fax #	Fax #

KOPPERS INTEROFFICE MEMO

TO: L. F. FLAHERTY
LOCATION: K-1750
SUBJECT: CAPITAL REQUEST
PITCH TRUCK "CAPS"

FROM: A. S. KAMERER
LOCATION: PORTLAND
DATE: OCT. 20, 1994

This request covers the purchase of 8 removable "caps" that would be added to the bottom-drop hopper trucks that we use to haul the pencil pitch from the port to the terminal. These "caps" would eliminate the need for tarping and will increase the loading capacity of the trucks.

First, these new caps will be completely sealed and will be operated mechanically, thus eliminating the need for tarpers at the port. They will also eliminate any possible spillage of pitch en route.

Second, because of the weight of the pencil pitch, approximately 55 lbs per c.f., we have been unable to come anywhere close to achieving full capacity loads of 25 S. tons. On the Korean ships, prior to the last one, we have averaged only 11.77 S. tons per load. On the last ship we added 2 x 12 side boards to the truck tops and we still only averaged 13.62 S. tons per load.

I approached Hall-Buck Marine about a rate reduction if we purchase this equipment. The cost of tarpers is included in the current rate, and since tarpers will not be necessary, Hall-Buck expenses will be lower, a savings which I thought should be passed on to us. Kermit Petrie, Hall-Buck's General Manager, has indicated that he would not want to reduce the rate; however, he would commit to a 50% participation in the capital expense, for a long-term contract.

The cost of these "cap" units will be $7,000 each, or a total of $56,000 for 8 units. Hall-Buck's 50% participation reduces the capital expense for us to only $28,000.

I would propose a 2-year guaranteed contract covering 1995 and 1996, for their 50% participation. This coincides with our plans to bring in liquid pitch at a later date, and could provide a distraction to Hall-Buck about these plans. Attached, please find copies of the design information on the caps from Fabrication Products, Inc. that I have used to put this proposal together.

Following are my comments on the justification of this request.

Pitch Volume

Projected for 1995, we will bring in the following to the terminal:

Korean:	3 vessels - 6,000 M. tons each -	19,485 S. tons
Chinese:	3 vessels - 1,360 M. tons each -	4,500 S. tons
	TOTAL	24,345 S. tons

Current Truck Volumes and Related Costs

We pay $60 per hour for the truck rental. The trucks average 9 loads per 8 hour shift, which reflects a multiplier of 1.125. Thus, at the most recent load rate of 13.62 S. tons per load, this becomes 15.32 S. tons per truck hour or a cost of $3.92 S. ton.

New Volumes Using "Caps," Related Costs and Savings

The new caps would add 10 S. tons of additional capacity; however, because of the way Hall-Buck's loading system works and the fact that it is operated by the long shoremen, I do not think that this is achievable. Thus, to be conservative, my calculations are based on 21 S. tons per load or a 7.38 S. ton increase over the above.

Additionally, because of the elimination of the tarpers we will see a reduction in the truck turn-around time. Currently, the trucks have to go through the tarping stations twice: empty, to roll back the tarps and full, to roll closed the tarps. I truly believe that the loads per 8 hour shift will increase to 11, but for this calculation I will figure only 10 loads per 8 hour shift, or an increase of one.

10 loads per 8 hour shift reflects a 1.25 multiplier. 21 S. tons per load equals 26.25 S. tons per truck hour. At $60.00 per hour, the cost is $2.29/S. ton. The current cost of $3.92/S. ton, less the new cost of $2.29/S. ton is a savings of $1.63/S. ton, times 24,345 S. tons annually results in a savings of $39,682.35. Using the capital expense of $28,000, this savings would reflect an 8 1/2 month payback.

Also, we need to remember that the possibility exists that in 1996 the volume of business through Portland could double or better, with the addition of Alcoa/Wenatchee's business, plus a better market and increased volumes for both Alcoa and Intalco. If you look at a double volume of 48,690 S. tons in 1996, times the $1.63 S. ton reduced rate, you see additional savings of $79,365 per year.

Other Considerations

Hauling 6,000 M. tons per ship at the current rate of 13.62 S. tons per load, requires 486 truck trips between the port and the terminal. At 21 S. tons per load, the number will drop to 315 truck loads, a 171 truck load (35%) reduction. Something that the St. Johns Neighborhood Association will be very happy about.

Due to 4 cases of severe pencil pitch-related eye burns to the tarpers on our last ship, Hall-Buck has indicated that they will no longer discharge pencil pitch during the day shift when the temperature exceeds 90°F. Perhaps the elimination of the tarpers with these caps could change their mind in this regard.

Lastly, not to be redundant, these units will be completely sealed, so unless there is some kind of equipment failure, there should never be any spillage. Thus, the haul through the neighborhood will be cleaner and we will again be doing something positive in the eyes of the residents.

Please review and advise your thoughts on this request.

Amos

A. S. Kamerer

RECEIVED

MAY 22 1995

KOPPERS INDS., INC.
PORTLAND, OR

City of Portland
Bureau of Planning
Land Use Permits Sections
1st Floor, Permit Center
1120 S.W. Fifth Avenue
Portland, OR 97204-1966
(503) 823-PLAN (823-7526)

LAND USE REVIEW APPLICATION FORM

Part A
File # _____ (Staff will assign #)

1. ☐ Zoning Map Amendment ☐ Adjustments ☐ Comprehensive Plan Amendment ☐ Greenway Review
   ☐ Conditional Use ☐ Design Review ☐ Environmental Review ☐ Other .....

2. Location and address of the property subject to the review:
   7540 NW St. Helens Road = Willamette River Mile 6.4
   Cross streets: NW Bridge Avenue

3. Short description of the proposal: Ship pier for unloading bulk or liquid coal tar pitch. Pier will be 40' x 60' with 4 mooring dolphins to make a berth along the river bank about 600 feet long. a 12" overhead pipe line for conveying discharged cargo from the pier to an existing storage on adjacent property will be installed.

4. Applicant(s):

Name	Address	Zip Code	Phone No.	Applicant's Interest in Property
Koppers Industries Inc.	1950 Koppers Building 436 7th Avenue Pittsburgh, PA	15219	(503) 286-3681	LEASEHOLDER

5. Owner(s) of the Property:

Name	Address	Zip Code	Phone No.
Northwest Natural Gas Co.	One Pacific Square; 220 NW 2nd Avenue Portland, Oregon	97209	(503) 220-2364
Koppers Industries Inc.	1950 Koppers Bldg; 436 7th Avenue Pittsburgh, Pennsylvania	15219	(503) 286-3681

6. Legal Description(s) of the Property:
   (Lot, Block and Addition or Tax Lot, Township and Range)
   TL's 42, 111, 113 & 123; Sec 12 & 13, T1N, R1W

7.

Tax Account Number(s):	1/4 Section Map Number(s)	Base Zone(s)	Overlay Zone(s)	Plan District
R-96113-0420	2221	IH	i	
R-96112-1110	2221	IH	i	
R-96112-1111	2221	IH	i	
R-96112-1130	2221	IH	i	
R-96112-1230	2221	IH	i	

PRELIMINARY
JUN 25 1993

8. Legal Description(s) all adjacent Property also owned by the Owner(s) listed above:
   (Lot, Block and Addition or Tax Lot, Township and Range)
   TL's 41, 112, 129, 130 & 131; Sec 12 & 13 T1N, R1W

9. For all adjacent Property also owned by the Owners listed above:

Tax Account Number(s):	1/4 Section Map Number(s)	Base Zone(s)	Overlay Zone(s)	Plan District
R-96113-0410	2321	IH	is	
R-96113-1120	2221	IH	i	
R-96112-1290	2221	IH	i	
R-96112-1300	2221	IH	i	
R-96112-1310	2221	IH	i	

10. **Acceptance of responsibility:** I, the applicant, submit the attached application for a land use review. I understand that I am responsible for accuracy of the information submitted. I understand that I am responsible for gaining permission of the owner(s) of the above-cited property to apply for this review. I understand that if the proposal is approved, the approval and any conditions of approval, will be recorded in the County Deed Records on the property. I understand that the City of Portland cannot be held liable if any of these actions are taken without the consent of the owner(s) of the property. Furthermore, I understand that in order to process this review the staff may visit the property. I acknowledge the staff's right to enter the property and to photograph the site as part of this review.

Applicant's Signature | Applicant's Printed Name | Date

LAND USE REVIEW APPLICATION FEES: When more than one land use review is requested, the fee for the most expensive review is charged, plus 1/2 the fee for the next two most expensive reviews. The chart below indicates the combined Bureau of Planning and Hearings Officer fees. Please check the boxes, circle amounts or enter fees as applicable.

	1. TYPE II PROCEDURE	2. TYPE III PROCEDURE	3. 1/2 FEE
ADJUSTMENT REVIEW: ☐ Residential	$380		
☐ Non residential	$700		
COMPREHENSIVE PLAN MAP AMENDMENT ☐ Without zoning map amendment		$3055	
☐ With zoning map amendment		$4110	
☐ CONDITIONAL USE REVIEW	$1065	$1885	
DESIGN REVIEW: Construction costs for this project: $ _____ x .003			
☐ Major		0.3 % of construction cost with $1500 min. & $4000 maximum	
☐ Minor/A: Includes all minor design reviews not identified in Minor/B (below)	0.3 % of construction cost with $750 min. & $1500 maximum		
☐ Minor/B: Consists of awnings, signs, rooftop equipment, storefront remodels affecting less than 25 feet of frontage, colors in historic districts, & all Type II residential projects	0.3 % of construction cost with $100 min. & $750 maximum		
☐ ENVIRONMENTAL REVIEW	$400	$3055	
☐ GREENWAY REVIEW	$860		
☐ ZONING MAP AMENDMENT		$2115	
☐ OTHER REVIEWS (Specify)			

Highest review fee (from columns 1 or 2) ..... $.....

Total of 1/2 fees from 2 next highest reviews (from column 3) ..... $.....

Total land use review fee ..... $.....

Number of posting signs (if required) [ ] x $5.00 each ..... $.....

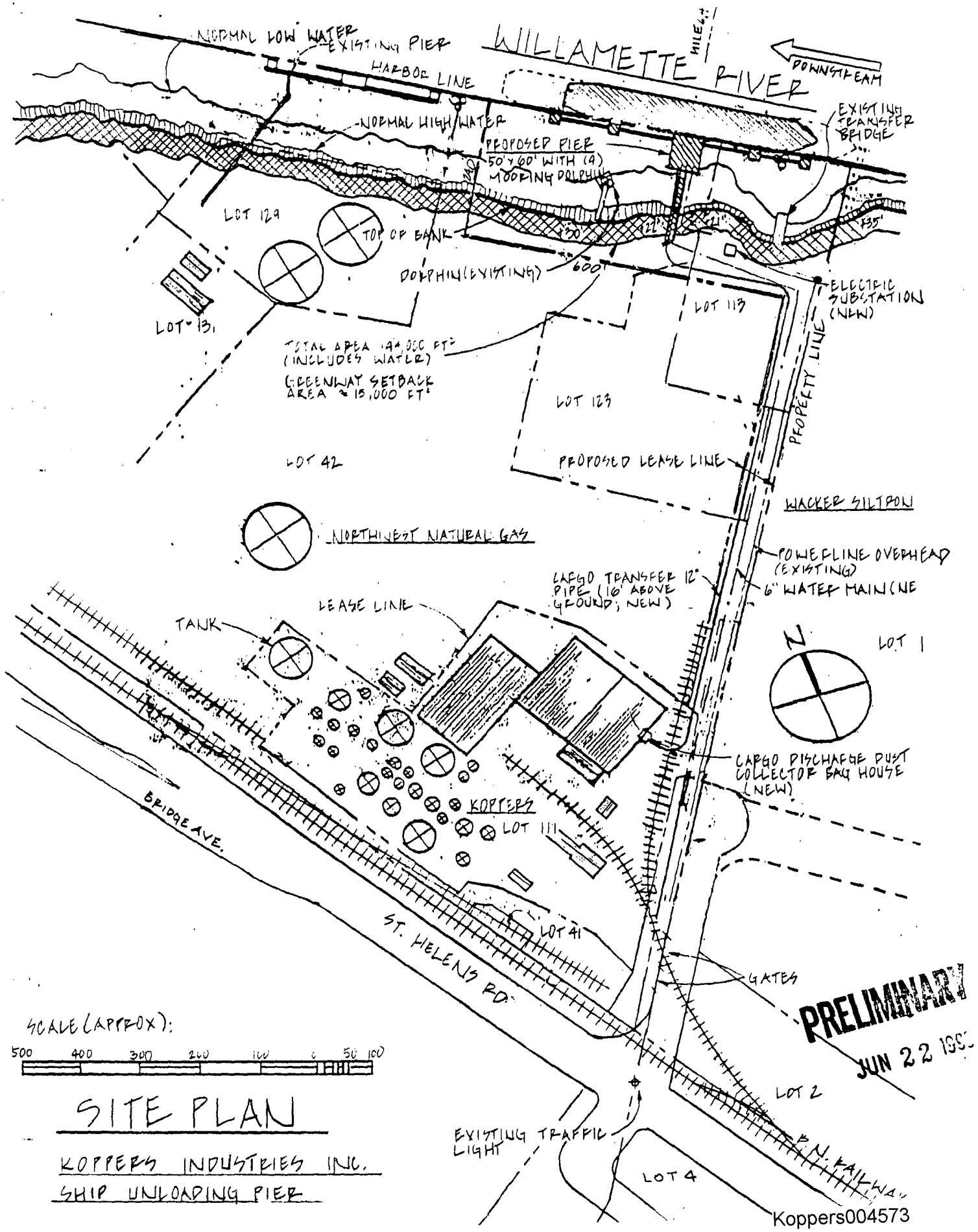
Other ..... $.....

TOTAL fee charged $_____

(Below line for office use)

Application received by ..... Date ..... Receipt # .....

Koppers004572



SCALE (APPROX):

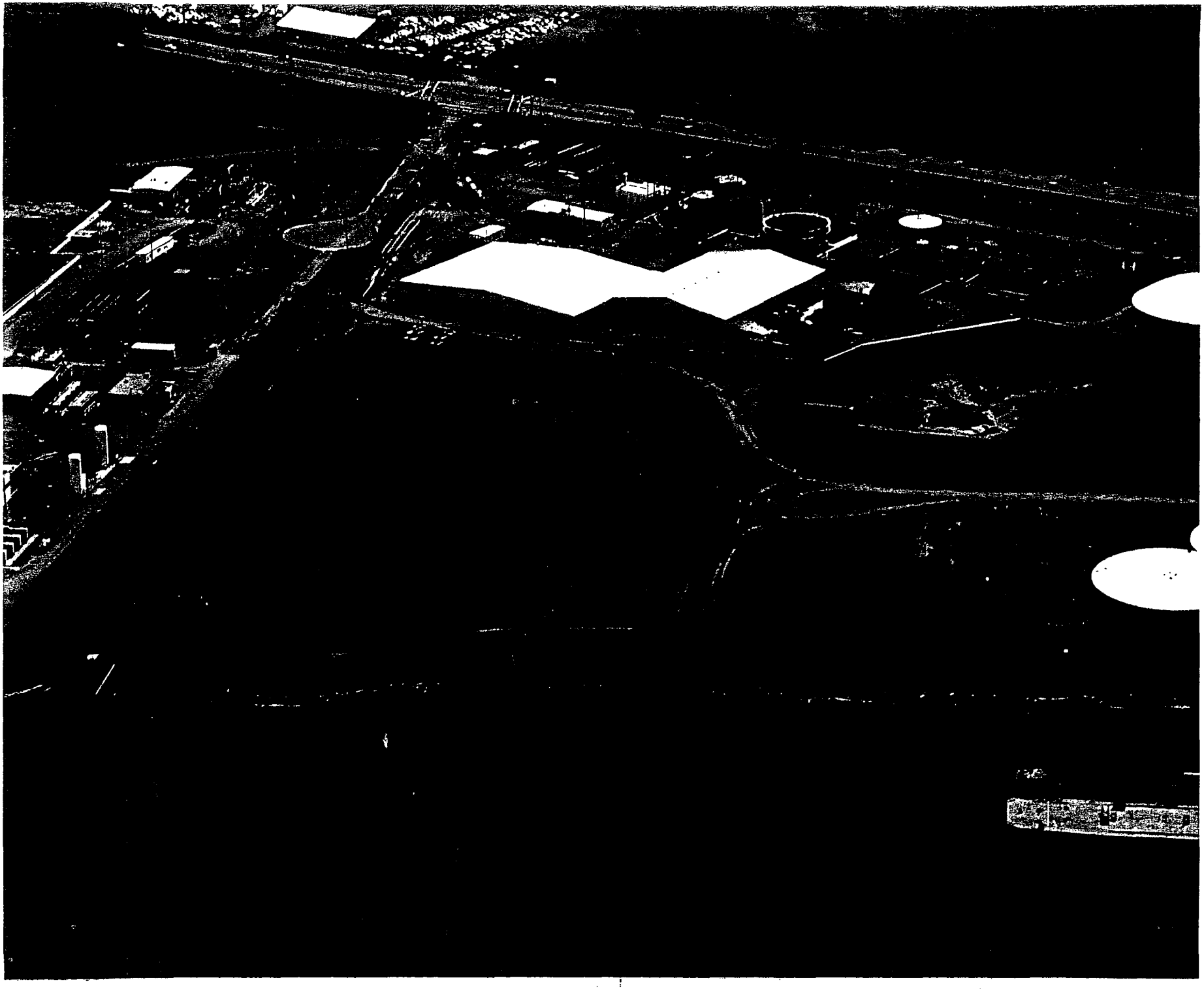
500 400 300 200 100 0 50 100

SITE PLAN

KOPPERS INDUSTRIES INC.

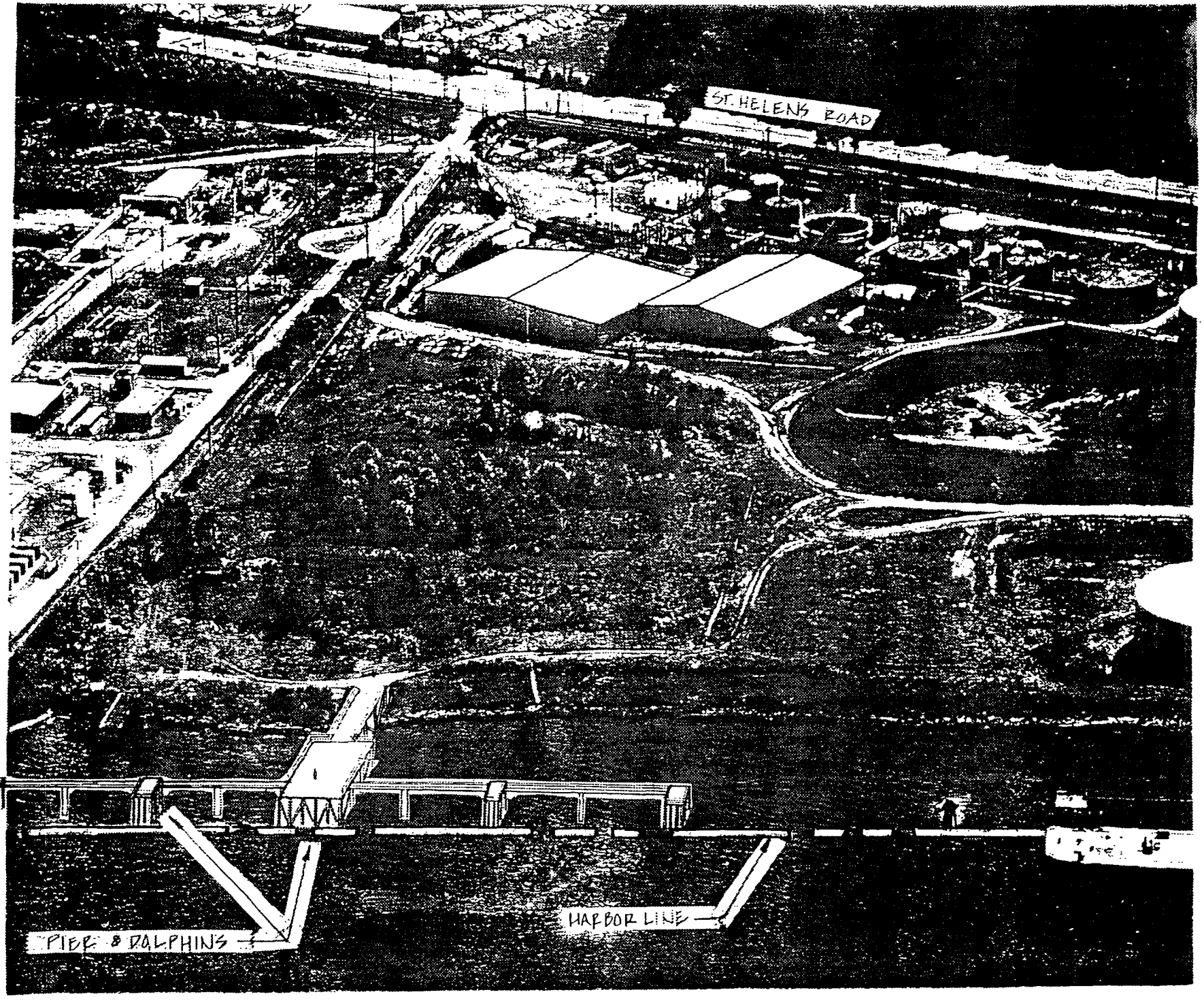
SHIP UNLOADING PIER

Koppers004573



SITE: KOPPERS INDUSTRIES INC. SHIP UNLOADING PIER

Koppers004574



KOPPERS INDUSTRIES INC. SHIP UNLOADING PIER

PRELIMINARY

Koppers004575

Supplemental Information for Greenway Review

Koppers Industries, Inc.
Ship Unloading Pier

1. Fully describe your proposal.

A ship unloading pier will be built on the left (west) bank of the Willamette River at River Mile 6.4 in the City of Portland. The pier is to be used to moor ships discharging bulk coal tar pitch to the adjacent Koppers Industries, Inc. Distribution Facility at 7450 NW St. Helens Road.

Bulk coal tar pitch is a black pelletized material. It will be conveyed pneumatically through a pipe line from the unloading ship to a storage building at the Kopper's Distribution Facility. Coal tar pitch is used in the manufacture of electrodes for the smelting of aluminum and for many other uses.

At the present time, bulk coal tar pitch is shipped into the Distribution Facility by truck. Ships carrying bulk coal tar pitch are presently unloaded in Portland by Hall-Buck Marine Inc. at the Port of Portland's Terminal 4 near St. Johns. The bulk coal tar pitch is loaded into dump trucks at Terminal 4 and moved over the St. Johns Bridge to the Kopper's Distribution Facility on NW St. Helens Road. The new pier will eliminate this inefficient, potentially messy trucking operation and place the ship unloading and transportation to storage all at one location.

About 40,000 tons of bulk coal tar pitch arrive at the Kopper's Distribution Facility every year. This equates to about 3600 truck loads across the St. Johns Bridge. This movement will be completely eliminated when the new pier and ship unloading system are in operation. It is anticipated that 85,000 tons per year will ultimately be processed through the Distribution Facility.

The unloading pier project will consist of the following elements:

a. Main pier structure about 60' long by 40' wide. The 40' width will be flush with the Corps of Engineer's Harbor Line. The pier will be a steel structure with steel piling supports. Wood fender pilings will be installed on the face of the pier.

b. Bridge structure from the top of the bank out to the pier. The bridge structure will be about 120' long by 30' wide. The bridge will be steel similar to the pier.

Cont'd . . .

(1/8)

PRELIMINARY

JUN 25 1993

1. Full describe your proposal. (Continued)

c. Breasting dolphins at 2 locations upstream of the pier and 2 locations downstream of the pier. The dolphins will be made with steel pilings and faced with wood fender pilings. The breasting dolphins will be in line with the Harbor Line and the face of the pier. Steel interconnecting walkways will be installed between the pier and the breasting dolphins.

d. Mooring anchors on the top of the bank. the mooring anchors will be steel pilings below grade capped by a concrete pad on grade. A mooring bollard will be installed on top of the concrete pad.

e. Improved road from the existing Distribution Facility on NW St. Helens Road to the pier down the east side of the property. The road improvement will be to gravel the surface for all weather use. In the future, the roadway may be hard surfaced.

f. Overhead pipe line from the pier to an existing storage building on the Distribution Facility property off NW St. Helens Road. The pipe line is to convey bulk coal tar pitch cargo from an unloading ship to the Distribution Facility. The pipe line will be 12" pipe. It will be supported by steel and concrete towers to provide about 16' clearance under the pipe. The pipe line will be about 1,200 feet long.

g. A dust collector bag house at the end of the 12" pipe at the existing storage facility. The dust collector will prevent discharge of dusty air from the conveying pipe line to the outside of the existing storage building.

h. A watermain extension from the existing fire main at the east corner of the existing facility to the pier (about 950').

i. A power line extension from the existing power line to the pier (about 150'). The existing power line is installed on poles running down the east side of the property to an existing barge loading/unloading bridge on top of the bank next to the new pier.

    1. The power line extension will connect to a new substation to be installed at the shore end of the bridge to the pier. The substation will be about 10' x 10.' A concrete pad for mounting equipment will be installed. A chain link fence and gate will be provided to limit access.

    2. Distribution cables from the substation to the pier will be installed for area lighting and power equipment on the pier.

Cont'd .

PRELIMINARY

j. Portable ship unloading equipment will be used on the pier. A truck crane will be used to move equipment such as front end bucket loader from the pier to a ship's hold. A trailer mounted pneumatic/vacuum bulk materials unloading machine will move the bulk coal tar pitch from the ship hold to the shore side conveying pipe. The unloading machine will have a crane/boom for handling the unloading arm into the ship hold. The unloading machine will also have pneumatic tanks and compressors to handle air for conveying the bulk coal tar pitch in the pipe line to the existing storage building.

2. Describe the existing use or activity occurring at the site.

The waterfront site at the new pier location is essentially vacant land. No activity is presently on the site. There is an existing inactive barge loading/unloading bridge on the upstream end of the site. This existing barge bridge is inactive and in disrepair. The attached aerial photograph shows the site.

Inland from the river bank (1200 feet) and next to St. Helens Road, the property is a Distribution Terminal for coal tar pitch. Bulk coal tar pitch is received by truck and stored inside storage buildings. The bulk pitch is melted/liquified in a heated tank. The liquid coal tar pitch is shipped out to various customers by rail tank cars and highway tank trucks. Customers are mostly aluminum smelters. At the aluminum smelters, the liquid coal tar pitch is used for the making of large electrodes for the aluminum smeltering process.

The land between the waterfront and the Coal Tar Pitch Distribution Facility (about 1000) feet is presently vacant and unused. There are 3 or 4 small, shallow ponds and drainage ditches located in this area. Medium to small sized cottonwood trees surround the ponds. The area is generally covered with grasses, blackberry shrubs and Scotch broom. The south portion next to the Coal Tar Pitch Distribution Facility is cleared and covered with gravel for outdoor storage and staging of equipment. A rail spur extends into this staging area about 200 feet. Except for a 30' wide access strip along the east boundary, this land will be left undisturbed and is not included in the project.

3. Explain how the activities at the site use the river for transportation or for other purposes.

~~Most~~ This coal tar pitch is imported from overseas. This facility will receive incoming coal tar pitch from ships arriving on the Willamette River.

Cont'd . . .

3/5

PRELIMINARY

4. Explain the necessity of the riverfront location.

Ships can only transit the river waterway. The only place a ship can be unloaded is at a pier on the riverfront.

5. Describe the condition of the bank. Does it consist of natural bank, rip-rap, dock, loading berth, or pier, for example?

The bank is covered with riprap. The top of the bank is covered with vegetation. Most of the vegetation is "naturalized" plants such as various low shrubs and grasses. Some plants observed were: blackberries, vetch, Scotch broom, plantains, milkweed, clovers, Canadian thistle, common white daises, cow pea, morning glory, and a number of grass varieties. The vegetation extends from the roadway across the top of the bank down to the "high" water line. There are no existing trees on the bank. See the attached snapshots for views of the river bank.

6. Are there structures or activities proposed in the greenway setback area? If so what are they?

a.) A roadway to the existing inactive barge unloading/ loading bridge is in the greenway setback area.

b.) A small pathway (3' wide) to an existing mooring dolphin crosses the greenway setback area near the middle of the site.

c.) A new roadway to the new pier will cross the greenway setback area.

d.) New mooring anchors (one upstream and one downstream) will be installed on the top of the bank in the greenway setback area. A small (3' wide) pathway will be provided from the roadway to the mooring anchors.

e.) A small (3' wide) pathway will be provided along the top of the bank from the end of the new pier bridge to the mooring anchors for personnel handling mooring lines from the ship.

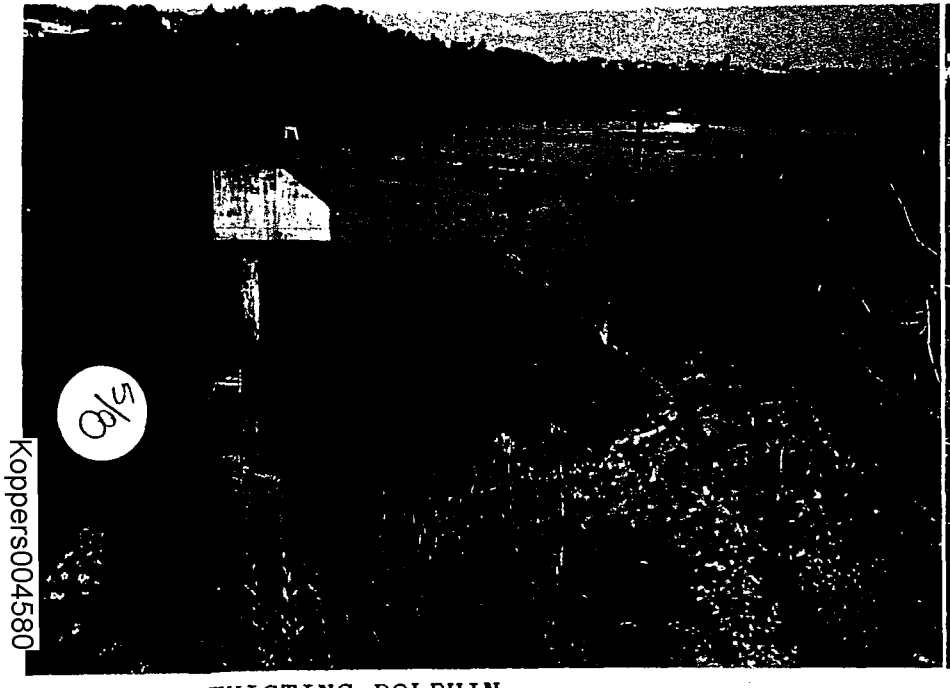
7. Is a recreational trail identified on the site? If so, how will you be meeting the recreation trail requirements?

No.

Cont'd . . .

LOOKING DOWNSTREAM

LOOKING DOWNSTREAM

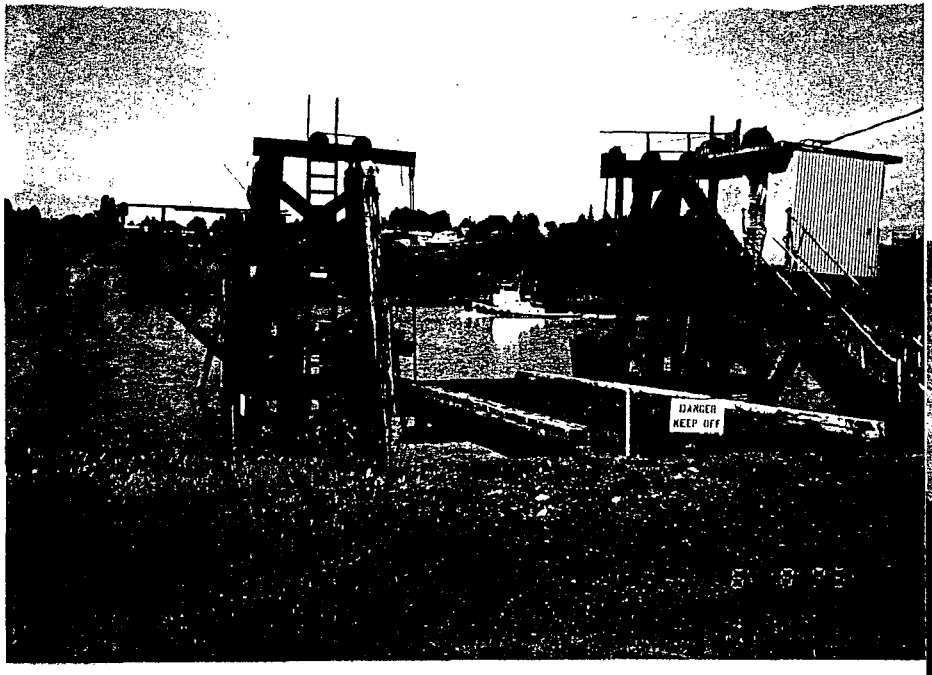


EXISTING DOLPHIN

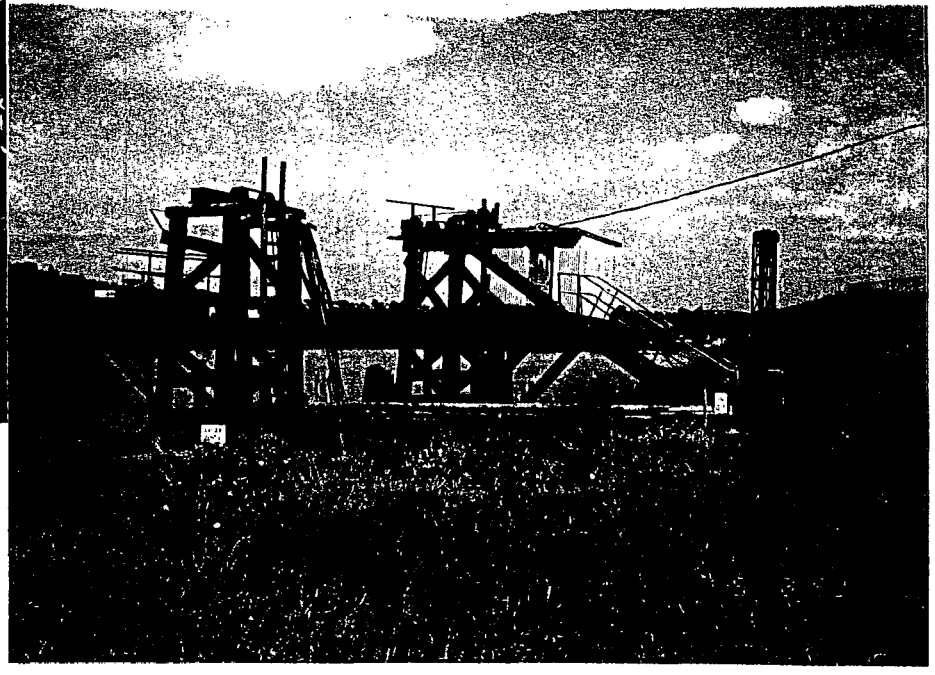
LOOKING DOWNSTREAM

KOPPERS PIER SITE RIVERBANK

Koppers004580



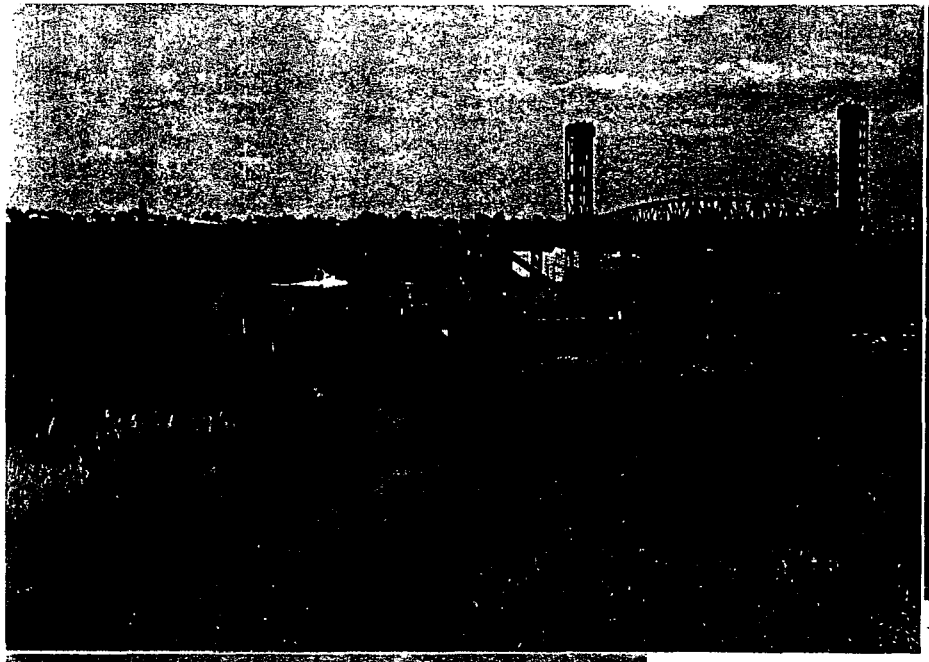
EXISTING BARGE
LOADING/UNLOADING BRIDGE

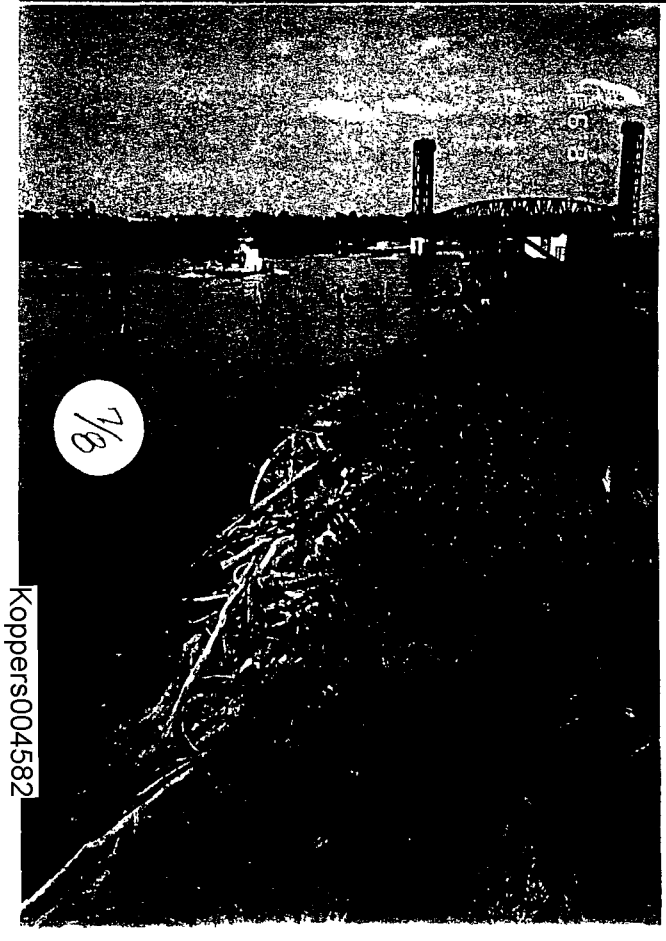


LOOKING UPSTREAM

Koppers004581

KOPPERS PIER SITE RIVERBANK





LOOKING
UPSTREAM

KOPPERS PIER SITE RIVERBANK

Koppers004582

8. Is a public viewpoint or public corridor identified on your site? If so, how much and where would this occur on the site?

   No.

9. Does the proposal require any fills or excavation? If so, how much and where would this occur on the site?

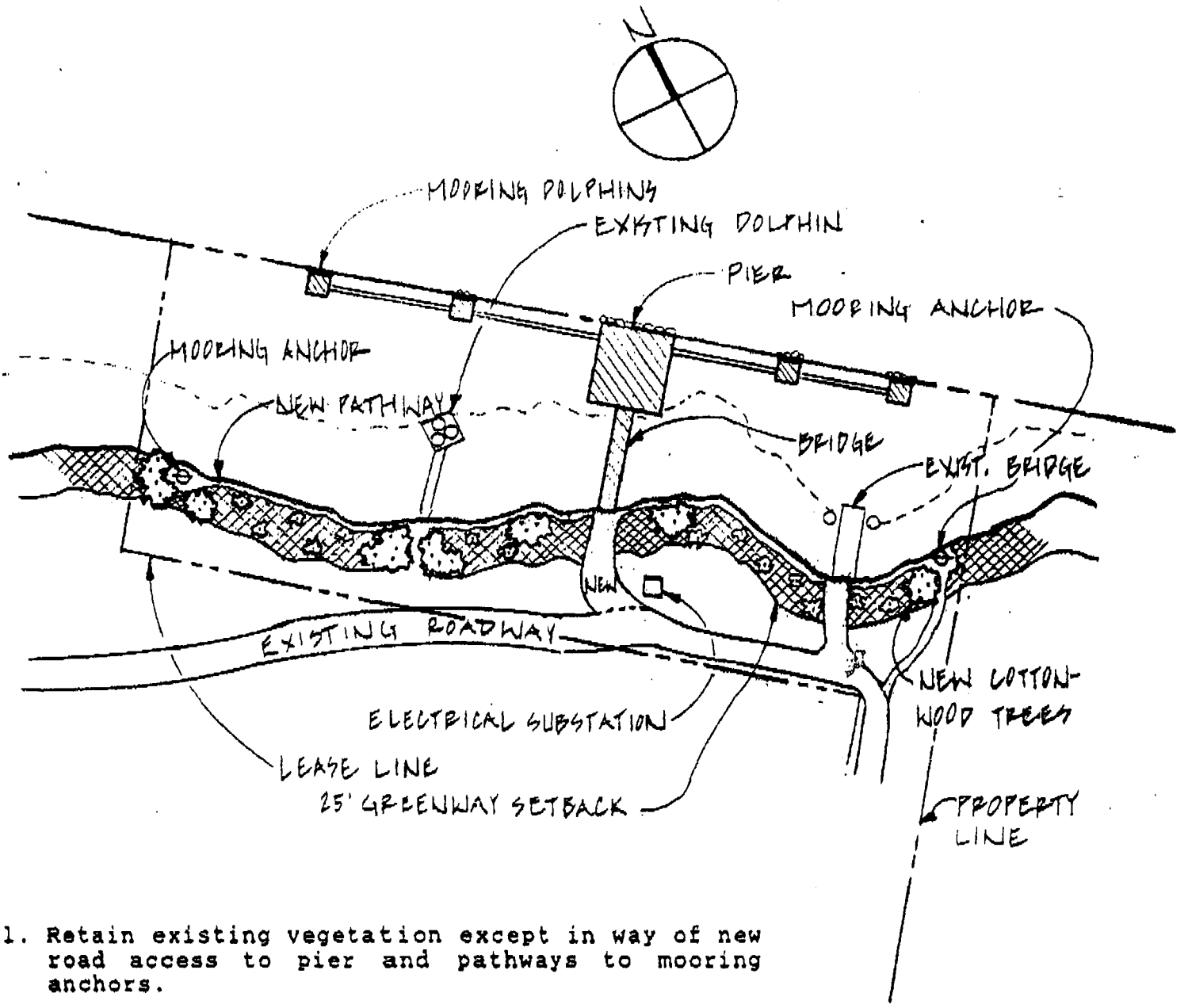
   Yes.

   a.) The river bottom in way of the ship berth along the face of the pier will require dredging to obtain a depth sufficient for mooring a ship safely. Approximately 1000 cubic yards will be removed.

   b.) Additional riprap will be placed on the bank under the bridge to the pier to prevent bank erosion. Approximately 30 cubic yards of riprap rock will be applied.

PRELIMINARY

(3/8)



1. Retain existing vegetation except in way of new road access to pier and pathways to mooring anchors.

2. Restore existing vegetation destroyed during construction.

3. Plant cottonwood trees in way of greenway set back. Trees to be grouped/staggered and spaced so that there is one tree for every 20' of bank. Trees to be minimum of 8' high and 1½' in diameter.

PRELIMINARY
JUN 25 1993

LANDSCAPING PLAN

KOPPERS INDUSTRIES INC.
SHIP UNLOADING PIER

300 200 100 0 50 10
SCALE: (APPROX.)

Statements Showing How Proposal Meets Greenway Development Standards/Approval Criteria

Koppers Industries, Inc.
Ship Unloading Pier

GREENWAY SETBACK

A. General.

The new pier, mooring dolphins, mooring anchors, and pathways are required for berthing a ship which will be unloaded at the site. These new facilities serve a river dependent use. These new facilities do not violate any "use-related restrictions" such as River Recreational Zone or River Natural Zones.

B. The setback area.

The Setback area is shown on the attached Site Plan and Landscaping Plan.

C. Development landward of the greenway setback.

All development landward of the Greenway Setback is to serve the pier and the unloading of ships alongside the pier. The improved roadway and incidental parking is for access of personnel and equipment working on the ship or pier. The extension of electric power lines and water mains and the installation of an electrical substation is to service the pier. The overhead pipe line is to convey the ship's cargo to shoreside storage. All of this development is river dependent and industrial usage on the site which is presently an industrial zone.

D. Development within the greenway setback.

The only development within the Greenway Setback will be installation of ship mooring anchors, access pathways to the ship mooring anchors, and an access roadway to the new pier. This development is river dependent.

E. Development riverward of the greenway setback.

1. Biological Productivity

a.) The new pier is supported by piling. The piling for the pier will cause the minimum interference with biological activity in the river.

b.) Dredging along the face of the pier will be required. A "strip" about 15 feet wide by 400 feet long will be dredged. This strip is at the edge of the deep channel, not in the "beach" area. When the dredging is completed, the dredged area will not be an obstruction to the passage of fish.

(1/3)

Cont'd . . .

GREENWAY SETBACK (Continued)

E. Development riverward of the greenway setback. (Continued)

1. Biological Productivity (Continued)

During construction dredging and pile driving will be done only during "permitted" times to prevent interference with fish migration.

The shallow beach areas are the most productive biological zones. The design of the pier incorporates a relatively narrow bridge across the shallow waters to the main pier structure. This design results in the minimum impact on the biological activity in the shallow water area.

The existence of the pier and dolphin structures will enhance some biological activity in the water. Everyone familiar with waterfront facilities has observed fish hovering around pilings and similar structures in the water. These structures apparently provide shelter for some species.

The new pier meets the criterion of "no significant loss of biological productivity."

2. Protection from wave and wake damage.

The existing bank is protected with riprap. Additional riprap will be placed under the pier bridge on the bank to further protect the bank. The pier project meets the criterion of "protecting the riverbank from wave or wake damage."

3. The new pier is within the limits of the established "Harbor Line" which is the Federally established limit of the navigation channel. The pier does not "stick out" beyond the main channel. the new pier is essentially in-line with the Harbor Line on the adjacent properties. The new pier is also in-line with the existing downstream pier and the adjacent property.

The new pier meets the criteria:

a.) Not to restrict boat access to adjacent properties.

b.) Not to interfere with commercial navigation.

c.) Not to interfere with fishing use.

d.) Not to significantly add to recreational boating congestion.

PRELIM

Cont'd . . .

2/2

GREENWAY SETBACK (Continued)

E. Development riverward of the greenway setback. (Continued)

4. The beach at the site is not publicly accessible from the land side. The pier structure is located so that small boats can go around the pier and dolphin structures to land on the beach, the same as at present. The new pier structure meets the criterion "not to significantly interfere with beaches that are open to the public."

NON-CONFORMING USES AND DEVELOPMENT

The proposed pier and associated works are a river dependent, river related, conforming use. No non-conforming use is planned.

LANDSCAPING

The landscaping plan is to basically retain the existing vegetation and to add trees as required by the Landscaping Standards. The cottonwood trees to be added comply with the native plant requirement.

PUBLIC RECREATION TRAILS

There are no Public Viewpoints shown on the nearby Greenway Trail.

VIEW CORRIDORS

There are no view corridors designated for this section of the river.

PRELIM...

JOINT APPLICATION FOR PERMIT

U.S. ARMY CORPS OF ENGINEERS
STATE OF OREGON, DIVISION OF STATE LANDS

WHEREAS Department of the Army permits for proposed work in or affecting navigable waters of the United States, the discharge of dredged or fill material into those waters, and the transport of dredged material for the purpose of dumping it into ocean waters are authorized by Section 10 of the River and Harbor Act of 1899, Section 404 of the Clean Water Act of 1977, and Section 103 of the Marine Protection Research and Sanctuaries Act of 1972, respectively, ---AND---permits for that part of those project activities which includes the removal or fill in the waterways of Oregon of rock, gravel, silt, and clay are authorized by the State of Oregon under O.R.S. 541.605 to 541.695---THIS APPLICATION WILL MEET THE REQUIREMENTS OF BOTH AGENCIES.

For Agency Use Only	For Agency Use Only
Corps of Engineers #	State of Oregon #
Date received	Date received

Name of Waterway: Willamette River | River Mile: 6.4 | Local Name: Doane Point

Section: 12 | Township: 1N | Range: 1W

Estimated Starting Date of Project: September 1993 | Estimated Completion Date of Project: May 1994

NAME OF APPLICANT: Koppers Industries, Inc. Attention: Sayeed Sultan	AUTHORIZED AGENT: J. Cameron McKernan
Address: 1950 Koppers Building 436 7th Avenue	Address: 1208 SE 7th Avenue
City, State, Zip Code: Pittsburgh, Pennyslvania 15219-1800	City, State, Zip Code: Portland, Oregon 97214
Phone: Work (503) 286-3681 Home ( )	Phone: Work (503) 232-7211 Home (503) 526-0126
PROJECT SUPERVISOR: J. Cameron McKernan	Phone: Work (503) 232-7211 Home (503) 526-0126
PROPERTY OWNER IF OTHER THAN APPLICANT: Northwest Natural Gas Co. One Pacific Square	PROJECT ADDRESS: 7540 NW St, Helens Road
Address: 220 NW 2nd Avenue	City, County, State Zip Code: Portland, Multnomah Oregon 97210
City, State, Zip Code: Portland, Oregon 97209	Assessor's Records--Shown on Map #: 2221 Tax Lot #: 42 & 113
Phone: Work (503) 220-2364 Home ( )	Name of Subdivision: N/A Lot: Block:

In order to expedite the processing of this application, the following city and/or county department, which has local jurisdiction over the proposed project, has been contacted:

Name of Department: City of Portland, Bureau of Planning
Address: 1120 SW 5th Avenue, Portland 97204
Phone Number: (503) 823-7700

APPROVALS OR CERTIFICATIONS applied for or already obtained from other agencies (Federal, interstate, state, county, city, area) for any of the proposed projects described in this application:

Issuing Agency	Type of Approval	Identification #	Date of Application	Date of Approval
City of Portland Bureau of Planning	Land Use (Willamette Greenway)			

PRELIMINARY
JUN 11 1993

NPP Form 358
OCT 1980
141-31-04-80

Inclosure 1

Has any agency denied approval for the activity described herein or for any other activity directly related to it?

☐ Yes ☒ No If yes, please explain in Remarks.

ADJOINING PROPERTY ON THE WATERWAY: Give names, addresses, and phone numbers of owners and/or occupants.

1. Wacker Siltronic Corp.; Attention: Tom Boyle; 7200 NW Front; P. O. Box 83180, Portland, Oregon 97283; (503) 243-2020
2. Northwest Natural Gas Co.; Attention: ; 220 NW 2nd Avenue, Portland, Oregon 97209; (503) 220-2364
3. U. S. A.; U. S. Army Corps of Engineers; Portland District; 333 SW 1st Avenue, Portland, Oregon 97204; (503) 326-6001

PLEASE EXPLAIN IN DETAIL your plans to restore the area to its natural condition.

Most of project is in the river. Access will be over existing roads, and right-of-way. The river bank is riprapped and overgrown with various woody shrubs and naturalized plants. Areas disturbed during construction will be reseeded and/or replanted with similar vegetation.

INFORMATION FOR FILL OR REMOVAL:

FILL WILL INVOLVE 0 cubic yards annually, and 30 cubic yards for the total project.

☒ Riprap ☐ Rock ☐ Gravel ☐ Sand ☐ Silt ☐ Clay ☐ Organic On bank under bridge to pier

REMOVAL WILL INVOLVE 1000 cubic yards annually, and 5000 cubic yards for the total project. (Estimate)

☐ Rock ☐ Gravel ☒ Sand ☒ Silt ☐ Clay Dredging & maintenance dredging at face of pier

DESCRIBE IN DETAIL THE PROPOSED ACTIVITY---its primary purpose and secondary purpose, if any,---intended use (private public, commercial)---type of structures and use---type of vessels using facility---facilities for handling wastes---type of conveyance and manner of extraction of any fill or removal---the quantity and composition of, and the source and disposal sites for any fill or removal. (If additional space is needed, use plain sheet of paper.)

The project is to build a private commercial pier and associated mooring dolphins for unloading ships carrying bulk or liquid coal tar pitch. The coal tar pitch is presently being brought in at the Port of Portland's Terminal 4 bulk unloading facility. The pier and dolphins will be steel deck with steel piling and framing supports. The ships using the pier will be small bulk carriers of about 8,000 deadweight tons (425' x 65' x 30'). Shipboard wastes will be disposed in accordance with U. S. Coast Guard Regulations, 33 CFR 158, by a qualified contractor to be selected. Riprap fill will be obtained by a qualified contractor to be selected. Riprap fill will be obtained from a commercial contractor's inland quarry. Dredge spoil will be removed by clam shell bucket and loaded on a barge for transport to an approved disposal site such as owned by Ross Island Sand & Gravel Co.

Application is hereby made for a permit or permits to authorize the activities described herein. I certify that I am familiar with the information contained in this application, and that, to the best of my knowledge and belief, such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities.

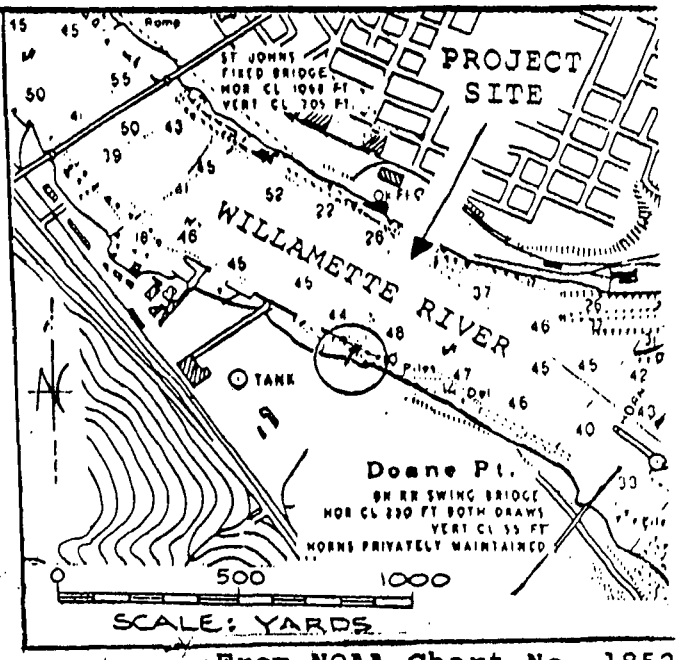
Signature of Applicant or Authorized Agent

18 USC 1001 provides in part: "Whoever, in any manner within the jurisdiction of any department . . . of the United States knowingly and willfully falsifies . . . a material fact or makes any false . . . statement or . . . uses any false . . . document . . . shall be fined not more than $10,000 or imprisoned not more than five years, or both."

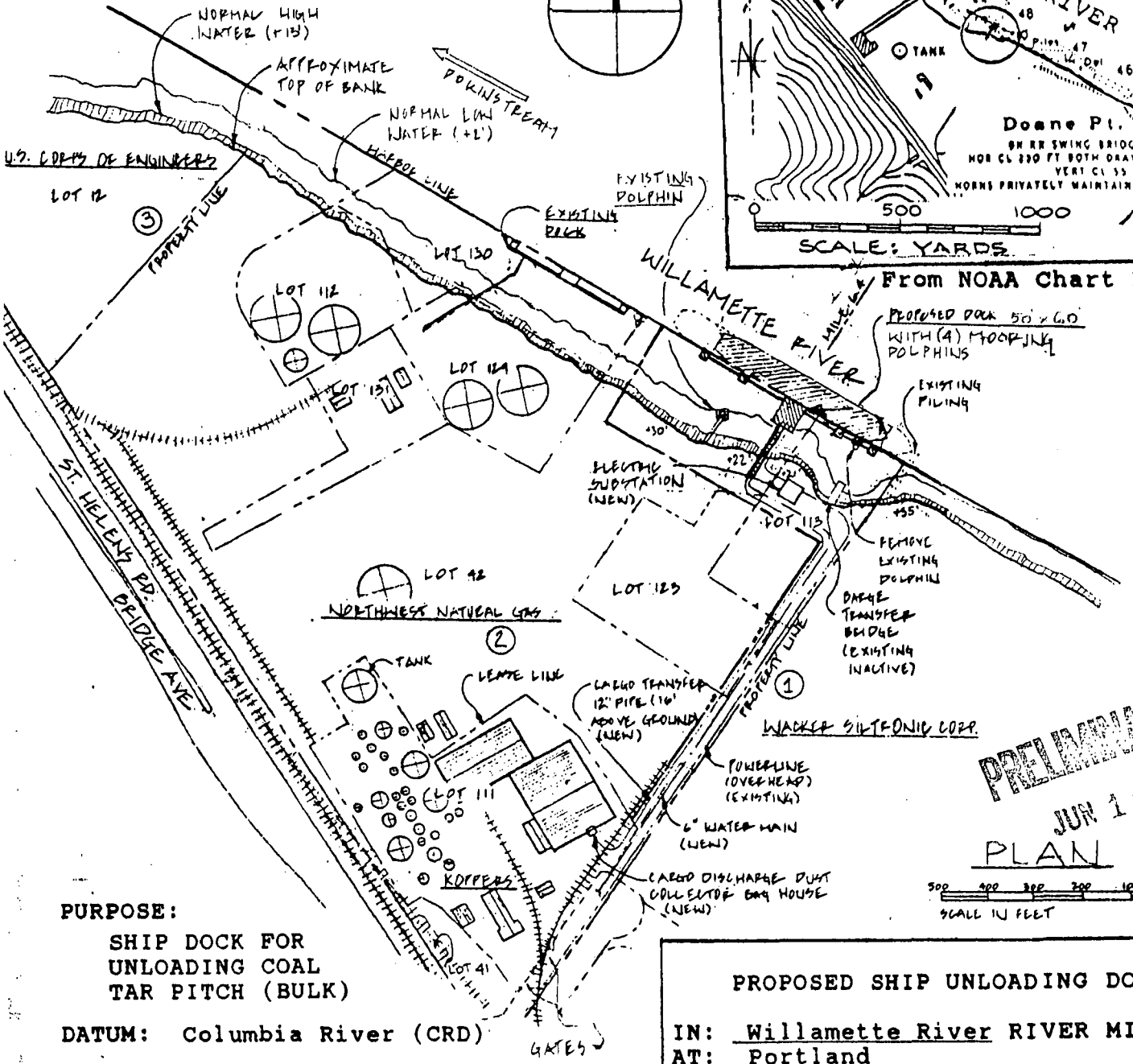
Koppers004589

VICINITY MAP

LAT: 45° 34' 46"
LONG: 122° 45' 18"
RIVER MILE: 6.4



From NOAA Chart No. 1852



PRELIMINARY
JUN 11 1993
PLAN

500 400 300 200 100 0 50 100
SCALE IN FEET

PURPOSE:

SHIP DOCK FOR
UNLOADING COAL
TAR PITCH (BULK)

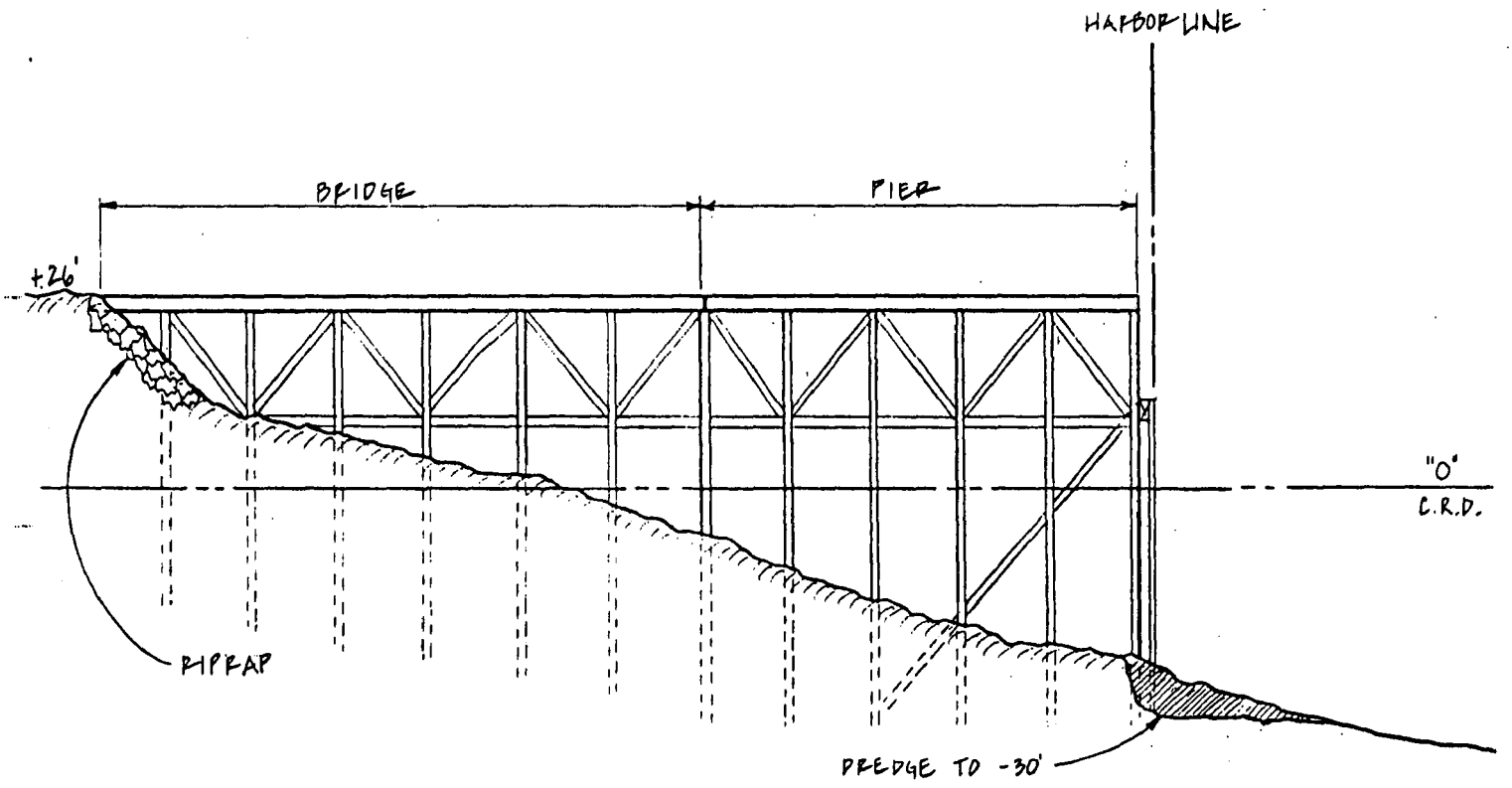
DATUM: Columbia River (CRD)

ADJACENT PROPERTY OWNERS:

1. Wacker Siltronic Corp.
2. Northwest Natural Gas
3. U. S. Corps of Engineers

PROPOSED SHIP UNLOADING DOCK

IN: Willamette River RIVER MILE 6.4
AT: Portland
COUNTY: Multnomah STATE: Oregon
APPLICANT: Koppers Industries, Inc.
DATE: June 11, 1993
SHEETS: 1 OF 2



SECTION LOOKING DOWNSTREAM

SCALE: 1" = 20'

KOPPERS INDUSTRIES INC.
SHIP UNLOADING DOCK

PRELIMINARY
JUN 11 1990

Koppers004591

KOPPERS INDUSTRIES

INTEROFFICE CORRESPONDENCE

To:	L.F. Flaherty	From:	Amos S. Kamerer
Location:	K-1750	Location:	Portland
Subject:	Pitch Unloading Facility	Date:	April 16, 1993

Here's the CER for the pitch ship unloading facility. The $36,000.00 cost covers the following:

Cameron McKernan's services	$ 29,700
Land use permit	1,000
River bottom profile	2,500
Contingencies	2,800

This process will take 4 to 5 months to complete, with the land use permit being the critical item. You cannot get a building permit without the land use permit.

The land use permit will have a 1 year expiration period from the date of issuance, thus a building permit would have to be secured within that time frame. Cameron advises that the building permit cost will be about 5% of the value of the project and will require about 2 months time to secure from the city.

Amos

Amos S. Kamerer

ASK:crt

cc: W.A. Meisinger
J.A. Oxford
M. Sayeed Sultan
W.W. Turner

KOPPERS
Koppers Industries, Inc.

CAPITAL EXPENDITURE REQUEST

				Request No.	9270-22
Division	TAR	Location	NORTHWEST PLANT	Request Date	4 / 16 / 93
Request Initiated By	J.A. OXFORD	Approved By			
Title	PITCH SHIP UNLOADING FACILITY				

Amount of Request	$ 36,000.00	Depreciation Life	YRS	Estimated Life	YRS	Approval Date	MO.	19 YEAR	
Class of Expenditure	See Reverse A 2 0	Depreciation Acct. No.							

Specification & Description:
THE REQUIRED ENGINEERING AND PRELIMINARY PERMITS TO CONSTRUCT A PENCIL AND/OR LIQUID PITCH SHIP UNLOADING FACILITY AT THE PORTLAND PLANT.

Summary of Justification:
DUE TO THE ESTIMATEDD 6 MONTH TIME PERIOD NEEDED TO ACCOMPLISH THE ENGINEERING AND PRELIMINARY PERMITTING PROCESS, IT IS FELT THAT THIS EXPENDITURE SHOULD BE MADE NOW, EVEN THOUGH A FINAL DECISION TO ACTUALLY CONSTRUCT THE FACILITY HAS NOT BEEN MADE TO DATE.

ENGINEERING: By M.SAYEED SULTAN Approval _____ **COSTS:** Cash Expenditure (1) 36,000.00

Trade-In or Salvage (2) _____

ESTIMATE: By JOHN A. OXFORD Approval _____ Amt. of Requests(1) + (3) 36,000.00

Type of Investment	Building	%	Equipment	%	Land	%	Type of Equipment	New		Used		Age		For Use On	Owned Property		Leased Property	

EARNINGS OR COST: *(5 Yrs. Average)*

Division Income Before Interest & Taxes _____

% Return On Net Investment _____

Added Working Capital Required If Any _____

RETIREMENTS: *(PDA) Attached*

Total Original Value _____

Years Acquired _____

Total Book Value _____

CONSTRUCTION BY:

Est. Schedule of Expense _____

Est. Start - Up Date _____

Est. Close to Property _____

Referral to Insurance _____

APPROVAL:

Production Manager		
Capital Planning		DATE
Environmental & Safety		DATE
Engineering		DATE
Division Controller		DATE
Group Controller		DATE
Other		DATE

KI - 405 Rev. 5

CLASSIFICATION OF APPROPRIATION REQUESTS AND CAPITAL EXPENDITURES

Each capital item shall be classified according to the following codes. This does not preclude the use of more than one classification code for a single request.

A - 1 - 0	Non-Revenue producing additions such as service facilities, fire protection equipment, laboratories, etc.
A - 1 - 1	Non-Revenue producing additions for pollution, effluent and OSHA facilities.
A - 1 - 2	Non-Revenue producing additions for energy conservation items.
A - 2 - 0	Additions for increased savings and profit.
A - 2 - 2	Additions for energy conservations items resulting in increased savings and profit.
A - 2 - 3	Additions for energy conservations items resulting in increased savings and profits and also resulting in a 20% Investment Tax Credit.
A - 3 - 0	Investments such as the whole or partial purchase of a going business, existing plants, processes of others, joint venture, and foreign investments.
R - 1 - 0	Replacement of items which can be identified on the property records and which will eventually be retired from the property account.
R - 1 - 1	Replacement of pollution, effluent and OSHA related items which can be identified on the property records and which will eventually be retired from the property account.
R - 1 - 2	Replacement of energy conservation items which can be identified on the property records and which will eventually be retired from the property account.
R - 2 - 0	Major repair to all items except pollution, effluent, OSHA, and energy conservation items. Also shall include replacement of items which cannot be specifically identified on the property records.
R - 2 - 1	Major repairs to pollution, effluent and OSHA items.
R - 2 - 2	Major repairs to energy conservation items.

KOPPERS INDUSTRIES

Koppers Industries, Inc.

ENGINEERING DEPT.

TO:- AMOS KAMERER.

COMPANY:- NORTHWEST TERMINAL

FAX NO:-

DATE:- APRIL- 5-93

FROM:- M. SAYEED SULTAN

NUMBER OF SHEETS INCLUDING THIS SHEET ARE 4.

MY FAX NUMBER IS 412-227-2841

I AM VERY GLAD THAT I HAD A CHANCE TO TALK TO YOU TODAY.

CAMERON'S LETTER DATED MAR-8-93 IS ATTACHED. I WILL APPRECIATE IF YOU INFORM HIM THAT WE CAN PROCEED WITH THIS WORK.

WE NEED TO WRITE A LETTER TO CAMERON, PUTTING A CAP ON THE EXPENDITURE. APPRECIATE IF YOU DRAFT A LETTER AND SEND IT TO HIM WITH A COPY TO ME.

I NEED AN AFE FIGURE FROM YOUR OFFICE, WHICH WILL INCLUDE CAMERONS FEE + FEES FOR PERMITS + CONTINGENCY.

THANK YOU.

SAYEED

PHONE (412) 227-2255

P.1

APR 05 '93 10:35AM KOPPERS IND TRAFFIC 412 227 2841

412 227 2841

KOPPERS INDUSTRIES

Koppers Industries, Inc.
436 Seventh Avenue
Pittsburgh, PA 15219-1800
Phone: (412) 227-2001

PLEASE GIVE ME A CALL AFTER YOU HAVE DEVELOPED THIS FIGURE, BEFORE SUBMITTING TO L. FLAHERTY.

IN A MEETING WITH WALT TURNER & L. FLAHERTY & BILL MEISINGER, WALT MENTIONED THAT HE LIKES THE DOCK FACILITY TO BE DESIGNED TO HANDLE LIQUID PITCH IN FUTURE.

I HAVE SPOKEN TO CAMERON REGARDING THIS, HOWEVER A WORD FROM YOU AS A REMINDER WILL BE VERY APPROPRIATE. I BELIEVE HIS APPLICATION FOR PERMIT MUST HAVE EITHER THIS DISCLOSURE OR AN STATEMENT TO THIS EFFECT.

REGARDS.

SAYERS.

EXT 2325

APR 05 '93 10:36AM KOPPERS IND TRAFFIC 412 227 2841 P.2

J. CAMERON McKERNAN

Engineer - Naval Architect

1208 S.E. 7th Avenue • Portland, Oregon 97214 • (503) 232-7211 • FAX (503) 232-7658

File No. P92-34

March 8, 1993

Koppers Industries, Inc.
436 Seventh Avenue
Pittsburgh, PA 15219-1800

Attention: Mr. M. Sayeed Sultan, P.E.
Project Manager

Subject: Portland Ship Unloading Facility

Reference: Telephone Conversation and FAX Between Mr. Sultan and Mr. McKernan on 3-1-93

Gentlemen:

I have reviewed the engineering tasks and costs Mr. Sultan requested during our telephone conversation on March 1, 1993.

I outline the tasks as follows:

1. Prepare applications for permits including supporting data.

   * City of Portland Land Use Review (Willamette Greenway)

   * Corps of Engineers Permit for Construction in the Navigable Waters

   * Oregon Division of State Lands Permit for Construction in State Waters

2. Prepare plans for construction of facility. Plans required are as follows:

Title	Engineering Labor
--Site Plan	80 man-hours
--Dock Structure	60 man-hours
--Bridge Structure	40 man-hours
--Mooring and Breasting Dolphin	40 man-hours
--Shore Deadman/Anchor	40 man-hours
--Walkways	40 man-hours
--Gangway	40 man-hours
--Electrical Power and Lighting	60 man-hours

Continued

APR 05 '93 10:36AM KOPPERS IND TRAFFIC 412 227 2841 P.3

Title	Engineering Labor
--Conveying Pipe and Support	60 man-hours
--Removal/Dredging Plans	20 man-hours
--Engineering Calculations	60 man-hours
TOTAL	540 man-hours

Based on my current review, I estimate your cost for my services as follows:

Three Permits	120 man-hours @ $45 =	$ 5,400
Plans	540 man-hours @ $45 =	24,300
TOTAL		$29,700

In addition, you would pay the permit fees.

Because I do not have any experience working with your company, I propose to undertake these tasks on a time-and-material basis at an average office rate of $45 per labor man-hour. Please note the charge will vary with the person working. My office rates are:

Principle Engineer	$60 per hour
Associate Engineer	$42 per hour
Drafting Technician	$24 per hour
Clerical	$20 per hour

The tasks outlined will get us to the point of making application for a building permit and sending out plans for construction bids. The engineering costs associated with bidding and construction are not included in this proposal.

I thank you for the opportunity to work on this project with you.

Very truly yours,

J. Cameron McKernan

JCM/sh

29,700
1,000
21,500
33,200
2,800
CONT. 36,000

(Approx. 5% of value of project)

APR 05 '93 10:36AM KOPPERS IND OFFICE 412 227 2841

KOPPERS INDUSTRIES

INTEROFFICE CORRESPONDENCE

To:	L. F. Flaherty	From:	Amos S. Kamerer
Location:	K-1750	Location:	Portland
Subject:	Pitch Unloading System	Date:	April 14, 1993

Attached is the letter from Northwest Natural Gas Co. saying we can proceed with the work on the proposed waterfront pitch unloading system. Their only real concern is the placement of the foundations for the conveying/piping system. I have assured them that they will be a part of that process. Thus, I will make sure that Cameron McKernan is aware of this situation prior to his starting to work on the design.

Now that we have this approval, we will begin work on the AFE for Cameron and the permitting process. We will have this AFE completed by the end of the week, then after approval, we will contact Cameron to get started.

Amos

Amos S. Kamerer

ASK:crt

cc: W.A. Meisinger
J.A. Oxford
M. Sayeed Sultan
W.W. Turner

NORTHWEST NATURAL GAS COMPANY

220 N.W. SECOND AVENUE PORTLAND, OREGON 97209 - 3991

(503) 226-4211

April 13, 1993

RECEIVED

APR 14 1993

KOPPERS INDS., INC.
PORTLAND, OR

Mr. Amos S. Kamerer
Regional Sales Manager
Koppers Industries
7540 NW St. Helens Road
Portland, OR 97210-3663

Dear Amos:

Thank you for meeting with Sandi Hart and me yesterday. As we stated in that meeting, we are looking forward to working with you and your staff in the development of an automated unloading system.

Please keep us informed of your progress so that we might be of assistance in establishing a route for the system that best addresses the use or our waterfront property.

Sincerely,

Lee T. Opitz

Ronald K. Opitz, Manager
Risk & Land Management

RKO:dg

cc: S. K. Hart

KOPPERS INDUSTRIES

Koppers Industries, Inc.
7540 N.W. Saint Helens Road
Portland, OR 97210-3663

Amos S. Kamerer
Regional Sales Manager

Telephone: (503) 286-3681
FAX: (503) 285-2831

March 3, 1993

Mr. Ron K. Opitz
Risk & Land Management
Northwest Natural Gas Company
220 N.W. Second Ave.
Portland, Or. 97209-3991

Dear Ron,

Pursuant to our conversation yesterday, Koppers would like to proceed with the idea of constructing a pitch unloading facility on the Willamette River, to the North of our current leased property.

Long term, we are concerned about our current unloading arrangements, and even though we have not made a firm decision to undertake such a project, we would like to pursue the idea further and thus need your agreement to proceed.

As I indicated to you, Cameron McKernan, a local Engineer-Naval Architect, has performed some preliminary work for us on the basic design of the project and the necessary permitting process that would be required prior to construction. For your review, I am attaching a copy of Mr. McKernan's report and a preliminary arrangement of the site. Our thought process is that perhaps we should speculate now and proceed with the costs necessary to obtain the required permits for the project. Then, should we decide to proceed, we would be ready to do so without delay. Obviously, we would require your written approval before this process can begin.

Needless to say, if you require any additional information, please call me at once. Additionally, we would appreciate your keeping this subject confidential.

Sincerely,

Amos S. Kamerer

ASK:crt
enclosure

Bcc: L.P. Flaherty
W.W. Turner

J. CAMERON McKERNAN

Engineer - Naval Architect

1208 S.E. 7th Avenue • Portland, Oregon 97214 • (503) 232-7211 • FAX (503) 232-7658

RECEIVED
NOV 18 1992
KOPPERS IND., INC.
PORTLAND, OR
COPY

File No. P92-34
November 17, 1992

M. Sayeed Sultan,
Project Manager
K-250
Koppers Industries Inc.
436 Seventh Avenue
Pittsburgh, Pennsylvania 15219-1800

Subject: Proposed Portland Ship Dock and Unloading System
Permits for Construction

Dear Mr. Sultan,

I am writing this letter to outline the local permit requirements for construction of your proposed ship unloading facility. This is written to confirm our discussion in Portland last week.

The two principal regulatory requirements are the U. S. Army Corps of Engineers Permit to Perform Work in the Navigable Waters and the City of Portland Land Use Review. I attach copies of the application forms with this letter. Other permits will be required. I discuss each of the local regulatory agencies as follows:

CORPS OF ENGINEERS

A Corps of Engineers permit is required to do any work in the navigable waters. Most of the work we are concerned with is going to be in the navigable waters. The permit application requires small scale site plans that describe the project. A list of the owners of adjacent properties is to be included. Also required are a brief verbal description of the project and its intended use. The permit application is fairly simple. The processing time is variable. The Corps will have an internal review and then publish a Public Notice. There is time in the process for the public and the neighbors to review the project and if desired comment on it. Concurrently the Corps circulates copies of the application to other Federal agencies such as Fish and Wildlife, Environmental Protection, and others for review, comment, and approval. The overall time for this process is in the order of 90 days minimum. If there is any controversy about the project, which I don't anticipate on this project, public hearings can be held and the time for review, decision making and issuance of the permit could take longer.

Cont'd . . .

cc: John Oxford

COPY

OREGON DIVISION OF STATE LANDS

This agency is the State of Oregon Administrative Agency for managing Oregon State properties including the lands along the river banks that the State claims up to the high water mark. The State uses the same application as the Corp of Engineers Application. The State will circulate the application to other State Agencies that may have an interest in this project such as the Department of Environmental Quality, Department of Fish and Wildlife and others. This application also serves as your request for leasing the state land below the high water line that will be occupied by the pier. The application for this project should be processed routinely because the project does not require landfill or loss of wetlands.

CITY OF PORTLAND, BUREAU OF PLANNING

In accordance with state law, the City of Portland will conduct a comprehensive Land Use Review to ensure the project is permitted at the proposed location. The property is zoned industrial and is within the Willamette Greenway Area. The Greenway Review requires demonstration of the "water dependent" nature of the project. A Greenway Review Site Plan and a Landscaping Plan for the Greenway Set Back are required to be submitted with the Application. The Greenway Set Back is a strip 25 feet wide at the top of the river bank. The set back area is to be landscaped with "natural" vegetation. Because this project is water dependent and will not require amendments to or variances from the City's Land Use Plan (Zoning), I anticipate a routine Type II Review Process. If there are no comments requiring public hearings, the process takes about 60 days after submittal.

CITY OF PORTLAND, BUREAU OF BUILDINGS

The Bureau of Buildings issues Building, Plumbing, and Electrical Permits. Detail plans and supporting engineering calculations must be submitted with the permit applications. The building permit application cannot be submitted until after the Land Use Greenway Review is completed and approved. The City usually issues the building permits within 45 days of the application. The Review may sometimes take longer depending on the Bureau of Buildings work load.

Cont'd . . .

COPY

OTHER AGENCIES

Generally, permits from other agencies are not required until the project goes into operation. Some of the permits are briefly described:

Oregon State Department of Environmental Quality

* Dust collector discharge requires a Minimal Source Air Contaminant Discharge Permit.

* Cooling or waste water discharge into the River requires a National Pollutant Discharge Elimination System Waste Discharge Permit.

United States Coast Guard

* A Certificate of Adequacy for Reception Facilities for Oily Waste Discharge is required. The application for this Certificate will show that the facility has a procedure for permitting vessels to discharge bilge water and other slops without discharging into the River. Contractors approved by the Coast Guard are available to provide this service.

* A Certificate of Adequacy for discharge of garbage and other waste is required. The application for this Certificate will show that disposal of ship waste originating from foreign ports can be properly handled. The Port of Portland may be contracted to remove such waste.

Other minor permits may also be required such as crane certification and pressure vessel permits.

Generally, the permit process should proceed smoothly. the key to success is to submit complete applications giving all the information required by the agency.

Cont'd . . .

COPY

Agency review of the applications takes time. The most usual problem is time, not technical. Usually the project owner wants to start construction before the required permits are issued. It is almost impossible to expedite any of the agencies. The permit applications should be submitted well in advance of the desired construction start date. I would allow at least 6 months for the permit process. Six months would allow sufficient time for preparation and submittal of the applications and agency review and approval of the project.

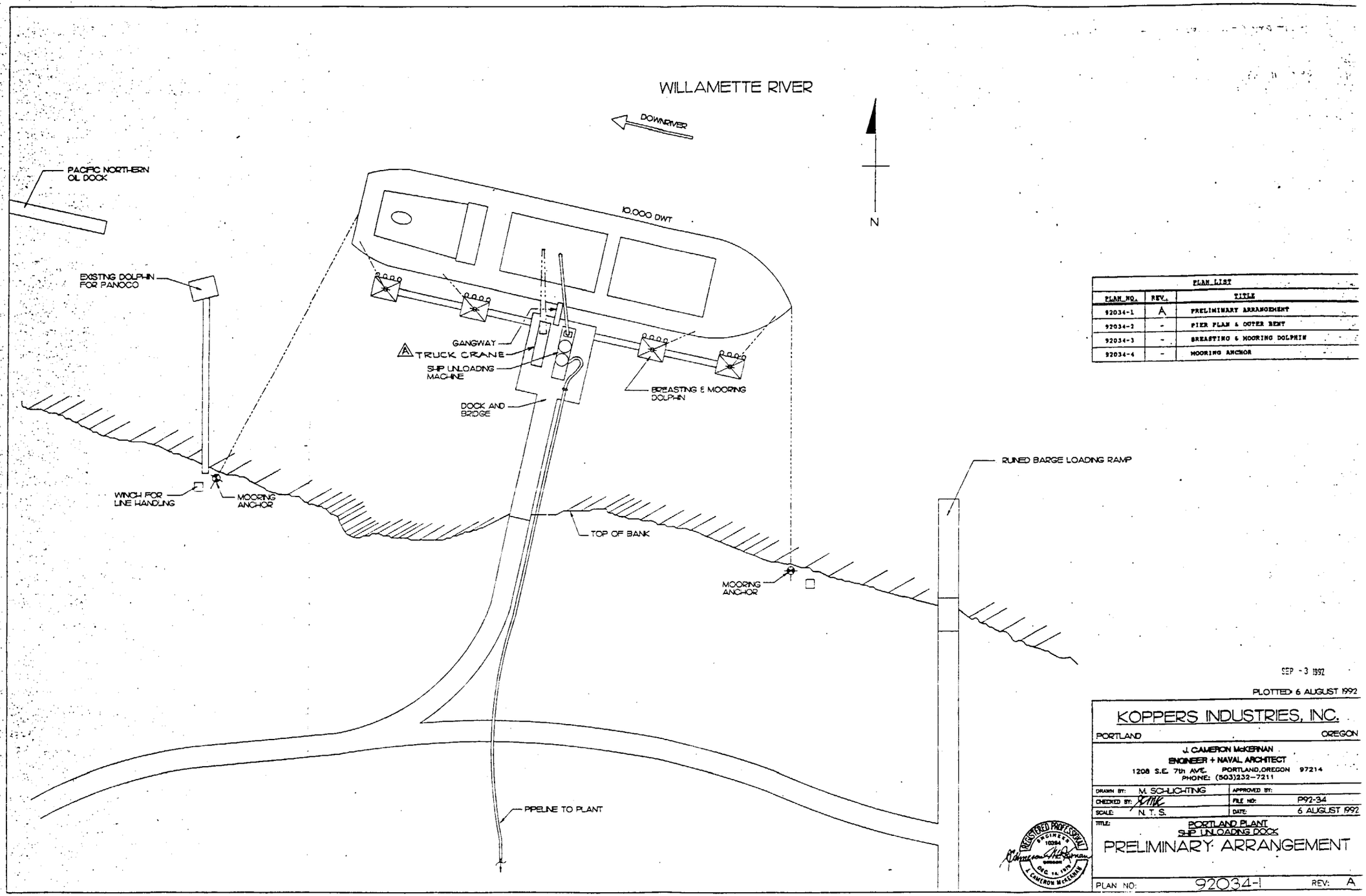
Very truly yours,

J. Cameron McKernan

Enclosures:

* Corps of Engineers and State of Oregon Permit Application Forms
* City of Portland, Bureau of Planning Land Use Review (Greenway) Application Forms

cc: John Oxford



PLAN LIST		
PLAN NO.	REV.	TITLE
92034-1	A	PRELIMINARY ARRANGEMENT
92034-2	-	PIER PLAN & OUTER BENT
92034-3	-	BREASTING & MOORING DOLPHIN
92034-4	-	MOORING ANCHOR

SEP - 3 1992

PLOTTED 6 AUGUST 1992

KOPPERS INDUSTRIES, INC.

PORTLAND OREGON

J. CAMERON McKERNAN
ENGINEER + NAVAL ARCHITECT
1208 S.E. 7th AVE. PORTLAND, OREGON 97214
PHONE: (503)232-7211

DRAWN BY:	M. SCHUCHTING	APPROVED BY:	
CHECKED BY:		FILE NO:	P92-34
SCALE:	N. T. S.	DATE:	6 AUGUST 1992

TITLE:
PORTLAND PLANT
SHIP UNLOADING DOCK
PRELIMINARY ARRANGEMENT

REGISTERED PROFESSIONAL ENGINEER 10394 DEC. 13, 1979 J. CAMERON McKERNAN

PLAN NO: 92034-1 REV: A

Koppers004606

7540 N.W. St. Helens Road, Portland, OR 97229
Telephone 503-286-3681

KOPPERS

TO: Walt Turner DATE: 3-10-93

FROM: John O'Ford NUMBER OF PAGES INCLUDING THIS ONE____

RE: Port of Portland

IF NOT ALL PAGES ARE RECEIVED PLEASE CALL 503-286-3681

Hammond, her husband and She said Scouts
3/10/93 Oregonian metro/NW section

Port of Portland agrees to pay $92,000 fine for river spills

A judge must OK a plan for the Port to remove coal tar pitch from the Willamette River

BY DAVE HOGAN
of The Oregonian staff

The Port of Portland has agreed to pay a $92,000 civil penalty for violating the Clean Water Act by spilling coal tar pitch in the Willamette River.

An estimated 80 to 100 tons of the material spilled into the river while it was being unloaded from ships during the 1980s, and the Port must clean it out within four years of the agreement being approved.

The agreement with the U.S. Environmental Protection Agency will have to be approved by a U.S. District Court judge.

The spills took place at Terminal 4 from late 1979 to March 1988 while it was being moved from ships to the dock, and then when material spilled on the dock was washed off into the river. The coal tar pitch settled to the bottom of the Willamette nearby, contaminating the river sediments.

Terminal 4 is just north of the St. Johns Bridge on the east side of the river.

The Port agreed to stop any further spills from happening. Since the late 1980s, the Port has made a number of changes, including upgrading its machinery and improving its loading procedures, said Darrel Buttice, the Port's director of public affairs.

Coal tar pitch is not readily soluble in water and is not believed to be harmful to fish or other river life in its present form, but it has buried a portion of the river bottom.

The Port agreed to take measures to remove the pitch without spreading it throughout the river. The Port must first obtain a U.S. Army Corps of Engineers permit for dredging and disposal of the material.

Afterward, EPA officials will inspect the Terminal 4 area and the disposal site to make sure the clean-up and disposal were done properly.

The pitch is a byproduct of the distillation of coal tar and is used in the manufacturing of such products as electrodes and clay pigeon targets.

Before the agreement is sent to a judge for final approval, the federal government will have a 30-day period for public comment after a notice appears in the Federal Register. That is expected to be published in the next week.

Public comments are to be sent to Steven Novick, an attorney in the U.S. Department of Justice's Environmental Enforcement Section. Novick's address is U.S. Department of Justice, 1425 New York Ave., N.W., Washington, D.C. 20005.

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KOPPERS
INDUSTRIES

INTEROFFICE CORRESPONDENCE

To:	W. A. Meisinger	From:	Sayeed Sultan
Location:	K-2050	Location:	K-2050
Subject:	PROJECT STUDY FOR A SHIP UNLOADING DOCK, AND BRIDGE AT THE WILLEMETTEE RIVER, PORTLAND, INCLUDING A MOBILE SHIP UNLOADER	Date:	October 14, 1992

RECEIVED
OCT 16 1992
KOPPERS INDS., INC.
PORTLAND, OR

The attached study outlines a detail analysis of cost per ton of unloading pencil pitch at a new dock facility furnished at the Willemettee river, which flows not too far away behind the plant fence line.

This in-depth study focuses on the following three major items which are as follows:

(1) Outright purchase of a 130 metric ton capacity Fuller-Kovako ship unloader.

(2) Lease/purchase arrangement with Fuller-Kovako for a 130 metric ton capacity unloader.

(3) Present unloading practice at the Port of Portland.

It is a known fact that pencil pitch when unloaded by a clam-shell bucket is very prone to dust dispersion as the bucket emerges from the hold of the ship and then swings towards the storage silo to discharge the material into it.

Environmentally it has become a very unsuitable method for withdrawing the pencil pitch from the vessels. (See attached letter).

Northwest Environmental Advocates are doing their best to advertise Koppers Indus, Inc. as one of the toxic polluter of the Columbia river system in the Greater Portland area. This kind of publicity is very detrimental to our business.

A pneumatic unloading method, combined with a private dock facility, appears to be the best approach for handling the pencil pitch, which will continue to arrive in 5,000 Dwt. or 10,000 Dwt. vessels from China, Japan or Korea.

This study includes a very inexpensive design of a dock having a bridge, connected to the main land. The pier is designed to support a mobile ship unloader and a crane. A cost estimate for its design and installation is included herewith.

Discussions with Fuller-Kovako, regarding a 130 metric ton mobile ship unloader have been more than satisfactory. Fuller-Kovako are very receptive to Koppers offer for a lease/purchase arrangement for the ship unloader, with a stipulated working time of 24 months. (letter attached). This alternative is very attractive, as it does not let us burdened with the outright purchase of such an expensive unit.

It will be very prudent on our part to get started with this project of new dock facility as soon as possible, so that by mid 1993 we are free from the unloading problem at the Port of Portland, longshoremen and the ever present trucking problem of pencil pitch through the city streets, before it reaches the plant site.

If there are any questions, please give me a call.

Sayeed.

Sayeed Sultan

SS:kas

Attachment

cc: L. F. Flaherty
W. W. Turner
K. J. Fitzgerald
J. L. Schaum
A. Kamerer
J. Oxford
W. F. Plovic
J. Calfe

FULLER-KOVAKO CORPORATION
2158 Avenue C, LVIP
Bethlehem, PA 18017-2188

A member of the F.L.Smidth-Fuller Engineering Group

TO:	Mr. Sayeed Sultan	FROM:	FS Wuertele
COMPANY:	Koppers Industries, Inc.	TELE:	(215) 264-6801
FAX NO:	412-227-2841	FAX:	(215) 264-6735
		HOME:	(215) 865-1850
		DATE:	1 October 1992

SUBJECT: Pneumatic Ship Unloader for Coal Tar Pitch

Dear Mr. Sultan,

In response to your request for financing alternatives for Fuller Kovako ship unloading equipment, we are able to offer the following:

Lease/Purchase Option -
Assuming an equipment price of $875,000 and a 10% interest rate, a twelve month lease/purchase will require monthly payments of $70,000 with a 10% buy out payment at the end. A 24 month lease/purchase will require monthly payments of $37,000 with a 10% buy out payment at the end of the program.

Contract Rental (with or without crew) -
Through one of our associated companies, a rental or unloading tonnage contract could be structured. The minimum contract length is flexible but usually at least one year duration. This option is available for our standard road mobile units, such as the RM-130-D.

I hope this information will help with your evaluation. In the meantime, if you have further questions, please contact Jim Borneman or myself. We appreciate your consideration of our equipment and look forward to working with you on this project.

Sincerely,
FULLER-KOVAKO CORPORATION

Fred S. Wuertele
Market Manager
Pneumatic Conveying

CC: Jim Borneman
Ad Ligthart
Bill Poulsen

0 Pages Follow

fswf2028.731

HERBERT
Malarkey Roofing Company

June 24, 1992

URGENT

Attn: Mr. John Oxford, Plant Manager
Koppers Co.
285-2831

Dear Mr. Oxford,

An organization called Northwest Environmental Advocates has recently published and are distributing a map entitled "Portland/Vancouver TOXIC WATERS". This map identifies 152 companies/sites which it implies are toxic polluters of the Willamette and Columbia river systems in the Greater Portland area.

We are one of the companies on the list. We consider the information and general presentation of the map to be very misleading and damaging to our company. We believe that Northwest Environmental Advocates has defamed our company and we are considering what legal or other actions we will take.

Your company also appears on the list. If you are interested in some joint action, we encourage your immediate response.

You may contact Mr. Gregory Malarkey at (503) 283-1191 (Fax 503-289-7644) during normal business hours. We urge your prompt response as we will hopefully be moving forward in the next 24 hours to limit the damages done to our company.

Yours very truly,

Gregory B. Malarkey

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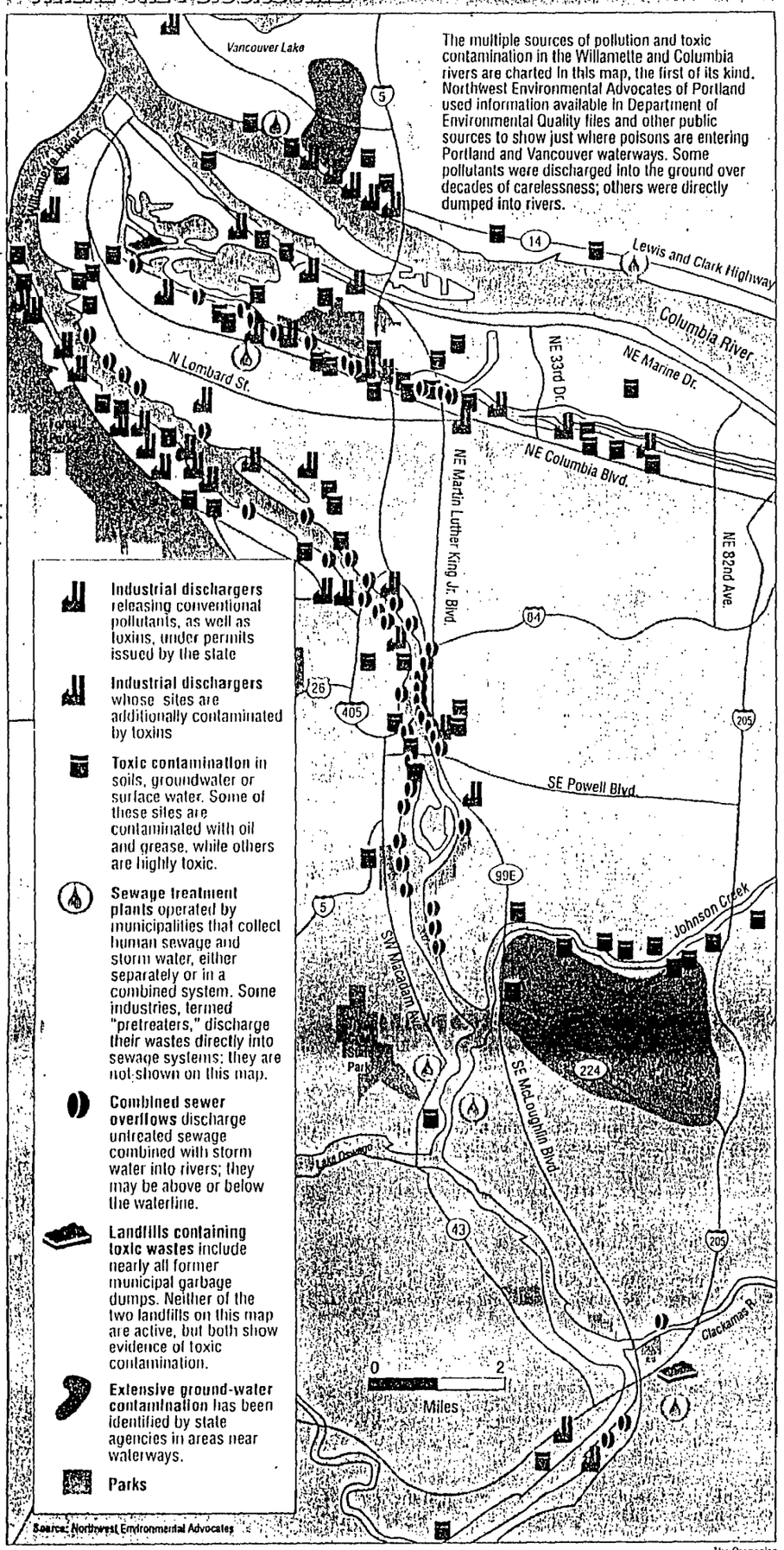
To	From
Co.	Co.
Dept.	Phone #
Fax #	Fax #

WHERE THE POISONS ARE



Group spots toxic waters

BRIEFLY **An environmental group issues a map Tuesday of the worst pollution spots in rivers in the Portland metropolitan area**

By PAUL KOBERSTEIN
of The Oregonian staff

For most of this century, the Lower Willamette River from Oregon City through Portland was a sewer of industrial poisons and municipal waste.

The state posted it unsafe for drinking and swimming. And as unhealthy as the Willamette's water was for humans, it was sometimes fatal for fish.

An intensive cleanup in the 1960s and 1970s brought down the warning signs. Water-skiers and swimmers came out to play, and healthy salmon runs returned. State officials ballyhooed the cleanup as a momentous environmental achievement.

On Tuesday, a local environmental group gave the public reason to reconsider whether the Wil-

Please turn to TOXIC, Page C7

Koppers004612

Toxic: Map claims DEQ discriminates

■ Continued from Page C1

lamette truly has been cleaned up.

Northwest Environmental Advocates of Portland published "Toxic Waters," a poster-size map and encyclopedia of the worst sources of pollution in waters in and around Portland and Vancouver, Wash.

The publication is the first comprehensive map of toxic spots in local rivers. At a glance, any swimmer, boater or angler can locate where the poisons are in the Willamette, Columbia and Tualatin rivers and in the Columbia Slough and Johnson Creek.

Researchers dredged the information from files at the DEQ, the U.S. Environmental Protection Agency, the city of Portland and several other public agencies.

Dozens of polluters dump hazardous material into the Willamette and other local rivers every day. Most of it arrives legally, under permits issued to polluters by the Oregon Department of Environmental Quality. Sometimes, those polluters violate their permits by discharging too much pollution.

This arrives in the river on top of vast quantities of poisons dumped over the years. The map charts the location of these known toxic sites and, on the back, provides a limited history of discharges, regulatory enforcement and cleanup.

The $3 map, produced with grants from KGW(8) and Soloflex Inc., draws attention to 152 pollution sources and 55 places where raw sewage enters the river with storm runoff.

Northwest Environmental Advocates was formed in 1969 as the Coalition for Safe Power. In its early years, it fought the Trojan Nuclear Plant and the Hanford Nuclear Reservation. It changed its name in 1989 to reflect its emphasis on education, research and litigation on a variety of issues.

Executive director Nina Bell hopes the map will dispel the myth that the Willamette, or any other local body of water, is entirely clean.

"It's amazing to us how many people think the Willamette River has been cleaned up," she said. "We have a long way to go to show that the Willamette is still a mess."

But the map also provides the group a podium for criticizing the state's lead environmental agency, the DEQ.

"The DEQ has taken the approach of being as hands-off as it possibly can," Bell said. "As a result, we don't know much about the Willamette River and the different sources who dump into it."

DEQ officials challenge the criticism. The agency is conducting major studies of pollution in the Willamette and Columbia but is restricted by state spending limitations, they say.

Removal of toxic wastes is expensive, says agency spokeswoman Carolyn Young, and the price is far beyond the DEQ's budget. In fact, cleanups are usually the responsibility of landowners.

Young said that while the map is not perfect, it is "a good informational tool. I'm sure they got the information right out of our files. It is unique."

But she did find fault on a point of fairness.

The map's harshest display is reserved for the Columbia Slough, a stagnant channel that runs along the Columbia's south shore. It says 215 toxic industries, 21 industries and innumerable stormdrains fill the slough with dioxin, polychlorinated byphenyls (PCBs), heavy metals and pesticides.

That much, Young says, is accurate. But Toxic Waters adds an editorial comment charging the DEQ and the city of Portland with racism.

"The slough receives little government attention because it is used for fishing and swimming mostly by people of color," the map says.

Young said cleaning up the slough is expensive and not a high DEQ priority. Two programs are in place to improve its water although an overall cleanup is ruled out because of the cost.

"If the slough were in any other location in Oregon it would receive the same amount of attention," the DEQ spokeswoman said.

Bell was doubtful. "I don't think we would tolerate an open sewer in Lake Oswego," she said. "People and kids in the housing projects swim there, and a tremendous amount of people fish there. They might as well call it the Columbia Sewer and be done with it."

While the map notes sources of pollution, it does not tell the reader where the pollution has gone. Swimmers can see how far away they are from pollution sources but not how much pollution may be in the water bathing their bodies.

Toxic Waters suggests the DEQ has been negligent in recent years for withholding data that might have assisted swimmers and fishers. It cites the highly contaminated McCormick & Baxter Co. wood treatment plant north of Swan Island as an example.

The map says the DEQ knew in 1987 that crayfish near the site were contaminated with dioxin but did not post the site as unsafe for swimming until 1991, after two boys wading in contaminated sediments suffered chemical burns to their legs.

"They sit on everything over there," Bell said. "It's put in a box someplace."

But Young said the DEQ did not act until the agency understood the source of the contamination.

"When we first saw that data in 1987, it didn't mean a whole lot," Young said. The site has since been abandoned, and the DEQ has ordered a cleanup.

Koppers004613

KOPPERS PORTLAND FACILITY

PROJECT STUDY

FOR

A SHIP UNLOADING DOCK AND BRIDGE

AT WILLAMETTE RIVER

INCLUDING

A MOBILE SHIP UNLOADER

FOR

PNEUMATIC HANDLING OF PENCIL PITCH

SAYEED SULTAN
K-2050

KOPPERS PORTLAND FACILITY

FULLER KOVAKO'S MOBIL SHIP UNLOADER

INTRODUCTION

Fuller Kovako B.V. is a highly specialized Company in respect to custom built pneumatic handling systems. Its product range consists of pneumatic barge & ship unloading equipment, special purpose pneumatic equipment, a range of terminal handling equipment and general engineering.

The Company is mainly involved in the market for cement transportation and handling, but it has designed and installed pneumatic equipment to handle, alumina, flyash, gypsum powder, coal powder, etc..

Recently the Company has started to design, fabricate and market equipment for coarse products such as pebble lime, grain and other granular materials.

Fuller Kovako's pneumatic system is capable to vacuum over large distances. Suction lengths of 164 ft. (50 meters) and blowing length of 2130 ft. (650 meters) have been achieved.

The road mobile unloaders have been designed to handle 50 M.T.P.H. (55 S.T.P.H.) to 150 M.T.P.H.(165 S.T.P.H.). Since the unloader is only 65% mechanically efficient, therefore, the net withdrawal rate of these unloaders is as follows.

65% x 50 M.T.P.H. x 24 Hrs/Day = 780 M.T.P.D.
65% x 130 M.T.P.H. x 24 Hrs/Day = 2028 M.T.P.D.
65% x 150 M.T.P.H. x 24 Hrs/Day = 2340 M.T.P.D.

Discussions with Fuller Kovako's representative have led to the fact that they do not know what pencil pitch is. Neither they have seen the material before nor they have tried to pneumatically convey the same.

DISCUSSIONS

Koppers briefed Fuller Kovako regarding pencil pitch, as to its structure, friability, temperature at which it congeals, melting point, dust characteristic, effect of direct sun light, etc..

It was also pointed out that unlike conveying cement or pebble lime, the basic vacuum system and the blowing system must have:

(1) Larger diameter pipe.
(2) Less than average conveying speed.
(3) Booster stations alongside the pipe line to ensure that the temperature of the conveying air does not rise above 50 degrees F.
(4) The use of a chiller to ensure that a low temp. conveying air is available.

Fuller Kovako are very anxious to work with Koppers to design and supply a two vessel all trailer mounted mobile shipunloader to handle the pencil pitch. Their main requirement is to supply them with one or two car load of material, so they can test it in their lab and develop the required data for pneumatic handling.

Fuller Kovako strongly feel that their machine is most ideal because:

1. It is a small and relatively low investment ship unloader.

2. The unloader is capable of doing the whole job. It not only withdraws the material from the ships, but it also conveys it to the storage facility. The only thing it requires is a simple pipeline to do the job.

3. The unloader is fully road mobile and completely self contained. The unit can be moved from one location to another without disassembling the large components. It is ready for start-up almost instantly after arriving at the dock.

4. Environmentally it is absolutely the most accepted system throughout the United States.

5. It is equipped with a large flexible arm which provides an excellent reach all through the hold of the ship to be unloaded. This flexibility allows maximum clean up at a very high efficiency.

6. It is estimated that, for 5000 DWT ships and a conveying distance of 800 ft., the road mobile unloader will consume about 2 KWH or 0.7 liter diesel fuel per ton conveyed.

7. Since there are no moving parts except two butterfly valves (Sketch Attached) therefore the wear is minimal.

8. Since early 1986 till 1991, Kovako has sold over 60 mobile ship unloaders throughout the world. These units have ranged from 100 M.T.P.H. to 800 M.T.P.H. in their unloading capacity.

CONCLUSION

Koppers have approached Fuller Kovako to provide three cost estimates for the supply, erection and start-up of a mobile ship unloader capable of unloading 150 M.T.P.H. of pencil pitch from 5,000 to 10,000 DWT vessels as follows.

(1) An out-right-purchase price for the unit.

(2) A rental arrangement spanning over a period of one year, where the rental cost is established on monthly basis.

(3) A lease arrangement, allowing the monthly lease payment to be deferred toward the purchase of the unit, after it has been in service for 12 months.

A detail reply from Fuller Kovako is expected very soon.

SHIP UNLOADING DOCK AND BRIDGE

AT THE WILLAMETTE RIVER

SHIP PIER

The dock is designed to be 61'-0" wide x 80 ft. long and it will be located at a distance of 70 ft. from the shore line into the Willamette River. The dock will be supported on vertical piles driven to the "Refusal" and will be cross braced by structural batters.

The dock surface will be a welded plate structure formed by utilizing the bed of the flat rail cars. These surfaces will be properly strengthened by utilizing new structural shapes to support the longitudinal and transverse load imposed by the ship unloader or the crane. The top of the deck will be maintained at an elevation of 30 ft. where the low water level datum is zero and the high water (flood) level is 15 ft.

All four sides of the top edge surface of the dock will be protected by 14" x 14" timber bull rail.

The entire North side of the dock surface facing the vessels will be covered with timber fenders, spaced at suitable intervals, to absorb the impact of the vessel.

The dock will be designed to support one (1) Fuller Kovako Model 130-D-4 mobil ship unloader complete with tractor. Additionally, enough room is provided to rest and support a truck crane P&H Model 9125 unit weighing 39,000 lb..

BRIDGE

The bridge will be 30 ft. wide x 70 ft. long and will span over the river, having one end resting on a 15 ft. wide x 35 ft. long concrete pad at the top of the bank and the other end connecting to the dock platform.

The bridge will be supported on piles & caps, practically the same way as the dock, and will have the similar load bearing characteristics.

MOORING AND BREASTING DOLPHINS

Four (4) Mooring and Breasting dolphins will be provided to facilitate the mooring of 50,000 DWT to 10,000 DWT vessels. Each dolphin will consist of HP 12 x 53 vertical piles driven down to the rock surface. These piles will be properly cross braced and furnished with pole type fender piles attached to cylindrical rubber fenders, to absorb the impact of a vessel.

Each dolphin platform will have a facing of 12 in. dia XXS chafing bar and a 3 in. dia. pipe handrail on the backside. The platform will be furnished with a 36 in. dia. XXS 36" high pipe to act as a bollard.

The dolphins will be spaced at appropriate distance to facilitate a 10,000 DWT vessel to be tied-in without any difficulty.

MOORING ANCHORS

Two (2) Mooring anchors will be designed and installed. Each anchor will be located on the shore line near the river bank and will consist of six HP 12 x 53 piling. The piles will be capped by a massive concrete pad to form the head of the anchor.

A 36" dia. XXS pipe will be installed to act as a bollard.

WALKWAY

A 3 Ft. wide galvanized steel walkway will be provided to connect all dolphins. The structural steel fabricated walkway will be rigidly strengthened to absorb the impact of the vessels. The walkway will be covered with XS galvanized grating.

GANGWAY

The dock will be equipped with a 4 ft. wide x 20 ft. long, structural steel fabricated gangway. The unit will be fitted with two heavy duty cylinders to be actuated by a hydraulic motor. The start-raise-lower-stop push buttons will be installed near the motor.

WINCH FOR LINE HANDLING

Two (2) winches, one on each side of the bridge will be installed near the mooring anchor. Each winch will be equipped with an electric motor & reducer.

LIGHTING & POWER

Every attempt will be made to have the local utility company install two (2) 125 KVA transformers, near the shore line.

Lighting system will be designed and installed to provide, sufficient overhead lights to allow the workers to unload the vessels after dark.

A 10 ft. square x 8 ft. high concrete block building will be provided near the transformers bank on the shore line to house the circuit breakers and the electric meters.

KOPPERS PORTLAND FACILITY
SHIP UNLOADING DOCK AT WILLAMETTE RIVER

A-1
9-22-92
SAYEED

SUBJECT		$ COST
1. ADMINISTRATIVE & ENGINEERING		
1.1 PERMIT FEES		10,000
1.2 ENGINEERING	$	
PERMIT APPLICATION	5,000	
DESIGN & DRAWING	55,000	
DRAWING APPROVAL	4,500	
CONSTRUCTION SUPERV.	15,000	
SURVEYS, PHOTOS,	8,000	
P'GH PROJECT MGT.	8,500	
SUB TOTAL =	$ 96,000 →	96,000
2. SHIP PIER & MOORING		
2.1 PIER AND BRIDGE	$	
80' PILINGS & CAPS	430,000	
DECK, RAILCARS-FILLER PLT	$ 200,000	
WOOD FENDERING (22 PILES)	50,000	
WOOD BULL RAIL	8,000	
CONCRETE PAD & RIP-RAP	25,000	
SUB TOTAL	= 713,000 →	713,000
2.2 MOORING	$	
MOORING & BREASTING DOLPHINS 4 @ 80,000	320,000	
MOORING ANCHORS 2 @ 30,000	60,000	
SHIP GANGWAY	25,000	
CAPSTANS - 2 UNITS	40,000	
SUB TOTAL	= 445,000 →	445,000
TOTAL OF THIS PAGE =		1,264,000

784,300
96,000
10,000
890,300

$ 713,000
10% CONT = 71,300
784,300

$ 445,000
10% CONT = 44,500
489,500

Koppers004621

PNEUMATIC UNLOADING OPERATION

ANNUAL THROUGHPUT = 75,000 M.T. - CASE VI

10 YEAR PAYBACK

SHIP SIZE = 5,000 M.T. DWT

SHIP UNLOADER - A 24 MONTH LEASE/PURCHASE ARRGT.
KOVAKO M-130-D-4 ROAD MOBILE
SHIPUNLOADER - MAX. 130 M.T.P.H.
0.8 LITER FUEL CONSUMPTIO PER M.T.
ACTUAL CAPACITY = .65x130 = 85 M.T.P.H.

STORAGE AREA = 75,000 TON (COMBINED)

TYPE OF OUT PUT = BULK TRUCKS OR RAIL CAR.

PAY BACK = 5 YEARS.

	$ COST	
SHIP UNLOADER		
LEASE ARRGT. $ 37,000/MONTH x 12	444000	PER YEAR
COST @ 75,000 M.T.P.Y. (FIRST YEAR)	5.92	PER TON
(SECOND YEAR)	5.92	PER TON
THIRD YEAR = $\frac{875,000 \times 10\%}{75,000}$	1.17	PER TON
FOURTH YEAR ⟶ ONWARD	NIL	

Koppers004622

KOPPERS PORTLAND FACILITY

SHIP UNLOADING DOCK AT WILLAMETTE RIVER

A-2
9-28-92
SAYERS

	B/F FROM PREVIOUS PAGE	1,264,000
	2.3 WALKWAYS ETC.	$ COST
	WALKWAYS BETWEEN DOLPHINS = $ 4 @ 10,000	40,000
	LIGHTING & POWER ON DOCK =	80,000
	SUB TOTAL = 120,000 →	120,000
	3. SHORE SIDE STORAGE & HANDLING	
	3.1 PIPELINE FOR PNEUMATIC CONVEYING ABOVE GROUND - 12" DIA x 1150 LG. $ FOOTERS + SUPPORT	≈160,000
	DUST COLLECTOR WITH DRIVE, SUPPORT STRUCTURE & STACK	70,000
	POWER AND LIGHTING FROM BANK TO PLANT	25,000
	STRUCTURAL REINFO: OF EXISTING SHED WALKWAYS, ASPHALT ROAD COVERS, SHEDS OVER ELECTRICAL & MECH. ITEMS	38,000
	SUBTOTAL = 293,000 →	293,000
	SUB TOTAL =	1,677,000
	10% CONTINGENCY	167,700
	TOTAL	1,844,700

TOTAL CONSTRUCTION COST = $ 1,850,000

$120,000
10% CNTG 12,000
132,000

160,000
16,000
176,000

70,000
7,000
77,000

25,000
2,500
27,500

38,000
3,800
41,800

IN PLANT FACILITY

NEW PITCH STORAGE SHED

The new shed located north east of the plant and adjacent to the existing storage shed will be 150 ft. wide x 200 ft. long. This structural steel frame building covered with roofing and siding is designed to be 22 ft.-10" high from the finished floor level to the underside of the purlin at the eaves.

Inside of the building is provided with a 1/4" thick x 7 ft. high steel plate wall on all four sides. The plate will be attached to the girts and held in place by high strength bolts.

The building will be provided with a net work of discharge pipes to ensure that the maximum area of the floor is utilized to store pitch to a reasonably safe height (See Sketch).

EXISTING PITCH STORAGE SHED

The existing storage shed is 128 ft. wide x 182 ft. long. The roof structure of this building will be reinforced to support the incoming conveying line and the distribution lines.

The torn and misplaced section of roofing and siding will be removed and replaced by new sections.

PIPE LINE

The pneumatic conveying line, emerging from the transfer vessel of the Fuller Kovako unit will be elevated and supported alongside the handrail of the bridge until it reaches the shore line. At this point, the pipe will be elevated to maintain a 16 ft. high elevation while it will gradually rise, gaining height, until it reaches near the new pitch storage shed. From the shore line to the storage shed which covers an approximate distance of 800 ft., the pipe will be supported on structural steel support columns, held in precast concrete footers at 15 ft. intervals.

The pipe line system will be fitted with a special regulating valve to control the CFM of air required to convey the pencil pitch and thus avoid the blockage in the pipeline system. The line will be fitted with a Y branch, allowing one arm directed toward the new shed and the other toward the existing shed. Each arm will be fitted with at least six branch-offs, each equipped with a butterfly valve having a remote control actuator. Each valve when fully open, will allow the pencil pitch to be discharged via a telescopic chute onto the surface of the storage building.

DUST COLLECTOR

A dry bag dust collector will be provided to receive the pitch dust laden air exhausted from the conveying pipe. The pulse jet air, bag collector, designed to operate on a continuous cycle, will rest on an elevated structural steel frame support and will have an exhaust duct, connected to a fan. The discharge end of the fan will be connected to a stack resting on the concrete foundation.

The collector will be located in the vicinity of the existing storage shed.

WALKWAYS & ACCESS ROAD

The area surrounding the existing and the new storage buildings will be paved and stabilized by 8" to 10" thick bed of crushed stone to allow mobile equipment to enter into these sheds to stock pile the pencil pitch and also bring the dust from the dust collector's hoppers and discharge the same into the piles.

A set of calculations have been developed to evaluate the per metric ton cost of unloading the pencil pitch from the new dock facility to the in-plant storage sheds.

The calculations take into account the few basic assumptions, which are listed below.

CASE #1 AND CASE II

(1) Annual throughput of 100,000 M.T.P.Y.

(2) Size of incoming vessel 5,000 M.T. Dwt.

(3) Payback for the shipunloader, dock facility, and the new storage shed to be 10 years for Case #1 and 5 years for Case #II.

(4) An outright purchase of the mobile ship unloader.

CASE III AND CASE IV

(1) Annual throughput of 75,000 M.T.P.Y.

(2) Size of incoming vessel 5,000 M.T. Dwt.

(3) Payback for the ship unloader, dock facility and the new storage shed to be 10 years for Case III and 5 years for Case IV.

(4) An outright purchase of the mobile ship unloader.

CASE V AND CASE VI

(1) Annual throughput of 100,000 M.T. for Case V and 75,000 M.T. for Case VI.

(2) Size of incoming vessel 5,000 M.T. Dwt.

(3) Payback for the dock facility, mobile ship unloader, and the new storage facility to be 10 years.

(4) A 24 month lease/purchase arrangement for the mobile ship unloader.

SUMMARY SHEET A

PNEUMATIC UNLOADING OPERATION

CASE NO.	INCOMING VESSEL METRIC TON	ANNUAL THROUGHPUT METRIC TON	PAY BACK IN YEARS	INTEREST RATES PER YEAR	$ TOTAL * TERMINAL COST PER METRIC TON
I	5,000	100,000	10	6%	8.0
II	5,000	100,000	5	6%	11.15
III	5,000	75,000	10	6%	10.27
IV	5,000	75,000	5	6%	14.49

NOTE:

* THE TOTAL TERMINAL COST INCLUDES:-

(1) Outright purchase of the ship unloader.

(2) Operating cost of the ship unloader.

(3) Installation of the ship pier, mooring dock, dolphins and bridge.

(4) Installation of a new storage shed at the plant.

(5) Installation of the pipe line from the unloader to the storage sheds.

(6) Maintenance cost, including personnel and supervision.

PNEUMATIC UNLOADING OPERATION

ANNUAL THROUGHPUT = 100,000 M.T. - CASE 1

10 YEAR PAYBACK

SHIP SIZE = 5,000 M.T. DWT.

SHIP UNLOADER = KOVAKO M-130-D-4 ROAD MOBILE SHIPUNLOADER - MAX UNLOADING = 130 M.T/HR

0.8 LITER FUEL PER TON

ACTUAL UNLOADING CAPACITY = 0.65 x 130 = 85 M.T.P.H

STORAGE AREA = 100,000 TON (COMBINED)

TYPE OF OUTPUT = BULK TRUCKS OR RAIL CARS.

PAYBACK = 10 YEARS.

	$ COST	
1. SHIP UNLOADER		
INVESTMENT COST		
* PRICE OF UNLOADER	875,000	
* BOOSTER PUMP WITH COOLER	25,000	
* TRANSPORTATION COST TO THE SITE	8,000	
* INSTALLATION COST	1,000	
* COST OF PIPE LINE TO STORAGE	176,000	
SUBTOTAL INVESTMENT COST	1085000	
• INVESTMENT COST PER YEAR (10 YEAR PAY)	108500	
• INTEREST COST (AVER. 6% PER YEAR)	65100	
TOTAL INVESTMENT COST	173600	PER YEAR
COST @ 100,000 M.T.P.Y	1.74	PER TON

Koppers004629

PNEUMATIC UNLOADING OPERATION

ANNUAL THROUGHPUT = 100,000 M.T. - CASE 1

10 YEAR PAYBACK

		$ Cost	
2.	**OPERATIONAL COST**		
	* OPERATOR'S COST (2x20x59x20x1.5) Ⓐ	70800	
	* FUEL COST (.22x1.35x100,000) Ⓑ	29700	
	* MAINTENANCE COST $18.00/mo x12	21600	
	RENTAL CRANE = $2000/month x12	24000	
	RENTAL DOZER = $800/month x12	9600	
	FUEL (.18 GAL x 1.35 x 25% (100,000)) Ⓒ	6075	
	MIS. MATL, TARP, POLY CLOTH, GLOVES	6000	
	SUBTOTAL OPERATING COST	167775	PER YEAR
	COST @ 100,000 M.T.P.Y	1.68	PER TON
3.	**SHIP PIER, BRIDGE & MOORING INVESTMENT COST**		
	* PIER & BRIDGE INCLUD. DESIGN	890300	
	* MOORING & BREASTING DOLPHIN	489500	
	* WALKWAY & LIGHTING	132000	
	SUBTOTAL INVESTMENT COST	1511800	
	• INVESTMENT COST PER YEAR (10 YR PAY BACK)	151180	
	• INTEREST COST (AVERAGE 6% PER YEAR)	90708	
	TOTAL INVESTMENT COST	241888	PER YEAR
	COST @ 100,000 M.T.P.Y	2.42	PER TON

Ⓐ $\frac{100{,}000\ \text{M.T}}{5000\ \text{DWT}} = 20\ \text{VESSELS}$ / $\frac{5000\ \text{M.T}}{85\ \text{TPH}} = 59\ \text{HRS}$ FOR EACH BOAT

WAGES $20/HR OVERTIME = 1.5

Ⓑ FUEL = .8 LITER x .26417 GAL/LIT = .22 GAL / COST OF FUEL = $1.35/GAL

Ⓒ DUST TO BE SCRAPED FROM THE HULL IS ESTIMATED TO BE 25% OF THE TOTAL LOAD.

Koppers004630

PNEUMATIC UNLOADING OPERATION

ANNUAL THROUGHPUT = 100,000 M.T. - CASE 1

10 YEAR PAYBACK

		$ Cost	
4.	**IN PLANT STORAGE & HANDLING INVESTMENT COST**		
	* NEW STORAGE BUILDING (INSTALLED)	380000	
	* A RECLAIM FRONTEND LOADER	35000	
	* CONTROL ROOM + CONTROL RM. EQUIP	41800	
	* TRANSPORTATION COST	5000	
	* ROADWAY, LIGHTING, ETC.	14000	
	* DUST COLLECTOR, MOTOR, DRIVE & STACK	77000	
	* CONTINGENCY	13500	
	SUB TOTAL INVESTMENT COST	566300	
	INVESTMENT COST PER YEAR (10 YR PAY BACK)	56630	
	INTEREST COST (AVERAGE 6% PER YEAR)	33978	
	TOTAL INVESTMENT COST	90608	PER YEAR
	COST @ 100,000 M.T.P.Y	0.91	PER TON
5.	**OPERATIONAL COST**		
	* LEASE OF PROPERTY (APPROX. 2½ ACRE)	40000	
	* PERSONNEL + SUPERVISION	45000	
	* MAINTENANCE + ENERGY COST	20000	
	* ADMINISTRATIVE + MISCELL.	20000	
	TOTAL OPERATING COST	125000	PER YEAR
	COST @ 100,000 M.T.P.Y	1.25	PER TON

TOTAL TERMINAL COST PER TON

1.74 + 1.68 + 2.42 + .91 + 1.25 ≅ $ 8.0

Koppers004631

PNEUMATIC UNLOADING OPERATION

ANNUAL THROUGHPUT = 100,000 M.T. - CASE II

5 YEAR PAYBACK

SHIP SIZE :- 5,000 M.T. DWT

SHIP UNLOADER = KOVAKO-M-130-D-4, ROAD MOBILE SHIPUNLOADER, MAX. UNLOADING 130 M.T/HR

0.8 LITER FUEL PER TON.

ACTUAL UNLOADING CAPACITY = .65 x 130 = 85 M.T.P.H

STORAGE AREA = 100,000 TON (COMBINED)

TYPE OF OUTPUT = BULK TRUCKS OR RAIL CAR

PAY BACK = 5 YEARS.

	# Cost	
1. SHIP UNLOADER		
INVESTMENT COST		
* PRICE OF UNLOADER	875000	
* BOOSTER PUMP WITH COOLER	25000	
* TRANSPORT COST TO SITE	8000	
* INSTALLATION COST	1,000	
* COST OF PIPELINE TO THE STORAGE AREA	176000	
SUB TOTAL INVESTMENT COST	1085000	
• INVESTMENT COST PER YEAR (5 YEAR PAY)	217000	
• INTEREST COST (AVERAGE 6% PER YEAR)	65100	
TOTAL INVESTMENT COST	282100	PER YEAR
COST @ 100,000 M.T.P.Y	2.82	PER TON

Koppers004632

PNEUMATIC UNLOADING OPERATION

ANNUAL THROUGHPUT = 100,000 M.T. - CASE II

5 YEAR PAYBACK

		$ Cost	
2.	**OPERATIONAL COST**		
	* Operator's Cost (2 x 20 x 59 x 20 x 1.5)	70800	
	* Fuel Cost (.22 x 1.35 x 100,000)	29700	
	* Maintenance Cost $1800/mon x 12	21600	
	Rental Crane = $2000/mth x 12	24000	
	Rental Dozer = $800/month x 12	9600	
	Fuel (.15 gal x 1.35 x 25% (100,000))	6075	
	Misc. Matl, Tarp, Poly Cloth, Gloves	6000	
	SUB TOTAL OPERATING COST	167775	Per Year
	Cost @ 100,000 M.T.P.Y.	1.68	Per Ton
3.	**SHIP PIER, BRIDGE & MOORING INVESTMENT COST**		
	* Pier & Bridge — Includ. Design	890300	
	* Mooring & Breasting Dolphin	489500	
	* Walkway & Lighting	132000	
	SUB TOTAL INVESTMENT COST	1511800	
	INVESTMENT COST PER YEAR (5 Yr. Pay Back)	302360	
	INTEREST COST (Average 6% per year)	90708	
	TOTAL INVESTMENT COST	393068	Per Year
	Cost @ 100,000 M.T.P.Y.	3.93	Per Ton

Koppers004633

PNEUMATIC UNLOADING OPERATION

ANNUAL THROUGHPUT = 100,000 M.T. - CASE II

5 YEAR PAYBACK

		$ COST	
4.	IN PLANT STORAGE & HANDLING		
	INVESTMENT COST		
	* NEW STORAGE BUILDING (INSTALLED)	380000	
	* A RECLAIM FRONT END LOADER	35000	
	* CONTROL ROOM + CONTROL ROOM EQUIP.	41800	
	* TRANSPORTATION COST	5000	
	* ROADWAY & LIGHTING ETC.	14000	
	* DUST COLLECTOR, MOTOR, DRIVE & STACK	77000	
	* CONTINGENCY	13500	
	SUB TOTAL INVESTMENT COST	566300	
	INVESTMENT COST PER YEAR (5 YEAR PAY BACK)	113260	
	INTEREST COST (AVERAGE 6% PER YEAR)	33978	
	TOTAL INVESTMENT COST	147238	PER YEAR
	COST @ 100,000 M.T.P.Y.	1.472	PER TON
5.	OPERATIONAL COST.		
	* LEASE OF PROPERTY (APPROX. 2½ ACRE)	40000	
	* PERSONNEL + SUPERVISION	45000	
	* MAINTENANCE + ENERGY COST	20000	
	* ADMINISTRATIVE + MISC.	20000	
	TOTAL OPERATING COST	125000	PER YEAR
	COST @ 100,000 M.T.P.Y	1.25	PER TON

TOTAL TERMINAL COST PER TON

$2.82 + 1.68 + 3.93 + 1.472 + 1.25 = \$11.15$

Koppers004634

PNEUMATIC UNLOADING OPERATION
ANNUAL THROUGHPUT = 75,000 M.T. CASE III
10 YEAR PAYBACK.

SHIP SIZE = 5,000 M.T. DWT.
SHIP UNLOADER = KOVAKO - M-130-D-4, ROAD MOBILE SHIPUNLOADER, MAX CAPACITY 130 M.T.P.H
0.8 LITER FUEL PER TON.
ACTUAL CAPACITY = .65 x 130 = 85 M.T.P.H
STORAGE AREA = 75,000 TON. (COMBINED)
TYPE OF OUTPUT = BULK TRUCKS OR RAIL CAR.
PAY BACK = 10 YEARS.

	$ COST
1. SHIP UNLOADER	
INVESTMENT COST.	
* PRICE OF UNLOADER	875,000
* BOOSTER PUMP WITH COOLER	25000
* TRANSPORT COST TO SITE	8000
* INSTALLATION COST ⊗	1000
* COST OF PIPELINE TO THE STORAGE AREA.	176,000
SUB TOTAL INVESTMENT COST	1,085,000
• INVESTMENT COST PER YEAR (10 YR PAY BACK)	108500
• INTEREST COST (AVERAGE 6% PER YEAR)	65100
TOTAL INVESTMENT COST	173,600 PER YEA
COST @ 75,000 M.T.P.Y	2.314 PER TON

Koppers004635

PNEUMATIC UNLOADING OPERATION
ANNUAL THROUGHPUT = 75,000 M.T. - CASE III
10 YEAR PAYBACK

	$ COST
2 OPERATIONAL COST	
* OPERATORS COST $(2 \times 15 \times 59 \times 20 \times 1.5)$ Ⓐ	53100
* FUEL COST $(.22 \times 1.35 \times 75{,}000)$ Ⓑ	22280
* MAINTENANCE COST = $1800\ \$/\text{mon} \times 12$	21600
RENTAL CRANE = 2000×12	24000
RENTAL DOZER = 800×12	9600
FUEL $(.18\ \text{GAL} \times 1.35\ \$/\text{GAL} \times 20\%\ (75{,}000))$ Ⓒ	3645
MISC. MATL, TARP, POLYCLOTH, GLOVES.	5000
SUBTOTAL OPERATING COST	139225 PER YEAR
COST @ (75,000 M.T.P.Y)	1.856 PER TON
3 SHIP PIER BRIDGE & MOORING	
INVESTMENT COST	
* PIER & BRIDGE INCLUDING DESIGN	890300
* MOORING & BREASTING DOLPHINS	489500
* WALKWAY & LIGHTING	132000
SUBTOTAL INVESTMENT COST	1,511,800
INVESTMENT COST PER YEAR (10YR PAYBACK)	151,180 PER YEAR
INTEREST COST (AVERAGE 6% PER YR)	90708
TOTAL INVESTMENT COST	241888 PER YEAR
COST @ 75,000 M.T.P.Y	3.225 PER TON

Ⓐ $\frac{75000\ \text{M/T}}{5000\ \text{DWT}} = 15\ \text{BOATS}$ & $\frac{5000\ \text{DWT}}{85\ \text{TPH}} = 59\ \text{HRS}$ FOR EACH BOAT.

WAGES = $20/HR FLAT OVERTIME = 1.5

Ⓑ FUEL = $.8 \times .26417 = .22\ \text{GAL}$ FUEL ; COST OF FUEL = $1.35\ \text{GALL}$
TOTAL WITHDRAWL = 75,000 TON.

Ⓒ DUST TO SCOOPE FROM HULL IS ESTIMATED TO BE 20% OF THE TOTAL.

Koppers004636

PNEUMATIC UNLOADING OPERATION

ANNUAL THROUGHPUT = 75,000 M.T. – CASE III

10 YEAR PAYBACK

		$ Cost
4	**IN PLANT STORAGE & HANDLING**	
	INVESTMENT COST	
	* NEW STORAGE BUILDING (INSTALLED)	380,000
	* RECLAIM FRONT-END LOADER	35,000
	* CONTROL ROOM + CONTRL RM. EQUIP.	41,800
	* TRANSPORTATION COST	5,000
	* ROADWAY, LIGHTING ETC.	14000
	* DUST COLLECTOR, MOTOR, DRIVE, STACK	77,000
	* CONTINGENCY	13500
	SUB TOTAL INVESTMENT COST	566300
	INVESTMENT COST PER YEAR (10 YEAR PAY BACK)	56630
	INTEREST COST (AVERAGE 6% PER YR)	33978
	TOTAL INVESTMENT COST	90608 Per Yr
	Cost @ 75,000 M.T.P.Y.	1.208 Per To
5.	**OPERATIONAL COST**	
	* LEASE OF PROPERTY (APPROX. 2½ ACRES)	40,000
	* PERSONNEL + SUPERVISION	45,000
	* MAINTENANCE + ENERGY COST	20,000
	* ADMINISTRATIVE + MISCELL.	20,000
	TOTAL OPERATING COST	125000 Per Yr
	(COST @ 75,000 M.T.P.Y)	1.667 Per To

TOTAL TERMINAL COST PER TON

$2.314 + 1.856 + 3.225 + 1.208 + 1.667 = \$10.27$

Koppers004637

PNEUMATIC UNLOADING OPERATION

ANNUAL THROUGHPUT = 75,000 M.T. - CASE IV

5 YEAR PAYBACK

SHIP SIZE = 5000 M.T. DWT.

SHIP UNLOADER = KOVAKO-M-130-D-4 ROAD MOBILE SHIPUNLOADER, MAX. UNLOADING 130 M.T.P.H

0.8 LITER FUEL PER TON.

ACTUAL UNLOADIN CAPACITY = 65x130 = 85 M.T.P.H

STORAGE AREA = 75,000 TON. (COMBINED)

TYPE OF OUTPUT = BULK TRUCKS OR RAIL CAR

PAY BACK = 5 YEARS

	# COST	
1. SHIP UNLOADER		
INVESTMENT COST		
* PRICE OF UNLOADER	875000	
* BOOSTER PUMP WITH COOLER	25000	
* TRANSPORT COST TO SITE	8000	
* INSTALLATION COST	1000	
* COST OF PIPELINE TO THE STORAGE AREA	176000	
SUB TOTAL INVESTMENT COST	1085000	
• INVESTMENT COST PER YEAR (5 YEAR PAY)	217000	
• INTEREST COST (AVERAGE 6% PER YEAR)	65100	
TOTAL INVESTMENT COST	282100	PER YEAR
COST @ 75,000 M.T.P.Y.	3.76	PER TON

Koppers004638

PNEUMATIC UNLOADING OPERATION

ANNUAL THROUGHPUT = 75,000 M.T. - CASE IV

5 YEAR PAYBACK

		$ Cost.	
2	**OPERATIONAL COST**		
	* OPERATORS COST (2x15x59x20x1.5)	53100	
	* FUEL COST (.22x1.35x75,000)	22280	
	* MAINTENANCE COST = 1800 man/mo x 12	21600	
	RENTAL CRANE = 2000/mo x 12	24000	
	RENTAL DOZER = 800 x12	9600	
	FUEL (.15 gal/gal x 1.35 $/gal x 20% (75,000))	3645	
	MISC. MATL, TARP, POLYCLOTH, GLOVES	5000	
	SUB TOTAL OPERATING COST.-	139225	PER YR
	COST @ 75,000 M.T.P.Y	1.856	PER TON
3.	**SHIP PIER, BRIDGE & MOORING.**		
	INVESTMENT COST		
	* PIER & BRIDGE INCLUD. DESIGN	890300	
	* MOORING & BREASTING DOLPHIN	489500	
	* WALKWAY & LIGHTING	132000	
	SUB TOTAL INVESTMENT COST	1511800	
	INVESTMENT COST PER YEAR (5 YR PAY BACK)	302360	
	INTEREST COST (AVERAGE 6% PER YR)	90708	
	TOTAL INVESTMENT COST	393068	PER YEAR
	COST @ 75,000 M.T.P.Y	5.241	PER TON

Koppers004639

PNEUMATIC UNLOADING OPERATION

ANNUAL THROUGHPUT = 75,000 M.T. - CASE IV

5 YEAR PAYBACK

		$ COST	
4	IN PLANT STORAGE & HANDLING		
	INVESTMENT COST		
	* NEW STORAGE BUILDING (INSTALLED)	380,000	
	* A RECLAIM FRONT END LOADER	35,000	
	* CONTROL ROOM + CONTROL ROOM EQUIP.	41,800	
	* TRANSPORTATION COST	5,000	
	* ROADWAY & LIGHTNING ETC	14,000	
	* DUST COLLECTOR, MOTOR, DRIVE & STACK	77,000	
	* CONTINGENCY	13,500	
	SUB TOTAL INVESTMENT COST	566,300	
	INVESTMENT COST PER YEAR (5 YEAR PAY BACK)	113,260	
	INTEREST COST (AVERAGE 6% PER YEAR)	33,978	
	TOTAL INVESTMENT COST	147,238	PER YEAR
	COST @ 75,000 M.T.P.Y.	1.963	PER TON
5.	OPERATIONAL COST		
	* LEASE OF PROPERTY (APPROX. 2½ ACRES)	40,000	
	* PERSONNEL + SUPERVISION	45,000	
	* MAINTENANCE + ENERGY COST	20,000	
	* ADMINISTRATIVE + MISC.	20,000	
	TOTAL OPERATING COST	125,000	PER YEAR
	COST @ 75,000 M.T.P.Y	1.667	PER TON

TOTAL TERMINAL COST PER TON

3.76 + 1.856 + 5.241 + 1.963 + 1.667 = $14.49

Koppers004640

LEASE/PURCHASE ARRANGEMENT

FOR THE MOBIL SHIP UNLOADER

SUMMARY SHEET B

PNEUMATIC UNLOADING OPERATION

CASE NO.	INCOMING VESSEL M.T.	ANNUAL THROUGHPUT M.T.	PAY BACK IN YEARS	INTEREST RATE PER YEAR	TOTAL TERMINAL * COST PER METRIC TON
IV	5,000	100,000	10	6%	--
1ST YR					10.98
2ND YR					10.98
3RD YR					7.42
4TH YR					6.54
5TH YR AND THERE ON					6.54
VI	5,000	75,000	10	6%	--
1ST YR					14.26
2ND YR					14.26
3RD YR					9.51
4TH YR					8.33
5TH YR AND THERE ON					8.33

NOTE:

(1)* The mobile ship unloader has been leased for a period of 24 months with a view to be purchased after 2 years.

PNEUMATIC UNLOADING OPERATION

ANNUAL THROUGHPUT = 100,000 M.T. - CASE V

10 YEAR PAYBACK

SHIP SIZE = 5000 M.T. DWT

SHIP UNLOADER = A 24 MONTH LEASE / PURCHASE ARRGT.
KOVAKO M-130-D-4 ROAD MOBILE
SHIP UNLOADER - MAX. 130 M.T.P.H.
0.8 LITER FUEL PER TON.
ACTUAL CAPACITY = .65 × 130 = 85 M.T.P.H.

STORAGE AREA = 75,000 TON (COMBINED)

TYPE OF OUTPUT = BULK TRUCKS OR RAIL CAR

PAY BACK = 10 YEARS

SHIP UNLOADER

	$ COST	
LEASE ARRGT $37,000/MONTH × 12 =	444,000	PER YEAR
COST @ 100,000 M.T.P.Y (FIRST YEAR) =	4.44	PER TON
(SECOND YEAR) =	4.44	PER TON
THIRD YEAR = $\frac{875,000 \times 10\%}{100,000}$ =	0.875	PER TON
FOURTH YEAR ⟶ ONWARD	NIL	

Koppers004643

PNEUMATIC UNLOADING OPERATION

ANNUAL THROUGHPUT = 100,000 M.T. - CASE V

10 YEAR PAYBACK

		$ Cost	
2.	**OPERATIONAL COST**		
	* OPERATORS COST (2x20x59x20x1.5)	70800	
	* FUEL COST (.22x1.35x100,000)	29700	
	* MAINTENANCE COST = $1800 ^{man} x 12	21600	
	RENTAL CRANE = $2000 x12	24000	
	RENTAL DOZER = $800x12	9600	
	FUEL (.15 ^{GAL} x1.35x25¢(100,000))	6075	
	MIS. MATL POLY, TRAP, POLYCLOTH	6000	
	SUB TOTAL OPERATING COST	167,775	PER YEAR
	COST @ 100,000 M.T.P.Y.	1.68	PER TON
3	**SHIP PIER, BRIDGE, DOLPHINS & PIPE LINE INVESTMENT COST**		
	* PIER & BRIDGE INCLUD. DESIGN	890300	
	* MOORING & BREASTING DOLPHINS	489500	
	* WALKWAY & LIGHTING	132000	
	* COST OF PIPELINE TO THE STORAGE AREA	176000	
	SUBTOTAL INVESTMENT COST	1687800	
	INVESTMENT COST PER YEAR (10 YR PAYBK)	168780	
	INTEREST COST (AVERAGE 6% PER YEAR)	101268	
	TOTAL INVESTMENT COST	270048	PER YEAR
	COST @ 100,000 M.T.P.Y	2.70	PER TON

Koppers004644

PNEUMATIC UNLOADING OPERATION

ANNUAL THROUGHPUT = 100,000 M.T. - CASE V

10 YEAR PAYBACK

		$ Cost	
4.	**IN PLANT STORAGE & HANDLING INVESTMENT COST**		
	* NEW STORAGE BUILDING (INSTALLED)	380000	
	* A RECLAIM FRONTEND LOADER	35000	
	* CONTROL ROOM + CONTROL RM. EQUIP.	41800	
	* TRANSPORTATION COST	5000	
	* ROADWAY LIGHTING ETC.	14000	
	* DUSTCOLLECTOR, MOTOR, DRIVE + STACK	77000	
	* CONTINGENCY	13500	
	SUBTOTAL INVESTMENT COST	566300	
	INVESTMENT COST PER YEAR (10YR PAY BACK)	56630	
	INVESTMENT COST (AVERAGE 6% INTEREST)	33978	
	TOTAL INVESTMENT COST	90608	PER YEAR
	COST @ 100,000 M.T.P.Y.	0.91	PER TON
5.	**OPERATIONAL COST**		
	* LEASE OF PROPERTY (APPROX. 2½ ACRE)	40000	
	* PERSONNEL SUPERVISION.	45000	
	* MAINTENANCE + ENERGY COST	20000	
	* ADMINISTRATIVE + MISC.	20000	
	TOTAL OPERATING COST	125000	PER YEAR
	COST @ 100,000 M.T.P.Y.	1.25	PER TON

TOTAL TERMINAL COST PER TON

1ST YEAR = 4.44 + 1.68 + 2.70 + 0.91 + 1.25 = $10.98

2ND YEAR = 4.44 + 1.68 + 2.70 + 0.91 + 1.25 = 10.98

3rd YEAR = 0.875 + 1.68 + 2.70 + 0.91 + 1.25 = 7.42

4TH YEAR = 0 + 1.68 + 2.70 + 0.91 + 1.25 = 6.54

5TH YEAR = 0 + 1.68 + 2.70 + 0.91 + 1.25 = 6.54

Koppers004645

PNEUMATIC UNLOADING OPERATION

ANNUAL THROUGHPUT = 75,000 M.T. – CASE VI

10 YEAR PAYBACK

2.	**OPERATIONAL COST**		
	* OPERATORS COST (2x15x59x20x1.5)	53100	
	* FUEL COST (.22x1.35x 75,000)	22280	
	* MAINTENANCE COST = 1800 ^{mon} x12	21600	
	RENTAL CRANE = 2000 x12	24000	
	RENTAL DOZER = 800x12	9600	
	FUEL(.18 ^{GAL} x 1.35 $^{\$/GAL}$ x 20% (75000)	3645	
	MIS. MATL, TARP, POLYCLOTH, GLOVES	5000	
	SUBTOTAL OF OPERATING COST	139225	PER YEAR
	COST @ 75,000 M.T.P.Y -	1.856	PER TON
3	**SHIP PIER BRIDGE DOLPHIN & PIPELINE INVESTMENT COST**		
	* PIER & BRIDGE INCLUDING DESIGN	890300	
	* MOORING & BREASTING DOLPHINS	489500	
	* WALKWAY AND LIGHTING	132000	
	COST OF PIPELINE TO THE STORAGE AREA	176000	
	SUBTOTAL INVESTMENT COST	1687800	
	INVESTMENT COST PER YEAR (10 YR PAYBACK)	168780	
	INTEREST COST (AVERAGE 6% INTEREST)	101268	
	TOTAL INVESTMENT COST	270048	PER YEAR
	COST @ 75,000 M.T.P.Y	3.60	PER TON

Koppers004646

PNEUMATIC UNLOADING OPERATION

ANNUAL THROUGHPUT = 75,000 M.T. - CASE VI

10 YEAR PAYBACK

4. IN PLANT STORAGE & HANDLING

INVESTMENT COST

SAME AS ITEM #4 - SHT #3
CASE V

TOTAL INVESTMENT COST — 90,608 PER YEAR
COST @ 75,000 M.T.P.Y — 1.208 PER TON

5. OPERATIONAL COST

SAME AS ITEM #5 - SHT #3
CASE V

TOTAL OPERATING COST — 125,000 PER YEAR
COST @ 75,000 — 1.667 PER TON

TOTAL TERMINAL COST PER TON

		$
1ST YEAR =	5.92 + 1.856 + 3.60 + 1.208 + 1.667 =	14.26
2ND YEAR =	5.92 + 1.856 + 3.60 + 1.208 + 1.667 =	14.26
3RD YEAR =	1.17 + 1.856 + 3.60 + 1.208 + 1.667 =	9.51
4TH YEAR =	0 + 1.856 + 3.60 + 1.208 + 1.667 =	8.33
5TH YEAR =	0 + 1.856 + 3.60 + 1.208 + 1.667 =	8.33

Koppers004647

PRESENT UNLOADING PRACTICE

USE OF CLAM-SHELL BUCKET TO UNLOAD PITCH

AT THE PORT OF PORTLAND

SUMMARY SHEET C

Following is the cost analysis of the Chinese pitch which arrived in the vessel "ARTEM" at the Port of Portland and was unloaded on Feb-26-92.

Total quantity of Pencil pitch unloaded = 5557M.T. *
Pencil pitch discharged to the trucks = 544 M.T.

		$ Cost	$ Cost/ Metric Ton
(1) Discharge to trucks (544 M.T.)	=	8,278	15.21
(2) Labor required to sweep) clean the vessel)	=	2,350	0.42
(3) Labor to tarp the trucks	=	1,926	0.35
(4) Truck Freight (Port to the plant)	=	---	4.00
(5) Truck unloading at the plant	=	---	2.00
	Total Cost		= $21.98

THIS COST $21.98/M.T. REFLECTS LOADING TRUCKS AT THE PORT OF DELIVERY TO THE PLANT STORAGE SHED.

* Copy of the invoice attached.

NOTE: Following items are not included

(1) Brokers Fee.

(2) Draft displacement survey fee.

HALL-BUCK MARINE, INC.
P.O. BOX 35
BURNSIDE, LOUISIANA 70738

INVOICE NO. 92/1950

DATE 02/26/92

KOPPERS INDUSTRIES, INC.
ATTN: W. W. TURNER
1601 KOPPERS BUILDING
PITTSBURGH, PA 15219

TERMS: NET 30 DAYS.
1 1/2% INTEREST ON UNPAID
BALANCE THEREAFTER.

INVOICE

CUSTOMER NO.	REFERENCE
0083006	PORTLAND BULK TERMINAL

COMMODITY: COAL TAR PITCH → Chrome Pitch
VESSEL: M/V "ARTEM"
COMPLETED: 1000 HOURS ON 02/23/92

DISCHARGED TO TRUCKS		DISCHARGED TO COVERED RAILCARS	
TONS:	544.300	TONS:	5,012.700
RATE:	$15.21	RATE:	$20.49
CHARGE:	$8,278.80	CHARGE	$102,710.22

TOTAL DISCHARGE COST $110,989.02

ADDITIONAL CHARGES

EXTRA LABOR REQUIRED TO SWEEP CLEAN VESSEL (KOPPERS REQUEST)

FEBRUARY 22, 1992
HOLD #1 - 8 HOURS OVERTIME - 2 MEN AT $587.70 PER MAN $1,175.40

FEBRUARY 23, 1992
HOLD #1 - 8 HOURS OVERTIME - 2 MEN AT $587.70 PER MAN $1,175.40

EXTRA LABOR TO TARP TRUCKS

FEBRUARY 21, 1992
DAY SHIFT -- 2 MEN AT $428.23 PER MAN $856.46
NIGHT SHIFT -- 2 MEN AT $534.54 PER MAN $1,069.08

TOTAL DUE THIS INVOICE $115,265.36

REMIT TO: HALL-BUCK MARINE, INC.
P. O. BOX 54695
NEW ORLEANS, LA 70154

MAR 2 1992

KI 37W REV 2 6M 6/90

GIL	DET.	S-DET.	LOC.	DEPT.	TAX	EMP #	MOVE # PO #	AMOUNT
5050	2	92	1620	X	0362			115,265 —

OK TO PAY 3/25/92

IMPORTANT: CIRCLE TERMS ON INVOICE

GROSS AMOUNT	115,265 36
DISCOUNT $	
NET $	115,265 36

CIRCLE TERMS ON INVOICE

INV # 92/1950 DATE 02/26/92

A/P DEPARTMENT USE ONLY

VENDOR NUMBER

TERMS CODE · DUE DATE: 03/26/92

DIVISION	MONTH	AUDIT NUMBER
483	3	

Koppers004650

SUMMARY SHEET D

Following is the cost analysis of the Chinese pitch which arrived in the vessel "GENERAL CABAL" at the Port of Portland and was unloaded on July-24-92.

Amount of Pencil pitch unloaded = 5196 metric ton *
Material discharged to trucks = 368 metric ton

		$ Cost	$ Cost/ Metric Ton
(1)	Discharge to Trucks only (368 M.T.) =	5,822	15.82
(2)	Labor required to sweep clean the vessel. =	---	---
(3)	Labor to tarp the trucks =	897	2.44
(4)	Truck freight (Port to the plant) =	---	4.00
(5)	Truck Unloading at the plannt =	---	2.00
	Total Cost =		$24.26

Total cost of unloading and delivery to the shed = $24.76

* Copy of invoice attached.

NOTE:

(1) Labor required to sweep clean the vessel appears to be included in the rate applied for loading rail cars.

HALL-BUCK MARINE INC.
PORTLAND BULK TERMINAL
INVOICE INFORMATION

TO: MR. CLARKE WILLIAMS

FROM: K. PITRE

RE: *VESSEL DISCHARGE*

METRIC TONS
4828 RAILCAR
368 TRUCK
TOTAL = 5196 M.T.

CUSTOMER: KOPPERS INDUSTRIES
COMMODITY: COAL TAR PITCH
VESSEL: GENERAL CABAL
COMPLETED: 16:35 07/24/92

MT DISCHARGED TO RAILCARS:		4,828.150
RATE:		$21.31
TOTAL CHARGE :		$102,887.88
MT DISCHARGED TO TRUCKS:		368.00
RATE:	15.82/TON	$15.82
TOTAL CHARGE :		$5,821.76

ADDITIONAL CHARGES : TRUCK TARPERS
07/22 TWO MEN 08:00-17:00 = 8 HOURS @ $895.92/SHIFT = $895.92

TOTAL DUE THIS INVOICE: $109,605.56

AUG- 4-92 TUE 8:21 HALL-BUCK MARINE, INC. FAX NO. 503 285 4467 P. 02

SUMMARY SHEET E

The following cost analysis pertain to the delivery of Japanese pitch, which arrived in the vessel "M/V AGNES" at the Port of Portland and the unloading into truck was completed on Feb-27-92.

Total quantity of pencil pitch unloaded = 3207 metric ton *

	$ Cost	$ Cost/ Metric Ton
(1) Discharge to Trucks only (3207 M.T.) =	48,778	15.21
(2) Labor to tarp the trucks =	8,662	2.70
(3) Truck freight (Port to the plant) =	---	4.00
(4) Truck unloading at the plant =	---	2.00
Total Cost =		$23.91

Total cost of unloading and delivery to the shed = $23.91

* Copy of invoice attached.

NOTE: Following items are not included.

(1) Brokers fee.
(2) Processing custom entry.
(3) Port usage fee.
(4) Draft-displacement survey fee.

HALL-BUCK MARINE, INC.
P.O. BOX 35
BURNSIDE, LOUISIANA 70738

INVOICE NO. 92/1975

DATE 02/28/92

KOPPERS INDUSTRIES, INC.
ATTN: W. W. TURNER
1601 KOPPERS BUILDING
PITTSBURGH, PA 15219

TERMS: NET 30 DAYS.
1 1/2% INTEREST ON UNPAID BALANCE THEREAFTER.

INVOICE

CUSTOMER NO.	REFERENCE
0063006	PORTLAND BULK TERMINAL

COMMODITY: COAL TAR PITCH → Jefferson Pitch
VESSEL: M/V "AGNES"
COMPLETED: 1500 HOURS ON 2/27/92

DISCHARGED TO TRUCKS		DISCHARGED TO COVERED RAILCARS	
TONS:	3,207.000	TONS:	0.000
RATE:	$15.21	RATE:	$0.00
CHARGE:	$48,778.47	CHARGE	$0.00

TOTAL DISCHARGE COST $48,778.47

ADDITIONAL CHARGES EXTRA LABOR HIRED TO TARP TRUCKS

2/25/92	
4 TARPERS - 1800-0300 = 8 HRS AT $534.54 PER MAN, PER SHIFT	$2,138.16
2/26/92	
4 TARPERS - 0300-0800 = 5 HRS AT $387.24 PER MAN, PER SHIFT	$1,548.96
4 TARPERS - 0800-1700 = 8 HRS AT $428.23 PER MAN, PER SHIFT	$1,712.92
2/27/92	
4 TARPERS - 0300-0800 = 5 HRS AT $387.24 PER MAN, PER SHIFT	$1,548.96
4 TARPERS - 0800-1700 = 8 HRS AT $428.23 PER MAN, PER SHIFT	$1,712.92

TOTAL DUE THIS INVOICE $57,440.39

REMIT TO: HALL-BUCK MARINE, INC.
P. O. BOX 54695
NEW ORLEANS, LA 70154

MAR 2 1992

KI 37W REV 2 6M 6/90

CIRCLE TERMS ON INVOICE

GIL	DET.	S-DET.	LOC.	DEPT.	TAX	EMP #	MOVE # PO #	AMOUNT
5050	3	92	1671	X	0362			57,440

INV # 92-1975 DATE 2/25/92

A/P DEPARTMENT USE ONLY

VENDOR NUMBER

TERMS CODE: DUE DATE 3/31/92

OK TO PAY

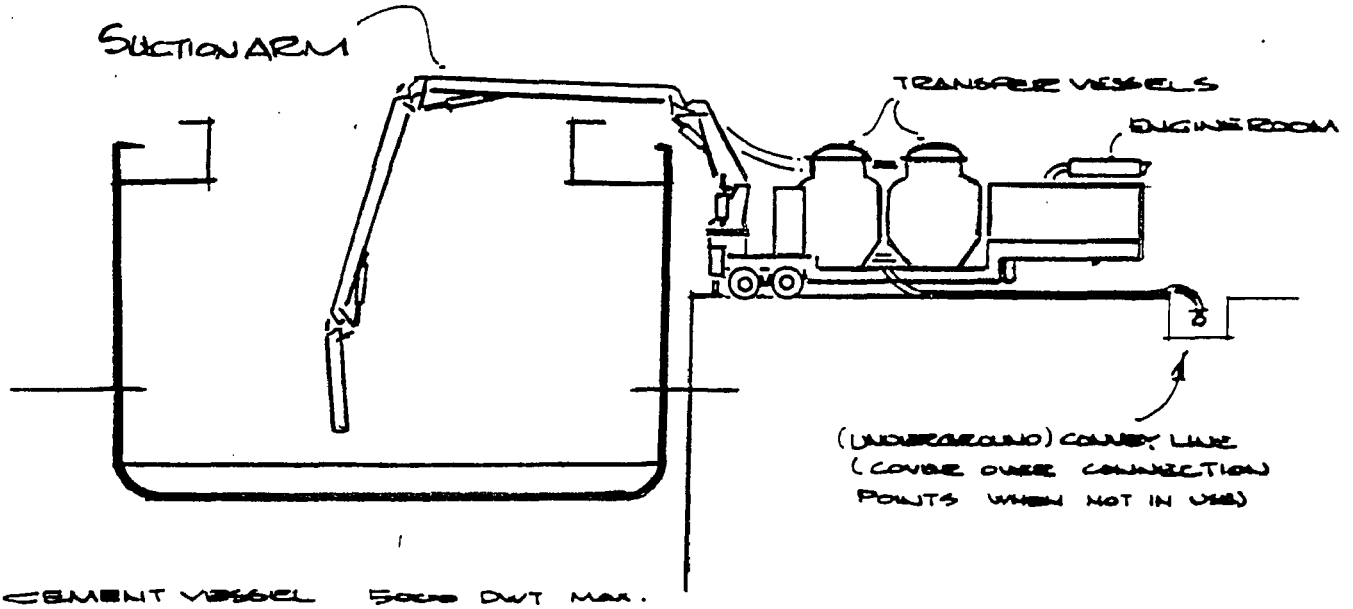
GROSS AMOUNT	57,440 39
DISCOUNT $	
NET $	57,440 39

DIVISION	MONTH	AUDIT NUMBER
483	3	

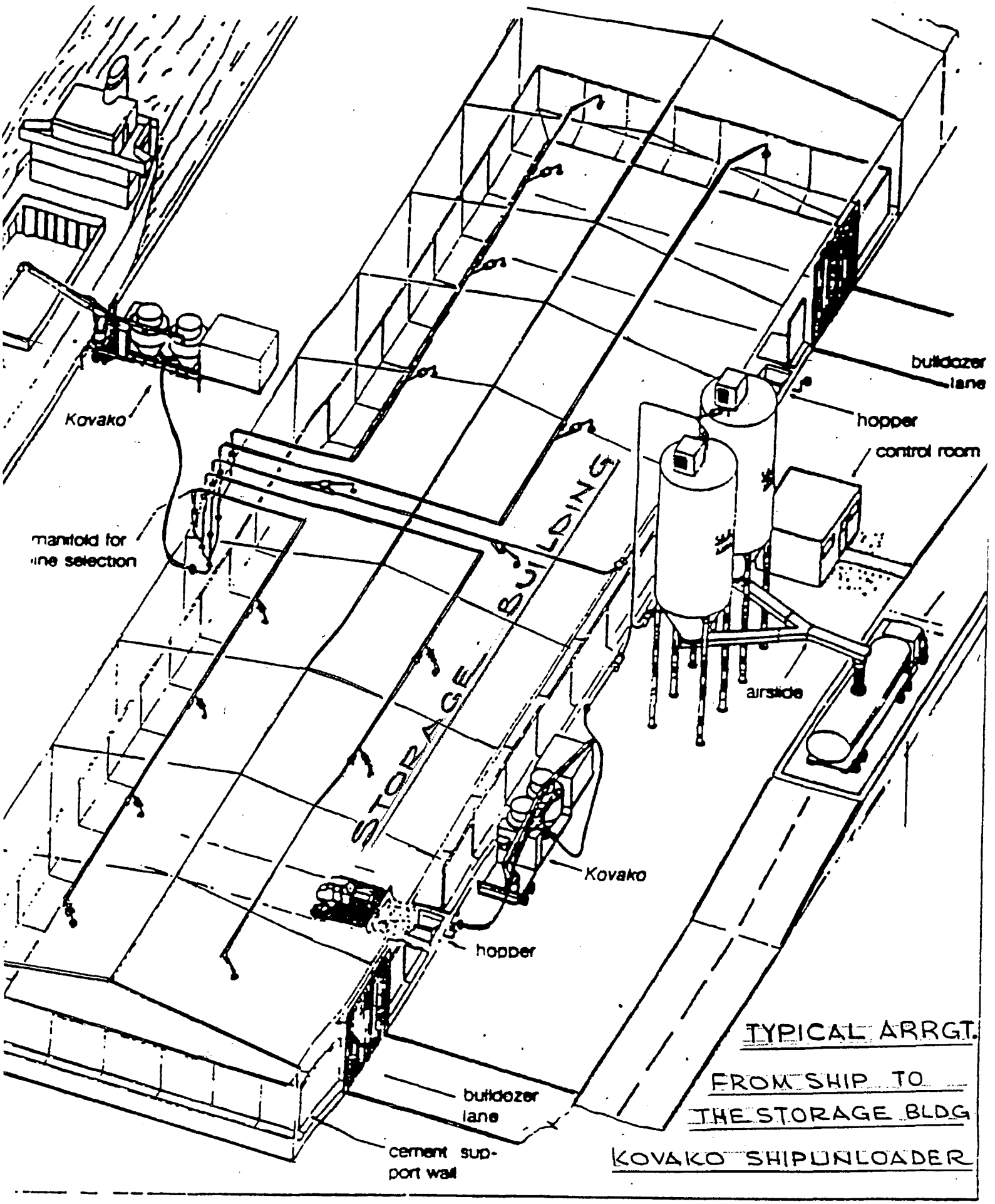
IMPORTANT: CIRCLE TERMS ON INVOICE

130 T/H SHIPUNLOADER

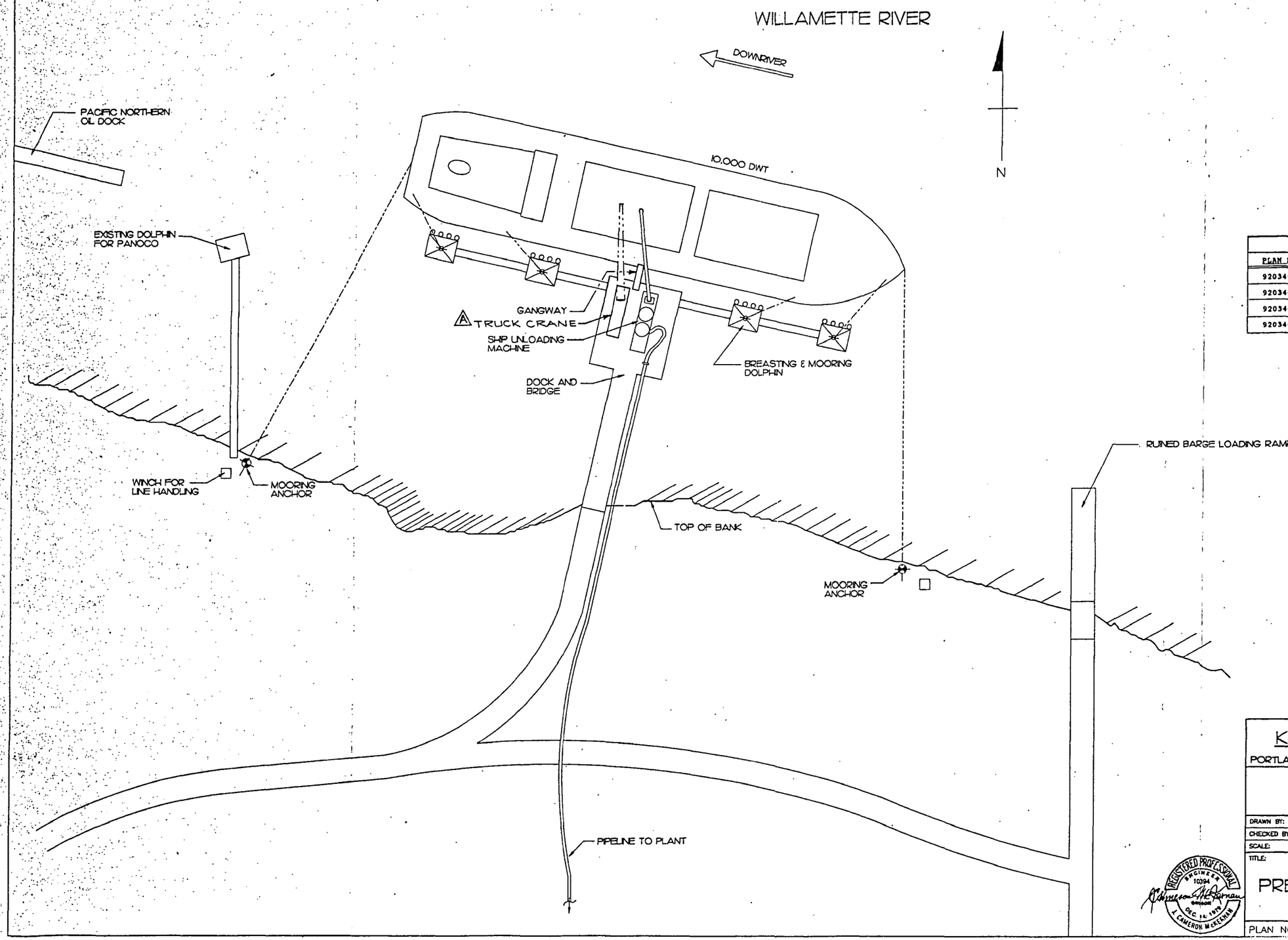
M-130-D-4



KOVAKO



TYPICAL ARRGT.
FROM SHIP TO
THE STORAGE BLDG
KOVAKO SHIPUNLOADER



PLAN LIST		
PLAN NO.	REV.	TITLE
92034-1	A	PRELIMINARY ARRANGEMENT
92034-2	-	PIER PLAN & OUTER BENT
92034-3	-	BREASTING & MOORING DOLPHIN
92034-4	-	MOORING ANCHOR

SEP - 3 1992

PLOTTED: 6 AUGUST 1992

KOPPERS INDUSTRIES, INC.

PORTLAND OREGON

J. CAMERON McKERNAN
ENGINEER + NAVAL ARCHITECT
1208 S.E. 7th AVE. PORTLAND, OREGON 97214
PHONE: (503)232-7211

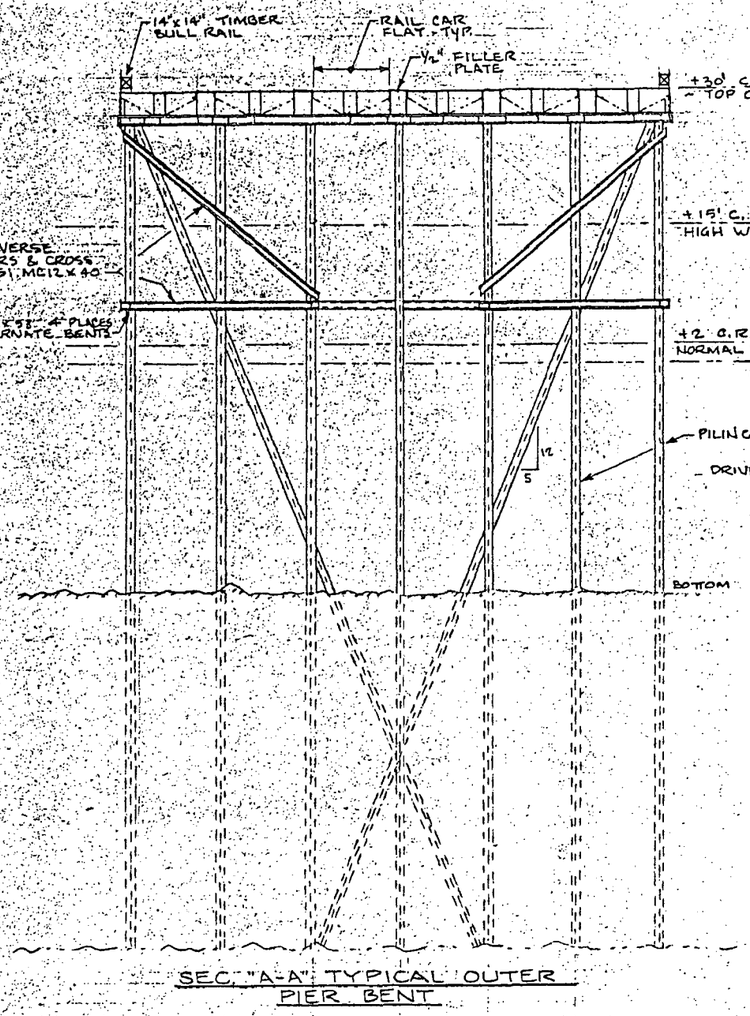
DRAWN BY:	M. SCHUCHTING	APPROVED BY:	
CHECKED BY:		FILE NO:	P92-34
SCALE:	N. T. S.	DATE:	6 AUGUST 1992

TITLE:
PORTLAND PLANT
SHIP UNLOADING DOCK
PRELIMINARY ARRANGEMENT

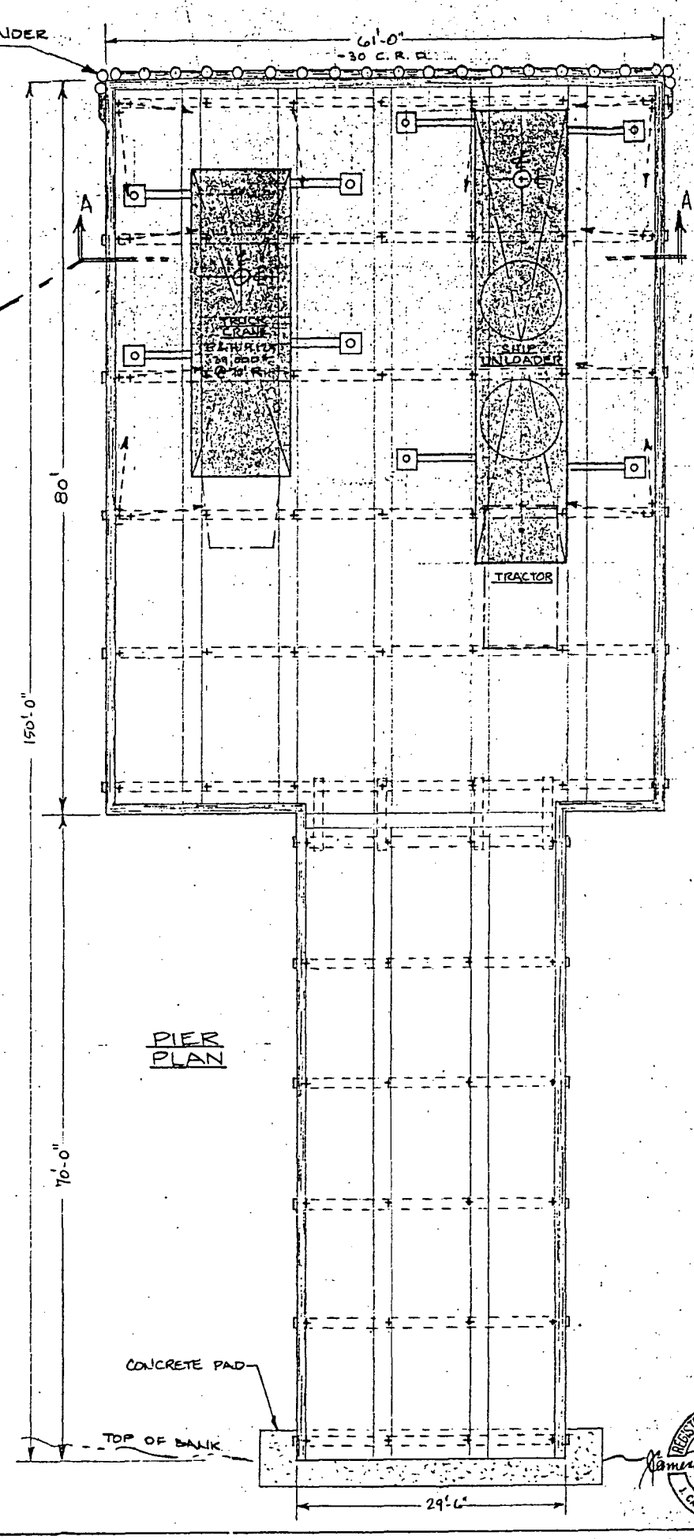
REGISTERED PROFESSIONAL ENGINEER 10394 OREGON DEC. 14, 1979 J. CAMERON McKERNAN

PLAN NO: 92034-1 REV: A

Koppers004657



SEC. "A-A" TYPICAL OUTER PIER BENT



PIER PLAN

NOTE:
1. THIS PLAN IS A "PRELIMINARY DESIGN" FINAL PLANS MAY BE DIFFERENT. DO NOT USE THIS PLAN FOR CONSTRUCTION.

REGISTERED PROFESSIONAL ENGINEER 1094 OREGON DEC. 16, 1979 J. CAMERON McKERNAN

SEP - 3 1992

KOPPERS INDUSTRIES, INC.
PORTLAND OREGON

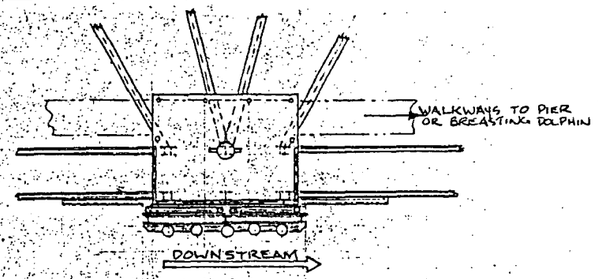
J. CAMERON McKERNAN
ENGINEER + NAVAL ARCHITECT
1208 S.E. 71st AVE., PORTLAND, OREGON 97215
PHONE, (503) 232-7211

DRAWN BY:	APPROVED BY:
CHECKED BY:	FILE NO. P92-34
SCALE: 1/8" = 1'-0"	DATE: 9/3/92

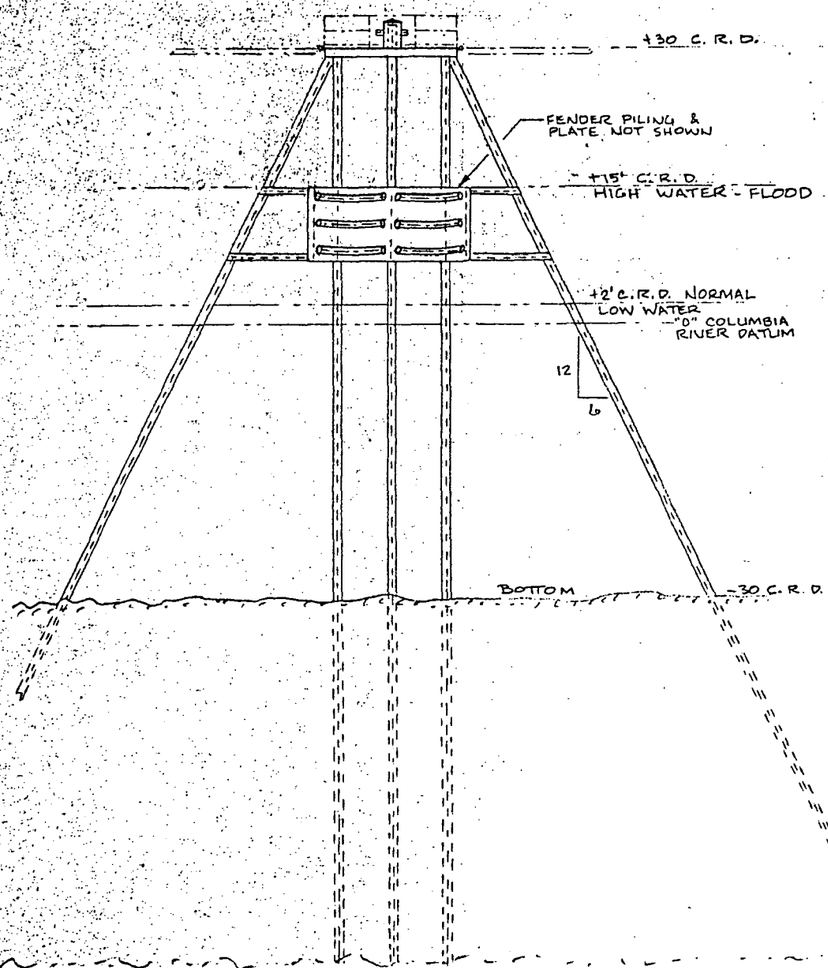
PORTLAND PLANT
SHIP UNLOADING FACILITY
PRELIMINARY DESIGN
PIER PLAN & OUTER BENT

PLAN NO: 92034-2 REV: -

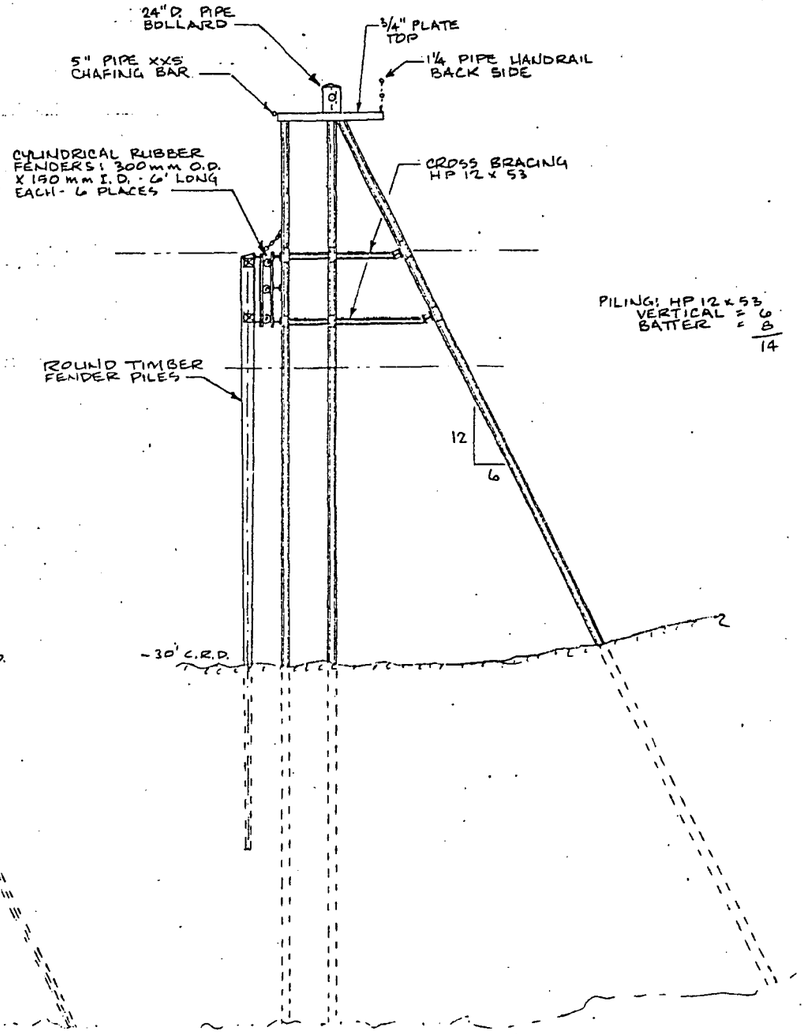
Koppers004658



PLAN AT TOP



ELEVATION LOOKING TOWARD SHORE



PILING: HP 12 x 53
VERTICAL = 6
BATTER = 8
14

ELEVATION LOOKING UPSTREAM

NOTE:
1. THIS PLAN IS A "PRELIMINARY DESIGN." FINAL PLANS MAY BE DIFFERENT. DO NOT USE THIS PLAN FOR CONSTRUCTION.

SEP - 3 1992

REGISTERED PROFESSIONAL ENGINEER 10094 OREGON DEC 14 1978 J. CAMERON McKERNAN

KOPPERS INDUSTRIES, INC.
PORTLAND OREGON

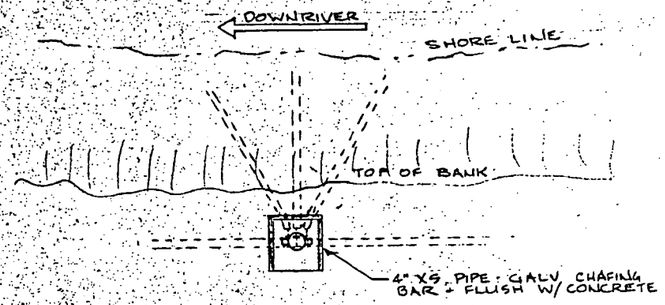
J. CAMERON McKERNAN
ENGINEER + NAVAL ARCHITECT
1208 S.E. 71h AVE., PORTLAND, OREGON 97214
PHONE: (503) - 232-7211

DRAWN BY:	APPROVED BY:
CHECKED BY:	FILE NO: P92-34
SCALE: 1/8" = 1'-0"	DATE: 9/3/92

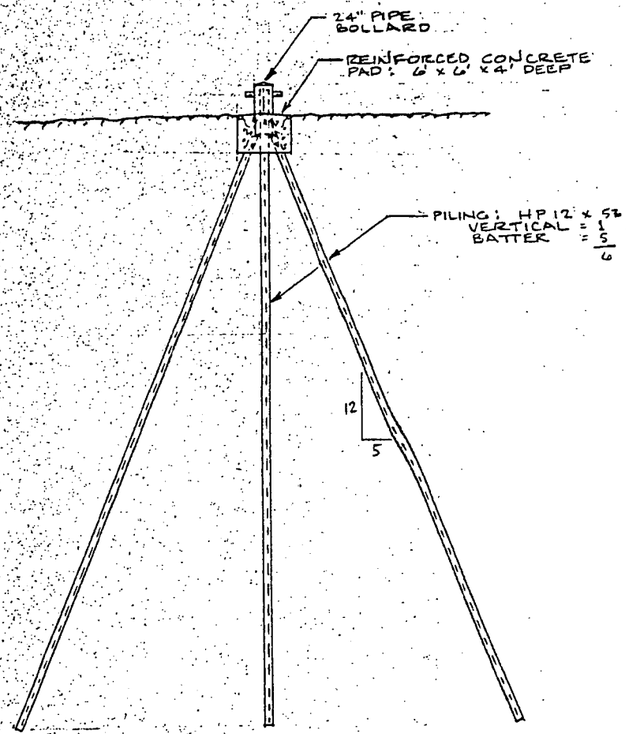
PORTLAND PLANT
SHIP UNLOADING FACILITY
PRELIMINARY DESIGN
BREASTING & MOORING DOLPHIN

PLAN NO: 92034-3 REV: —

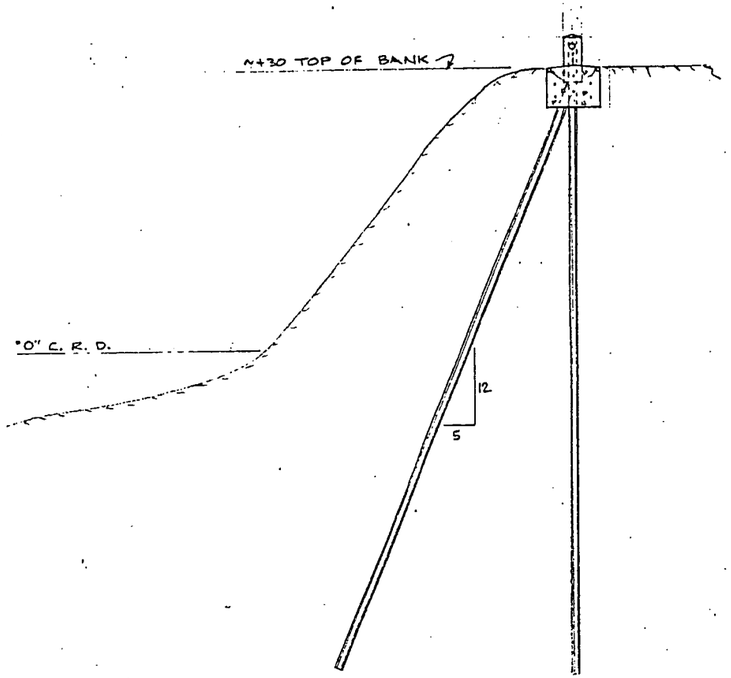
Koppers004659



PLAN



SECTION LOOKING TOWARD RIVER
(EARTH REMOVED)



SECTION LOOKING UPSTREAM
(EARTH REMOVED)

NOTE:
1. THIS PLAN IS A "PRELIMINARY DESIGN." FINAL PLANS MAY BE DIFFERENT. DO NOT USE THIS PLAN FOR CONSTRUCTION.

SEP - 3 1992

KOPPERS INDUSTRIES, INC.
PORTLAND OREGON

J. CAMERON McKERNAN
ENGINEER + NAVAL ARCHITECT
1208 S.E. 7th AVE., PORTLAND, OREGON 97214
PHONE: (503) 232-7211

DRAWN BY: JCMK	APPROVED BY:
CHECKED BY:	FILE NO. P92-34
SCALE: 1/8"=1'-0"	DATE: 9/3/92

PORTLAND PLANT
SHIP UNLOADING FACILITY
PRELIMINARY DESIGN
MOORING ANCHOR

PLAN NO. 92034-4 REV. —

REGISTERED PROFESSIONAL ENGINEER 10394 OREGON DEC. 14, 1979 J. CAMERON McKERNAN

Koppers004660

NORTHWEST NATURAL GAS COMPANY

220 N.W. SECOND AVENUE PORTLAND, OREGON 97209 - 3991

(503) 226-4211

March 5, 1992

Mr. Amos Kamerer
Pacific Procurement Manager
Koppers Industries, Inc.
7540 N. W. St. Helens Road
Portland, OR 97210-3663

Dear Amos:

In response to your letter of February 26, 1992, I find no objections to the construction of the proposed building we discussed while visiting your facility, provided that you assure access to the test pipes for the leach field and that you forward some documentation that demonstrates an acceptance on the part of the DEQ.

With regard to the other mentioned project, we feel that many more questions must be answered in order to approve such an expansion. We would ask that a study be completed that addresses environment, land use, obtainment of permits and an approval from the Army Corp of Engineers for the construction of an unloading facility on top of existing pilings.

As you know, Northwest Natural is committed to work with you in every way possible, provided that all questions concerning environment and property utilization can be addressed.

Please contact us should you have any questions concerning our response, and we look forward to working with you in the future.

Sincerely,

Ronald K. Opitz, Manager
Risk & Land Management

RKO:dg

cc: B. B. Samson
S. K. Hart

KOPPERS
INDUSTRIES

Koppers Industries, Inc.
7540 N.W. Saint Helens Road
Portland, OR 97210-3663

Amos S. Kamerer
Pacific Procurement Manager

Telephone: (503) 286-3681
FAX: (503) 285-2831

February 26, 1992

Mr. Ronald K. Opitz
Manager, Risk and Land Management
Northwest Natural Gas Company
220 N. W. Second Avenue
Portland, Oregon 97209

Dear Ron,

First, please excuse my delay in getting this information off to you, realizing that our meeting here at the terminal was almost a month ago.

As we discussed, it is our intent to construct an addition to our existing pitch storage building. This addition will be approximately 150' X 200' and would sit to the east and north of the existing building, and frankly is the only available space here for this purpose. This would require us to cover the old leach field with reinforced concrete, joining the existing asphalt in that area to form the floor for the new building. Our Environmental Affairs Manager, advises that he sees no legal or environmental problems in constructing this building over the leach field, as long as the existing test pipes are capped at floor level and are still accessible for future testing.

With regard to the future, we would like you to look at the feasibility of Koppers constructing our own unloading facility on the Willamette River, to the north of our current leased property.

Our thought would be to construct an environmentally safe vacuum unloading system on top of pilings in the river. The screw conveyor, needed to move the pitch from the ship to our storage building, would be constructed using floating foundation blocks for the supports. Also, we think that this conveyor system and the support structures could follow close to the existing roadway, from the river to our property and would thus not interfere with the Gas Company land, as we discussed during your visit.

As our business continues to expand, the ability for us to control all of our operations, including the unloading of the pitch, will become very important to us and will also make us a long term tenant for the Gas Company.

Needless to say, I am most concerned about your agreement with our position as to the addition to the storage building and would appreciated a prompt response.

As to the unloading system, I realize that this will require additional consideration, however some kind of indication of your thought in this regard in the next couple of months, would be very much appreciated.

Thanking you in advance of your consideration, I remain,

Very truly yours,

Amos S. Kamerer

ASK/km

CC: Ms. Sandy Hart, Environmental Engineering, N.W. Natl. Gas

BCC: L. F. Flaherty
J. O. Oxford
W. W. Turner

Pitch Storage Building

Koppers004664

KOPPERS

Koppers Industries, Inc.

CAPITAL EXPENDITURE REQUEST

				Request No.	9270-
Division	TAR	Location	N.W. PLANT	Request Date	1 / 11 / 93
Request Initiated By	JOHN A OXFORD	Approved By			
Title	STORM WATER COLLECTION SYSTEM FOR NEW PITCH SHED				
Amount of Request	$ 48,000.00	Depreciation Life	YRS	Estimated Life	YRS
Approval Date	MO.	YEAR 19 93			
Class of Expenditure	See Reverse: A 1 1	Depreciation Acct. No.			

Specification & Description: INSTALL 4'X4'X6' CATCH BASIN. INSTALL 6" 8" & 10" PVC PIPE TO CATCH AND GUIDE STORMWATER INTO THE CATCH BASIN. INSTALL A 514' OF 4" A.B.S. PIPE FASTENED TO ANGLE IRON AND HUNG ON PITCH SHEDS AND PIPE STANTIONS ALL THE WAY TO COLLECTION SUMP IN LOWER TANK FARM.

Summary of Justification: CITY OF PORTLAND, OR. HAS ISSUED NEW REGULATIONS GOVERNING THE DISPOSITION OF STORMWATER OFF OF BUILDINGS. THE NEW PITCH SHED REQUIRES THIS SPECIAL HANDLING FOR THE COLLECTION OF THE STORM WATER AND ITS CONTAINMENT AT THE SUMP BEFORE TESTING AND PUMPING TO THE WILLAMETTE RIVER, UNDER THE TERMS OF OUR N.P.D.E.S. PERMIT.

ENGINEERING: By ED BENNETT Approval _____ **COSTS:** Cash Expenditure (1) 48,000.00

Trade-In or Salvage (2) _____

ESTIMATE: By J.A. OXFORD Approval _____ Amt. of Requests(1) + (3) 48,000.00

Type of Investment	Building	%	Equipment	%	Land	%	Type of Equipment	New		Used		Age		For Use On	Owned Property		Leased Property	

EARNINGS OR COST: *(5 Yrs. Average)*

Division Income Before Interest & Taxes _____

% Return On Net Investment _____

Added Working Capital Required If Any _____

RETIREMENTS: *(PDA) Attached*

Total Original Value _____

Years Acquired _____

Total Book Value _____

CONSTRUCTION BY:

Est. Schedule of Expense 1ST QTR

Est. Start - Up Date 1-12-93

Est. Close to Property _____

Referral to Insurance _____

APPROVAL:

Production Manager _____ DATE

Capital Planning _____ DATE

Environmental & Safety _____ DATE

Engineering _____ DATE

Division Controller _____ DATE

Group Controller _____ DATE

Other _____ DATE

KI - 405 Rev. 5

INDICATE PERMIT(S) REQUIRED
(To Be Filled Out By Permit Center Staff)

Plumbing ☑ # _____
Mechanical ☐ # _____
Electrical ☑ # _____
Building ☒ # BLD98-03756
Sprinkler ☐ # _____
Alarm ☐ # _____

CITY OF PORTLAND
BUREAU OF BUILDINGS
INSPECTION RECORD

THIS RECORD SHALL BE MAINTAINED IN A CONSPICUOUS PLACE ON THE JOB UNTIL COMPLETION. **PLEASE CALL FOR ALL INSPECTIONS.**
APPROVED PLANS REQUIRED ON JOB SITE **AT ALL TIMES.**
NO WORK OF ANY KIND, ON ANY PART OF ANY BUILDING OR STRUCTURE REQUIRING INSPECTION SHALL BE COVERED OR CONCEALED IN ANY MANNER WHATSOEVER, WITHOUT FIRST OBTAINING APPROVAL.

LOCATION: 7540 NW ST HELENS RD. **OCCUPANCY:** W **TYPE:** ~~IVN~~

24-HOUR
INSPECTION REQUEST SERVICE
BUILDINGS 823-7000 ❖ FIRE MARSHAL 823-3700

Plumbing Contractor: _____ **Date Issued:** _____

Inspection/Comments	Date	Insp
Underground		
Underfloor		
Rough-in-Plumbing		
Water Service		
Sanitary Sewer		
Sub Surface Disposal System		
Storm Sewer		
Rain Drain		
Final Plumbing		

Mechanical Contractor: _____ **Date Issued:** _____

Gas Piping		
Rough-In HVAC		
Final HVAC		

Electrical Contractor: _____ **Date Issued:** _____

Rough-in-Wiring		
Final Electrical		

Fire Marshal: _____

Sprinkler		
Alarm		
Final Fire Marshal		

Building Contractor: DIVERSIFIED MARINE **Date Issued:** 12/23/98

Footing/Slab Form		
Foundation Wall Form		
Roofing		
Framing		
Under Floor		
Cover Wall/Ceiling		
Nailing		
Final Building		

These permits shall become null and void without prior notification by the Bureau of Buildings, if such work authorized by the permit is not commenced within 180 days from the issuance, or if said work is suspended or abandoned for a period of 180 days from the start of such work.

DO NOT OCCUPY PRIOR TO BUILDING FINAL APPROVAL

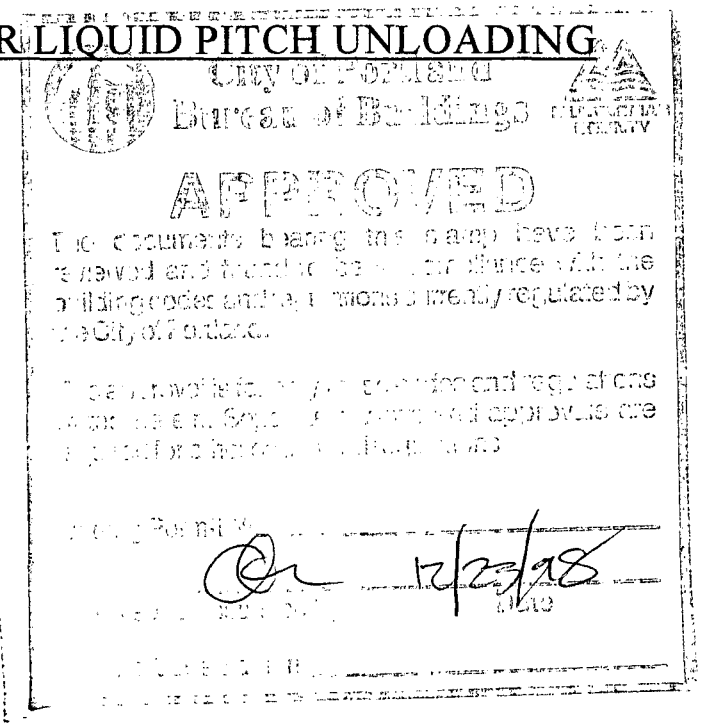
m:\forms\PAC-1 (Rev. 5/95)
248 (8/96)

Koppers004666

Bld 98-
03756

McKernan
File No. P97-10
October 1998

SPECIFICATION
MODIFICATION OF PIER FOR LIQUID PITCH UNLOADING



PREPARED FOR:

Koppers Industries, Inc.
7540 NW St. Helens Road
Portland, Oregon 97210

Phone: (503) 286-3681

PREPARED BY:

J. Cameron McKernan Company
Engineering + Naval Architecture
825 NE 20th Avenue, Suite 110
Portland, Oregon 97232

Phone: (503) 232-7211

Specification
Modification of Pier for Liquid Pitch Unloading

McKernan
File No. P97-10
October 1998

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Specification
Modification of Pier for Liquid Pitch Unloading

McKernan
File No. P97- 10
October 1998

1.0 GENERAL

This specification describes the requirements for modification of an existing pier, known as the Pacific Northern Oil Pier. The pier is located in the City of Portland just upstream of the St. Johns Bridge on the Left Bank of the Willamette River at River Mile No. 6.3. The pier modification is a part of the project at the Koppers Industries Distribution Terminal at 7540 NW St. Helens Road, Portland, Oregon 97210 to convert the plant and terminal from "dry bulk" coal tar (pencil) pitch to "liquid bulk" coal tar pitch. The main aspects of the project are

* Installation of a 2,000,000 gallon capacity storage tank.

* Modification of the pier.

* Installation of a pipeline from the pier to the storage tanks.

Coal tar pitch must be heated to about 400 degrees F to be handled as a liquid. At normal ambient temperatures (70 F) coal tar pitch is a solid.

1.1 The pier modifications require the following work:

1.1.1 Fabrication and installation of a new steel access bridge 208 feet long by 8 feet wide.

1.1.2 Installation of 2 new steel 2 pile bents for support of the new access bridge.

1.1.3 Installation of a reinforced concrete footing for support of the shore end of the new access bridge.

1.1.4 Removal of an existing 120 feet long by 4 feet wide steel access walkway from the existing pier center service platform to the upstream breasting dolphin.

1.1.5 Fabrication and installation of a new steel access walkway to replace the removed access walkway. The new access walkway will be about 120 feet long by 8 feet wide.

1.1.6 Installation of one new wood timber piling at the existing mid-span support piling bent. The existing wood cross bracing shall be removed from the existing wood pilings. New wood cross bracing shall be installed.

1.1.7 Installation of a 4" dry pipe for emergency fire service.

Koppers004669

1.0 GENERAL (continued)

The arrangements are shown in the plans listed on the attached Plan List. The Contractor shall furnish all labor and materials required to complete the work as shown on the plans.

1.2.1 All materials and workmanship shall conform to the "State of Oregon's Structural Specialty Code," 1998.

1.2.2 The Contractor shall be responsible for all construction methods, techniques, sequencing, and safety required for the construction.

1.2.3 The Contractor shall furnish all labor and material required.

1.2.4 On completion of the work, the Contractor shall clean up the site and remove all equipment and debris not part of the completed modifications. The site shall be cleaned to the satisfaction of the Owner's Representative.

2.0 PERMITS

2.1 Corps of Engineers

Koppers Industries has obtained a permit from the U. S. Army Corps of Engineers for modifying the pier. Permit 97903 was issued on September 18, 1997.

2.2 City of Portland – Land Use Review

Koppers Industries has received the City of Portland Land Use Review (Willamette Greenway) Decision. The City of Portland approved the development on August 14, 1997, City of Portland File No. LUR-00666 GW (Koppers).

2.3 State of Oregon Division of State Lands

The State of Oregon has assigned State Project No. ML 14315 to the modification of the pier. Because no removal of material and/or fill on the bank is planned a State Permit is not required.

2.4 City of Portland Building Permit

Koppers Industries has applied to the City of Portland for a Building Permit. Koppers Industries will obtain the building permit prior to construction.

Koppers004670

3.0 ENVIRONMENTAL CONSIDERATIONS

The river and adjacent ground are environmentally sensitive areas. The work is to be conducted in a manner that minimizes disturbance of the ground or surrounding the water area. In particular the Contractor shall observe the following practices:

3.1 Mooring or moving derricks, pile drivers, and other floating equipment with spuds or anchors set in the bottom mud or sediments is prohibited. Spuds or anchors are not be set in the bottom ground.

3.2 Vessels shall be moored to the existing pier structures and/or to anchors set on the bank well above the water bottom mud and sediments.

3.3 At all times when floating equipment containing and/or using petroleum fuel is engaged in work at the pier, the Contractor shall deploy a suitable oil containing floating barrier system or boom around the equipment and work area. The Contractor shall report and clean up any spill or appearance of contaminates as required by law.

4.0 COORDINATION WITH PACIFIC NORTHERN OIL

Pacific Northern Oil operates a petroleum product distribution business across the existing pier. It is the intention of Koppers Industries to cause the least interference possible with the ongoing business across the pier. Tugs, barges, and occasional ships call at the pier to receive or discharge petroleum. These operations are planned several days in advance. The Contractor doing the pier modifications will coordinate his operation with Pacific Northern Oil so the least interference is caused. This may require the Contractor to occasionally "pull back" or even shut down for a few hours. The pier operation schedule will be furnished so the Contractor can plan his work.

5.0 PLANS

5.1 Contract Plans

The plans listed on the attached Plan List are part of this Specification. The Contractor shall comply with these plans. No changes shall be made without the approval of the Owner.

The Contractor shall at all times keep at the site of the work a copy of the drawings and specifications of this contract. Anything mentioned in the specifications and not shown on the drawings, or shown on the drawings and not mentioned in the specifications, shall be the same as if shown and mentioned in both. In case of difference between the drawings and specifications, the specifications shall govern.

Koppers004671

5.0 PLANS (continued)

The Contractor is to review and check all plans contained in this specification. This check shall include verification of the suitability of the arrangement and dimensions shown on the plans for construction. The Owner is not responsible for unsuitable or incorrect dimensions on the plans or sketches that can be determined from proper checking and layout. The Contractor shall notify the Owner of any errors or incompatibility found by the Contractor.

5.1.1 Plan List

PLAN NO.	REV.	TITLE
97010-21		SITE PLAN
97010-22		FIRE & SAFETY PLAN
97010-22A		FIRE MAINS & HYDRANTS (EXISTING)
97010-23		WALKWAY PIER TO DOLPHIN – ARRANGEMENT
97010-24		WALKWAY PIER TO DOLPHIN – STRUCTURAL SECTIONS
97010-25		WALKWAY PIER TO DOLPHIN – SEGMENT W1 ASSEMBLY
97010-26		WALKWAY PIER TO DOLPHIN – SEGMENT W2 ASSEMBLY
97010-27		WALKWAY PIER TO DOLPHIN – SEGMENT W3 ASSEMBLY
97010-28		WALKWAY PIER TO DOLPHIN – SEGMENT W4 ASSEMBLY
97010-29		BRIDGE TO SHORE – ARRANGEMENT
97010-30		BRIDGE TO SHORE – STRUCTURAL SECTIONS
97010-31		BRIDGE TO SHORE – SEGMENT B1 ASSEMBLY
97010-32		BRIDGE TO SHORE – SEGMENT B2 ASSEMBLY
97010-33		BRIDGE TO SHORE – SEGMENT B3 ASSEMBLY
97010-34		BRIDGE TO SHORE – SEGMENT B4 ASSEMBLY
97010-35		BRIDGE TO SHORE – SEGMENT B5 ASSEMBLY
97010-36		BRIDGE TO SHORE – SHORE FOOTING
97010-37		WALKWAY & BRIDGE: MISCELLANEOUS DETAILS
97010-38		NOT USED
97010-39		NOT USED
97010-40		PILING PLAN

END OF PLAN LIST

Koppers004672

5.0 PLANS (continued)

5.2 Shop Drawings and Details

In addition to the Owner's plans included in this Specification, the Contractor shall prepare shop drawings, material lists, and layouts as necessary to fabricate the parts. Two copies of these shop drawing and layouts shall be furnished to the Owner for review and approval.

The Owner will review the submitted plans and data and transmit comments, marked-up prints and/or approval within 5 working days after receipt of the Contractor's submittal for review.

On completion of the work, the Contractor shall furnish the Owner with two copies of the shop drawings revised to show the "as-built" arrangements.

6.0 CHANGES

As the construction work progresses, it may become apparent that changes in the work are desirable. Such changes may be proposed by either the Owner or the Contractor. The Contractor shall prepare and submit price and schedule change information all requested changes. The Contractor shall not perform any changed work until the plans or specification are revised and the contract is amended to show the changed work and to incorporate the changed price and/or schedule.

7.0 OWNER'S REPRESENTATIVE

The Owner will designate a representative to work with the Contractor to assist with resolutions of problems that will come up during construction. The Owner's Representative will also assist with processing specification or contract changes as necessary. The Owner's Representative will assist the Contractor with coordination of other project contractors and the operator of the pier. The Owner's Representative will perform inspections for the Owner. The Owner's Representative will not assist the Contractor in planning or supervising the Contractor's work.

8.0 INSPECTIONS AND TESTS

8.1 The Contractor shall be responsible for in process inspections. Prior to acceptance of the work, at the convenience of the Contractor, a complete final inspection of all work will be made jointly by the Contractor and the Owner's Representative. Incomplete work noted during these inspections shall be completed by the Contractor prior to closing the job and demobilization.

Koppers004673

8.0 INSPECTIONS AND TESTS (continued)

8.2 The following inspections shall conform to section 306 of the State of Oregon Structural Specialty Code and as may be required by the City of Portland:

* Pile Installation
* Reinforcing Steel Placement
* Concrete Placement
* Welding

8.3 All special inspections and testing with related sampling, whether required by the construction documents or by the governing building code shall be performed by an independent testing agency retained and paid for by the Owner to perform all inspections and tests.

8.4 Contractor shall fully cooperate with and provide assistance to Owner's inspectors and provide proper notices of need for inspections.

8.5 Inspection/testing reports shall be submitted to the Owner's Representative giving observations and results of tests, and indicating compliance on noncompliance with specified standards and with the construction documents. Test results or inspections shall be followed by appropriate inspection/tests or corrective work to show compliance as specified.

9.0 PROJECT/SITE CONDITIONS

9.1 Contractor shall verify all existing conditions. If existing conditions differ from those shown, the Owner's Representative shall be notified prior to continuance of work.

9.2 Contractor shall be responsible to work around or relocate all obstructions during the demolition and the installation of new or replacement materials.

9.3 Smoking will be prohibited for all personnel on the existing pier.

9.4 Heavy construction equipment or trucks will not be allowed onto the existing pier.

10.0 TEMPORARY CONSTRUCTION FACILITIES

10.1 Contractor shall be responsible for design and construction of all temporary shoring, bracing, etc. required for the construction.

Koppers004674

11.0 FIRE PREVENTION AND PROTECTION

11.1 Contractor shall comply with all applicable state and local fire prevention regulations and ordinances. Where these regulations do not apply, applicable parts of NFPA No. 241 "Standard for Safeguarding of Building Construction, Alteration, and Demolition Operations" shall be followed.

11.2 Cutting and welding safety procedures shall be in accordance with NFPA No. 51B "Standard for Fire Prevention in Use of Cutting and Welding Operations." Prior to any cutting or welding, the area within 35 feet of cutting/welding operation shall be made fire safe, examined, and approved by the Owner's Representative responsible for authorizing cutting and welding operations.

12.3 A cutting/welding permit shall be obtained each day for each cutting/welding operation from the Owner's Representative responsible for authorizing cutting or welding operations. Cutting or welding without a permit shall not be allowed.

11.4 Contractor shall provide fully charged and operable fire extinguishers at each cutting/welding operation prior to any cutting or welding.

12.0 DEMOLITION AND DISMANTLING

12.1 Contractor shall comply with all applicable state and local regulations and ordinances concerning demolition operations and refuse removal. Where these regulations do not apply, applicable parts of ANSI A10.6 "Safety Required for the Construction" shall be followed.

12.2 Contractor shall be responsible for all demolition methods, techniques, sequencing and safety required for the constructions.

12.3 Contractor shall take all necessary precautions during demolition against damaging systems, especially structural and utilities, not intended to be demolished. Contractor shall take all necessary precautions to protect structures, utilities, and other facilities from damage caused by debris, lateral movement, and other hazards created by demolition operations.

12.4 If adjacent structures appear to be endangered by demolition operations, the Owner's Representative shall be notified prior to continuance of the work.

13.0 EXCAVATIONS & FORMWORK

13.1 Excavations shall be shored as required to prevent personal injuries and subsidence or damage to adjacent existing structures, pavement, utilities, etc.

Koppers004675

13.0 EXCAVATIONS & FORMWORK (continued)

13.2 Construction, shoring, and bracing of formwork shall be in accordance with Chapter 4 of ACI 301 "Specifications for Structural Concrete for Building," and ACI 347 "Recommended Practice for Concrete Formwork."

13.3 Contractor shall be responsible for design and construction of all formwork and shoring.

14.0 REINFORCING STEEL

14.1 Reinforcing steel shall be ASTM A615 Grade 60 deformed bars.

14.2 Fabrications and placement of reinforcing steel shall be in accordance with CRSI MSP-1 "Manual of Standard Practice" and Chapter 5 of ACI 301 "Specifications for Structural Concrete for Buildings."

14.3 Unless otherwise indicated, minimum clearance for reinforcing steel and welded wire fabric shall be 3 inches for concrete cast against earth and for concrete exposed to earth or weather; 1½ inches for #5 and smaller bars; 2 inches for #6 and larger bars. Install with proper bar supports prior to concrete placement.

15.0 CONCRETE

15.1 Cast-in-place concrete shall have a compressive strength of 3000 PSI @ 28 days. Slump shall be 4" plus or minus 1". Air entrainment shall be 5% plus or minus 1". Minimum cement content shall be 5 sacks per cubic yard.

15.2 Concrete material and quality shall be in accordance with Chapters 3 and 5 respectively of ACI 318 "Building Code Requirements for Reinforced Concrete."

15.3 Transporting of ready-mix concrete shall be in accordance with ASTM C94 "Standard Specification for Ready-Mixed Concrete" and concrete placement and curing shall be accordance with ACI 301 "Specifications for Structural Concrete for Building."

16.0 PATCHING MORTAR

16.1 Patching mortar shall be polymer modified type "Metatex" as manufactured by Adhesive Engineering Co. or "Sikatop 122" as manufactured by Sika Corp.

Koppers004676

16.0 PATCHING MORTAR (continued)

16.2 Install/place in accordance with ACI 593.4-79(86) "Specification for Repairing Concrete with Epoxy Mortars" and the manufacturer's written instructions and specifications.

17.0 STRUCTURAL STEEL AND METAL FABRICATIONS

17.1 Steel shapes, plates, and bars shall be ASTM A36.

17.2 Steel shaped tubing shall be ASTM A500 Grade B.

17.3 Steel pipe shall be ASTM A53 Grade B.

17.4 Fabrication and erection shall be in accordance with AISC "Specification for Structural Steel Building" and AISC "Code of Standard Practice for Steel Building and Bridges."

17.5 Bolts shall be ASTM A307 Grade A or A325 Type 1 as noted on the plans. Galvanize all bolts, nuts, and washers in accordance with ASTM A153. All threads shall be coated with an anti seize compound on assembly. Note: The AISC Commentary on the Specification for using A. S. T. M. A325 Galvanized Bolts recommends that galvanized nuts & bolts be furnished as an assembly.

17.6 Welding shall be in accordance with AWS D1.1 "Structural Welding Code-Steel." Welding filler metal shall be AWS 15.1 or 15.5 E70XX Electrodes, AWS A518 ER70S-X, AWS A5.20 E7XT-X. Welding filler metal at braces and link beams shall be low hydrogen type. Welders shall be AWS certified. Submit copy of all welding procedures and welder certifications to the Owner's Representative prior to any welding.

17.7 The Contractor shall shop assemble the bolted sections prior to galvanizing to insure proper fit-up. The Owner's Representative shall be notified in order to witness the fit-up.

18.0 GALVANIZING

All steel shall be "hot dip" galvanized in accordance with ASTM A-125 after fabrication. The shop drawings shall be developed with consideration for the size of the available dipping kettles and for draining and venting during the galvanizing process.

Koppers004677

PURCHASE INVOICE

Purchase Invoice Number: 356

Purchase Invoice Date: 02/28/07

Pay
To: PACIFIC TERMINAL SERVICES INC
PACIFIC TERMINAL
PO BOX 24005
SEATTLE, WA 98124-0005

Ship
To: PORTLAND TERMINAL
7540 NW Saint Helens Road
Portland, OR 97210

Ship Via		Confirm To	
Receive By	03/12/07	Buyer	
Terms	Net 30 Days from Ship Date	P.O. Number	
Vendor ID	383878003	P.O. Date	03/12/07

Item No.	Description	Unit	Quantity	Unit Price	Total Price
	PRODUCTS USED IN OPERATIONS		1	5,177.25	5,177.25

Subtotal:	5,177.25
Invoice Discount:	0.00
Total Sales Tax:	0.00
Total:	5,177.25

Pacific Terminal Services, Inc.
P O BOX 24006
Seattle WA 98124

Invoice	356
Date	2/28/2007
Page	1

Bill To:

Kopper Industries, Inc
7540 N.W. St. Helens Road
Portland OR 97210

Ship To:

Kopper Industries, Inc
7540 N.W. St. Helens Road
Portland OR 97210

Purchase Order No.	Customer ID	Salesperson ID	Shipping Method	Payment Terms	Req Ship Date	Master No.
	KOPPER			Due on Receipt	2/28/2007	523

Ordered	Shipped	B/O	Item Number	Description	Discount	Unit Price	Ext. Price
1.00	1.00	0.00	MGMTFEE-STERM	Vessel Service-Boom	$0.00	$5,177.25	$5,177.25

PUT COPY OF INV TO OSPREY FILE

PPI9270000- 306
PZ-20473

Please remit payment by wire to US Bank account# 153595020311, aba#125000105. Thank you for your business.

Subtotal	$5,177.25
Misc	$0.00
Tax	$0.00
Freight	$0.00
Trade Discount	$0.00
Total	$5,177.25

Attachments can contain viruses that may harm your computer. Attachments may not display correctly.

Amy Shinokis

From: Tina Garrett [tinag@fammpnw.com] **Sent:** Wed 2/28/2007 1:30 PM
To: Amy Shinokis
Cc: 'Kevin Buffum'
Subject: Kopper's Invoice
Attachments: msg-30574-141.txt(564B)

Hi Amy - we need an invoice sent out to Kopper's Industries for receipt of the Osprey Arrow please. They like it itemized as below -

Osprey Arrow at dock 0918 02/18/07 until 0636 02/19/07

Total hours at dock - 21.4

3 shifts at 8 hours = 24 hours

24 hours x 2 operators = 48 hours

Thruput = 22,571 barrels

Labor = 48 hours x $63.72 = $3,058.56

Thruput = 22,571 barrels x $0.0625 = $1,410.69

Boom Deployment = $708.00

Total = $5,177.25

PURCHASE INVOICE

Purchase Invoice Number: 371

Purchase Invoice Date: 06/13/07

Pay
To: PACIFIC TERMINAL SERVICES INC
PACIFIC TERMINAL
PO BOX 24005
SEATTLE, WA 98124-0005

Ship
To: PORTLAND TERMINAL
7540 NW Saint Helens Road
Portland, OR 97210

Ship Via		Confirm To	
Receive By	06/26/07	Buyer	
Terms	Net 30 Days from Ship Date	P.O. Number	
Vendor ID	383878003	P.O. Date	06/26/07

Item No.	Description	Unit	Quantity	Unit Price	Total Price
	PRODUCTS USED IN OPERATIONS		1	6,286.64	6,286.64

Subtotal:	6,286.64
Invoice Discount:	0.00
Total Sales Tax:	0.00
Total:	6,286.64

Pacific Terminal Services, Inc.
P O BOX 24006
Seattle WA 98124

Invoice	371
Date	6/13/2007
Page	1

Bill To:

Kopper Industries, Inc
7540 N.W. St. Helens Road
Portland OR 97210

Ship To:

Kopper Industries, Inc
7540 N.W. St. Helens Road
Portland OR 97210

Purchase Order No.	Customer ID	Salesperson ID	Shipping Method	Payment Terms	Req Ship Date	Master No.
	KOPPER			Due on Receipt	6/13/2007	547

Ordered	Shipped	B/O	Item Number	Description	Discount	Unit Price	Ext. Price
1.00	1.00	0.00	MGMTFEE-STERM	Vessel Service-Boom	$0.00	$6,286.64	$6,286.64

PPI9270000- 45
PZ-26280

Please remit payment by wire to US Bank account# 153595020311, aba#125000105. Thank you for your *business.*

Subtotal	$6,286.64
Misc	$0.00
Tax	$0.00
Freight	$0.00
Trade Discount	$0.00
Total	$6,286.64

⚠ Attachments can contain viruses that may harm your computer. Attachments may not display correctly.

Amy Shinokis

From: Tina Garrett [tinag@fammpnw.com] **Sent:** Tue 6/5/2007 11:51 AM
To: Amy Shinokis
Cc: 'Kevin Buffum'
Subject: Koppers Invoice
Attachments: msg-27667-141.txt(501B)

Hi Amy - we have had another ship for Koppers that needs to be invoiced as follows.

Tern Arrow at dock 0900 5/20/07 until 1515 5/21/07

Total hours at dock = 30.25

4 shifts at 8 hours = 32 hours

32 hours x 2 operators = 64 hours

Thruput = 24,009 barrels

Labor = 64 hours x $63.72 = $4,078.08

Thruput = 24,009 barrels x $0.0625 = $1,500.56

Boom Deployment = $708.00

Total = $6,286.64

PURCHASE INVOICE

Purchase Invoice Number: 377

Purchase Invoice Date: 08/27/07

Pay
To: PACIFIC TERMINAL SERVICES INC
PACIFIC TERMINAL
PO BOX 24005
SEATTLE, WA 98124-0005

Ship
To: PORTLAND TERMINAL
7540 NW Saint Helens Road
Portland, OR 97210

Ship Via		Confirm To	
Receive By	09/06/07	Buyer	
Terms	Net 30 Days from Ship Date	P.O. Number	
Vendor ID	383878003	P.O. Date	09/06/07

Item No.	Description	Unit	Quantity	Unit Price	Total Price
	PRODUCTS USED IN OPERATIONS		1	5,045.06	5,045.06

Subtotal:	5,045.06
Invoice Discount:	0.00
Total Sales Tax:	0.00
Total:	5,045.06

Pacific Terminal Services, Inc.
P O BOX 24006
Seattle WA 98124

Invoice	377
Date	8/27/2007
Page	1

Bill To:

Kopper Industries, Inc
7540 N.W. St. Helens Road
Portland OR 97210

Ship To:

Kopper Industries, Inc
7540 N.W. St. Helens Road
Portland OR 97210

Purchase Order No.	Customer ID	Salesperson ID	Shipping Method	Payment Terms	Req Ship Date	Master No.
	KOPPER			Due on Receipt	8/27/2007	553

Ordered	Shipped	B/O	Item Number	Description	Discount	Unit Price	Ext. Price
1.00	1.00	0.00	MGMTFEE-STERM	Vessel Service-Boom	$0.00	$5,045.06	$5,045.06

PPI9270000- 458
PI-29589

Please remit payment by wire to US Bank account# 153595020311, aba#125000105. Thank you for your business.

Subtotal	$5,045.06
Misc	$0.00
Tax	$0.00
Freight	$0.00
Trade Discount	$0.00
Total	$5,045.06

Amy Shinokis

From: Tina Garrett [tinag@fammpnw.com] **Sent:** Mon 8/27/2007 3:46 PM
To: Amy Shinokis
Cc: 'Kevin Buffum'
Subject: Koppers Invoice
Attachments:

Hi Amy – we need an invoice for the Koppers Tanker again please.

Osprey Arrow at dock 0530 8/18/07 until 2345 8/18/07

Total hours at dock = 18.25

3 shifts at 8 hours = 24 hours

24 hours x 2 operators = 48 hours

Thruput = 20,456 barrels

Labor = 48 hours x $63.72 = $3,058.56

Thruput = 20,456 barrels x $0.0625 = $1,278.50

Boom Deployment = $708.00

Total = $5045.06

PURCHASE INVOICE

Purchase Invoice Number: 388

Purchase Invoice Date: 11/15/07

Pay
To: PACIFIC TERMINAL SERVICES INC
PACIFIC TERMINAL
PO BOX 24005
SEATTLE, WA 98124-0005

Ship
To: PORTLAND TERMINAL
7540 NW Saint Helens Road
Portland, OR 97210

Ship Via		Confirm To	
Receive By	11/28/07	Buyer	
Terms	Net 30 Days from Ship Date	P.O. Number	
Vendor ID	383878003	P.O. Date	11/28/07

Item No.	Description	Unit	Quantity	Unit Price	Total Price
	PRODUCTS USED IN OPERATIONS		1	5,054.37	5,054.37

Subtotal:	5,054.37
Invoice Discount:	0.00
Total Sales Tax:	0.00
Total:	5,054.37

Pacific Terminal Services, Inc.
P O BOX 24006
Seattle WA 98124

Invoice	388
Date	11/15/2007
Page	1

Bill To:

Koppers Industries, Inc
7540 N.W. St. Helens Road
Portland OR 97210

Ship To:

Koppers Industries, Inc
7540 N.W. St. Helens Road
Portland OR 97210

Purchase Order No.	Customer ID	Salesperson ID	Shipping Method	Payment Terms	Req Ship Date	Master No.
	KOPPER			Due on Receipt	11/15/2007	564

Ordered	Shipped	B/O	Item Number	Description	Discount	Unit Price	Ext. Price
1.00	1.00	0.00	MGMTFEE-STERM	Vessel Service-Boom	$0.00	$5,054.37	$5,054.37

PPI9270000- 521
335 93

Please remit payment by wire to US Bank account# 153595020311, aba#125000105. Thank you for your business.

Subtotal	$5,054.37
Misc	$0.00
Tax	$0.00
Freight	$0.00
Trade Discount	$0.00
Total	$5,054.37

From: Tina Garrett [mailto:tinag@fammpnw.com]
Sent: Fri 11/9/2007 11:09 AM
To: Amy Shinokis
Cc: 'Kevin Buffum'
Subject: Kopper's Invoice

Hi Amy – we have a Koppers ship that needs to be invoiced as follows:
Osprey Arrow at dock 1215 10/25/07 until 0630 10/26/07
Ship delayed due to heavy fog – crew standby time of 4 hours
Total dock hours + 22.25

3 shifts at 8 hours = 24 hours
24 hours x 2 operators = 48 hours

Thruput = 20,605 barrels

Labor = 48 hours x $63.72 = $3,058.56
Thruput = 20,605 barrels x $0.0625 = $1,287.81
Boom Deployment = $708.00

Total = $5,054.37

FLOW CHART

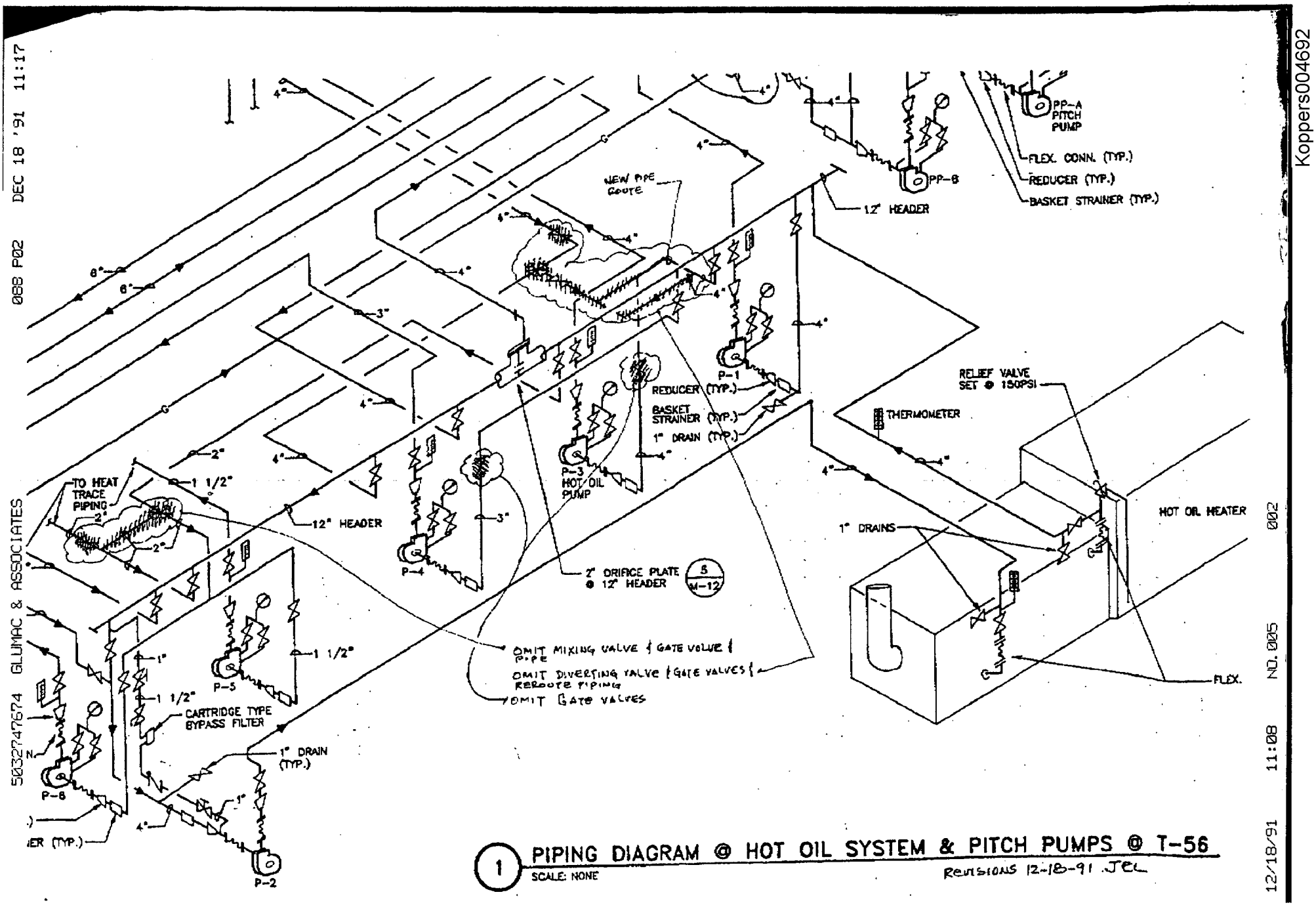
The pitch melter at the Koppers Portland, Oregon facility operates by melting imported Coal Tar Pitch. The pitch is unloaded from ships through the Hall Buck Marine unloading facility at Terminal #4, the Port of Portland, Portland, Oregon. It is usual that the tonnage is between 5-7 thousand metric tons. This material is loaded into trucks and brought to the K.I.I. facility which is approximately three miles from the unloading site. The pitch is then unloaded from the trucks and stacked inside the covered storage building by the use of 4 wheel bucket payloaders, this unloading will continue around the clock until all the tonnage is brought over to the plant.

If it is so desired we will have the capability to store and segregate different types of Coal Tar Pitch and therefore we will be able to blend on a percentage basis the different types of pitch to achieve a finish product meeting K. I. I. Published Specifications. Since we know how many pounds of pitch will fit in each payloaders bucket we can then blend exact amounts of each pitch together on the loading bay floor inside #1 pitch storage building. When the pitch's have been thoroughly mixed together by the payloaders they will be loaded into the hopper which directly feeds them into the screw conveyor that will transport the pitch mixture into the melter tank. It is estimated that the initial loading of the melter tank will be 2,500 short tons. This will put the melter tank at the half full level and will allow for any moisture to be dissipated away into the fume recovery unit. Constant mixing will be achieved by the internal stand pipe circulation system. Heat will be exchanged into the pitch by circulation of hot thermal oil through the sidewall and floor coil heaters respectively. The hot oil temperature will be 500 to 550 degrees f. The pitch will be heated and melted to a temperature of 350 degree f.. At this time samples will be taken from both pitch circulation pumping systems. Effectively we will be sampling one foot off the bottom of the tank at the center and three feet off the bottom of the tank at the side wall. Samples will only be taken when we have a uniform temperature reading from all sensors in the tank. These will be a temperature sensor at the 4', 8' and 12' level in the tank. It is our intention at the time to elevate and melt 2500 tons of coal tar pitch. We would then limit the batch size to 500 tons and hold 2000 tons of hot liquid pitch in the melter. After loading out 500 tons into tank cars or trucks or to the storage tank we would then reblend dry pitch in the storage building and elevate for melting 500 tons into the melter tank, this way we are able to utilize the heat already in the 2000 ton liquid mass in the melter tank.

This will shorten the melting time, which is estimated to be 10 days, I am hoping to be able to melt 500 ton batches every 48 hours, but that remains to be seen.

When samples are taken we will run a full scan of tests required by Koppers Published Specifications for each customer. The Portland Lab will be able to perform all quality control tests by these specifications. The Portland Lab will have all the equipment and training required to perform these tests in a reliable and accurate manner.

If the material is found to be within specifications then rail cars or trucks may be loaded or the batch may be pumped to the storage tank to be held for loading. All rail cars or trucks will be sampled on an individual basis and a softening point will be run to confirm specifications before the car or truck is shipped to the customer. If it is found that the batch is out of specification the material can be adjusted. If the material is low in specification more solid pitch can be added to bring the batch into compliance. If it is found that the material is high in specification then correction oil will be injected into the tank and the material will be brought into compliance with specification.



1 PIPING DIAGRAM @ HOT OIL SYSTEM & PITCH PUMPS @ T-56

SCALE: NONE

REVISIONS 12-18-91 JEL

088 P02 DEC 18 '91 11:17
5032747674 GLUMAC & ASSOCIATES
12/18/91 11:08 NO. 005 002
Koppers004692

KOPPERS INDUSTRIES

Koppers Industries, Inc.
7540 N.W. Saint Helens Road
Portland, OR 97210-3663

Amos S. Kamerer
Pacific Procurement Manager

Telephone: (503) 286-3681
FAX: (503) 285-2831

February 26, 1992

Mr. Ronald K. Opitz
Manager, Risk and Land Management
Northwest Natural Gas Company
220 N. W. Second Avenue
Portland, Oregon 97209

Dear Ron,

First, please excuse my delay in getting this information off to you, realizing that our meeting here at the terminal was almost a month ago.

As we discussed, it is our intent to construct an addition to our existing pitch storage building. This addition will be approximately 150' X 200' and would sit to the east and north of the existing building, and frankly is the only available space here for this purpose. This would require us to cover the old leach field with reinforced concrete, joining the existing asphalt in that area to form the floor for the new building. Our Environmental Affairs Manager, advises that he sees no legal or environmental problems in constructing this building over the leach field, as long as the existing test pipes are capped at floor level and are still accessible for future testing.

With regard to the future, we would like you to look at the feasibility of Koppers constructing our own unloading facility on the Willamette River, to the north of our current leased property.

Our thought would be to construct an environmentally safe vacuum unloading system on top of pilings in the river. The screw conveyor, needed to move the pitch from the ship to our storage building, would be constructed using floating foundation blocks for the supports. Also, we think that this conveyor system and the support structures could follow close to the existing roadway, from the river to our property and would thus not interfere with the Gas Company land, as we discussed during your visit.

As our business continues to expand, the ability for us to control all of our operations, including the unloading of the pitch, will become very important to us and will also make us a long term tenant for the Gas Company.

Needless to say, I am most concerned about your agreement with our position as to the addition to the storage building and would appreciated a prompt response.

As to the unloading system, I realize that this will require additional consideration, however some kind of indication of your thought in this regard in the next couple of months, would be very much appreciated.

Thanking you in advance of your consideration, I remain,

Very truly yours,

Amos S. Kamerer

ASK/km

CC: Ms. Sandy Hart, Environmental Engineering, N.W. Natl. Gas

BCC: L. F. Flaherty
J. O. Oxford
W. W. Turner

USPCI

Service provided by:
SOLVENT SERVICE CO., INC.

ORIGINAL INVOICE
Please pay from this invoice
No statement will be rendered

Service For:
KOPPERS INDUSTRUIAL INC

7540 NW ST HELENS ROAD
PORTLAND, OR 97210

Bill To:
KOPPERS INDUSTRIES, INC.

7540 N.W. SAINT HELENS ROAD
PORTLAND, OR 97210 -3663

Customer No.	Invoice Date	Invoice No.
001034643	11/16/95	SSI361364

Bill To No.: 000026907

Accounting Information: S CO 0311 0311

Terms: NET 30

ITEM #	QUANTITY	DESCRIPTION	PRICE	PER	NET AMT
		PO: VERBAL			FAC NO: 02100
		MAN #: 82444 MAN ITEM: A			
		DEPARTURE: 09/28/95 ARRIVAL: 09/28/95 ORDER: 950062414 LD TKT: 62414			
		WASTE STREAM: SJ95-2034 WASTE NAME: CREOSOTE CONTAMIN RAGS AND ABS			
		MAN DOC #: 95382444			
INCSLD	1,050.00	DESTRUCTIVE INCINERATION MIN. 350 LBS PER 55 GAL DRUM	1.100	LB	1,155.00
MANSER	1.00	MANIFEST PREPERATION	25.000	HR	25.00

Post-it® Fax Note 7671 | Date 2/22/96 | # of pages ▶ 4

To Ni Su | From Linda

Co./Dept. A/R-USPCI | Co. Koppers

Phone # | Phone # 503/286-3681

Fax # 408/453-8167 | Fax # 503/285-2831

RECEIVED
NOV 20 1995
KOPPERS INDS., INC.
PORTLAND, OR

Remit to Address: P.O. BOX 13618
NEWARK, NJ 07188-0618

THANK YOU DAVE ASPITARTE

Please pay this amount:

FOR PROPER CREDIT, PLEASE INCLUDE INVOICE NUMBER ON REMITTANCE 1,180.00

KI 37G REV 2 2M 6/90

GIL	DET.	S-DET.	LOC.	DEPT.	TAX	EMP #	MOVE # PO #	AMOUNT
305	807		9270	910	0362			1180.00

OK TO PAY

IMPORTANT - CIRCLE TERMS ON INVOICE

GROSS AMOUNT 1180 00

DISCOUNT $

NET $

CIRCLE TERMS ON INVOICE

INV # 361364 DATE 11/16/95

A/P DEPARTMENT USE ONLY

VENDOR NUMBER 0 0 6 3 4 7 0 0 2

TERMS CODE 045 DUE DATE / /

DIVISION	MONTH	AUDIT NUMBER
483	11	92701060

COPY

ORIGINAL MANIFEST IS MAILED DIRECTLY TO GENERATOR FROM SITE

UNIFORM HAZARDOUS WASTE MANIFEST	Generator US EPA ID: ORD027734359	Manifest No.: 82444	Page 1 Of: 00001

GENERATOR

Generator Name and Mailing Address:
KOPPERS INDUSTRUIAL INC
7540 NW ST HELENS ROAD
PORTLAND OR 97210 ORD027734359

State Manifest Doc No.: 95382444

State Generator ID:

Transporter 1 Company Name:

State Trans ID: CAD982495608

Transport Phone:

Transporter 2 Company Name:

State Trans ID:

Transport Phone:

Designated Facility Name and Address:
USPCI TRS SAN JOSE
1021 BERRYESSA ROAD
SAN JOSE CA 95133 CAD059494310

State Facility No.: CAD059494310

Facility Phone: (408)453-6046

US DOT Description (including name, hazard class, and ID number)	Container No.	Container Type	Total quantity	Unit Wt/Vl	Waste Number
A.RQ HAZARDOUS WASTE SOLID N.O.S.(CREOSOTE),9,NA3077,PG III (U051) 9 NA3077	00003	DM	830.00	P	U051 352

Additional Description for Materials Listed Above:

Handling Codes for Above:

Special Handling Instructions and Additional Information:
PH NA

Authorization: Date:

TRANSPORTER

Transporter 1 Authorization: Date:

Transporter 2 Authorization: Date:

FACILITY

Discrepancy Indication Space:

Authorization: BETTE SWEENEY Date: 09/28/95

CUSTOMER/VENDOR NUMBER REQUESTS

TO: TOOTIE STETTER

FROM: Karen

LOCATION: K-1750, FAX 2159

LOCATION: PORTLAND

SUBJECT: CVN REQUEST

DATE: 11/20/95

****

Please circle one of the following:

TYPE OF REQUEST: (Vendor) Customer Employee

CATEGORY: (General) Government Railroad Utility

NAME FOR REQUEST: Solvent Service Co., Inc.

SOLD TO ADDRESS: _____

REMIT TO ADDRESS: P.O. Box 13618

Newark, NJ 07188

LOCATION #: 9270

DIVISION #: 483

ASSIGNED #: 0063-470-02

DATE IN SYSTEM: 11/22/95

Koppers004697

LITE-TAC®
REMOVE TO EXPOSE
ADHESIVE

G/L	DET.	S-DET.	LOC.	DEPT.	TAX	EMP. #	AMOUNT
305	804		9270	910	0362		171.
						GROSS AMOUNT:	
OK TO PAY:						DISC. $:	
						NET $	171.28

VENDOR NUMBER: 0 1 4 3 7 4 0 2 1

INV. #: 020519002-1

INV. DATE: 9/1/89

TERMS: 045 DUE DATE: / /

DIVISION	MONTH	AUDIT NUMBER
483	9	

Koppers004698

2

Van Waters & Rogers Inc.

subsidiary of **Univar**

SERVING SCIENCE, INDUSTRY AND AGRICULTURE • WAREHOUSES IN MAJOR MARKETING AREAS

VAN WATERS & ROGERS
PO BOX 4500-63

PORTLAND, OR 97208

PORTLAND

(503)222-1721

ORIGINAL **INVOICE**

SOLD TO
CUSTOMER NO. 02013488
KOPPERS INDUSTRIES
7540 NW ST HELENS ROAD
PORTLAND
OR 97210

SHIP TO
CUSTOMER NO. 02013488
KOPPERS INDUSTRIES
7540 NW ST HELENS ROAD
PORTLAND
OR 97210

INVOICE DATE
09-01-89

INVOICE NUMBER
020519002.1

TERMS	TAX EXEMPT	YOUR ORDER NUMBER	SHIPPING DATE	SHIPPED VIA
NET 30 DAYS		JOHN	09-01-89	VWR TRK-DRY-3

F.O.B. DEST. +CART. =WHS FREIGHT PREPAID-CUSTOMER ACCOUNT WAREHOUSE PORTLAND OFFICE

DESCRIPTION		ORDERED	SHIPPED	ISSUE UNIT	TX	UNIT PRICE	PER	PRICE EXTENSION
XYLENE VWR R/NR DRM 55 GL DR	04036203	1.0	1.0	DR	T	2.4400	GL	134.20
RETURNABLE DRUM VWR 1 EA	04090195	1.0	1.0	EA	E	20.0000	EA	20.00
CARTAGE VIA VWR TRUCK 1 EA	04163101	438.0	438.0	EA	T	0.0390	EA	17.08

CED 2 1

IT IS EXPRESSLY UNDERSTOOD AND AGREED THAT SELLER MAKES NO EXPRESS OR IMPLIED WARRANTIES OF FITNESS OR OF MERCHANTABILITY OR OF ANY OTHER KIND WHATSOEVER EXCEPT THAT THE GOODS SOLD HEREUNDER SHALL BE OF THE QUANTITY ABOVE SPECIFIED. BUYER ASSUMES ALL THE RISK OF LIABILITY WHATSOEVER RESULTING FROM THE USE OF SUCH GOODS, WHETHER USED SINGULARLY OR IN COMBINATION WITH OTHER SUBSTANCES. SELLER'S LIABILITY FOR NONCONFORMING GOODS IS EXCLUSIVELY LIMITED, AT THE SELLER'S OPTION, TO REPLACEMENT OF THE DEFECTIVE GOODS OR THE PURCHASE PRICE OF SUCH GOODS AND UNDER NO CIRCUMSTANCES SHALL SELLER BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. THE AMOUNT BILLED IS JUSTLY DUE AND OWING, NO PART THEREOF HAS BEEN PAID, AND THE AMOUNT DUE FOR THE LAST ITEM ACCRUED WITHIN ONE YEAR OF THE INVOICE DATE.

STATE AND LOCAL TAXES HAVE NOT BEEN INCLUDED UNLESS SPECIFICALLY ITEMIZED ON THE INVOICE. PAST DUE BALANCES ARE SUBJECT TO A LATE PAYMENT CHARGE OF 1½% PER MONTH, OR IF LESS, THE MAXIMUM AMOUNT PERMITTED BY APPLICABLE LAW. CONTAINER CHARGES SUBJECT TO REGULAR TERMS OF SALE. FULL CREDIT TO BE ISSUED IF RETURNED IN USEABLE CONDITION WITHIN 90 DAYS OF

TOTAL 171.28

PLEASE PAY ⇨ $171.28

Koppers004699

STATEMENT

Van Waters & Rogers Inc.
subsidiary of **Univar**

PAGE 1

KOPPERS INDUSTRIES
7540 NW ST HELENS ROAD
PORTLAND, OR 97210

REMITTANCE STUB

Van Waters & Rogers Inc.
subsidiary of Univar

KOPPERS INDUSTRIES

ACCOUNT NO.	DATE	ACCOUNT NO.	DATE
02013488	09-30-89	02013488	09-30-89

01
04

PLEASE RETURN THIS STUB WITH YOUR REMITTANCE

CHECK ITEMS COVERED BY REMITTANCE HERE

DATE	INVOICE NO.	CODE	REFERENCE NO.	DEBIT	CREDIT	BALANCE	INVOICE NO.	BALANCE
09-01-89	020519002. 1	01	JOHN	171. 28		171. 28	020519002. 1	171. 28
					OCT 6 1989			
						171. 28	PLEASE PAY	171. 28

CODES:

01 Invoice	06 Late Payment Charge
02 Payment	07 On-Account Cash
03 Credit Memo	08 Balance Forward
04 Adjustment	09 On Account Credit Memo
05 Discount	

AGE OF RECEIVABLES FROM DUE DATE

CURRENT	PAST DUE 1—30	PAST DUE 31—60	PAST DUE 61+
171. 28	0. 00	0. 00	0. 00

REMIT TO:

VAN WATERS & ROGERS
PO BOX 4500-63

PORTLAND, OR 97208

Koppers004700

THIS MEMORANDUM is an acknowledgment that a Bill of Lading has been issued, and is not the Original Bill of Lading, nor a copy or duplicate covering the property named herein, and is intended solely for filing or record.

CARRIER OUR TRUCK 203 DATE 09-01-89 SHIPPER NO. 020519002 CARRIER NO.

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading.

FROM **Van Waters & Rogers Inc.** subsidiary of **Univar** AT: 3950 NW YEON AVE PORTLAND,OR,97210

CONSIGNED TO: 02018488
KOPPERS INDUSTRIES
7540 NW ST HELENS ROAD

PORTLAND, OR 97210

Invoice #020519002
Cust PO #JOHN

Subject to Section 7 of conditions of applicable bill of lading, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement.
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

Van Waters & Rogers Inc.
(Signature of Consignor)

BULK HOOK-UP OK'D BY:

PLACARDS OFFERED TO CARRIER ☒ YES ☐ NO
ACCEPTED BY CARRIER ☒ YES ☐ NO

COLLECT ON DELIVERY

$ _____ and remit to: Van Waters & Rogers Inc. at above address

$ _____ CHARGES ADVANCED
C.O.D. Charge to be paid by { Shipper ☐ Consignee ☐

If charges are to be prepaid, write or stamp here. To be Prepaid.

PREPAID

Received $ _____ to apply in prepayment of the charges on the property described hereon.
Agent or Cashier
Per _____
The signature here acknowledges only the amount prepaid.

the property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and designated as indicated below, which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in Uniform Freight Classification in effect on the date hereof, if this is a rail or a rail-water shipment, or (2) in the applicable motor carrier classification or tariff if this is a motor carrier shipment.

Shipper hereby certifies that he is familiar with all the terms and conditions of the said bill of lading, including those on the back thereof, set forth in the classification or tariff which governs the transportation of this shipment, and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

CARRIER: SHORT FORM BILL OF LADING MUST ACCOMPANY YOUR INVOICE.

FOR EMERGENCY ASSISTANCE INVOLVING HAZARDOUS CHEMICALS **CALL CHEMTREC 800-424-9300** DAY OR NIGHT

HAZARDOUS MATERIALS ↴

PKG/TYPE	X HM	DESCRIPTION OF ARTICLES SPECIAL MARKS AND EXCEPTIONS	*WEIGHT (SUBJECT TO CORR.)	CLASS OR RATE	CK COL
1 DRUM	X	XYLENE,FLAMMABLE LIQUID,UN1307 55 GL DR P1230.3 (XYLENE ;4560)	438		

NOTE: Signature on the "RECEIVED BY" line, below, also acknowledges receipt of a Material Safety Data Sheet(s) for hazardous chemicals in this shipment.

Number of packages 1 Total weight = 438

*If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading shall state whether it is carrier's or shipper's weight.
NOTE – Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.
The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding 1.55 per POUND

This is to certify that the herein-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

MSDS RECEIVED BY S/M

Shipper, Per [signature]
Agent _____ Per _____

Van Waters & Rogers Inc.
Permanent post-office address of shipper as shown above

3

07157558 31 AUG 1989 Page 1 of 1

Koppers004701

0E1440

Van Waters & Rogers Inc.

subsidiary of Univar

3950 N.W. [illegible]
P.O. BOX [illegible]
####### PORTLAND, OR 97210
####### 503-222-1721

ORDER DATE [illegible]
Cust Whse: 02
Ship Whse: 02
Printer O: 57
VWR PO:

INVOICE # 020519002
CUST. P.O. # JOHN

SHIP TO

CUST. NO: 02013488
KOPPERS INDUSTRIES
7540 NW ST HELENS ROAD

PORTLAND, OR 97210
503-286-3681

BILL TO

CUST. NO: 02013488
KOPPERS INDUSTRIES
7540 NW ST HELENS ROAD

PORTLAND, OR 97210

WOF# or JA#: 263*7913*59613#1

	SHIP DATE	SHIP VIA	FREIGHT TERMS	IN SLS	TAX	DEPT
by	09-01-89	OUR TRUCK	PREPAID-CUSTOMER ACCOUNT	263	ZZ (0.00%)	04

203

OUT SALES	CREDIT TERMS	F.O.B.	DELIVERY CONTACT	DELIVERY PHONE
01	03 STS	DEST.*CART.=WHSE (DEST	HAROLD BEELER	503-286-3681

NET 30 DAYS

PRODUCT DESCRIPTION	QUANTITY TO PICK	QTY SHIPPED	QUANTITY B/O	
XYLENE 04036203 VWR R/NR DRM R/NR DRM 55 GL DR 1.0 DR x 438.00 lbs/DR=438 lbs Warehouse location(s), 58 Invoicing Message:	1.0 DR	1		1Y
- - - - Includes following container - - - - -				
RETURNABLE DRUM VWR 04090195 1 EA EA Product Pick Message: STEEL CONTAINER	(DO NOT PICK)			2N C

3

PACKING LIST

DO NOT RETURN GOODS WITHOUT OUR AUTHORIZATION

YOUR ORDER IS DELIVERED SUBJECT TO THE TERMS AND CONDITIONS PRINTED ON THE REVERSE SIDE HEREOF.

CLAIMS FOR SHORTAGES MUST BE MADE WITHIN 10 DAYS OF THE DATE OF DELIVERY.

Number of packages= 1

Total weight=438 lbs

FILLED BY	CHECKED BY	DATE SHIPPED	DELIVERED BY	FREIGHT AMT.	TOTAL MDSE.	TOTAL 1	TOTAL 2	RECEIVED BY
TD	Hunt	9-1-89	Hunt		[illegible]	1.0		

09:57:53 31 AUG 1989 020519002 Page 1 of 1

Koppers004702

STANDARD TERMS AND CONDITIONS OF SALE

1. It is Buyer's duty to make a careful inspection of the cargo for evidence of loss or damage, both apparent and concealed, for loss or damage in transit by Parcel Post or United Parcel Service – report to Seller immediately, retain damaged products and shipping container for our instructions. For loss or damage by motor carrier, freight forwarders, railway express, rail or air shipments – secure a notation of any loss or damage on your copy and on the carrier's copy of the delivery receipt, retain products and shipping containers, call carrier immediately for an inspection and file a claim with the carrier.

2. To the extent that this order is covered by a prior written contract between us, it is accepted on the terms and conditions in that contract and the terms and conditions expressed herein are not intended to modify, change, or supersede such prior contract. To the extent that this order is not covered by such a contract, this instrument contains all of the terms and conditions with respect to the sale and purchase of products named herein. No modification of these terms and conditions shall be of any force unless such modification shall be in writing and signed by the party claimed to be bound thereby. If any of the provisions of Buyer's purchase order or other writings are in conflict with the terms and conditions of this document, the terms and conditions of this document shall govern.

3. Seller's liability as to delivery ceases upon making delivery of products purchased hereunder to carrier at shipping point in good condition. Title and risk of loss for the products supplied hereunder will pass at the F.O.B. point specified in Seller's applicable published price schedule for all products shipped by Seller. Title to and risk of loss for all products picked up by Buyer at Seller's designated shipping locations will pass to Buyer at the point the products are deposited by Seller onto Buyer's owned or leased equipment, and in the case of bulk liquid or solid products title and risk of loss shall pass at the point of discharge from Seller's fill nozzle or discharge tube.

4. IT IS EXPRESSLY UNDERSTOOD AND AGREED THAT SELLER MAKES NO EXPRESS OR IMPLIED WARRANTIES OF FITNESS OR OF MERCHANTABILITY OR OF ANY OTHER KIND WHATSOEVER EXCEPT THAT THE PRODUCTS SOLD HEREUNDER SHALL BE OF THE QUANTITY SPECIFIED AND THAT THE PRODUCTS SHALL CONFORM TO SELLER'S PUBLISHED SPECIFICATIONS AND THOSE SPECIFICATIONS LISTED ON PRODUCT LABELS. AS TO ANY PRODUCTS WHICH SELLER HAS ITSELF PURCHASED AND HAS SUBSEQUENTLY SOLD WITH NO FURTHER PROCESSING, SELLER MAKES NO WARRANTIES WHATSOEVER, AND DISCLAIMS ANY RESPONSIBILITY FOR SUCH PRODUCTS FAILING TO MEET ANY SPECIFICATIONS PUBLISHED BY ANY PERSON OTHER THAN SELLER. BUYER ASSUMES ALL THE RISK OF LIABILITY WHATSOEVER RESULTING FROM THE USE OF THE PRODUCTS WHETHER USED SINGULARLY OR IN COMBINATION WITH OTHER SUBSTANCES. SELLER'S LIABILITY FOR NONCONFORMING PRODUCTS IS EXCLUSIVELY LIMITED, AT SELLER'S OPTION, TO REPLACEMENT OF THE DEFECTIVE PRODUCTS OR THE PURCHASE PRICE OF SUCH PRODUCTS. UNDER NO CIRCUMSTANCES SHALL SELLER BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

5. Within thirty days after the date of receipt of any shipment of products under this Agreement, Buyer shall examine any such products for any damage, defect or shortage. All claims for any cause whatsoever (whether such cause be based on contract, breach of warranty, negligence, strict liability, other tort or otherwise) shall be deemed waived unless made in writing and received by Seller within thirty days after Buyer's receipt of products with respect to which such claim is made, or if such claim is for non-delivery of such products, within thirty days after the date upon which such products were to be delivered; provided that as to any such claim not reasonably discoverable within such thirty day period (including such claims discoverable only in processing, further manufacture, other use or resale), such claim shall be made in writing and received by Seller within 180 days after Buyer's receipt of the products. Failure of Seller to receive written notice of any such claim within the applicable time period shall be deemed an absolute and unconditional waiver by Buyer of such claim irrespective of whether the facts giving rise to such claim shall have been discovered or that whether processing, further manufacture, other use or other resale of the products shall have taken place. Products sold under this Agreement shall not be returned without Seller's permission and transportation charges for return shall not be paid by Seller unless authorized in advance.

6. Payment terms are net thirty (30) days from invoice date unless otherwise agreed in writing. In the event Buyer fails to fulfill the terms of payment, or in case Seller shall have any doubt at any time as to Buyer's financial responsibility, Seller may decline to make further deliveries except upon receipt of cash or satisfactory security. Past due balances are subject to a late payment charge of 1½% per month, or the maximum amount permitted by applicable law whichever is less.

7. Buyer shall reimburse Seller for all taxes, excise or other charges which Seller may be required to pay to any government (national, state or local) upon the sale, production or transportation of the products sold hereunder.

8. Performance of Seller will be excused in case of act of God, war, riots, fire, explosions, floods, strikes, lockouts, injunctions, inability to obtain fuel, power, raw materials, labor, containers or transportation facilities, accidents, breakage of machinery or apparatus, national emergency or because performance is made impracticable by the occurrence of any other unforeseeable contingency, or because of compliance in good faith with any applicable foreign or domestic governmental statute, regulation or order whether or not it later proves to be invalid, preventing the manufacture, shipment or acceptance of a shipment of the product, or preventing any manufacture of a material upon which the manufacture of the products of this contract is dependent. Any delivery so suspended shall be cancelled without liability, but the contract shall otherwise remain unaffected.

9. All returnable containers used in connection with delivery of products shall remain the property of Seller unless sold on a drum-included basis. Such containers shall be used by Buyer only for the reasonable storage of original contents and shall be returned to Seller in good condition within ninety (90) days from date of original shipment. To secure the performance of this obligation, Buyer shall pay a deposit without discount, at the time of payment for the contents. The deposit shall be credited to Buyer's account upon return of the containers (F.O.B. Seller's shipping point) in good condition if made within the 90 day limit. If not returned within the 90 day limit Seller may reject the containers tendered and retain the full amount of the deposit.

10. Buyer assumes complete responsibility for, and agrees to defend, indemnify and hold Seller and its employees harmless from all claims, demands, actions, and causes of action, including attorneys' fees and actual costs incurred as a result thereof, on account of injury to any person or any property damage, arising out of the handling, transportation, storage, possession, processing, further manufacture or other use or resale of the products sold by Buyer after the products are delivered to Buyer or upon Seller's delivery to carrier at shipping point, whether or not such products are handled, stored, or used singly or in conjunction with other products; provided, however, this paragraph shall not operate to relieve Seller from liability resulting solely from Seller's negligent acts or omissions.

11. It is expressly understood that any technical advice furnished by Seller with reference to the use of its products is given gratis and Seller assumes no obligation or liability for the advice given or results obtained. All such advice is given and accepted at Buyer's risk.

12. This sales agreement is not assignable or transferable by Buyer, in whole or in part, except with the written consent of Seller.

13. When in the opinion of Seller there is a period of shortages of supply of said products for any reason, Seller may allocate its available supply among any or all of its various customers upon such basis as it shall deem fair and practicable, with no liability on its part for failure to deliver the quantity or any portion therein specified.

14. Seller's weight taken at shipping point will govern.

15. Buyer shall pay all reasonable costs, fees, including attorney's fees, and expenses incurred by Seller in collecting monies due or to become due hereunder.

Koppers004703

Koppers Industries, Inc.
Pittsburgh, PA 15219

106232 62-4 311

Location No. 483/9270 Date 11/15/89 No.

Pay to the order of -KOPPERS- COMPANY,INC. $30and00cts

$ 30.00
Not valid over $3500.00

STATE OF CALIFORNIA
CASHIER
DEPT. OF FOOD & AGRICULTURE
P.O. BOX 942872
SACRAMENTO, CA 94271-2872

Payable through Mellon Bank (DE) N.A., Wilmington, DE 19899
Mellon Bank (East) N.A., Philadelphia, PA 19102

KI 179 2/89

⑈106232⑈ ⑆031100047⑆ 2⑈924 918⑈

General Ledger	Detail	Sub Detail	Location or Contract	Dept. or Orig. Loc.	Tax Codes	Emp. No.	Purchase Order No. Rec. Id.	Br.	or P.O. No.	P.O. Add	P.O. Add or Resource	Quantity	Unit Code	Amount Distributed Dollars	Cents
305	973		9270	910	0362									30	00

Vendor No.

Description

RENEWAL PESTICIDE [illegible]DESIGNATED AGENT LICENSE
#00000 60066 JOHN A. OXFORD

STATE OF CALIFORNIA
DEPARTMENT OF FOOD AND AGRICULTURE
LICENSING AND CERTIFICATION PROGRAM
1713 J STREET, SUITE 301
SACRAMENTO, CA 95814
TELEPHONE (916) 322-4647

10/11/89

RENEWAL APPLICATION FOR:
PESTICIDE DEALER'S DESIGNATED AGENT LICENSE

IN ORDER TO RENEW YOUR DESIGNATED AGENT STATUS FOR TWO YEARS:

1. Check your name and/or address below.
   If you have a name and/or address change or correction, please put a check in the box. ☑
   (See Instructions)
2. Sign and date the renewal form. Include your Social Security Number.
   The Department needs the Social Security Number as an alternate means of applicant identification, as many names are similar. This is not public information and will not appear on any publication produced or distributed by the Department.
3. Please complete the information required on the back of the renewal application.
4. Enclose your check or money order for $30.00, payable to Cashier, Dept. of Food & Agriculture.
   If your renewal is not postmarked on or before December 31, of the expiration year, you must include a $10.00 penalty fee.
5. Mail in the envelope provided
   to Cashier, Department of Food & Agriculture, P.O. Box 942972, Sacramento CA 94271-2872

NOTE: IN ORDER TO ASSURE RECEIPT OF YOUR LICENSE PRIOR TO JANUARY 1, PLEASE SUBMIT THE REQUIRED DOCUMENTS FOR RENEWAL WITH THE PROPER FEE PRIOR TO DECEMBER 1.

DESIGNATED AGENT ID: 00000 60066

EXPIRATION YEAR: 89

OXFORD, JOHN A
~~4708 N E 139TH AVENUE~~
~~VANCOUVER WA 98662~~
6208 NE 17th AVE #27
VANCOUVER WA 98665

TOTAL FEE REQUIRED: $ 30.00

I DECLARE UNDER THE PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA THAT THE INFORMATION PROVIDED IS TRUE AND CORRECT.

SIGNATURE John A Oxford DATE 11-14-89

SOCIAL SECURITY NUMBER: [redacted]

FA AGENT ED 9-86

PESTICIDE DEALER'S DESIGNATED AGENT LICENSE
RENEWAL APPLICATION INFORMATION REQUIREMENT

PLEASE COMPLETE:

EMPLOYMENT STATUS: PLEASE CHECK APPROPRIATE ONE BELOW.

___CURRENTLY NOT A DESIGNATED AGENT LICENSEE FOR A PESTICIDE DEALER BUSINESS.

X CURRENTLY A DESIGNATED AGENT LICENSEE FOR A PESTICIDE DEALER BUSINESS.

KOPPERS INDUSTRIES INC 7540 NW ST. HELENS RD.
NAME OF BUSINESS (PLEASE PRINT) ADDRESS

PORTLAND OREGON 97210
CITY STATE ZIP CODE

Koppers004706

INSTRUCTIONS

IMPORTANT - PLEASE READ!!

QUALIFIED APPLICATOR LICENSE
QUALIFIED APPLICATOR CERTIFICATE
PESTICIDE DEALER DESIGNATED AGENT LICENSE

1. REVIEW YOUR NAME AND/OR ADDRESS.
   If there are changes or corrections, please print them on the front of the renewal form. If making a name change or if you need assistance, please telephone (916) 322-4647 for further instructions.

2. SIGN AND DATE THE RENEWAL FORM. PLEASE WRITE IN YOUR SOCIAL SECURITY NUMBER.
   The Department needs the Social Security Number as an alternate means of identification as many names are similar. This information is not for the public record and will not appear in any publication, be reproduced or distributed by the Department.

3. COMPLETE THE INFORMATION REQUIRED ON THE BACK OF THE RENEWAL APPLICATION.
   Incomplete information may result in delaying receipt of your license.

4. ENCLOSE A CHECK OR MONEY ORDER FOR THE TOTAL FEE REQUIRED, PAYABLE TO: CASHIER, CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE.
   If your renewal is not postmarked on or before December 31, of the expiration year, you must also include a $10 late penalty fee.

5. MAIL THE ENVELOPE PROVIDED TO:
   Cashier, California Department of Food and Agriculture, P.O. Box 942872, Sacramento, CA 94271-2872.

NOTE: IN ORDER TO ASSURE RECEIPT OF YOUR LICENSE PRIOR TO JANUARY 1, PLEASE, SUBMIT THE REQUIRED DOCUMENTS FOR RENEWAL WITH THE PROPER FEE PRIOR TO DECEMBER 1. LICENSES ARE ISSUED FOR TWO YEARS.

Koppers004707

Koppers Industries, Inc.
Pittsburgh, PA 15219

106233 62-4/311

Location No. 483/9270 Date 11-15-89 No.

Pay to the order of -KOPPERS- COMPANY,INC. $30 and 00 cts

$ 30.00
Not valid over $3500.00

STATE OF CALIFORNIA
CASHIER
DEPT. OF FOOD & AGRICULTURE
P.O. BOX 942872
SACRAMENTO, CA 94271-2872

Payable through Mellon Bank (DE) N.A., Wilmington, DE 19899
Mellon Bank (East) N.A., Philadelphia, PA 19102

KI 179 2/89

⑈106233⑈ ⑆031100047⑆ 2⑈924 918⑈

General Ledger	Detail	Sub Detail	Location or Contract	Dept. or Orig. Loc.	Tax Codes	Emp. No.	Purchase Order No. Rec. Id.	Br.	or P.O. No.	P.O. Add	P.O. Add or Resource	Quantity	Unit Code	Amount Distributed Dollars	Cents
305	973		9270	910	0362									30	00

Vendor No.

Description

RENEWAL QUALIFIED APPLICATORS CERTIFICATE #00000 48441
JOHN A. OXFORD

STATE OF CALIFORNIA
DEPARTMENT OF FOOD AND AGRICULTURE
LICENSING AND CERTIFICATION PROGRAM
1713 J STREET, SUITE 301
SACRAMENTO, CA 95814
TELEPHONE (916) 322-4647

10/11/89

RENEWAL APPLICATION FOR:
QUALIFIED APPLICATORS CERTIFICATE

IN ORDER TO RENEW YOUR CERTIFICATE FOR TWO YEARS:

1. Check your name and/or address below.
   If you have a name and/or address change or correction, please put a check in the box. ☑
   (See instructions).
2. Sign and date the renewal form. Include your Social Security Number.
   The Department needs the Social Security Number as an alternate means of applicant identification, as many names are similar. This is not public information and will not appear on any publication produced or distributed by the Department.
3. Please complete the information required on the back of the renewal application.
4. Enclose your check/money order for $30.00, payable to Cashier. Dept. of Food & Agriculture.
   If your renewal is not postmarked on or before December 31, of the expiration year, you must include a $10.00 penalty fee.
5. Mail in the envelope provided
   to Cashier, Department of Food & Agriculture, P.O. Box 942872, Sacramento, CA 94271-2872

NOTE: IN ORDER TO ASSURE RECEIPT OF YOUR LICENSE PRIOR TO JANUARY 1, PLEASE SUBMIT THE REQUIRED DOCUMENTS FOR RENEWAL WITH THE PROPER FEE PRIOR TO DECEMBER 1.

L

LICENSE ID: 00000 48441

EXPIRATION YEAR: 89

OXFORD, JOHN A
~~4708 N E 139TH AVENUE~~
~~VANCOUVER WA 98662~~
6208 NE 17th AVE #27
VANCOUVER WA. 98665

TOTAL FEE REQUIRED: $ 30.00

I DECLARE UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA THAT THE INFORMATION PROVIDED BY ME IS TRUE AND CORRECT.

SIGNATURE John A Oxford DATE 11-14-89

SOCIAL SECURITY NUMBER: [redacted]

FACERTIFEO986

[redacted]

QUALIFIED APPLICATOR CERTIFICATE
RENEWAL APPLICATION INFORMATION REQUIREMENT

PLEASE COMPLETE:

1. EMPLOYMENT STATUS: PLEASE CHECK APPROPRIATE ONE.

____QUALIFIED APPLICATOR CERTIFICATE HOLDER FOR GOVERNMENTAL AGENCY
____CITY ____COUNTY ____STATE ____FEDERAL ____SPECIAL DISTRICT

____QUALIFIED APPLICATOR CERTIFICATE HOLDER FOR A MAINTENANCE GARDENER PEST CONTROL BUSINESS (INCIDENTAL PEST CONTROL BUSINESS FOR HIRE)

X QUALIFIED APPLICATOR CERTIFICATE HOLDER FOR A PRIVATE BUSINESS (PEST CONTROL NOT FOR HIRE)

____QUALIFIED APPLICATOR CERTIFICATE HOLDER FOR SPECIAL GOVERNMENTAL DISTRICT
____IRRIGATION DISTRICT ____SCHOOL DISTRICT

____MOSQUITO ABATEMENT DISTRICT ____OTHER _____

____QUALIFIED APPLICATOR CERTIFICATE HOLDER WORKING FOR A PEST CONTROL BUSINESS FOR HIRE.

NAME OF AGENCY OR BUSINESS WHERE YOU ARE EMPLOYED OR THAT YOU OWN:

Koppers Industries Inc. — NAME OF AGENCY OR BUSINESS (PLEASE DO NOT ABBREVIATE)
7540 N.W. St Helens Rd. — ADDRESS
Portland — CITY
Oregon — STATE
97210 — ZIP CODE

2. CLASSIFICATION OF PESTICIDE(S) APPLIED OR SUPERVISED BY YOU: PLEASE CHECK APPROPRIATE CLASSIFICATION.

____RESTRICTED USE PESTICIDES ONLY ____GENERAL USE PESTICIDES ONLY

X BOTH RESTRICTED USE AND GENERAL USE PESTICIDES

____CURRENTLY NOT INVOLVED WITH APPLICATION OR SUPERVISING THE APPLICATION OF PESTICIDES.

Koppers004710

INSTRUCTIONS

IMPORTANT - PLEASE READ!!

QUALIFIED APPLICATOR LICENSE
QUALIFIED APPLICATOR CERTIFICATE
PESTICIDE DEALER DESIGNATED AGENT LICENSE

1. REVIEW YOUR NAME AND/OR ADDRESS.
   If there are changes or corrections, please print them on the front of the renewal form. If making a name change or if you need assistance, please telephone (916) 322-4647 for further instructions.

2. SIGN AND DATE THE RENEWAL FORM. PLEASE WRITE IN YOUR SOCIAL SECURITY NUMBER.
   The Department needs the Social Security Number as an alternate means of identification as many names are similar. This information is not for the public record and will not appear in any publication, be reproduced or distributed by the Department.

3. COMPLETE THE INFORMATION REQUIRED ON THE BACK OF THE RENEWAL APPLICATION.
   Incomplete information may result in delaying receipt of your license.

4. ENCLOSE A CHECK OR MONEY ORDER FOR THE TOTAL FEE REQUIRED, PAYABLE TO: CASHIER, CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE.
   If your renewal is not postmarked on or before December 31, of the expiration year, you must also include a $10 late penalty fee.

5. MAIL THE ENVELOPE PROVIDED TO:
   Cashier, California Department of Food and Agriculture, P.O. Box 942872, Sacramento, CA 94271-2872.

NOTE: IN ORDER TO ASSURE RECEIPT OF YOUR LICENSE PRIOR TO JANUARY 1, PLEASE, SUBMIT THE REQUIRED DOCUMENTS FOR RENEWAL WITH THE PROPER FEE PRIOR TO DECEMBER 1. LICENSES ARE ISSUED FOR TWO YEARS.

Koppers004711

Koppers Industries, Inc.
Pittsburgh, PA 15219

200193 62-4/311

Location No. 483/9270 Date 2/2/89 No.

-KOPPERS- COMPANY, INC. $15 and 00 cts

$15.00
Not valid over $3500.00

Pay
to the order of

STATE OF OREGON
DEPARTMENT OF AGRICULTURE
635 CAPITOL ST. N.E.
SALEM, OREGON 97310-0110

Kelly S. Marshall

Payable through Mellon Bank (DE) N.A., Wilmington, DE 19899
Mellon Bank (East) N.A., Philadelphia, PA 19102

KI 179 12/88

⑈200193⑈ ⑆031100047⑆ 2⑈924 918⑈

General Ledger	Detail	Sub Detail	Location or Contract	Dept. or Orig. Loc.	Tax Codes	Emp. No.	Purchase Order No. Rec. Id.	Br.	or P.O. No.	P.O. Add.	P.O. Add or Resource	Quantity	Unit Code	Amount Distributed Dollars	Cents
305	973		9270	910	0362									15	00

Vendor No.	Description
9466-260-13	Renewal commercial pesticide license

FORM 1013

DEPARTMENT OF AGRICULTURE
635 CAPITOL ST. N.E.
SALEM, OREGON 97310-0110

FOR OFFICIAL USE ONLY

420 250703 84107 00000 00000 PAGE 1

AGENCY AG PROGRAM AREA 1A LICENSE TYPE 68 FIRM NUMBER 00077415 LICENSE NUMBER 004583

LICENSE EXPIRES 12/31/88

OXFORD, JOHN A
4708 NE 139TH AVE
VANCOUVER WA 98662 99

PHONE NUMBER 206-254-8011

APPL LIC NO.

0000

BUSINESS LOCATION
STREET ADDRESS
CITY, STATE

CHECK ONE OF THE FOLLOWING: X RENEWAL NEW LICENSE ADDITIONAL INFORMATION DELETION

CHECK TYPE OF OWNERSHIP: INDIVIDUAL A,B CORPORATION E,F GOVERNMENTAL AGENCY I,J
PARTNERSHIP C,D COOPERATIVE G,H ASSUMED BUSINESS NAME

**********COMMERCIAL PESTICIDE APPLICATOR**********

DATE CERTIFIED : 01/01/86 CREDITS RECORDED : 00

ESTICIDE OPERATION CATEGORIES - FEES APPLY ONLY TO MAJOR CATEGORIES (M/C)

M/C
( ) AIR OPERATION-NO FEE RQD
( ) AGRICULTURE
( )INSECTICIDE & FUNGICIDE
( )HERBICIDE
( )SOIL FUMIGATION
( )LIVESTOCK PEST
( )VERTEBRATE PEST
( ) AQUATIC
( ) DEMONSTRATION & RESEARCH
( ) FOREST
( ) PUBLIC HEALTH
( ) RIGHT OF WAY

M/C
(X) INDUSTRIAL,INSTITUTIONAL,HEALTH & STRUCTURAL
( )GENERAL PEST
( )STRUCTURAL PEST
( )SPACE FUMIGATION
( )MOSS
(X)WOOD TREATMENT
( ) ORNAMENTAL & TURF
( )INSECTICIDE & FUNGICIDE
( )HERBICIDE
( ) SEED TREATMENT
( ) REGULATORY-PREDATOR
( ) REGULATORY-WEED

APPLICANT MUST PASS A WRITTEN EXAMINATION PRIOR TO CERTIFICATION FOR ADDITIONAL MAJOR CATEGORIES, AND SUB-CATEGORIES.

SUBSIDIARY LOCATION DATA FOR CORRECTION OR DELETION

US/OWNER/OFFICER/PARTNER, STREET ADDRESS, CITY, STATE, ZIP CODE, COUNTY, SEG/REASON

RECORD KEY G-001
OPPERS COMPANY INC 7540 NW ST HELENS RD PORTLAND OR 97210 26 1 5
2
3
4

********** MORE INFORMATION TO APPEAR ON FOLLOWING PAGES **********

DO NOT SEPARATE
Return Complete Application Packet
for [illegible] of Oregon.

FEB 2 1[illegible]

FORM 1013

DEPARTMENT OF AGRICULTURE
635 CAPITOL ST. N.E.
SALEM, OREGON 97310-0110

FOR OFFICIAL USE ONLY

AGENCY AG PROGRAM AREA 1A LICENSE TYPE 68 FIRM NUMBER 00077415 LICENSE NUMBER 004583

LICENSE EXPIRES

PHONE NUMBER

BUSINESS LOCATION
STREET ADDRESS
CITY, STATE

CHECK ONE OF THE FOLLOWING: RENEWAL NEW LICENSE ADDITIONAL INFORMATION DELETION

CHECK TYPE OF OWNERSHIP: INDIVIDUAL A,B CORPORATION E,F GOVERNMENTAL AGENCY I,J
PARTNERSHIP C,D COOPERATIVE G,H ASSUMED BUSINESS NAME

LICENSE FEE SCHEDULE

ONE MAJOR CATEGORY	$15.00	$15.00
ADDITIONAL MAJOR CATEGORIES _____	@ $ 7.50 EACH	_____
MAJOR CATEGORIES ADDED AFTER CURRENT LICENSE ISSUED. _____	@ $12.50	_____

TOTAL REMITTANCE : $_____

****
*** NO FEE REQUIRED FOR : ***
*** AIR OPERATION ***
*** ALL SUB-CATERGORIES ***
****

TOTAL FEE SUBMITTED : $-------

SIGNATURE----------TITLE----------DATE----------

PRINT OWNER OR SIGNATORY NAME ----------
MAKE REMITTANCE PAYABLE TO OREGON STATE DEPARTMENT OF AGRICULTURE

Koppers Industries, Inc.
Pittsburgh, PA 15219

106247 62-4/311

Location No. 483/9270 Date 12/4/89 No.

Pay to the order of -KOPPERS- COMPANY,INC. $2,500 and 00 cts

$ 2500.00
Not valid over $3500.00

OREGON DEPT. OF REVENUE
HAZARDOUS SUBSTANCE FEE
P.O. BOX 14110
SALEM, OR 97309-0910

Kelly S. Marshall

Payable through Mellon Bank (DE) N.A., Wilmington, DE 19899
Mellon Bank (East) N.A., Philadelphia, PA 19102

KI 179 2/89

⑈106247⑈ ⑆031100047⑆ 2⑈924 918⑈

General Ledger	Detail	Sub Detail	Location or Contract	Dept. or Orig. Loc.	Tax Codes	Emp. No.	Purchase Order No. Rec. Id.	Br.	or P.O. No	P.O. Add	P.O. Add or Resource	Quantity			Unit Code	Amount Distributed Dollars	Cents
305	973		1670	910	0362											2500	00

Vendor No.

Description

OREGON HAZARDOUS SUBSTANCE FEE ACCT. #006202

PAYMENT COUPON

OREGON HAZARDOUS SUBSTANCE FEE

Date Due JANUARY 1, 1990

Amount Due	Account Number
$2,500.00	006202

Enter Payment Amount

Amount of Payment
Date Payment Mailed

Tear out coupon before mailing

KOPPERS COMPANT, INC.
7540 NW ST HELENS RD
PORTLAND, OR 97210

Make check payable to:
Oregon Department of Revenue

Mail your payment and coupon to:
Hazardous Substance Fee
Oregon Department of Revenue
P.O. Box 14110
Salem, OR 97309-0910

000250000 89 82 607 0062026

Keep this portion for your records.

Tear out coupon before mailing

Under ORS 453.402 your company is being billed for the possession of hazardous substances you possess, use, store, manufacture or dispose at your place of business.

CHEMICAL REPORTED : COAL TAR PITCH

SINGLE LARGEST AGGREGATE AMOUNT REPORTED : 1,000,000-9,999,999

LOCATION SITE : 7540 NW ST HELENS RD, PORTLAND

FOR YOUR INFORMATION

Your firm is required to pay annual fee(s) to fund state programs involving hazardous substances. These programs are described below. The fee(s) are calculated using the single largest quantity of hazardous substance manufactured, used, possessed, stored or disposed of by your firm in 1988. The identity of the hazardous substance and the quantity used to calculate the fee(s) is shown above for your information. If you have any questions regarding the fee amount, please follow the directions on the back of this sheet. Two programs are being funded this year. Program funding for each is indicated on reverse.

Community Right-to-Know Program

Each day, hazardous substances (chemicals) are released into the environment. In too many cases, as the result of fire, spill or other incident, the community is threatened. When this happens, emergency responders need information to control and minimize the hazards. Equally important is the community's need to know the location of hazardous substances to make emergency response plans.

Recognizing these needs, Oregon adopted the Community Right-to-Know and Protection Act (ORS 453.307-453.372) in 1985. This legislation addressed four major concerns:

1. The public's health and safety may be endangered by a lack of knowledge about hazardous substances located in the state.

2. Information on the use of hazardous substances should be readily available to the public, allowing them to protect themselves against dangers posed to health and safety.

3. Emergency personnel must know what types and amounts of hazardous substances are present within the state and where they are located to properly protect human life and property.

4. Access to hazardous substance information assures protection of homes and recreational facilities, increases safety in the work place, improves livability, and allows more control during emergencies.

150-607-001 (8-89)

See the back for additional information.

20

001054

OREGON DEPARTMENT OF REVENUE

Amount of Payment
Date Payment Mailed

Tear out coupon before mailing

Make check payable to:
Oregon Department of Revenue

Mail your payment and coupon to:
Hazardous Substance Fee
Oregon Department of Revenue
P.O. Box 14110
Salem, OR 97309-0910

Keep this portion for your records.

Tear out coupon before mailing

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150-607-001 (8-89)

See the back for additional information.

20

001054

Toxic Use Reduction Program

During the 1989 legislative session, many people worked to find ways to reduce industry reliance on the use of toxic substances and the generation of hazardous waste. As a result, House Bill 3515 was passed. It focused on three main areas to reduce toxics use:

1. The Department of Environmental Quality must provide technical assistance to toxics users and generators.
2. Toxics users need to make comprehensive plans and develop goals aimed at reducing toxic substance use.
3. The Department of Environmental Quality must monitor the use of toxic substances and the generation of hazardous wastes in Oregon.

Program Funding for 1989-1991

The 1989 legislature looked at several ways to fund the Community Right-to-Know Program and the Toxic Use Reduction Program. The legislature decided that those firms which manufacture, use, possess, store or dispose of hazardous substances should pay an annual fee. This fee is based on the maximum quantity of hazardous substance reported to the Office of State Fire Marshal. The amount of the fee ranges from $25 to $2000 per firm location. The amount of the fee may change each year depending on the number and amounts of hazardous substances reported. The fee may also change if the legislature changes the approved budget amounts for these programs.

The fees are collected by the Department of Revenue. The Department of Revenue then sends the money to the Office of State Fire Marshal and Department of Environmental Quality.

How to Appeal Assessment of a Hazardous Substance Fee

If you have concerns or questions about the billing process, call Fees Program, 378-6835. If you have concerns or questions about the payment due date or the method of payment, please contact the Department of Revenue. If you contest the amount or the assessment of a hazardous substance fee, you may request an informal conference or a hearing with a hearings officer by contacting the Office of State Fire Marshal. Most problems relating to the fee assessment can be resolved through an informal conference. Tell us in writing why you disagree with or question the assessment and ask for an informal conference. You must do this within 30 days of the date on your assessment. A representative of the Office of State Fire Marshal will review the assessment with you. If you wish, the informal conference can be by phone. We will discuss our decision with you and confirm it by letter. If you still disagree with the assessment, you are entitled to a formal hearing under the contested case procedure described in OAR 837-01-005.

Please address your questions or conference request concerning the **fee assessment** to:

Attn.: Fee Program
Hazardous Materials Bureau
Office of State Fire Marshal
3000 Market Street N.E., Suite 534
Salem, OR 97310

How to Pay the Fee

Tear off the coupon at the top of this page and mail it with your check to the Department of Revenue. The due date and mailing address are shown on the coupon.

If you have questions about the **payment date or how to pay,** send your questions to:

Hazardous Substance Fee
Oregon Department of Revenue
P.O. Box 14119
Salem, OR 97309-0910

Penalty and Interest:

A five percent delinquency penalty is added if you pay more than 60 days after the due date and you did not get an extension to pay. Interest is added to the amount you owe if you pay more than 60 days after the due date. Interest is figured from the 60th day after the due date to the date of your payment. Interest is charged even if you have an extension to pay.

NEIL GOLDSCHMIDT
GOVERNOR

Executive Department
STATE FIRE MARSHAL
3000 MARKET STREET PLAZA - SUITE 534
SALEM, OREGON 97310-0198

Administration	378-FIRE
Logistics and Finance	378-4580
Operations	378-2848
Planning	373-1540
Accreditation/Standards	378-2871
Admin. Services	373-1276
Data	378-4464
Fire Prev./Investigation	378-4917
Hazardous Materials	378-2885
Institutions/Codes	378-4917
Licensing/Permits	373-1871
Public Education	378-2884
Training	378-5210
FAX	(503) 588-FIRE

November 15, 1989

Dear Employer:

In 1985, the Legislature recognized the need to provide community planners, emergency responders, and the public with information on hazardous substances in their communities. The Community Right to Know and Protection Act, ORS 453.307 to 453.372, established a statewide collection and distribution of hazardous substance data through the Office of State Fire Marshal. To minimize the impact on employers of this legislation, the Office of State Fire Marshal's annual hazardous substance survey was designed and is accepted by the Environmental Protection Agency (EPA) as a substitute for the survey required by Section 312 of the Federal SARA Title III law. To further reduce the burden on employers, the state survey, which is mailed annually to designated possessors of hazardous substances, is pre-printed with data submitted during the previous survey period.

Initial funding for this program was provided from the state's General Fund and the Fire Insurance Premium Tax fund. In 1989, after considering several alternatives, the Legislature decided that those who possess hazardous substances should support the program. The fee adopted in HB 3515 is to be assessed annually and will vary depending upon requirements of the program. The Survey program is managed by the Office of State Fire Marshal while the Toxic Chemical Reduction program and the state Superfund are managed by the Department of Environmental Quality. The fees, per site, for the Community Right to Know and Toxic Use Reduction programs will each range from $25.00 to $2,000.00 and for the state Superfund program from $25.00 to $9,000.00. To lessen confusion and multiple billings, the collection of monies for the three programs was consolidated. Collection is through the Department of Revenue.

The enclosed bill is your assessment to support these programs. The amount of the bill was computed using data contained in your 1988-89 hazardous substance survey. The quantity range of the hazardous substance reported in the highest amount was compared with the fee assessment table for 1989-90. A copy of the table is included for your reference. From that comparison the separate and combined fees were determined.

Hazardous substances represent a threat from exposure, fire, and contamination to the surrounding community and emergency responders. Even in small quantities there is a threat to the health and well-being of users and those who may be required to control or clean-up fires and spills. The monies raised through the billing process will help insure that the adverse effects which could result from hazardous substance possession are minimized. We believe that you and most other possessors of hazardous substances, as well as all Oregonians, will benefit from the programs these fees support.

If you have any questions, please call the Hazardous Substance Fee Hotline at 378-6835.

Sincerely,

Olin L. Greene
State Fire Marshal

OLG:1L
Enclosure

TABLE FOR FEE SCHEDULE

RANGE	REPORTED QUANTITY	TOXIC USE REDUCTION FEE	COMMUNITY RIGHT TO KNOW FEE	TOTAL ANNUAL FEE
00	0 - 99	$0	$0	$0
01	100 - 999	$0	$25	$25
02	1,000 - 9,999	$25	$100	$125
03	10,000 - 99,999	$100	$500	$600
04	100,000 - 999,999	$500	$1,000	$1,500
05	1,000,000 - 9,999,999	$1,000	$1,500	$2,500
06	10,000,000 - 49,999,999	$1,500	$2,000	$3,500
07 - 10	50,000,000 - AND ABOVE	$2,000	$2,000	$4,000

N
MISC

Koppers Industries, Inc.
Pittsburgh, PA 15219

106248 62-4 311

Location No. 483/9270 Date 12/4/89 No.

Pay to the order of -KOPPERS- COMPANY,INC. $10and00cts $ 10.00

Not valid over $3500.00

STATE OR OREGON
DEPT. OF AGRICULTURE
635 CAPITOL ST. N.E.
SALEM, OREGON 97310-01110

Fellad S. Marshall

Payable through Mellon Bank (DE) N.A., Wilmington, DE 19899
Mellon Bank (East) N.A., Philadelphia, PA 19102

KI 179 2/89

⑈106248⑈ ⑆031100047⑆ 2⑈924 918⑈

General Ledger	Detail	Sub Detail	Location or Contract	Dept. or Orig. Loc.	Tax Codes	Emp. No.	Purchase Order No. Rec. Id.	Br.	or P.O. No.	P.O. Add.	P.O. Add or Resource	Quantity			Unit Code	Amount Distributed Dollars	Cents
305	973		9270	910	0362											10	00

Vendor No.	Description
9466-260-13	Pesticide Dealers license for John A. Oxford

FORM 1013

DEPARTMENT OF AGRICULTURE
635 CAPITOL ST. N.E.
SALEM, OREGON 97310-0110

FOR OFFICIAL USE ONLY

420 250703 84108 00000 00000 PAGE 1

AGENCY AG PROGRAM AREA 1A LICENSE TYPE 65 FIRM NUMBER 00077467 LICENSE NUMBER 000520

LICENSE EXPIRES 12/31/89

KOPPERS COMPANY INC
JOHN A OXFORD
7540 NW ST HELENS RD
PORTLAND OR 97210 26

PHONE NUMBER 503-286-3681

BUSINESS LOCATION STREET ADDRESS
CITY, STATE

7540 NW ST HELENS RD
PORTLAND OR 97210 26

CHECK ONE OF THE FOLLOWING: X RENEWAL NEW LICENSE ADDITIONAL INFORMATION DELETION

CHECK TYPE OF OWNERSHIP: INDIVIDUAL A,B PARTNERSHIP C,D CORPORATION E,F COOPERATIVE G,H GOVERNMENTAL AGENCY I,J ASSUMED BUSINESS NAME

**********PESTICIDE DEALER**********

LICENSE FEE SCHEDULE

PAY THIS AMOUNT FOR LICENSE ; $10.00

LICENSE IS PERSONAL TO THE APPLICANT AND CANNOT BE TRANSFERRED TO ANOTHER PERSON OR ENTITY

Return of this Application is Required for license renewal or deletion.

TOTAL FEE SUBMITTED : $-------

SIGNATURE----------TITLE----------DATE----------

PRINT OWNER OR SIGNATORY NAME ----------
MAKE REMITTANCE PAYABLE TO OREGON STATE DEPARTMENT OF AGRICULTURE

K

C 13698 POR

Koppers004724

T.S.

KOPPERS INDUSTRIES

Koppers Industries, Inc.
436 Seventh Avenue
Pittsburgh, PA 15219-1800

David A. Webb
Technical Director

Telephone: (412)-227-2505
Fax: (412)-227-2423

TO: Distribution

FROM: D. A. Webb

LOCATION: Pittsburgh K-1800

SUBJECT: Creosote

DATE: July 9, 1993

Please note, the letter which is attached focuses on a preliminary laboratory test for creosote.

You are encouraged to review this information and share it with those employees within your area of direction. You may want to post the letter and/or discuss it during safety meetings.

If you should have any questions concerning the information, please do not hesitate to contact this office for assistance.

D. A. Webb

DAW/ge

Attachment

RECEIVED
JUL 15 1993
KOPPERS INDS., INC.
PORTLAND, OR

RECEIVED
KOPPERS INDS., INC.
PORTLAND, OR

KOPPERS INDUSTRIES

Koppers Industries, Inc.
436 Seventh Avenue
Pittsburgh, PA 15219-1800

David A. Webb
Technical Director

Telephone: (412)-227-2505
Fax: (412)-227-2423

July 9, 1993

DATA DEVELOPMENT PROGRAM--CREOSOTE

Koppers Industries, as a California registrant of creosote, is participating in a health effects data development program with creosote. As you are aware, creosote is a preservative used in the pressure treatment of wood products. In Koppers wood treating plants, the use of creosote is under the direction of a certified applicator. The state of California requires all pesticides, including creosote, sold in that state be evaluated in a series of standard laboratory toxicity tests, which are a part of the data development program. This letter is being sent to inform you of the preliminary results obtained in one of these tests which are currently underway.

When laboratory rats were force-fed high dosages of creosote on a daily basis throughout their adult lives and then allowed to mate, survival of the offspring (pups) born to these parents was diminished compared to a similar group of rats that had not received creosote. The study, which is an ongoing program, involves three test groups of male and female animals each receiving creosote daily oral doses (via stomach tubes).

The effect on pup survival was seen at the two highest dosed levels. This would be analogous to human consumption of between one-third and one-half fluid ounce of creosote being ingested every day. The low experimental dose, 25mg/kg/day or the human equivalent of about one-half teaspoon per day, did not adversely affect pup survival or adult health.

These data are preliminary, and the significance to human health is not clear. Koppers Industries, as required by law, has informed both California and federal environmental protection agency officials of this information. It is important to note that although ingestion of creosote is not considered to be a significant means of human exposure, the information is being reviewed by Koppers Industries product safety and industrial hygiene professionals as part of the recommendations for safe handling and personnel protective measures for creosote.

Current practices as described on the product label and the Material Safety Data Sheet are adequate to protect users of creosote from potential adverse health effects including those described above. This information reminds us as employees of the importance to follow safe work practices when using creosote. These procedures are as follows:

-- Avoid prolonged or repeated breathing of vapors, mists or fumes from creosote.

-- Avoid frequent or prolonged skin or eye contact with creosote.

-- When working with creosote, wear long-sleeved shirts and pants, chemical-resistant gloves and launder all clothing separate from household laundry.

-- After working with creosote and before eating, drinking and use of rest facilities or tobacco products, wash all potentially exposed areas (i.e., hands and face) thoroughly.

-- DO NOT handle creosote until after reading and understanding the Material Safety Data Sheet and product label.

Koppers Industries is committed to product stewardship and will continue as in the past to develop and disseminate information on the safe use of our products. It is through these measures that we can assure that creosote will continue to be available for use as a wood preservative. If anyone should have questions concerning the information that has been provided, you may either contact your immediate supervisor or this office directly.

D. A. Webb

DAW/ge

Koppers004728

LAIDLAW ENVIRONMENTAL SERVICES
"An Equal Opportunity Employer"

IMPERIAL VALLEY - 519
LAIDLAW ENV. SVCS (IMP. VALLEY),INC
5295 SOUTH GARVEY ROAD
WESTMORLAND, CA 92281
Telephone: 619-344-9400

FEDERAL ID NUMBER: 57-0891474

DATE	INVOICE NO.
06/11/93	51930611008

Page 001

931866 - 2 -

ATTN: ACCOUNTS PAYABLE
[illegible]

KOPPERS INDUSTRIES, INC
7540 N.W. SAINT HELENS ROAD
PORTLAND, OR 97210-3665
SALES: DANN SCHOENDORF

TRANSPORTED BY	TERMS	DATE SHIPPED	P.O. NUMBER
LES MTZ	Net 10 Days	05/21/93	JOB/PROJECT #81387

WORK ORDER NO.	QUANTITY SHIPPED	DESCRIPTION	UNIT PRICE	AMOUNT
[illegible]	[illegible]	DISPOSAL SOLIDS HAZ	[illegible]	[illegible]
		MANIFEST # 92713957 WASTE CODE:		
		DISPOSAL SERVICES GROUP SUBTOTAL	$	[illegible]
		SUBTOTAL FOR INVOICE	$	195.00
		County Tax	$	19.50

30 tons

RECEIVED
JUN 17 1993
KOPPERS INDS. INC.
PORTLAND, OR

ENTERED JUN 21 1993

[illegible] LAIDLAW ENV. SVCS (IMP. VALLEY) INC
P.O. BOX 100026
PASADENA, CA 91189-0026

TOTAL DUE $ [illegible]

585-4501-585001 6/92

CUSTOMER COPY

K1 37G REV 2 2M 6/90

CIRCLE TERMS ON INVOICE

GIL	DET	S-DET	LOC	DEPT	TAX	EMP #	MOVE PO #	AMOUNT
375	807		9270	910	0362			215.00

INV 51930611008 DATE 6/11/93

A/P DEPARTMENT USE ONLY

VENDOR NUMBER 0083000011

TERMS CODE 045 DUE DATE / /

OK TO PAY [illegible]

GROSS AMOUNT

DISCOUNT

NET $ 214.50

DIVISION	MONTH	AUDIT NUMBER
483	06	92700557

IMPORTANT: CIRCLE TERMS ON INVOICE

D026 Fed - 352 Calif

Koppers004729

LAIDLAW ENVIRONMENTAL SERVICES
"An Equal Opportunity Employer"

IMPERIAL VALLEY - 519
LAIDLAW ENV. SVCS (IMP. VALLEY),INC
5295 SOUTH GARVEY ROAD
WESTMORLAND, CA 92281
Telephone: 619-344-9400

FEDERAL ID NUMBER: 57-0891474

DATE	INVOICE NO.
06/11/93	51930611008

931866 - 2 -

ATTN: ACCOUNTS PAYABLE
KOPPERS INDUSTRIES, INC.
7540 N.W.SAINT HELENS ROAD

PORTLAND, OR 97210-3663

KOPPERS INDUSTRIES, INC.
7540 N.W.SAINT HELENS ROAD

PORTLAND, OR 97210-3663
SALES: DANN SCHOENDORF

TRANSPORTED BY	TERMS	DATE SHIPPED	P.O. NUMBER
LES MTZ	Net 10 Days	05/21/93	JOB/PROJECT #81387

WORK ORDER NO.	QUANTITY SHIPPED	DESCRIPTION	UNIT PRICE	AMOUNT
2053538	3.000 DM	DISPOSAL SOLIDS HAZ	65.0000	195.00
		MANIFEST # 92713957 WASTE CODE:		
		DISPOSAL SERVICES GROUP SUBTOTAL		$ 195.00
		SUBTOTAL FOR INVOICE		$ 195.00
		County Tax		$ 19.50

Please Remit To: LAIDLAW ENV. SVCS (IMP. VALLEY),INC
P.O. BOX 100026

PASADENA, CA 91189-0026

TOTAL DUE $ 214.50

585-4501-585001 6/92

REMITTANCE COPY

Document № 2053538

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

DEPUTY - GROSS LBS. See Document # 2053557

DEPUTY - TARE LBS.

DEPUTY - NET LBS.

SITE: IMPERIAL VALLEY

WMU: 2 SEC: B-6 ELEV: 10-20

GENERATOR: KOPPERS CO.

HAULER: LES MTZ.

MATERIAL DESCRIPTION: CONT. SOIL & DEBRIS

DRIVER [illegible] CARRIER LES MTZ. FEE $

Carried For: ~~Creosote~~ Koppers

Address From:

Laidlaw Environmental Services, Inc.
Imperial Valley Facility
Laidlaw Environmental Services, Inc.
5295 South Garvey Road
Westmorland, CA 92281
(619) 344-9400

UNITS	COMMODITY	MARK
	Creosote	92713557

TRUCK LICENSE NO. SP24747

TRAILER LICENSE NO. DT86193

TRAILER LICENSE NO.

15028

DATE: 05/21/93

JOB NO. / PHASE / TASK / SUB TASK: 2477

PROFIT CENTER: LF

DISPOSAL SITE TYPE: 92713957

MANIFEST NUMBER: N

GENERATOR OUT OF STATE: N

INTERSITE TRANSFER: 1464-1DR-0493 81387

WASTE STREAM NUMBER: 352 R

DHS: CRWQCB: UCD:

CLASSIFICATION: HAZ

PRODUCT CODE: DC104

TONS: 3 DM @ $65/DM

OFFICE USE:
MINIMUM DISPOSAL CHARGE $195.00 19.50
MINIMUM DISPOSAL TAX $214.50

pH LEVEL	6.84		AMMONIA	NA		DISTILLATION	NA
HCVP	0		RADIOACTIVITY	ND	PPM	PAINT FILTER	PASS
PHENOLS	ND	PPM	% OIL	0	CPM	XS OXIDANT	ND
SULFIDES	ND	PPM	% SOLIDS	99		SPIKES	
CYANIDES		PPM	FLASH POINT	NA	DEG/F		

CALLOUT _____ H CALLOUT _____ S HANDLING _____ SCALE FEE _____

WIND DISPERSAL PROGRAM WIND SPEED: 19 MPH DIRECTION: W

WATER SPRAY _____ SYNTHETIC COVER _____ FOAM _____ DIRT _____ OTHER _____

DRIVER PROTECTIVE GEAR REQUIRED HARD HAT ✓ GLOVES ✓

RUBBER BOOTS ✓ RESPIRATORY PROTECTION _____ FACE SHIELD _____

POST OFF-LOAD INSPECTION MUDFLAPS _____ TAILGATES _____ TIRES _____

INSPECTED BY _____ COMMENTS _____

G
T

You are, by this attachment, informed that Laidlaw Environmental Services, Inc.'s Imperial Valley Facility has all the required Federal, State, and Local permits necessary to receive your waste, if your waste meets all required predisposal conditions. The attached manifest is your notice that this facility has accepted this waste. This notice is being given pursuant to Section III (G) (2) of the Imperial Valley Facility's Department of Health Services Permit number 13-0001-80.

White - Billing -:- Canary - File -:- Pink - Billing -:- Goldenrod - Hauler

Form No. 10728 • Plaza Printers 344-2365

Kopper004730

State of California—Environmental Protection Agency
Form Approved OMB No. 2050-0039 (Expires 9-30-94)
Please print or type. *Form designed for use on elite (12-pitch) typewriter.*

See Instructions on back of page 6.

Department of Toxic Substances Control
Sacramento, California

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. ORD027734359 | Manifest Document No. 13957 | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: Koppers Company, 7540 NW St. Helens Rd, Portland, OR 97210

4. Generator's Phone: 503 286-3681

A. State Manifest Document Number: 92713957

B. State Generator's ID: HAHQ361-0468111

5. Transporter 1 Company Name: KVS Transportation | 6. US EPA ID Number: CAD982495608

C. State Transporter's ID: 312388

D. Transporter's Phone: 805-549-5220

7. Transporter 2 Company Name: Laidlaw Environmental Services RA | 8. US EPA ID Number: CAD000831121

E. State Transporter's ID:

F. Transporter's Phone: (50)372-4800

9. Designated Facility Name and Site Address: Laidlaw Environmental Services (Imperial Valley), 5295 S. Garvey Rd, Westmorland, CA 92281 | 10. US EPA ID Number: CAD000633164

G. State Facility's ID: CAD000633164

H. Facility's Phone: (619) 344-9400

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste Numbers
a. X HM Hazardous Waste, Solid, N.O.S. (Creosote), 9, NA3077, III	003	DM	1378	P	State 352; EPA/Other U051, D026
b.					State / EPA/Other
c.					State / EPA/Other
d.					State / EPA/Other

J. Additional Descriptions for Materials Listed Above: a) 1464-IAR-0493

K. Handling Codes for Wastes Listed Above: a. 03/D81 | b. | c. | d.

15. Special Handling Instructions and Additional Information: 24 Hour Emergency # (800) 535-5053 (515)
Wear PPE when handling
ERG# a) 31

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state and international laws.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month	Day	Year
JOHN A. OXFORD	John A Oxford	05	18	93

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
CLIFF R. RAY	Cliff R Ray	05	18	93

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Brian Eckhoff	Brian Eckhoff	05	19	93

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
Andrew Hamby	Andrew Hamby	05	21	93

DO NOT WRITE BELOW THIS LINE.

GENERATOR
TRANSPORTER
FACILITY

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550

DTSC 8022A (7/92)
EPA 8700—22

LAIDLAW ENVIRONMENTAL SERVICES
"An Equal Opportunity Employer"

MARTINEZ - 515
LAIDLAW ENV. SVCS OF CALIFORNIA,INC
4501 PACHECO BLVD.
MARTINEZ, CA 94553
Telephone: 415-372-4800

FEDERAL ID NUMBER: 65-0121392

DATE	INVOICE NO.
06/07/93	51530607027

Page 001

931866 - 1 -

ATTN: ACCOUNTS PAYABLE
KOPPERS INDUSTRIES, INC.
7540 N W SAINT HELENS ROAD
PORTLAND, OR 97210-3553

KOPPERS INDUSTRIES, INC.
7540 N W SAINT HELENS ROAD
PORTLAND, OR 97210-3553

TRANSPORTED BY	TERMS	DATE SHIPPED	P.O. NUMBER
KVS	Net 10 Days	05/18/93	93-19

WORK ORDER NO.	QUANTITY SHIPPED	DESCRIPTION	UNIT PRICE	AMOUNT
	3.000 EA	DRUMS TO IMPERIAL	95.0000	285.00
		MANIFEST # 92713957 WASTE CODE:		
		TRANSPORTATION GROUP SUBTOTAL		$ 285.00
		SUBTOTAL FOR INVOICE		$ 285.00
		County Tax		$ 0.00

RECEIVED
JUN 14 1993
KOPPERS INDS., INC.
PORTLAND, OR

ENTERED JUN 17 1993

NOTE: JOB/PROJECT# 131831

Please Remit To: LAIDLAW ENV. SVCS OF CALIFORNIA,INC
P.O. BOX 100026
PASADENA, CA 91189-0026

TOTAL DUE $ 285.00

585-4501-585001 6/92

CUSTOMER COPY

KI 37G REV 2.2M 6/90

GIL	DET	S DET	LOC	DEPT	TAX	EMP #	MOVE # PO #	AMOUNT
305	807		9270	910	0362			285.00

CIRCLE TERMS ON INVOICE

INV # 51530607027 DATE 6/07/93

A/P DEPARTMENT USE ONLY

VENDOR NUMBER 008370001

TERMS CODE 045 DUE DATE / /

OK TO PAY [signature]

GROSS AMOUNT
DISCOUNT $
NET $ 285.00

DIVISION	MONTH	AUDIT NUMBER
483	06	92700547

IMPORTANT: CIRCLE TERMS ON INVOICE

Koppers004732

LAIDLAW ENVIRONMENTAL SERVICES
"An Equal Opportunity Employer"

MARTINEZ - 515
LAIDLAW ENV. SVCS OF CALIFORNIA,INC
4501 PACHECO BLVD.
MARTINEZ, CA 94553
Telephone: 415-372-4800

DATE	INVOICE NO.
06/07/93	51530607027

FEDERAL ID NUMBER: 65-0121392

931866 - 1 -

ATTN: ACCOUNTS PAYABLE
KOPPERS INDUSTRIES, INC.
7540 N.W.SAINT HELENS ROAD

PORTLAND, OR 97210-3663

KOPPERS INDUSTRIES, INC.
7540 N.W.SAINT HELENS ROAD

PORTLAND, OR 97210-3663
SALES: DANN SCHOENDORF

TRANSPORTED BY	TERMS	DATE SHIPPED	P.O. NUMBER
KVS	Net 10 Days	05/18/93	93-19

WORK ORDER NO.	QUANTITY SHIPPED		DESCRIPTION	UNIT PRICE	AMOUNT
45413	3.000	EA	DRUMS TO IMPERIAL	95.0000	285.00
			MANIFEST # 92713957 WASTE CODE:		
			TRANSPORTATION GROUP SUBTOTAL		$ 285.00
			SUBTOTAL FOR INVOICE		$ 285.00
			County Tax		$ 0.00

* NOTE: JOB/PROJECT# 131831

Please Remit To: LAIDLAW ENV. SVCS OF CALIFORNIA,INC
P.O. BOX 100026

PASADENA, CA 91189-0026

TOTAL DUE $ 285.00

585-4501-585001 6/92

REMITTANCE COPY

LAIDLAW

ENVIRONMENTAL SERVICES OF CA, INC.

SERVICE ORDER 90 - 45413

JOB NO. 13183

DATE 5-18-93

TRANSPORTATION SERVICE ORDER

Transportation ID #: CAD000083121

☑ 4501 Pacheco Blvd.
Martinez, CA 94553
(415) 372-4800

☐ 3237 Patton Way
Bakersfield, CA 93308
(805) 835-5801 or
(805) 589-4970

☐ 221 E. "D" Street
Wilmington, CA 90744
(213) 518-4700

Customer Name: Koppers

Telephone: (503) 285-2831

Billing Address: 7450 NW St. Helens Rd

Contact Person: John Oxford

City: Portland State OR

BOE #:

Job Location: Portland OR

Destination: Imperial

Type of Material:

Sales Person:

Generator: Koppers Co.

EPA Number:

Generator ID Number (State):

Facility EPA NO.:

Disposal: LES Facility ✓ Outside Facility ____ None ____

Customer P.O. 93-19

Manifest # ____ . ____ # ____ # ____ # ____

Services Performed Pick 3x55 to IV

Start Miles: End Miles: Total Miles:

Truck No: Trailer No: Net Wgt:

Capacity:

Driver Time: Start (AM/PM): Stop (AM/PM) Gross Time

Meals: Start Time (AM/PM): Stop (AM/PM) Less Time

Other Time Detail Adj. Time

Drivers Name KVS Trans Driver No. LES m/z Total Time

Customer Site: Time In Disposal Site: Time In Time In

Time Out Time Out Time Out

Explanation of Time:

CUSTOMER AUTHORIZATION AND APPROVAL SIGNATURE:

FOR ACCOUNTING ONLY

PROD CODE	DESCRIPTION	QTY	UOM	RATE	EXT	PROD CODE	DESCRIPTION	QTY	UOM	RATE	EXT
14000	TRANS		ST			24015	HAZ SOLIDS				
14000	TRANS		OT			24015	N/HAZ SOLIDS				
14000	TRANS		DT			24010	HAZ LIQUIDS				
	2ND DRIVER					24010	N/HAZ LIQUIDS				
	SUBHAULER					24020	DRUMS				
54045	LABOR					24025	SOLID SURCHG				
94065	BIN RENTAL					24025	STABILIZATION				
14000	TRANS (NO DISP)					24025	LIQ SURCHG				
14000	WASHOUT						TAXES				
14000	SCALE/CERTS						TAXES				
14000	SUBSISTENCE					34035	ANALYTICAL				
74055	TOLLS					74055	MISC CHARGES				
90465	TYVEK					74055	MISC CHARGES				
90465	BOOTS										
90465	GOGGLES										
90465	GLOVES						Pickup drums	3	EA	95	285
90465	BIN LINERS										
70455	OTHERS										

WHITE - BAKERSFIELD ACCTNG WHITE - BAKERSFIELD ACCTNG PINK - CUSTOMER COPY CANARY - FACILITY ACCTNG BLUE - SALESPERSON

State of California—Environmental Protection Agency
Form Approved OMB No. 2050-0039 (Expires 9-30-94)
Please print or type. *Form designed for use on elite (12-pitch) typewriter.*

See Instructions on back of page 6.

Department of Toxic Substances Control
Sacramento, California

92713957

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: OR0027734359 — Manifest Document No.: 13957
2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: Koppers Company, 7540 NW St. Helens Rd, Portland, OR 97210
4. Generator's Phone: (503) 286-3681
5. Transporter 1 Company Name: [illegible]
6. US EPA ID Number: [illegible]
7. Transporter 2 Company Name: Laidlaw Environmental Services of CA
8. US EPA ID Number: CAD000083121
9. Designated Facility Name and Site Address: Laidlaw Environmental Services (Imperial Valley), 5295 S. Garvey Rd, Westmorland, CA 92281
10. US EPA ID Number: CAD000633164

A. State Manifest Document Number: 92713957
B. State Generator's ID: [illegible]
C. State Transporter's ID: [illegible]
D. Transporter's Phone: [illegible]
E. State Transporter's ID: [illegible]
F. Transporter's Phone: [illegible]
G. State Facility's ID: [illegible]
H. Facility's Phone: (619) [illegible]

11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	12. Containers Type	13. Total Quantity	14. Unit Wt/Vol
a. X Hazardous Waste, Solid, N.O.S. (Creosote), 9, NA 3077, III	003	DM	1378	P
b.				
c.				
d.				

[illegible]

15. Special Handling Instructions and Additional Information: 24 Hour Emergency # (800) 535-5053 (515)
Wear PPE when handling
ERG# a) 31

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable federal, state and international laws.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month	Day	Year
JOHN A OXFORD	John A Oxford	05	18	93

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
[illegible]	[illegible]	05	18	93

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Brian Eckhoff	Brian Eckhoff	05	19	93

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month	Day	Year
Andrew Hamby	[illegible]	05	21	93

DO NOT WRITE BELOW THIS LINE

DTSC 8022A (7/92)
EPA 8700—22

Green: HAULER RETAINS

Koppers004735

Document № 2053538

WEIGHMASTER CERTIFICATE

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on this certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

See Document # 2053557

DEPUTY - GROSS LBS.

DEPUTY - TARE LBS.

DEPUTY - NET LBS.

SITE: IMPERIAL VALLEY

WMU: 2 SEC: B-6 ELEV: 10-20

GENERATOR: KOPPERS CO.

HAULER: LES MTZ.

MATERIAL DESCRIPTION: CONT. SOIL & DEBRIS

DATE: 05/21/92

JOB NO. / PHASE / TASK / SUBTASK

PROFIT CENTER

DISPOSAL SITE TYPE

MANIFEST NUMBER

GENERATOR OUT OF STATE

INTERSITE TRANSFER

WASTE STREAM NUMBER

DHS: CRWOOD UOS

CLASSIFICATION

PRODUCT CODE

TONS

OFFICE USE

MINIMUM DISPOSAL CHARGE

MINIMUM DISPOSAL TAX

DRIVER: [illegible] CARRIER: LES MTZ. FEE $

Carried For: Koppers

Address From:

Laidlaw Environmental Services, Inc.
Imperial Valley Facility
Laidlaw Environmental Services, Inc.
5295 South Garvey Road
Westmorland, CA 92281
(619) 344-9400

UNITS	COMMODITY	MARK	TRUCK LICENSE NO.
	Concrete	9271557	SP2747
			TRAILER LICENSE NO. DT85-93
			TRAILER LICENSE NO. 15028
	6.84		NA NA

pH LEVEL	0		AMMONIA	ND	PPM	DISTILLATION	PASS
HCVP	ND	PPM	RADIOACTIVITY	0	CPM	PAINT FILTER	ND
PHENOLS	ND	PPM	% OIL	99		XS OXIDANT	
SULFIDES	ND	PPM	% SOLIDS	NA		SPIKES	
CYANIDES		PPM	FLASH POINT		DEG/F		

CALLOUT ____ H CALLOUT ____ S HANDLING 19 SCALE FEE ____

WIND DISPERSAL PROGRAM ____ WIND SPEED: 19 MPH DIRECTION: W

WATER SPRAY ____ SYNTHETIC COVER ____ FOAM ____ DIRT ____ OTHER ____

DRIVER PROTECTIVE GEAR REQUIRED ____ HARD HAT ✓ GLOVES ✓

RUBBER BOOTS ✓ RESPIRATORY PROTECTION ____ FACE SHIELD ✓

POST OFF-LOAD INSPECTION ____ MUDFLAPS ____ TAILGATES ____ TIRES ____

INSPECTED BY ____ COMMENTS ____

G T

You are, by this attachment, informed that Laidlaw Environmental Services, Inc.'s Imperial Valley Facility has all the required Federal, State, and Local permits necessary to receive your waste, if your waste meets all required predisposal conditions. The attached manifest is your notice that this facility has accepted this waste. This notice is being given pursuant to Section III (G) (2) of the Imperial Valley Facility's Department of Health Services Permit number 13-0001-60.

White - Billing -:- Canary - File -:- Pink - Billing -:- Goldenrod - Hauler

Form No. 10728 • Plaza Printers 344-2365

Koppers004736

CUSTOMER/VENDOR NUMBER REQUESTS

TO: FR Terry Shilling/Tootie Stetter FROM: TO Cheryl Gotthard

LOCATION: Rm. 1950, FAX 2159 LOCATION:

SUBJECT: CVN Request DATE: 6/14/93

Please circle one of the following:

TYPE OF REQUEST: (Vendor) Customer Employee
CATEGORY: (General) Government Railroad Utility

NAME FOR REQUEST: Landlaw Environmental SVCS - Calif

SOLD TO ADDRESS:

REMIT TO ADDRESS: (SEE BOTTOM OF RQV.) ~~[illegible]~~

LOCATION NO: 9270 DIVISION NO: 483

ASSIGNED NO: 0083-700-01 DATE IN SYSTEM:

J. CAMERON McKERNAN

Engineer - Naval Architect

1208 S.E. 7th Avenue • Portland, Oregon 97214 • (503) 232-7211 • FAX (503) 232-7658

November 9, 1994

INVOICE

NO: PI94-83

Koppers Industries, Inc.
7540 NW Saint Helens Road
Portland, Oregon 97210-3663

Attention: Amos S. Kamerer

DESCRIPTION	AMOUNT

Pacific Northern Oil Co. Ship Unloading Pipeline
(McKernan Job No. P94-26)

Engineering service to prepare a conceptual arrangement plan and a detailed cost estimate for modifications to be made to the existing Pacific Northern Oil Pier for a ship unloading pipeline to Koppers Industries, Inc. Services and charges are as follows:

1. McKernan visited Koppers Industries, Inc. in Linnton, Oregon on 9/23/94. Met with Amos Kamerer to discuss the project and tour the plant.

2. Prepared "CONCEPTUAL ARRANGEMENT - SHIP UNLOADING PIPELINE" McKernan Plan No. 94026. Sent plan with letter dated 10/14/94 by mail to Amos Kamerer and by Federal Express to Sayeed Sultan (Koppers, Pittsburgh).

3. Prepared a COST ESTIMATE of the entire project and prepared some OVERHEAD PROJECTOR SLIDES showing details of the conveying system as requested by Sayeed Sultan. Sent the estimate and the slides with letter dated 10/27/94 by mail to Amos Kamerer and by Federal Express to Sayeed Sultan.

CHARGES (Copy of Activity Logs attached):

Principal engineer:	
7½ man-hours @ $60 per man-hour	$ 510.00
Associate:	
13 man-hours @ $45 per man-hour	585.00
Drafting technician:	
½ man-hours @ $30 per man-hour	15.00
FEDERAL EXPRESS CHARGES	
(Copy of receipts attached)	25.00
TOTAL AMOUNT DUE	$1,133.00

TERMS: Net cash

OK 11/10/94

KI 37Q REV 2.2M 6/90

GIL	DET.	S-DET.	LOC.	DEPT.	TAX	EMP #	MOVE # PO #	AMOUNT
4210			9270	22	0362			1133 00

CIRCLE TERMS ON INVOICE

INV # 9483 DATE 11/9/94

A/P DEPARTMENT USE ONLY

VENDOR NUMBER 0 0 6 5 6 5 0 0 8

TERMS CODE 045 DUE DATE / /

OK TO PAY

GROSS AMOUNT 1133 00

DISCOUNT $

NET $

IMPORTANT: CIRCLE TERMS ON INVOICE

DIVISION	MONTH	AUDIT NUMBER
483	11	92700977

ACTIVITY LOG

NAME J. CAMERON MCKERNAN PERIOD ENDING SEPTEMBER 30, 1994

JOB NO: P94-26 NAME GASCO DOCK FOR KOPPERS

DATE	HOURS	DESCRIPTION OF ACTIVITY
9-23	2	Went directly from the house to the Koppers Plant on NW St. Helens Road. Conferred with Amos Kamerer and did a tour of the plant to see what equipment and things we needed to have.

SIGNED J. Cameron McKernan DATE 10/10/94

2 mh

ACTIVITY LOG

NAME Sam Kaplan PERIOD ENDING Sept 15, 94

JOB NO: P94-26 NAME Koppers Dock Evaluation

DATE	HOURS	DESCRIPTION OF ACTIVITY
9/13	1	Overview of scope of work w/Dave. Review of file and history of facility and site.
9/15	1	Revised site plan to remove proposed dock and prepare for proposed cargo line to Koppers facility.

SIGNED Sam Kaplan DATE Sept 15, 94

2 m.h

Koppers004740

ACTIVITY LOG

NAME Sam Roplin PERIOD ENDING Sept 30, '94

JOB NO: P94-26 NAME Exxco Dock to Koppers

DATE	HOURS	DESCRIPTION OF ACTIVITY
10/11	1½	Worked w/ Sam on pipeline layout and configuration on Exxco property.
10/12	4	Routed pipe from EXXCO dock to Koppers tank facility. Analyzed pipe and support requirements imposed on the pipeline ie: stable surface supports for 10" cargo line w/ 2 2" hot oil trace lines undergoing Δt of 500°F.
10/13	3	Drafting. Site plan w/ discharge schematic and pipe support details.
10/14	1½ (1 HR. DRAFTING)	Received design w/ Sam and made revisions.

SIGNED Sam Roplin DATE 10/17/94

ACTIVITY LOG

NAME J. CAMERON MCKERNAN PERIOD ENDING OCTOBER 15, 1994

JOB NO: P94-26 NAME GASCO DOCK FOR KOPPERS

DATE	HOURS	DESCRIPTION OF ACTIVITY
10-11	2	Worked with Sam Replin. Sketched out the routing of the pipeline from the dock to the storage tanks. Outlined with Sam what has to go on the drawing to make a complete concept arrangement.
10-13	1	Reviewed with Sam what's on the drawings.
10-14	1	Checked Sam's conceptual arrangement for the cradles and marked it up with some changes. Had Mary draft a forwarding letter for it. Sam made the corrections and late in the afternoon Mary delivered it to Federal Express for Sayeed and in the mail for Amos.

SIGNED JCMcK DATE 11-8-94

JCMcK

ACTIVITY LOG

NAME J. CAMERON MCKERNAN PERIOD ENDING OCTOBER 31, 1994

JOB NO: P94-26 NAME DOCK EVALUATION FOR KOPPERS

DATE	HOURS	DESCRIPTION OF ACTIVITY
10-21	1/2	Reviewed the FAX we received from Sayeed and went over it with Sam and decided how we were going to handle the transparencies.
10-27	2	Reviewed Sam's work and the estimate. Also reviewed the slides. prepared a forwarding letter to Sayeed Sultan. Also telephoned Amos Kanerer and gave him what the estimate was. Mary took the package and hand delivered it Federal Express.

SIGNED JCMK DATE 11-8-94

ACTIVITY LOG

NAME Sam Replin PERIOD ENDING Oct 31'94

JOB NO: P94-26 NAME Exxco Dock (Koppers)

DATE	HOURS	DESCRIPTION OF ACTIVITY
10/20	3	Cost estimate for construction of 1500' cargo line at PAVOCO Dock.
10/21	2	Do.
10/24	½	Do.
10/25	5	Size pressure relief valve, pump and ancillary piping. Obtain outstanding costs and format.
10/26	½	Finalize estimate

SIGNED Sam Replin DATE 11/1/94

ACTIVITY LOG

NAME MICHAEL N KINCAID PERIOD ENDING 10/31/94

JOB NO: 9426 NAME GASCO DOCK EVALUATION

DATE	HOURS	DESCRIPTION OF ACTIVITY
0/27	1/2	DREW ELEVATION & PLAN OF TWO TANKS ON 8 1/2 x 11 SHEET & PLOT

SIGNED [signature] DATE 11-1-94

FEDERAL EXPRESS

USE THIS AIRBILL FOR SHIPMENTS WITHIN THE CONTINENTAL U.S.A., ALASKA AND HAWAII.
USE THE INTERNATIONAL AIR WAYBILL FOR SHIPMENTS TO PUERTO RICO AND ALL NON U.S. LOCATIONS.
QUESTIONS? CALL 800-238-5355 TOLL FREE.

AIRBILL PACKAGE TRACKING NUMBER 2689403301

4228M 2689403301

SENDER'S COPY

SENDER'S COPY

1 SENDER'S FEDERAL EXPRESS ACCOUNT NUMBER: 1724-6485-8 | Date: 10-14-94

From (Your Name) Please Print	Your Phone Number (Very Important)	2 To (Recipient's Name) Please Print	Recipient's Phone Number (Very Important)
	503-232-7211	Sayeed Sultan	412 227-2325
Company: J CAMERON MCKERNAN ARCHITECT	Department/Floor No.	Company: Koppers Industries Inc.	Department/Floor No.
Street Address: 1208 SE 7TH AVE		Exact Street Address (We Cannot Deliver to P.O. Boxes or P.O. Zip Codes.): 436 Seventh Avenue	
City: PORTLAND State: OR	ZIP Required: 97214	City: Pittsburgh, State: PA	ZIP Required: 15219-1800

YOUR INTERNAL BILLING REFERENCE INFORMATION (optional) (First 24 characters will appear on invoice.)

H IF HOLD AT FEDEX LOCATION, Print FEDEX Address Here
Street Address
City State ZIP Required

3 PAYMENT 1 [X] Bill Sender 2 [ ] Bill Recipient's FedEx Acct. No. 3 [ ] Bill 3rd Party FedEx Acct. No. 4 [ ] Bill Credit Card 5 [ ] Cash/Check Acct./Credit Card No. Exp. Date

4 SERVICES (Check only one box)

Priority Overnight (Delivery by next business morning†)
- 11 [ ] OTHER PACKAGING
- 16 [ ] FEDEX LETTER*
- 12 [ ] FEDEX PAK*
- 13 [ ] FEDEX BOX
- 14 [ ] FEDEX TUBE

Standard Overnight (Delivery by next business afternoon. No Saturday delivery†)
- 51 [ ] OTHER PACKAGING
- 56 [X] FEDEX LETTER*
- 52 [ ] FEDEX PAK*
- 53 [ ] FEDEX BOX
- 54 [ ] FEDEX TUBE

Economy Two-Day (Delivery by second business day †)
- 30 [ ] ECONOMY*

* Economy Letter Rate not available. Minimum charge: One pound Economy rate.

Government Overnight (Restricted for authorized users only)
- 46 [ ] GOVT LETTER
- 41 [ ] GOVT PACKAGE

Freight Service (for packages over 150 lbs.)
- 70 [ ] OVERNIGHT FREIGHT** (Confirmed reservation required)
- 80 [ ] TWO-DAY FREIGHT**

† Delivery commitment may be later in some areas. *Declared Value Limit $500. **Call for delivery schedule.

5 DELIVERY AND SPECIAL HANDLING (Check services required)

Weekday Service
- 1 [ ] HOLD AT FEDEX LOCATION WEEKDAY (Fill in Section H)
- 2 [ ] DELIVER WEEKDAY

Saturday Service
- 31 [ ] HOLD AT FEDEX LOCATION SATURDAY (Fill in Section H)
- 3 [ ] DELIVER SATURDAY (Extra charge) (Not available to all locations)
- 9 [ ] SATURDAY PICK-UP (Extra charge)

Special Handling
- 4 [ ] DANGEROUS GOODS (Extra charge)
- 6 [ ] DRY ICE Dangerous Goods Shipper's Declaration not required
  Dry Ice, 9, UN 1845, ____ X ____ kg. 904 III
- [ ] DESCRIPTION
- 12 [ ] HOLIDAY DELIVERY (If offered) (Extra charge)

6

PACKAGES	WEIGHT In Pounds Only	YOUR DECLARED VALUE (See right)
Total	Total	Total

DIM SHIPMENT (Chargeable Weight) [ ] ____ lbs.
L x W x H

Received At
1 [ ] Regular Stop 3 [ ] Drop Box 4 [ ] B.S.C. 2 [ ] On-Call Stop 5 [ ] Station

SERVICE CONDITIONS, DECLARED VALUE AND LIMIT OF LIABILITY

Use of this airbill constitutes your agreement to the service conditions in our current Service Guide, available upon request. See back of sender's copy of this airbill for information. Service conditions may vary for Government Overnight Service. See U.S. Government Service Guide for details.

We will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, and document your actual loss for a timely claim. Limitations found in the current Federal Express Service Guide apply. Your right to recover from Federal Express for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the declared value specified to the left. Recovery cannot exceed actual documented loss. The maximum Declared Value for FedEx Letter and FedEx Pak packages is $500.

In the event of untimely delivery, Federal Express will at your request and with some limitations refund all transportation charges paid. See Service Guide for further information.

7 Sender authorizes Federal Express to deliver this shipment without obtaining a delivery signature and shall indemnify and hold harmless Federal Express from any claims resulting therefrom.

Release Signature:

Federal Express Use
- Base Charges
- Declared Value Charge
- Other 1
- Other 2
- Total Charges

REVISION DATE 4/94
PART #145412 FXEM 7/94
FORMAT #160
160

© 1993-94 FEDEX
PRINTED IN U.S.A.

(424) Postage $9.00

10-14-94

$9.00

"CONCEPTUAL PLAN"

Sent 10.14.94

(p426)

Koppers004746

FEDERAL EXPRESS

USE THIS AIRBILL FOR SHIPMENTS WITHIN THE CONTINENTAL U.S.A., ALASKA AND HAWAII.
USE THE INTERNATIONAL AIR WAYBILL FOR SHIPMENTS TO PUERTO RICO AND ALL NON U.S. LOCATIONS.
QUESTIONS? CALL 800-238-5355 TOLL FREE.

AIRBILL PACKAGE TRACKING NUMBER 2689403356

4228M 2689403356

SENDER'S COPY

SENDER'S COPY

1 SENDER'S FEDERAL EXPRESS ACCOUNT NUMBER: 1724-6465-8 | Date: 10-27-94

From (Your Name) Please Print: | Your Phone Number (Very Important): 503-232-7211

Company: J CAMERON MCKERNAN ARCHITECT | Department/Floor No.:

Street Address: 1208 SE 7TH AVE

City: PORTLAND | State: OR | ZIP Required: 97214

2 To (Recipient's Name) Please Print: Sayeed Sultan | Recipient's Phone Number (Very Important): (412) 227 2325

Company: [redacted] Koppers Industries, Inc. | Department/Floor No.:

Exact Street Address (We Cannot Deliver to P.O. Boxes or P.O. Zip Codes.): 436 Seventh Avenue

City: Pittsburgh, PA | State: | ZIP Required: 15219-1800

YOUR INTERNAL BILLING REFERENCE INFORMATION (optional) (First 24 characters will appear on invoice.)

H IF HOLD AT FEDEX LOCATION, Print FEDEX Address Here: Street Address | City | State | ZIP Required

3 PAYMENT: 1 [X] Bill Sender 2 [ ] Bill Recipient's FedEx Acct. No. 3 [ ] Bill 3rd Party FedEx Acct. No. 4 [ ] Bill Credit Card 5 [ ] Cash/Check Acct./Credit Card No. Exp. Date

4 SERVICES (Check only one box)

Priority Overnight (Delivery by next business morning†): 11 [ ] OTHER PACKAGING; 16 [ ] FEDEX LETTER*; 12 [ ] FEDEX PAK*; 13 [ ] FEDEX BOX; 14 [ ] FEDEX TUBE

Standard Overnight (Delivery by next business afternoon. No Saturday delivery†): 51 [ ] OTHER PACKAGING; 56 [ ] FEDEX LETTER*; 52 [X] FEDEX PAK*; 53 [ ] FEDEX BOX; 54 [ ] FEDEX TUBE

Economy Two-Day (Delivery by second business day †): 30 [ ] ECONOMY*

* Economy Letter Rate not available. Minimum charge: One pound Economy rate.

Government Overnight (Restricted for authorized users only): 46 [ ] GOV'T LETTER; 41 [ ] GOV'T PACKAGE

Freight Service (for packages over 150 lbs.): 70 [ ] OVERNIGHT FREIGHT** (Confirmed reservation required); 80 [ ] TWO-DAY FREIGHT**

† Delivery commitment may be later in some areas. ** Declared Value Limit $500. *Call for delivery schedule.

5 DELIVERY AND SPECIAL HANDLING (Check services required)

Weekday Service: 1 [ ] HOLD AT FEDEX LOCATION WEEKDAY (Fill in Section H); 2 [ ] DELIVER WEEKDAY

Saturday Service: 31 [ ] HOLD AT FEDEX LOCATION SATURDAY (Fill in Section H); 3 [ ] DELIVER SATURDAY (Extra charge) (Not available to all locations); 9 [ ] SATURDAY PICK-UP (Extra charge)

Special Handling: 4 [ ] DANGEROUS GOODS (Extra charge); 6 [ ] DRY ICE Dangerous Goods Shipper's Declaration not required. Dry Ice, 9, UN 1845, ___ x ___ kg. 904 III; [ ] DESCRIPTION; 12 [ ] HOLIDAY DELIVERY (If offered) (Extra charge)

6 PACKAGES | WEIGHT In Pounds Only | YOUR DECLARED VALUE (See right)

Total 1 | Total | Total

DIM SHIPMENT (Chargeable Weight) [ ] ___ lbs. L x W x H

Received At: 1 [ ] Regular Stop; 2 [ ] On-Call Stop; 3 [ ] Drop Box; 4 [ ] B.S.C.; 5 [ ] Station

SERVICE CONDITIONS, DECLARED VALUE AND LIMIT OF LIABILITY

Use of this airbill constitutes your agreement to the service conditions in our current Service Guide, available upon request. See back of sender's copy of this airbill for information. Service conditions may vary for Government Overnight Service. See U.S. Government Service Guide for details.

We will not be responsible for any claim in excess of $100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, and document your actual loss for a timely claim. Limitations found in the current Federal Express Service Guide apply. Your right to recover from Federal Express for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of $100 or the declared value specified to the left. Recovery cannot exceed actual documented loss. The maximum Declared Value for FedEx Letter and FedEx Pak packages is $500.

In the event of untimely delivery, Federal Express will at your request and with some limitations refund all transportation charges paid. See Service Guide for further information.

7 Sender authorizes Federal Express to deliver this shipment without obtaining a delivery signature and shall indemnify and hold harmless Federal Express from any claims resulting therefrom.

Release Signature:

Federal Express Use: Base Charges | Declared Value Charge | Other 1 | Other 2 | Total Charges

REVISION DATE 4/94 PART #145412 FXEM 7/94 FORMAT #160

160

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(424) Postage

$11.24

10-27-94

Overhead Projector slides and response to FAX

Re: P94-26

Koppers004747

D
Misc

Koppers Company, Inc.
Pittsburgh, Pa. 15219

KOPPERS

8-26
430

Location No. 483/9270 Date 12/13/88 No. 669460

Pay to the order of -KOPPERS- COMPANY, INC. $10 and 00 cts $ 10.00

Not valid over $3500.00

DEPARTMENT OF AGRICULTURE
635 CAPITOL ST. N.E.
SALEM, OREGON 97310-0110

Kelly S Marshall

Mellon Bank N. A.
Pittsburgh, Pa.

ADS-179 REV. 10 [redacted] ⑈669460⑈ ⑆043000261⑆ 166⑈1468⑈

General Ledger	Detail	Sub Detail	Location or Contract	Dept or Orig. Loc.	Tax Codes	Emp. No	Purchase Order No: Rec Id.	Br.	or P.O. No.	P.O. Add.	P.O. Add or Resource	Quantity	Unit Code	Amount Distributed: Dollars	Cents
305	973	X	9270	910	0360									10	00

Vendor No. 9466-260-13

Description: License renewal for John A. Oxford, 7540 N.W. St. Helens Rd. Portland, OR. 97210 #000520

FORM 1013

DEPARTMENT OF AGRICULTURE
635 CAPITOL ST. N.E.
SALEM, OREGON 97310-0110

FOR OFFICIAL USE ONLY

420 250703 84108 00000 00000

AGENCY AG PROGRAM AREA 1A LICENSE TYPE 65 FIRM NUMBER 00077467 LICENSE NUMBER 000520

LICENSE EXPIRES 12/31/88

KOPPERS COMPANY INC
JOHN A OXFORD
7540 NW ST HELENS RD
PORTLAND OR 97210 26

PHONE NUMBER 503-286-3681

BUSINESS LOCATION
STREET ADDRESS 7540 NW ST HELENS RD
CITY, STATE PORTLAND OR 97210 26

CHECK ONE OF THE FOLLOWING: X RENEWAL NEW LICENSE ADDITIONAL INFORMATION DELETION

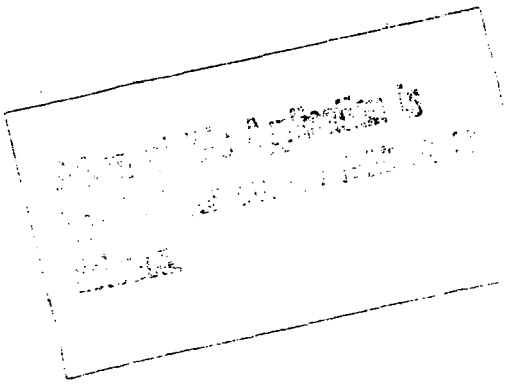
CHECK TYPE OF OWNERSHIP: INDIVIDUAL A,B CORPORATION E,F GOVERNMENTAL AGENCY I,J
PARTNERSHIP C,D COOPERATIVE G,H ASSUMED BUSINESS NAME

**********PESTICIDE DEALER**********

LICENSE FEE SCHEDULE

PAY THIS AMOUNT FOR LICENSE ; $10.00

LICENSE IS PERSONAL TO THE APPLICANT AND CANNOT BE TRANSFERRED
TO ANOTHER PERSON OR ENTITY



TOTAL FEE SUBMITTED : $-------

SIGNATURE----------TITLE----------DATE----------

PRINT OWNER OR SIGNATORY NAME ----------
MAKE REMITTANCE PAYABLE TO OREGON STATE DEPARTMENT OF AGRICULTURE

Koppers Company, Inc.
Pittsburgh, Pa. 15219

KOPPERS

8-26
430

Location No. ~~XXX~~ 456 / 9270 Date 6/20/88 No. 669260

Pay - KOPPERS COMPANY, INC. - Thirty and 00 cts $ 30.00
to the order of

Not valid over $3500.00

DEPARTMENT OF AGRICULTURE
STATE OF OREGON
635 CAPITAL ST. N.E.
SALEM, OREGON 97310-0110

VOID

Mellon Bank N. A.
Pittsburgh, Pa.

ADS-179 REV. 10

[redacted] ⑈669260⑈ ⑆043000261⑆ 166⑈1468⑈

General Ledger	Detail	Sub Detail	Location or Contract	Dept. or Orig. Loc.	Tax Codes	Emp. No.	Purchase Order No. or Rec. Id.	Br.	P.O. No.	P.O. Add.	P.O. Add or Resource	Quantity	Unit Code	Amount Distributed Dollars	Cents
1426	973	X	2060 XXXX	649 XXX	0360									30	00

Vendor No.

Description

SCALE LICENSE RENEWAL #9865

FORM 1013

DEPARTMENT OF AGRICULTURE
635 CAPITOL ST. N.E.
SALEM, OREGON 97310-0110

FOR OFFICIAL USE ONLY

420 250301 81761 81771 81781

AGENCY AG PROGRAM AREA 1D LICENSE TYPE FIRM NUMBER 00009865 LICENSE NUMBER SEE BELOW

LICENSE EXPIRES 06/30/88

KOPPERS CO INC
7540 NW ST HELENS RD
PORTLAND OR 97229 26

PHONE NUMBER 503-286-3681

BUSINESS LOCATION
STREET ADDRESS 7540 NW ST HELENS RD
CITY, STATE PORTLAND OR 97229 26

CHECK ONE OF THE FOLLOWING: X RENEWAL NEW LICENSE ADDITIONAL INFORMATION DELETION

CHECK TYPE OF OWNERSHIP: INDIVIDUAL A,B PARTNERSHIP C,D CORPORATION E,F COOPERATIVE G,H GOVERNMENTAL AGENCY I,J ASSUMED BUSINESS NAME

WEIGHTS AND MEASURES

DEVICE INFORMATION FOR CORRECTION OR DELETION

AG-1D-24-000014 DEVICE, SCALES TYPE C

STREET LOCATION	CITY	STATE	ZIP CODE	COUNTY
7540 NW ST HELENS RD	PORTLAND	OR.	97229	26

TOTAL DEVICES 1 REMOTE READOUTS TOTAL FEE $ 30.00

PORTLAND OR

Return of this Application is Required for license renewal or deletion.

JUN 9 1988

TOTAL FEE SUBMITTED : $ 30.00

****

MAKE REMITTANCE PAYABLE TO OREGON STATE DEPARTMENT OF AGRICULTURE

FOR ADDITIONAL INFORMATION PLEASE CALL 378-3792

****

LICENSE RENEWAL STEPS

FOR 1988 - 1989 WEIGHING AND MEASURING DEVICE LICENSES

(1987 - 1988 LICENSES EXPIRE ON JUNE 30, 1988)

1. Please make any necessary changes or corrections to the name, address, or number of scales, pumps, meters or remote readouts by crossing out the old and marking the new information right on the enclosed renewal application sheet(s).

2. **REMOTE READOUT FEE:** Each separate scale, pump or meter that is connected to a remote readout (these may be indicators, consoles, terminals, or printers) located physically separate from the weighing or measuring device is subject to an additional fee equal to 50% of the established basic device license fee up to a maximum of $100 additional fee per device. Example: 6 gas pumps read out on a cashier's console gives 6 X $7.50 per pump (Type F) or $45 total in remote readout additional fee. It is the total number of pumps (each nozzle is separate device) that can be read remotely, not the number of consoles, that gives the total readouts for licensing.

   A remote readout license is required regardless of how the information on the remote display is used or not used.

3. Fill in on the sheet(s) the **TOTAL FEES** due for the number and type of scales, meters and remote readouts to be in service during the period from July 1, 1988 through June 30, 1989.

4. Return ALL sheets (except this page) with your correct total payment (see FEE SCHEDULE below) made out to **"OREGON DEPARTMENT OF AGRICULTURE".**

   NOTE: PLEASE IDENTIFY AND RETURN IF OUT-OF-BUSINESS OR OWNERSHIP HAS CHANGED. GIVE NAME OF NEW OWNERS IF KNOWN.

1988 - 1989 FEE SCHEDULE

FOR COMMERCIAL WEIGHING AND MEASURING DEVICES

TYPE	WEIGHING DEVICES	DEVICE FEE
A	SCALES 0-400 POUNDS CAPACITY	$12.00 each
B	SCALES 401-1160 POUNDS CAPACITY	$18.00 each
C	SCALES 1161-7500 POUNDS CAPACITY	$30.00 each
D	SCALES 7,501-60,000 POUNDS CAPACITY	$85.00 each
E	SCALES OVER 60,000 POUNDS CAPACITY	$125.00 each
W	CONTINUOUS WEIGHING DEVICES UNDER 10 TONS PER HOUR	$100.00 each
X	CONTINUOUS WEIGHING DEVICES 10 TO 150 TONS PER HOUR	$160.00 each
Y	CONTINUOUS WEIGHING DEVICES 151 TO 1,000 TONS PER HOUR	$315.00 each
Z	CONTINUOUS WEIGHING DEVICES OVER 1,000 TONS PER HOUR	$725.00 each

TYPE	LIQUID-FUEL METERING DEVICES	DEVICE FEE
F	SERVICE STATION TYPE PUMP METERS UNDER 20 GALLONS PER MINUTE CAPACITY (EXCEPT LPG METERING EQUIPMENT)	$15.00 each
G	BULK PETROLEUM FUEL METERS 20-150 GALLONS PER MINUTE CAPACITY	$25.00 each
H	BULK PETROLEUM FUEL METERS OVER 150 GALLONS PER MINUTE CAPACITY	$42.00 each
M	LIQUEFIED PETROLEUM GAS (LPG) METERS 3/4 INCH DIAMETER OR UNDER	$50.00 each
N	LIQUEFIED PETROLEUM GAS (LPG) METERS OVER 3/4 INCH DIAMETER	$95.00 each

OREGON LAW REQUIRES SCALES, PUMPS METERS, ETC. TO BE LICENSED ANNUALLY BEFORE USE IN COMMERCE

Koppers004753

FORM 1013

DEPARTMENT OF AGRICULTURE
635 CAPITOL ST. N.E.
SALEM, OREGON 97310-0110

FOR OFFICIAL USE ONLY

420 250301 81761 81771 81781

AGENCY AG PROGRAM AREA 1D LICENSE TYPE FIRM NUMBER 00009865 LICENSE NUMBER SEE BELOW PAGE 1

LICENSE EXPIRES 06/30/88

KOPPERS CO INC
7540 NW ST HELENS RD
PORTLAND OR 97229 26

PHONE NUMBER 503-286-3681

BUSINESS LOCATION
STREET ADDRESS 7540 NW ST HELENS RD
CITY, STATE PORTLAND OR 97229 26

CHECK ONE OF THE FOLLOWING: X RENEWAL NEW LICENSE ADDITIONAL INFORMATION DELETION

CHECK TYPE OF OWNERSHIP: INDIVIDUAL A,B PARTNERSHIP C,D CORPORATION E,F COOPERATIVE G,H GOVERNMENTAL AGENCY I,J ASSUMED BUSINESS NAME

WEIGHTS AND MEASURES

DEVICE INFORMATION FOR CORRECTION OR DELETION

AG-1D-24-000014 DEVICE, SCALES TYPE C

STREET LOCATION	CITY	STATE	ZIP CODE	COUNTY
7540 NW ST HELENS RD	PORTLAND	OR.	97229	26

TOTAL DEVICES 1 REMOTE READOUTS TOTAL FEE $ 30.00

PORTLAND, OR

Return of this Application is Required for license renewal or deletion.

JUN 9 1988

TOTAL FEE SUBMITTED : $ 30.00

****

MAKE REMITTANCE PAYABLE TO OREGON STATE DEPARTMENT OF AGRICULTURE

FOR ADDITIONAL INFORMATION PLEASE CALL 378-3792

****

Date: 6/15/00 7:30 AM
Sender: Traci Self
To: Amos Kamerer
cc: Mark Cilley; jill <jmerrill@air-comp.com>
Priority: Normal
Subject: TRI

Hi Amos,

I spoke with Jill and she or someone from ACCI is working on the Form R. They will contact you to request info, they need to review last years Form. Jill said we will have the Form R for submittal by July 1. Thank You.

SWO# 3238

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039. Expires 9-30-96

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: ORD027734359 — Manifest Document No.: 04684

2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: KOPPERS INDUSTRIES, INC.
7540 NW ST. HELENS R
PORTLAND, OR 97210

4. Generator's Phone (503) 286-3681

A. State Manifest Document Number: 1004684

B. State Generator's ID

5. Transporter 1 Company Name: SAFETY-KLEEN (TG), INC.

6. US EPA ID Number: SCD987574647

C. State Transporter's ID

D. Transporter's Phone: (253) 288-2800

7. Transporter 2 Company Name: ~~MP ENVIRONMENTAL~~ SAFETY KLEEN (TG) INC

8. US EPA ID Number: ~~CAT000624247~~ SCD987574647

E. State Transporter's ID

F. Transporter's Phone: ~~(805) 393-1151~~ 253 288 2800

9. Designated Facility Name and Site Address: SAFETY-KLEEN (LONE & GRASSY MT.), INC.
3 MILES EAST, 7 MILES NORTH;EXIT 41 OFF I-80
CLIVE, UT 84083 #801-323-8900

10. US EPA ID Number: UTD991301748

G. State Facility's ID

H. Facility's Phone: (801) 323-8900

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. B	X	WASTE Environmentally hazardous substances, solid, n.o.s., (Contains Creosote), 9, UN3077, PG-III	004	DM	01200	P	U051
b.		Transferred to Aragonite, UT for incineration Bret Bushnell 6/24/00					
c.		EPA ID # UTD981552177 Safety-Kleen Aragonite 11600 N. Aptus Road, Arag. --- , UT 84029					
d.							

J. Additional Descriptions for Materials Listed Above
A: 990118-OSKOP-001-006, 4 X 55gDM, (ERG # 171) (INCIN)
B:
C:
D:

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
Profile Number a. OSKOP-99M0019d.
b.
c.

SWO# 3238
Emergency Contact:
1-800-451-8346
3E

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

X Printed/Typed Name: T J Turner — Signature: [signature] — Month Day Year: 01 18 99

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Michael D. Rabinowitz — Signature: Michael D. Rabinowitz — Month Day Year: 01 18 99

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: John W. Wallace — Signature: John W. Wallace — Month Day Year: 01 22 99

19. Discrepancy Indication Space
1999000710 B

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Becky Fields — Signature: Becky Fields — Month Day Year: 02 03 99

GENERATOR / TRANSPORTER / FACILITY

Style CF17-6 LABELMASTER, AN AMERICAN LABELMARK CO., CHICAGO, IL 60646 (800)621-5808

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

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ORIGINAL-RETURN TO GENERATOR

Koppers004756

3493 T-2953 SWO# 3600 991647

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. ORD027734591 Manifest Document No. 1152 6

2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: KOPPERS INDUSTRIES, INC.
7540 NW ST. HELENS R
PORTLAND, OR 97210

A. State Manifest Document Number: 1011526

B. State Generator's ID:

4. Generator's Phone (503) 286-3681

5. Transporter 1 Company Name: SAFETY-KLEEN (TG), INC.

6. US EPA ID Number: SCD987574647

C. State Transporter's ID:

D. Transporter's Phone: (253) 288-2800

7. Transporter 2 Company Name: MP ENVIRONMENTAL

8. US EPA ID Number: CAT000624247

E. State Transporter's ID:

F. Transporter's Phone: (805) 393-1151

9. Designated Facility Name and Site Address:
SAFETY-KLEEN (ARAGONITE), INC
11600 N. APTUS ROAD
ARAGONITE, UT 84029

10. US EPA ID Number: UTD981552177

G. State Facility's ID:

H. Facility's Phone: (801) 323-8156

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. WASTE FLAMMABLE LIQUIDS, n.o.s. (LABPACK), 3, UN 1993, PG II	X	004	DF	00320	P	D001
b. NON RCRA/NON DOT REGULATED WASTE (LABPACK)		001	DF	00080	P	N/R
c.						
d.						

J. Additional Descriptions for Materials Listed Above
A: 990422-12-KO-001-002, 004-005 * 4X30 gDF, (ERG # 128)
B: 990422-12-KO-003 - 1X30 g DF
C:
D:

W600479
W600477

K. Handling Codes for Wastes Listed Above: T07

15. Special Handling Instructions and Additional Information
Profile Number a. 3013015-12-KO d.
b. 3013015-12-KO
c.

SWO# 3600
Emergency Contact:
1-800-451-8346
3E

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name	Signature	Month Day Year
T.J. Turner		04 22 99

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month Day Year
Michael D. Rabinowitz	Michael D. Rabinowitz	04 22 99

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month Day Year
PAT MARTIN	Pat Martin	04 28 99

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Month Day Year
Martin Keller		04 28 99

GENERATOR | TRANSPORTER | FACILITY

Style CF 17 LABELMASTER, AN AMERICAN LABELMARK CO., CHICAGO, IL 60646 (800)621-5808

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

ORIGINAL-RETURN TO GENERATOR

PRINTED ON RECYCLED PAPER USING SOYBEAN INK PRINTED WITH SOY INK

NIKMA

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

SWO# 3600

Form Approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. ORD027734359 — Manifest Document No. 11524

2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: KOPPERS INDUSTRIES, INC.
7540 NW ST. HELENS R
PORTLAND, OR 97210

4. Generator's Phone (503) 286-3681

A. State Manifest Document Number: 1011524

B. State Generator's ID:

5. Transporter 1 Company Name: SAFETY-KLEEN (TG), INC.

6. US EPA ID Number: SGD987574647

C. State Transporter's ID:

D. Transporter's Phone: (253)288-2800

7. Transporter 2 Company Name: MP ENVIRONMENTAL

8. US EPA ID Number: CAT000624247

E. State Transporter's ID:

F. Transporter's Phone: (805)393-1151

9. Designated Facility Name and Site Address:
SAFETY-KLEEN LTD. (DELTA)
7842 PROGRESS WAY
DELTA, BC V4G 1A4

10. US EPA ID Number: PG8388

G. State Facility's ID:

H. Facility's Phone: (604) 940-0894

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. 10	X	WASTE Paint, (OIL PAINT), 3, UN1263, PG-II	001	CF ~~D.M~~	01200	P	D001
b. 11		NON RCRA / NON DOT REGULATED WASTE (TAR)	002	D.M	00600	P	
c.							
d.							

J. Additional Descriptions for Materials Listed Above
A: 990422-12-KO-001, 1 X gaylord BOX, (ERG # 127)
B: 990422-12-KO-003-002, 2 X SSg DM
C:
D:
WX00477

K. Handling Codes for Wastes Listed Above
PAINT OF EXIT: BLAINE WA.
May 6/99

15. Special Handling Instructions and Additional Information
Profile Number a. 3013010-12-KO d.
b. 3013011-12-KO
c.
SWO# 3600
Emergency Contact:
1-800-451-8346
3E

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: TJ Turner — Signature: [signature] — Month Day Year: 04 22 99

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Michael D. Rabinowitz — Signature: Michael D. Rabinowitz — Month Day Year: 04 22 99

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: PAT MARTIN — Signature: Pat Martin — Month Day Year: 04 28 99

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Otis Rechord — Signature: [signature] — Month Day Year: 05 17 99

GENERATOR / TRANSPORTER / FACILITY

Style CF 17 LABELMASTER, AN AMERICAN LABELMARK CO., CHICAGO, IL 60646 (800)621-5808

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

ORIGINAL-RETURN TO GENERATOR

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SWO#

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039 Expires 9-30-96

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: ORD027734359
Manifest Document No.: 99901

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: KOPPERS INDUSTRIES, INC.
7540 NW ST. HELENS ROAD
PORTLAND, OR 97210

4. Generator's Phone (503 286-3681

A. State Manifest Document Number: 10099901

B. State Generator's ID

5. Transporter 1 Company Name: SAFETY-KLEEN (TG), INC.

6. US EPA ID Number: SCD987574647

C. State Transporter's ID

D. Transporter's Phone: (253)288-2800

7. Transporter 2 Company Name: SAFETY KLEEN (TG)

8. US EPA ID Number: SCD987574647

E. State Transporter's ID

F. Transporter's Phone: 253 288 2800

9. Designated Facility Name and Site Address:
SAFETY-KLEEN LTD. (DELTA)
7842 PROGRESS WAY
DELTA, BC V4G 1A4

10. US EPA ID Number: PS8388

G. State Facility's ID

H. Facility's Phone: (604) 940-0894

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. 5	X	WASTE Corrosive liquid, basic, inorganic, n.o.s., (Contains Potassium hydroxide), 8, UN3266, PG-II	001	DF	00300 ~~00600~~	P	D002
b. 6	X	WASTE CORROSIVE LIQUID, ACIDIC, INORGANIC, n.o.s., UN3264, PG II 8 (MURIATIC ACID, HYDROFLUORIC ACID)	001	DF	00300	P	D002
c.							
d.							

J. Additional Descriptions for Materials Listed Above
A: 990901-001-~~002~~, ~~1x 30gPD~~, 1x85gPD (OVER PACK) (ERG# 154)
B: 990901-002, 1X 30gPD (ERG#126)
C:
D:

K. Handling Codes for Wastes Listed Above
Sept 13 '99 POE
Richthaven Blaine
Rezdan wash
A: 103691 B: 103692

15. Special Handling Instructions and Additional Information
Profile Number a. 2201935 b. 2201936 c. d.
SWO#
Emergency Contact: 1-800-451-8346 3E
POINT OF DEPARTURE: BLAINE, WA

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
and conforms to the terms of the attached EPA Acknowledgment of Consent.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: [signature] Signature: [signature] Date: Month 09 Day 02 Year 99

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Michael D. Rabinowitz Signature: Michael D. Rabinowitz Date: Month 09 Day 02 Year 99

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: John W. Wallace Signature: John W. Wallace Date: Month 9 Day 9 Year 99

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.
Printed/Typed Name: WAYNE MA. Signature: [signature] Month 9 Day 24 Year 99

GENERATOR

TRANSPORTER

FACILITY

INSTRUCTIONS FOR COMPLETION OF THIS FORM, REFER CODE OF FEDERAL REGULATIONS, 40, PART 262.20.

EPA Form 8700-22 (Rev. 9-88) previous editions obsolete

SAFETY-KLEEN CORP.

90290

6

ORIGINAL-RETURN TO GENERATOR

Koppers004759

Reviewing instructions, gathering data, and completing and reviewing the form. Send comments regarding the burden estimate, including suggestions for reducing this burden, to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

HAZARDOUS AND NON-HAZARDOUS DISPOSAL LOG
KOPPERS INDUSTRIES, INC.
PORTLAND, OREGON TERMINAL

Date of Shipment	Destination	Handled By	Material Shipped	Quantity Shipped
4/24/90	Arlington, Oregon	Chem-Security Systems	creosote spill, rags & absorbents	20 drums
5/18/93	Lohern, Calif.	Laidlaw Environmental Services	creosote spill, rags & absorbents	3 drums
9/28/95	San Jose, Calif.	USPCI-Solvent Services	creosote spill, rags & absorbents	3 drums
7/02/97	Houston, Texas	Eltes Environmental Services	no longer used laboratory chemicals	4 lab packs
3/05/98	Delta, BC, Canada	Laidlaw Environmental Services	creosote spill, rags & absorbents	2 drums
3/05/98	Knolls, Ut.	Laidlaw Environmental Services	refined tar spill rags & absorbents (non-hazardous)	6 drums
1/18/99	Clive,Utah	Safety –Kleen (TG) Inc.	creosote spill, rags & absorbents	4 drums/1200 #
4/22/99	Aragonite, Utah	Safety-Kleen (TG) Inc.	paint, non RCRA and non DOT hazardous materials	5 lab packs/400 #
4/22/99	Delta, BC Canada	Safety-Kleen (TG) Inc.	same as above	3 lab packs/1800 #
9/2/99	Delta, BC Canada	Safety-Kleen (TG) Inc.	aluminum brightner, caustic prewash and acidic brightner	2 drums/600 #

Koppers004760

FAXED 5.6.99

AIR/COMPLIANCE CONSULTANTS, INC.

Memorandum

To:	Amos Kamerer
Company:	Koppers Industries, Inc., Portland Tar Plant
From:	Kim Coy/Jill Merrill
Date:	May 6, 1999
Subject:	1998 SARA Report

Dear Amos:

From your 5/4/99 fax transmittal, we understand that waste was sent to Laidlaw Environmental Services located in Delta, British Columbia (Canada) and Knolls, Utah on 3/5/98. Could you please supply the manifests for that day?

With respect to water releases, did KII perform any sampling for PACs on 1998? If so, could you please supply the results?

If you have any questions or comments, please give me a call at 412 826-3636.

Regards, Kim

FAX # 412-826-3640

CERTIFICATE OF ANALYSIS

CLIENT: KOPPERS INDUSTRIES, INC.
7540 NW ST. HELENS ROAD
PORTLAND OR 97210-3663

PHONE: (503) 286-3681
FAX: (503) 285-2831

DATE SUBMITTED: 01/21/98

PROJECT NAME: WASTE WATER ANALYSIS

CI SAMPLE #	CLIENTS ID#	DATE	TIME	DESCRIPTION
980076-001-01		01/21/98	1315	TANKS 1-3-5 WASTE WATER GRAB SAMPLE
980076-001-02		01/21/98	1315	TANKS 1-3-5 WASTE WATER GRAB SAMPLE

REPORT DATE: 01/22/98 REPORT NUMBER: 980076 PAGE: 1 OF 1

SAMPLE	ANALYSIS	PARAMETER	RESULT	UNIT	DETECTION LIMIT	ANALYST
TANKS 1-3-5 WASTE WATER GRAB SAMPLE						
980076-001-01	O&G, TOTAL, GRAV EPA 413.1/9070	TOTAL OIL & GREASE	2.0	PPM	2	Gordon I.
TANKS 1-3-5 WASTE WATER GRAB SAMPLE						
980076-001-02	PNAH 2 EPA 625 (SIM)	ACENAPHTHENE	17	ug/l	0.05	Jacob F.
		ACENAPHTHYLENE	4.7	ug/l	0.05	
		ANTHRACENE	10	ug/l	0.05	
		BENZO(A)ANTHRACENE	19	ug/l	0.05	
		BENZO(A)PYRENE	19	ug/l	0.2	
		BENZO(B)FLUORANTHENE	11	ug/l	0.2	
		BENZO(GHI)PERYLENE	22	ug/l	0.5	
		BENZO(K)FLUORANTHENE	11	ug/l	0.2	
		CHRYSENE	19	ug/l	0.05	
		DIBENZO(AH)ANTHRACENE	ND	ug/l	0.3	
		FLUORANTHENE	23	ug/l	0.05	
		FLUORENE	12	ug/l	0.05	
		INDENO(1.2.3-CD)PYRENE	32	ug/l	0.4	
		NAPTHALENE	0.35	ug/l	0.05	
		PHENANTHRENE	10	ug/l	0.05	
		PYRENE	19	ug/l	0.05	
			229.05			
		SURROGATE	76%	% RECOVERY	50%-150%	

REVIEWED BY: _____
Martin Little Laboratory Manager

1st

CERTIFICATE OF ANALYSIS

CLIENT: KOPPERS INDUSTRIES, INC.
7540 NW ST. HELENS ROAD
PORTLAND OR 97210-3663

PHONE: (503) 286-3681
FAX: (503) 285-2831

DATE SUBMITTED: 04/23/98

PROJECT NAME: TANK 1-3-5 WASTE WATER ANALYSIS

CI SAMPLE #	CLIENTS ID#	DATE	TIME	DESCRIPTION
980581-001-01		04/23/98	1300	TANK 1-3-5 WASTE WATER GRAB SAMPLE
980581-001-02		04/23/98	1300	TANK 1-3-5 WASTE WATER GRAB SAMPLE
980581-001-03		04/23/98	1300	TANK 1-3-5 WASTE WATER GRAB SAMPLE

REPORT DATE: 04/28/98 REPORT NUMBER: 980581 PAGE: 1 OF 1

SAMPLE	ANALYSIS	PARAMETER	RESULT	UNIT	DETECTION LIMIT	ANALYST
TANK 1-3-5 WASTE WATER GRAB SAMPLE						
980581-001	O&G, TOTAL, GRAV EPA 413.1/9070	TOTAL OIL & GREASE	5.4	PPM	2	Gordon I.
	PHENOLS, TOTAL EPA 420.1	TOTAL RECOVERABLE PHENOLICS	<0.05	PPM	0.05	Abigail K.
	PNAH 2 EPA 625 (SIM)	ACENAPHTHENE	2.5	ug/l	0.05	Jacob I.
		ACENAPHTHYLENE	0.24	ug/l	0.05	
		ANTHRACENE	2.3	ug/l	0.05	
		BENZO(A)ANTHRACENE	26	ug/l	0.05	
		BENZO(A)PYRENE	46	ug/l	0.2	
		BENZO(B)FLUORANTHENE	36	ug/l	0.2	
		BENZO(GHI)PERYLENE	34	ug/l	0.5	
		BENZO(K)FLUORANTHENE	36	ug/l	0.2	
		CHRYSENE	29	ug/l	0.05	
		DIBENZO(AH)ANTHRACENE	5.8	ug/l	0.3	
		FLUORANTHENE	31	ug/l	0.05	
		FLUORENE	1.4	ug/l	0.05	
		INDENO(1,2,3-CD)PYRENE	47	ug/l	0.4	
		NAPTHALENE	0.24	ug/l	0.05	
		PHENANTHRENE	12	ug/l	0.05	
		PYRENE	30	ug/l	0.05	
			329.43			
		SURROGATE	109%	% RECOVERY 50%-150%		

REVIEWED BY: _____
Martin Little - Laboratory Manager

2nd

Koppers004763

CERTIFICATE OF ANALYSIS

CLIENT: KOPPERS INDUSTRIES, INC.
7540 NW ST. HELENS ROAD
PORTLAND OR 97210-3663

PHONE: (503) 286-3681
FAX: (503) 285-2831

DATE SUBMITTED: 09/18/98

PO#:

PROJECT NAME: WWTks 1 Through 6

CI SAMPLE #	CLIENTS ID#	DATE	TIME	DESCRIPTION
981304-001		09/18/98	1300	WWTks (1-6)
981304-001		09/18/98	1300	WWTks (1-6)

REPORT DATE: 09/22/98 REPORT NUMBER: 981304 PAGE: 1 OF 2

SAMPLE	ANALYSIS	PARAMETER	RESULT	UNIT	DETECTION LIMIT	ANALYST
WWTks (1-6)						
981304-001	O&G, TOTAL, GRAV EPA 413.1/9070	TOTAL OIL & GREASE	ND	PPM	2	Gordon L.
981304-001	PHENOLS, TOTAL EPA 420.1	TOTAL RECOVERABLE PHENOLICS	0.052	PPM	0.05	Abigail K.
981304-001	PNAH 2 EPA 625 (SIM)	ACENAPHTHENE	10.0	ug/l	0.05	Jacob F.
		ACENAPHTHYLENE	8.4	ug/l	0.05	
		ANTHRACENE	5.6	ug/l	0.05	
		BENZO(A)ANTHRACENE	41.	ug/l	0.05	
		BENZO(A)PYRENE	73.	ug/l	0.2	
		BENZO(B)FLUORANTHENE	55.	ug/l	0.2	
		BENZO(GHI)PERYLENE	63.	ug/l	0.5	
		BENZO(K)FLUORANTHENE	55.	ug/l	0.2	
		CHRYSENE	47.	ug/l	0.05	
		DIBENZO(AH)ANTHRACENE	12.	ug/l	0.3	
		FLUORANTHENE	44.	ug/l	0.05	

REVIEWED BY: Richard O. Reid

Richard O. Reid - Laboratory Director

3rd

Koppers004764

CERTIFICATE OF ANALYSIS

REPORT DATE: 09/22/98 REPORT NUMBER: 981304 PAGE: 2 OF 2

SAMPLE	ANALYSIS	PARAMETER	RESULT	UNIT	DETECTION LIMIT	ANALYST
MWTks (1-6)						
981304-001	PNAH 2	FLUORENE	9.7	ug/l	0.05	Jacob F.
	EPA 625 (SIM)	INDENO(1,2,3-CD)PYRENE	79.	ug/l	0.4	
		NAPTHALENE	1.9	ug/l	0.05	
		PHENANTHRENE	24.	ug/l	0.05	
		PYRENE	43.	ug/l	0.05	
			571.6			
		SURROGATE	67%	% RECOVERY	50%-150%	

CERTIFICATE OF ANALYSIS

CLIENT: KOPPERS INDUSTRIES, INC.
7540 NW ST. HELENS ROAD
PORTLAND OR 97210-3663

PHONE: (503) 286-3681
FAX: (503) 285-2831

DATE SUBMITTED: 10/13/98

PROJECT NAME: QUARTERLY WASTEWATER TEST

CI SAMPLE #	CLIENTS ID#	DATE	TIME	DESCRIPTION
981431-001		10/13/98	0800	WWTks
981431-001		10/13/98	0800	WWTks
981431-001		10/13/98	0800	WWTks

REPORT DATE: 10/14/98 REPORT NUMBER: 981431

SAMPLE	ANALYSIS	PARAMETER	RESULT	UNIT	DETECTION LIMIT	ANALYST
WWTks						
981431-001	O&G, TOTAL, GRAV EPA 413.1/9070	TOTAL OIL & GREASE	ND	PPM	2	Gordon L.
981431-001	PHENOLS, TOTAL EPA 420.1	TOTAL RECOVERABLE PHENOLICS	ND	PPM	0.05	Abigail K.
981431-001	PNAH 2 EPA 625 (SIM)	ACENAPHTHENE	4.9	ug/l	0.05	Jacob F.
		ACENAPHTHYLENE	1.7	ug/l	0.05	
		ANTHRACENE	5.4	ug/l	0.05	
		BENZO(A)ANTHRACENE	66.	ug/l	0.05	
		BENZO(A)PYRENE	144.	ug/l	0.2	
		BENZO(B)FLUORANTHENE	100.	ug/l	0.2	
		BENZO(GHI)PERYLENE	99.	ug/l	0.5	
		BENZO(K)FLUORANTHENE	100.	ug/l	0.2	
		CHRYSENE	73.	ug/l	0.05	
		DIBENZO(AH)ANTHRACENE	52.	ug/l	0.3	

REVIEWED BY: Richard D. Reid - Laboratory Director

Koppers004766

CERTIFICATE OF ANALYSIS

REPORT DATE: 10/14/98 REPORT NUMBER: 981431

SAMPLE	ANALYSIS	PARAMETER	RESULT	UNIT	DETECTION LIMIT	ANALYST
WWTks						
981431-001	PNAH 2	FLUORANTHENE	52.	ug/l	0.05	Jacob F.
	EPA 625 (SIM)	FLUORENE	3.9	ug/l	0.05	
		INDENO(1,2,3-CD)PYRENE	180.	ug/l	0.4	
		NAPTHALENE	0.48	ug/l	0.05	
		PHENANTHRENE	18.	ug/l	0.05	
		PYRENE	48.	ug/l	0.05	
		SURROGATE	68%	% RECOVERY	50%-150%	

Table 1. ~~1997~~ 1998 SARA Title III, Toxic Chemical Reporting Inventory, Total Production/Throughput Inventory, Koppers Industries, Inc., Portland Tar Plant, Portland, Oregon

Process Production/Usage Rates

Mixture	Density (lb/gal)	Yearly Total (gal)		Maximum On-site (gal)	
Pitch	11.0	~~6,943,524~~	10,224,344	~~577,259~~	890,909
Heavy Oil	9.6	~~42,421~~	65,417	~~29,732~~	38,004
P1/P13 Creosote	9.0	~~218,413~~	250,719	~~94,100~~	82,185
UCC	9.1	14,738	0	~~16,785~~	0
P&R Oil	9.1	~~4,761~~	715	~~5,476~~	715
CMN	8.5	~~0~~	2,687	~~NA~~	2,687
NSR	9.0	~~0~~	1,111	~~NA~~	1,111
Refined Tar	10.0	~~157,624~~	95,409	~~33,892~~	28,036

Maximum on-site represents the maximum quantity from either the beginning or ending inventory, whichever was greater.

Koppers004768

MAX. ON SITE 9,800,000 # (4900 TONS) / 1 MONTH / 890,909 gals. Yearly total / 56,234 TONS / 112,468,000 # / 10,224,364 gals

PORTLAND PITCH INVENTORY IN SHORT TONS	1998 JANUARY ACTUAL	1998 FEBRUARY ACTUAL	1998 MARCH ACTUAL	1998 APRIL ACTUAL	1998 MAY ACTUAL	1998 JUNE ACTUAL	1998 JULY ACTUAL	1998 AUGUST ACTUAL	1998 SEPTEMBER ACTUAL	1998 OCTOBER ACTUAL	1998 NOVEMBER ACTUAL	1998 DECEMBER ACTUAL	1999 JANUARY ESTIMATE	1999 FEBRUARY ESTIMATE
CHINESE														
OPENING INV.	1666	1329	0	5406	4489	3938	7554	6235	5676	4514	2075	1538	868	4982
USAGE	337	1329	1005	917	551	1008	733	559	1162	2439	537	670	700	1075
REYNOLDS	0	0	195	0	0	0	586	0	0	0	0	0	0	0
RECEIPTS	0	0	6606	0	0	4624	0	0	0	0	0	0	4814	0
CLOSING INV.	1329	0	5406	4489	3938	7554	6235	5676	4514	2075	1538	868	4982	3907
KOREAN(K&I)														
OPENING INV.	5308	9497	9318	4546	0	960	4329	3997	9003	7210	8701	9370	4460	8176
USAGE	2425	4588	4772	4546	3449	3245	4741	1608	3998	5123	3740	4910	4000	4200
RECEIPTS	6614	4409	0	0	4409	6614	4409	6614	2205	6614	4409	0	7716	0
CLOSING INV.	9497	9318	4546	0	960	4329	3997	9003	7210	8701	9370	4460	8176	3976
REILLY														
OPENING INV.	182	345	345	167	0	349	90	0	350	0	353	441	441	177
USAGE	0	0	264	167	84	349	90	171	350	0	0	0	264	177
RECEIPTS	163	0	86	0	433	90	0	521	0	353	88	0	0	0
CLOSING INV.	345	345	167	0	349	90	0	350	0	353	441	441	177	0
MELTER(K&I)														
OPENING INV.	3092	2648	3124	3694	4135	4027	3575	4900	3316	2955	3933	3368	4041	3591
SHIPMENTS	3145	4101	5432	4791	4149	5005	4243	4047	5864	4662	4959	4887	5350	5260
PRODUCTION	2701	4577	6002	5232	4041	4553	5568	2463	5503	5640	4394	5560	4900	5260
CLOSING INV.	2648	3124	3694	4135	4027	3575	4900	3316	2955	3933	3368	4041	3591	3591
TOTAL														
OPENING INV.	10248	13819	12787	13813	8624	9274	15548	15132	18345	14679	15062	14717	9810	16926
USAGE	5907	10018	11668	10421	8233	9607	10393	6385	11374	12224	9236	10467	10314	10712
RECEIPTS	9478	8986	12694	5232	8883	15881	9977	9598	7708	12607	8891	5560	17430	5260
CLOSING INV.	13819	12787	13813	8624	9274	15548	15132	18345	14679	15062	14717	9810	16926	11474
VANALCO														
OPENING INV.	0	0	465	0	0	0	3065	2046	1218	201	1316	325	325	1971
USAGE	0	905	465	0	0	0	1019	828	1017	788	991	0	0	0
RECEIPTS	0	1370	0	0	0	3065	0	0	0	1903	0	0	1646	0
CLOSING INV.	0	465	0	0	0	3065	2046	1218	201	1316	325	325	1971	1971

01/06/99 Dec-98

CC:K.FITZGERALD,J.KUNKLE,W.PLOVIC,K.REGEL,D.BACHMAN,C.KRAYNIK,T.J.TURNER, C. MEINERT

Koppers004769

Process / Production Volume 1998

- Light Uncreosoted Coco – Wrote off in April – 18441 # / 2049 gals.
  None used All year — 0 ✓

- Heavy oil

Opening inventory	267,588
Receipts	679,504
Closing Inventory	319,092
Amt. used (inc. inventory losses)	628,000 # / 65417 gals. ✓

- Creosote

O.I.	712.881
Receipts	1,652,416
C.I.	114,345
Amt. used (inc. inv. losses)	2,250,952 #
plus pails + Drum sales	5,515 #
	2,256,467 #
	250,719 gals. ✓

- PtR oil – Total for the year — 715 gallons ✓

- Methyl Solvent – " — 22841 # / 2,687 gals ✓

- NSR – " — 10,000 # ✓

PSB

O. I.	274,090
Receipts	781,300
C. I.	118,340
Amt. used	937,040 #

K-1535 RT - ~~total~~ for the year 17,050 #

954,090 #

95,409 gals.

3175

38207 = 76,414,000 # = 6,946727 gals

Kamerer Amos

From: Troy Goodman [TroyG@fammpnw.com]
Sent: Friday, November 02, 2001 8:38 AM
To: Tina Garrett; Bob Robertson
Cc: Amos Kamerer
Subject: FW: Pitch Discharge Hose

TINA
CAm

Tina, Bob:

Koppers will be conducting an air pressure test of their dockline the week of November 12. Amos will coordinate with Tina for the exact date. I would prefer that we not have employees on the dock or near the dockline during the test for safety reasons. High pressure air leaks are difficult/impossible to see and can easily injure people. As the line is new, the probability of leaks is low; however, I would rather our employees be away from the dockline during the test.

Koppers will also conduct a water pressure test of their dock hoses. They will discharge the water into our sump.

Give me a call if you have any questions.

Troy
-----Original Message-----
From: Kamerer Amos [mailto:KamererAS@koppers.com]
Sent: Friday, November 02, 2001 8:09 AM
To: 'Troy Goodman'
Subject: RE: Pitch Discharge Hose

Troy,

We are looking at doing the line the w/o 11/12, probably the 14th or 15th.

The hoses will be done separately and we are waiting for Peterson Ind. to let us know what their schedule looks like. I'm not going to the hoses on the same day as the line, thus, the hoses could be done later, but will need to be done by 11/30.

I will keep you posted, and I will check with Tina regarding your schedule, so that we will not do either, when you have any traffic on berth.

Does Tina have e-mail? Address?

Thanks, again.

Amos

> -----Original Message-----
> **From:** Troy Goodman [mailto:TroyG@fammpnw.com]
> **Sent:** Friday, November 02, 2001 7:55 AM
> **To:** Kamerer Amos
> **Subject:** RE: Pitch Discharge Hose
>
> Amos,
>
> I had a long, but uneventful drive home. Thank you for the opportunity to meet with you.
>
> I do not see any problems discharging water from the pitch hose test into our sump system. Please let me know when you plan to do the hose testing and I will ensure the operators are prepared.
>
> I would like to know when you plan to do the air pressure testing of the dockline. I would prefer to not have any employees on the dock during testing.

Regards,

Troy

-----Original Message-----
From: Kamerer Amos [mailto:KamererAS@koppers.com]
Sent: Wednesday, October 31, 2001 3:11 PM
To: Troy Goodman (E-mail)
Subject: Pitch Discharge Hose

Troy,

I hope that your drive home was uneventful? Thanks again for taking the time to come and visit. I'll get you the info on tnak T-20, as soon as possible.

I have decided to go ahead and pressure test the pitch line and the discharge hose in November, when they are due for re-testing, rather than waiting for any new business down the road and then possibly encountering some type of unexpected problem and have a delay.

We will use air for the line testing, but I was wondering about using water for the hose testing. Peterson Industrial that perform that service for us, uses water. So, the question is, could we, like we did last year, empty the approximate 260 gallons of water from the hose test into your dock sump? Would this relatively small volume of water be a problem? Remembering, that pitch is not water soluble and should not present any problems to your NPDES permit limits.

Let me know.

Thanks,

Amos

Amos Kamerer
Phone # 503-286-3681
Fax # 503-285-2831
E-mail: Kamereras@koppers.com

Kamerer Amos

From: Cilley Mark
Sent: Wednesday, October 03, 2001 1:30 PM
To: Kamerer Amos
Cc: Self Traci
Subject: RE: Pitch line USCG testing

Amos:
I would probably go to the city and try to get permission to go directly to the sewer or river.

Although I did have another suggestion. If the line is empty, no heat that could vaporize small pieces left in the line, and blinded at the tank, why couldn't we use air to pressurize the line. If you have an air compressor or even rent one there would be no need to worry about discharging the water. Since any pitch in the line would stay solidified within the line, you would not have to worry about air discharge either.

Mark

-----Original Message-----
From: Kamerer Amos
Sent: Friday, September 28, 2001 5:12 PM
To: Cilley Mark
Cc: Self Traci
Subject: Pitch line USCG testing

Mark,

I'm just wondering? Now that the line is empty of pitch, we will have to test it with water, whenever we that turns out to be. PTSI's permit is for stromwater, not process water, so I can't run it through their sump. Because pitch is not water soluble, could I simply go the City for a special permit to empty the water into the river, once the test is completed?

Now, if we end up unloading some asphalt through the line, then that will be another matter. In that case, I'm figuring that I would have to get a "baker tank" in for processing and disposal.

I'd appreciate your thought's.

Have a nice weekend.

Also, I met with Pacific Rock yesterday and it looks like the earliest we would get started with receiving any asphalt, if we ever do, it will be January 2002. The volume number's that I gave you, are still look OK.

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E-mail: Kamereras@koppers.com

Kamerer Amos

From: Kamerer Amos
Sent: Friday, September 28, 2001 2:12 PM
To: Cilley Mark
Cc: Self Traci
Subject: Pitch line USCG testing

Mark,

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Kamerer Amos

From: Kamerer Amos
Sent: Tuesday, September 25, 2001 11:37 AM
To: Troy Goodman (E-mail)
Subject: USCG Annual Hydro Testing of our Pitch Pipeline

Troy,

I have called the USCG and explained our current business situation and they advised that as long as the line is not in use, we do not have to test it in November. However, we need to make sure that it is tested at least 30 days prior to it being put buck into service.

This made me think about the process of testing the line the next time, when ever that is. In the past, we tested the line when it was full of pitch, using nitrogen to build the pressure, and only used water for the hoses. Now, the line is empty, thus, it will have to be also tested with water. The line, from the valve inside of containment, to the manifold at the dock, holds some 6,720 gallons. Is it possible, with all of the proper planning and coordination, that when we do this test that we would be able to use the PTSI dock sump and your oil water separator, to drain the line after testing is completed?

If this is not possible, I need to start thinking, now, about how I will move that amount of water to our end of the line.

Let me know what you think.

Thanks,

Amos Kamerer
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PTSI's permit is stormwater only, no process water
look at a 3rd party to supply a "baker" tank to dump the water
into

Kamerer Amos

From: Kamerer Amos
Sent: Tuesday, September 25, 2001 11:12 AM
To: Dietz Jim
Cc: Self Traci; Cilley Mark; Meisinger William
Subject: Pitch Line Annual Hydro Testing

Jim,

My calendar reminded me today that we are scheduled to hydro test the pitch line in November, so, I called the US Coast Guard. MST3 Brian Worley advised that I would not need to test the line as long as it is not in use, however, it will need to be tested at least 30 days prior to it being used again. Documentation of the test results and the stenciling of the pipeline will be required as usual, at that time, and then, the re-testing will be one year, from that date.

So, depending on what happen's with asphalt, we can forgo this task until a latter date.

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#503/240-9333

cc: T.J. — F.Y.I.

Remember

Koppers004777

Kamerer Amos

From: Cilley Mark
Sent: Thursday, October 11, 2001 5:32 AM
To: Kamerer Amos
Subject: RE: Pitch line USCG testing

Amos:
Yes, I believe that would work well.
Mark

-----Original Message-----
From: Kamerer Amos
Sent: Tuesday, October 09, 2001 6:44 PM
To: Cilley Mark
Subject: RE: Pitch line USCG testing

Mark,

I like the air idea, the only problem is that we would have to turn on the heat to open the shore side valve and the dock valves to the manifold flange. However, I guess we could heat one week to open the valves and then let it go cold for testing, then heat to close the valves another week.
I wouldn't want heat and air, I'd want to do it cold with air.

Let me know what you think.

Amos

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Sent: Wednesday, October 03, 2001 1:30 PM
To: Kamerer Amos
Cc: Self Traci
Subject: RE: Pitch line USCG testing

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Kamerer Amos

From: Kamerer Amos
Sent: Saturday, January 25, 2003 12:26 PM
To: Self Traci
Cc: Dietz Jim; Hyde Leslie; Risher Heather
Subject: Waste Minimization Report

Traci,

In the process of collecting the data for the annual ODEQ Registration Verification Report, which is used to determine our hazardous waste generator category, I realized that when I put the information together for the subject report, that I somehow added one shipment to Clean harbor, twice. Thus, the amount reported was overstated by 41,360 pounds. A revised WMR is attached.

Sorry, I hope that this does not cause any problems on your end, with other year end reports.

Waste Minimization Report Form...

Amos Kamerer
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E-mail: Kamereras@koppers.com

KOPPERS INDUSTRIES, INC
Portland, Oregon Terminal
WASTE MINIMIZATION REPORT

Quarter (2002)	Waste Type (in pounds				Production (units)	Comparison Ratio
	Remediation Waste	Tank Sludge	Operational Waste	Non-Haz Industrial Waste		
1	0	0	0	0	2540000	0.00
2	0	0	0	8000	5076000	0.00
3	0	21262	0	0	11543000	0.00
4	0	275987	0	0	11636730	0.00
Total	0	297249	0	8000	30795730	0.00
Base Year (2000)						
1	0	0	0		31184000	0.00
2	0	0	0		25640000	0.00
3	600	0	0		23488000	0.00
4	0	0	0		16756000	0.00
Total	600	0	0		97068000	0.0062

KOPPERS INDUSTRIES, INC
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1	0	0	0	0	2540000	0.00
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3	0	21262	0	0	11543000	0.00
4	0	~~317347~~	~~285,987~~ 0	0	11636730	0.00
Total	0	~~338609~~	0	8000	30795730	0.00
		297,249				
Base Year (2000)						
1	0	0	0		31184000	0.00
2	0	0	0		25640000	0.00
3	600	0	0		23488000	0.00
4	0	0	0		16756000	0.00
Total	600	0	0		97068000	0.00

Kamerer Amos

From: Kamerer Amos
Sent: Friday, August 16, 2002 2:50 PM
To: Dietz Jim; Self Traci; Stephenson Jack
Subject: Tank Cleaning

All,

Emerald finished the cleaning of tanks &-53 and T-74 today. They did a good job and TJ inspected both tanks when completed and feels very comfortable that both fall below the RCRA allowable .003% remaining residues. In fact his assessment on T-57 (16,000 gal) was 5 to 10 gals. remaining and on T-74 (20,000 gal) was less than 30 gals. remaining.

I will get the final bill on Monday, but it will end up being more than my original estimate of $24,000.00, that I budgeted. I'm guessing another $4,000.00. The good news is that it's done and before the 22nd.

Amos Kamerer
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Koppers Industries

PROJECT HEALTH AND SAFETY PLAN

1. PROJECT SITE LOCATION:

Koppers Industries 7540 NW. Saint Helens Road Portland, Oregon 97210

2. DESCRIPTION OF PROJECT:

Emerald Services Inc. will provide industrial tank cleaning for tanks T-53 and T-74

3. ORGANIZATIONAL STRUCTURE AND RESPONSIBILITIES:

In compliance with 29 CFR 1910.120 (b)(2) and WAC 296-62-3010 (2), the following individuals are assigned specific responsibilities and lines of communication for the duration of this project.

All Employees and workers on this project are expected to maintain vigilance at all times to ensure that the work is conducted in a safe and efficient manner.

REGIONAL HEALTH AND SAFETY OFFICER

Emerald Services Inc. Health and Safety Officer has the responsibility and authority to oversee the development of this site Health and Safety Plan and to audit the equipment and training of involved company and sub-contractor employees to implement the plan. The Regional Health and Safety Officer assigned to this project is Heather Barden.

PROJECT MANAGER

Kelly Nightingale is the designated Project Manager for this project. She is responsible for overall administration of the project. His duties include project planning, budgeting, communications, coordination and preparation of the Health and Safety Plan.

PROJECT SUPERVISOR

Kelly Nightingale or his designated representative is responsible for preparation and implementation of this Health and Safety Plan, and all on site activities on a daily basis. His other responsibilities include, but are not limited to:

1) project planning
2) scheduling

3) site documentation
4) regulatory compliance
5) personnel assignments
6) customer and sub-contractor relations.

From time to time, the Project Supervisor may delegate all or part of his responsibilities to the lead person who will assume on site project control in the absence of the Project Supervisor.

SITE HEALTH AND SAFETY SUPERVISOR

The project supervisor is the designated Site Safety Officer. She is responsible for verification and overall compliance with this Health and Safety Plan. Her duties include, but are not limited to:

1) on site monitoring to determine appropriate levels of PPE
2) site surveillance, hazard identification, and health risk analysis
3) implementation of procedures and programs to eliminate risk to site personnel
4) implementation of site control measures
5) conducting daily Health and Safety meetings
6) instructing all site personnel in the terms and conditions of this Health and Safety Plan.

TECHNICIANS

Technicians are specialized personnel with hazardous waste operations experience and training. They perform all assigned site tasks which include, but are not limited to

1) general construction
2) industrial cleaning
3) equipment operation and maintenance
4) remediation
5) sampling
6) site closure activities.

Technicians report to a leadman or the Project Supervisor.

4. COMPREHENSIVE WORKPLAN

Emerald Services will be cleaning 2 tanks that containes creosote contaminated solids and creosote and water.

5. SITE CHARACTERIZATION

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As required by 29 CFR 1910.120 (c) and WAC 296-62-3020 and 3080, all site personnel shall be aware of the nature, level, and degree of exposure likely as a result of participation in this Hazardous Waste Operation. Initial air monitoring results will be posted at the entry point, and all employees have the option to observe the air monitoring process.

The project will take place in and around tank T-53, a 16,000 gallon capacity horizontal tank with the diamentions 10'dia.x 28' long. It has approx. 2,400 gallons of dirt, rock, and creosote and tank T-74 , a vertical tank with the diamentions of 11' dia.x 28' high. It has approx. 500 gallons of creosote and water with minimual water.

6. SITE CONTROL MEASURES

The project site is divided into an exclusion zone, a contaminant reduction zone, and a clean zone. The exclusion zone contains the area(s) of contamination consisting of as described above. The contaminant reduction zone is where hazardous substances are removed from site personnel and their equipment. The clean zone is a non-contaminated area where support services, storage of non-hazardous materials, and administrative activities may occur.

Access to the contamination reduction zone from the clean zone is through a single point over the containment wall for the tank. All personnel entering the exclusion zone shall wear the prescribed PPE for the tasks they are to perform.
All personnel and equipment must pass through the an initial decontamination point before exiting the exclusion zone. Decontamination of personnel and equipment will be accomplished as described in Section 12 below. PPE must be removed in the contaminant reduction zone before entering the clean zone.

All personnel within the exclusion and contaminant reduction zones will use the "buddy system" to maintain vigilance over each other. Communications within the exclusion zone will be by hand signals. In the event of an emergency, an alert will be sounded with an air horn as described in Section 13 below.

There will be no smoking or eating within the Kopper facility except in areas designated by Kopper Personnel.

7. TRAINING

All employees and site personnel entering the exclusion zone shall be trained in compliance with 29 CFR 1910.120 (e) and WAC 296-62 part p as follows:

A) Workers engaged in this hazardous waste operation shall have a minimum of 40 hours of off site instruction (or its equivalent) and three days of actual field experience under the supervision of a trained, experienced supervisor. In addition, they shall have annual 8 hour refresher training as required by WAC 296-62-3040(8).

B) Supervisors and managers engaged in this hazardous waste operation shall have received the equivalent training to the workers they supervise plus an additional 8 hours of specialized training as required by WAC 296-3040(4). Supervisors shall be trained in first aid CPR and exposure to blood borne pathogens as per 29 CFR 1910.1030.

C) Equipment and transport vehicle operators, engaged in this hazardous waste operation and using air-purifying respirators shall have a minimum of 40 hours of off site training and three days actual experience under the supervision of a trained, experienced supervisor. Truck drivers have a C class DOT license or higher with a hazardous waste transporter endorsement.

Before work on this site begins, all involved personnel will be briefed on this site specific Health and Safety Plan. This briefing will be conducted by the Site Safety officer Kelley Nightingale. This training will focus on the potential hazards present at the site and the safety and health procedures specific to this project. The training will include, but not be limited to, the following:

Project Introduction and Orientation
Characteristics and Potential Hazards of Chemical and Physical Dangers on Site
Personal Protective Equipment- function, care, and limitations
Air Monitoring- purpose, methods, interpretation, and notifications
Decontamination Procedures
Emergency Response
General Safety Concepts
Confined Space Entry Rescue Practice

8. MEDICAL SURVEILLANCE

All site personnel who may be exposed to hazardous substances or health and safety hazards participate in Emerald Services' Medical Surveillance program. This program requires a complete baseline physical and associated laboratory tests. All site personnel must have passed this examination to detect any medical condition that would place an individual at increased risk of impairment as a result of his or her participation in this project or use of a respirator. An annual update exam or closure physical is also required for all personnel participating in this program. Emerald Services' Medical Surveillance Program complies with 29 CFR 1910.120 (f) and WAC 296-62-3050.

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9. ENGINEERING CONTROLS, WORK PRACTICES, AND PPE

Engineering Controls:

Air Compressor Systems: All compressed air systems used to power tools or equipment shall be inspected on a daily basis. Hoses and fittings will be checked for cracks or wear and replaced as necessary. Air powered tools will be equipped with a safety lanyard between the tool and air supply hose to prevent uncontrolled whipping of the hose in the event of a break in the line or connection. All air compressors will also be equipped with an OSHA approved air restrictor valve to shut off the flow of air in the event of a sudden loss of pressure.

Air hoses will be carefully laid out and taped to the floor if necessary to minimize the possibility of tripping. Compressed air for respirators will be supplied by cylinders or compressors certified for breathing air use.

Energy Systems Lockout: All energized systems (electrical, pneumatic, hydraulic, mechanical, etc.) will be locked out, tagged, and tried whether the energy source is cut off or not. Electrical breaker boxes will be locked out, tagged, and tried by a certified electrician. Should entry be required into a space where power cannot be permanently be disconnected, the breaker boxes will be locked out with a keyed lock out device, tagged, and tried.

Equipment: All moving equipment will be equipped with backup warning devices.

Illumination: Supplemental lighting shall be supplied to provide not less than 3 foot-candles of illumination in all work areas. All lighting will be provided by explosion proof flashlights.
Machinery: All exposed moving parts on operating machinery shall be screened to prevent accidental contact with personnel, clothing, or other equipment.

Sanitation: An adequate supply of potable water will be provided on the site in enclosed containers. Toilet facilities will be supplied in accordance with 29 CFR 1910.120 (n) and WAC 296-62-3130. Adequate washing facilities and change rooms will be available for all site workers as specified in 29 CFR 1910.120 (n)(6) and (7) and WAC 296-62-3130 (6) and (7).

Work Practices

Combustible Liquids and Solids: All combustible liquids and solids shall be handled in accordance with local fire codes and regulations. Liquids shall be stored and transported in "bung" type (17E) drums or containers. Spill prevention and control measures shall be implemented whenever liquids are being handled or stored. Fire extinguishers will be immediately available for use in the area of combustible materials.

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Confined Space Entry: Any entry into a confined space not normally occupied by workers will be done under a Confined Space Entry Permit in Level B supplied air. An appropriate rescue plan will be determined prior to entry.

Equipment: All workers will be advised of the hazards of working around heavy equipment. This will be emphasized in daily Health and Safety meetings. All moving equipment will have warning devices such as back up bells, horns, and lights.

Housekeeping: All employees will practice good housekeeping. Litter and debris will be removed from the work area. Slippery floor surfaces will be wiped and sprinkled with adsorbents. Hoses, wires, pipes, and other equipment will be kept in control so as not to be a tripping hazard.

Line Breaking: Disconnecting any line, flange or seal from a piping system shall be done in accordance with established procedures. The line will be depressurized or emptied under the supervision of the project supervisor or other competent person. Workers will be attired in appropriate PPE and make the initial disconnection slowly so that any residual material can be released into containers in a controlled manner. A line breaking permit is required for all unbroken lines or vessels too small to be entered.

PPE

Personal protective equipment shall be selected and used which will protect employees from hazards and potential hazards they are likely to encounter as identified during the site characterization and analysis. The level of PPE may be reduced by the site Health and Safety Officer when site monitoring and all other information indicates. Entry will not be permitted if the oxygen concentration is below 19.5% or the LEL is over 10%.

Level B

- Positive pressure, full facepiece SCBA or NIOSH approved, full face, positive pressure, supplied-air respirator with escape bottle.
- Hooded, chemical resistant, disposable coveralls and boot covers
- Inner and outer chemical resistant gloves
- Chemical resistant boots with steel toe and shank
- Hard hat, face shield, coveralls and optional coolant vest and long underwear if applicable

Level C

- NIOSH approved full face air purifying respirator with OV cartridge

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- Disposable, hooded chemical resistant coveralls
- Chemical resistant outer and inner gloves
- Hard hat
- Chemical resistant boots or shoes with steel toe and shank with metatarsal protection

11. MONITORING

Breathing zone air monitoring will be conducted on a regular basis to measure levels of O_2 and LEL in the work space and adjacent areas. The air monitoring results will be used to determine the appropriate level of PPE and to advise site workers of any changes in the levels of exposure likely as a result of their activities. An Industrial Scientific 3 gas meter will be used to perform continuous monitoring for oxygen, lower explosive limit, and carbon monoxide. Results are recorded on the confined space entry permit. Initial entry and final monitoring will be done by a competent person.

12. DECONTAMINATION

Decontamination of personnel and equipment will be done in the contaminant reduction zone. Personnel leaving the tank will pass through a gross decontamination, followed by a second station between the woem and cold zones. All equipment, tools, and supplies that have been inside the exclusion zone or in contact with contaminated materials will be decontaminated. Coveralls, gloves, boot covers, respirator cartridges, and other disposable PPE will be drummed for disposal if they cannot adequately be cleaned.

All personnel in the contaminant reduction zone shall one level lower of PPE than those in the exclusion zone. Scrub brushes, tubs, water sprayers, and wipe cloths will be set up to effectively manage the decontamination process. Soapy water will be the decontamination solution.

Step 1 - Equipment Decontamination: All equipment that is to leave the site will be decontaminated first. The equipment will be placed on plastic sheets, in supplied containers, or in a wash tub. These items will be washed and scrubbed in soapy water to remove gross contamination. They will then be sprayed or wiped with a suitable solvent to remove residual contamination then rinsed in clean water and wiped dry with a clean cloth.

Koppers004790

Step 2 - Boot Wash: Boots will be scrubbed in a tub of soapy water to remove gross contamination.

Step 3-Respirator Removal: Airline or air-purifying respirator will be removed with assistance if necessary from the attendant. This equipment will be decomtaminated if necessary before re-use. Worker then moves to secondary decontamination.

Step 4 - Tape Removal: Remove tape from around boots and gloves. Place tape in disposal drum. Outer gloves and boot covers may be directly drummed for disposal if unfit for reuse.

Step 5 – Glove and Suit Removal: Remove outer gloves, suit and inner gloves and place in disposal drum. None of these are to be reused. The worker can now move to the clean zone.

Step 6 - Field Wash: At a minimum, washing of the face and hands with soap and water is required for skin decontamination.

Step 7 - Redress: Street clothes or clean coveralls may be worn following decontamination.

13. EMERGENCY RESPONSE

Pre-Emergency Planning

A daily Health and Safety (or "Tailgate") meeting will be conducted by the site Health and Safety Officer. The topics discussed and the names of personnel in attendance will be recorded on a form designed for this purpose. Copies of this form will be retained in the job file

All site personnel will be instructed in the site topography, layout and points of ingress or egress. Weather and wind directions will be noted daily to identify safe routes of evacuation in case of an emergency. The locations of communications equipment such as cellular phones and radios will be noted.

Specific conditions that may lead to an IDLH (Immediate Danger to Life and Health) emergency condition on this project are:
1) Fire
2) Explosion
The tank will be blown down to at least a 10% LEL level and free product removed before any tank cleaning will take place.

Koppers004791

PPE and Emergency Equipment

At a minimum, the following equipment shall be at the work site and available for use:

Dry Chemical Fire Extinguisher (A-B-C Rated)
First Aid Kits (including chemical burn kits)
Portable radios and cellular telephone
Emergency PPE -Face shields, suits, gloves, etc.
SCBA Gear for rescue
3 gas air meter
Emergency Lighting

Emergency Alarm System

Several warning systems may be used to sound the alarm in an emergency situation. The type of system used depends on the nature of the emergency. The type of systems are:

Radio Communications: Used to give instructions and directions. Also used for communications between on site and off site personnel. Emergency radio communications are identified as such and have priority over normal operational messages.

Vehicle Horns: Horn signals are used to signify an emergency situation or to attract attention when other forms of communication are not available or practicable. Standard horn signals are:

One Short Blast- to signify that communication is required. Personnel should report immediately to their supervisor.

One Long Blast- to signify an IDLH emergency evacuation of the work area. Personnel should evacuate to a pre-determined site upwind. A head count will be taken and further instructions given.

Repeated Short Blasts- to signify an IDLH emergency evacuation of all site personnel through pre-determined routes. A head count will be taken and further instructions given at the meeting point outside the evacuated area.

Emergency Evacuation

The project team will be briefed to the signals used specifically at the Koppers terminal. In the event that the area must be evacuated due to the release of gas, smoke, or poisonous fumes, site personnel will move off site via the nearest up-wind route. Safe distances and places of refuge will be determined by air monitoring. No one will re-enter the site without approval from the Site Safety Officer

Emergency Response Procedures

In case of emergency or hazardous situation, the individual or individuals who observe the situation shall immediately give the alarm. Upon hearing the alarm, all non-essential communication shall cease. The individual(s) who sounded the alarm shall notify his supervisor of the situation. Immediate actions that will be taken to correct the situation shall be dictated by the emergency. These actions may be one or more of the following:

Spills of Hazardous Substances: Contain the spill as soon as possible. Remove contaminated material and place in drums.
Fires: Extinguish fire with fire extinguishers or blankets if possible. Evacuate the area and notify the fire department if uncontrolled.
Gas or Fume Release: Evacuate the area until the fumes have dispersed. Notify appropriate authorities if fumes threaten to escape the exclusion zone.
Personnel Injury: Administer first aid as appropriate.

Hazardous Substance Release

Should a hazardous substance be released, all personnel not in Level B PPE will immediately evacuate the area to a safe area up wind. Level B workers will be summoned and approach the spill with caution and cordon off the area with barrier tape. The atmosphere will be tested for explosive fumes and toxic organic vapors. Using adsorbent materials and hand tools, the hazardous substance will be collected and placed in drums. Affected media such as soil, vegetation, and debris will also be collected and drummed. Leaking drums will be repositioned to stop product release and their contents transferred to new drums. All recovered materials will be contained and moved to a safe location for storage or else taken off site for disposal.

Upon completion of recovery operations, air monitoring and environmental sampling will be conducted. When the results of the sample analysis indicates complete decontamination, site work may resume.

Injury or Exposure

If an injury should occur, stabilize the injured person and administer first aid. If the person is in the exclusion zone, they must be decontaminated or contained in uncontaminated materials prior to removal from the zone. Medical aid may be summoned by dialing 911. Someone must be sent to the main gate to direct emergency responders.

Koppers004793

If the injury is minor or not life threatening, and the victim can be safely moved, the victim can be taken to Good Samaritan 1015 NW 22nd Ave. Portland, OR. 97210 503-413-7711 (map attached)

Any job related injury or illness must be reported within 24 hours.

Emergency Medical Treatment and First Aid

Adequate facilities and personnel will be provided to assure prompt and efficient first aid in the event of injury or exposure. First aid kits will conform to WAC 296-24-065 through 070 and will consist of individually sealed items within a weatherproof container. Each first aid kit will be inspected and fully equipped before being deployed to the project. Any expended items will be replaced as soon as used.

General first aid practices that may be employed in the event of personal injury or exposure are:

Eyes: Irrigate immediately with pressurized eye/face wash unit
Skin: Wash with soap and water
Breathing: Move victim to fresh air at once and begin CPR. Phone 911 to obtain medical attention as soon as possible.
Swallowing: Identify the item swallowed. Follow appropriate first aid procedures and obtain medical attention as soon as possible.

Emergency Telephone Numbers

The following telephone numbers will be conspicuously posted at each installed or cellular telephone location on site:

FIRE	**911**
AMBULANCE	**911**
POLICE	**911**
HOSPITAL	**503-413-7711**
Koppers	**503-286-3681**
Vancouver Field Service Office	**360-699-5275**
Heather Barden-Safety	**206-255-0393**
Kelley Nightingale-Project Manager	**503-793-8512**

Koppers004794

14. HEALTH AND SAFETY PLAN APPROVAL

This Health and Safety Plan has been reviewed and hereby approved. By their signatures, the following undersigned certify that this Health and Safety Plan meets the requirements of 29 CFR 1910.120 and WAC 296-62-3010 and all other applicable regulations for the protection of the health and safety of all persons entering upon this site.

Emerald Services Health & Safety Director	Date
Emerald Services Project Supervisor	Date

15. HEALTH AND SAFETY PLAN CERTIFICATION

By their signature, the following undersigned certify that this Health and Safety Plan has been read, or otherwise communicated to them. They further certify that they completely understand this plan and will follow its procedures for the protection of the health and safety of all persons entering upon this site.

NAME	DATE

Koppers004795

Koppers004796

SK REFERENCE NO: AP8009479

MATERIAL PROFILE

Safety-Kleen (SK) Use Only	If applicable, Intercompany Billing Facility #	Customer Number:	SK Line Of Business #:	Facility Profile #: 8009479

A. GENERATOR INFORMATION

☐ Check if Billing Information is same as Generator Information

Generator Name: Koppers Industries
Billing Company: Emerald Services
Facility Address (No P.O. Box): 7540 NW St. Helens Road
Billing Address: 7343 E. Marginal Way So.
City/State/Zip: Portland, OR 97210
City/State/Zip: Seattle, WA 98108
Technical Contact: Amos Kamerer
Billing Contact: Tim Berrens
Phone: 503-286-3681 Fax: 503-285-2831
Phone: 206-832-3225 Fax: 206-832-3220
Generator Location (If different from Facility Address):
SIC Code: ☐ CESQG ☐ SQG US EPA ID #: ORD 027 734 State Generating ID #:

B. SHIPPING INFORMATION

☐ DOT Assistance Requested ☐ Check if SK Transportation Services are requested

US DOT Proper Shipping Name: Waste Toxic Liquids, Organic, N.O.S. (Creosote)
Hazard Class / Division #: 6.1 ID # (UN / NA): UN 2810 Packing Group (PG): III RQ:

Non-Bulk Shipping Containers

Size	Steel	Poly	Fiber	Quantity & Frequency
55 Gal	☒	☐	☐	44 one time
____ Gal	☐	☐	☐	
____ Gal	☐	☐	☐	
____ Gal	☐	☐	☐	

Bulk Shipping Containers

Container Type	Quantity, Size & Frequency
☐ Yd.³ Box or ☐ Super Sack	
☐ Hard Top or ☐ Tarped Bin	
☐ End Dump (Tarped) Trailer	
☐ Tank or ☐ Vacuum	

C. GENERAL MATERIAL & REGULATORY INFORMATION

Name of Material: Creosote Liquids
Process Generating The Material: Tank clean out
Odor: ☐ None ☒ Mild ☐ Strong:

Yes	No		Yes	No	
☐	☒	Regulated or Licensed Radioactive Waste	☐	☒	Meets LDR Standards or ☐ Partially Meets (Landfill Only)
☐	☒	Regulated Medical / Infectious Waste	☐	☒	Commingled Waste (2 or more hazardous wastes mixed as one)
☐	☒	Regulated Benzene NESHAP Waste	☐	☒	Sorbent Added; If Yes, is sorbent biodegradable? ☐ Yes ☐ No
☐	☒	TSCA Regulated PCB Waste *(List any PCB level in Sec.D)*	☐	☒	Exempt Waste; If Yes, list reference, 40 CFR
☐	☒	Regulated Subpart CC Waste (VOs ≥ 500 ppm)	☐	☐	State Hazardous Waste; State Code: WT02
☐	☒	Regulated Ozone Depleting Substance	☒	☐	RCRA Hazardous Waste
☐	☒	CERCLA Regulated (Superfund) Waste			RCRA Waste Codes (including any LDR subcategories, e.g., D003 Water Reactive):
☐	☒	Hazardous Debris (Subject to alternative LDR treatment standards)			U051
☐	☒	Waste Contains UHCs/Constituents Of Concern			
		If Yes, list in ☐ Sec. D or ☐ Constituent Addendum			

EPA Haz Waste Only Origin Code: ☐ 1 ☒ 2 ☐ 3 ☐ 4 ☐ 5 Source Code: A 57 Form Code: B 207 System Code: M 041

D. MATERIAL COMPOSITION

1. Chemical/Physical Constituents: List all detectable components by chemical name, including physical material, e.g., sorbent, debris

Material Components & Composition	ppm	☐ wt % ☒ vol %	Material Components & Composition	ppm	☐ wt % ☐ vol %
Water		50-70			
Liquid Organics - See Attached		30-60			
Soil Sludges		10-15			

Section D continues on the next page for Elemental Constituents * Range Total ≥ 100 %

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SAFETY-KLEEN MATERIAL PROFILE (continued):

SK REFERENCE NO: 8009479

Note: Completion of Sections D.2 & F is optional for: ☐ Analytical Profile (representative sample submitted; test results used to complete D.2 & F)
Completion of Sections D.2, E, & F is optional for: ☒ Standard Industry Profile (Safety-Kleen historical data utilized to complete D.2, E, & F)

D. MATERIAL COMPOSITION *(Continued)*

2. Elemental Constituents ☒ ***Check if this waste contains No Detectable Elements / Metals, unless listed below.***

Check either: ☐ Total Analysis *or* ☐ TCLP Method *or* ☐ Generator Knowledge, then enter data below.

Constituent	ppm	Constituent	ppm	Constituent	ppm	Constituent	ppm	Constituent	ppm
Aluminum		Cadmium		Fluorine		Nickel		Sodium	
Antimony		Chlorine		Lead		Phosphorous		Sulfur	
Arsenic		Chromium		Lithium		Potassium		Thallium	
Barium		Cobalt		Manganese		Selenium		Titanium	
Beryllium		Copper		Mercury		Silicon		Vanadium	
Bromine		Iodine		Molybdenum		Silver		Zinc	

E. REACTIVE CHARACTERISTICS ☒ *Check if this waste exhibits No Reactive Characteristics*

Yes	No		Yes	No		Yes	No	
☐	☒	Explosive	☐	☒	Oxidizer	☐	☒	Reactive Cyanide _____ ppm
☐	☒	Shock Sensitive	☐	☒	Water Reactive	☐	☒	Reactive Sulfide _____ ppm
☐	☒	Pyrophoric	☐	☒	Air Reactive	☐	☒	Polymerizable

Other Incompatibles; Describe _____

F. MATERIAL PHYSICAL CHARACTERISTICS @ 70°F.

# of Phases	2	Color	Varies	Flash Point	____ °F (if < 73°F)	pH ☐ Liquids >20% H_2O *or* pH ☒ Non-Aqueous	
Liquid %	95-	Specific Gravity	1.2	☐ 73 - <100°F	☐ 100 - 141°F	☐ ≤ 2 pH	☐ > 2 - 4 pH ☒ > 4 - 10 pH
Sludge %		Viscosity cps	low	☐ 142°F. - <200°F	☒ ≥200°F	☐ > 10 - < 12.5 pH	☐ ≥ 12.5 pH
Solid %	1-5	Density	8-12	Boiling Point (if < 130°F)	n/a	BTU's / lb. or Range	<3000
Powder %		☒ lbs./ gal. ☐ lbs./ cu. ft.		Ash % (Bridgeport Only)			
Gas %		Comments					

G. GENERATOR PROFILE CERTIFICATION

I hereby certify that I am an authorized agent of the generator, and warrant on behalf of the generator that the information supplied on this form and on any attachments or supplements hereto is complete and accurate, and that all known or suspected hazards of the material(s) described herein have been disclosed. I agree that if the sample test results indicate a discrepancy with any information supplied on this form, that either Safety-Kleen or the generator may initiate further testing and evaluation in accordance with the terms and conditions of the contract between Safety-Kleen and the generator and that this profile certification may be amended accordingly.

Generator's Authorized Signature _____ Name & Title (Printed or Typed) _____ Date ____ / ____ / ____

Comments _____

SK Use Only ☐ SKOS ☐ SKVS ☐ Non-haz Evaluation ☐ Standard Industry Profile: SIP Index # _____

SK Sales Rep. Name _____ Employee # _____ Territory/Branch # _____

Process Approval # _____ Product Code or Part # _____ TRI Flowpath # _____ Pricing _____

Waste Approval & Certification

We certify acceptability of this waste stream and that all appropriate permits have been obtained, as indicated by Safety-Kleen's facility approval

Safety-Kleen's Authorized Facility Signature _____ Name & Title (Printed or Typed) _____ Date ____ / ____ / ____

Koppers004798

SK REFERENCE NO: AP8009478

MATERIAL PROFILE

Safety-Kleen (SK) Use Only	If applicable, Intercompany Billing Facility #	Customer Number:	SK Line Of Business #:	Facility Profile #: 8009478

A. GENERATOR INFORMATION ☐ Check if Billing Information is same as Generator Information

Generator Name: Koppers Industries
Facility Address (No P.O. Box): 7540 NW St. Helens Road
City/State/Zip: Portland, OR 97210
Technical Contact: Amos Kamerer
Phone: 503-286-3681 Fax: 503-285-2831
Generator Location (If different from Facility Address):
SIC Code: ☐ CESQG ☐ SQG US EPA ID #: ORD 027 734 State Generating ID #:

Billing Company: Emerald Services
Billing Address: 7343 E. Marginal Way So.
City/State/Zip: Seattle, WA 98108
Billing Contact: Tim Berrens
Phone: 206-832-3225 Fax: 206-832-3220

B. SHIPPING INFORMATION ☐ DOT Assistance Requested ☐ Check if SK Transportation Services are requested

US DOT Proper Shipping Name: Waste Toxic Liquids, Organic, N.O.S. (Creosote)
Hazard Class / Division #: 6.1 ID # (UN / NA): Un 2810 Packing Group (PG): III RQ:

Non-Bulk Shipping Containers

Size	Steel	Poly	Fiber	Quantity & Frequency
55 Gal	☒	☐	☐	44 one time
____ Gal	☐	☐	☐	
____ Gal	☐	☐	☐	
____ Gal	☐	☐	☐	

Bulk Shipping Containers

Container Type	Quantity, Size & Frequency
☐ Yd.³ Box. or ☐ Super Sack	
☐ Hard Top or ☐ Tarped Bin	
☐ End Dump (Tarped) Trailer	
☐ Tank or ☐ Vacuum	

C. GENERAL MATERIAL & REGULATORY INFORMATION

Name of Material: Creosote
Process Generating The Material: Tank clean out/spill cleanup
Odor: ☐ None ☒ Mild ☐ Strong;

Yes	No		Yes	No	
☐	☒	Regulated or Licensed Radioactive Waste	☐	☒	Meets LDR Standards or ☐ Partially Meets (Landfill Only)
☐	☒	Regulated Medical / Infectious Waste	☐	☒	Commingled Waste (2 or more hazardous wastes mixed as one)
☐	☒	Regulated Benzene NESHAP Waste	☐	☒	Sorbent Added; If Yes, is sorbent biodegradable? ☐ Yes ☐ No
☐	☒	TSCA Regulated PCB Waste *(List any PCB level in Sec.D)*	☐	☒	Exempt Waste; If Yes, list reference, 40 CFR
☐	☒	Regulated Subpart CC Waste (VOs ≥ 500 ppm)	☐	☐	State Hazardous Waste; State Code: WT02
☐	☒	Regulated Ozone Depleting Substance	☒	☐	EPA Hazardous Waste
☐	☒	CERCLA Regulated (Superfund) Waste			EPA Waste Codes (including any LDR subcategories, e.g., D003 Water Reactive):
☐	☒	Hazardous Debris (Subject to alternative LDR treatment standards)			U051
☐	☒	Waste Contains UHCs/Constituents Of Concern			
		If Yes, list in ☐ Sec. D or ☐ Constituent Addendum			

EPA Haz Waste Only Origin Code: ☐ 1 ☒ 2 ☐ 3 ☐ 4 ☐ 5 Source Code: A 57 Form Code: B 207 System Code: M 041

D. MATERIAL COMPOSITION

1. Chemical/Physical Constituents: List all detectable components by chemical name, including physical material, e.g., sorbent, debris.

Material Components & Composition	ppm	☐ wt % ☒ vol %	Material Components & Composition	ppm	☐ wt % ☐ vol %
Soil, Wood Pieces		70-80			
Water		10-15			
Liquid Organics - Segattached		10-15			

Section D continues on the next page for Elemental Constituents Range Total ≥ 100 %

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SAFETY-KLEEN MATERIAL PROFILE (continued): SK REFERENCE NO: 8009478

Note: Completion of Sections D.2 & F is optional for: ☐ Analytical Profile (representative sample submitted; test results used to complete D.2 & F)
Completion of Sections D.2, E, & F is optional for: ☒ Standard Industry Profile (Safety-Kleen historical data utilized to complete D.2, E, & F)

D. MATERIAL COMPOSITION *(Continued)*

2. Elemental Constituents ☒ ***Check if this waste contains No Detectable Elements / Metals, unless listed below.***

Check either; ☐ Total Analysis *or* ☐ TCLP Method *or* ☐ Generator Knowledge, then enter data below.

Constituent	ppm	Constituent	ppm	Constituent	ppm	Constituent	ppm	Constituent	ppm
Aluminum		Cadmium		Fluorine		Nickel		Sodium	
Antimony		Chlorine		Lead		Phosphorous		Sulfur	
Arsenic		Chromium		Lithium		Potassium		Thallium	
Barium		Cobalt		Manganese		Selenium		Titanium	
Beryllium		Copper		Mercury		Silicon		Vanadium	
Bromine		Iodine		Molybdenum		Silver		Zinc	

E. REACTIVE CHARACTERISTICS ☒ *Check if this waste exhibits No Reactive Characteristics*

Yes	No		Yes	No		Yes	No	
☐	☒	Explosive	☐	☒	Oxidizer	☐	☒	Reactive Cyanide _____ ppm
☐	☒	Shock Sensitive	☐	☒	Water Reactive	☐	☒	Reactive Sulfide _____ ppm
☐	☒	Pyrophoric	☐	☒	Air Reactive	☐	☒	Polymerizable

Other Incompatibles: Describe _____

F. MATERIAL PHYSICAL CHARACTERISTICS @ 70°F.

# of Phases 2	Color *Varies*	Flash Point _____ °F (if < 73°F)	pH ☐ Liquids >20% H_2O *or* pH ☒ Non-Aqueous	
Liquid % 20-	Specific Gravity *1.2*	☐ 73 - <100°F ☐ 100 - 141°F	☐ ≤ 2 pH	☐ > 2 - 4 pH ☒ > 4 - 10 pH
Sludge %	Viscosity cps *high*	☐ 142°F. - <200°F ☒ ≥200°F	☐ > 10 - < 12.5 pH	☐ ≥ 12.5 pH
Solid % 70-	Density *8-12*	Boiling Point (if < 130°F) *n/a*	BTU's / lb. or Range *<3000*	
Powder %	☒ lbs./ gal. ☐ lbs./ cu. ft.	Ash % (Bridgeport Only)		
Gas %	Comments			

G. GENERATOR PROFILE CERTIFICATION

I hereby certify that I am an authorized agent of the generator, and warrant on behalf of the generator that the information supplied on this form and on any attachments or supplements hereto is complete and accurate, and that all known or suspected hazards of the material(s) described herein have been disclosed. I agree that if the sample test results indicate a discrepancy with any information supplied on this form, that either Safety-Kleen or the generator may initiate further testing and evaluation in accordance with the terms and conditions of the contract between Safety-Kleen and the generator and that this profile certification may be amended accordingly.

Generator's Authorized Signature _____ Name & Title (Printed or Typed) _____ Date ____ / ____ / ____

Comments _____

SK Use Only ☐ SKOS ☐ SKVS ☐ Non-haz Evaluation ☐ Standard Industry Profile: SIP Index # _____

SK Sales Rep. Name _____ Employee # _____ Territory/Branch # _____

Process Approval # _____ Product Code or Part # _____ TRI Flowpath # _____ Pricing _____

Waste Approval & Certification

We certify acceptability of this waste stream and that all appropriate permits have been obtained, as indicated by Safety-Kleen's facility approval

Safety-Kleen's Authorized Facility Signature _____ Name & Title (Printed or Typed) _____ Date ____ / ____ / ____

Koppers004800

POLLUTION CONTROL INDUSTRIES

4343 Kennedy Ave. East Chicago, IN 46312 1-800-388-7242
8486 Tay-For Drive Millington, TN 38053 1-888-724-8388
11855 Whiterock Rd. Rancho Cordova, CA 95670

PROFILE NUMBER

Nº

GENERATORS WASTE PROFILE SHEET

PLEASE PRINT IN INK OR TYPE

A. GENERATOR INFORMATION:

Generator Name: Koppers Industries
Facility Address 7540 NW St Helens Road
City Portland State OR Zip 97210
Customer Name: Amos Kamerer
Customer Phone: (503) 286 - 3681
Customer Fax: (503) 285 - 2831
Generator USEPA/Federal ID #: ORD 027 734 359
Is the Generator a "Conditionally Exempt Small Quantity Generator"? ___Yes X No
Generator's S.I.C. Code(4 Digit):_____

BILLING INFORMATION:

Billing Name: Koppers Industries
Billing Address 7540 NW St Helens
City Portland State OR Zip 97210
Billing Contact Name: Amos Kamerer
Billing Phone: (503) 286 - 3681
Billing Fax: (503) 285 - 2831
P.C.I. Sales Rep.: Emerald Services

B. WASTE STREAM INFORMATION:

Name of the Waste: Creosote
Original Process Generating Waste: Spill Clean-Up

Is a representative sample provided? ___Yes X No
Is there any Analytical attached? TCLP ___Yes X No
Is a MSDS attached? ___Yes X No
Other X Yes ___No

C. GENERAL CHARACTERISTICS:

___Color:
Odor:
___None
___Mild
X Strong

Physical state @ 70 F:
20-30% Liquid
70-80% Sludge
___% Solid
___% Powder
___% Gas(Aerosol)
___% Gas(Other)
___% Other

Phases:
___Single Layer
X Multi Layer
How Many? 2

Btu/Lb:
X <3000
___3000-5000
___5000-10,000
___>10,000

PH: ___<2.0 ___2.0 to 4.0 X 4.0 to 10.0 ___10.0 to 12.5 ___>12.5
Liquid Flash Point: ___<73 F ___73 to 99 F ___100 to 139 F ___140 to 200 F ___>200 F ___None
Specific Gravity > 9.0 % Total Halogens < 10

D. CHEMICAL COMPOSITION:

Constituents	Min%	Max%	Constituents	Min%	Max%
Soil	70	80			
Water	10	15			
Liquid Organics (See Attached)	10	15			

Total of Maximum concentration must > or = to 100%

E. OTHER WASTE STREAM INFORMATION:

Is this waste a "USED OIL" per 40CFR PART 279? ___Yes X No
If "Yes", does the total halogen content exceed 1,000 ppm? ___Yes ___No
If "Yes", can you identify the "Chlorinated Constituent" present in the oil? _____
If "Yes", can you rebut the presumption that this material is a "Hazardous Waste"? ___Yes ___No

Does the Waste have any of the following characteristics? (Please check all that apply)

___Oxidizer ___Organic Peroxide ___Water Reactive ___Air Reactive ___Pyrophoric ___Dioxin
___Radioactive ___Infectious ___Pathogen ___Carcinogen ___Etiological
___Explosive ___Shock Sensitive ___Undergo Hazardous Polymerization ___Cylinder ___Aerosols

Does the Waste contain any of the following?

None	or LESS THAN	or ACTUAL	None	or LESS THAN	or ACTUAL
___ PCB'S	___<50ppm	___ppm	___ Sulfides	___<50ppm	___ppm
___ Cyanides	___<50ppm	___ppm	___ Phenolics	___<50ppm	___ppm

Does the waste represented by this profile contain benzene? X Yes ___No
If "Yes", please list concentration in 11 ppm.
Is the Waste subject to the benzene waste operations NESHAP? (40CFR Part 61, Subpart FF) ___Yes X No
Answer "Yes" if your waste contains benzene and if the SIC code from your facility is one of the following:

2812 2813 2816 2819 2821 2822 2823 2824 2833 2834 2836 2838 2841 2842 2843 2844 2851
2861 2865 2869 2873 2874 2878 2879 2891 2892 2893 2898 2899 2911 3312 4953 4959 9511

E. OTHER WASTE STREAM INFORMATION CONTINUED:

Is the Waste subject to RCRA Subpart CC controls? (40 CFR 265 SUBPART CC) X Yes ___No
If "No", does the Waste meet the organic LDR exemption for UHC'S? (40 CFR 268.48, 268.7) ___Yes ___No
If "No", does the Waste contain <500ppmw volatile organic(VO)? (40 CFR 265 SUBPART CC) ___Yes ___No
Does the Waste contain any Class I or Class II ozone-depleting substances? ___Yes X No
If PCB'S are present, is the waste regulated by TSCA per 40 CFR 761? ___Yes X No

F. SHIPPING INFORMATION:

Method of Shipment:
___Bulk Liquid(> 500 Gallons) ___Bulk Solids(roll-off box, vacuum box, etc) ___Lab Pack
___Cubic Yard Boxes ___Totes (Please specify size) ___
X Drums(Specify size) ___85 X55 ___30 ___16 ___5 Other (Please specify)___
Shipping Frequency:
Number of Units 44 Per ___Month ___Quarter ___Year Other One time

G. R.C.R.A. CHARACTERIZATION:

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? X Yes ___No
If "No", Please skip to section H.
Is this a "Universal Waste" per 40CFR part 273? ___Yes X No
Is this a "Characteristic Waste"? ___Yes X No
If "Yes" Is it: ___D001 Ignitable ___D002 Corrosive ___D003 Reactive
Characteristic for Toxic Metals: ___D004 ___D005 ___D006 ___D007 ___D008 ___D009 ___D010 ___D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)___
Is this an "F" or "K" Listed waste or mixed with one? ___Yes X No
If "Yes", Please list all applicable code(s) from 40CFR261.31 and/or 261.32:___
Is this a commercial chemical product or spill cleanup that would carry a "U" or "P" waste code under 40CFR 261.33 (e) or (f)? X Yes ___No
If "Yes", Please list all applicable waste code(s). U051
Is this a state regulated waste? X Yes ___No
If "Yes", Please list all codes. WT02

H. DOT SHIPPING INFORMATION:

Is this a U.S. Dept. of Transportation(USDOT) Hazardous Material? X Yes ___No
Proper Shipping Name per 49CFR 172.101 Hazardous Materials Table: Waste Toxic Liquid, Organic N.O.S. (Creosote)
"Reportable Quantity(if any) ___lbs
Hazard Class or Division No. 6.1 (UN)NA # 2810 Packing Group ___I X II ___III
Is this a "Poison Inhalation Hazard"? ___Yes X No
If "Yes", Please Indicate Hazard Zone ___Zone A ___Zone B ___Zone C ___Zone D ___Other
List two primary hazardous constituents:___

I. GENERATOR CERTIFICATION:

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability. No deliberate or willful omissions of composition or properties exist and that all known or suspected hazardous have been disclosed.
I also certify that the obtained sample is representative of the waste material described above and give PCI permission and consent to make amendments and corrections.

Name(print)___ Title___
Signature ___ Date___

THIS SPACE FOR PCI APPROVALS DEPARTMENT ONLY

DATE RECEIVED ___/___/___ APPROVER'S INITIALS___ PROFILE NUMBER
PROCESS CODE ___ ___ PRICE___ TRANS___
PROPER WASTE CODES ___
PROPER D.O.T. SHIPPING NAME:___
HAZARD CLASS___ UN___ NA___ PACKING GROUP ___I ___II ___III
N.O.S. DESCRIPTORS___
YARD INSTRUCTIONS: ___RUN SALES ANALYTICAL ___MSDS ATTACHED
___NO LANDFILL CUSTOMER ___N/H FOR METALS PER GEN. ___SEE ATTACHED ANALYTICAL
___NO SAMPLE APPROVAL ___RUN OX. SCREEN ON INCOMING ___RUN COMP. ON INCOMING
FORM CODE B___ SYSTEM CODE M___
NOTES:___

POLLUTION CONTROL INDUSTRIES

4343 Kennedy Ave.
East Chicago, IN 46312
1-800-366-7242

5466 Tay-For Drive
Millington, TN 38053
1-888-724-8366

11855 Whiterock Rd.
Rancho Cordova, CA 95670

Page 1 of 2

PROFILE NUMBER

Nº

GENERATORS WASTE PROFILE SHEET

PLEASE PRINT IN INK OR TYPE

A. GENERATOR INFORMATION:

Generator Name: Koppers Industries
Facility Address 7540 NW St. Helens Road
City Portland State OR Zip 97210
Customer Name: Amos Kamerer
Customer Phone: (503) 286 - 3681
Customer Fax: (503) 285 - 2831
Generator USEPA/Federal ID #: ORD 027734 359
Is the Generator a "Conditionally Exempt Small Quantity Generator"? ___Yes X No
Generator's S.I.C. Code(4 Digit): 2865

BILLING INFORMATION:

Billing Name: Koppers Industries
Billing Address 7540 NW St Helens
City Portland State OR Zip 97210
Billing Contact Name: Amos Kamerer
Billing Phone: (503) 286 - 3681
Billing Fax: (503) 285 - 2831
P.C.I. Sales Rep.: Emerald Services

B. WASTE STREAM INFORMATION:

Name of the Waste: Creosote
Original Process Generating Waste: Spill Clean-up

Is a representative sample provided? ___Yes X No
Is a MSDS attached? ___Yes ___No
Is there any Analytical attached? TCLP ___Yes X No → Other X Yes ___No

C. GENERAL CHARACTERISTICS:

Black Color:
Odor:
___None
___Mild
X Strong

Physical state @ 70 F:
95-99 % Liquid
1-5 % Sludge
___% Solid
___% Powder
___% Gas(Aerosol)
___% Gas(Other)
___% Other

Phases:
X Single Layer
___Multi Layer
How Many? ___

Btu/Lb:
X <3000
___3000-5000
___5000-10,000
___>10,000

PH: ___<2.0 ___2.0 to 4.0 X 4.0 to 10.0 ___10.0 to 12.5 ___>12.5
Liquid Flash Point: ___<73 F ___73 to 99 F ___100 to 139 F ___140 to 200 F X >200 F ___None
Specific Gravity ≈ 8.33 % Total Halogens < 10

D. CHEMICAL COMPOSITION:

Constituents	Min%	Max%	Constituents	Min%	Max%
Water	50	70			
Liquid Organics (See Attachment)	30	60			
Soil Sludges	1	5			

Total of Maximum concentration must > or = to 100%

E. OTHER WASTE STREAM INFORMATION:

Is this waste a "USED OIL" per 40CFR PART 279? ___Yes X No
If "Yes", does the total halogen content exceed 1,000 ppm? ___Yes ___No
If "Yes", can you identify the "Chlorinated Constituent" present in the oil? ___
If "Yes", can you rebut the presumption that this material is a "Hazardous Waste"? ___Yes ___No

Does the Waste have any of the following characteristics? (Please check all that apply)

___Oxidizer ___Organic Peroxide ___Water Reactive ___Air Reactive ___Pyrophoric ___Dioxin
___Radioactive ___Infectious ___Pathogen ___Carcinogen ___Etiological
___Explosive ___Shock Sensitive ___Undergo Hazardous Polymerization ___Cylinder ___Aerosols

Does the Waste contain any of the following?

None	or	LESS THAN	or	ACTUAL		None	or	LESS THAN	or	ACTUAL
___	PCB'S	___<50ppm		___ppm		___	Sulfides	___<50ppm		___ppm
___	Cyanides	___<50ppm		___ppm		___	Phenolics	___<50ppm		___ppm

Does the waste represented by this profile contain benzene? X Yes ___No
If "Yes", please list concentration in 11 ppm.
Is the Waste subject to the benzene waste operations NESHAP? (40CFR Part 61, Subpart FF) ___Yes X No
Answer "Yes" if your waste contains benzene and if the SIC code from your facility is one of the following:

2812 2813 2816 2819 2821 2822 2823 2824 2833 2834 2835 2836 2841 2842 2843 2844 2851
2861 2865 2869 2873 2874 2876 2879 2891 2892 2893 2898 2899 2911 3312 4953 4959 9511

E. OTHER WASTE STREAM INFORMATION CONTINUED:

Is the Waste subject to RCRA Subpart CC controls? (40 CFR 265 SUBPART CC) X Yes ___No
If "No", does the Waste meet the organic LDR exemption for UHC'S? (40 CFR 268.48, 268.7) ___Yes ___No
If "No", does the Waste contain <500ppmw volatile organic(VO)? (40 CFR 265 SUBPART CC) ___Yes ___No
Does the Waste contain any Class I or Class II ozone-depleting substances? ___Yes X No
If PCB'S are present, is the waste regulated by TSCA per 40 CFR 761? ___Yes X No

F. SHIPPING INFORMATION:

Method of Shipment:
___Bulk Liquid(> 500 Gallons) ___Bulk Solids(roll-off box, vacuum box, etc) ___Lab Pack
___Cubic Yard Boxes ___Totes (Please specify size) ___
X Drums(Specify size) ___85 X55 ___30 ___16 ___5 Other (Please specify)___
Shipping Frequency:
Number of Units 11 Per ___Month ___Quarter ___Year Other One time

G. R.C.R.A. CHARACTERIZATION:

Is this a USEPA "Hazardous Waste" per 40CFR 261.3? X Yes ___No
If "No", Please skip to section H.
Is this a "Universal Waste" per 40CFR part 273? ___Yes X No
Is this a "Characteristic Waste"? ___Yes X No
If "Yes" Is it: ___D001 Ignitable ___D002 Corrosive ___D003 Reactive
Characteristic for Toxic Metals: ___D004 ___D005 ___D006 ___D007 ___D008 ___D009 ___D010 ___D011
Characteristic for Toxic Organics: D012 thru D043 (please list all that apply)___
Is this an "F" or "K" Listed waste or mixed with one? ___Yes X No
If "Yes", Please list all applicable code(s) from 40CFR261.31 and/or 261.32:___
Is this a commercial chemical product or spill cleanup that would carry a "U" or "P" waste code under 40CFR 261.33 (e) or (f)? X Yes ___No
If "Yes", Please list all applicable waste code(s). U051
Is this a state regulated waste? X Yes ___No
If "Yes", Please list all codes. WT02

H. DOT SHIPPING INFORMATION:

Is this a U.S. Dept. of Transportation(USDOT) Hazardous Material? X Yes ___No
Proper Shipping Name per 49CFR 172.101 Hazardous Materials Table: Waste Toxic Liquid, Organic N.O.S. (Creosote)
"Reportable Quantity(if any) ___lbs
Hazard Class or Division No. 6.1 (UN)NA # 2810 Packing Group ___I X II ___III
Is this a "Poison Inhalation Hazard"? ___Yes X No
If "Yes", Please indicate Hazard Zone ___Zone A ___Zone B ___Zone C ___Zone D ___Other
List two primary hazardous constituents:___

I. GENERATOR CERTIFICATION:

I hereby certify that the above and attached description is complete and accurate to the best of my knowledge and ability. No deliberate or willful omissions of composition or properties exist and that all known or suspected hazardous have been disclosed.
I also certify that the obtained sample is representative of the waste material described above and give PCI permission and consent to make amendments and corrections.

SIGN HERE
Name(print)___ Title___
Signature ___ Date___

THIS SPACE FOR PCI APPROVALS DEPARTMENT ONLY

DATE RECEIVED ___/___/___ APPROVER'S INITIALS___ PROFILE NUMBER
PROCESS CODE ___ ___ PRICE___ TRANS___
PROPER WASTE CODES ___
PROPER D.O.T. SHIPPING NAME:___
HAZARD CLASS___ UN___ NA___ PACKING GROUP ___I ___II ___III
N.O.S. DESCRIPTORS___
YARD INSTRUCTIONS: ___RUN SALES ANALYTICAL ___MSDS ATTACHED
___NO LANDFILL CUSTOMER ___N/H FOR METALS PER GEN. ___SEE ATTACHED ANALYTICAL
___NO SAMPLE APPROVAL ___RUN OX. SCREEN ON INCOMING ___RUN COMP. ON INCOMING
FORM CODE B___ SYSTEM CODE M___
NOTES:___

WASTE MANAGEMENT, INC ....NON HAZARDOUS WASTE DISPOSAL SOLUTIONS FOR THE PACIFIC NORTHWEST

Hillsboro Landfill, Inc.

3205 SE MINTER BRIDGE ROAD HILLSBORO, OR 97123

PERMIT # 2560

PERMIT TO DISPOSE OF NON-HAZARDOUS MATERIALS

EXPIRES: 6/24/03

GENERATOR: KOPPERS INDUSTRIES, INC.	
DESCRIPTION: *SOLID COAL TAR PITCH AND OFF SPEC CHEMICALS, PITCH COKE*	TONS: *100*
☒SPECIAL WASTE ☐CS ☐CLEAN-UP MATERIAL	
LOCATION: *PORTLAND, OREGON*	COUNTY: *Multnomah*
CONTACT: *AMOS KAMERER*	PHONE: *503-286-3681*

BILLING: *Landfill account BILL HAULER*	PO#: *N/A*	JOB#: *N/A*

We accept business checks, cash, VISA / Mastercard or charge(with prior approval)

SPECIAL HANDLING : *NOTE: CONTROL DUST*
HAULER: WASTE MANAGEMENT, EMERALD SERVICES, WEST COAST MARINE CLEANING

DL MK

APPROVED: KC *KRISTIN CASTNER* DATE: *11/08/02 1:45:25 PM*

A COPY OF THIS PERMIT MUST BE SHOWN BY EACH DRIVER

THERE IS A MINIMUM CHARGE OF $50-$60 FOR EACH LOAD OF SPECIAL WASTE

WASTE MANAGEMENT

HAZARDOUS WASTE IS STRICTLY PROHIBITED

KOPPERS
INDUSTRIES

7540 NW Saint Helens Road
Portland, Oregon 97210-3663
Telephone: 503-286-3681
Fax: 503-285-2831
E-mail: kamereras@koppers.com

To: Kristin Castner
Hillsboro Landfill, Inc.

Fax #: 503-493-7822

Date: 11/8/02

Of Pages: 3

From: Amos Kamerer

Subject: Permit # 2560 Revision

Confirming our conversation of yesterday, I would like to add Pitch Coke to subject permit for non-hazardous materials. A copy of the TCLP results on this material, is attached.

As a reminder, please bill the hauler for the applicable the fees; which could be any one of the following, all of which have accounts with you:

Waste Management
Emerald Services
West Coast Marine

Let me know if you have nay questions or need anything else.

Thanks,

Amos

CI CERTIFICATE OF ANALYSIS

CLIENT: Koppers Industries, Inc.
7540 NW St. Helens Road
Portland OR, 97210-3663
ATTN: Amos Kamerer

PROJECT NAME: Pitch Coke: TCLP Test

PHONE: (503) 286-3681
FAX: (503) 285-2831

SUBMITTED: 09/18/02 14:06

CI SAMPLE	CLIENTS ID#	DATE	TIME	MATRIX
2091802-01	Tank 65 Pitch Coke	09/18/2002	0000	Other(Sld)

REPORT DATE: 10/14/02 14:14 REPORT NUMBER: 2091802

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
2091802-01	**SAMPLE ID: Tank 65 Pitch Coke**						
Toxicity Characteristics Leachate Procedure (TCLP) Metals							
ARSENIC, TCLP - ICP	EPA 200.7/6010B	ARSENIC	ND	mg/L	0.010	GW	09/26/2002 14:39
BARIUM, TCLP - ICP		BARIUM	1.6	mg/L	0.020	GW	09/26/2002 14:39
CADMIUM, TCLP - ICP		CADMIUM	ND	mg/L	0.020	GW	09/26/2002 14:39
CHROMIUM, TCLP - ICP		CHROMIUM	ND	mg/L	0.010	GW	09/26/2002 14:39
LEAD, TCLP - ICP		LEAD	0.29	mg/L	0.040	GW	09/26/2002 14:39
SELENIUM, TCLP - ICP		SELENIUM	ND	mg/L	0.070	GW	09/26/2002 14:39
SILVER, TCLP - ICP		SILVER	ND	mg/L	0.080	GW	09/26/2002 14:39
Toxicity Characteristics Leachate Procedure (TCLP) Mercury							
MERCURY, TCLP - CVAA	EPA 245.1/7470A	MERCURY	ND	mg/L	0.0003	GW	09/27/2002 06:48
Volatile Organics by Gas Chromatography/Mass Spectroscopy							
TCLP VOLATILES	EPA 8260	BENZENE	ND	ug/L	0.1	PA	09/20/2002 17:23
		CARBON TETRACHLORIDE	ND	ug/L	0.1		
		CHLOROBENZENE	ND	ug/L	0.1		
		CHLOROFORM	0.9	ug/L	0.1		
		1,4-DICHLOROBENZENE	ND	ug/L	0.1		
		1,2-DICHLOROETHANE	ND	ug/L	0.1		
		1,1-DICHLOROETHENE	ND	ug/L	0.1		
		METHYL ETHYL KETONE	ND	ug/L	0.6		
		TETRACHLOROETHYLENE	ND	ug/L	0.1		
		TRICHLOROETHENE	ND	ug/L	0.1		
		VINYL CHLORIDE	ND	ug/L	0.1		
		Surrogate: Dibromofluoromethane	98.3 %	%RECOVERY	50-150		
		Surrogate: Fluorobenzene	98.9 %	%RECOVERY	50-150		
		Surrogate: Chlorobenzene-d5	103 %	%RECOVERY	50-150		
		Surrogate: 1,4-Dichlorobenzene-d4	89.8 %	%RECOVERY	50-150		
Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy							
TCLP ACID SEMIVOL	EPA 8270	O-CRESOL (2-METHYLPHENOL)	ND	ug/L	11	RVM	10/02/2002 14:25
		M-CRESOL (3-METHYLPHENOL)	ND	ug/L	11		
		P-CRESOL (4-METHYLPHENOL)	ND	ug/L	11		

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Authorized for Release By: David T. Back - Quality/Systems Manager

CERTIFICATE OF ANALYSIS

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
2091802-01	**SAMPLE ID: Tank 65 Pitch Coke**						
Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy							
TCLP ACID SEMIVOL	EPA 8270	PENTACHLOROPHENOL	ND	ug/L	11	RVM	10/02/2002 14:25
		2,4,5-TRICHLOROPHENOL	ND	ug/L	11		
		2,4,6-TRICHLOROPHENOL	ND	ug/L	11		
		Surrogate: Phenol-d6	31.2 %	%RECOVERY	50-150		
		Surrogate: 2,4,6-Tribromophenol	94.6 %	%RECOVERY	50-150		
TCLP B/N SEMIVOL		2,4-DINITROTOLUENE	ND	ug/L	210	RVM	10/02/2002 14:04
		HEXACHLOROBENZENE	ND	ug/L	110		
		HEXACHLOROBUTADIENE	ND	ug/L	110		
		HEXACHLOROETHANE	140	ug/L	110		
		NITROBENZENE	ND	ug/L	110		
		Surrogate: 2-Fluorobiphenyl	86.0 %	%RECOVERY	50-150		
		Surrogate: Nitrobenzene-D5	85.3 %	%RECOVERY	50-150		
		Surrogate: p-Terphenol-d14	82.9 %	%RECOVERY	50-150		

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Authorized for Release By:David T. Back - Quality/Systems Manager

COLUMBIA INSPECTION, INC 7133 N. Lombard, Portland, OR 97203 Phone:(503) 286-9464 Fax:(503) 286-5355 E-mail:lab@ColumbiaInspection.com

COLUMBIA INSPECTION, INC.

U.S Customs Approved Gaugers
Petroleum and Environmental Laboratory
Tank Calibrations

INVOICE

071

Koppers Industries, Inc.
7540 NW St. Helens Road
Portland, OR 97210-3663
Attn: Amos Kamerer

Invoice Number:	Invoice Date:	Terms:
5210073	10/14/02	Net 15 Days

Project Number	PO Number	Received
[none]	NA	09/18/02

Project
Pitch Coke: TCLP Test

Work Order(s)
2091802

Comments

Client
Koppers Industries, Inc.

Quantity	Analysis/Description	Matrix	Unit Cost	Extended Cost
1	TCLP - 8 METALS [7 day]	Other(Sld)	$200.00	$200.00
1	TCLP - SEMIVOL SHRT [7 day]	Other(Sld)	$300.00	$300.00
1	TCLP - VOLATILES [7 day]	Other(Sld)	$275.00	$275.00

Invoice Total: **$775.00**

COLUMBIA INSPECTION, INC 7133 N. Lombard, Portland, OR 97203 Phone:(503) 286-9464 Fax:(503) 286-5355 E-mail:lab@ColumbiaInspection.com

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Terms - Net 15 Days

Thank you for doing business with Columbia Inspection

Please state invoice number and remit to:

Columbia Inspection, Inc.
PO Box 83569, St. Johns Station
Portland, OR 97283

Kamerer Amos

From: Self Traci
Sent: Monday, October 21, 2002 6:53 AM
To: Stephenson Jack; Kamerer Amos
Subject: Pitch coke/TCLP

Hello,

I reviewed the TCLP toxicity data that was left for me and I did not see any parameter that would trigger hazardous. There was only toxicity data, the other characteristics were not on the analysis.

KOPPERS INDUSTRIES

FAX TRANSMITTAL

7540 N.W. Saint Helens Rd.
Portland. Oregon 97210-3663
Phone: (503) 286-3681
Fax: (503) 285-2831
Web Page: www.koppers.com

TO: Jack Stephenson DATE: 10/2/02

FROM: Amos TOTAL # OF PAGES: 3

Attached Are the TCLP Results on the Pitch/coke from tanks T-65 & T-68 — Let me Know what you think —

IF THIS TRANSMITTAL IS IN ERROR, PLEASE CALL 503-286-3681 FAX # 503-285-2831

CERTIFICATE OF ANALYSIS
(DRAFT)

CLIENT: Koppers Industries, Inc.
7540 NW St. Helens Road
Portland OR, 97210-3663
ATTN: Amos Kamerer

PHONE: (503) 286-3681
FAX: (503) 285-2831

PROJECT NAME: Pitch Coke: TCLP Test

SUBMITTED: 09/18/02 14:06

CI SAMPLE	CLIENTS ID#	DATE	TIME	MATRIX
2091802-01	DRAFT: Tank 65 Pitch Coke	09/18/2002	0000	Other(Sld)

REPORT DATE: 10/02/02 14:53 REPORT NUMBER:2091802

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
2091802-01	**SAMPLE ID: DRAFT: Tank 65 Pitch Coke**						
DRAFT: Toxicity Characteristics Leachate Procedure (TCLP) Metals							
ARSENIC, TCLP - ICP	EPA 200.7/6010B	ARSENIC	ND	mg/L	0.010	GW	09/26/2002 14:39
BARIUM, TCLP - ICP		BARIUM	1.6	mg/L	0.020	GW	09/26/2002 14:39
CADMIUM, TCLP - ICP		CADMIUM	ND	mg/L	0.020	GW	09/26/2002 14:39
CHROMIUM, TCLP - ICP		CHROMIUM	ND	mg/L	0.010	GW	09/26/2002 14:39
LEAD, TCLP - ICP		LEAD	0.29	mg/L	0.040	GW	09/26/2002 14:39
SELENIUM, TCLP - ICP		SELENIUM	ND	mg/L	0.070	GW	09/26/2002 14:39
SILVER, TCLP - ICP		SILVER	ND	mg/L	0.080	GW	09/26/2002 14:39
DRAFT: Toxicity Characteristics Leachate Procedure (TCLP) Mercury							
MERCURY, TCLP - CVAA	EPA 245.1/7470A	MERCURY	ND	mg/L	0.0003	GW	09/27/2002 06:48
DRAFT: Volatile Organics by Gas Chromatography/Mass Spectroscopy							
TCLP VOLATILES	EPA 8260	BENZENE	ND	mg/L	0.0001	PA	09/20/2002 17:23
		CARBON TETRACHLORIDE	ND	mg/L	0.0001	PA	09/20/2002 17:23
		CHLOROBENZENE	ND	mg/L	0.0001	PA	09/20/2002 17:23
		CHLOROFORM	0.0009	mg/L	0.0001	PA	09/20/2002 17:23
		1,4-DICHLOROBENZENE	ND	mg/L	0.0001	PA	09/20/2002 17:23
		1,2-DICHLOROETHANE	ND	mg/L	0.0001	PA	09/20/2002 17:23
		1,1-DICHLOROETHENE	ND	mg/L	0.0001	PA	09/20/2002 17:23
		METHYL ETHYL KETONE	ND	mg/L	0.0006	PA	09/20/2002 17:23
		TETRACHLOROETHYLENE	ND	mg/L	0.0001	PA	09/20/2002 17:23
		TRICHLOROETHENE	ND	mg/L	0.0001	PA	09/20/2002 17:23
		VINYL CHLORIDE	ND	mg/L	0.0001	PA	09/20/2002 17:23
		Surrogate: Dibromofluoromethane	98.8 %	%RECOVERY	50-150		
		Surrogate: Fluorobenzene	98.8 %	%RECOVERY	50-150		
		Surrogate: Chlorobenzene-d5	102 %	%RECOVERY	50-150		
		Surrogate: 1,4-Dichlorobenzene-d4	90.1 %	%RECOVERY	50-150		
DRAFT: Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy							
TCLP ACID SEMIVOL	EPA 8270	O-CRESOL (2-METHYLPHENOL)	ND	mg/L	0.011	RVM	10/02/2002 14:25

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CERTIFICATE OF ANALYSIS
(DRAFT)

REPORT DATE: 10/02/02 14:53 REPORT NUMBER:2091802

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
2091802-01	**SAMPLE ID: DRAFT: Tank 65 Pitch Coke**						
DRAFT: Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy							
TCLP ACID SEMIVOL	EPA 8270	M-CRESOL (3-METHYLPHENOL)	ND	mg/L	0.011	RVM	10/02/2002 14:25
		P-CRESOL (4-METHYLPHENOL)	ND	mg/L	0.011	RVM	10/02/2002 14:25
		PENTACHLOROPHENOL	ND	mg/L	0.011	RVM	10/02/2002 14:25
		2,4,5-TRICHLOROPHENOL	ND	mg/L	0.011	RVM	10/02/2002 14:25
		2,4,6-TRICHLOROPHENOL	ND	mg/L	0.011	RVM	10/02/2002 14:25
		Surrogate: Phenol-d6	31.2 %	%RECOVERY	50-150		
		Surrogate: 2,4,6-Tribromophenol	94.6 %	%RECOVERY	50-150		
TCLP B/N SEMIVOL		2,4-DINITROTOLUENE	ND	mg/L	0.21	RVM	10/02/2002 14:04
		HEXACHLOROBENZENE	ND	mg/L	0.11	RVM	10/02/2002 14:04
		HEXACHLOROBUTADIENE	ND	mg/L	0.11	RVM	10/02/2002 14:04
		HEXACHLOROETHANE	0.14	mg/L	0.11	RVM	10/02/2002 14:04
		NITROBENZENE	ND	mg/L	0.11	RVM	10/02/2002 14:04
		PYRIDINE	ND	mg/L	0.11	RVM	10/02/2002 14:04
		Surrogate: 2-Fluorobiphenyl	86.0 %	%RECOVERY	50-150		
		Surrogate: Nitrobenzene-D5	85.3 %	%RECOVERY	50-150		
		Surrogate: p-Terphenol-d14	82.9 %	%RECOVERY	50-150		

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DRAFT REPORT - DATA SUBJECT TO CHANGE

COLUMBIA INSPECTION, INC 7133 N. Lombard, Portland, OR 97203 Phone:(503) 286-9464 Fax:(503) 286-5355 E-mail:lab@ColumbiaInspection.com

Columbia Inspection, Inc.

Members of ASTM & API
U.S. Customs Certified Gauger and Laboratory

Fax Transmittal from the office at:
Portland
7133 N. Lombard
Portland, OR 97203
(503) 286-9464
FAX (503) 285-7831

Other office locations:

Tacoma	San Francisco	Los Angeles
4902 20th E	613 Escobar St.	790 Basin St.
Fife, WA 98424	Martinez, CA 94553	San Pedro, CA 90731
(253) 922-8781	(925) 229-0360	(310) 833-1557
FAX(253) 922-8957	FAX (925) 229-2821	FAX (310) 833-1585

DATE: 09/30/2002
CLIENT: **Koppers Industries, Inc.**
7540 NW St. Helens Road
Portland OR, 97210-3663

ATTN: **Amos Kamerer**
FAX: **(503) 285-2831**
Transmittal of the following number of pages:____

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Just finishing the sequentials.

CERTIFICATE OF ANALYSIS
(DRAFT)

CLIENT: Koppers Industries, Inc.
7540 NW St. Helens Road
Portland OR, 97210-3663
ATTN: Amos Kamerer

PHONE: (503) 286-3681
FAX: (503) 285-2831

PROJECT NAME: Pitch Coke: TCLP Test

SUBMITTED: 09/18/02 14:06

CI SAMPLE	CLIENTS ID#	DATE	TIME	MATRIX
2091802-01	DRAFT: Tank 65 Pitch Coke	09/18/2002	0000	Other(Sld)

REPORT DATE: 09/30/02 16:30 REPORT NUMBER: 2091802 PAGE: 1 OF 1

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
2091802-01	**SAMPLE ID: DRAFT: Tank 65 Pitch Coke**						
DRAFT: Toxicity Characteristics Leachate Procedure (TCLP) Metals							
ARSENIC, TCLP - ICP	EPA 200.7/6010B	ARSENIC	ND	mg/L	0.010	GW	09/26/2002 14:39
BARIUM, TCLP - ICP		BARIUM	1.6	mg/L	0.020	GW	09/26/2002 14:39
CADMIUM, TCLP - ICP		CADMIUM	ND	mg/L	0.020	GW	09/26/2002 14:39
CHROMIUM, TCLP - ICP		CHROMIUM	ND	mg/L	0.010	GW	09/26/2002 14:39
LEAD, TCLP - ICP		LEAD	0.29	mg/L	0.040	GW	09/26/2002 14:39
SELENIUM, TCLP - ICP		SELENIUM	ND	mg/L	0.070	GW	09/26/2002 14:39
SILVER, TCLP - ICP		SILVER	ND	mg/L	0.080	GW	09/26/2002 14:39
DRAFT: Toxicity Characteristics Leachate Procedure (TCLP) Mercury							
MERCURY, TCLP - CVAA	EPA 245.1/7470A	MERCURY	ND	mg/L	0.0003	GW	09/27/2002 06:48
DRAFT: Volatile Organics by Gas Chromatography/Mass Spectroscopy							
TCLP VOLATILES	EPA 8260	BENZENE	ND	ug/L	0.1	PA	09/20/2002 17:23
		CARBON TETRACHLORIDE	ND	ug/L	0.1	PA	09/20/2002 17:23
		CHLOROBENZENE	ND	ug/L	0.1	PA	09/20/2002 17:23
		CHLOROFORM	0.9	ug/L	0.1	PA	09/20/2002 17:23
		1,4-DICHLOROBENZENE	ND	ug/L	0.1	PA	09/20/2002 17:23
		1,2-DICHLOROETHANE	ND	ug/L	0.1	PA	09/20/2002 17:23
		1,1-DICHLOROETHENE	ND	ug/L	0.1	PA	09/20/2002 17:23
		METHYL ETHYL KETONE	ND	ug/L	0.6	PA	09/20/2002 17:23
		TETRACHLOROETHYLENE	ND	ug/L	0.1	PA	09/20/2002 17:23
		TRICHLOROETHENE	ND	ug/L	0.1	PA	09/20/2002 17:23
		VINYL CHLORIDE	ND	ug/L	0.1	PA	09/20/2002 17:23
		Surrogate: Dibromofluoromethane	98.8 %	%RECOVERY	50-150		
		Surrogate: Fluorobenzene	98.8 %	%RECOVERY	50-150		
		Surrogate: Chlorobenzene-d5	102 %	%RECOVERY	50-150		
		Surrogate: 1,4-Dichlorobenzene-d4	90.1 %	%RECOVERY	50-150		

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CI CERTIFICATE OF ANALYSIS

CLIENT: Koppers Industries, Inc.
7540 NW St. Helens Road
Portland OR, 97210-3663
ATTN: Amos Kamerer

PHONE: (503) 286-3681
FAX: (503) 285-2831

PROJECT NAME: Pitch Coke: TCLP Test

SUBMITTED: 09/18/02 14:06

CI SAMPLE	CLIENTS ID#	DATE	TIME	MATRIX
2091802-01	Tank 65 Pitch Coke	09/18/2002	0000	Other(Sld)

REPORT DATE: 10/14/02 14:14 REPORT NUMBER:2091802 PAGE: 1 OF 2

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
2091802-01	**SAMPLE ID: Tank 65 Pitch Coke**						
Toxicity Characteristics Leachate Procedure (TCLP) Metals							
ARSENIC, TCLP - ICP	EPA 200.7/6010B	ARSENIC	ND	mg/L	0.010	GW	09/26/2002 14:39
BARIUM, TCLP - ICP		BARIUM	1.6	mg/L	0.020	GW	09/26/2002 14:39
CADMIUM, TCLP - ICP		CADMIUM	ND	mg/L	0.020	GW	09/26/2002 14:39
CHROMIUM, TCLP - ICP		CHROMIUM	ND	mg/L	0.010	GW	09/26/2002 14:39
LEAD, TCLP - ICP		LEAD	0.29	mg/L	0.040	GW	09/26/2002 14:39
SELENIUM, TCLP - ICP		SELENIUM	ND	mg/L	0.070	GW	09/26/2002 14:39
SILVER, TCLP - ICP		SILVER	ND	mg/L	0.080	GW	09/26/2002 14:39
Toxicity Characteristics Leachate Procedure (TCLP) Mercury							
MERCURY, TCLP - CVAA	EPA 245.1/7470A	MERCURY	ND	mg/L	0.0003	GW	09/27/2002 06:48
Volatile Organics by Gas Chromatography/Mass Spectroscopy							
TCLP VOLATILES	EPA 8260	BENZENE	ND	ug/L	0.1	PA	09/20/2002 17:23
		CARBON TETRACHLORIDE	ND	ug/L	0.1		
		CHLOROBENZENE	ND	ug/L	0.1		
		CHLOROFORM	0.9	ug/L	0.1		
		1,4-DICHLOROBENZENE	ND	ug/L	0.1		
		1,2-DICHLOROETHANE	ND	ug/L	0.1		
		1,1-DICHLOROETHENE	ND	ug/L	0.1		
		METHYL ETHYL KETONE	ND	ug/L	0.6		
		TETRACHLOROETHYLENE	ND	ug/L	0.1		
		TRICHLOROETHENE	ND	ug/L	0.1		
		VINYL CHLORIDE	ND	ug/L	0.1		
		Surrogate: Dibromofluoromethane	98.3 %	%RECOVERY	50-150		
		Surrogate: Fluorobenzene	98.9 %	%RECOVERY	50-150		
		Surrogate: Chlorobenzene-d5	103 %	%RECOVERY	50-150		
		Surrogate: 1,4-Dichlorobenzene-d4	89.8 %	%RECOVERY	50-150		
Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy							
TCLP ACID SEMIVOL	EPA 8270	O-CRESOL (2-METHYLPHENOL)	ND	ug/L	11	RVM	10/02/2002 14:25
		M-CRESOL (3-METHYLPHENOL)	ND	ug/L	11		
		P-CRESOL (4-METHYLPHENOL)	ND	ug/L	11		

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CI CERTIFICATE OF ANALYSIS

REPORT DATE: 10/14/02 14:14 REPORT NUMBER:2091802 PAGE: 2 OF 2

SAMPLE/ ANALYSIS	METHOD	PARAMETER	RESULTS	UNITS	DETECTION LIMIT	TECH	DATE/TIME
2091802-01	**SAMPLE ID: Tank 65 Pitch Coke**						
Semi-Volatile Organics by Gas Chromatography/Mass Spectroscopy							
TCLP ACID SEMIVOL	EPA 8270	PENTACHLOROPHENOL	ND	ug/L	11	RVM	10/02/2002 14:25
		2,4,5-TRICHLOROPHENOL	ND	ug/L	11		
		2,4,6-TRICHLOROPHENOL	ND	ug/L	11		
		Surrogate: Phenol-d6	31.2 %	%RECOVERY	50-150		
		Surrogate: 2,4,6-Tribromophenol	94.6 %	%RECOVERY	50-150		
TCLP B/N SEMIVOL		2,4-DINITROTOLUENE	ND	ug/L	210	RVM	10/02/2002 14:04
		HEXACHLOROBENZENE	ND	ug/L	110		
		HEXACHLOROBUTADIENE	ND	ug/L	110		
		HEXACHLOROETHANE	140	ug/L	110		
		NITROBENZENE	ND	ug/L	110		
		Surrogate: 2-Fluorobiphenyl	86.0 %	%RECOVERY	50-150		
		Surrogate: Nitrobenzene-D5	85.3 %	%RECOVERY	50-150		
		Surrogate: p-Terphenol-d14	82.9 %	%RECOVERY	50-150		

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COLUMBIA INSPECTION, INC 7133 N. Lombard, Portland, OR 97203 Phone (503) 286-9464 Fax:(503) 286-5355 E-mail:lab@ColumbiaInspection.com

Jack 9/17/02

TCLP - pitch coke

Rob/Hahn

semivolitals

full $1000.00

8260

RCRA metals
VOC's
Semi volitals
extraction

$665

N. Creek Chemistries

No Hebbisides or pesticides
per knowledge

TCLP	Jim B
Metals (RCRA)	$130
Organics	
	$750
Volitals	250
Semi-Vol.	350

Kamerer Amos

From: Stephenson Jack
Sent: Wednesday, March 27, 2002 10:26 AM
To: Kamerer Amos
Subject: RE: Pitch Coke

Amos,
Your right, it is the whole listing of metals and organics. As far as a protocol, that's a term I'm not familiar with. If you take a gallon sample to any good lab they can run that test for you. Should run approx. $600.

Jack

-----Original Message-----
From: Kamerer Amos
Sent: Wednesday, March 27, 2002 12:42 PM
To: Stephenson Jack
Subject: RE: Pitch Coke

Jack,

Thanks for the NCAA Re-cap, I was hoping to be closer to the bottom and maybe get my $$ back.
I told Dietz and Kress; at least my wife isn't beating me! Ha! Ha!

When you say "full TCLP" is there a protocol for that, that you could send me? As I remember,
it's all the metals and organics, correct? Costs about $1,000.00?

Amos

-----Original Message-----
From: Stephenson Jack
Sent: Wednesday, March 27, 2002 6:58 AM
To: Kamerer Amos
Subject: RE: Pitch Coke

Amos,
I do remember you asking about that last year. It seems to me that we need to get a sample and have a full TCLP test run so that we can say with a certainty that it is non-hazardous. If you could get that done at a local lab then I'll find a place to get it to. Thanks. If Bill Rhea ever gets new results out on the pool I'll send them to you.

Jack

-----Original Message-----
From: Kamerer Amos
Sent: Monday, March 25, 2002 12:45 PM
To: Stephenson Jack
Subject: Pitch Coke

Hi Jack,

Some time back, you were going to check out the disposal cost for the approximate 150 tons of pitch coke the we took out of the melter tank last Fall. As I have never received anything from you in this regard, I'm figuring that we must have had another "Senior Moment"! Ha! Ha!

We had talked about sending it to Monessen, but you felt you could send it somewhere to Canada, cheaper.

Let me know, thanks.

Amos Kamerer
Phone # 503-286-3681
Fax # 503-285-2831
E-mail: Kamereras@koppers.com

KOPPERS INDUSTRIES

MATERIAL SAFETY DATA SHEET

SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

KOPPERS INDUSTRIES, INC.
436 SEVENTH AVENUE
PITTSBURGH, PA 15219-1800

MEDICAL EMERGENCIES: 800-553-5631
MEDICAL EMERGENCIES OUTSIDE U.S.A.: 615-632-9269
TECHNICAL ASSISTANCE: 412-227-2001
MSDS REQUESTS: 866-852-5239
CHEMTREC ASSISTANCE: 800-424-9300
CANUTEC: 613-996-6666

MSDS NUMBER: 00229373

SUBSTANCE: ANTHRACENE PASTE

TRADE NAMES/SYNONYMS:
00229373

PRODUCT GROUP Chemical

CHEMICAL FAMILY: polynuclear, aromatic hydrocarbons

REVISION DATE: Mar 11 2003

SECTION 2 COMPOSITION, INFORMATION ON INGREDIENTS

COMPONENT: ANTHRACENE PASTE
CAS NUMBER: 90640-81-6
PERCENTAGE: 100

COMPONENT: ANTHRACENE
CAS NUMBER: 120-12-7
PERCENTAGE: 52.87

COMPONENT: CARBAZOLE
CAS NUMBER: 86-74-8
PERCENTAGE: 15.62

COMPONENT: PHENANTHRENE
CAS NUMBER: 85-01-8

PERCENTAGE: 4.40

COMPONENT: FLUORENE
CAS NUMBER: 86-73-7
PERCENTAGE: 3.31

COMPONENT: NAPHTHALENE
CAS NUMBER: 91-20-3
PERCENTAGE: 1.81

COMPONENT: DIBENZOFURAN
CAS NUMBER: 132-64-9
PERCENTAGE: 1.57

COMPONENT: ACENAPHTHENE
CAS NUMBER: 83-32-9
PERCENTAGE: 0.95

COMPONENT: DIPHENYL
CAS NUMBER: 92-52-4
PERCENTAGE: 0.60

COMPONENT: FLUORANTHENE
CAS NUMBER: 206-44-0
PERCENTAGE: 0.38

COMPONENT: QUINOLINE
CAS NUMBER: 91-22-5
PERCENTAGE: 0.23

COMPONENT: PYRENE
CAS NUMBER: 129-00-0
PERCENTAGE: 0.22

COMPONENT: 1,2-BENZPHENANTHRENE
CAS NUMBER: 218-01-9
PERCENTAGE: 0.17

COMPONENT: ACENAPHTHYLENE
CAS NUMBER: 208-96-8
PERCENTAGE: 0.06

COMPONENT: 1,2-BENZANTHRACENE
CAS NUMBER: 56-55-3
PERCENTAGE: 0.05

COMPONENT: BENZO(G,H,I)PERYLENE
CAS NUMBER: 191-24-2
PERCENTAGE: 0.05

COMPONENT: BENZO(B)FLUORANTHENE
CAS NUMBER: 205-99-2
PERCENTAGE: 0.02

COMPONENT: BENZO(A)PYRENE
CAS NUMBER: 50-32-8
PERCENTAGE: 0.02

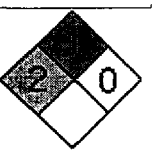
COMPONENT: BENZO(J)FLUORANTHENE
CAS NUMBER: 205-82-3
PERCENTAGE: 0.01

COMPONENT: BENZO(K)FLUORANTHENE
CAS NUMBER: 207-08-9
PERCENTAGE: 0.01

COMPONENT: INDENO(1,2,3-CD)PYRENE
CAS NUMBER: 193-39-5
PERCENTAGE: 0.01

SECTION 3 HAZARDS IDENTIFICATION

NFPA RATINGS (SCALE 0-4): HEALTH=2 FIRE=1 REACTIVITY=0



EMERGENCY OVERVIEW:
COLOR: green to brown
PHYSICAL FORM: solid
ODOR: aromatic odor
SIGNAL WORD: WARNING!
MAJOR HEALTH HAZARDS: harmful if swallowed, respiratory tract irritation, skin irritation, eye irritation, allergic reactions, blood damage, cancer
PHYSICAL HAZARDS: Dust/air mixtures may ignite or explode.
PRECAUTIONARY STATEMENTS: Do not breathe dust. Do not get in eyes, on skin, or on clothing. Avoid creation of dust. Keep container tightly closed. Wash thoroughly after handling. Use only with adequate ventilation.

POTENTIAL HEALTH EFFECTS:
INHALATION:
SHORT TERM EXPOSURE: irritation, nausea, headache, difficulty breathing, blood disorders
LONG TERM EXPOSURE: irritation, cancer
SKIN CONTACT:
SHORT TERM EXPOSURE: irritation, allergic reactions, skin disorders, sensitivity to light
LONG TERM EXPOSURE: irritation, allergic reactions
EYE CONTACT:
SHORT TERM EXPOSURE: irritation, sensitivity to light, tearing
LONG TERM EXPOSURE: irritation
INGESTION:
SHORT TERM EXPOSURE: harmful if swallowed, irritation, nausea, vomiting, diarrhea, stomach pain, headache
LONG TERM EXPOSURE: blood disorders, liver damage

CARCINOGEN STATUS:
OSHA: No
NTP: No
IARC: Yes

SECTION 4 FIRST AID MEASURES

INHALATION: If adverse effects occur, remove to uncontaminated area. Give artificial respiration if not breathing. Get immediate medical attention.

SKIN CONTACT: Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention, if needed. Thoroughly clean and dry contaminated clothing and shoes before reuse.

EYE CONTACT: Flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention.

INGESTION: DO NOT induce vomiting. Give large amounts of water or milk. Do not give anything by mouth to unconscious or convulsive person. Get immediate medical attention.

SECTION 5 FIRE FIGHTING MEASURES

FIRE AND EXPLOSION HAZARDS: Dust/air mixtures may ignite or explode. Containers may rupture or explode if exposed to heat.

EXTINGUISHING MEDIA: regular dry chemical, alcohol resistant foam, water

FIRE FIGHTING: Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out. Do not scatter spilled material with high-pressure water streams. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas.

SENSITIVITY TO MECHANICAL IMPACT: Not available

SENSITIVITY TO STATIC DISCHARGE: Not available

FLASH POINT: 284 F (140 C) approximate

HAZARDOUS COMBUSTION PRODUCTS:
Thermal decomposition products or combustion: oxides of carbon

SECTION 6 ACCIDENTAL RELEASE MEASURES

WATER RELEASE:
Subject to California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65). Keep out of water supplies and sewers.

OCCUPATIONAL RELEASE:
Collect spilled material in appropriate container for disposal. Keep out of water supplies and sewers. In Canada, report releases to provincial authorities, municipal authorities, or both, as required. Due to the concentration of Naphthalene and the CERCLA (40 CFR 302.4) reportable quantity of 100

pounds, the release of 5525 pounds of this product requires National Response Center notification.

SECTION 7 HANDLING AND STORAGE

STORAGE: Store and handle in accordance with all current regulations and standards. Label all containers. Keep container in a well-ventilated place. Keep away from heat, sparks and flame. Protect from physical damage. See original container for storage recommendations. Keep separated from incompatible substances.

HANDLING: Avoid contact with eyes, skin and clothing. Avoid creation of dust. When using, do not eat, drink or smoke. Wash exposed skin with soap and water. Use protective skin cream on exposed skin before and during work shift. Contaminated clothing should be removed and laundered before reuse. Use methods to minimize dust.

SECTION 8 EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE LIMITS:
ANTHRACENE PASTE:
COAL TAR PITCH VOLATILES:
0.2 mg/m3 OSHA TWA (benzene soluble fraction)
0.2 mg/m3 ACGIH TWA (benzene soluble fraction)
0.1 mg/m3 NIOSH recommended TWA 10 hour(s) (cyclohexane extractable fraction)

VENTILATION: Provide local exhaust or process enclosure ventilation system. Ensure compliance with applicable exposure limits.

EYE PROTECTION: ANSI Z87.1-1989 approved safety glasses with side shields. Contact lenses should not be worn. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

CLOTHING: Wear protective clothing to prevent contact. Contaminated clothing should be removed and laundered before reuse.

GLOVES: Wear appropriate chemical resistant gloves.

PROTECTIVE MATERIAL TYPES: protective skin cream, chemical resistant material

RESPIRATOR: No respirator is required under normal conditions of use.
If ventilation does not maintain inhalation exposures below applicable TLVs and/or PELs, use canister or cartridge respirators, which are MSHA/NIOSH-approved, with organic vapor cartridges and high-efficiency particulate filters.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: solid
COLOR: green to brown
ODOR: aromatic odor
BOILING POINT: 608-680 F (320-360 C)
MELTING POINT: Not available
VAPOR PRESSURE: <0.01 mmHg @ 20 C
VAPOR DENSITY (air=1): Not available

SPECIFIC GRAVITY (water=1): >=1.080 @ 15.5 C
WATER SOLUBILITY: immiscible
PH: Not applicable
VOLATILITY: Not applicable
ODOR THRESHOLD: Not available
EVAPORATION RATE: Not applicable
COEFFICIENT OF WATER/OIL DISTRIBUTION: Not available

SECTION 10 STABILITY AND REACTIVITY

REACTIVITY: Stable at normal temperatures and pressure.

CONDITIONS TO AVOID: Avoid heat, flames, sparks and other sources of ignition. Avoid contact with incompatible materials.

INCOMPATIBILITIES: oxidizing materials

HAZARDOUS DECOMPOSITION:
Thermal decomposition products or combustion: oxides of carbon

POLYMERIZATION: Will not polymerize.

SECTION 11 TOXICOLOGICAL INFORMATION

ANTHRACENE PASTE:
LOCAL EFFECTS:
Irritant: inhalation, skin, eye
TARGET ORGANS: blood, immune system (sensitizer)
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: skin disorders and allergies, metabolic disorders

SECTION 12 ECOLOGICAL INFORMATION

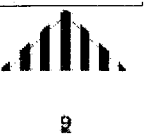
Not available

SECTION 13 DISPOSAL CONSIDERATIONS

Dispose in accordance with all applicable regulations.

SECTION 14 TRANSPORT INFORMATION

U.S. DOT 49 CFR 172.101:
PROPER SHIPPING NAME: Other regulated substances, solid, n.o.s. (ANTHRACENE, PHENANTHRENE)
ID NUMBER: NA3077
HAZARD CLASS OR DIVISION: 9
PACKING GROUP: III
LABELING REQUIREMENTS: 9
DOT HAZARDOUS SUBSTANCE(S):
Anthracene 5000 lb(s) (2270 kg(s))
Fluoranthene 100 lb(s) (45.4 kg(s))
Naphthalene 100 lb(s) (45.4 kg(s))



Acenaphthene 100 lb(s) (45.4 kg(s))
Biphenyl 100 lb(s) (45.4 kg(s))
Benzo(b)fluoranthene 1 lb(s) (0.454 kg(s))
Benzo(a)pyrene 1 lb(s) (0.454 kg(s))

CANADIAN TRANSPORTATION OF DANGEROUS GOODS: No classification assigned.

SECTION 15 REGULATORY INFORMATION

U.S. REGULATIONS:

SARA TITLE III SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355.30): Not regulated.

SARA TITLE III SECTION 304 EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355.40): Not regulated.

SARA TITLE III SARA SECTIONS 311/312 HAZARDOUS CATEGORIES (40 CFR 370.21):
ACUTE: Yes
CHRONIC: Yes
FIRE: No
REACTIVE: No
SUDDEN RELEASE: No

SARA TITLE III SECTION 313 (40 CFR 372.65):
ANTHRACENE
PHENANTHRENE
NAPHTHALENE
DIBENZOFURAN

STATE REGULATIONS:

California Proposition 65:
Known to the state of California to cause the following:
Soots, tars, and mineral oils (untreated and mildly treated oils and used engine oils)
Cancer (Feb 27, 1987)
Carbazole
Cancer (May 01, 1996)
NAPHTHALENE
Cancer (Apr 19, 2002)
Quinoline and its strong acid salts
Cancer (Oct 24, 1997)
1,2-Benzphenanthrene (Chrysene)
Cancer (Jan 01, 1990)
1,2-Benzanthracene
Cancer (Jul 01, 1987)
BENZO(B)FLUORANTHENE
Cancer (Jul 01, 1987)
Benzo(a)pyrene
Cancer (Jul 01, 1987)
BENZO(J)FLUORANTHENE
Cancer (Jul 01, 1987)

BENZO(K)FLUORANTHENE
Cancer (Jul 01, 1987)
Indeno (1,2,3-cd)pyrene
Cancer (Jan 01, 1988)

CANADIAN REGULATIONS:
WHMIS CLASSIFICATION: D2A.

NATIONAL INVENTORY STATUS:
U.S. INVENTORY (TSCA): Not listed on inventory.

TSCA 12(b) EXPORT NOTIFICATION: Not listed.

CANADA INVENTORY (DSL/NDSL): Not listed on inventory.

SECTION 16 OTHER INFORMATION

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While the information and recommendations set forth herein are believed to be accurate as of the date hereof, Koppers Industries makes no warranty with respect thereto and disclaims all liability from reliance thereon.

KOPPERS INDUSTRIES, INC.

Technology Department
Analysis Report

Sample No: 2002-1335 Date Received: 9/25/02

Received From: Portland
Tank Residue from Tank T-66

Quantity: 1qt
Description: Tank Residue from Tank T-66

Analysis Date: 9/26/02 Analyzed By: RJC

The sample was dissolved in methylene chloride and analyzed by gas chromatography against a multistandard from Acusstandard and internal standards of hexadecane and 9.10 diphenylanthracene.

	A Wt%	B Wt%
Naphthalene	1.71	1.91
quinoline	0.20	0.26
2methyl naphthalene	2.42	2.53
1methyl naphthalene	0.56	0.71
Biphenyl	0.59	0.61
Acenaphthylene	0.05	0.06
Acenaphthene	0.84	1.06
Dibenzofuran	1.58	1.55
Fluorene	3.54	3.07
Phenanthrene	4.71	4.08
Anthracene	54.94	50.80
Carbazole	15.86	15.37
Fluoranthene	0.35	0.40
Pyrene	0.20	0.24
Benz(a)anthracene	0.05	0.05
Chrysene	0.17	0.17
Benzo(b)fluoranthene	0.01	0.02
benzo(j)fluoranthene	0.01	0.01
Benzo(k)fluoranthene	0.01	0.01
Benzo (a) pyrene	0.02	0.02
indeno(1,2,3c,d)pyrene	0.01	0.00
benzo(g,h,i)perylene	0.05	0.04

KOPPERS INDUSTRIES, INC.

Analytical Services Group
Analysis Report

Sample No:	2002-1335	Date Received:	9/25/02
Received From:	Koppers Portland		
Quantity:	1 Qt.		
Description:	T-66 tank bottoms		
Analysis Date:	9/27/02	Analyzed By:	MRP

Ash, %: 0.66

9/27/02 ^

KOPPERS INDUSTRIES, INC.

Analytical Services Group
Analysis Report

Sample No: Q97-311 Date Received: 2-20-97

Received From: KII-Portland
T.J. Turner

Quantity: 1 quart
Description: Tank Bottom Sample from T-1

Analysis Date: 2-24-97 Analyzed By: SAM

Ash, %:	.21
Water, %:	6.8

Distillation:

up to 210°C, %:	4.9
up to 235°C, %:	5.5
up to 270°C, %:	14.8
up to 315°C, %:	31.8
up to 355°C, %:	53.0
Residue, %:	47.0

Benzene, %:	ND
Naphthalene, %:	8.0
Acenaphthylene,%:	0.5
Acenaphthene, %:	6.7
Fluorene, %:	4.6
Phenanthrene, %:	13.3
Anthracene, %:	2.7
Fluoranthene, %:	7.8
Pyrene, %:	6.1
Benzo (a) anthracene, %:	2.5
Chrysene, %:	2.3
Benzo fluoranthenes, %:	3.2
Benzo (a) pyrene, %:	1.7
Benzo perylene, %:	4.2

STRAIGHT BILL OF LADING – SHORT FORM
ORIGINAL – NOT NEGOTIABLE

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading

FROM: **KOPPERS INC.** AT: **PORTLAND, OR** DATE: **01/04/07**

Bill of Lading Number

9270000012

The property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned and destined as indicated below, which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own road or its own water line, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all conditions not prohibited by law, whether printed or written, herein contained, including classification bills of lading conditions, which are hereby agreed to be the shipper and accepted for himself and his assigns.

Freight Basis

COLLECT

Ship To: **KOPPERS INC.**
CLAIRTON, PA

Route: **BNSF-(VCOUV)-UP-(CHGO)-NS-(CLAIR)-URR**

Carrier / Vehicle # **MP583200**
Sold To:

Shippers Order #

9270000012

Customers P.O. Number

Packages No. and Kind	HM	DOT SHIPPING NAME/HAZARD CLASS (IF APPLICABLE)	DESCRIPTION OF ARTICLES, SPECIAL MARKS & EXCEPTIONS	WEIGHT (Subject to Correction)
1 HC	RQ	**RESIDUE LAST CONTAINED:** **OTHER REGULATED SUBSTANCES, SOLID, N.O.S.** **(CONTAINS BENZO(A)PYRENE, DEBENZ(A,H)ANTHRACENE)** **CLASS 9 NA 3077 PG III** **ELECTRODE BINDER PITCH** **MARKED: 3077** **(CARBON PITCH TYPE A-SOLID - 42150001)**		

EMERGENCY CONTACT: CALL CHEMTREC 1-800-424-9300 OR 1-202-483-7616 FAX 1-800-242-7428

Subject to Section 7 of Conditions of applicable bill of lading, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement: **The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.**

Signature Of Consignor per KOPPERS, INC See ★ below

"Note: Where the rate is dependent on value, shipper's are required to state specifically in writing the released or declared value of the property. The agreed or declared value of the property is hereby stated by the shipper to be not exceeding 170 cents per pounds for each distribution package."

PERMANENT POST-OFFICE ADDRESS OF SHIPPER:

Koppers Industries, Inc.
436 Seventh Avenue
Pittsburgh, PA 15219-1800

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation

PER

♦ Shipper herby certifies that this shipment is correctly described; correct weight is shown and is subject to verification according to agreement with the Weighing and Inspection Bureau having jurisdiction.

PER

_____ Agent

Per

★ Signature of Shipper's agent next above is also intended as execution of Section 7
Signature above must appear in longhand

STRAIGHT BILL OF LADING – SHORT FORM
ORIGINAL – NOT NEGOTIABLE

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading

FROM: **KOPPERS INC.** | AT: **PORTLAND, OR** | DATE: **01/04/07**

Bill of Lading Number

9270000013

The property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned and destined as indicated below, which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own road or its own water line, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all conditions not prohibited by law, whether printed or written, herein contained, including classification bills of lading conditions, which are hereby agreed to be the shipper and accepted for himself and his assigns.

Freight Basis

COLLECT

Ship To: **KOPPERS INC.**
CLAIRTON, PA

Route: **BNSF-(VCOUV)-UP-(CHGO)-NS-(CLAIR)-URR**

Carrier / Vehicle # **UP38758**
Sold To:

Shippers Order #

9270000013

Customers P.O. Number

Packages No. and Kind	HM	DOT SHIPPING NAME/HAZARD CLASS (IF APPLICABLE)	DESCRIPTION OF ARTICLES, SPECIAL MARKS & EXCEPTIONS	WEIGHT (Subject to Correction)
1 HC	RQ	**RESIDUE LAST CONTAINED:** **OTHER REGULATED SUBSTANCES, SOLID, N.O.S.** **(CONTAINS BENZO(A)PYRENE, DEBENZ(A,H)ANTHRACENE)** **CLASS 9 NA 3077 PG III** **ELECTRODE BINDER PITCH** **MARKED: 3077** **(CARBON PITCH TYPE A-SOLID - 42150001)**		

EMERGENCY CONTACT: CALL CHEMTREC 1-800-424-9300 OR 1-202-483-7616 FAX 1-800-242-7428

Subject to Section 7 of Conditions of applicable bill of lading, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement: **The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.**

Signature Of Consignor per KOPPERS See ★ below INC

"Note: Where the rate is dependent on value, shipper's are required to state specifically in writing the released or declared value of the property. The agreed or declared value of the property is hereby stated by the shipper to be not exceeding 170 cents per pounds for each distribution package."

PERMANENT POST-OFFICE ADDRESS OF SHIPPER:

Koppers Industries, Inc.
436 Seventh Avenue
Pittsburgh, PA 15219-1800

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation

PER

♦ Shipper herby certifies that this shipment is correctly described; correct weight is shown and is subject to verification according to agreement with the Weighing and Inspection Bureau having jurisdiction.

PER

_____ Agent

Per

★ Signature of Shipper's agent next above is also intended as execution of Section 7
Signature above must appear in longhand

STRAIGHT BILL OF LADING – SHORT FORM
ORIGINAL – NOT NEGOTIABLE

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading

FROM: **KOPPERS INC.** | AT: **PORTLAND, OR** | DATE: **01/04/07**

Bill of Lading Number

9270000014

The property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned and destined as indicated below, which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own road or its own water line, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all conditions not prohibited by law, whether printed or written, herein contained, including classification bills of lading conditions, which are hereby agreed to be the shipper and accepted for himself and his assigns.

Freight Basis

COLLECT

Ship To: **KOPPERS INC.**
CLAIRTON, PA

Route: **BNSF-(VCOUV)-UP-(CHGO)-NS-(CLAIR)-URR**

Carrier / Vehicle # **MP583000**
Sold To:

Shippers Order #

9270000014

Customers P.O. Number

Packages No. and Kind	HM	DOT SHIPPING NAME/HAZARD CLASS (IF APPLICABLE)	DESCRIPTION OF ARTICLES, SPECIAL MARKS & EXCEPTIONS	WEIGHT (Subject to Correction)
1 HC	RQ	**RESIDUE LAST CONTAINED:** **OTHER REGULATED SUBSTANCES, SOLID, N.O.S.** **(CONTAINS BENZO(A)PYRENE, DEBENZ(A,H)ANTHRACENE)** **CLASS 9 NA 3077 PG III** **ELECTRODE BINDER PITCH** **MARKED: 3077** **(CARBON PITCH TYPE A-SOLID - 42150001)**		

EMERGENCY CONTACT: CALL CHEMTREC 1-800-424-9300 OR 1-202-483-7616 FAX 1-800-242-7428

Subject to Section 7 of Conditions of applicable bill of lading, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement: **The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.**

Signature Of Consignor per KOPPERS INC. See ★ below

"Note: Where the rate is dependent on value, shipper's are required to state specifically in writing the released or declared value of the property. The agreed or declared value of the property is hereby stated by the shipper to be not exceeding 170 cents per pounds for each distribution package."

PERMANENT POST-OFFICE ADDRESS OF SHIPPER:

Koppers Industries, Inc.
436 Seventh Avenue
Pittsburgh, PA 15219-1800

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

PER

♦ Shipper herby certifies that this shipment is correctly described; correct weight is shown and is subject to verification according to agreement with the Weighing and Inspection Bureau having jurisdiction.

PER

_____ Agent

Per

★ Signature of Shipper's agent next above is also intended as execution of Section 7
Signature above must appear in longhand

STRAIGHT BILL OF LADING – SHORT FORM
ORIGINAL – NOT NEGOTIABLE

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading

FROM: **KOPPERS INC.** AT: **PORTLAND, OR** DATE: **01/04/07**

Bill of Lading Number

9270000015

The property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned and destined as indicated below, which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own road or its own water line, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all conditions not prohibited by law, whether printed or written, herein contained, including classification bills of lading conditions, which are hereby agreed to be the shipper and accepted for himself and his assigns.

Freight Basis

COLLECT

Ship To: **KOPPERS INC.**
CLAIRTON, PA

Route: **BNSF-(VCOUV)-UP-(CHGO)-NS-(CLAIR)-URR**

Carrier / Vehicle # **MP588914**
Sold To:

Shippers Order #

9270000015

Customers P.O. Number

Packages No. and Kind	HM	DOT SHIPPING NAME/HAZARD CLASS (IF APPLICABLE)	DESCRIPTION OF ARTICLES, SPECIAL MARKS & EXCEPTIONS	WEIGHT (Subject to Correction)
1 HC	RQ	**RESIDUE LAST CONTAINED:** **OTHER REGULATED SUBSTANCES, SOLID, N.O.S.** **(CONTAINS BENZO(A)PYRENE, DEBENZ(A,H)ANTHRACENE)** **CLASS 9 NA 3077 PG III** **ELECTRODE BINDER PITCH** **MARKED: 3077** **(CARBON PITCH TYPE A-SOLID - 42150001)**		

EMERGENCY CONTACT: CALL CHEMTREC 1-800-424-9300 OR 1-202-483-7616 FAX 1-800-242-7428

Subject to Section 7 of Conditions of applicable bill of lading, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement: **The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.**

Signature Of Consignor per KOPPERS INC See ★ below

"Note: Where the rate is dependent on value, shipper's are required to state specifically in writing the released or declared value of the property. The agreed or declared value of the property is hereby stated by the shipper to be not exceeding 170 cents per pounds for each distribution package."

PERMANENT POST-OFFICE ADDRESS OF SHIPPER:

Koppers Industries, Inc.
436 Seventh Avenue
Pittsburgh, PA 15219-1800

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

PER

♦Shipper herby certifies that this shipment is correctly described; correct weight is shown and is subject to verification according to agreement with the Weighing and Inspection Bureau having jurisdiction.

PER

Agent

Per

★ Signature of Shipper's agent next above is also intended as execution of Section 7
Signature above must appear in longhand

STRAIGHT BILL OF LADING – SHORT FORM
ORIGINAL – NOT NEGOTIABLE

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading

FROM: **KOPPERS INC.** | AT: **PORTLAND, OR** | DATE: **01/04/07**

Bill of Lading Number
9270000016

The property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned and destined as indicated below, which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own road or its own water line, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all conditions not prohibited by law, whether printed or written, herein contained, including classification bills of lading conditions, which are hereby agreed to be the shipper and accepted for himself and his assigns.

Freight Basis
COLLECT

Ship To: **KOPPERS INC.**
CLAIRTON, PA

Route: **BNSF-(VCOUV)-UP-(CHGO)-NS-(CLAIR)-URR**

Carrier / Vehicle # **MP588231**
Sold To:

Shippers Order #
9270000016

Customers P.O. Number

Packages No. and Kind	HM	DOT SHIPPING NAME/HAZARD CLASS (IF APPLICABLE)	DESCRIPTION OF ARTICLES, SPECIAL MARKS & EXCEPTIONS	WEIGHT (Subject to Correction)
1 HC	RQ	**RESIDUE LAST CONTAINED:** **OTHER REGULATED SUBSTANCES, SOLID, N.O.S.** **(CONTAINS BENZO(A)PYRENE, DEBENZ(A,H)ANTHRACENE)** **CLASS 9 NA 3077 PG III** **ELECTRODE BINDER PITCH** **MARKED: 3077** **(CARBON PITCH TYPE A-SOLID - 42150001)**		

EMERGENCY CONTACT: CALL CHEMTREC 1-800-424-9300 OR 1-202-483-7616 FAX 1-800-242-7428

Subject to Section 7 of Conditions of applicable bill of lading, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement: **The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.**

Signature Of Consignor per KOPPERS INC See ★ below

"Note: Where the rate is dependent on value, shipper's are required to state specifically in writing the released or declared value of the property. The agreed or declared value of the property is hereby stated by the shipper to be not exceeding 170 cents per pounds for each distribution package."

PERMANENT POST-OFFICE ADDRESS OF SHIPPER:
Koppers Industries, Inc.
436 Seventh Avenue
Pittsburgh, PA 15219-1800

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

PER

♦ Shipper herby certifies that this shipment is correctly described; correct weight is shown and is subject to verification according to agreement with the Weighing and Inspection Bureau having jurisdiction.

PER

_____ Agent

Per

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Signature above must appear in longhand

STRAIGHT BILL OF LADING – SHORT FORM
ORIGINAL – NOT NEGOTIABLE

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading

FROM: **KOPPERS INC.** | AT: **PORTLAND, OR** | DATE: **01/04/07**

Bill of Lading Number

9270000017

The property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned and destined as indicated below, which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own road or its own water line, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all conditions not prohibited by law, whether printed or written, herein contained, including classification bills of lading conditions, which are hereby agreed to be the shipper and accepted for himself and his assigns.

Freight Basis

COLLECT

Ship To: **KOPPERS INC.**
CLAIRTON, PA

Route: **BNSF-(VCOUV)-UP-(CHGO)-NS-(CLAIR)-URR**

Carrier / Vehicle # **UP37826**
Sold To:

Shippers Order #

9270000017

Customers P.O. Number

Packages No. and Kind	HM	DOT SHIPPING NAME/HAZARD CLASS (IF APPLICABLE)	DESCRIPTION OF ARTICLES, SPECIAL MARKS & EXCEPTIONS	WEIGHT (Subject to Correction)
1 HC	RQ	**RESIDUE LAST CONTAINED:** **OTHER REGULATED SUBSTANCES, SOLID, N.O.S.** **(CONTAINS BENZO(A)PYRENE, DEBENZ(A,H)ANTHRACENE)** **CLASS 9 NA 3077 PG III** **ELECTRODE BINDER PITCH** **MARKED: 3077** **(CARBON PITCH TYPE A-SOLID - 42150001)**		

EMERGENCY CONTACT: CALL CHEMTREC 1-800-424-9300 OR 1-202-483-7616 FAX 1-800-242-7428

Subject to Section 7 of Conditions of applicable bill of lading, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement: **The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.**

Signature Of Consignor per KOPPERS, INC See ★ below

"Note: Where the rate is dependent on value, shipper's are required to state specifically in writing the released or declared value of the property. The agreed or declared value of the property is hereby stated by the shipper to be not exceeding 170 cents per pounds for each distribution package."

PERMANENT POST-OFFICE ADDRESS OF SHIPPER:

Koppers Industries, Inc.
436 Seventh Avenue
Pittsburgh, PA 15219-1800

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

PER

♦ Shipper herby certifies that this shipment is correctly described; correct weight is shown and is subject to verification according to agreement with the Weighing and Inspection Bureau having jurisdiction.

PER

_____ Agent

Per

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Signature above must appear in longhand

STRAIGHT BILL OF LADING – SHORT FORM
ORIGINAL – NOT NEGOTIABLE

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading

FROM: **KOPPERS INC.** AT: **PORTLAND, OR** DATE: **01/04/07**

Bill of Lading Number

9270000018

The property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned and destined as indicated below, which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own road or its own water line, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all conditions not prohibited by law, whether printed or written, herein contained, including classification bills of lading conditions, which are hereby agreed to be the shipper and accepted for himself and his assigns.

Freight Basis

COLLECT

Ship To: **KOPPERS INC.**
CLAIRTON, PA

Route: **BNSF-(VCOUV)-UP-(CHGO)-NS-(CLAIR)-URR**

Carrier / Vehicle # **MP587824**
Sold To:

Shippers Order #

9270000018

Customers P.O. Number

Packages No. and Kind	HM	DOT SHIPPING NAME/HAZARD CLASS (IF APPLICABLE)	DESCRIPTION OF ARTICLES, SPECIAL MARKS & EXCEPTIONS	WEIGHT (Subject to Correction)
1 HC	RQ	**RESIDUE LAST CONTAINED:** **OTHER REGULATED SUBSTANCES, SOLID, N.O.S.** **(CONTAINS BENZO(A)PYRENE, DEBENZ(A,H)ANTHRACENE)** **CLASS 9 NA 3077 PG III** **ELECTRODE BINDER PITCH** **MARKED: 3077** **(CARBON PITCH TYPE A-SOLID - 42150001)**		

EMERGENCY CONTACT: CALL CHEMTREC 1-800-424-9300 OR 1-202-483-7616 FAX 1-800-242-7428

Subject to Section 7 of Conditions of applicable bill of lading, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement: **The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.**

Signature Of Consignor per KOPPERS INC. See ★ below

"Note: Where the rate is dependent on value, shipper's are required to state specifically in writing the released or declared value of the property. The agreed or declared value of the property is hereby stated by the shipper to be not exceeding 170 cents per pounds for each distribution package."

PERMANENT POST-OFFICE ADDRESS OF SHIPPER:

Koppers Industries, Inc.
436 Seventh Avenue
Pittsburgh, PA 15219-1800

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

PER

♦Shipper herby certifies that this shipment is correctly described; correct weight is shown and is subject to verification according to agreement with the Weighing and Inspection Bureau having jurisdiction.

PER

_____ Agent

Per

★ Signature of Shipper's agent next above is also intended as execution of Section 7
Signature above must appear in longhand

SENDING REPORT

Jan. 0 : 2007 11:12AM

YOUR LOGO :KOPPERS
YOUR FAX NO. :5032852831

NO.	OTHER FACSIMILE	START TIME	USAGE TIME	MODE	PAGES	RESULT
01	BNSF RR	Jan.04 11:10AM	02'17	SND	06	OK

TO TURN OFF REPORT, PRESS 'MENU' #04 SET.
THEN SELECT OFF BY USING 'JOG-DIAL'.

FOR FAX ADVANTAGE ASSISTANCE, PLEASE CALL 1-800-HELP-FAX (435-7329).

BROADCAST REPORT 1

Jan. 0- 2007 1:3-PM

YOUR LOGO :KOPPERS
YOUR FAX NO. :503285287?1

NO.	OTHER FACSIMILE	START TIME	USAGE TIME	PAGES	(IQ-FAX)	RESULT
01	PWRR AL	Jan.04 11:18AM	02'41	07		OK
02	ALCOA BEKY	Jan.04 11:21AM	02'38	07		OK
03	ALCOA STRS	Jan.04 11:24AM	02'38	07		OK
04	PWRR-RL-1	Jan.04 11:27AM	02'50	07		OK
05	PWRR-RL-2	Jan.04 11:30AM	02'50	07		OK
06	ALCOA TRFC	Jan.04 11:33AM	02'59	07		OK
		TOTAL	016'36	042	(000)	

FOR FAX ADVANTAGE ASSISTANCE, PLEASE CALL 1-800-HELP-FAX (435-7329).

JOURNAL

Jan. 0 2007 11:26AM

YOUR LOGO :KOPPERS
YOUR FAX NO. :5032852871

NO.	OTHER FACSIMILE	START TIME	USAGE TIME	MODE	PAGES	RESULT
01	3604239321	Dec. 29 01:26PM	01'08	RCV	02	OK
02	BNSF RR	Dec. 29 01:30PM	01'37	SND	04	OK
03	BNSF RR	Dec. 29 01:50PM	01'01	SND	02	OK
04	PWRR AL	Dec. 29 01:54PM	01'04	SND	02	OK
05	ALCOA BEKY	Dec. 29 01:55PM	01'03	SND	02	OK
06	ALCOA STRS	Dec. 29 01:56PM	01'02	SND	02	OK
07	PWRR-RL-1	Dec. 29 01:57PM	01'15	SND	02	OK
08	PWRR-RL-2	Dec. 29 01:59PM	00'57	SND	02	OK
09	ALCOA TRFC	Dec. 29 02:00PM	01'24	SND	02	OK
10	5036926309	Dec. 29 02:35PM	00'39	SND	01	OK
11	<FAX # NOT AVAIL.>	Dec. 30 04:03PM	00'46	RCV	00	OTHER FAX NOT RESPOND
12	Nina Lyons	Jan. 01 10:17PM	00'52	RCV	01	OK
13	<FAX # NOT AVAIL.>	Jan. 02 09:11AM	00'40	RCV	01	OK
14	AP(SANDY)	Jan. 02 03:34PM	01'33	SND	06	OK
15	5036926309	Jan. 03 09:45AM	00'28	SND	00	PRESSED THE STOP KEY
16	5036926309	Jan. 03 09:46AM	00'06	SND	00	PRESSED THE STOP KEY
17	5036926309	Jan. 03 09:46AM	00'42	SND	00	OTHER FAX NOT RESPOND
18	5036926309	Jan. 03 09:48AM	00'38	SND	01	OK
19	<FAX # NOT AVAIL.>	Jan. 03 10:29AM	00'56	RCV	02	OK
20	FAX	Jan. 03 10:35AM	00'29	RCV	01	OK
21	K 1650	Jan. 03 10:45AM	00'53	SND	02	OK
22	3604239321	Jan. 04 09:20AM	00'47	RCV	01	OK
23	Mortgage Services	Jan. 04 10:07AM	00'29	RCV	01	OK
24	13604239321	Jan. 04 10:09AM	01'45	SND	05	OK
25	303-307-0703	Jan. 04 10:33AM	00'46	RCV	01	OK
26	BNSF RR	Jan. 04 11:10AM	02'17	SND	06	OK
27	BNSF RR	Jan. 04 11:13AM	02'37	SND	07	OK
28	PWRR AL	Jan. 04 11:18AM	02'41	SND	07	OK
29	ALCOA BEKY	Jan. 04 11:21AM	02'38	SND	07	OK
30	ALCOA STRS	Jan. 04 11:24AM	02'38	SND	07	OK

FOR FAX ADVANTAGE ASSISTANCE, PLEASE CALL 1-800-HELP-FAX (435-7329).

$) 17,109 20

MP 582148 21

MP 589434 22

MP 589522 23

MP 38399 24

STRAIGHT BILL OF LADING – SHORT FORM
ORIGINAL – NOT NEGOTIABLE

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading

FROM: **KOPPERS INC.** | AT: **PORTLAND, OR** | DATE: **01/09/07**

Bill of Lading Number

9270000024

The property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned and destined as indicated below, which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own road or its own water line, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all conditions not prohibited by law, whether printed or written, herein contained, including classification bills of lading conditions, which are hereby agreed to be the shipper and accepted for himself and his assigns.

Freight Basis

COLLECT

Ship To: **KOPPERS INC.**
CLAIRTON, PA

Route: **BNSF-(VCOUV)-UP-(CHGO)-NS-(CLAIR)-URR**

Carrier / Vehicle # **UP38399**
Sold To:

Shippers Order #

9270000024

Customers P.O. Number

Packages No. and Kind	HM	DOT SHIPPING NAME/HAZARD CLASS (IF APPLICABLE)	DESCRIPTION OF ARTICLES, SPECIAL MARKS & EXCEPTIONS	WEIGHT (Subject to Correction)
1 HC	RQ	**RESIDUE LAST CONTAINED:** **OTHER REGULATED SUBSTANCES, SOLID, N.O.S.** **(CONTAINS BENZO(A)PYRENE, DEBENZ(A,H)ANTHRACENE)** **CLASS 9 NA 3077 PG III** **ELECTRODE BINDER PITCH** **MARKED: 3077** **(CARBON PITCH TYPE A-SOLID - 42150001)**		

EMERGENCY CONTACT: CALL CHEMTREC 1-800-424-9300 OR 1-202-483-7616 FAX 1-800-242-7428

Subject to Section 7 of Conditions of applicable bill of lading, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement: **The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.**

Signature Of Consignor per Koppers Inc See ★ below

"Note: Where the rate is dependent on value, shipper's are required to state specifically in writing the released or declared value of the property. The agreed or declared value of the property is hereby stated by the shipper to be not exceeding 170 cents per pounds for each distribution package."

PERMANENT POST-OFFICE ADDRESS OF SHIPPER:

Koppers Industries, Inc.
436 Seventh Avenue
Pittsburgh, PA 15219-1800

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

PER

♦ Shipper herby certifies that this shipment is correctly described; correct weight is shown and is subject to verification according to agreement with the Weighing and Inspection Bureau having jurisdiction.

PER

_____ Agent

Per

★ Signature of Shipper's agent next above is also intended as execution of Section 7
Signature above must appear in longhand

STRAIGHT BILL OF LADING – SHORT FORM
ORIGINAL – NOT NEGOTIABLE

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading

FROM: **KOPPERS INC.** AT: **PORTLAND, OR** DATE: **01/09/07**

Bill of Lading Number

9270000023

The property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned and destined as indicated below, which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own road or its own water line, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all conditions not prohibited by law, whether printed or written, herein contained, including classification bills of lading conditions, which are hereby agreed to be the shipper and accepted for himself and his assigns.

Freight Basis

COLLECT

Ship To: **KOPPERS INC.**
CLAIRTON, PA

Route: **BNSF-(VCOUV)-UP-(CHGO)-NS-(CLAIR)-URR**

Carrier / Vehicle # **MP589522**
Sold To:

Shippers Order #

9270000023

Customers P.O. Number

Packages No. and Kind	HM	DOT SHIPPING NAME/HAZARD CLASS (IF APPLICABLE)	DESCRIPTION OF ARTICLES, SPECIAL MARKS & EXCEPTIONS	WEIGHT (Subject to Correction)
1 HC	RQ	**RESIDUE LAST CONTAINED:** **OTHER REGULATED SUBSTANCES, SOLID, N.O.S.** **(CONTAINS BENZO(A)PYRENE, DEBENZ(A,H)ANTHRACENE)** **CLASS 9 NA 3077 PG III** **ELECTRODE BINDER PITCH** **MARKED: 3077** **(CARBON PITCH TYPE A-SOLID - 42150001)**		

EMERGENCY CONTACT: CALL CHEMTREC 1-800-424-9300 OR 1-202-483-7616 FAX 1-800-242-7428

Subject to Section 7 of Conditions of applicable bill of lading, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement: **The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.**

Signature Of Consignor per Koppers Inc **See ★ below**

"Note: Where the rate is dependent on value, shipper's are required to state specifically in writing the released or declared value of the property. The agreed or declared value of the property is hereby stated by the shipper to be not exceeding 170 cents per pounds for each distribution package."

PERMANENT POST-OFFICE ADDRESS OF SHIPPER:

Koppers Industries, Inc.
436 Seventh Avenue
Pittsburgh, PA 15219-1800

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

PER

♦ Shipper herby certifies that this shipment is correctly described; correct weight is shown and is subject to verification according to agreement with the Weighing and Inspection Bureau having jurisdiction.

PER

_____ Agent

Per

★ Signature of Shipper's agent next above is also intended as execution of Section 7
Signature above must appear in longhand

STRAIGHT BILL OF LADING – SHORT FORM
ORIGINAL – NOT NEGOTIABLE

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading

FROM: **KOPPERS INC.** AT: **PORTLAND, OR** DATE: **01/09/07**

Bill of Lading Number
9270000022

The property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned and destined as indicated below, which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own road or its own water line, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all conditions not prohibited by law, whether printed or written, herein contained, including classification bills of lading conditions, which are hereby agreed to be the shipper and accepted for himself and his assigns.

Freight Basis
COLLECT

Ship To: **KOPPERS INC.**
CLAIRTON, PA

Route: **BNSF-(VCOUV)-UP-(CHGO)-NS-(CLAIR)-URR**

Carrier / Vehicle # **MP589434**
Sold To:

Shippers Order #
9270000022

Customers P.O. Number

Packages No. and Kind	HM	DOT SHIPPING NAME/HAZARD CLASS (IF APPLICABLE)	DESCRIPTION OF ARTICLES, SPECIAL MARKS & EXCEPTIONS	WEIGHT (Subject to Correction)
1 HC	RQ	**RESIDUE LAST CONTAINED:** **OTHER REGULATED SUBSTANCES, SOLID, N.O.S.** **(CONTAINS BENZO(A)PYRENE, DEBENZ(A,H)ANTHRACENE)** **CLASS 9 NA 3077 PG III** **ELECTRODE BINDER PITCH** **MARKED: 3077** **(CARBON PITCH TYPE A-SOLID - 42150001)**		

EMERGENCY CONTACT: CALL CHEMTREC 1-800-424-9300 OR 1-202-483-7616 FAX 1-800-242-7428

Subject to Section 7 of Conditions of applicable bill of lading, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement: **The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.**

Signature Of Consignor per Koppers Inc See ★ below

"Note: Where the rate is dependent on value, shipper's are required to state specifically in writing the released or declared value of the property. The agreed or declared value of the property is hereby stated by the shipper to be not exceeding 170 cents per pounds for each distribution package."

PERMANENT POST-OFFICE ADDRESS OF SHIPPER:
Koppers Industries, Inc.
436 Seventh Avenue
Pittsburgh, PA 15219-1800

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

PER

♦ Shipper herby certifies that this shipment is correctly described; correct weight is shown and is subject to verification according to agreement with the Weighing and Inspection Bureau having jurisdiction.

PER

_____ Agent

Per

★ Signature of Shipper's agent next above is also intended as execution of Section 7
Signature above must appear in longhand

STRAIGHT BILL OF LADING – SHORT FORM
ORIGINAL – NOT NEGOTIABLE

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading

FROM: **KOPPERS INC.** AT: **PORTLAND, OR** DATE: **01/09/07**

Bill of Lading Number
9270000021

The property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned and destined as indicated below, which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own road or its own water line, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all conditions not prohibited by law, whether printed or written, herein contained, including classification bills of lading conditions, which are hereby agreed to be the shipper and accepted for himself and his assigns.

Freight Basis
COLLECT

Ship To: **KOPPERS INC.**
CLAIRTON, PA

Route: **BNSF-(VCOUV)-UP-(CHGO)-NS-(CLAIR)-URR**

Carrier / Vehicle # **MP582148**
Sold To:

Shippers Order #
9270000021
Customers P.O. Number

Packages No. and Kind	HM	DOT SHIPPING NAME/HAZARD CLASS (IF APPLICABLE)	DESCRIPTION OF ARTICLES, SPECIAL MARKS & EXCEPTIONS	WEIGHT (Subject to Correction)
1 HC	RQ	**RESIDUE LAST CONTAINED:** **OTHER REGULATED SUBSTANCES, SOLID, N.O.S.** **(CONTAINS BENZO(A)PYRENE, DEBENZ(A,H)ANTHRACENE)** **CLASS 9 NA 3077 PG III** **ELECTRODE BINDER PITCH** **MARKED: 3077** **(CARBON PITCH TYPE A-SOLID - 42150001)**		

EMERGENCY CONTACT: CALL CHEMTREC 1-800-424-9300 OR 1-202-483-7616 FAX 1-800-242-7428

Subject to Section 7 of Conditions of applicable bill of lading, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement: **The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.**

Signature Of Consignor per Koppers, Inc See ★ below

"Note: Where the rate is dependent on value, shipper's are required to state specifically in writing the released or declared value of the property. The agreed or declared value of the property is hereby stated by the shipper to be not exceeding 170 cents per pounds for each distribution package."

PERMANENT POST-OFFICE ADDRESS OF SHIPPER:
Koppers Industries, Inc.
436 Seventh Avenue
Pittsburgh, PA 15219-1800

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

PER

♦ Shipper herby certifies that this shipment is correctly described; correct weight is shown and is subject to verification according to agreement with the Weighing and Inspection Bureau having jurisdiction.

PER

_____ Agent

Per

★ Signature of Shipper's agent next above is also intended as execution of Section 7
Signature above must appear in longhand

BROADCAST REPORT 1

Jan. 0[illegible] 2007 2:40PM

YOUR LOGO :KOPPERS
YOUR FAX NO. :503[illegible]

NO.	OTHER FACSIMILE	START TIME	USAGE TIME	PAGES	(IQ-FAX)	RESULT
01	PWRR AL	Jan.09 12:29PM	01'44	04		OK
02	ALCOA BEKY	Jan.09 12:31PM	01'42	04		OK
03	ALCOA STRS	Jan.09 12:33PM	01'41	04		OK
04	PWRR-RL-1	Jan.09 12:35PM	01'34	04		OK
05	PWRR-RL-2	Jan.09 12:37PM	01'36	04		OK
06	ALCOA TRFC	Jan.09 12:38PM	02'04	04		OK
		TOTAL	010'21	024	(000)	

FOR FAX ADVANTAGE ASSISTANCE, PLEASE CALL 1-800-HELP-FAX (435-7329).

BNSF RAILWAY

Attn: KOPPERS,

Date: Tuesday, January 09, 2007 02:37:20 PM

Number of Pages including cover sheet: 2

To: KOPPERS,

From: BNSF CENTRALIZED WAYBILLING,
Phone:

Subject:

The information contained in this facsimile message is privileged and confidential information intended only for the individual or entity named above. If you have received this communication in error, or are unable to deliver it, please notify the sender immediately and destroy this fax message.

You have received this automated message since you recently submitted a fax document to the BNSF Waybilling Department.

Please note that effective January 1, 2005, BNSF requires all shipping instructions* be submitted electronically and will no longer accept shipping instructions via fax. Any submission of shipping instructions or modifications via fax may delay your shipment.

To register for BNSF tools available for submitting shipping instructions, refer to http://www.bnsf.com or call 1.888.428.2673, Option 3, 1 to speak to our eBusiness team.

Thank you for shipping with BNSF!

**Shipping instructions for hazardous waste* (STCC series 48) *will continue to be handled as required in 40 CFR (U.S. mail or overnight courier.) Industry EDI standards do not currently support billing of hazardous waste.*

STRAIGHT BILL OF LADING – SHORT FORM
ORIGINAL – NOT NEGOTIABLE

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading

FROM: **KOPPERS INC.** AT: **PORTLAND, OR** DATE: **01/05/07**

Bill of Lading Number

9270000020

The property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned and destined as indicated below, which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own road or its own water line, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all conditions not prohibited by law, whether printed or written, herein contained, including classification bills of lading conditions, which are hereby agreed to be the shipper and accepted for himself and his assigns.

Freight Basis

COLLECT

Ship To: **KOPPERS INC.**
CLAIRTON, PA

Route: **BNSF-(VCOUV)-UP-(CHGO)-NS-(CLAIR)-URR**

Carrier / Vehicle # **MP582231**
Sold To:

Shippers Order #

9270000020

Customers P.O. Number

Packages No. and Kind	HM	DOT SHIPPING NAME/HAZARD CLASS (IF APPLICABLE)	DESCRIPTION OF ARTICLES, SPECIAL MARKS & EXCEPTIONS	WEIGHT (Subject to Correction)
1 HC	RQ	**RESIDUE LAST CONTAINED:** **OTHER REGULATED SUBSTANCES, SOLID, N.O.S.** **(CONTAINS BENZO(A)PYRENE, DEBENZ(A,H)ANTHRACENE)** **CLASS 9 NA 3077 PG III** **ELECTRODE BINDER PITCH** **MARKED: 3077** **(CARBON PITCH TYPE A-SOLID - 42150001)**		

EMERGENCY CONTACT: CALL CHEMTREC 1-800-424-9300 OR 1-202-483-7616 FAX 1-800-242-7428

Subject to Section 7 of Conditions of applicable bill of lading, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement: **The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.**

Signature Of Consignor per Koppers Inc See★below

"Note: Where the rate is dependent on value, shipper's are required to state specifically in writing the released or declared value of the property. The agreed or declared value of the property is hereby stated by the shipper to be not exceeding 170 cents per pounds for each distribution package."

PERMANENT POST-OFFICE ADDRESS OF SHIPPER:

Koppers Industries, Inc.
436 Seventh Avenue
Pittsburgh, PA 15219-1800

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation

PER

♦ Shipper herby certifies that this shipment is correctly described, correct weight is shown and is subject to verification according to agreement with the Weighing and Inspection Bureau having jurisdiction.

PER

_____ Agent

Per

★ Signature of Shipper's agent next above is also intended as execution of Section 7
Signature above must appear in longhand

STRAIGHT BILL OF LADING – SHORT FORM
ORIGINAL – NOT NEGOTIABLE

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading

FROM: **KOPPERS INC.** AT: **PORTLAND, OR** DATE: **01/05/07**

Bill of Lading Number
9270000019

The property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned and destined as indicated below, which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own road or its own water line, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all conditions not prohibited by law, whether printed or written, herein contained, including classification bills of lading conditions, which are hereby agreed to be the shipper and accepted for himself and his assigns

Freight Basis
COLLECT

Ship To: **KOPPERS INC.**
CLAIRTON, PA

Route: **BNSF-(VCOUV)-UP-(CHGO)-NS-(CLAIR)-URR**

Carrier / Vehicle # **MP582907**
Sold To:

Shippers Order #
9270000019

Customers P.O. Number

Packages No. and Kind	HM	DOT SHIPPING NAME/HAZARD CLASS (IF APPLICABLE)	DESCRIPTION OF ARTICLES, SPECIAL MARKS & EXCEPTIONS	WEIGHT (Subject to Correction)
1 HC	RQ	**RESIDUE LAST CONTAINED:** **OTHER REGULATED SUBSTANCES, SOLID, N.O.S.** **(CONTAINS BENZO(A)PYRENE, DEBENZ(A,H)ANTHRACENE)** **CLASS 9 NA 3077 PG III** **ELECTRODE BINDER PITCH** **MARKED: 3077** **(CARBON PITCH TYPE A-SOLID - 42150001)**		

EMERGENCY CONTACT: CALL CHEMTREC 1-800-424-9300 OR 1-202-483-7616 FAX 1-800-242-7428

Subject to Section 7 of Conditions of applicable bill of lading, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement: **The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.**

Signature Of Consignor per Koppers Inc See ★ below

"Note: Where the rate is dependent on value, shipper's are required to state specifically in writing the released or declared value of the property. The agreed or declared value of the property is hereby stated by the shipper to be not exceeding 170 cents per pounds for each distribution package."

PERMANENT POST-OFFICE ADDRESS OF SHIPPER:
Koppers Industries, Inc.
436 Seventh Avenue
Pittsburgh, PA 15219-1800

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

PER

♦ Shipper herby certifies that this shipment is correctly described; correct weight is shown and is subject to verification according to agreement with the Weighing and Inspection Bureau having jurisdiction.

PER

_____ Agent

Per

★ Signature of Shipper's agent next above is also intended as execution of Section 7
Signature above must appear in longhand

BROADCAST REPORT 1

Jan. 0[illegible] 200[illegible] [illegible]:[illegible]PM

YOUR LOGO :KOPPERS
YOUR FAX NO. :5033852[illegible]1

NO.	OTHER FACSIMILE	START TIME	USAGE TIME	PAGES (IQ-FAX)	RESULT
01	PWRR AL	Jan.05 03:11PM	01'05	02	OK
02	ALCOA BEKY	Jan.05 03:12PM	01'03	02	OK
03	ALCOA STRS	Jan.05 03:14PM	01'02	02	OK
04	PWRR-RL-1	Jan.05 03:15PM	01'14	02	OK
05	PWRR-RL-2	Jan.05 03:16PM	00'57	02	OK
06	ALCOA TRFC	Jan.05 03:17PM	01'25	02	OK
		TOTAL	006'46	012 (000)	

FOR FAX ADVANTAGE ASSISTANCE, PLEASE CALL 1-800-HELP-FAX (435-7329).

MP 582648
MP 582083
MP 589546
UP 37329
MP 589501

01·26·07
SZK

STRAIGHT BILL OF LADING – SHORT FORM
ORIGINAL – NOT NEGOTIABLE

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading

FROM: **KOPPERS INC.** | AT: **PORTLAND, OR** | DATE: **01/26/07**

Bill of Lading Number

9270000029

The property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned and destined as indicated below, which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own road or its own water line, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all conditions not prohibited by law, whether printed or written, herein contained, including classification bills of lading conditions, which are hereby agreed to be the shipper and accepted for himself and his assigns.

Freight Basis

COLLECT

Ship To: **KOPPERS INC.**
CLAIRTON, PA

Route: **BNSF-(VCOUV)-UP-(CHGO)-NS-(CLAIR)-URR**

Carrier / Vehicle # **MP582648**
Sold To:

Shippers Order #

9270000029

Customers P.O. Number

Packages No. and Kind	HM	DOT SHIPPING NAME/HAZARD CLASS (IF APPLICABLE)	DESCRIPTION OF ARTICLES, SPECIAL MARKS & EXCEPTIONS	WEIGHT (Subject to Correction)
1 HC	RQ	**RESIDUE LAST CONTAINED:** **OTHER REGULATED SUBSTANCES, SOLID, N.O.S. (CONTAINS BENZO(A)PYRENE, DEBENZ(A,H)ANTHRACENE)** **CLASS 9 NA 3077 PG III** **ELECTRODE BINDER PITCH** **MARKED: 3077** **(CARBON PITCH TYPE A-SOLID - 42150001)**		

EMERGENCY CONTACT: CALL CHEMTREC 1-800-424-9300 OR 1-202-483-7616 FAX 1-800-242-7428

Subject to Section 7 of Conditions of applicable bill of lading, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement: **The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.**

Signature Of Consignor per Koppers Inc See ★ below

"Note: Where the rate is dependent on value, shipper's are required to state specifically in writing the released or declared value of the property. The agreed or declared value of the property is hereby stated by the shipper to be not exceeding 170 cents per pounds for each distribution package."

PERMANENT POST-OFFICE ADDRESS OF SHIPPER:

Koppers Industries, Inc.
436 Seventh Avenue
Pittsburgh, PA 15219-1800

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

PER

♦ Shipper herby certifies that this shipment is correctly described; correct weight is shown and is subject to verification according to agreement with the Weighing and Inspection Bureau having jurisdiction.

PER

_____ Agent

Per

★ Signature of Shipper's agent next above is also intended as execution of Section 7
Signature above must appear in longhand

STRAIGHT BILL OF LADING – SHORT FORM
ORIGINAL – NOT NEGOTIABLE

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading

FROM: **KOPPERS INC.** AT: **PORTLAND, OR** DATE: **01/26/07**

Bill of Lading Number
9270000030

The property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned and destined as indicated below, which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own road or its own water line, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all conditions not prohibited by law, whether printed or written, herein contained, including classification bills of lading conditions, which are hereby agreed to be the shipper and accepted for himself and his assigns.

Freight Basis
COLLECT

Ship To: **KOPPERS INC.**
CLAIRTON, PA

Route: **BNSF-(VCOUV)-UP-(CHGO)-NS-(CLAIR)-URR**

Carrier / Vehicle # **MP582083**
Sold To:

Shippers Order #
9270000030

Customers P.O. Number

Packages No. and Kind	HM	DOT SHIPPING NAME/HAZARD CLASS (IF APPLICABLE)	DESCRIPTION OF ARTICLES, SPECIAL MARKS & EXCEPTIONS	WEIGHT (Subject to Correction)
1 HC	RQ	**RESIDUE LAST CONTAINED:** **OTHER REGULATED SUBSTANCES, SOLID, N.O.S.** **(CONTAINS BENZO(A)PYRENE, DEBENZ(A,H)ANTHRACENE)** **CLASS 9 NA 3077 PG III** **ELECTRODE BINDER PITCH** **MARKED: 3077** **(CARBON PITCH TYPE A-SOLID - 42150001)**		

EMERGENCY CONTACT: CALL CHEMTREC 1-800-424-9300 OR 1-202-483-7616 FAX 1-800-242-7428

Subject to Section 7 of Conditions of applicable bill of lading, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement: **The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.**

Signature Of Consignor per Koppers Inc. **See ★ below**

"Note: Where the rate is dependent on value, shipper's are required to state specifically in writing the released or declared value of the property. The agreed or declared value of the property is hereby stated by the shipper to be not exceeding 170 cents per pounds for each distribution package."

PERMANENT POST-OFFICE ADDRESS OF SHIPPER:
Koppers Industries, Inc.
436 Seventh Avenue
Pittsburgh, PA 15219-1800

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation

PER

♦ Shipper herby certifies that this shipment is correctly described; correct weight is shown and is subject to verification according to agreement with the Weighing and Inspection Bureau having jurisdiction.

PER

_____ Agent

Per

★ Signature of Shipper's agent next above is also intended as execution of Section 7
Signature above must appear in longhand

STRAIGHT BILL OF LADING – SHORT FORM
ORIGINAL – NOT NEGOTIABLE

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading

FROM: **KOPPERS INC.** AT: **PORTLAND, OR** DATE: **01/26/07**

Bill of Lading Number

9270000031

The property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned and destined as indicated below, which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own road or its own water line, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all conditions not prohibited by law, whether printed or written, herein contained, including classification bills of lading conditions, which are hereby agreed to be the shipper and accepted for himself and his assigns.

Freight Basis

COLLECT

Ship To: **KOPPERS INC.**
CLAIRTON, PA

Route: **BNSF-(VCOUV)-UP-(CHGO)-NS-(CLAIR)-URR**

Carrier / Vehicle # **MP589546**
Sold To:

Shippers Order #

9270000031

Customers P.O. Number

Packages No. and Kind	HM	DOT SHIPPING NAME/HAZARD CLASS (IF APPLICABLE) DESCRIPTION OF ARTICLES, SPECIAL MARKS & EXCEPTIONS	WEIGHT (Subject to Correction)
1 HC	RQ	**RESIDUE LAST CONTAINED:** **OTHER REGULATED SUBSTANCES, SOLID, N.O.S.** **(CONTAINS BENZO(A)PYRENE, DEBENZ(A,H)ANTHRACENE)** **CLASS 9 NA 3077 PG III** **ELECTRODE BINDER PITCH** **MARKED: 3077** **(CARBON PITCH TYPE A-SOLID - 42150001)**	

EMERGENCY CONTACT: CALL CHEMTREC 1-800-424-9300 OR 1-202-483-7616 FAX 1-800-242-7428

Subject to Section 7 of Conditions of applicable bill of lading, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement: **The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.**

Signature Of Consignor per Koppers, Inc See★below

"Note: Where the rate is dependent on value, shipper's are required to state specifically in writing the released or declared value of the property. The agreed or declared value of the property is hereby stated by the shipper to be not exceeding 170 cents per pounds for each distribution package."

PERMANENT POST-OFFICE ADDRESS OF SHIPPER:

Koppers Industries, Inc.
436 Seventh Avenue
Pittsburgh, PA 15219-1800

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation

PER

♦ Shipper herby certifies that this shipment is correctly described; correct weight is shown and is subject to verification according to agreement with the Weighing and Inspection Bureau having jurisdiction.

PER

_____ Agent

Per

★ Signature of Shipper's agent next above is also intended as execution of Section 7
Signature above must appear in longhand

STRAIGHT BILL OF LADING – SHORT FORM
ORIGINAL – NOT NEGOTIABLE

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading

FROM: **KOPPERS INC.** AT: **PORTLAND, OR** DATE: **01/26/07**

Bill of Lading Number
9270000032

The property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned and destined as indicated below, which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own road or its own water line, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all conditions not prohibited by law, whether printed or written, herein contained, including classification bills of lading conditions, which are hereby agreed to be the shipper and accepted for himself and his assigns.

Freight Basis
COLLECT

Ship To: **KOPPERS INC.**
CLAIRTON, PA

Route: **BNSF-(VCOUV)-UP-(CHGO)-NS-(CLAIR)-URR**

Carrier / Vehicle # **UP37329**
Sold To:

Shippers Order #
9270000032
Customers P.O. Number

Packages No. and Kind	HM	DOT SHIPPING NAME/HAZARD CLASS (IF APPLICABLE)	DESCRIPTION OF ARTICLES, SPECIAL MARKS & EXCEPTIONS	WEIGHT (Subject to Correction)
1 HC	RQ	**RESIDUE LAST CONTAINED:** **OTHER REGULATED SUBSTANCES, SOLID, N.O.S. (CONTAINS BENZO(A)PYRENE, DEBENZ(A,H)ANTHRACENE)** **CLASS 9 NA 3077 PG III** **ELECTRODE BINDER PITCH** **MARKED: 3077** **(CARBON PITCH TYPE A-SOLID - 42150001)**		

EMERGENCY CONTACT: CALL CHEMTREC 1-800-424-9300 OR 1-202-483-7616 FAX 1-800-242-7428

Subject to Section 7 of Conditions of applicable bill of lading, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement: **The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.**

Signature Of Consignor per Koppers, Inc. ★See below

"Note: Where the rate is dependent on value, shipper's are required to state specifically in writing the released or declared value of the property. The agreed or declared value of the property is hereby stated by the shipper to be not exceeding 170 cents per pounds for each distribution package."

PERMANENT POST-OFFICE ADDRESS OF SHIPPER:
Koppers Industries, Inc.
436 Seventh Avenue
Pittsburgh, PA 15219-1800

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

PER

♦ Shipper hereby certifies that this shipment is correctly described; correct weight is shown and is subject to verification according to agreement with the Weighing and Inspection Bureau having jurisdiction.

PER

_____ Agent

Per

★ Signature of Shipper's agent next above is also intended as execution of Section 7
Signature above must appear in longhand

STRAIGHT BILL OF LADING – SHORT FORM
ORIGINAL – NOT NEGOTIABLE

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading

FROM: **KOPPERS INC.** AT: **PORTLAND, OR** DATE: **01/26/07**

Bill of Lading Number
9270000033

The property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned and destined as indicated below, which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own road or its own water line, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all conditions not prohibited by law, whether printed or written, herein contained, including classification bills of lading conditions, which are hereby agreed to be the shipper and accepted for himself and his assigns.

Freight Basis
COLLECT

Ship To: **KOPPERS INC.**
CLAIRTON, PA

Route: **BNSF-(VCOUV)-UP-(CHGO)-NS-(CLAIR)-URR**

Carrier / Vehicle # **MP589501**
Sold To:

Shippers Order #
9270000033

Customers P.O. Number

Packages No. and Kind	HM	DOT SHIPPING NAME/HAZARD CLASS (IF APPLICABLE)	DESCRIPTION OF ARTICLES, SPECIAL MARKS & EXCEPTIONS	WEIGHT (Subject to Correction)
1 HC	RQ	**RESIDUE LAST CONTAINED:** **OTHER REGULATED SUBSTANCES, SOLID, N.O.S.** **(CONTAINS BENZO(A)PYRENE, DEBENZ(A,H)ANTHRACENE)** **CLASS 9 NA 3077 PG III** **ELECTRODE BINDER PITCH** **MARKED: 3077** **(CARBON PITCH TYPE A-SOLID - 42150001)**		

EMERGENCY CONTACT: CALL CHEMTREC 1-800-424-9300 OR 1-202-483-7616 FAX 1-800-242-7428

Subject to Section 7 of Conditions of applicable bill of lading, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement: **The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.**

Signature Of Consignor per Koppers, Inc See★below

"Note: Where the rate is dependent on value, shipper's are required to state specifically in writing the released or declared value of the property. The agreed or declared value of the property is hereby stated by the shipper to be not exceeding 170 cents per pounds for each distribution package."

PERMANENT POST-OFFICE ADDRESS OF SHIPPER:
Koppers Industries, Inc.
436 Seventh Avenue
Pittsburgh, PA 15219-1800

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

PER

♦Shipper herby certifies that this shipment is correctly described; correct weight is shown and is subject to verification according to agreement with the Weighing and Inspection Bureau having jurisdiction.

PER

_____ Agent

Per

★ Signature of Shipper's agent next above is also intended as execution of Section 7
Signature above must appear in longhand

BNSF RAILWAY

Attn: KOPPERS,

Date: Friday, January 26, 2007 12:24:02 PM

Number of Pages including cover sheet: 2

To: KOPPERS,

From: BNSF CENTRALIZED WAYBILLING,
Phone:

Subject:

The information contained in this facsimile message is privileged and confidential information intended only for the individual or entity named above. If you have received this communication in error, or are unable to deliver it, please notify the sender immediately and destroy this fax message.

You have received this automated message since you recently submitted a fax document to the BNSF Waybilling Department.

Please note that effective January 1, 2005, BNSF requires all shipping instructions* be submitted electronically and will no longer accept shipping instructions via fax. Any submission of shipping instructions or modifications via fax may delay your shipment.

To register for BNSF tools available for submitting shipping instructions, refer to http://www.bnsf.com or call 1.888.428.2673, Option 3, 1 to speak to our eBusiness team.

Thank you for shipping with BNSF!

**Shipping instructions for hazardous waste (STCC series 48) will continue to be handled as required in 40 CFR (U.S. mail or overnight courier.) Industry EDI standards do not currently support billing of hazardous waste.*

BROADCAST REPORT 1

Jan. 26 2007 10:48AM

YOUR LOGO :KOPPERS
YOUR FAX NO. :5033952831

NO.	OTHER FACSIMILE	START TIME	USAGE TIME	PAGES (IQ-FAX)	RESULT
01	PWRR AL	Jan. 26 10:34AM	02'01	05	OK
02	ALCOA BEKY	Jan. 26 10:36AM	02'00	05	OK
03	ALCOA STRS	Jan. 26 10:39AM	01'59	05	OK
04	PWRR-RL-1	Jan. 26 10:41AM	02'11	05	OK
05	PWRR-RL-2	Jan. 26 10:43AM	02'11	05	OK
06	ALCOA TRFC	Jan. 26 10:45AM	02'21	05	OK
		TOTAL	012'43	030 (000)	

FOR FAX ADVANTAGE ASSISTANCE, PLEASE CALL 1-800-HELP-FAX (435-7329).

STRAIGHT BILL OF LADING – SHORT FORM
ORIGINAL – NOT NEGOTIABLE

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading

FROM: **KOPPERS INC.** | AT: **PORTLAND, OR** | DATE: **01/11/07**

Bill of Lading Number
9270000028

The property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned and destined as indicated below, which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own road or its own water line, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all conditions not prohibited by law, whether printed or written, herein contained, including classification bills of lading conditions, which are hereby agreed to be the shipper and accepted for himself and his assigns.

Freight Basis
COLLECT

Ship To: **KOPPERS INC.**
CLAIRTON, PA

Route: **BNSF-(VCOUV)-UP-(CHGO)-NS-(CLAIR)-URR**

Carrier / Vehicle # **MP582864**
Sold To:

Shippers Order #
9270000028

Customers P.O. Number

Packages No. and Kind	HM	DOT SHIPPING NAME/HAZARD CLASS (IF APPLICABLE)	DESCRIPTION OF ARTICLES, SPECIAL MARKS & EXCEPTIONS	WEIGHT (Subject to Correction)
1 HC	RQ	**RESIDUE LAST CONTAINED:** **OTHER REGULATED SUBSTANCES, SOLID, N.O.S.** **(CONTAINS BENZO(A)PYRENE, DEBENZ(A,H)ANTHRACENE)** **CLASS 9 NA 3077 PG III** **ELECTRODE BINDER PITCH** **MARKED: 3077** **(CARBON PITCH TYPE A-SOLID - 42150001)**		

EMERGENCY CONTACT: CALL CHEMTREC 1-800-424-9300 OR 1-202-483-7616 FAX 1-800-242-7428

Subject to Section 7 of Conditions of applicable bill of lading, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement: **The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.**

Signature Of Consignor per Koppers Inc See ★ below

"Note: Where the rate is dependent on value, shipper's are required to state specifically in writing the released or declared value of the property. The agreed or declared value of the property is hereby stated by the shipper to be not exceeding 170 cents per pounds for each distribution package."

PERMANENT POST-OFFICE ADDRESS OF SHIPPER:
Koppers Industries, Inc.
436 Seventh Avenue
Pittsburgh, PA 15219-1800

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

PER

♦ Shipper herby certifies that this shipment is correctly described; correct weight is shown and is subject to verification according to agreement with the Weighing and Inspection Bureau having jurisdiction.

PER

_____ Agent

Per

★ Signature of Shipper's agent next above is also intended as execution of Section 7
Signature above must appear in longhand

STRAIGHT BILL OF LADING – SHORT FORM
ORIGINAL – NOT NEGOTIABLE

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading

FROM: **KOPPERS INC.** AT: **PORTLAND, OR** DATE: **01/11/07**

Bill of Lading Number

9270000027

The property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned and destined as indicated below, which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own road or its own water line, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all conditions not prohibited by law, whether printed or written, herein contained, including classification bills of lading conditions, which are hereby agreed to be the shipper and accepted for himself and his assigns.

Freight Basis

COLLECT

Ship To: **KOPPERS INC.**
CLAIRTON, PA

Route: **BNSF-(VCOUV)-UP-(CHGO)-NS-(CLAIR)-URR**

Carrier / Vehicle # **MP587852**
Sold To:

Shippers Order #

9270000027

Customers P.O. Number

Packages No. and Kind	HM	DOT SHIPPING NAME/HAZARD CLASS (IF APPLICABLE)	DESCRIPTION OF ARTICLES, SPECIAL MARKS & EXCEPTIONS	WEIGHT (Subject to Correction)
1 HC	RQ	**RESIDUE LAST CONTAINED:** **OTHER REGULATED SUBSTANCES, SOLID, N.O.S.** **(CONTAINS BENZO(A)PYRENE, DEBENZ(A,H)ANTHRACENE)** **CLASS 9 NA 3077 PG III** **ELECTRODE BINDER PITCH** **MARKED: 3077** **(CARBON PITCH TYPE A-SOLID - 42150001)**		

EMERGENCY CONTACT: CALL CHEMTREC 1-800-424-9300 OR 1-202-483-7616 FAX 1-800-242-7428

Subject to Section 7 of Conditions of applicable bill of lading, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement: **The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.**

Signature Of Consignor per Koppers Inc See ★ below

"Note: Where the rate is dependent on value, shipper's are required to state specifically in writing the released or declared value of the property. The agreed or declared value of the property is hereby stated by the shipper to be not exceeding 170 cents per pounds for each distribution package."

PERMANENT POST-OFFICE ADDRESS OF SHIPPER:

Koppers Industries, Inc.
436 Seventh Avenue
Pittsburgh, PA 15219-1800

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

PER

♦ Shipper herby certifies that this shipment is correctly described; correct weight is shown and is subject to verification according to agreement with the Weighing and Inspection Bureau having jurisdiction.

PER

_____ Agent

Per

★ Signature of Shipper's agent next above is also intended as execution of Section 7
Signature above must appear in longhand

STRAIGHT BILL OF LADING – SHORT FORM
ORIGINAL – NOT NEGOTIABLE

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading

FROM: **KOPPERS INC.** AT: **PORTLAND, OR** DATE: **01/11/07**

Bill of Lading Number
9270000026

The property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned and destined as indicated below, which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own road or its own water line, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all conditions not prohibited by law, whether printed or written, herein contained, including classification bills of lading conditions, which are hereby agreed to be the shipper and accepted for himself and his assigns.

Freight Basis
COLLECT

Ship To: **KOPPERS INC.**
CLAIRTON, PA

Route: **BNSF-(VCOUV)-UP-(CHGO)-NS-(CLAIR)-URR**

Carrier / Vehicle # **UP46242**
Sold To:

Shippers Order #
9270000026

Customers P.O. Number

Packages No. and Kind	HM	DOT SHIPPING NAME/HAZARD CLASS (IF APPLICABLE)	DESCRIPTION OF ARTICLES, SPECIAL MARKS & EXCEPTIONS	WEIGHT (Subject to Correction)
1 HC	RQ	**RESIDUE LAST CONTAINED:**		
		OTHER REGULATED SUBSTANCES, SOLID, N.O.S.		
		(CONTAINS BENZO(A)PYRENE, DEBENZ(A,H)ANTHRACENE)		
		CLASS 9 NA 3077 PG III		
		ELECTRODE BINDER PITCH		
		MARKED: 3077		
		(CARBON PITCH TYPE A-SOLID - 42150001)		

EMERGENCY CONTACT: CALL CHEMTREC 1-800-424-9300 OR 1-202-483-7616 FAX 1-800-242-7428

Subject to Section 7 of Conditions of applicable bill of lading, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement: **The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.**

Signature Of Consignor per Koppers Inc See ★ below

"Note: Where the rate is dependent on value, shipper's are required to state specifically in writing the released or declared value of the property. The agreed or declared value of the property is hereby stated by the shipper to be not exceeding 170 cents per pounds for each distribution package."

PERMANENT POST-OFFICE ADDRESS OF SHIPPER:
Koppers Industries, Inc.
436 Seventh Avenue
Pittsburgh, PA 15219-1800

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

PER

◆ Shipper herby certifies that this shipment is correctly described; correct weight is shown and is subject to verification according to agreement with the Weighing and Inspection Bureau having jurisdiction.

PER

_____ Agent

Per

★ Signature of Shipper's agent next above is also intended as execution of Section 7
Signature above must appear in longhand

STRAIGHT BILL OF LADING – SHORT FORM
ORIGINAL – NOT NEGOTIABLE

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading

FROM: **KOPPERS INC.** AT: **PORTLAND, OR** DATE: **01/11/07**

Bill of Lading Number
9270000025

The property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned and destined as indicated below, which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own road or its own water line, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all conditions not prohibited by law, whether printed or written, herein contained, including classification bills of lading conditions, which are hereby agreed to be the shipper and accepted for himself and his assigns.

Freight Basis
COLLECT

Ship To: **KOPPERS INC.**
CLAIRTON, PA

Route: **BNSF-(VCOUV)-UP-(CHGO)-NS-(CLAIR)-URR**

Carrier / Vehicle # **UP39272**
Sold To:

Shippers Order #
9270000025
Customers P.O. Number

Packages No. and Kind	HM	DOT SHIPPING NAME/HAZARD CLASS (IF APPLICABLE) DESCRIPTION OF ARTICLES, SPECIAL MARKS & EXCEPTIONS	WEIGHT (Subject to Correction)
1 HC	RQ	**RESIDUE LAST CONTAINED:** **OTHER REGULATED SUBSTANCES, SOLID, N.O.S. (CONTAINS BENZO(A)PYRENE, DEBENZ(A,H)ANTHRACENE)** **CLASS 9 NA 3077 PG III** **ELECTRODE BINDER PITCH** **MARKED: 3077** **(CARBON PITCH TYPE A-SOLID - 42150001)**	

EMERGENCY CONTACT: CALL CHEMTREC 1-800-424-9300 OR 1-202-483-7616 FAX 1-800-242-7428

Subject to Section 7 of Conditions of applicable bill of lading, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement: **The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.**

Signature Of Consignor per koppers inc See ★ below

"Note: Where the rate is dependent on value, shipper's are required to state specifically in writing the released or declared value of the property. The agreed or declared value of the property is hereby stated by the shipper to be not exceeding 170 cents per pounds for each distribution package."

PERMANENT POST-OFFICE ADDRESS OF SHIPPER:
Koppers Industries, Inc.
436 Seventh Avenue
Pittsburgh, PA 15219-1800

This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation

PER

♦ Shipper herby certifies that this shipment is correctly described; correct weight is shown and is subject to verification according to agreement with the Weighing and Inspection Bureau having jurisdiction.

PER

_____ Agent

Per

★ Signature of Shipper's agent next above is also intended as execution of Section 7
Signature above must appear in longhand

BROADCAST REPORT 1

Jan. 11 2007 09:24AM

YOUR LOGO :KOPPERS
YOUR FAX NO. :5033852831

NO.	OTHER FACSIMILE	START TIME	USAGE TIME	PAGES (IQ-FAX)	RESULT
01	PWRR AL	Jan. 11 09:15AM	01'43	04	OK
02	ALCOA BEKY	Jan. 11 09:17AM	01'41	04	OK
03	ALCOA STRS	Jan. 11 09:19AM	01'39	04	OK
04	PWRR-RL-1	Jan. 11 09:20AM	01'53	04	OK
05	PWRR-RL-2	Jan. 11 09:22AM	01'35	04	OK
06	ALCOA TRFC	Jan. 11 09:24AM	02'03	04	OK
		TOTAL	010'34	024 (000)	

FOR FAX ADVANTAGE ASSISTANCE, PLEASE CALL 1-800-HELP-FAX (435-7329).

BNSF RAILWAY

Attn: KOPPERS,

Date: Thursday, January 11, 2007 11:22:35 AM

Number of Pages including cover sheet: 2

To: KOPPERS,

From: BNSF CENTRALIZED WAYBILLING,
Phone:

Subject:

The information contained in this facsimile message is privileged and confidential information intended only for the individual or entity named above. If you have received this communication in error, or are unable to deliver it, please notify the sender immediately and destroy this fax message.

BNSF RAILWAY

You have received this automated message since you recently submitted a fax document to the BNSF Waybilling Department.

Please note that effective January 1, 2005, BNSF requires all shipping instructions* be submitted electronically and will no longer accept shipping instructions via fax. Any submission of shipping instructions or modifications via fax may delay your shipment.

To register for BNSF tools available for submitting shipping instructions, refer to http://www.bnsf.com or call 1.888.428.2673, Option 3, 1 to speak to our eBusiness team.

Thank you for shipping with BNSF!

**Shipping instructions for hazardous waste* (STCC series 48) *will continue to be handled as required in 40 CFR (U.S. mail or overnight courier.) Industry EDI standards do not currently support billing of hazardous waste.*

EMERALD RECYCLING
a division of Emerald SERVICES INC.
www.emeraldnw.com
1-888-832-3008

Recycling & Recovery

Marine & Industrial Cleaning

Recycled Products

Waste Treatment & Disposal

Automotive Fluids Management

Construction Services

Transportation Services

Vacuum Truck Services

Portable Storage

June 24, 2003

KOPPERS INDUSTRIES
7540 NW ST. HELENS ROAD
PORTLAND, OR 97310

RE: WASTE STREAM APPROVAL

This letter is to inform you that the following waste profile questionnaire(s) #CH8009478-B CREOSOTE SOLIDS has/have been approved at Emerald Services Inc., Tacoma Facility on 10/30/02. These waste streams are approved for four years from the approval date.

Emerald Services Inc. has the necessary permits per WAC 173-303-290(3) and 40CFR 264.12(b) to accept and properly manage the waste stream(s) identified above.

If you have any questions and/or comments in regards to this letter please feel free to contact me at 206-832-3225, or your Customer Care Representative at 206-832-3203.

Thank you for your business!

Sincerely,

Tim Berrens

Tim Berrens
Environmental Manager
Emerald Services Inc.
1825 Alexander Ave
Tacoma, WA 98421

RECEIVED
JUN 3 0 2003
KOPPERS INDS, INC
PORTLAND OR

Kamerer Amos

From: Kamerer Amos
Sent: Saturday, January 25, 2003 12:26 PM
To: Self Traci
Cc: Dietz Jim; Hyde Leslie; Risher Heather
Subject: Waste Minimization Report

Traci,

In the process of collecting the data for the annual ODEQ Registration Verification Report, which is used to determine our hazardous waste generator category, I realized that when I put the information together for the subject report, that I somehow added one shipment to Clean harbor, twice. Thus, the amount reported was overstated by 41,360 pounds. A revised WMR is attached.

Sorry, I hope that this does not cause any problems on your end, with other year end reports.

Waste Minimization Report Form...

Amos Kamerer
Phone # 503-286-3681
Fax # 503-285-2831
E-mail: Kamereras@koppers.com

KOPPERS INDUSTRIES, INC
Portland, Oregon Terminal
WASTE MINIMIZATION REPORT

Quarter (2002)	Waste Type (in pounds				Production (units)	Comparison Ratio
	Remediation Waste	Tank Sludge	Operational Waste	Non-Haz Industrial Waste		
1	0	0	0	0	2540000	0.00
2	0	0	0	8000	5076000	0.00
3	0	21262	0	0	11543000	0.00
4	0	275987	0	0	11636730	0.00
Total	0	297249	0	8000	30795730	0.00
Base Year (2000)						
1	0	0	0		31184000	0.00
2	0	0	0		25640000	0.00
3	600	0	0		23488000	0.00
4	0	0	0		16756000	0.00
Total	600	0	0		97068000	0.0062

KOPPERS INDUSTRIES, INC
Portland, Oregon Terminal
WASTE MINIMIZATION REPORT

Quarter (2002)	Waste Type (in pounds				Production (units)	Comparison Ratio
	Remediation Waste	Tank Sludge	Operational Waste	Non-Haz Industrial Waste		
1	0	0	0	0	2540000	0.00
2	0	0	0	8000	5076000	0.00
3	0	21262	0	0	11543000	0.00
4	0	~~317347~~	275,987 0	0	11636730	0.00
Total	0	~~338609~~	0	8000	30795730	0.00
		297,249				
Base Year (2000)						
1	0	0	0		31184000	0.00
2	0	0	0		25640000	0.00
3	600	0	0		23488000	0.00
4	0	0	0		16756000	0.00
Total	600	0	0		97068000	0.00

lbs.(10.91 tons). We also shipped an additional 10 - 55g drums of Hazardous
Waste Liquids which totaled 4,613 lbs. (2.31 tons). Please invoice this load as follows:

26,447

Invoice Date - 12-13-02
Disposal Charge - 109 drums of Hazardous Waste Solids x $240.00 per drum =
$26,160.00
Utah Hazardous Waste Tax - (10.91 tons) 11 tons x $28.00 per ton = $308.00
Disposal Charge - 10 drums of Hazardous Waste Liquid x $240.00 per drum =
$2,400.00
Utah Hazardous Waste Tax - (1.2 tons) 1.5 tons x $28.00 per ton = $42.00
Transportation - Included in the price per drum.

Total Invoice Amount = $28,910.00

I will fax you copies of the manifests and weight tickets for both shipments. Let me know If you need any further assistance.

Thanks again for all your help.

Dan

Total = 275,987 Pounds

Koppers004873

Kamerer Amos

From: Dan Pain [danp@emeraldnw.com]
Sent: Friday, January 10, 2003 5:06 PM
To: Kamerer Amos
Subject: FW: Koppers Waste Invoices

Importance: High

Amos,

Number 6 & 7

Have a great weekend.

Dan

-----Original Message-----
From: Dan Pain [mailto:danp@emeraldnw.com]
Sent: Friday, December 20, 2002 3:40 PM
To: 'conniev@emeraldnw.com'
Cc: 'clue@emeraldnw.com'; 'cindyb@emeraldnw.com'; 'susant@emeraldnw.com'
Subject: Koppers Waste Invoices
Importance: High

Connie,

Here is the information for invoicing Koppers for the sixth and the seventh shipment of waste to Clean Harbors in Aragonite, Utah. These last two loads will complete the waste shipped for job # 60-52441.

We still have a couple loads of non-haz waste from Koppers we are shipping to Hillsboro Landfill this Saturday for job # 60-52816.

Shipment # 6 - The sixth shipment was received on 12-13-02 and totaled 46,420 lbs. (23.21 tons). Please invoice this load as follows:

Invoice Date - 12-13-02
Disposal Charge - 46,420 lbs. x $.35 per lb. = $16,247.00
Utah Hazardous Waste Tax - (23.21 tons) 23.5 tons x $28.00 per ton = $658.00
Transportation = $2,280.00
Demurrage - 8 additional hours at Clean Harbors x $50.00 per hour = $400.00
Bin Drop Fee = $560.00
Bin Liners - (2) at $20.00 each = $40.00
Fuel Surcharge = N/C

Total Invoice Amount = $20,365.00

Shipment # 7 - The seventh shipment was also received on 12-13-02. There was a total of 109 - 55g drums of Hazardous Waste Solids which totaled 21,834

Kamerer Amos

From: Dan Pain [danp@emeraldnw.com]
Sent: Friday, January 10, 2003 5:04 PM
To: Kamerer Amos
Subject: FW: Koppers Invoice

Importance: High

Amos,

Shipment # 5

Dan

-----Original Message-----
From: Dan Pain [mailto:danp@emeraldnw.com]
Sent: Tuesday, December 10, 2002 7:12 PM
To: 'conniev@emeraldnw.com'
Cc: 'clue@emeraldnw.com'; 'cindyb@emeraldnw.com'; 'susant@emeraldnw.com'
Subject: Koppers Invoice
Importance: High

Connie,

Here is the information for invoicing Koppers for the fifth shipment of waste to Clean harbors in Aragonite, Utah.

Shipment # 5 - The fifth shipment was received on 12-9-02 and totaled 45,180 lbs. (22.59 tons). Please invoice this load as follows:

Invoice Date: 12-9-02
Disposal Charge - 45,180 lbs. x $.35 per lb. = $15,813.00
Utah Hazardous Waste Tax - (22.59 tons) 23 tons x $28.00 per ton = $644.00
Transportation = $2,280.00
Demurrage - 8 additional hours at Clean Harbors x $50.00 per hour = $400.00
Bin Drop Fee = $560.00
Bin Rental = N/C
Bin Liners - 2 boxes x $20.00 each = $40.00
Fuel Surcharge = N/C

Total Invoice Amount = $19,737.00

Connie, there are two more scheduled shipments on Wednesday, December 11th.
One is drop boxes and the other is a load of drums. This will complete the
waste loads which are being hauled to Aragonite. We should have the information needed to complete the waste invoicing sometime next week.

If you need any further assistance, please let me know.

Thanks again.

Dan

Kamerer Amos

From: Dan Pain [danp@emeraldnw.com]
Sent: Friday, January 10, 2003 5:02 PM
To: Kamerer Amos
Subject: FW: Koppers Invoice

Importance: High

Amos,

Shipment # 4

Dan

-----Original Message-----
From: Dan Pain [mailto:danp@emeraldnw.com]
Sent: Thursday, December 05, 2002 8:12 PM
To: 'conniev@emeraldnw.com'
Cc: 'clue@emeraldnw.com'; 'cindyb@emeraldnw.com'; 'susant@emeraldnw.com'; 'kamereras@koppers.com'
Subject: Koppers Invoice
Importance: High

Connie,

Here is the information for invoicing Koppers for the fourth shipment of waste into Clean Harbors in Arogonite, Utah.

Shipment # 4 - The fourth shipment was received on 12-4-02 and totaled 41,360 lbs. (20.68 tons). Please invoice this load as follows:

Invoice Date: - 12-4-02
Disposal Charge - 41,360 lbs. x $.35 per lb. = $14,476.00
Utah State Hazardous Waste Tax - (20.68 tons) 21 tons x $28.00 per ton = $588.00
Transportation = $2,280.00
Demurrage - 8.5 additional hours at Clean Harbors x $50.00 per hour = $425.00
Bin Drop Fee = $560.00
Bin Rental = N/C
Bin Liners - 2 boxes x $20.00 each = $40.00
Fuel Surcharge = N/C

Total Invoice Amount = $18,369.00

If you need any further information, please let me know.

Thanks again

Dan

$420.00
Transportation = $2,280.00
Demurrage = 6 additional hours at Clean Harbors x $50.00 per hour = $300.00
Bin Drop Fee = $560.00
Bin Rental = N/C
Bin Liners - 2 boxes x $20.00 each = $40.00
Fuel Surcharge - N/C

Total Invoice Amount = $13,827.00

Shipment # 3 - The third shipment was received on 11-21-02 and totaled 42,540 lbs. (21.27 tons) Please invoice as follows:

Invoice Date - 11-21-02
Disposal Charge - 42,540 lbs. x $.35 per lb. = $14,889.00
Utah State Hazardous Waste Tax - (21.27 tons) 21.5 tons x $28.00 per ton = $602.00
Transportation = $2,280.00
Demurrage = 6 additional hours at Clean Harbors x $50.00 per hour = $300.00
Bin Drop Fee = $560.00
Bin Rental = N/C
Bin Liners - 2 boxes x $20.00 each = $40.00

Total Invoice Amount = $18,671.00

There will be four additional loads (including one shipment of PPE drums) which will be shipped to Utah in the coming weeks. As I receive the proper information from these shipments, I will forward it to you immediately for proper invoicing.

Please let me know if you need any additional information.

Thanks again for your assistance.

Dan

Kamerer Amos

From: Dan Pain [danp@emeraldnw.com]
Sent: Friday, January 10, 2003 5:01 PM
To: Kamerer Amos
Subject: FW: Koppers Invoices

Importance: High

Amos,

Shipments 1 through 3.

Thanks

Dan

-----Original Message-----
From: Dan Pain [mailto:danp@emeraldnw.com]
Sent: Tuesday, November 26, 2002 9:37 AM
To: 'conniev@emeraldnw.com'
Cc: 'cindyb@emeraldnw.com'; 'clue@emeraldnw.com';
'kamereras@koppers.com';
'susant@emeraldnw.com'
Subject: Koppers Invoices
Importance: High

Connie,

As per our phone conversation yesterday, here is the information for invoicing Koppers for the first three loads of waste transported to Clean
Harbors in Utah. Also, at the customers request, please invoice each shipment separately and date the invoice to correspond with the date the waste was actually received in Utah to expedite payment.

Shipment # 1 - The first shipment was received on 11-11-02 and totaled 44,820 lbs. (22.41tons) Please invoice this load as follows:

Invoice Date - 11-11-02
Disposal Charge - 44,820lbs. x $.35 per lb. = $15,687.00
Utah State Hazardous Waste Tax - (22.41 tons) 22.5 tons x $28.00 per ton =
$630.00
Transportation = $2,280.00
Demurrage - 6 additional hours at Clean Harbors x $50.00 per hour = $300.00
Bin Drop Fee = $560.00
Bin Rental = N/C
Bin Liners - 2 boxes x $20.00 each = $40.00
Fuel Surcharge = N/C

Total Invoice Amount = $19,497.00

Shipment # 2 - The second shipment was received on 11-15-02 and totaled 29,220 lbs. (14.61 tons) Please invoice as follows:

Invoice Date - 11-15-02
Disposal Charge - 29,220 lbs. x $.35 per lb. = $10,227.00
Utah State Hazardous Waste Tax - (14.61 tons) 15 tons x $28.00 per ton =

SK REFERENCE NO: _____

MATERIAL PROFILE

Safety-Kleen (SK) Use Only	If applicable, Intercompany Billing Facility #	Customer Number:	SK Line Of Business #:	Facility Profile #: 8009478

A. GENERATOR INFORMATION

☐ Check if Billing Information is same as Generator Information

Generator Name: Koppers Industries
Facility Address (No P.O. Box): 7540 NW St. Helens Road
City/State/Zip: Portland, OR 97210
Technical Contact: Amos Kamerer
Phone: 503-286-3681 Fax: 503-285-2831
Generator Location (If different from Facility Address):
SIC Code: _____ ☐ CESQG ☐ SQG US EPA ID #: ORD027734000 State Generating ID #: _____

Billing Company: Emerald Services
Billing Address: 9010 E MARINAL WAY SOUTH #200
City/State/Zip: Seattle, WA 98108
Billing Contact: Tim Berrean
Phone: 206-832-3225 Fax: 206-832-3220

B. SHIPPING INFORMATION

☐ DOT Assistance Requested ☐ Check if SK Transportation Services are requested

US DOT Proper Shipping Name: HAZARDOUS WASTE LIQUIDS, NOS (CREOSOTE)
Hazard Class / Division #: 9 ID # (UN / NA): NA3082 Packing Group (PG): II RQ: _____

Non-Bulk Shipping Containers					Bulk Shipping Containers	
Size	Steel	Poly	Fiber	Quantity & Frequency	Container Type	Quantity, Size & Frequency
55 Gal	☒	☐	☐	2-6 ONE TIME	☐ Yd.³ Box or ☐ Super Sack	
____ Gal	☐	☐	☐		☐ Hard Top or ☒ Tarped Bin	
____ Gal	☐	☐	☐		☐ End Dump (Tarped) Trailer	
____ Gal	☐	☐	☐		☐ Tank or ☐ Vacuum Trailer	

C. GENERAL MATERIAL & REGULATORY INFORMATION

Name of Material: TANK CLEANING WATER
Process Generating The Material: Tank clean out/spill cleanup
Odor: ☐ None ☒ Mild ☐ Strong; Describe: _____

Yes	No		Yes	No	
☐	☒	Regulated or Licensed Radioactive Waste	☐	☒	Meets LDR Standards or ☐ Partially Meets (Landfill Only)
☐	☒	Regulated Medical / Infectious Waste	☐	☒	Commingled Waste (2 or more hazardous wastes mixed as one)
☐	☒	Regulated Benzene NESHAP Waste	☐	☒	Sorbent Added; If Yes, is sorbent biodegradable? ☐ Yes ☐ No
☐	☒	TSCA Regulated PCB Waste (List any PCB level in Sec.D)	☐	☒	Exempt Waste; If Yes, list reference, 40 CFR: _____
☐	☒	Regulated Subpart CC Waste (VOs ≥ 500 ppm)	☐	☒	State Hazardous Waste; State Code: _____
☐	☒	Regulated Ozone Depleting Substance	☒	☐	EPA Hazardous Waste
☐	☒	CERCLA Regulated (Superfund) Waste			EPA Waste Codes (including any LDR subcategories, e.g., D003 Water Reactive):
☐	☒	Hazardous Debris (Subject to alternative LDR treatment standards)			U051, D018
☐	☒	Waste Contains UHCs/Constituents Of Concern			
		If Yes, list in ☐ Sec. D or ☐ Constituent Addendum			

EPA Haz Waste Only Origin Code: ☐ 1 ☒ 2 ☐ 3 ☐ 4 ☐ 5 Source Code: A 57 Form Code: B 207 System Code: M 041

D. MATERIAL COMPOSITION

1. Chemical/Physical Constituents: List all detectable components by chemical name, including physical material, e.g., sorbent, debris.

Material Components & Composition	ppm	☐ wt % ☒ vol %	Material Components & Composition	ppm	☐ wt % ☐ vol %
WATER		95-100			
Creosote		0-05			

Section D continues on the next page for Elemental Constituents * Range Total ≥ 100 %

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SAFETY-KLEEN MATERIAL PROFILE (continued): SK REFERENCE NO: _____

Note: Completion of Sections D.2 & F is optional for: ☐ Analytical Profile (representative sample submitted; test results used to complete D.2 & F)
Completion of Sections D.2, E, & F is optional for: ☒ Standard Industry Profile (Safety-Kleen historical data utilized to complete D.2, E, & F)

D. MATERIAL COMPOSITION *(Continued)*

2. Elemental Constituents ☒ *Check if this waste contains No Detectable Elements / Metals, unless listed below*

Check either: ☐ Total Analysis *or* ☐ TCLP Method *or* ☐ Generator Knowledge, then enter data below.

Constituent	ppm	Constituent	ppm	Constituent	ppm	Constituent	ppm	Constituent	ppm
Aluminum		Cadmium		Fluorine		Nickel		Sodium	
Antimony		Chlorine		Lead		Phosphorous		Sulfur	
Arsenic		Chromium		Lithium		Potassium		Thallium	
Barium		Cobalt		Manganese		Selenium		Titanium	
Beryllium		Copper		Mercury		Silicon		Vanadium	
Bromine		Iodine		Molybdenum		Silver		Zinc	

E. REACTIVE CHARACTERISTICS ☒ *Check if this waste exhibits No Reactive Characteristics*

Yes	No		Yes	No		Yes	No		
☐	☒	Explosive	☐	☒	Oxidizer	☐	☒	Reactive Cyanide _____	ppm
☐	☒	Shock Sensitive	☐	☒	Water Reactive	☐	☒	Reactive Sulfide _____	ppm
☐	☒	Pyrophoric	☐	☒	Air Reactive	☐	☒	Polymerizable	

Other Incompatibles: Describe _____

F. MATERIAL PHYSICAL CHARACTERISTICS @ 70° F.

# of Phases	2	Color *Varies*	Flash Point ____ °F (if < 73 °F)	pH ☒ Liquids >20% H_2O *or* pH ☐ Non-Aqueous	
Liquid %	>95	Specific Gravity .8-1	☐ 73 - <100 °F ☐ 100 - 141 °F	☐ ≤ 2 pH ☐ > 2 - 4 pH	☒ > 4 - 10 pH
Sludge %		Viscosity cps LOW	☐ 142 °F. - <200 °F	☒ ≥200 °F	☐ > 10 - < 12.5 pH ☐ ≥ 12.5 pH
Solid %	<5	Density 7-8	Boiling Point (if < 130 °F) n/a	BTU's / lb. or Range <3000	
Powder %		☒ lbs./ gal. ☐ lbs./ cu. ft.	Ash % (Bridgeport Only)		
Gas %		Comments			

G. GENERATOR PROFILE CERTIFICATION

I hereby certify that I am an authorized agent of the generator, and warrant on behalf of the generator that the information supplied on this form and on any attachments or supplements hereto is complete and accurate, and that all known or suspected hazards of the material(s) described herein have been disclosed. I agree that if the sample test results indicate a discrepancy with any information supplied on this form, that either Safety-Kleen or the generator may initiate further testing and evaluation in accordance with the terms and conditions of the contract between Safety-Kleen and the generator and that this profile certification may be amended accordingly.

Jack L Stephenson | Jack L Stephenson - Mgr. of Purch | 12 / 07 / 02

Generator's Authorized Signature | Name & Title (Printed or Typed) | Date

Comments _____

SK Use Only ☐ SKOS ☐ SKVS ☐ Non-haz Evaluation ☐ Standard Industry Profile: SIP Index # _____

SK Sales Rep. Name _____ Employee # _____ Territory/Branch # _____

Process Approval # _____ Product Code or Part # _____ TRI Flowpath # _____ Pricing _____

Waste Approval & Certification

We certify acceptability of this waste stream and that all appropriate permits have been obtained, as indicated by Safety-Kleen's facility approval below:

_____ / _____ / _____

Safety-Kleen's Authorized Facility Signature | Name & Title (Printed or Typed) | Date

Koppers004880

SK REFERENCE NO: _____

MATERIAL PROFILE

Safety-Kleen (SK) Use Only	If applicable, Intercompany Billing Facility #	Customer Number:	SK Line Of Business #:	Facility Profile #: 8009478

A. GENERATOR INFORMATION

☐ Check if Billing Information is same as Generator Information

Generator Name	Koppers Industries	Billing Company	Emerald Services
Facility Address (No P.O. Box)	7540 NW St. Helens Road	Billing Address	7345 E. Marginal Way So.
City/State/Zip	Portland, OR 97210	City/State/Zip	Seattle, WA 98108
Technical Contact	Amos Kamerer	Billing Contact	Tim Berrens
Phone	503-286-3681	Fax	503-285-2831
		Phone	206-832-3225
		Fax	206-832-3220

Generator Location (If different from Facility Address) _____

SIC Code: _____ ☐ CESQG ☐ SQG US EPA ID # ORD0127734000 State Generating ID # _____

B. SHIPPING INFORMATION

☐ DOT Assistance Requested ☐ Check if SK Transportation Services are requested

US DOT Proper Shipping Name: Waste Toxic Liquids, Organic, N.O.S. (Creosote)

Hazard Class / Division # 6.1 ID # (UN / NA) UN 2810 Packing Group (PG) III RQ _____

Non-Bulk Shipping Containers					Bulk Shipping Containers	
Size	Steel	Poly	Fiber	Quantity & Frequency	Container Type	Quantity, Size & Frequency
____ Gal	☐	☐	☐		☐ Yd.³ Box or ☐ Super Sack	
____ Gal	☐	☐	☐		☐ Hard Top or ☒ Tarped Bin	4-6 20 yd boxes
____ Gal	☐	☐	☐		☐ End Dump (Tarped) Trailer	
____ Gal	☐	☐	☐		☐ Tank or ☐ Vacuum Trailer	

C. GENERAL MATERIAL & REGULATORY INFORMATION

Name of Material: Creosote Solids

Process Generating The Material: Tank clean out/spill cleanup

Odor: ☐ None ☒ Mild ☐ Strong; Describe: _____

Yes	No		Yes	No	
☐	☒	Regulated or Licensed Radioactive Waste	☐	☒	Meets LDR Standards or ☐ Partially Meets (Landfill Only)
☐	☒	Regulated Medical / Infectious Waste	☐	☒	Commingled Waste (2 or more hazardous wastes mixed as one)
☐	☒	Regulated Benzene NESHAP Waste	☐	☒	Sorbent Added: If Yes, is sorbent biodegradable? ☐ Yes ☐ No
☐	☒	TSCA Regulated PCB Waste (List any PCB level in Sec. D)	☐	☒	Exempt Waste; If Yes, list reference, 40 CFR _____
☐	☒	Regulated Subpart CC Waste (VOs ≥ 500 ppm)	☐	☐	State Hazardous Waste; State Code: WT02
☐	☒	Regulated Ozone Depleting Substance	☒	☐	EPA Hazardous Waste
☐	☒	CERCLA Regulated (Superfund) Waste	EPA Waste Codes (including any LDR subcategories, e.g., D003 Water Reactive):		
☐	☒	Hazardous Debris (Subject to alternative LDR treatment standards)	U051, D018		
☐	☒	Waste Contains UHCs/Constituents Of Concern			
		If Yes, list in ☐ Sec. D or ☐ Constituent Addendum			

EPA Haz Waste Only Origin Code: ☐ 1 ☒ 2 ☐ 3 ☐ 4 ☐ 5 Source Code: A 52 Form Code: B 2117 System Code: M 041

D. MATERIAL COMPOSITION

1. Chemical/Physical Constituents: List all detectable components by chemical name, including physical material e.g. carbon, debris

Material Components & Composition	ppm	☐ wt % ☒ vol %	Material Components & Composition	ppm	☐ wt % ☐ vol %
Creosote Type Isomers		95-99			
Water		1-5			

Section D continues on the next page for Chemical Constituents

Range Total ≥ 100 %

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SAFETY-KLEEN MATERIAL PROFILE (continued): SK REFERENCE NO:

Note: Completion of Sections D.2 & F is optional for: ☐ Analytical Profile (representative sample submitted, test results used to complete D.2 & F)

Completion of Sections D.2, E, & F is optional for: ☒ Standard Industry Profile (Safety-Kleen historical data utilized to complete D.2, E, & F)

D. MATERIAL COMPOSITION (Continued)

1. Elemental Constituents ☒ *Check if this waste contains No Detectable Elements / Metals, unless listed below.*

Check either: ☐ Total Analysis *or* ☐ TCLP Method *or* ☐ Generator Knowledge, then enter data below.

Constituent	ppm	Constituent	ppm	Constituent	ppm	Constituent	ppm	Constituent	ppm
Aluminum		Cadmium		Fluorine		Nickel		Sodium	
Antimony		Chlorine		Lead		Phosphorous		Sulfur	
Arsenic		Chromium		Lithium		Potassium		Thallium	
Barium		Cobalt		Manganese		Selenium		Titanium	
Beryllium		Copper		Mercury		Silicon		Vanadium	
Bromine		Iodine		Molybdenum		Silver		Zinc	

E. REACTIVE CHARACTERISTICS ☒ *Check if this waste exhibits No Reactive Characteristics*

Yes	No		Yes	No		Yes	No	
☐	☒	Explosive	☐	☒	Oxidizer	☐	☒	Reactive Cyanide _____ ppm
☐	☒	Shock Sensitive	☐	☒	Water Reactive	☐	☒	Reactive Sulfide _____ ppm
☐	☒	Pyrophoric	☐	☒	Air Reactive	☐	☒	Polymerizable

Other Incompatibles, Describe

F. MATERIAL PHYSICAL CHARACTERISTICS @ 70° F.

# of Phases: 2	Color: Varies	Flash Point: ____ °F (if < 73° F)	pH: ☐ Liquids >20% H_2O *or* pH: ☒ Non-Aqueous	
Liquid %: <5	Specific Gravity: 1.2	☐ 73 - <100° F ☐ 100 - 141° F	☐ ≤ 2 pH ☐ > 2 - 4 pH	☒ > 4 - 10 pH
Sludge %:	Viscosity cps: high	☐ 142° F. - <200° F ☒ ≥200° F	☐ > 10 - < 12.5 pH	☐ ≥ 12.5 pH
Solid %: >95	Density: 10-12	Boiling Point (if < 130° F): n/a	BTUs / lb. or Range: <3000	
Powder %:	☒ lbs./ gal. ☐ lbs./ cu. ft.	Ash % (Bridgeport Only):		
Gas %:	Comments:			

G. GENERATOR PROFILE CERTIFICATION

I hereby certify that I am an authorized agent of the generator, and warrant on behalf of the generator that the information supplied on this form and on any attachments or supplements hereto is complete and accurate, and that all known or suspected hazards of the material(s) described herein have been disclosed. I agree that if the sample test results indicate a discrepancy with any information supplied on this form, that either Safety-Kleen or the generator may initiate further testing and evaluation in accordance with the terms and conditions of the contract between Safety-Kleen and the generator and that this profile certification may be amended accordingly.

Jack L. Stephenson — Jack L. Stephenson — 10 / 23 / 02

Generator's Authorized Signature — Name & Title (Printed or Typed) — Date

Comments

SK Rec. Clerk: ☐ 8700 ☐ 8700-28 ☐ Non-haz Combustion ☐ Standard Industry Profile SIC Index #

SK Sales Rep. Name: Employee #: Territory/Branch #:

Process Approval #: Product Code or Part #: TRI Flowpath #: Pricing:

Waste Approval & Certification

We certify acceptability of this waste stream and that all appropriate permits have been obtained, as indicated by Safety-Kleen's facility approval below:

Safety-Kleen's Authorized Facility Signature — Name & Title (Printed or Typed) — Date

Koppers004882

SAFETY-KLEEN MATERIAL PROFILE (continued): SK REFERENCE NO:

Note: Completion of Sections D.2 & F is optional for: ☐ Analytical Profile (representative sample submitted; test results used to complete D.2 & F)

Completion of Sections D.2, E, & F is optional for: ☒ Standard Industry Profile (Safety-Kleen historical data utilized to complete D.2, E, & F)

D. MATERIAL COMPOSITION *(Continued)*

2. Elemental Constituents ☒ *Check if this waste contains No Detectable Elements / Metals, unless listed below.*

Check either: ☐ Total Analysis *or* ☐ TCLP Method *or* ☐ Generator Knowledge, then enter data below.

Constituent	ppm	Constituent	ppm	Constituent	ppm	Constituent	ppm	Constituent	ppm
Aluminum		Cadmium		Fluorine		Nickel		Sodium	
Antimony		Chlorine		Lead		Phosphorous		Sulfur	
Arsenic		Chromium		Lithium		Potassium		Thallium	
Barium		Cobalt		Manganese		Selenium		Titanium	
Beryllium		Copper		Mercury		Silicon		Vanadium	
Bromine		Iodine		Molybdenum		Silver		Zinc	

E. REACTIVE CHARACTERISTICS ☒ *Check if this waste exhibits No Reactive Characteristics*

Yes	No		Yes	No		Yes	No		
☐	☒	Explosive	☐	☒	Oxidizer	☐	☒	Reactive Cyanide	ppm
☐	☒	Shock Sensitive	☐	☒	Water Reactive	☐	☒	Reactive Sulfide	ppm
☐	☒	Pyrophoric	☐	☒	Air Reactive	☐	☒	Polymerizable	

Other Incompatibles; Describe

F. MATERIAL PHYSICAL CHARACTERISTICS @ 70°F.

# of Phases	1	Color	Varies	Flash Point	°F (if < 73°F)	pH ☐ Liquids >20% H_2O *or* pH ☒ Non-Aqueous	
Liquid %	-	Specific Gravity	>1	☐ 73 - <100°F	☐ 100 - 141°F	☐ ≤ 2 pH	☐ > 2 - 4 pH ☐ > 4 - 10 pH
Sludge %		Viscosity cps	high	☐ 142°F. - <200°F	☒ ≥200°F	☐ > 10 - < 12.5 pH	☐ ≥ 12.5 pH
Solid %	100	Density	8-10	Boiling Point (if < 130°F)	n/a	BTU's / lb. or Range	<3000
Powder %		☒ lbs./gal. ☐ lbs./cu. ft.		Ash % (Bridgeport Only)			
Gas %		Comments					

G. GENERATOR PROFILE CERTIFICATION

I hereby certify that I am an authorized agent of the generator, and warrant on behalf of the generator that the information supplied on this form and on any attachments or supplements hereto is complete and accurate, and that all known or suspected hazards of the material(s) described herein have been disclosed. I agree that if the sample test results indicate a discrepancy with any information supplied on this form, that either Safety-Kleen or the generator may initiate further testing and evaluation in accordance with the terms and conditions of the contract between Safety-Kleen and the generator and that this profile certification may be amended accordingly.

[signature] Generator's Authorized Signature — [signature] Name & Title (Printed or Typed) — 10 / 31 / 02 Date

Comments

SK Use Only: ☐ SKOS ☐ SKUS ☐ Non-haz Evaluation ☐ Standard Industry Profile: SIP Index #

SK Sales Rep. Name _____ Employee # _____ Territory/Branch # _____

Process Approval # _____ Product Code or Part # _____ TRI Flowpath # _____ Pricing _____

Waste Approval & Certification

We certify acceptability of this waste stream and that all appropriate permits have been obtained, as indicated by Safety-Kleen's facility approval below:

_____ Safety-Kleen's Authorized Facility Signature _____ Name & Title (Printed or Typed) ___ / ___ / ___ Date

KOPPERS INDUSTRIES

FAX TRANSMITTAL

7540 N.W. Saint Helens Rd.
Portland, Oregon 97210-3663
Phone: (503) 286-3681
Fax: (503) 285-2831
Web Page: www.koppers.com

TO: Jack Stephenson DATE: 10/30/02

FROM: Amos TOTAL # OF PAGES: 3

Another profile on the PPE stuff, please sign and fax to Dan & myself.

We're on the last 2 tanks - #1 & #2. #1 is about 50% complete. #2, we just cut a doorway in it's side today, lots of solids. Plan to bring in a Bob Cat. Still have a chance to be finished 11/8!

IF THIS TRANSMITTAL IS IN ERROR, PLEASE CALL 503-286-3681 FAX # 503-285-2831 Don't Repeat

SK REFERENCE NO: _____

MATERIAL PROFILE

Safety-Kleen (SK) Use Only	If applicable, Intercompany Billing Facility #	Customer Number:	SK Line Of Business #:	Facility Profile #: *8009478*

A. GENERATOR INFORMATION ☐ *Check if Billing Information is same as Generator Information*

Generator Name *Koppers Industries* | Billing Company *Emerald Services*

Facility Address (No P.O. Box) *7540 NW St. Helens Road* | Billing Address *7343 E. Marginal Way So.*

City/State/Zip *Portland. OR 97210* | City/State/Zip *Seattle. WA 98108*

Technical Contact *Amos Kamerer* | Billing Contact *Tim Berrens*

Phone *503-286-3681* Fax *503-285-2831* | Phone *206-832-3225* Fax *206-832-3220*

Generator Location *(If different from Facility Address)* _____

SIC Code: _____ ☐ CESQG ☐ SQG US EPA ID # *ORD027734000* State Generating ID # _____

B. SHIPPING INFORMATION ☐ ***DOT Assistance Requested*** ☐ ***Check if SK Transportation Services are requested***

US DOT Proper Shipping Name *Hazardous Waste SOlid*

Hazard Class / Division # *9* ID # (UN / NA) *Un3077* Packing Group (PG) *III* RQ _____

Non-Bulk Shipping Containers					Bulk Shipping Containers	
Size	Steel	Poly	Fiber	Quantity & Frequency	Container Type	Quantity, Size & Frequency
55 Gal	☒	☒	☐	*5-8*	☐ Yd.³ Box *or* ☐ Super Sack	
_____ Gal	☐	☐	☐		☐ Hard Top *or* ☐ Tarped Bin	
_____ Gal	☐	☐	☐		☐ End Dump (Tarped) Trailer	
_____ Gal	☐	☐	☐		☐ Tank *or* ☐ Vacuum Trailer	

C. GENERAL MATERIAL & REGULATORY INFORMATION

Name of Material *PPE & DEBRIS*

Process Generating The Material *PPE AND DEBRIS FROM: Tank clean out/spill cleanup*

Odor: ☐ None ☒ Mild ☐ Strong; Describe _____

Yes	No		Yes	No	
☐	☒	Regulated or Licensed Radioactive Waste	☐	☒	Meets LDR Standards or ☐ Partially Meets (Landfill Only)
☐	☒	Regulated Medical / Infectious Waste	☐	☒	Commingled Waste (2 or more hazardous wastes mixed as one)
☐	☒	Regulated Benzene NESHAP Waste	☐	☒	Sorbent Added; If Yes, is sorbent biodegradable? ☐ Yes ☐ No
☐	☒	TSCA Regulated PCB Waste ***(List any PCB level in Sec.D)***	☐	☒	Exempt Waste; If Yes, list reference, 40 CFR _____
☐	☒	Regulated Subpart CC Waste (VOs ≥ 500 ppm)	☐	☐	State Hazardous Waste; State Code _____
☐	☒	Regulated Ozone Depleting Substance	☒	☐	EPA Hazardous Waste
☐	☒	CERCLA Regulated (Superfund) Waste			EPA Waste Codes (including any LDR subcategories, e.g., D003 Water Reactive):
☐	☒	Hazardous Debris (Subject to alternative LDR treatment standards)			*U051, D018*
☐	☒	Waste Contains UHCs/Constituents Of Concern			
		If Yes, list in ☐ Sec. D *or* ☐ Constituent Addendum			

EPA Haz Waste Only Origin Code: ☐ 1 ☒ 2 ☐ 3 ☐ 4 ☐ 5 Source Code: **A** *57* Form Code: **B** *207* System Code: **M** *041*

D. MATERIAL COMPOSITION

1. **Chemical/Physical Constituents:** List all detectable components by chemical name, including physical material, e.g., sorbent, debris

Material Components & Composition	ppm	☐ wt % ☒ vol %	Material Components & Composition	ppm	☐ wt % ☐ vol %
PPE		*60-70*			
CUT UP HOSES (2X2 PIECES)		*10-20*			
PLASTIC		*20-20*			

Section. D continues on the next page for Elemental Constituents * **Range Total ≥ 100 %**

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SAFETY-KLEEN MATERIAL PROFILE (continued): SK REFERENCE NO: _____

Note: Completion of Sections D.2 & F is optional for: ☐ Analytical Profile (representative sample submitted; test results used to complete D.2 & F)
Completion of Sections D.2, E, & F is optional for: ☒ Standard Industry Profile (Safety-Kleen historical data utilized to complete D.2, E, & F)

D. MATERIAL COMPOSITION *(Continued)*

2. Elemental Constituents ☒ ***Check if this waste contains No Detectable Elements / Metals, unless listed below.***

Check either; ☐ Total Analysis *or* ☐ TCLP Method *or* ☐ Generator Knowledge, then enter data below.

Constituent	ppm	Constituent	ppm	Constituent	ppm	Constituent	ppm	Constituent	ppm
Aluminum		Cadmium		Fluorine		Nickel		Sodium	
Antimony		Chlorine		Lead		Phosphorous		Sulfur	
Arsenic		Chromium		Lithium		Potassium		Thallium	
Barium		Cobalt		Manganese		Selenium		Titanium	
Beryllium		Copper		Mercury		Silicon		Vanadium	
Bromine		Iodine		Molybdenum		Silver		Zinc	

E. REACTIVE CHARACTERISTICS ☒ *Check if this waste exhibits No Reactive Characteristics*

Yes	No		Yes	No		Yes	No		
☐	☒	Explosive	☐	☒	Oxidizer	☐	☒	Reactive Cyanide _____	ppm
☐	☒	Shock Sensitive	☐	☒	Water Reactive	☐	☒	Reactive Sulfide _____	ppm
☐	☒	Pyrophoric	☐	☒	Air Reactive	☐	☒	Polymerizable	

Other Incompatibles; Describe _____

F. MATERIAL PHYSICAL CHARACTERISTICS @ 70 °F.

# of Phases 1	Color *Varies*	Flash Point _____ °F (if < 73 °F)	pH ☐ Liquids >20% H_2O *or* pH ☒ Non-Aqueous	
Liquid % -	Specific Gravity *>1*	☐ 73 - <100 °F ☐ 100 - 141 °F	☐ ≤ 2 pH ☐ > 2 - 4 pH ☐ > 4 - 10 pH	
Sludge %	Viscosity cps *high*	☐ 142 °F. - <200 °F ☒ ≥200 °F	☐ > 10 - < 12.5 pH ☐ ≥ 12.5 pH	
Solid % *100*	Density *8-10*	Boiling Point (if < 130 °F) *n/a*	BTU's / lb. or Range *<3000*	
Powder %	☒ lbs./ gal. ☐ lbs./ cu. ft.	Ash % (Bridgeport Only)		
Gas %	Comments			

G. GENERATOR PROFILE CERTIFICATION

I hereby certify that I am an authorized agent of the generator, and warrant on behalf of the generator that the information supplied on this form and on any attachments or supplements hereto is complete and accurate, and that all known or suspected hazards of the material(s) described herein have been disclosed. I agree that if the sample test results indicate a discrepancy with any information supplied on this form, that either Safety-Kleen or the generator may initiate further testing and evaluation in accordance with the terms and conditions of the contract between Safety-Kleen and the generator and that this profile certification may be amended accordingly.

_____ _____ ____ / ____ / ____

Generator's Authorized Signature | Name & Title (Printed or Typed) | Date

Comments _____

SK Use Only ☐ SKOS ☐ SKVS ☐ Non-haz Evaluation ☐ Standard Industry Profile: SIP Index # _____

SK Sales Rep. Name _____ Employee # _____ Territory/Branch # _____

Process Approval # _____ Product Code or Part # _____ TRI Flowpath # _____ Pricing _____

Waste Approval & Certification

We certify acceptability of this waste stream and that all appropriate permits have been obtained, as indicated by Safety-Kleen's facility approval below:

_____ _____ ____ / ____ / ____

Safety-Kleen's Authorized Facility Signature | Name & Title (Printed or Typed) | Date

Koppers004886

Portland, Oregon Northwest Terminal Tank Condition Recap

Latest Revision: 9/5/02

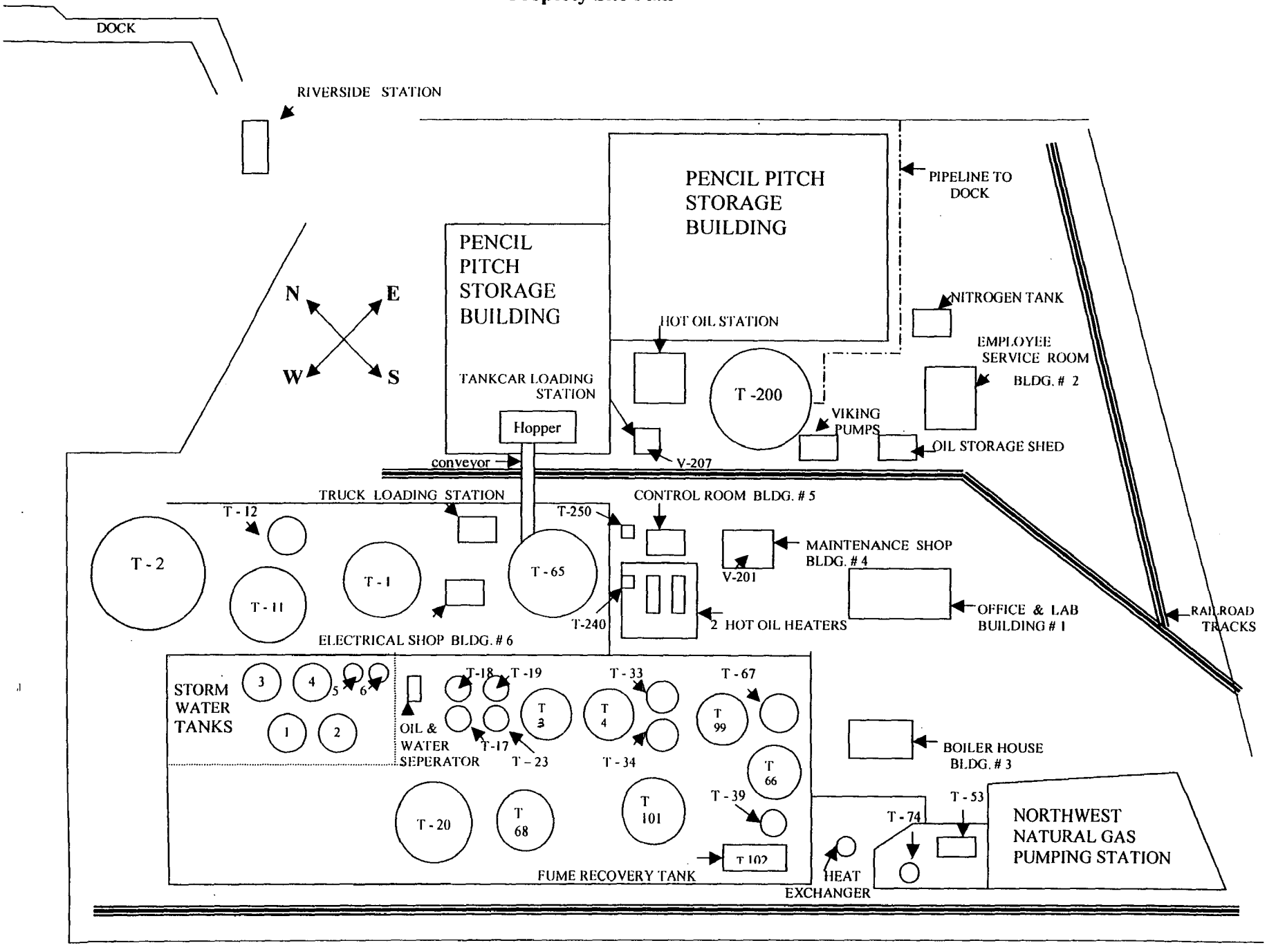
Tank #	Product	Residue Gallons	Residue Inches	Residue Phy. State	Steam Heat. Status Condition	Steam Heat. Status Type	Comments
1	crude tar	19,755	9"	70% liquid	?	vertical	
2	crude tar	26,851	9"	70% liquid	?	vertical	
3	methyl solvent	1,691	7"	6" liq- 1" msh	leaks	horizontal	
4	lt. uncorrected creo	16,091	4' 9"	3' hard-1'9" liq	?	horizontal	Product above the doorway
11	creosote	3,131	6"	mush & PAC	good	vertical	
12	crude tar/ola tar	1,000	12"	liq. & mush	inactive	?	
17	heavy oil	425	12"/14"	Liq to hard	good	vertical	6" viscous Liq would need heating, 2' mounds soft to PAC along walls
18	NSR	2,547	3'	half liq./hard	inactive	vertical	Product above the doorway
19	P & R oil	566	12"/13"	Liq to mush	inactive	horizontal	8" Liq, then hard crust, then to mush
20	creosote	5,444	14"	Liq to mush	inactive	vertical	6" viscous liq to mush, would need heating 8" of water
23	lt. uncorrected creo	1,977	2' 4"	half liq./hard	good	vertical	Product above the doorway
34	NSR	1,585	10"	mush	good	horizontal	viscose Liq would need heating, wall baffles
39	creosote/water	800	10"	liq. & PAC	inactive	vertical	2" liq and 8" hard crusty PAC, wall baffles
53	has been cleaned	0					
66	creosote	18,815	3' 6"	hard	inactive	vertical	Product above the doorway
74	has been cleaned	0					
99	creosote	3,600	6"	70% liquid	good	vertical	Product above the doorway
99	water	13,800	2'	"	"	"	water added during the flood of 1996
101	creosote	122,888	6'	hard	inactive	vertical	Product above the doorway
V201	still - crude tar	2,300	3' 3"	liquid	inactive	N/A	
V207	pitch	100	3"	hard	inactive	N/A	

Notes:

1) All tanks have side wall suction lines at about 12" above the tank bottom, which will make it impossible to completey pump these tanks clean. Tanks T-65 & T-68 were cleaned using a vacuum truck before they were put into liquid pitch service. Most pumps servicing these tanks are not operable.

Koppers004887

Property Site Plan



Koppers004888

Kamerer Amos

From: Dan Pain [danp@emeraldnw.com]
Sent: Friday, December 20, 2002 5:49 PM
To: Kamerer Amos
Subject: FW: Koppers Waste Invoices

Importance: High

Amos,

Here is the information for the last two loads of waste shipped to Aragonite.

Again, I would like to wish you and all your loved ones a safe and happy holiday season.

Thanks again.

Dan

-----Original Message-----
From: Dan Pain [mailto:danp@emeraldnw.com]
Sent: Friday, December 20, 2002 3:40 PM
To: 'conniev@emeraldnw.com'
Cc: 'clue@emeraldnw.com'; 'cindyb@emeraldnw.com'; 'susant@emeraldnw.com'
Subject: Koppers Waste Invoices
Importance: High

Connie,

Here is the information for invoicing Koppers for the sixth and the seventh shipment of waste to Clean Harbors in Aragonite, Utah. These last two loads will complete the waste shipped for job # 60-52441.

We still have a couple loads of non-haz waste from Koppers we are shipping to Hillsboro Landfill this Saturday for job # 60-52816.

Shipment # 6 - The sixth shipment was received on 12-13-02 and totaled 46,420 lbs. (23.21 tons). Please invoice this load as follows:

Invoice Date - 12-13-02
Disposal Charge - 46,420 lbs. x $.35 per lb. = $16,247.00
Utah Hazardous Waste Tax - (23.21 tons) 23.5 tons x $28.00 per ton = $658.00
Transportation = $2,280.00
Demurrage - 8 additional hours at Clean Harbors x $50.00 per hour = $400.00
Bin Drop Fee = $560.00
Bin Liners - (2) at $20.00 each = $40.00
Fuel Surcharge = N/C

Total Invoice Amount = $20,365.00

Shipment # 7 - The seventh shipment was also received on 12-13-02. There was
a total of 109 - 55g drums of Hazardous Waste Solids which totaled 21,834
lbs.(10.91 tons). We also shipped an additional 10 - 55g drums of Hazardous
Waste Liquids which totaled 4,613 lbs. (2.31 tons). Please invoice this load as follows:

Invoice Date - 12-13-02
Disposal Charge - 109 drums of Hazardous Waste Solids x $240.00 per drum =
$26,160.00
Utah Hazardous Waste Tax - (10.91 tons) 11 tons x $28.00 per ton =
$308.00
Disposal Charge - 10 drums of Hazardous Waste Liquid x $240.00 per drum =
$2,400.00
Utah Hazardous Waste Tax - (1.2 tons) 1.5 tons x $28.00 per ton =
$42.00
Transportation - Included in the price per drum.

Total Invoice Amount = $28,910.00

I will fax you copies of the manifests and weight tickets for both shipments. Let me know If you need any further assistance.

Thanks again for all your help.

Dan

Koppers004890

Kamerer Amos

From: Dan Pain [danp@emeraldnw.com]
Sent: Thursday, December 05, 2002 8:12 PM
To: conniev@emeraldnw.com
Cc: clue@emeraldnw.com; cindyb@emeraldnw.com; susant@emeraldnw.com; Kamerer Amos
Subject: Koppers Invoice

Importance: High

Connie,

Here is the information for invoicing Koppers for the fourth shipment of waste into Clean Harbors in Arogonite, Utah.

Shipment # 4 - The fourth shipment was received on 12-4-02 and totaled 41,360 lbs. (20.68 tons). Please invoice this load as follows:

Invoice Date: - 12-4-02
Disposal Charge - 41,360 lbs. x $.35 per lb. = $14,476.00
Utah State Hazardous Waste Tax - (20.68 tons) 21 tons x $28.00 per ton = $588.00
Transportation = $2,280.00
Demurrage - 8.5 additional hours at Clean Harbors x $50.00 per hour = $425.00
Bin Drop Fee = $560.00
Bin Rental = N/C
Bin Liners - 2 boxes x $20.00 each = $40.00
Fuel Surcharge = N/C

Total Invoice Amount = $18,369.00

If you need any further information, please let me know.

Thanks again

Dan

Kamerer Amos

From: Kamerer Amos
Sent: Tuesday, November 05, 2002 6:04 PM
To: Dietz Jim
Cc: Fitzgerald Kevin; Hyde Leslie; Self Traci; Stephenson Jack; Turner TJ
Subject: Tank Cleaning Project

Jim,

This is a follow up to Howard's report of the other day.

14 of the 16 tanks have now been cleaned, with one cleaned and the 2 remaining needing to have a final wash.

The last 2 remaining tanks, are T-1 a 660, 000 gallon tank and T-2 a 1,065,000 gallon tank.

T-1 has presented the most challenge of all of the tanks, to date. It has maybe 30% more material in it, than what was our original estimate. Plus, this material is crude tar that is "hard molasses" in composition. Today we have 8 men in the tank, 4 with 30# jack hammer's and 4 with buckets and shovels; tomorrow we will have 12 men in the tank. Progress is being made and I have no doubt that we will be finished by November 20th. It's just a bit disappointing, because after all of our early success that we had, we thought that we could have been done by now. Ha! Ha!

T-2 has also been a challenge, but as this tank will never be used again in it's present condition, we made the decision to cut an opening in the side of the tank to obtain greater access. We now have a Bobcat front end loader in this tank and are making good progress.

To date we have shipped 6 cars of reclaimed material to Stickney; they have received 3 of these cars and Mark has reported that he has not had any problems with any of this material. We will have at least 2 more cars, and possibly 3 more cars, for a total of 8 or 9 cars; far more than originally estimated, which is good economic news. We have now filled 2 drop boxes of solid material and are now loading the 3rd. We could end up with as many as 6 drop boxes of solid material, when you add in all of the PPE and clean up materials from the whole project.

The following pictures are of these last 2 tanks:

493, 494 and 495 are of T-1 and show the type of material that is coming out of this tank.

498 and 499 are of T-2 and show an early picture of the hose from the tank to the pumping truck and the opening that has been cut into the tank, for better access.

MVC-465S.JPG MVC-493S.JPG MVC-494S.JPG MVC-495S.JPG MVC-498S.JPG MVC-499S.JPG

Let me know if you have any questions.

Amos Kamerer
Phone # 503-286-3681
Fax # 503-285-2831
E-mail: Kamereras@koppers.com

Kamerer Amos

From: Turner TJ
Sent: Sunday, November 03, 2002 12:43 PM
To: Dietz Jim
Cc: Hyde Leslie; Kamerer Amos; Self Traci; Turner TJ
Subject: Portland from 10/28/02 to 11/02/02

Hello Jim -

Sorry for not being personally in touch but I know that Amos has kept you up to speed on our progress, needless to say that we have been extremely busy and have been making good head way.

First the good news - all the completed tanks except 11 and 12 tanks have been washed and rinsed including T-53 and T-74 and are more than acceptable to meet government regulations - I think Amos can attest to this - they look really good !

We plan to ship two debris boxes to Utah either Tuesday or Wednesday.

We are ready to hit 2 tank hard this week and hopefully we can make good time - I have talked to Amos and hopefully we will be able to send the bulk of residue that is in this tank back to Stickney for reprocessing.

Now my huckleberry - 1 tank - this tank is just plan tough, the bottoms are like taffy, sticky, gooey, hard to walk - even move. We have tried several things but it comes down to labor intensive work. We are using jack hammers, cutting the pieces into small chunks and passing them through the man way into a loader bucket where we then dump the pieces into the roll off. Hopefully by Wednesday we should have this tank completed !!

Jim, I just want you to know that we would not be where we are now if it had not been for Amos, T.J, the plant personnel and Emerald - the contractor and all the sub-contractors that are involved in this project, we would not be on schedule to be done by the 11/20 date if not for all their cooperation !

Later,
Howard

Portland Costs 10-21-02.xls

Portland Costs 10-28-02.xls

Week of 10/28/02 through 11/02/02

1028/2002
Cleaning 1 tank.

10/29/02
Cleaning 1 tank.
Started cleaning 11 tank.

10/30/02
Cleaning 1 tank.
Completed 11 tank

10/31/02
Cleaning 1 tank.
Preparing to started cleaning on 2 tank.

11/1/02
Cleaning 1 tank.
Started cleaning on 2 tank.

	tank	vac. trk.	set-up	people	hours reg	hours o/t	
10/28/02	1	10		12	94	4	
10/29/02	1	8		8	59.5	6.5	
	11	4		4	32	4	
10/30/02	1	2		7	56	5	
	11	8		4	32	8	
10/31/00	1	8		7	56	7.5	
	2	6		4	32	8	
11/1/02	1	4		7	48	6	
	2			4	32	6	
11/2/02				4	0	33	
					441.5	88	529.5

Week of 10/21/02 through 10/25/02

10/21/02
Started cleaning 1 Tank
Started rinsing tanks in the lower tank farm.

10/22/02
Cleaning 1 tank.
Rinsing tanks in lower tank farm.

10/23/02
Cleaning 1 tank.
Rinsing tanks in lower tank farm.

10/24/02
Cleaning 1 tank.
Completed rinsing tanks in lower tank farm.

10/25/02
Cleaning 1 tank.
Rinsed V-201, V207, 53 Tank and 74 Tank, all tanks that were cleaned are rinsed.

	tank	vac. trk.	set-up	people	hours reg	hours o/t	
10/21/02	1	7		6	48	10	
10/22/02	1	11.5		6	44	12.5	
10/23/02	1	6		6	47	12.5	
10/24/00	1	5		6	48	10	
10/25/02	1	4		4	32	3	
	12			3	24	1.5	
					243	49.5	292.5

time for rinising for 14 tanks.

	vac. Trk.	hotsy				
10/21/02	0	0	3	2		
10/22/02	9	9	3	24	6	
10/23/02	10	10	3	24	7.5	
10/24/00	8.5	8.5	3	24	4.5	
10/25/02	4	0	2	8		
				82	18	100

Kamerer Amos

From: Turner TJ
Sent: Wednesday, October 23, 2002 6:28 AM
To: Dietz Jim
Cc: Hyde Leslie; Kamerer Amos; Self Traci; Turner TJ
Subject: Portland 10/14/02

Hey Jim -

We had another very productive week at Portland, we finished all the tanks in the lower tank farm and V-201 and V-207 on the " high ground ".

We have started to load our fifth rail car for Stickney and a crew started Tuesday giving the tanks in the lower tank farm their final wash and are looking good.

We are working to Tank 1 and recovering a great amout of material.

Will talk to you later.

Portland Costs 10-14-02.xls

Howard

Koppers004896

Week of 10/14/02 through 10/18/02

10/14/02
Cleaned 4 tank.

10/15/02
Cleaned 4 tank - finished a ready for final rinse.

10/16/02
Cleaned 99 tank.

10/17/02
Cleaned 99 tank and 39 tank - finished and ready for final rinse

10/18/02
Cleaned V-201 and V-207 - finished and ready for final rinse.

	tank	vac. trk.	set-up	people	hours reg	hours o/t	
10/14/02		4	8	6	48.5	10	
10/15/02		4	7	4	57.5	0	
10/16/02		99	8	6	48	13	
10/17/00		99	5	5	25	0	
		39	3		15	7.5	
10/18/02	V-201		6	6	20		
	V-207				23.5	4	
					237.5	34.5	272

Kamerer Amos

From: Turner TJ
Sent: Tuesday, October 15, 2002 4:57 PM
To: Dietz Jim
Cc: Hyde Leslie; Kamerer Amos; Self Traci; Turner TJ

10/15/02

Hey Jim,

I think we have had a real good week in the tank cleaning business here in Portland !

As of today 10/15, we have two tanks to complete in the lower tank farm - 99 and 39 and should be finished by Thursday.

Last week 34 tank was labor intensive but we got all the material out and completed 4 tank today !

I have given 2 safety talks as well as 8 observations with the Emerald people and they have been received well.

Amos and T.J have really been a great help to me in getting where we are today !

Any questions give me a call.

Later

Portland Costs 10-7-02.xls

Howard

Koppers004898

Week of 10/7/02 through 10/11/02

10/7/02

Cleaned 20 tank - ready for a final wash.
Started cleaning 34 tank.

10/8/02

Cleaned 34 tank.

10/9/02

Cleaned 34 tank .

10/10/02

Sucked liquid from 4 tank - 6 loads of approximately 12,500 gallons
Cleaned UTLX 650895
Cleaned UTLX 650824

10/11/02

Cleaned 34 tank - finished ready for final rinse

	tank	vac. trk.	set-up	people	hours reg	hours o/t	
10/7/02	20	5	1 o/t	6	30	1	
	34	3			17		
10/8/02	34	8		5	40	6.5	
	99 M8 Pump to dewater 99 tank 4 hours						
10/9/02	34	6		5	35.5	6	
10/10/00	4	8		6	37	8	
	UTLX 650895 clean			3	4.5		
	UTLX 650824 clean			3	4.5		
10/11/02	34	7		5	48	5.5	
					216.5	27	243.5

Had a good week last week considering 34 tank which was labor intensive but was completed Friday.

We cleaned two pitch cars for material transport to Stickney, which we have started to load one.

We will have three cars ready to ship back to Stickney tommorrow.

We have been successful in material recovery and only have waste drums to ship for disposal at this point.

Week of 10/7/02 through 10/11/02

I have conducted two safety meetings and 8 observations with the contractor.

34 tank	140.5 hours straight time	18 hours ot	158.5 total
20 tank	30 hours straight time	1 hours ot	31 total
4 tank	37 hours straight time	8 hours ot	45 total
T/Cs cleaned	9 hours straight time		9 total
	216.5 straight	27 hrs ot	243.5 total

Kamerer Amos

From: Turner TJ
Sent: Monday, October 07, 2002 8:43 AM
To: Dietz Jim
Cc: Kamerer Amos; Hyde Leslie; Self Traci; Turner TJ

Hey Jim,

We are moving right along here in Portland !

We should have the three cars that are here loaded by Wednesday 10/9/02 and are looking at two pitch cars for material loading that are here in th plant.

We have permission from the city to drain water off 99 tank to the sewer system which will help geatly and may start that tommorrow.

We have completed 6 tanks - 3, 17,18,19,23,20 with no material being landfilled.

We will work on 34, 39,99 and 4 tanks this week, hoping to be out of the lower tank farm by the 20th of October.

Hopefully this week will be as successful as last week.

Later,
Howard

Portland Costs
9-30-02.xls

Koppers004901

Date	Company	Invoice	Use		Cost	
9/19/02	Morse Bros	671332	1 1/2-0	gravel	129.45	
9/19/02	Morse Bros	671342	1 1/2-0	gravel	128.52	
9/19/02	Morse Bros	671351	1 1/2-0	gravel	129.97	
9/19/02	Morse Bros	671356	1 1/2-0	gravel	138.56	
9/19/02	Morse Bros	671365	1 1/2-0	gravel	129.79	
9/19/02	Morse Bros	671369	1 1/2-0	gravel	129.88	
9/19/02	Morse Bros	671385	1 1/2-0	gravel	123.6	
9/19/02	Morse Bros	671392	1 1/2-0	gravel	120.88	
9/19/02	Morse Bros	671401	1 1/2-0	gravel	128.95	
9/19/02	Morse Bros	671444	1 1/2-3/4	gravel	314.06	
9/19/02	Morse Bros	671458	1 1/2-0	gravel	131.58	
9/19/02	Morse Bros	671459	1 1/2-3/4	gravel	170.36	
9/19/02	Morse Bros	671466		sand	99.39	
						1874.99
9/20/02	CSI Geosynthetics	1026121-01		15x300 syn ind 801 road matting	345	345
9/23/02	Willi Make It	6296		toilet	105	105
9/24/02	Mr. Plywood	s 540960		plywood walkways	443.88	443.88
9/27/02	MCD Mechanical	1041		steel tank for containment	458	458
10/3/02	MCD Mechanical	1016		steel tank for containment	458	458
						3684.87

Kamerer Amos

From: Turner TJ
Sent: Thursday, September 19, 2002 2:57 PM
To: Dietz Jim
Cc: Hyde Leslie; Kamerer Amos; Rue Howard S; Self Traci; Turner TJ
Subject: Portland

Hey Jim,

9/16/02

Arrived in Portland.

TJ and I started looking into tanks to make an initial game plan.

9/17/02

Amos, TJ and I had a meeting on the upcoming project and which way to approach things.

We have one car here GATX 37155 that was used for distillates and are expecting two more by Friday.

We plan to start cleaning Monday 9/23/02 with Emerald and we have a 9:00am meeting on 9/18/02 with Kelly Nightengale from Emerald.

Amos will contact ODEQ and inform them that we will be cleaning the tanks.

Discussed water caps on several of the tanks and have that pretty well in hand at this point.

TJ will order 7 to 10 loads of rock so we can access the tanks with out sinking the vacuum truck - ground wet and soft !!

We also have a plan to clean the tanks in this order = 34, 99, 39, 4, 3, 17, 19, 18, 23, 20, 102, T-1, T-11, T-12, T-2, V-201, V-207 and
will hold 66 and 101 for last to see if the material can be sold.

9/18/02

Amos, TJ, Howard meet with Kelly Nightengale and Dan Pain from Emerald meet at 9;00am.

They provided a Project Health and Safety Plan for the job.

They also provided qualitive fit testing reports, confined space training, hazwoper, forklift traning and all certificates will be on file here at the NW Terminal.

We also informed them of our SH&E position - that it was number 1 and that we will be doing Safety Talks as well as Observations. They were impressed and liked the idea.

They will start 9/23/02 with 7 laborers, 1 operator and a supervisor.

Will check into roll off boxes for waste and let Amos know.

We will supply a toilet but they will supply a change trailor.

Amos informed us that he had spoken to Rose Lim of the ODEQ in regards to the work on the tanks.

We opened up V-201, V-207, and 66 tanks - material is over the manhead of 66 tank and hard.

9/19/02

TJ and I built two roads to gain access to 3 and 4 tanks and the other to gain access to 99 and 66 tanks.

Any questions give me a call.

Howard

Koppers004904

Close

From: Thurman Wilson [SMTP:veepengr@stargate.net]
To: tim basilone; leslie hyde; jim dietz; howard rue
Cc:
Subject: Meeting Minutes of 9/09/02
Sent: 9/11/02 4:51 PM **Importance:** Normal

Here are revised meeting minutes from Monday's meeting.

Thanks,
Thurman

Meeting90902.doc

Meeting Minutes
Sludge Minimization/Elimination Process
September 9, 2002

Attendance:
Tim Basilone
Jim Dietz
Leslie Hyde (Part-time)
Howard Rue
Thurman Wilson (Quattro)

The meeting was held in the 18th Floor conference room. This meeting was held to review the overall sludge elimination plan as drafted by Thurman Wilson. Following is the summary of the issues discussed during the meeting.

Jim Dietz agreed with the base assumptions that processing of tar sludges through the distillation process and use of the Clairton centrifuge were viable options. The concept of diluting for fuel usage does appears to be unfeasible due to economics in addition to the fact that needed raw materials would be consumed as diluents.

Jim envisions the recovery of sludge and transfer to process taking the following path.

- The solids will be cut in half with use of off-spec distillates
- Existing agitators, and possibly additional agitators, will be used to suspend the solids into the distillate. Once suspended, agitation will be continued to maintain the suspension. The material will then be fed at acceptable rates to the process.
- There may be instances where the slurry will be transferred to another tank for the actual blending to the process feed streams.

The Stickney Plant is currently planning on applying this procedure for the cleaning of #100 Tank which is scheduled to be demolished and replaced with a new tank.

- The physical integrity of the tank is currently being evaluated to determine that it can safely accommodate an agitator.
- Oil currently in #102 Tank will be used to dilute the heel and the material will be put into slurry. It will then be transferred back to #102 Tank where it will be fed to the process.
- Work can then commence on #100 Tank.

The Clairton centrifuge is currently used for cleaning up some tar feed for specific products. Any usage for tank cleaning will have to be coordinated with this need. Use of the centrifuge also requires an outlet for the underflow, as the coke plant is limited on the amount of material it will handle. We discussed that Colmac Resources is very interested in the underflow material as fuel and is working closely with us to arrange for the permitted usage as such.

Jim Dietz expressed desire for any final arrangement with Colmac to include their purchase of the material, KII picking up freight costs, and working toward the bottom line sales price/cost through this mechanism.

The criteria used to develop the material balances for the plant appear to be good. There is the possibility that slightly more material can be blended than the plan currently designates.

The concept of moving "slurried" tar from Follansbee to Clairton can be accomplished in theory. The practical consideration will be the amount of settling that occurs in the transporting vessel.

The creosote residue in #1 Tank at Clairton can be used as diluent for putting the tar sludge into a slurry. It will be necessary to heat #1 Tank and return that material to a liquid state in order to accomplish this.

The material in #1A at Clairton is best used for CBO shipments and shouldn't be considered for use as a diluent.

All economic modeling will be adjusted to include $0.10 per gallon reprocessing charge.

Stickney will begin to clean-out their terminal tanks and recycle through #6 Tank which is agitated. This work will be done concurrently with the #100 Tank project which will also start this week.

The USX Gary blast furnace burns about 35,000 gallons per day of fuel tar. They produce about 23,000 gallons per day of tar for this purpose. The only way this could become an outlet is with a relatively good fuel blend (0.5% ash or less) and the storage of a large amount that will allow them to campaign a blend. There may be some possibility of this being used as an outlet but it should only be considered as a final option.

Water inventories, hindering sludge availability, were discussed briefly. Jim Dietz said that much of this problem is generated by paving and storm water collection with subsequent overloading of existing treating plants. They have been working to increase the capacity at Woodward to alleviate some of the water problems.

Jim Dietz anticipates working on the residue in the following order:

- Tar Tanks
- Out of Service Tar Tanks
- Out of Service Distillate Tanks
- Railcars

Thurman Wilson had developed some conceptual plans for specific tank cleaning and tanks to be used for that purpose at each of the plants. These were only developed to provide "sanity checks" to assure that adequate tankage and resources were available to permit the project to proceed. The plants will be responsible for developing the specific tasks associated with this program.

Jim Dietz will continue to work with sales and marketing people to see if there is an outlet for high PAC material. Jim says the Europeans do have interest in 40% or higher PAC material although the dark color in the creosote residue does create some problems.

Monitoring of this program remains to be developed. It was determined that final documents should incorporate as much existing information and practices as possible. This will minimize any additional work requirements for KII personnel.

Howard Rue will assume the responsibility for coordinating these efforts in the field for KII. Thurman Wilson will provide information to Howard as quickly as possible.

Thurman Wilson
Quattro Associates
9/11/02

Close

From: Hyde Leslie
To: Rue Howard S
Cc: Self Traci
Subject: Portland tank project
Sent: 9/13/02 11:03 AM **Importance:** Normal

Howard

I wanted to put some of my thoughts down on how we can communicate status at Portland over the next couple of months. I've attached a spreadsheet that includes the information I have from Portland. To the right on the spreadsheet, I've added four columns - ***plan*** , ***projected completion date***, ***status*** and ***tank completion date*** (the date we complete the entire plan for a specific tank). I've made up some stuff (in red) to show the level of detail I'm looking for. Feel free to modify this spreadsheet as you need to track the info you want to track.

A couple of things we discussed that you need to keep in mind:

- the first thing you need to do is develop an understanding of the Portland tanks and the situation of each. Are all the tanks included on the list, are there others, is the status accurately reflected, etc? Don't ignore tanks that are called "process vessels". For the purposes of this project, a tank is a tank - let's look at all of them to make sure we understand their status.
- the material we send back to Stickney must be, in our best estimate, material that can legitimately be redistilled - we cannot send material that is mostly waste just to blend it into tar and "lose" it. As you and I discussed, not only is this prohibited by the regulations, it will come back to us as waste somewhere down the line anyway. This quality of material should be properly disposed of.
- If you are doing anything with material - other than putting it in a railcar to send to Stickney for recycling - call Traci first. There may be regulatory concerns and she can help identify those.
- we want to do this safety and correctly, so we don't harm people or the environment.

Call me if you have questions / concerns / ideas. Good luck

Leslie

Portland Tank Recycling Plan.xls

Portland Tank Status

ntity of lue (gal)	Physical State of Residue	Condition of tank	Plan	Projected Completion date	Status	Tank Complete (date)
9755	70 % liquid	fair	example: 1. get heat to tank	9/20/02	9/20 - heating tank (expect to heat for 1 week) 9/27 - heating completed	
			2. heat tank	9/20-9/20		
			3. vacuum pumpable liquids - load to railcar	9/30-10/2		
			4. Determine disposition of solids	10/3/02		
			5. remove solids	10/15-10/30		
			6. clean tank	10/30-11/15		
			7. evaluate tank condition	11/16/02		
5851	70 % liquid	poor				
961	mush					
5091	hard	?				
131	mush	good				
000	mush	poor				
425	hard	good				
.547	hard	poor				
566	mush	poor				
444	mush	poor				
977	mush	good				
585	mush	good				
300	liquid/mush	poor				

Koppers004910

Portland Tank Status

ntity of lue (gal)	Physical State of Residue	Condition of tank	Plan	Projected Completion date	Status	Tank Complete (date)
:400	hard	?			cleaned	
8815	hard	poor				
500	mush	?			cleaned	
7400	70% liquid	good				
59184	hard	poor				
:300	liquid?	poor				
100	hard	poor				
)2832						

Koppers004911

Close

From: Dietz Jim
To: Self Traci; Kamerer Amos; Turner TJ; Rue Howard S
Cc: Hyde Leslie
Subject: RE: Tank Recycling
Sent: 9/16/02 11:07 PM **Importance:** Normal

Traci,

Stickney will accept and use all product material shipped.

Jim

-----Original Message-----
From: Self Traci
Sent: Monday, September 16, 2002 4:28 PM
To: Kamerer Amos; Turner TJ; Rue Howard S
Cc: Dietz Jim; Hyde Leslie
Subject: Tank Recycling

Based on our telephone conversation today reprocessing of material to the Stickney facility would be acceptable as long as the material was considered useful by the Stickney Plant. If the material upon receipt by Stickney required disposal-either through wastewater treatment, incineration, land disposal etc. it may be determined that the material is a waste and not useful as a product. Every effort should be made to insure materials shipped cannot be construed as waste.

Close

From: Thurman Wilson [SMTP:veepengr@stargate.net]

To: howard rue

Cc:

Subject: Creosote Solubility

Sent: 9/16/02 2:36 PM **Importance:** Normal

Howdy,

Attached is a report that was written a few months ago to detail some lab testing on creosote solubility in Harmarville. Don't think there is anything that you wouldn't have known already - but it does quantify to some extent temperatures, time, etc. that are required to get PAC back into solution. Give me a call if you want to discuss.

I'll send you this stuff intermittently - as I think it serves some of your purposes. Don't want to swamp you with stuff that doesn't provide you with some immediate help. Let me know if you have needs for specific information and if I have it I'll be glad to forward it to you.

Thanks,
Thurman

CreosoteSolubility.doc

Kamerer Amos

From: Carlson Rachel
Sent: Friday, August 16, 2002 11:22 AM
To: Kamerer Amos
Cc: HTC Analyses Team
Subject: FW: Tar Report

al-36183.doc

This is the sample 02-1137 or sample from T12 tank sampled 8/1/02. Let me know if you need any further information.

Rachel J. Carlson
412 826-3977

-----Original Message-----
From: Vaughn Romell [mailto:vromell@indspec-chem.com]
Sent: Friday, August 16, 2002 2:20 PM
To: Rachael Carlson
Subject: Tar Report

Hi Rachael,

Here's my report on the unknown tar. It does resemble a mix of an ola tar and a coke oven product. Let me know if you have questions or need anything else.

Vaughn

PS - Did I spell your first name right? Or is it "Rachel"? I have a niece who spells it that way.....

August 16, 2002

Ms. Rachael Carlson
Koppers Industries, Inc.
1005 William Pitt Way
Pittsburgh, PA 15238

RE: Unknown Tar (3760)

Dear Ms. Carlson:

Your sample 02-1137 (A. L. No. 36183) of an unknown tar from Portland has been examined by FT-IR techniques for characterization, as requested.

Examined as received, the sample exhibits infrared absorptions characteristic of a mixture of a high boiling petroleum hydrocarbon oil, coal tar hydrocarbons, carbon/carbonaceous matter, and water. *The organic components and structures observed in the tar are consistent for a mixture of an "ola tar" (or similar heavy petroleum oil) and a crude / topped coke oven tar.*

The ratio of the petroleum oil / coke oven tar is estimated to be 70 / 30 by weight; this calculation is based on historical absorptivity data of "typical" ola tars and crude coke oven tars. The aromaticity index (Ia) of the sample is 0.43.

Every precaution has been taken to ensure the accuracy of the results. However, the information in this final report is provided subject to the condition that INDSPEC Chemical Corporation will not be liable for any loss or damage resulting from use of the data.

Should the results of the testing be considered for any advertising or promotional purposes, it should be noted that INDSPEC Chemical Corporation does not allow the use of its name to be contained in advertising and/or promotional material.

If we can be of further assistance, please do not hesitate to contact us.

Sincerely,

INDSPEC CHEMICAL CORPORATION

Vaughn J. Romell
Senior Scientist
Absorption Spectroscopy

cc: Mrs. B. B. Buchner

Kamerer Amos

From: Kamerer Amos
Sent: Friday, August 16, 2002 2:51 PM
To: Dietz Jim
Cc: Hyde Leslie; Self Traci
Subject: RE: Compliance issue Update

Jim,

Below are the corrections that need to be made to the Portland tank list, which Leslie e-mailed yesterday.

First, a couple of comments:

1) Personally, I do not think that any of the liquid materials are saleable, however, most of it is retrievable for re-distilling purposes. The PAC material in tanks 66 and 101 is another matter, you believe could be sold as anthracene, but I would have no idea if that possible.
2) Most of this material is not pump able; it is retrievable via the use of a vac truck and could then be transferred to another tank, a tank car, a tank truck, etc. The only tank that is pump able is T-99, however, a new pump and piping would need to be installed; then this tank would also have to be vac'ed to remove all residues.
3) Traci has told me that I will need to develop a tank management program to deal with all of these issues by the 22nd. However, before I can do that and sign off on it, I need to be given some guidance; what funds will be available for this work, I understand that Jack is working on this and rightfully so, as this is not something that I am prepared to do. What will be the time frame for completing all of this work? Is management going to put these commitments in writing for the Plant Manager's?.

Below, please find additional or new comment's for the spreadsheet, where applicable, by tank number:

T-1: This will require funds for piping, etc. This is not salable.
T-2: This will require funds for piping, etc. This tank is listing badly; 10 to 12" from one end to the other. We do not know the true condition of this material, because of the possible danger associated with doing a closer inspection, do to the tank condition.
T-19: No leaks, piping required.
T-20: No leaks, piping required.
T-39: No leaks, piping required.
T-99: The approx. 3600 gals of creosote is PAC that goes from hard on the bottom to mush on the top. The water is on the top of this material.
V201: This is the old still and contains ola tar. This will require funds for piping, etc.
T-12: HTC has run a GC on this sample and as we believed from it's appearance and odor, it appears to be a mix of crude tar and ola tar. This tank is rusting and has an open rust hole in it's side, however, its is not leaking. I will forward you all a copy of their report.

Monday, we need to get together to review all of this, so I can finish writing the tank management program next week.

Thanks,

Amos

-----Original Message-----
From: Hyde Leslie
Sent: Wednesday, August 14, 2002 2:40 PM
To: Burkhart R Jim; Traczek Gregory; Kamerer Amos; Lish Steven; Weinstein Nate
Cc: Dietz Jim; Self Traci
Subject: Compliance issue Update

Per Jim Dietz' request, the following updated spreadsheet of compliance issues is provided

<< File: Compliance Findings Summary 8_14_02 CM&C.xls >>

Portland, Oregon Northwest Terminal Tank Condition Recap

Tank #	Product	Residue Gallons	Residue Inches	Residue Phy. State	Steam Heating Status Condition	Steam Heating Status Type	Pre. Washed	Comments
1	crude tar	19,755	9"	70% liquid	?	vertical	no	
2	crude tar	26,851	9"	70% liquid	?	vertical	no	
3	methyl solvent	1,691	6"	mush	leaks	horizontal	no	
4	light uncorrected creo	16,091	4' 9"	hard	?	horizontal	yes	
11	creosote	3,131	4"	mush	good	vertical	yes	
12	?? (see note)	1,000	12"	liq. & mush	inactive	?	no	← has Rust hole in side
17	heavy oil	~~850~~ 425	~~12"~~ 6"	hard	good	vertical	no	
18	NSR	2,547	3'	half liq./hard	inactive	vertical	no	
19	P & R oil	~~850~~ ~~566~~	~~12"~~ ~~8"~~	mush	inactive	vertical	yes	
20	creosote	5,444	6"	mush	inactive	vertical	yes	
23	light uncorrected creo	1,977	2' 4"	half liq./hard	good	vertical	yes	
33	heavy oil - **In use**	0		N/A			no	
34	NSR	1,585	10"	mush	good	horizontal	yes	
39	creosote/water	800	12"	liq. & mush	inactive	????	no	water added during the flood of 1996
53	creo/dirt/rock	2,400		hard	?	horizontal	no	
65	liquid pitch - **In use**	0		N/A			no	
66	creosote	18,815	3' 6"	hard	inactive	vertical	no	
67	heavy oil - **In use**	0		N/A			no	
68	liquid pitch - **In use**	0		N/A			no	
74	mostly creo/some dirt	500		mush	?	vertical	no	
99	creosote	3,600	6"	70% liquid	good	vertical	yes	
99	water	13,800	2'	"	"	"	"	water added during the flood of 1996
101	creosote	169,184	8'	hard	inactive	vertical	no	
102	water-fumr tank- **In use**	0		N/A			no	
200	liquid pitch - **In use**	0		N/A			no	
V201	still - crude tar	2,300	3' 3"	liquid	inactive	N/A	no	
V207	pitch	100	3"	hard	inactive	N/A	no	
240	heat transfer oil - **In use**	0		N/A			no	
250	heat transfer oil - **In use**	0		N/A			no	

Notes:

1) A "yes" under the pre-washed tanks reflects that the tank was blended in 1986/1987 with distillate, thus, the current residues are lower, today.
2) All tanks have side wall suction lines at about 12" above the tank bottom, which will make it impossible to completey pump these tanks clean. Tanks T-65 & T-68 were cleaned using a vacuum truck before they were put into liquid pitch service. Most pumps servicing these tanks are not operable.
3) In addition to the above, there are 6 tanks in strom water collection service: SW-1 through SW-6.
4) Tank T-12 was sampled and sent to HTC on 7/29/02
5) Tanks T-53 and T-74 are scheduled to be cleaned the week of 8/5/02

Koppers004917

Northwest Terminal Tank Condition Recap

Tank #	Product	Residue (gals)	Phy. State	Steam Heater Status: Condition	Steam Heater Status: Type	Steam Heater Status: Pre. Washed	Comments
1	crude tar	19,755	70% liquid	?	vertical	no	
2	crude tar	26,851	70% liquid	?	vertical	no	
3	methyl solvent	1,691	mush	leaks	horizontal	no	
4	light uncorrected creo	16,091	hard	?	horizontal	yes	
11	creosote	3,131	mush	good	vertical	yes	
12	??????	????	????	dead	?	no	
17	heavy oil	425	hard	good	vertical	no	
18	NSR	2,547	hard	dead	vertical	no	
19	P & R oil	566	mush	dead	vertical	yes	
20	creosote	5,444	mush	dead	vertical	yes	
23	light uncorrected creo	1,977	mush	good	vertical	yes	
33	heavy oil - In use	0	N/A			no	
34	NSR	1,585	mush	good	horizontal	yes	
39	creosote/water	????	????	dead	????	no	water added during the flood of 1996
53	creo/dirt/rock	2,400	hard	?	horizontal	no	
65	liquid pitch - **In use**	0	N/A			no	
66	creosote	18,815	hard	dead	vertical	no	
67	heavy oil - **In use**	0	N/A			no	
68	liquid pitch - **In use**	0	N/A			no	
74	mostly creo/some dirt	500	mush	?	vertical	no	
99	creosote	3,600	70% liquid	good	vertical	yes	
99	water	13,800	"	"	"	"	water added during the flood of 1996
101	creosote	169,184	hard	dead	vertical	no	
102	water-fumr tank- **In use**	0	N/A			no	
200	liquid pitch - **In use**	0	N/A			no	
V201	still - crude tar	2,300		dead	N/A	no	
V207	pitch	100	hard	dead	N/A	no	
240	heat transfer oil - **In use**	0	N/A			no	
250	heat transfer oil - **In use**	0	N/A			no	

Notes:

A "yes" under the pre-washed tanks reflects that the tank was cleaned in 1986/1987 using distillate, thus, the current residues are lower, today.

All tanks have side wall suction lines at about 12" above the tank bottom, which will make it impossible to completey pump these tanks clean. Tanks T-65 & T-68 were cleaned using a vacuum truck before they were put into liquid pitch service. Most pumps servicing these tanks are not operable.

In addition to the above, there are 6 tanks in strom water collection service: SW-1 through SW-6.

Koppers004918

Plant	Tank #	Last Date of Svc	Contents/Last Contents	Size of tank	Quantity of Residue (gal)	Physical State	Condition	Comments	Corrective Action Planned	Legal Position	Projected Completion date	Compliance (In/ out)?	Will this be reportable on 8/22
Monessen	(3) fiberglass scrubber cylinders at former sinter plant								Plant to determine if there is material in these vessels - analysis performed and material characterized by 8/22		8/22/02	if material is haz	?
Monessen	out of service tank in byproducts area			20000					Plant to determine if there is material in these vessels - will be cleaned by 8/22		8/22/02		N (if cleaned)
Monessen	inactive tar decanter								Plant to determine if there is material in these vessels - concern about integrity therefore, can't clean now - does process knowledge tell us this would be empty?			gray	?
Portland	1		crude tar		19755	70 % liquid	fair	no leaks, piping may require funds (Will)	can we sell the liquid (makes it a product) - discussed with counsel	If there is pumpable material that can be sold as a a product, it can be held for a reasonable amount of time to do so. The question is, are we comfortable that this material is a product? Are we comfortable that it is legitimate input to the distillation process? When we remove all "product", what remains is waste and the 90 day clock starts. If we intend to take this "product" to Stickney to re-distill, we should: - develop (and document) a plan - with milestones - start returning material - meet all milestones Argument is more difficult with tanks where material is hardened			Need decision based on legal analysis
Portland	2		crude tar		26851	70 % liquid	poor	no leaks (")	can we sell the liquid (makes it a product) - discussed with counsel				
Portland	11		creosote		3131	mush	good	Listed material, piping not connected					
Portland	19		P & R oil		566	mush	poor	No leaks, Piping Required					
Portland	20				5444	mush	poor	(") (")					
Portland	23		light uncorrected creo		1977	mush	good	connected					
Portland	34		NSR		1585	mush	good	(")					
Portland	39		creosote/water		800	liquid/mush	poor	Not connected					
Portland	99		creosote/water		3600/13800	PACTMAN 70% liquid	good		move liquid to tank 1 or 56 - discussed with counsel - ship to Stickney for redistillation - is this a legitmate input to the distillation process - what about the residue				
Portland	V201		still - crude tar		2300	liquid?	poor	oletar, Not connected					
Portland	3		methyl solvent		1961	mush		tank oh, steam line leaks					
Portland	12		???? believe CT TAL & OIA		1000	mush	poor	rusted not leaking - sent sample to HTC to identify					

Koppers004919

Plant	Tank #	Last Date of Svc	Contents/Last Contents	Size of tank	Quantity of Residue (gal)	Physical State	Condition	Comments	Corrective Action Planned	Legal Position	Projected Completion date	Compliance (In/ out)?	Will this be reportable on 8/22
Portland	4		light uncorrected creo		16091	hard	good	Benzene material					
Portland	V207		pitch		100	hard	poor						
Portland	17		heavy oil		425	hard	good						
Portland	18		NSR		2547	hard	poor						
Portland	66		creosote		18815	hard	poor		sell PAC as anthracene - discussed with counsel - what do they do with the other chemicals - how much of it is anthracene	So long as the material in the tank is a product, and the tank is "in operation" Must be actively engaged in marketing the product. The better we can make this argument, the stronger the position At some point, if it is not sold, it is waste. No definite point when this occurs. In our interest to make this happen quickly. When we remove the PAC, what remains is waste - 90 day clock starts.			Need decision based on legal analysis
Portland	101		creosote		169184	hard	poor		PAC crystals - discussed with legal counsel (if can we sell this, does it become a product?) - what about residue				
Portland	53		creo/dirt/rock		2400	hard	?		clean week of 8/5		8/22/02		N (if cleaned)
Portland	74		mostly creo/some dirt		500	mush	?		clean week of 8/5		8/22/02		N (if cleaned)
Stickney	12		RCO	317000	23319	hard		all pumpable removed - hole 12' below roof - plan to remove sludge and clean in 2003	budgeted for cleaning in 2003				Y
Stickney	14		NSR	338000	1573			Measurement shows tank to be empty, but we can see some material in the tank.	can we pump this out by 8/22 - all pumpable material removed - sludge remains				Y
Stickney	P1		RECYCLE DISTILLATE		4513			out of service	- need to determine status				Y
Stickney	OL22		DISTILLATE FUEL	2284000	115007		hole in sid	out of service	budgeted for cleaning in 2003				gray

Koppers004920

When Box is Black, this is an Uncontrolled Document

Tank Management Program

KOPPERS INC.

NORTHWEST TERMINAL

PORTLAND, OR

KOPPERS INC.
NORTHWEST TERMINAL
7540 NW Saint Helens Rd.
PORTLAND, OR 97210-3663
March 15, 2005

MANAGEMENT APPROVAL

This Tank Management Program will be implemented as herein described.

T. J. Turner
General Foreman

Portland Northwest Terminal is located in Multnomah County in the city of Portland, OR. The terminal is located on approximately 6.4 acres of leased property. The property owner is North West Natural, 220 NW Second Avenue, and Portland, OR, 97209. The portion of the property that Koppers leases is addressed as 7540 NW Saint Helens Rd., Portland, OR, 97210-3663. The property is bounded by Saint Helens Road (Oregon State Highway 30) on the south, the N W Natural property extending to the shore of the Willamette River on the north. The N W Natural liquefied natural gas plant on the west. The south end of NW Front Ave. separates Koppers property from Wacker Siltronic Corporation, on the eastern boundary. At this time, there are 2 full time and 1 part time employee's, at the terminal. Normal operating hours are from 12:00 a.m. on Sundays through 3:00 p.m. on Fridays. Generally, the plant is closed on the weekends.

The facility maintains a SPCC and Contingency Plan to: a) provide a basis for planning for and responding to potential spills, accidents, fires, or other contingencies and b) describe and implement practices to minimize and control pollutants in storm water discharges and ensure discharge permit compliance. It includes the requirements for the Contingency Plan as required by the Resources Conservation and Recovery Act (RCRA), the Spill Prevention, Control and Countermeasures (SPCC) Plan and Storm Water Pollution Prevention Plan (SWPPP) of the Clean Water Act, and the inventory reporting requirements of the Emergency Planning and Community Right-to Know Act (SARA Title III).

Questions concerning this plan may be directed to:

T.J. Turner	General Foreman	(503) 286-3681– Office

Liquid Coal tar pitch is imported from Asian sources via a bulk cargo vessel that is equipped with heated storage tanks for hauling the pitch. These receipts arrive at the NW Natural Gasco dock on the Willamette River, where they are pumped from the vessel, through a pipeline that is about 2,400 feet long, to a storage tank at the terminal. This product is then stored at the terminal, prior to the distribution to our customers. Outbound shipments are made mostly via tank truck and occasionally via tank cars.

All products and/or chemicals used or handled through the terminal are covered by material safety data sheets, which are on file. All employees have been trained on the usage of these materials and educated in the proper manner of reading and understanding of the material safety data sheets. This training is mandatory and is given annually.

1.1 Business Information and Identification

The following information applies to the Koppers Inc. Northwest Terminal:

Business Name:	Koppers Inc.
Business Phone:	(503) 286-3681
Business Fax:	(503) 285-2831
Owner:	Koppers Inc. 436 Seventh Ave. Pittsburgh, PA 15219
Operator:	Same as owner
NAICS Code:	325192
SIC Code:	2865
EPA ID Number:	ORD 027734359
Site Address:	7540 NW Saint Helens Road Portland, OR 97210-3663
Mail Address:	Same as above
Type of Business:	Coal Tar Pitch Terminal

1.2 Hazardous Materials Inventory

Koppers Industries acquired the Portland North West terminal in 1988 from Koppers Company (now Beazer East, Inc.). 36 aboveground tanks are located on the leased property. At the time of purchase, several tanks were not in use or ceased use shortly thereafter. Koppers Industries Inc changed the name of the company in February 2003 to Koppers Inc.

Stored materials include coal tar distillate, coal tar pitch, boiler water treatment chemicals, diesel, gasoline, heat transfer oil and lubricants for plant vehicles and equipment. The stormwater tanks are used for collection purposes only. 19 of the tanks have been cleaned and content materials were recycled to our Stickney, Illinois plant. After cleaning, the tanks were power washed but because the tank was not scraped or wiped clean, they may contain minimal residue. The tanks are labeled according to the last product they contained.

The concrete-wall-lined and earth-diked tank farm has a total containment capacity of approximately 2,900,000 gallons. Operators regularly walk and inspect this area, checking for corrosion, leaks or stains, or anything out of the ordinary. They also do housekeeping, as necessary.

As part of Koppers Inc commitment to implement an SH&E management system, this program has been developed to address management of tank residuals and to facilitate recycling initiatives.

The facility conducts monthly external inspections of the tanks, ancillary equipment and diked area. Unsatisfactory conditions are noted on plant report forms and corrected, as required. Items that require correction in excess of plant approval capability will be directed to CM&C division management in accordance with request for expenditure procedures. Such request will be submitted no later than 30 days of determination that an expense must be incurred.

Upon discontinuance of the use of a tank, Koppers Inc. NW Terminal will render tanks containing recyclable materials that are pumpable within 180 days of such determination. An attempt will be made to recycle the material off-site, if this is not possible, disposal processes will be initiated.

When Box is Black, this is an
Uncontrolled Document

KOPPERS

Tank List

Tank No.	Current use	Last contained	Capacity (000)	Residue Est. (gals)	Date Cleaned
1	Empty & Cleaned	Crude Tar	660	0	11/2002
2	Empty & Cleaned	Crude Tar	1065	0	11/2002
3	Empty & Cleaned	Methyl Solvent	99	0	11/2002
4	Empty & Cleaned	Lt. Uncorrected Distillate	99	0	11/2002
11	Empty & Cleaned	Creosote	254	0	11/2002
12	Empty & Cleaned	Unknown	57	0	11/2002
17	Empty & Cleaned	Heavy Oil Distillate	20	0	11/2002
18	Empty & Cleaned	NSR Oil	20	0	11/2002
19	Empty & Cleaned	P&R Oil	20	0	11/2002
20	Empty & Cleaned	Creosote	712	0	11/2002
23	Empty & Cleaned	Lt. Uncorrected Distillate	20	0	11/2002
33	Heavy Oil	Heavy Oil Distillate	45	In use	
34	Empty & Cleaned	NSR Oil	45	0	11/2002
39	Empty & Cleaned	Creosote	20	0	11/2002
53	Empty & Cleaned	Creosote	10	0	11/2002
65	Liquid Pitch	Liquid Pitch	761	In use	
66	Empty & Cleaned	Creosote	191	0	02/2003
67	Heavy Oil	Heavy Oil Distillate	102	In use	
68	Liquid Pitch	Liquid Pitch	248	In use	
74	Empty & Cleaned	Creosote	20	0	11/2002
99	Empty & Cleaned	Creosote	209	0	11/2002
101	Creosote	Creosote	759	169184	
102	Fume Tank	Heavy Oil Distillate	9.3	In use	
200	Liquid Pitch	Liquid Pitch	2100	In use	
V201	Empty & Cleaned	Liquid Pitch	19	0	11/2002
V207	Empty & Cleaned	Liquid Pitch	19	0	11/2002
240	Heat Transfer Oil	Heat Transfer Oil	2	In use	
250	Heat Transfer Oil	Heat Transfer Oil	2	In use	
SW #1	Storm Water	Storm Water	45	In use	
SW #2	Storm Water	Storm Water	45	In use	
SW #3	Storm Water	Storm Water	45	In use	
SW #4	Storm Water	Storm Water	45	In use	
SW#5	Storm Water	Storm Water	20	In use	
SW#6	Storm Water	Storm Water	20	In use	
DSL-1	Diesel Storage	Diesel	4.5	In use	
DSL-1	Diesel Storage	Diesel	4.5	In use	

Note: Tanks marked as Empty and Cleaned were cleaned to "commercially acceptable practices" to meet RCRA standards.

Tank Management Program

KOPPERS INC.

NORTHWEST TERMINAL

PORTLAND, OR

KOPPERS INC.
NORTHWEST TERMINAL
7540 NW Saint Helens Rd.
PORTLAND, OR 97210-3663
July 7, 2004

MANAGEMENT APPROVAL

This Tank Management Program will be implemented as herein described.

T. J. Turner
General Foreman

Portland Northwest Terminal is located in Multnomah County in the city of Portland, OR. The terminal is located on approximately 6.4 acres of leased property. The property owner is North West Natural, 220 NW Second Avenue, and Portland, OR, 97209. The portion of the property that Koppers leases is addressed as 7540 NW Saint Helens Rd., Portland, OR, 97210-3663. The property is bounded by Saint Helens Road (Oregon State Highway 30) on the south, the N W Natural property extending to the shore of the Willamette River on the north. The N W Natural liquefied natural gas plant on the west. The south end of NW Front Ave. separates Koppers property from Wacker Siltronic Corporation, on the eastern boundary. At this time, there are 2 full time and 1 part time employee's, at the terminal. Normal operating hours are from 12:00 a.m. on Sundays through 3:00 p.m. on Fridays. Generally, the plant is closed on the weekends.

The facility maintains a SPCC and Contingency Plan to: a) provide a basis for planning for and responding to potential spills, accidents, fires, or other contingencies and b) describe and implement practices to minimize and control pollutants in storm water discharges and ensure discharge permit compliance. It includes the requirements for the Contingency Plan as required by the Resources Conservation and Recovery Act (RCRA), the Spill Prevention, Control and Countermeasures (SPCC) Plan and Storm Water Pollution Prevention Plan (SWPPP) of the Clean Water Act, and the inventory reporting requirements of the Emergency Planning and Community Right-to Know Act (SARA Title III).

Questions concerning this plan may be directed to:

T.J. Turner General Foreman (503) 286-3681– Office

Liquid Coal tar pitch is imported from Asian sources via a bulk cargo vessel that is equipped with heated storage tanks for hauling the pitch. These receipts arrive at the NW Natural Gasco dock on the Willamette River, where they are pumped from the vessel, through a pipeline that is about 2,400 feet long, to a storage tank at the terminal. This product is then stored at the terminal, prior to the distribution to our customers. Outbound shipments are made mostly via tank truck and occasionally via tank cars.

All products and/or chemicals used or handled through the terminal are covered by material safety data sheets, which are on file. All employees have been trained on the usage of these materials and educated in the proper manner of reading and understanding of the material safety data sheets. This training is mandatory and is given annually.

1.1 Business Information and Identification

The following information applies to the Koppers Inc. Northwest Terminal:

Business Name:	Koppers Inc.
Business Phone:	(503) 286-3681
Business Fax:	(503) 285-2831
Owner:	Koppers Inc. 436 Seventh Ave. Pittsburgh, PA 15219
Operator:	Same as owner
NAICS Code:	325192
SIC Code:	2865
EPA ID Number:	ORD 027734359
Site Address:	7540 NW Saint Helens Road Portland, OR 97210-3663
Mail Address:	Same as above
Type of Business:	Coal Tar Pitch Terminal

1.2 Hazardous Materials Inventory

Koppers Industries acquired the Portland North West terminal in 1988 from Koppers Company (now Beazer East, Inc.). 36 aboveground tanks are located on the leased property. At the time of purchase, several tanks were not in use or ceased use shortly thereafter. Koppers Industries Inc changed the name of the company in February 2003 to Koppers Inc.

Stored materials include coal tar distillate, coal tar pitch, boiler water treatment chemicals, diesel, gasoline, heat transfer oil and lubricants for plant vehicles and equipment. The stormwater tanks are used for collection purposes only. 19 of the tanks have been cleaned and content materials were recycled to our Stickney, Illinois plant. After cleaning, the tanks were power washed but because the tank was not scraped or wiped clean, they may contain minimal residue. The tanks are labeled according to the last product they contained.

Koppers004928

The concrete-wall-lined and earth-diked tank farm has a total containment capacity of approximately 2,900,000 gallons. Operators regularly walk and inspect this area, checking for corrosion, leaks or stains, or anything out of the ordinary. They also do housekeeping, as necessary.

As part of Koppers Inc commitment to implement an SH&E management system, this program has been developed to address management of tank residuals and to facilitate recycling initiatives.

The facility conducts monthly external inspections of the tanks, ancillary equipment and diked area. Unsatisfactory conditions are noted on plant report forms and corrected, as required. Items that require correction in excess of plant approval capability will be directed to CM&C division management in accordance with request for expenditure procedures. Such request will be submitted no later than 30 days of determination that an expense must be incurred.

Upon discontinuance of the use of a tank, Koppers Inc. NW Terminal will render tanks containing recyclable materials that are pumpable within 180 days of such determination. An attempt will be made to recycle the material off-site, if this is not possible, disposal processes will be initiated.

In the event a corporate tanks program becomes effective, this program will be amended to ensure continuity between the corporate program and this program.

Tank List

Tank No.	Current use	Last contained	Capacity (000)	Residue Est. (gals)	Date Cleaned
1	Empty & Cleaned	Crude Tar	660	0	11/2002
2	Empty & Cleaned	Crude Tar	1065	0	11/2002
3	Empty & Cleaned	Methyl Solvent	99	0	11/2002
4	Empty & Cleaned	Lt. Uncorrected Distillate	99	0	11/2002
11	Empty & Cleaned	Creosote	254	0	11/2002
12	Empty & Cleaned	Unknown	57	0	11/2002
17	Empty & Cleaned	Heavy Oil Distillate	20	0	11/2002
18	Empty & Cleaned	NSR Oil	20	0	11/2002
19	Empty & Cleaned	P&R Oil	20	0	11/2002
20	Empty & Cleaned	Creosote	712	0	11/2002
23	Empty & Cleaned	Lt. Uncorrected Distillate	20	0	11/2002
33	Heavy Oil	Heavy Oil Distillate	45	In use	
34	Empty & Cleaned	NSR Oil	45	0	11/2002
39	Empty & Cleaned	Creosote	20	0	11/2002
53	Empty & Cleaned	Creosote	10	0	11/2002
65	Liquid Pitch	Liquid Pitch	761	In use	
66	Empty & Cleaned	Creosote	191	0	02/2003
67	Heavy Oil	Heavy Oil Distillate	102	In use	
68	Liquid Pitch	Liquid Pitch	248	In use	
74	Empty & Cleaned	Creosote	20	0	11/2002
99	Empty & Cleaned	Creosote	209	0	11/2002
101	Creosote	Creosote	759	169184	
102	Fume Tank	Heavy Oil Distillate	9.3	In use	
200	Liquid Pitch	Liquid Pitch	2100	In use	
V201	Empty & Cleaned	Liquid Pitch	19	0	11/2002
V207	Empty & Cleaned	Liquid Pitch	19	0	11/2002
240	Heat Transfer Oil	Heat Transfer Oil	2	In use	
250	Heat Transfer Oil	Heat Transfer Oil	2	In use	
SW #1	Storm Water	Storm Water	45	In use	
SW #2	Storm Water	Storm Water	45	In use	
SW #3	Storm Water	Storm Water	45	In use	
SW #4	Storm Water	Storm Water	45	In use	
SW#5	Storm Water	Storm Water	20	In use	
SW#6	Storm Water	Storm Water	20	In use	
DSL-1	Diesel Storage	Diesel	4.5	In use	
DSL-1	Diesel Storage	Diesel	4.5	In use	

Note: Tanks marked as Empty and Cleaned were cleaned to "commercially acceptable practices" to meet RCRA standards.

Koppers004930

Tank Management

KOPPERS INDUSTRIES, INC.

NORTHWEST TERMINAL

PORTLAND, OR

KOPPERS INDUSTRIES, INC.
NORTHWEST TERMINAL
7540 NW Saint Helens Rd.
PORTLAND, OR 97210-3663
January 31, 2003

MANAGEMENT APPROVAL

This Tank Management Plan will be implemented as herein described.

Amos S. Kamerer
Plant Manager

Portland Northwest Terminal is located in Multnomah County in the city of Portland, OR. The terminal is located on approximately 6.4 acres of leased property. The property owner is North West Natural, 220 NW Second Avenue, and Portland, OR, 97209. The portion of the property that Koppers Industries leases is addressed as 7540 NW Saint Helens Rd., Portland, OR, 97210-3663. The property is bounded by Saint Helens Road (Oregon State Highway 30) on the south, the N W Natural property extending to the shore of the Willamette River on the north. The N W Natural liquefied natural gas plant on the west. The south end of NW Front Ave. separates Koppers property from Wacker Siltronic Corporation, on the eastern boundary. On average, 4 to 7 people are employed at any one time, at the terminal (2 to3 salaried people, 2 to 4 hourly people). Normal operating hours is from 4:00 p.m. on Sundays through 4:00 p.m. on Fridays. Generally, the plant is closed on the weekends.

The facility maintains a SPCC and Contingency Plan to: a) provide a basis for planning for and responding to potential spills, accidents, fires, or other contingencies and b) describe and implement practices to minimize and control pollutants in storm water discharges and ensure discharge permit compliance. It includes the requirements for the Contingency Plan as required by the Resources Conservation and Recovery Act (RCRA), the Spill Prevention, Control and Countermeasures (SPCC) Plan and Storm Water Pollution Prevention Plan (SWPPP) of the Clean Water Act, and the inventory reporting requirements of the Emergency Planning and Community Right-to Know Act (SARA Title III).

Questions concerning this plan may be directed to:

Amos S. Kamerer	Plant Manager	(503) 286-3681 – Office
T.J. Turner	General Foreman	(503) 286-3681

Coal tar pitch is imported via bulk and/or liquid cargo vessels. This product is then stored at the terminal, prior to the distribution to customers. Outbound shipments are made via tank truck or tank cars.

Solid coal tar pitch is imported via bulk cargo vessels through the Port of Longview, Washington and is then trucked from Longview to the terminal. The liquid coal tar pitch is imported via a bulk cargo vessel that is also equipped with heated storage tanks for hauling the pitch. These receipts arrive at the NW Natural Gasco dock on the Willamette River, where they are pumped from the vessel, through a pipeline that is about 2,400 feet long, to a storage tank at the terminal.

All products and/or chemicals used or handled through the terminal are covered by material safety data sheets, which are on file. All employees have been trained on the usage of these materials and educated in the proper manner of reading and understanding of the material safety data sheets. This training is mandatory and is given annually.

Tank List

Tank No.	Current use	Last contained	Capacity (000)	Residue Est. (gals)	Date Cleaned
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4	Empty & Cleaned	Lt. Uncorrected Distillate	99	0	11/2002
11	Empty & Cleaned	Creosote	254	0	11/2002
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17	Empty & Cleaned	Heavy Oil Distillate	20	0	11/2002
18	Empty & Cleaned	NSR Oil	20	0	11/2002
19	Empty & Cleaned	P&R Oil	20	0	11/2002
20	Empty & Cleaned	Creosote	712	0	11/2002
23	Empty & Cleaned	Lt. Uncorrected Distillate	20	0	11/2002
33	Heavy Oil	Heavy Oil Distillate	45	In use	
34	Empty & Cleaned	NSR Oil	45	0	11/2002
39	Empty & Cleaned	Creosote	20	0	11/2002
53	Empty & Cleaned	Creosote	10	0	11/2002
65	Liquid Pitch	Liquid Pitch	761	In use	
66	Creosote	Creosote	191	18815	
67	Heavy Oil	Heavy Oil Distillate	102	In use	
68	Liquid Pitch	Liquid Pitch	248	In use	
74	Empty & Cleaned	Creosote	20	0	11/2002
99	Empty & Cleaned	Creosote	209	0	11/2002
101	Creosote	Creosote	759	169184	
102	Fume Tank	Heavy Oil Distillate	9.3	In use	
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SW #4	Storm Water	Storm Water	45	In use	
SW#5	Storm Water	Storm Water	20	In use	
SW#6	Storm Water	Storm Water	20	In use	
DSL-1	Diesel Storage	Diesel	4.5	In use	
DSL-1	Diesel Storage	Diesel	4.5	In use	

Note: Tanks marked as Empty and Cleaned were cleaned to "commercially acceptable practices" to meet RCRA standards.

Koppers004933

The facility conducts monthly external inspections of the tanks, ancillary equipment and diked area. Unsatisfactory conditions are noted on the attached report form and corrected as required. Items that require correction in excess of plant approval capability will be directed to CM&C division management in accordance with request for expenditure procedures. Such request will be submitted no later than 30 days of determination that an expense must be incurred.

Upon discontinuance of us of a tank, Koppers Industries NW Terminal will render tanks containing recyclable materials that are pumpable within 180 days of such determination. An attempt will be made to recycle the material offsite, if not possible offsite recycling followed by disposal will be initiated.

In the event a corporate tanks program become effective this plan will be amended to ensure continuity between the corporate program and this plan.

1.1 Business Information and Identification

The following information applies to the Koppers Industries Northwest Terminal:

Business Name:	Koppers Industries, Inc.
Business Phone:	(503) 286-3681
Business Fax:	(503) 285-2831
Owner:	Koppers Industries, Inc. 436 Seventh Ave. Pittsburgh, PA 15219
Operator:	Same as owner
SIC Code:	2865
EPA ID Number:	ORD 027734359
Site Address:	7540 NW Saint Helens Road Portland, OR 97210-3663
Mail Address:	Same as above
Type of Business:	Coal Tar Pitch Terminal

1.2 Hazardous Materials Inventory

Koppers Industries acquired the Portland North West terminal in 1988 from Koppers Company (now Beazer East, Inc.). 36 aboveground tanks are located on the leased property. At the time of purchase, several tanks were not in use or ceased use shortly thereafter.

Stored materials include coal tar distillate, coal tar pitch, boiler water treatment chemicals, diesel, gasoline, heat transfer oil and lubricants for plant vehicles and equipment. The stormwater tanks contain have been cleaned and material recycled to other KII's Stickney plant. The tanks were power washed but because the tank was not scraped cleaned and may contain minimal residue the tanks are labeled according to last content contained.

The concrete-wall-lined and earth-diked tank farm has a total containment capacity of approximately 2,900,000 gallons. Operators regularly walk and inspect this area, checking for corrosion, leaks or stains, or anything out of the ordinary. They also do housekeeping, as necessary.

As part of Koppers Industries commitment to implement a SH&E management system. This plan has been developed to address management of tank residuals and to facilitate recycling initiatives.

KOPPERS
INDUSTRIES

Internal Correspondence

To be the most valued supplier of quality products and services in the industries we serve, by providing unsurpassed personal attention to our customers and attaining total quality in everything we do.

To:	**Plant Managers & SH&E Coordinators**	**From:**	**Randy Collins**
Location:	**See distribution list**	**Location**	**K-1550**
Subject:	**Tank Management**	**Date:**	

One of our 2002 Corporate Goals was to study the problem of sludge accumulation in our tank assets and develop a plan to eliminate all sludges and other residual materials over the next two years. In support of this goal, you have been providing information to our consultant, Thurman Wilson, and have been provided with procedures to prevent accumulation of sludge in the future. This project is extremely important to all of us as we strive to maintain operational efficiency and ensure our compliance with regulatory requirements.

In order to ensure that the executive staff is kept apprised on the status of progress toward this goal, we are asking you to report quarterly on your activities on this project. To this end, you will need to complete the attached report quarterly.

By the 5th of the month following the end of each quarter, please provide completed copies of the attached forms to your CSG Environmental Manager. This schedule aligns this report with the quarterly waste minimization report you currently provide (a copy of which is also attached).

The attached form is an Excel spreadsheet containing information on each tank and process vessel located at your facility. Residual volumes for each tank are to be noted on a quarterly basis using this spreadsheet – this requires an actual measurement of the residual volume. The second page of the form contains information for the applicable quarter concerning the disposition of residual material if work was performed on a tank and whether the active/inactive status of a tank has changed.

For the purposes of reporting, "residual" is defined as any material currently stored in bulk storage tanks and/or process vessels, that cannot be used (as a feedstock or product) in its current state due to its physical or chemical characteristics. This includes, but is not limited to, solids accumulations on tank bottoms, slurries, liquids, blends, and water.

Please review your spreadsheet carefully to ensure that all bulk storage tanks and process vessels with the capacity to store material, whether active or inactive, are listed, and appropriate volume of sludge is indicated. If you find that a tank is not listed please note this on the spreadsheet along with applicable information and provide a copy of the edited spreadsheet to CSG. Please provide an initial report on November 30th. After the initial report, we will follow the quarterly reporting format.

In the process of planning for work to clean a tank containing material and that will require disposition off-site, your CSG Manager and Jack Stephenson should be contacted to assist in making proper arrangements for transportation and disposal.

If you have any questions please call your CSG environmental manager.

cc: Ops Manager
General Manager
Jack Stephenson

Emailed 11/26/02

Tank Residuals Reporting Form

Plant: Northwest Terminal, Portland, Oregon
Quarter: 4th
Year: 2002

I. Residuals Removed

For all residuals removed during the past quarter please provide the information regarding the volume and disposition of material removed (report all values in gallons):

Tank #	Residuals Recycled (gal)	Residuals Otherwise Disposed (gal)	Explanation
POR-T-01	25955	9667	See note below.
POR-T-02	48203	17953	See note below.
POR-T-03	1860		See note below.
POR-T-04	17689		See note below.
POR-T-11	3444		See note below.
POR-T-12	1100		See note below.
POR-T-17	935		See note below.
POR-T-18	2802		See note below.
POR-T-19	935		See note below.
POR-T-20	5988		See note below.
POR-T-23	2175		See note below.
POR-T-34	1744		See note below.
POR-T-39	880		See note below.
POR-T-99	3660		See note below.
POR-T-V201	2530		See note below.
POR-T-V250	110		See note below.

*** Total volumes of material removed should correspond with reduction amounts shown on the sludge tracking spreadsheet attached**

Note: These volumes of material do not match the amounts shown on the sludge tracking spreadsheet that is attached. These volumes reflect more accurately what was actually removed from these tanks, which was approximately 66.7 % greater than our original estimate.

II. Tank Demolition

List below tanks (by Tank ID # in database) that were demolished during the past quarter:

No tanks were demolished.

III. Tank Status Change (Inactive/Active)

List below tanks that have gone inactive during the past quarter, and the date they were taken out of service:

16 tanks were taken out of service in this quarter, all per the sludge tracking spreadsheet.

List below tanks that were formerly inactive during the past quarter, and the date they were put back into service:

2 tanks were taken out of service in the 3rd quarter, per the sludge tracking spreadsheet.

IV. Explanation of Increases in Sludge Volumes

Provide a brief explanation for increases in tank sludge volume(s), for each tank an increase has been noted on the attached quarterly monitoring spreadsheet.

In the tanks that were cleaned, we simply found more material in the tanks than originally had been estimated, mainly due to mounding of material in various places with in the tanks.

Emerald Act. Load Weights
1 ⇄ 3 Shipments

1	44,820	Ay. 1+3 = 43,680
2	29,220	use for est. Next 3
3	42,540	
	116,580	
+	131,040	43,680 × 3
	247,620 #	
	÷ 9	
	27,620 gals	65% #2 = 17,953 / 35% #1 = 9667
+	120,000 gals	8 × 15,000 – Tank Cars
Total	147,620 gals	vs 88,562 (original) = 59,058 increase / 66.7%

Liquid – 120,000 gals
– 45,842 gals – 140 ten tanks – Orig. est + 10%
74,158 gals

65% #2 = 48,203 gals.
35% #1 = 25,955 gals.

Tank ID#	Current Contents	Residuals Baseline Volume (gallons)	Status: Inactive? Active?	Date Inactive?	Residual Volumes					
					Quarter, 2002		Quarter, 2003			
					3	4	1	2	3	4
POR-T-01	Crude Tar	19755	Inactive	Nov-02	19755	0				
POR-T-02	Crude Tar	26851	Inactive	Nov-02	26851	0				
POR-T-03	Methyl solvent	1691	Inactive	Nov-02	1691	0				
POR-T-101	Creosote	169184	Active		169184	169184				
POR-T-102	Heavy Oil	0	Active		0	0				
POR-T-11	Creosote	3131	Inactive	Nov-02	3131	0				
POR-T-12	Crude & Ola Tar	1000	Inactive	Nov-02	1000	0				
POR-T-17	Heavy Oil	850	Inactive	Nov-02	850	0				
POR-T-18	NSR Oil	2547	Inactive	Nov-02	2547	0				
POR-T-19	P & R Oil	850	Inactive	Nov-02	850	0				
POR-T-20	Creosote	5444	Inactive	Nov-02	5444	0				
POR-T-200	Pitch	0	Active		0	0				
POR-T-23	Light uncor. Creo	1977	Inactive	Nov-02	1977	0				
POR-T-33	Heavy oil	0	Active		0	0				
POR-T-34	NSR Oil	1585	Inactive	Nov-02	1585	0				
POR-T-39	Creosote	800	Inactive	Nov-02	800	0				
POR-T-4	Light uncor. Creo	16081	Inactive	Nov-02	16081	0				
POR-T-53	Creosote	0	Inactive	Aug-02	0	0				
POR-T-65	Liquid Pitch	0	Active		0	0				
POR-T-66	Creosote	18815	Active		18815	18815				
POR-T-67	Heavy oil	0	Active		0	0				
POR-T-68	Liquid Pitch	0	Active		0	0				
POR-T-74	Creosote	0	Inactive	Aug-02	0	0				
POR-T-99	Creosote	3600	Inactive	Nov-02	3600	0				
POR-T-SW-1	Storm Water	0	Active		0	0				
POR-T-SW-2	Storm Water	0	Active		0	0				
POR-T-SW-3	Storm Water	0	Active		0	0				
POR-T-SW-4	Storm Water	0	Active		0	0				
POR-T-SW-5	Storm Water	0	Active		0	0				
POR-T-SW-6	Storm Water	0	Active		0	0				
POR-T-V201	Pitch	2300	Inactive	Nov-02	2300	0				
POR-T-V207	Pitch	100	Inactive	Nov-02	100	0				
POR-T-V240	Heat Transfer Oil	0	Active		0	0				
POR-T-V250	Heat Transfer Oil	0	Active		0	0				
Totals		**276561**			**276561**	**187999**				

Koppers004940

Author: AMOS KAMERER at PITT
Date: 12/21/98 11:58 AM
Priority: Normal
TO: Traci Self at PITT
Subject: Re: PCB Transformer Registration -REMINDER
---------- Message Contents ----------

Traci,

Portland does not have any PCB Transformers.

Amos

---------- Reply Separator ----------
Subject: PCB Transformer Registration -REMINDER
Author: Traci Self at PITT
Date: 12/21/98 10:10 AM

Just a reminder that the information regarding PCB transformers, requested in a correspondence dated 12/15/98 from Steve Smith is due today. Please respond even if your facility does not require registration. Thank You.

Traci

KOPPERS INDUSTRIES

Amos Kamerer
Portland

INTEROFFICE CORRESPONDENCE

To:	Plant Managers Environmental Managers	**From:**	S. T. Smith
Location:	Distribution	**Location**	K-1800
Subject:	**Polycholorinated Biphenyls Transformer Registration**	**Date:**	December 15, 1998

On June 29, 1998, the United States Environmental Protection Agency ("USEPA") promulgated considerable and far-reaching changes to the current Polychlorinated Biphenyls ("PCBs") regulations under the Toxic Substances Control Act. A great deal of the substantive changes deal with PCB disposal requirements and remediation of releases. However, while the Corporate Services Group continues to dissect the new rule and explore its application to Koppers Industries, Inc. ("KII"), one particular deadline regarding registration is imminent. Specifically, the USEPA is now requiring all owners of PCB Transformers to register these transformers with USEPA Fibers & Organics Branch by **December 28, 1998**. While each facility was previously required to locally register their PCB transformers with the fire department in the community (under the 1995 PCB Fire Rule), the USEPA wishes to centralize this type of information for use in emergency situations. Attached to this memorandum are three (3) documents:

1. Pertinent section of the new rule pertaining to this registration requirement;

2. A copy of the PCB Transformer Registration form (for your informational purposes only); and

3. Item-by-Item Instructions for completion of this form (again, for your informational purposes only).

As evidenced in the PCB Transformer Registration Form, the USEPA prefers that one Form (or submittal) be sent per company. Accordingly, and in order to fully complete the Form, please **provide the following information to either me or the respective Corporate Environmental Manager by December 21, 1998**:

1. Number of transformers (500 ppm or greater) at your location,

2. Total weight in kilograms of the PCB dielectric fluid in each transformer (or, if you do not know the weight – estimate the volume in gallons), and

3. Whether any transformers contain flammable dielectric fluid (per 40 CFR

261.21(a)(1)). This section is optional, but, if you do know that the flashpoint of the liquid is less than 140 °F, please indicate that fact.

Once this information is collected from all facilities to which it applies, I will complete and submit the company-wide PCB Transformer Registration Form to the USEPA Fibers & Organics Branch. Also, this comprehensive rule will be further examined for new or modified requirements that apply to our facilities. Thank you in advance for your expeditious cooperation in collecting this information.

CC:	R. D. Collins	K-1700
	T. E. DuPlessis	K-1800
	N. J. Prepelka	K-1800
	T. I. Self	K-1800

(vi) (A) No later than December 28, 1998 all owners of PCB Transformers, including those in storage for reuse, must register their transformers with the Environmental Protection Agency, National Program Chemicals Division, Office of Pollution Prevention and Toxics (7404), 401 M St., SW., Washington, DC 20460. This registration requirement is subject to the limitations in paragraph (a)(1)of this section.

(1) A transformer owner who assumes a transformer is a PCB-Contaminated transformer, and discovers after December 28, 1998 that it is a PCB-Transformer, must register the newly-identified PCB Transformer, in writing, with the Environmental Protection Agency no later than 30 days after it is identified as such. This requirement does not apply to transformer owners who have previously registered with the EPA PCB Transformers located at the same address as the transformer that they assumed to be PCB-Contaminated and later determined to be a PCBTransformer.

(2) A person who takes possession of a PCB Transformer after December 28, 1998 is not required to register or re-register the transformer with the EPA.

(B) Any person submitting a registration under this section must include:

(1) Company name and address.

(2) Contact name and telephone number.

(3) Address where these transformers are located. For mobile sources such as ships, provide the name of the ship.

(4) Number of PCB Transformers and the total weight in kilograms of PCBs contained in the transformers.

(5) Whether any transformers at this location contain flammable dielectric fluid (optional).

(6) Signature of the owner, operator, or other authorized representative certifying the accuracy of the information submitted.

(C) A transformer owner must retain a record of each PCB Transformer's registration (e.g., a copy of the registration and the return receipt signed by EPA) with the inspection and maintenance records required for each PCB Transformer under paragraph (a)(1)(xii)(I) of this section.

(D) A transformer owner must comply with all requirements of paragraph (a)(1)(vi)(A) of this section to continue the PCB-Transformer's authorization for use, or storage for reuse, pursuant to this section and TSCA section 6(e)(2)(B).

[§761.30(a)(1)(vi) revised at 63 FR 35440, June 29, 1998]

Copyright 1993-1998, The Bureau of National Affairs, Inc.

USEPA	United States **Environmental Protection Agency** Washington, DC 20460	Form Approved OMB No. 2070-0159

PCB TRANSFORMER REGISTRATION

Return To: Fibers & Organics Branch (7404) Office of Pollution Prevention & Toxics U.S. Environmental Protection Agency 401 M Street, S.W. Washington, DC 20460	**For Official Use Only**

1. Company Name	Address	Contact Name & Phone #

2. a. Location of PCB Transformer(s) - Location #1	2. a. Location of PCB Transformer(s) - Location #2
b. No. of Transformers and wt. (kg):	b. No. of Transformers and wt. (kg):
c. Any transformers containing flammable dielectric fluid: **Yes** or **No**	c. Any transformers containing flammable dielectric fluid: **Yes** or **No**
2. a. Location of PCB Transformer(s) - Location #3	2. a. Location of PCB Transformer(s) - Location #4
b. No. of Transformers and wt. (kg):	b. No. of Transformers and wt. (kg):
c. Any transformers containing flammable dielectric fluid: **Yes** or **No**	c. Any transformers containing flammable dielectric fluid: **Yes** or **No**

7. Certification

Under civil and criminal penalties of law for the making or submission of false or fraudulent statements or representations (18 U.S.C. 1001 and 15 U.S.C. 2615), I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as a company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.

Signature	Name and Official Title (Type of Print)	Date Signed

Paperwork Reduction Act Notice

The annual public reporting burden for this collection of information is estimated to average 2 hours per response. This estimate includes time for reading instructions, searching existing data sources, gathering and maintaining the needed data, and completing and reviewing collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden to: Director, OPPE Regulatory Information Division, U.S. Environmental Protection Agency (mail code 2137), 401 M Street, S.W., Washington, D.C. 20460. Include the OMB number identified above in any correspondence. Do not send the completed form to this address. The actual information or form should be submitted in accordance with the instructions accompanying the form, or as specified in the corresponding regulations.

EPA Form 7720-12 (9/98)

Item-by-Item Instructions for Completing EPA Form 7720-12

No information on this form may be claimed as confidential.

Return completed form to:

Fibers & Organics Branch (7404)
Office of Pollution Prevention & Toxics
U.S. Environmental Protection Agency
401 M Street, SW
Washington, DC 20460

PCB Transformer means any transformer that contains 500 ppm or greater PCB dielectric. For PCB concentration assumptions applicable to transformers containing three pounds or more of fluid other than mineral oil, see 40 CFR 761.2. For provisions permitting reclassification of electrical equipment containing 500 ppm or greater PCBs to PCB-Contaminated Electrical Equipment, see 40 CFR 761.30(a) and (h).

Type or print in black ink all items, except Item 3, "Certification." If you must use additional sheets, indicate clearly the number of the item on the form to which the information on the separate sheet applies.

Item 1 **Company Name:** Enter the name of the company which owns the equipment.
Address: Enter the street, city, state, and zip code of the company.
Contact Name and Phone Number: Enter the name and business telephone number of the person who should be contacted regarding information submitted on this form.

Item 2a **Location of PCB Transformers:** Enter the address (street, city, state, and zip code) where the PCB Transformer(s) is located. Please note that the address you give must be a physical address, not a P.O. Box. *Route* numbers are acceptable provided they include enough specificity to assist emergency response personnel in determining the location of the transformer(s).

Item 2b **Number (No.) of Transformers and weight (wt.):** Enter the total number of PCB (500 ppm or greater) Transformers at this location (address) and the total weight (wt.) in kilograms (kg) of the PCB dielectric fluid in the transformer(s).

Item 2c **Any transformers containing flammable dielectric fluid:** (Response optional) Circle yes or no if you have any knowledge that there are or are not transformers at this location (address) that contain flammable (see 40 CFR 261.21(a)(1) - Characteristics of Ignitability) dielectric fluid.

***Please note this form has been designed to accommodate companies submitting registrations for multiple locations. However, companies with more than 4 locations may choose to submit an additional form(s) or an attachment(s).

Item VII -- Certification: This certification must be signed by the owner, operator, or an authorized representative of the transformer owner or operator of the facility or property where the unit is located. An "authorized representative" is a person responsible for the overall operation of the facility (i.e., a plant manager or superintendent, or a person of equal responsibility). All notifications must include this certification to be complete.

Koppers004946

RECEIVED

DEC 2 1 1998

KOPPERS INDS, INC.
PORTLAND OR

Koppers Waste Minimization Plan for 2006

Koppers Inc.
Northwest Terminal
Portland, OR.

EPA ID # ORD 027734359

Certification

I certify that the information contained in this plan is, to the best my knowledge, true, accurate and complete. The plan will be implemented as herein described.

_____

T. J. Turner
General Foreman

Koppers Inc.
Northwest Terminal
Portland, OR.

Waste Minimization Plan

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APPENDICES

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Koppers004949

1. Policy statement:

Koppers, Northwest Terminal is committed to excellence and leadership in protecting the environment by striving to minimize adverse impact on the air, land, and water. Koppers and its employees come from an established tradition of complying with law and maintaining the highest standards of business ethics, community responsibility, and uncompromising values.

Koppers supports the reduction of all waste that is generated. When waste generation cannot be avoided, Koppers is committed to recycling, treatment, and disposal in ways that minimize undesirable effects on air, water, and land. Koppers is dedicated to identifying and implementing waste minimization opportunities through training and awareness programs for all employees.

Due to Koppers Inc. tank cleaning efforts in the years 2002 and 2003 we became a Large Quantity Generator during those two years, however, we returned to Conditionally Exempt Generator status in 2004 with no hazardous waste generated. Even though as a Conditionally Exempt Generator we are not required to meet the State of Oregon 1989 Toxics Use Reduction and Hazardous Act (TURHWRA) of having a Reduction Plan, Koppers believes that we should have this Waste Minimization Plan, regardless. Plant employees are trained on the plan and its requirements, as well as the Koppers Safety Health and Environmental Management System.

2. Scope, objectives, and goals:

All employees of Koppers, Northwest terminal will be involved in the waste minimization effort. Our goal is to maintain zero operational waste generation. This will be accomplished through continued waste assessments, procedure improvements, equipment changes, material substitution and most importantly employee training, including the Observation and Contacts process of the SH&E Management System.

The Koppers, Northwest Terminal Tank Management Program will also be used as reference document, where applicable, for use to administer this plan.

3. Waste minimization team:

Coordinator

T. J. Turner General Foreman

Members

T. J. Turner	General Foreman
Scott Hummel	Utilityman
Steve Kenyon	Utilityman

4. Historical waste minimization efforts:

Date: February, 1994
Effort: Started using small loaf pans for liquid pitch sampling.
Result: Eliminated disposal cost of qt. sample cans and contents to landfill. Eliminated cost of purchasing the qt. Sample cans. Pitch samples are fully recycled back to process. The small loaf pans are reused.

Date: December 1995
Effort: Installed hydraulic sliding door covered hopper tops for the bottom dump truck-trailers' that carried solid pencil pitch from the port unloading facilities to the Koppers' Northwest Terminal.
Result: Minimized spillage of pencil pitch, and resolved dust concerns enroute from the port facility through the local neighborhoods to Portland Northwest Terminal.

Date: June 1996
Effort: Developed a truck-trailer-tire-washing station to eliminate the tracking of pencil pitch and pitch dust from the unloaded truck-trailer as it exited the pencil pitch storage warehouse.
Result: Decreased pencil pitch residue on roadways in the terminal and reduced dust concerns.

Date: December 1999
Effort: Laid concrete and asphalt around Tank-200.
Result: Reduced the possibility of potential spillage of product or heat-transfer fluids to the soil.

5. HAZARDOUS AND NON-HAZARDOUS DISPOSAL LOG

a. Types

9/28/95	Creosote spill, rags & absorbents.	3 drums	830 lb.
7/02/97	No longer used laboratory chemicals.	4 lab packs	145 lb.
3/05/98	Creosote spill, rags & absorbents.	2 drums	800 lb.
3/05/98	Refined tar spill, rags & absorbents. (non-hazardous)	6 drums	3600 lb.
1/18/99	Creosote, rags & absorbents.	4 drums	1200 lb.
4/22/99	Paint, non- RCRA and non- DOT hazardous materials.	5 lab packs	400 lb.
4/22/99	Paint, non- RCRA and non- DOT hazardous materials.	3 lab packs	1800 lb.
9/02/99	Aluminum brightner, caustic prewash and acidic brightner.	2 drums	600 lb.
7/25/00	Creosote spill, rags & absorbents.	2 drums	600 lb.
2/15/01	Used & unused quinoline.	1 drum	400 lb.
8/26/02	Historical material from tank cleanings	50 drums	21,262 lb.
11/9/02	Historical material from tank cleanings	2 drop boxes	44,820 lb.
11/13/02	Historical material from tank cleanings	2 drop boxes	29,220 lb.
11/19/02	Historical material from tank cleanings	2 drop boxes	42,540 lb.
12/02/02	Historical material from tank cleanings	2 drop boxes	41,360 lb.
12/16/02	Historical material from tank cleanings	2 drop boxes	45,180 lb.
12/11/02	Historical material from tank cleanings	2 drop boxes	46,420 lb.
12/11/02	Historical material from tank cleanings	2 drop boxes	21,834 lb.
12/11/02	Historical material from tank cleanings	119 drums	4,613 lb.
2/28/03	Historical material from tank cleanings	8 drums	1,449 lb.
8/20/03	Historical material from tank cleanings	1 drum	195 lb.
9/11/03	Historical material from tank cleanings	1 drum	619 lb.
12/11/03	Historical material from tank cleanings	1 drum	645 lb.

5. Annual Waste Minimization Report:

Attached as Appendix A

6. Current Wastestream List:

Attached as Appendix B

7. Current Waste Assessments:

Attached as Appendix C

8. Summary of Planned Facility Waste Minimization Actions for 2006:

Koppers004952

The Koppers Northwest Terminal will maintain the same practices in 2006, with the goal the same as in 2005 with no operational hazardous waste generation.

Appendix A

Koppers Northwest Terminal
Annual Waste Minimization Report
2005

TYPES AND QUANTITIES OF HAZARDOUS WASTE GENERATED:

Results for Comparison Purposes:

Year;	2005	Goal 2006
Pounds hazardous waste generated	0 lb.	0 lb.
Pounds of hazardous waste reduction		0 lb.
Percent hazardous waste reduction		100 %
Yearly Waste Disposal Cost		$0.00

Discussion of Results: The calculation to determine the reduction in waste is based upon the actual volume of material generated and then disposed of in 2005.

Progress and Annual Training: In 2005 Koppers, Northwest Terminal conducted Waste Minimization training. This training included a review of the waste minimization action plan and practices that are in place at the terminal. These include office waste, used oils, scrap metals, florescent bulbs and processed pitch back into the process.

Recommendations for Next Year: Next year Koppers, Northwest Terminal will maintain the same practices in 2005 and maintain the same level as in 2006, with no operational hazardous waste generation.

Certification:

I certify that the information contained in this document is, to the best of my knowledge, true, accurate and complete.

T. J. Turner, General Foreman _____ Date

Appendix B

Koppers Northwest Terminal

Waste Stream List

2005

#	**Process / Operation**	**Wastestream**
1	Mobile and Process Equipment	Used lube- Heat transfer- Diesel Oils, Parts washing fluid
2	Maintenance- Construction	Scrap; steel, copper; iron, brass& Aluminum
3	Lighting, florescent	Florescent bulbs. All are now green environmental bulbs.
4	Office- Maintenance	Paper- Cardboard
5	Product processing and Samples	Coal Tar Pitch

Appendix C

WASTE ASSESSMENT FORM

PART I

Date of Assessment: 6/26/01

Process, Operation, or Activity: Mobile and Process Equipment.

Waste stream: Used lube- Heat transfer- Diesel Oils, Parts washing fluid.

For each wastestream generated, determine:

- Point of origin; Process and Mobile Operating Equipment.
- Rate of generation (lbs/unit of product); 4-55 Gal. drums per year.
- Variations in generation rate; Determined by Mobile and Process Equipment usage.
- Physical and chemical properties; Liquid Petroleum Products
- Hazardous Waste? Y / N Listed Waste? Y / N Characteristic Waste? Yes
- Other waste streams affected; No
- Mixed with any materials; No
- Disposal method: Disposed of off site through Safety Kleen Inc.

PART II

1. Cost to Dispose: $235.OO per drum
2. List reduction options for this process:

   (1) Recycled off site by Safety Kleen Inc.

3. Which option is economically most feasible? Explain;

Recycling; Cost- $80.00 per drum. Savings of $155.00 for each drum recycled.

Which option is technically most feasible? Explain: No measurable difference.

PART III

Option approved for implementation: YES

Reason for acceptance or rejection: Cost reduction.

General Foreman's Signature:_____ Date_____

Koppers004955

Appendix C

WASTE ASSESSMENT FORM

PART I

Date of Assessment: 6/26/01

Process, Operation, or Activity; Maintenance / Construction

Waste stream; Scrap-steel, copper, iron, brass, & Aluminum

For each wastestream generated, determine:

- Point of origin; Maintenance and construction projects.
- Rate of generation (lbs/unit of product); 5,000 lb. per year,
- Variations in generation rate; Determined by what is repaired, replaced or constructed.
- Physical and chemical properties; Metals, alloys, or composite of.
- Hazardous Waste? Y / N Listed Waste? Y / N Characteristic Waste? Y / N
- Other waste streams affected; No
- Mixed with any materials; No
- Disposal method, be specific; Recycled off site through Scrap dealer.

PART II

1. Cost to Dispose: $O.OO
2. List reduction options for this process:

   (1)

   (2)

3. Which option is economically most feasible? Explain:

   Which option is technically most feasible? Explain:

PART III

Option approved for implementation: YES / NO

Reason for acceptance or rejection:

General Foreman's Signature:_____ Date_____

Koppers004956

Appendix C

WASTE ASSESSMENT FORM

PART I

Date of Assessment: 6/26/01

Process, Operation, or Activity; Office / Maintenance

Waste stream; Paper/cardboard

For each wastestream generated, determine:

- Point of origin; Incoming parcels, discarded used paper, and material wrappings.
- Rate of generation (lbs/unit of product); 3,000 lbs. per year.
- Variations in generation rate; Determined by business and operating process needs.
- Physical and chemical properties; Paper
- Hazardous Waste? Y / N Listed Waste? Y / N Characteristic Waste? Y / N
- Other waste streams affected; No
- Mixed with any materials; No
- Disposal method, be specific; Recycled off site through Waste Management.

PART II

1. Cost to Dispose: $O.OO per year
2. List reduction options for this process:

   (1)

   (2)

3. Which option is economically most feasible? Explain:

   Which option is technically most feasible? Explain:

PART III

Option approved for implementation: YES / NO

Reason for acceptance or rejection:

General Foreman's Signature: _____ Date_____

Koppers004957

Appendix C

WASTE ASSESSMENT FORM

PART I

Date of Assessment: 6/26/01

Process, Operation, or Activity; Product processing and samples.

Waste stream; Coal Tar Pitch

For each wastestream generated, determine:

- Point of origin; Pitch process and loading systems, Lab samples.
- Rate of generation (lbs/unit of product); 3,000 lbs. per year.
- Variations in generation rate; Determined by production output.
- Physical and chemical properties; Solid particles, coal tar pitch.
- Hazardous Waste? Y / N Listed Waste? Y / N Characteristic Waste? Y / N
- Other waste streams affected; No
- Mixed with any materials; No
- Disposal method, be specific; Recycled on site back to process stream.

PART II

1. Cost to Dispose: $O.OO
2. List reduction options for this process:

   (1)

   (2)

3. Which option is economically most feasible? Explain:

   Which option is technically most feasible? Explain:

PART III

Option approved for implementation: YES / NO

Reason for acceptance or rejection:

General Foreman's Signature:_____ Date_____

Koppers004958

Appendix C

WASTE ASSESSMENT FORM

PART I

Date of Assessment: 6/26/01

Process, Operation, or Activity; Lighting, florescent.

Waste stream; florescent bulbs.

For each wastestream generated, determine:

- Point of origin; Light fixtures.
- Rate of generation (lbs/unit of product); 1 box, 48 tubes.
- Variations in generation rate; Determined by replacement needs.
- Physical and chemical properties; Glass, mercury elements.
- Hazardous Waste? Yes Listed Waste? Y / N Characteristic Waste? Yes
- Other waste streams affected; No
- Mixed with any materials; No
- Disposal method, be specific; Disposed of off site through Graybar Electric.

PART II

1. Cost to Dispose: $49.95 per box.
2. List reduction options for this process:

   (1) Switch to environmentally friendly florescent bulbs.

   (2)

3. Which option is economically most feasible? Explain: Cost difference between environmentally

   Friendly bulbs and standard bulbs is an increase of $27.84 per box of 48, but a savings of

   $ 22.11 over disposal costs.

   Which option is technically most feasible? Explain: Environmentally friendly florescent bulbs can be disposed of with normal refuse.

PART III

Option approved for implementation: YES

Reason for acceptance or rejection: Appropriate action environmentally and economically.

General Foreman's Signature:_____ Date_____

Koppers004959

WASTE ASSESSMENT FORM

PART I

Date of Assessment: 2005

Process, Operation, or Activity: No operational hazardous waste was generated.

Waste stream;

For each wastestream generated, determine:

- Point of origin;
- Rate of generation (lbs/unit of product);
- Variations in generation rate;
- Physical and chemical properties;
- Hazardous Waste? Y / N Listed Waste? Y / N Characteristic Waste? Y / N
- Other waste streams affected;
- Mixed with any materials;
- Disposal method, be specific;

PART II

1. Cost to Dispose:
2. List reduction options for this process:

   (1)

   (2)

3. Which option is economically most feasible? Explain:

   Which option is technically most feasible? Explain:

PART III

Option approved for implementation: YES / NO

Reason for acceptance or rejection:

General Foreman's Signature:_____ Date_____

Koppers004960

Koppers Waste Minimization Plan for 2005

Koppers Inc.
Northwest Terminal
Portland, OR.

EPA ID # ORD 027734359

Certification

I certify that the information contained in this plan is, to the best my knowledge, true, accurate and complete. The plan will be implemented as herein described.

_____

T. J. Turner
General Foreman

Koppers Inc.
Northwest Terminal
Portland, OR.

Waste Minimization Plan

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2. Scope, objectives, and goals:

All employees of Koppers, Northwest terminal will be involved in the waste minimization effort. Our goal is to reduce our waste generation by 25% from last year, with a target of zero. This will be accomplished through waste assessments, procedure improvements, equipment changes, material substitution and most importantly employee training, including the Observation and Contacts process of the SH&E Management System.

The Koppers, Northwest Terminal Tank Management Program will also be used as reference document, where applicable, for use to administer this plan.

3. Waste minimization team:

Coordinator

T. J. Turner General Foreman

Members

T. J. Turner General Foreman

Scott Hummel Utilityman

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Effort: Started using small loaf pans for liquid pitch sampling.
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Date: December 1995
Effort: Installed hydraulic sliding door covered hopper tops for the bottom dump truck-trailers' that carried solid pencil pitch from the port unloading facilities to the Koppers' Northwest Terminal.
Result: Minimized spillage of pencil pitch, and resolved dust concerns enroute from the port facility through the local neighborhoods to Portland Northwest Terminal.

Date: June 1996
Effort: Developed a truck-trailer-tire-washing station to eliminate the tracking of pencil pitch and pitch dust from the unloaded truck-trailer as it exited the pencil pitch storage warehouse.
Result: Decreased pencil pitch residue on roadways in the terminal and reduced dust concerns.

Date: December 1999
Effort: Laid concrete and asphalt around Tank-200.
Result: Reduced the possibility of potential spillage of product or heat-transfer fluids to the soil.

5. HAZARDOUS AND NON-HAZARDOUS DISPOSAL LOG

a. Types

9/28/95	Creosote spill, rags & absorbents.	3 drums	830 lb.
7/02/97	No longer used laboratory chemicals.	4 lab packs	145 lb.
3/05/98	Creosote spill, rags & absorbents.	2 drums	800 lb.
3/05/98	Refined tar spill, rags & absorbents. (non-hazardous)	6 drums	3600 lb.
1/18/99	Creosote, rags & absorbents.	4 drums	1200 lb.
4/22/99	Paint, non- RCRA and non- DOT hazardous materials.	5 lab packs	400 lb.
4/22/99	Paint, non- RCRA and non- DOT hazardous materials.	3 lab packs	1800 lb.
9/02/99	Aluminum brightner, caustic prewash and acidic brightner.	2 drums	600 lb.
7/25/00	Creosote spill, rags & absorbents.	2 drums	600 lb.
2/15/01	Used & unused quinoline.	1 drum	400 lb.
8/26/02	Historical material from tank cleanings	50 drums	21,262 lb.
11/9/02	Historical material from tank cleanings	2 drop boxes	44,820 lb.
11/13/02	Historical material from tank cleanings	2 drop boxes	29,220 lb.
11/19/02	Historical material from tank cleanings	2 drop boxes	42,540 lb.
12/02/02	Historical material from tank cleanings	2 drop boxes	41,360 lb.
12/16/02	Historical material from tank cleanings	2 drop boxes	45,180 lb.
12/11/02	Historical material from tank cleanings	2 drop boxes	46,420 lb.
12/11/02	Historical material from tank cleanings	2 drop boxes	21,834 lb.
12/11/02	Historical material from tank cleanings	119 drums	4,613 lb.
2/28/03	Historical material from tank cleanings	8 drums	1,449 lb.
8/20/03	Historical material from tank cleanings	1 drum	195 lb.
9/11/03	Historical material from tank cleanings	1 drum	619 lb.
12/11/03	Historical material from tank cleanings	1 drum	645 lb.

5. Annual Waste Minimization Report:

Attached as Appendix A

6. Current Wastestream List:

Attached as Appendix B

7. Current Waste Assessments:

Attached as Appendix C

8. Summary of Planned Facility Waste Minimization Actions for 2005:

Koppers004965

The Koppers Northwest Terminal will maintain the same practices in 2005, with the goal of a further reduction of 25% or maintain the same level as in 2004 with no operational hazardous waste generation.

Appendix A

Koppers Northwest Terminal

Annual Waste Minimization Report

2004

TYPES AND QUANTITIES OF HAZARDOUS WASTE GENERATED:

Results for Comparison Purposes:

Year;	2004	Goal 2005
Pounds hazardous waste generated	0 lb.	0 lb.
Pounds of hazardous waste reduction		0 lb.
Percent hazardous waste reduction		100 %
Yearly Waste Disposal Cost		$0.00

Discussion of Results: The calculation to determine the reduction in waste is based upon the actual volume of material generated and then disposed of in 2004.

Progress and Annual Training: In 2004 Koppers, Northwest Terminal conducted Waste Minimization training. This training included a review of the waste minimization action plan and practices that are in place at the terminal. These include office waste, used oils, scrap metals, florescent bulbs and processed pitch back into the process.

Recommendations for Next Year: Next year Koppers, Northwest Terminal will maintain the same practices in 2005, with the further reduction of 25% or maintain the same level as in 2004, with no operational hazardous waste generation.

Certification:

I certify that the information contained in this document is, to the best of my knowledge, true, accurate and complete.

T. J. Turner, General Foreman _____ Date _____

Appendix B

Koppers Northwest Terminal

Waste Stream List

2004

#	**Process / Operation**	**Wastestream**
1	Mobile and Process Equipment	Used lube- Heat transfer- Diesel Oils, Parts washing fluid
2	Maintenance- Construction	Scrap; steel, copper; iron, brass& Aluminum
3	Lighting, florescent	Florescent bulbs
4	Office- Maintenance	Paper- Cardboard
5	Product processing and Samples	Coal Tar Pitch

Appendix C

WASTE ASSESSMENT FORM

PART I

Date of Assessment: 6/26/01

Process, Operation, or Activity: Mobile and Process Equipment.

Waste stream: Used lube- Heat transfer- Diesel Oils, Parts washing fluid.

For each wastestream generated, determine:

- Point of origin; Process and Mobile Operating Equipment.
- Rate of generation (lbs/unit of product); 4-55 Gal. drums per year.
- Variations in generation rate; Determined by Mobile and Process Equipment usage.
- Physical and chemical properties; Liquid Petroleum Products
- Hazardous Waste? Y / N Listed Waste? Y / N Characteristic Waste? Yes
- Other waste streams affected; No
- Mixed with any materials; No
- Disposal method: Disposed of off site through Safety Kleen Inc.

PART II

1. Cost to Dispose: $235.OO per drum
2. List reduction options for this process:

   (1) Recycled off site by Safety Kleen Inc.

3. Which option is economically most feasible? Explain;

Recycling; Cost- $80.00 per drum. Savings of $155.00 for each drum recycled.

Which option is technically most feasible? Explain: No measurable difference.

PART III

Option approved for implementation: YES

Reason for acceptance or rejection: Cost reduction.

General Foreman's Signature:_____ Date_____

Koppers004968

Appendix C

WASTE ASSESSMENT FORM

PART I

Date of Assessment: 6/26/01

Process, Operation, or Activity; Maintenance / Construction

Waste stream; Scrap-steel, copper, iron, brass, & Aluminum

For each wastestream generated, determine:

- Point of origin; Maintenance and construction projects.
- Rate of generation (lbs/unit of product); 5,000 lb. per year,
- Variations in generation rate; Determined by what is repaired, replaced or constructed.
- Physical and chemical properties; Metals, alloys, or composite of.
- Hazardous Waste? Y / N Listed Waste? Y / N Characteristic Waste? Y / N
- Other waste streams affected; No
- Mixed with any materials; No
- Disposal method, be specific; Recycled off site through Scrap dealer.

PART II

1. Cost to Dispose: $O.OO
2. List reduction options for this process:

   (1)

   (2)

3. Which option is economically most feasible? Explain:

   Which option is technically most feasible? Explain:

PART III

Option approved for implementation: YES / NO

Reason for acceptance or rejection:

General Foreman's Signature:_____ Date_____

Koppers004969

Appendix C

WASTE ASSESSMENT FORM

PART I

Date of Assessment: 6/26/01

Process, Operation, or Activity; Office / Maintenance

Waste stream; Paper/cardboard

For each wastestream generated, determine:

- Point of origin; Incoming parcels, discarded used paper, and material wrappings.
- Rate of generation (lbs/unit of product); 3,000 lbs. per year.
- Variations in generation rate; Determined by business and operating process needs.
- Physical and chemical properties; Paper
- Hazardous Waste? Y / N Listed Waste? Y / N Characteristic Waste? Y / N
- Other waste streams affected; No
- Mixed with any materials; No
- Disposal method, be specific; Recycled off site through Waste Management.

PART II

1. Cost to Dispose: $O.OO per year
2. List reduction options for this process:

   (1)

   (2)

3. Which option is economically most feasible? Explain:

   Which option is technically most feasible? Explain:

PART III

Option approved for implementation: YES / NO

Reason for acceptance or rejection:

General Foreman's Signature: _____ Date_____

Koppers004970

Appendix C

WASTE ASSESSMENT FORM

PART I

Date of Assessment: 6/26/01

Process, Operation, or Activity; Product processing and samples.

Waste stream; Coal Tar Pitch

For each wastestream generated, determine:

- Point of origin; Pitch process and loading systems, Lab samples.
- Rate of generation (lbs/unit of product); 3,000 lbs. per year.
- Variations in generation rate; Determined by production output.
- Physical and chemical properties; Solid particles, coal tar pitch.
- Hazardous Waste? Y / N Listed Waste? Y / N Characteristic Waste? Y / N
- Other waste streams affected; No
- Mixed with any materials; No
- Disposal method, be specific; Recycled on site back to process stream.

PART II

1. Cost to Dispose: $O.OO
2. List reduction options for this process:

   (1)

   (2)

3. Which option is economically most feasible? Explain:

   Which option is technically most feasible? Explain:

PART III

Option approved for implementation: YES / NO

Reason for acceptance or rejection:

General Foreman's Signature:_____ Date_____

Koppers004971

Appendix C

WASTE ASSESSMENT FORM

PART I

Date of Assessment: 6/26/01

Process, Operation, or Activity; Lighting, florescent.

Waste stream; florescent bulbs.

For each wastestream generated, determine:

- Point of origin; Light fixtures.
- Rate of generation (lbs/unit of product); 1 box, 48 tubes.
- Variations in generation rate; Determined by replacement needs.
- Physical and chemical properties; Glass, mercury elements.
- Hazardous Waste? Yes Listed Waste? Y / N Characteristic Waste? Yes
- Other waste streams affected; No
- Mixed with any materials; No
- Disposal method, be specific; Disposed of off site through Graybar Electric.

PART II

1. Cost to Dispose: $49.95 per box.
2. List reduction options for this process:

   (1) Switch to environmentally friendly florescent bulbs.

   (2)

3. Which option is economically most feasible? Explain: Cost difference between environmentally

   Friendly bulbs and standard bulbs is an increase of $27.84 per box of 48, but a savings of

   $ 22.11 over disposal costs.

   Which option is technically most feasible? Explain: Environmentally friendly florescent bulbs can be disposed of with normal refuse.

PART III

Option approved for implementation: YES

Reason for acceptance or rejection: Appropriate action environmentally and economically.

General Foreman's Signature:_____ Date_____

Koppers004972

Appendix C

WASTE ASSESSMENT FORM

PART I

Date of Assessment: 3/15/04

Process, Operation, or Activity; Tank cleaning of historical materials during 2002 and 2003

Waste stream; Tank residues, including PPE debris and final cleanup wash liquids

For each wastestream generated, determine:

- Point of origin; Various tanks
- Rate of generation (lbs/unit of product); Total from all tanks: 300,157 pounds
- Variations in generation rate; not applicable
- Physical and chemical properties; Solids, liquids and PPE debris
- Hazardous Waste? Yes Listed Waste? Yes Characteristic Waste? Yes
- Other waste streams affected; No
- Mixed with any materials; No
- Disposal method, be specific; Off-site at Clean Harbors, Aragonite, Utah via incineration.

PART II

1. Cost to Dispose: $189,602.00
2. List reduction options for this process:

   (1) This was historical material and will not be done again.

   (2)

3. Which option is economically most feasible? Explain: not applicable

   Which option is technically most feasible? Explain: not applicable

PART III

Option approved for implementation: YES / NO

Reason for acceptance or rejection: not applicable

General Foreman's Signature: _____ Date_____

Koppers004973

WASTE ASSESSMENT FORM

PART I

Date of Assessment:

Process, Operation, or Activity;

Waste stream;

For each wastestream generated, determine:

- Point of origin;
- Rate of generation (lbs/unit of product);
- Variations in generation rate;
- Physical and chemical properties;
- Hazardous Waste? Y / N Listed Waste? Y / N Characteristic Waste? Y / N
- Other waste streams affected;
- Mixed with any materials;
- Disposal method, be specific;

PART II

1. Cost to Dispose:
2. List reduction options for this process:

   (1)

   (2)

3. Which option is economically most feasible? Explain:

   Which option is technically most feasible? Explain:

PART III

Option approved for implementation: YES / NO

Reason for acceptance or rejection:

General Foreman's Signature:_____ Date_____

Koppers004974

Koppers Portland Plant
Annual Waste Minimization Report
2001

TYPES AND QUANTITIES OF HAZARDOUS WASTE GENERATED:

Results for Comparison Purposes

Year	2000	2001
Pounds hazardous waste generated	600	400
Pounds hazardous waste reduction		200
Percent hazardous waste reduction		33.3 %
Yearly Waste Disposal Cost	$574.00	$121.00

Discussion of Results: The calculation to determine the reduction in waste is based upon the actual volume of material disposed.

Progress and Annual Training: In 2001 Koppers, Portland plant, conducted Waste Minimization training. This training included a review of the waste minimization action plan and practices that are in place at the Portland plant. These include office waste, used oils, scrap metals, florescent bulbs and processed pitch back into the process.

Recommendations for Next Year: The Koppers Portland plant will maintain the same practices in 2002, with the goal of a further reduction of 15%.

Certification:

I certify that the information contained in this document is, to the best of my knowledge, true, accurate and complete.

Amos Kamerer, Plant Manager: _____

Date: 1/11/02

Kamerer Amos

From: Dietz Jim
Sent: Tuesday, January 08, 2002 1:30 PM
To: Self Traci; Cilley Mark; Huschak Heath; Kamerer Amos; Probst Kevin; Rutledge Ron; Shamitko Greg; Wolfe Scott
Cc: Burkhart R Jim; Kraynik Charles; Lish Steven; Weinstein Nate; Kunkle John; Fitzgerald Kevin
Subject: RE: Waste minimization goal for 2001

Let me help everyone out here:

We spoke about this last year at the SH&E Seminar and with the office managers as well. The goal of 15% reduction is reviewed after comparing the weights all waste hauled off-site less tank cleaning, capital improvement construction disposal and that sent to recycle for 2001 compared to 2000. If you did not have detailed weight records compiled on all waste hauled out (not recycled within the same plant) use disposal $. With tipping fees generally increasing, a decrease in $ represents a greater decrease in weight.

Break out housekeeping expense. The short range target is to get each location with a clean appearance.

Jim

-----Original Message-----
From: Self Traci
Sent: Tuesday, January 08, 2002 2:17 PM
To: Cilley Mark; Huschak Heath; Kamerer Amos; Probst Kevin; Rutledge Ron; Shamitko Greg; Wolfe Scott
Cc: Dietz Jim; Burkhart R Jim; Kraynik Charles; Lish Steven; Weinstein Nate
Subject: Waste minimization goal for 2001

If you have not done so, please complete the comparison chart in your waste minimization plan to determine achievement of the 15% reduction goal for 2001. The draft plan can be found on KOPNET if you need the chart. Please submit it me by 1/17/02. Thank You.

ORV - 8490

THIS SHIPPING ORDER

must be legibly filled in, in Ink, in Indelible Pencil, or in Carbon, and retained by the Agent

Shipper's No. US DOT 490704

(Carrier) West Coast Marine Clea SCAC. _____ Carrier's No. MC-382534

Received, subject to the classifications and tariffs in effect on the date of this Bill of Lading:

at Koppers POX facility, date 5/17/02 from Warehouse/facility clean

the property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated below, which said company (the word company being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its own road or its own water line, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained (as specified in Appendix B to Part 1035) which are hereby agreed to by the shipper and accepted for himself and his assigns.

TO: (Mail or street address of consignee for purposes of notification only.)
Consignee Hillsboro Landfill
Street
Destination Zip

FROM:
Shipper Koppers Industries, INC.
Street 7540 NW St. Helens Rd.
Origin Portland, OR. Zip 97210

Route: local City

Delivering Carrier LOCMCI | Trailer Initial/ Number | U.S. DOT Hazmat Reg. Number

Number of packages	O HM	Description of articles, special marks, and exceptions	*Weight (subject to correction)	Class or rate	Check column	Charges (for carrier use only)
1		Solid Coal/Tar pitch	8000	P		
		Hillsboro Permit # 2560				

Remit C.O.D. to:
Address: N/A
City: State: Zip:

COD
AMT: $

C. O. D. FEE:
Prepaid ☐
Collect ☐ $

TOTAL CHARGES:
$

FREIGHT CHARGES
FREIGHT PREPAID
Except when box at right is checked ☐ CHECK BOX if charges are to be collect

*If the shipment moves between two ports by a carrier by water, the law requires that the bill of lading shall state whether it is "carrier's or shipper's weight".
Note – where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.
The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding–
$ _____ per _____

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.
(Signature of consignor)

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. Per _____

SHIPPER: Koppers Industries
PER: Amos Kameeer DATE: 5-17-02

CARRIER: West Coast marine Cleaning
PER: Robert Baker DATE: 5-17-02

Permanent post office address of shipper

EMERGENCY RESPONSE TELEPHONE NUMBER: ( )
Monitored at all times the Hazardous Material is in transportation including storage incidental to transportation (§172.604).

O Mark with an "X" to designate Hazardous Material as defined in the Department of Transportation Regulations governing the transportation of hazardous materials.
The use of this column is an optional method for identifying hazardous materials on bills of lading per Section 172.201(a)(1)(iii) of Title 49, code of Federal Regulations. Also, when shipping hazardous materials, the shipper's certification statement prescribed in Section 172.204(a) of the Federal Regulations must be indicated on the bill of lading, unless a specific exception from this requirement is provided in the Regulations for a particular material.

10-BLS-A3 (Rev. 6/95)

Agent must detach and retain this Shipping Order and must sign the Original Bill of Lading.

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KOPPERS INDUSTRIES

FAX TRANSMITTAL

7540 N.W. Saint Helens Rd.
Portland, Oregon 97210-3663
Phone: (503) 286-3681
Fax: (503) 285-2831
Web Page: www.koppers.com

TO: J. Dietz, T. Self, M. Cilley DATE: 3/29/00

FROM: Amos TOTAL # OF PAGES: 5

More on the possible Superfund listing — There was another article in today's Oregonian that didn't copy very well, so we are mailing each of you A copy —

IF THIS TRANSMITTAL IS IN ERROR, PLEASE CALL 503-286-3681 FAX # 503-285-2831

Portland Harbor Sediments

Oregon Department of Environmental Quality

March 2000 Update #8

Background

Portland Harbor covers a highly industrialized, 6-mile stretch of the Willamette River extending from the southern tip of Sauvie Island upstream to Swan Island. For several years, concerns have been raised about the quality of sediments in the Portland Harbor. A study performed in 1997 by the Oregon Department of Environmental Quality (DEQ) and Environmental Protection Agency (EPA) found that sediments in the area are contaminated. The results of the study led EPA to consider the placing the harbor on the Superfund National Priorities List (NPL).

The state has asked EPA that the site be deferred and cleaned up under state authority. This would allow for the continuation of DEQ's cleanup work in the Harbor and integration of other state programs. In June 1999, DEQ completed the Portland Harbor Sediment Management Plan (PHSMP) that provides the framework for evaluating and managing contaminated sediments, describes how the state will meet EPA's criteria for deferral and forms the cornerstone of a state-led approach to cleaning up the harbor.

What's Happening Now?

DEQ continues with work as outlined in the PHSMP. Work in the next several months includes:

- Completion of the **Portland Harbor Remedial Investigation/Feasibility Study Work Plan;**
- Continued public outreach;
- Continued federal, local and tribal natural resource trustee involvement efforts;
- Continued environmental work at the existing sites in the harbor;
- Ongoing site assessment and investigation;
- Consent decree negotiation

Decision for Deferral

On March 31, 2000 EPA will evaluate DEQ's progress towards obtaining state deferral based on the following criteria:

- A Superfund-equivalent Remedial Investigation and Feasibility Study.
- Protection of the Natural Resource Trustees rights.
- Tribal Involvement.
- Completion of a public involvement plan.
- Enforcement plan for ensuring responible parties (RPs) perform and pay for the cleanup of the harbor.

Should the state not meet these criteria, EPA has indicated that a listing package will be forwarded to EPA headquarters in Washington D.C. During this time, the cleanup work already underway in the Harbor will continue. Both agencies are committed to making a decision on the best management option for the Portland Harbor, and will not allow the process to slow down environmental progress.

Koppers004979

Natural Resource Trustees

The natural resource trustees involved in Portland Harbor include six Native American Tribes, the National Marine Fisheries Service (NMFS), National Oceanic Atmospheric Administration (NOAA), US Fish and Wildlife Service (USFWS), Oregon Department of Fish and Wildlife (ODFW) and Oregon DEQ. These trustees are responsible to protect natural resources such as salmon and migratory birds.

When a site is listed on the Superfund National Priorities List (NPL), EPA is required to coordinate assessments, investigations and planning with natural resource trustees. In addition, trustees can file Natural Resource Damage Assessment (NRDA) claims until *three years after a cleanup is completed.* Without a Federal listing, trustees can only file NRDA claims until *three years after the date injury to a resource was first discovered.* This difference in the timing, *or statute of limitations*, for filing a NRDA claim could affect a trustee's ability to protect natural resources.

Under a state-led cleanup, DEQ must provide the same level of participation and involvement for natural resource trustees. Tolling agreements, signed by both natural resource trustees and the responsible parties (RPs), stop the statute of limitations from running out. These agreements provide the trustees the same capability to file NRDA claims under a state-led cleanup as they are guaranteed under the federal process.

In order to support a state-led cleanup, and to protect their legal rights, the natural resource trustees have stated they need the RPs to sign tolling agreements.

On January 13, 2000, DEQ, the Governor's Office, federal, state and tribal natural resource trustees met with the Portland Harbor Group to negotiate a resolution to the trustee rights issue. Additional discussions took place on February 4, 2000 and March 10, 2000.

Tribal Involvement

The following tribes have expressed both natural resource and cultural interests in the Portland Harbor cleanup: Confederated Tribes of Grand Ronde, Confederated Tribes of the Siletz Indians, Confederated Tribes of the Umatilla Indian Reservation, Confederated Tribes of the Warm Springs Indian Reservation, Confederated Tribes and Bands of the Yakama Indian Nation, and the Nez Perce Tribe.

EPA has a federal trust responsibility and government-to-government relationship with federally recognized tribes. This relationship assures tribes of appropriate consultation during a Superfund cleanup process. DEQ is committed to the full involvement and participation of interested tribes in the planning, investigation and cleanup efforts occurring in Portland Harbor.

On December 13, 1999, Governor Kitzhaber met with representatives from five of the interested Tribes to express Oregon's willingness and commitment to tribal participation throughout a state-led cleanup. The Director of DEQ continues to meet with tribal chairs and tribal councils so DEQ can better understand issues and concerns regarding Portland Harbor. Discussions are underway with several tribes regarding agreements that would outline tribal participation and funding.

Koppers004980

The Portland Harbor RI/FS Work Plan

DEQ is currently preparing a Remedial Investigation/Feasibility Study Work Plan that will be used to investigate the types and quantities of contaminants in the sediments and determine what types of risks these contaminants pose to humans, fish and wildlife. The information gathered during implementation of the Work Plan will eventually help DEQ decide on how best to clean up the contaminated sediments.

To provide early and on-going stakeholder involvement and contribution to the Work Plan preparation process, DEQ formed two groups, a Technical Exchange Workgroup and a Stakeholders Advisory Group. Each group was comprised of representatives from the following seven sectors: federal & local government, industry, natural resource trustees, native American tribes, environmental organizations and community groups. These groups met through March 2000.

Representatives of the Technical Exchange Workgroup discuss specific technical details related to development of the Work Plan such as the number and location of samples and how to evaluate the health of fish and wildlife.

The Stakeholder Advisory Group focuses on bringing a non-technical perspective to the broader policy issues associated with DEQ's response to Harbor contamination. The advisory group also considers the policy implications of specific technical choices identified by the Technical Exchange Workgroup.

In addition to meeting agendas, summaries and participant lists, a developmental draft of the Work Plan is currently available on DEQ's Website. DEQ will conduct an informal public comment period that will focus on introducing the Work Plan to the local community, explain the purpose of the Work Plan, and answer questions. A formal public comment period will be held later this summer.. If you would like DEQ to attend a meeting of your organization during either the informal or formal public comment period, please contact Kim Cox, DEQ, at 503-229-6590.

Work Plan Implementation

Implementation of the RI/FS Work Plan is scheduled to begin in late summer 2000. The work is planned in phases; Phase 1 will take about *18 months to complete.* The final Work Plan will be attached to an enforceable consent order signed by responsible parties (RPs). The RPs will be ordered by the state to perform the work. The RPs will perform the investigation, with DEQ in an oversight role.

Public Involvement Plan

Twenty-five Community Interviews, conducted in late 1999 will be used to complete the Public Involvement Plan described in Appendix J of the Portland Harbor Sediment Management Plan. The interviews were conducted with a wide range of stakeholders including neighborhood and community groups, various users of the river, elected officials and industry associations. The interviews focused on the interviewee's current knowledge of Portland Harbor, any concerns and issues, the difference between a state and federal cleanup, the type of information the community needs and the best way to provide that information.

DEQ will use the results of the interviews to develop public outreach tailored to meet the needs of the affected community. A final public involvement plan should be available in April.

Other outreach efforts include environmental and community group participation in the development of the Work Plan, public comment process on the Work Plan, and continued communication with local neighborhood and community groups.

Koppers004981

Site Assessment Work

Prior to the release of the **Portland Harbor Sediment Management Plan** in June 1999, DEQ initiated investigation and cleanup activities at 17 sites within the Portland Harbor Study Area. Investigation and cleanup activities include:

- extensive upland investigations to identify and evaluate contaminant sources,
- collection of sediment chemistry and toxicity data,
- implementation of source control measures to prevent contaminant migration to the river.

In addition to work at these 17 sites, site discovery efforts based on the results of the 1997 joint EPA/DEQ sediment investigation identified approximately 50 additional sites and 18 outfalls to the river that are potential sources of contamination to the Willamette River. These sites are identified in **Appendix F (Table F-3: Sites Identified in Site Discovery Process)** of the **Portland Harbor Sediment Management Plan**.

The list of sites presented in Appendix F was modified by adding new sites, combining sites based on property ownership or operation, and eliminating sites currently being addressed through DEQ's Voluntary Cleanup Program. Each site was evaluated through DEQ's Strategy Recommendation process. Recently, DEQ completed strategy recommendations for 35 sites within the Portland Harbor Study Area. Recommendations for further action at these sites included:

- 12 High-Priority Remedial Investigations (RI)
- 13 High-Priority Expanded Preliminary Assessments (XPA)
- 10 Low or Medium Preliminary Assessments (PA) or Expanded Preliminary Assessments

RECEIVED
MAR 8 2000
KOPPERS INDS, INC.
PORTLAND OR

Orphan Site Designation

When responsible parties are either unknown, refuse to conduct required cleanup activities or are financially unable to do so, DEQ pays for priority cleanups using Orphan Program funds. Because orphan site funding is limited, only sites posing serious threats to public health and the environment become orphans.

DEQ recently designated the Portland Harbor as an Orphan site. Based on a preliminary review of Portland Harbor sediment data, DEQ has concluded that, at this time, there are no obvious sources for *some* of the sediment contamination in Portland Harbor. An Orphan Site designation allows DEQ to access the Orphan fund to pay for work in the harbor associated with contaminants that can not be associated with any specific responsible party. This allows the state to continue to make environmental progress while DEQ continues investigation that will identify responsible parties to perform and pay for the cleanup

The Orphan Site Account was established in 1991. The Oregon legislature authorized the financing of orphan cleanups with long-term pollution control bonds. Since 1992, DEQ has issued bonds totaling $20.4 million. Debt on the bonds is repaid with a variety of funds.

Almost $11 million was available for use by the Orphan Fund in the 1997 – 1999 biennium. This same amount is projected to be available for the 1999 – 2001 biennium. It is projected that approximately *$1-2 million* of Orphan Site Funds will be used in Portland Harbor until June 2001.

Questions?

If you have questions for **DEQ** regarding Portland Harbor please contact: Emily Roth, Portland Harbor Policy Manager at 503-229-6156 or Mike Rosen, Portland Harbor Technical Manager at 503-229-6712.

If you have questions for **EPA** regarding Portland Harbor please contact: Mark MacIntyre, EPA Region X Public Affairs, at 206-553-7302.

If you would like additional information, please visit our web site at:

http://www.deq.state.or.us/wmc/cleanup/PortlandHarbor/portlandharbor.htm

Koppers004982

FILE: PORTLAND - ENVIRONMENTAL

FAX TRANSMITTAL

KOPPERS INDUSTRIES, INC.
7540 NW SAINT HELENS RD.
PORTLAND, OR 97210-3663

TELEPHONE: 503-286-3681
FAX: 503-285-2831

TO: J. Dietz, K-1650
T. Self, K-1800
B. Meisinger, HTC
FROM: Amos Kamerer

DATE:
10/05/99

TOTAL # OF PAGES: 3

SUBJECT: ODEQ Wells

The attached is self-explanatory, with the ODEQ flexing their mussels! This pretty much cover's what I had advised earlier about the first sample results. I talked to Rob Ede at Hahn and Assoc., Rob said that he would be responding to Eric with the requested plan, in the next couple of weeks. Rob feels that it will take at least a year, 4 more samples, before any meaningful data will be developed, as to what, if anything, has happened as a result of our new piles.

I will forward Rob's response when received.

Amos

cc: M. Cilley, Stickney

IF THIS TRANSMITTAL IS RECEIVED IN ERROR, PLEASE ADVISE.

Oregon
John A. Kitzhaber, M.D., Governor

Department of Environmental Quality
811 SW Sixth Avenue
Portland, OR 97204-1390
(503) 229-5696
TDD (503) 229-6993

October 1, 1999

Ms. Sandra Hart
Senior Engineer
Northwest Natural
220 N.W. Second Avenue
Portland, OR 97209

RE: Preliminary Results of Groundwater Monitoring Downgradient of Tank Location, Koppers Lease Area – Former GASCO site.

Dear Sandi:

As you are aware, 208 support pilings were driven to bedrock as part of the installation of a pencil pitch storage tank at the Koppers Lease Area at the former GASCO site. The pilings penetrated an area of tar contamination present in the form of a dense non-aqueous phase liquid (DNAPL). Following installation of the support pilings, two monitoring wells were installed downgradient of the pencil pitch storage tank. One monitoring well, MW-15-50, is screened immediately below a silt unit that has, at previously investigated locations in the plant site area, acted as a barrier to contaminant migration. The second monitoring well, MW-15-66, is screened just above the basalt/alluvium interface. The purpose of the monitoring wells is to determine whether the tank installation could exacerbate existing contamination at the former GASCO facility.

Monitoring wells MW-15-50 and MW-15-66 were sampled in July 1999. MW-15-66 was resampled as part of quarterly groundwater monitoring at the GASCO facility in August 1999. Preliminary results obtained from MW-15-50 reveal high concentrations of benzene (95.1 mg/l), naphthalene (8.5 mg/l) and acenaphthylene (9.7 mg/l) in groundwater. These concentrations indicate that free phase product is present in the vicinity of MW-15-50. Groundwater concentrations detected in groundwater collected from MW-15-66 are only slightly above detection limits.

A preliminary analysis of the groundwater data suggests that free product has penetrated the silt unit in the vicinity of the pencil pitch storage tank location. Based on the low concentrations of contamination detected in MW-15-66, it appears that the contamination detected in MW-15-50 was not present prior to the installation of the support pilings. However, it is not clear at this time whether the migration of contamination through the silt units occurred as a result of contaminant dragdown during pile installation or indicates that the support pilings have created a conduit that will allow continued migration of free phase product through the silt unit and into the alluvial zone.

Until it can be demonstrated existing conditions have not been exacerbated due to the installation of support pilings, DEQ will not approve the installation of any subsequent storage tanks. DEQ requests that Northwest Natural develop a plan to assess the source of the high concentrations of benzene, naphthalene and acenaphthylene detected in monitoring well MW-15-50. The plan should present an approach to determine whether the observed contamination is associated with the installation of the support pilings and whether a conduit for ongoing migration of free phase product through the silt unit and into the alluvial zone has been created.

If you have any questions in this matter, please contact me at 229-5648.

Sincerely,

Eric L. Blischke
Project Manager
Waste Management and Cleanup Division

cc: Mike Rosen, NWR/DEQ
Rod Struck, NWR/DEQ
Amos Kamerer, Koppers Industries

Post-it® Fax Note 7671	Date 11/18/99	# of pages ▶ 2
To Traci Self	From Amos	
Co./Dept.	Co.	
Phone #	Phone #	
Fax #	Fax #	

RECEIVED
OCT 05 1999
KOPPERS INDS, INC.
PORTLAND OR

cc: KTF

FILE: PORTLAND - ENVIRONMENTAL

KOPPERS INDUSTRIES

FAX TRANSMITTAL

7540 N.W. Saint Helens Rd.
Portland, Oregon 97210-3663
Phone: (503) 286-3681
Fax: (503) 285-2831
Web Page: www.koppers.com

TO: J. Dietz, T. Self DATE: 9/30/99

FROM: Aaron TOTAL # OF PAGES: 3

Is this something I should attend?
OR should I avoid being a part of this?

IF THIS TRANSMITTAL IS IN ERROR, PLEASE CALL 503-286-3681 FAX # 503-285-2831

Oregon
John A. Kitzhaber, M.D., Governor

Department of Environmental Quality
811 SW Sixth Avenue
Portland, OR 97204-1390
(503) 229-5696
TDD (503) 229-6993

September 17, 1999

Amos Kamerer
Koppers Industries, Inc.
7540 NW St. Helen's Road
Portland, OR 97210-3663

Dear Mr. Kamerer:

This letter is addressed to you as a land owner, or business owner or operator, within the Portland Harbor area. DEQ requests that you or your representative attend an informational meeting regarding ongoing efforts in Portland Harbor, including your role and responsibilities in the Harbor cleanup. DEQ intends to proceed with Portland Harbor investigative and cleanup activities, including activities related to your site, in an expedited manner over the next six months; therefore, it is essential that you attend this meeting to understand the cleanup process and timing of activities.

The meeting will be held: **Tuesday, October 12, 1999**
10 AM to 12 PM
Room 140
Oregon State Office Building
800 NE Oregon
Portland, Oregon.

AMOS/TRACI - DO WE HAVE THIS STUDY?

As you know, sampling results from a 1997 river sediment quality study conducted by the U.S. Environmental Protection Agency (EPA) and the Department of Environmental Quality (DEQ) revealed elevated concentrations of a number of contaminants in sediments within the Harbor. Some of the sediments contain concentrations of organic and inorganic contaminants which potentially could be harmful to fish and wildlife or human health.

In response, DEQ led a process in which state and federal government agencies, organizations, and individuals and entities doing business in the Portland Harbor joined to develop the Portland Harbor Sediment Management Plan (PHSMP). The PHSMP lays out the technical approach for investigating the nature and extent of contamination and assessing risk to human health and the environment from contaminated sediments in Portland Harbor. During the next six months, DEQ will be preparing the work plan that will describe the specific harbor-wide investigation and assessment activities required to implement the PHSMP.

DEQ-1

As you have been informed earlier by DEQ, recent investigations and information suggest that your property or business may be a source of sediment contamination in the Harbor. You have been contacted in the past for information regarding the site and will be contacted in the future with results of DEQ's preliminary site assessment, issued in the form of a "Strategy Recommendation." Depending upon the results of the assessment, you may be required to complete additional site assessment and investigation to more fully characterize the nature and extent of contamination resulting from past or current operations at your facility.

At the October 12 meeting, DEQ will explain your desired role regarding your site and Portland Harbor. The meeting will address the following:

- Overview of Portland Harbor investigation and cleanup
- Review of status of proposed Superfund listing, and roles of EPA, natural resource trustees, and tribes
- Description of Sediment Investigation (SI) work plan development schedule, activities and opportunities for your participation
- Description of DEQ process for identifying and assessing upland sites and issuing strategy recommendations
- Description of substance, procedure, and timing for completion of Preliminary Assessments and Remedial Investigations
- DEQ strategy for implementation of work at sites with uncooperative responsible parties
- Consent Order or Consent Decree for implementing SI work plan

As I have emphasized on many occasions, DEQ strongly believes that a collaborative approach is the most effective and efficient process for evaluation and remediation of contamination in Portland Harbor sediments. We look forward to working with you in a voluntary, cooperative manner to address contamination at your site and harbor-wide. For parties who choose not to cooperate, DEQ will use its authorities to ensure entities assume responsibility for their fair share of investigating and cleaning up the Harbor.

Due to limited space at the meeting location, we ask that you limit your participation to no more than two representatives. For directions and other questions about meeting logistics, please contact Bill Knight at (503) 229-5774. For other questions related to the Portland Harbor cleanup, please contact Charles Landman at (503) 229-6461.

Sincerely,

Mary Wahl for

Langdon Marsh
Director

FILE: PORTLAND - ENVIRONMENTAL

KOPPERS INDUSTRIES

Koppers Industries, Inc.
7540 N.W. St. Helens Road
Portland, OR 97210-3663

Amos S. Kamerer
Plant Manager

Telephone: 503-286-3681
Fax: 503-285-2831

Fax Memorandum

August 31, 1999

Mr. Jay Collins
Oregon DEQ (WRAP)
Northwest Region
2020 SW 4th, Suite 400
Portland, OR 97201

RE: Toxic Use Reduction Rule

Dear Mr. Collins:

As we discussed on this date, Koppers Industries, Inc. operates a terminal facility that imports coal tar pitch in a solid form and then melts the pitch for loading into rail tank cars or tank trucks for distribution to our Aluminum producing customers. A heavy oil (coal tar distillate) is added back to the product, on an as needed basis for softening point adjustment, to replace the fractions lost during the melting process. As such, there is no processing of this product, only repackaging from a solid to liquid.

The Portland terminal facility is a conditionally exempt small quantity generator of hazardous waste. In 1998 we generated a total of 800 pounds of hazardous waste. The waste generated was debris (absorbents, rags etc.) contaminated with creosote. We no longer use creosote at this facility and the generation of this waste will be discontinued.

Due to these facts, Koppers Industries, Inc. does not fully understand were we would fit into the scheme of this regulation and ask that the Oregon DEQ review our applicability to this rule. We also respectfully request an extension of the associated reporting requirements until such time that a determination of applicability can be made.

Thank you for your time and consideration in this matter.

Sincerely,

Amos S. Kamerer
Cc: M. Cilley
T. Self K-1800

Post-it® Fax Note 7671	Date 9/16/99	# of pages ▶ 1
To Jim Oleta	From Amos	
Co./Dept.	Co.	
Phone #	Phone #	
Fax #	Fax #	

FILE: PORTLAND DEQ

May 26, 1999

Attention: Jim Dietz

On May 25, 1999 at approximately 3:00 PM, Northwest Terminal had an inspection by the Department of Environmental Quality due to an alleged complaint they received at their office. Rebecca E. Paul, Environmental Specialist for Hazardous Waste Compliance performed the plant inspection.

During the inspection there were 2 issues of alleged non-compliance brought to my attention.

First Issue:

A vacuum street sweeper company we have come in and clean our plant asphalted areas on an as needed basis, deposited the water and sweepings from the plant roadways they collected. Due to a misunderstanding of the instructions, given by our plant personnel, the sweeper driver, who was new and unfamiliar with our plant, deposited the water and sweepings off the edge of the asphalt on to the adjoining soil. This area is located at the northwest end of the plant, behind the pitch warehouse, "next to the vehicle and trailer wash areas". This wash area recessed and asphalted, is where this water and sweepings are normally deposited so water can evaporate and the solids can be recycled or disposed of in a proper manner. Once this error was realized, our plant personnel removed the sweepings to the asphalt area and tarped it. Ms. Paul took 2 samples, one of the sweepings, the other of the soil on the other side of the roadway.

Second Issue:

Located at the south side of the pitch storage warehouse were 4 drums (1 acidic cleaner for aluminum, 1 caustic neutralizer for the cleaner, 1citrus cleaner, 1 used oil for recycle) and several batteries on pallets contained on a steel bay. These were recently moved from the plate steel bay onto a gravel area next to it, I assume, due to the on going dismantling and construction in that area. The reason why has not been ascertained and/or confirmed. One of the 4 drums was a caustic liquid used as a neutralizer to an acid cleaner for aluminum. The plastic drum appeared to have leaked from a crack in the top of the drum as a result of being moved, leaving a white residue down the side of the drum with a small amount of residue on the gravel. Ms. Paul field-tested the residue for a pH of 12. She agreed for us to place the previously mentioned items in a contained area and to wait for her letter to proceed any further. The small amount of residue and soil was removed and placed in a hazardous waste drum.

Sincerely,

T.J. Turner
General Forman

CC:
Amos Kamerer
Traci Self
Kevin Fitzgerald

INTEROFFICE COMMUNICATION

To: J. T. Dietz
Location: K-1650
Subject: February Highlights

From: A. S. Kamerer
Location: Portland
Date: 03/05/99

PLANT OPERATIONS

SHIPMENTS/PRODUCTION

COMMODITY	UNIT	MONTH	YTD	PRIOR YTD	+1-% YTD
CREOSOTE	GALS	10,333	10,333	25,469	-15,136
PENCIL PITCH	TONS	58.9	98.7	74.0	24.7
LIQUID PITCH	TONS	3,546.3	6,624.7	3,268.4	3,356.3
INTALCO TRANSSHIPMENT	TONS	1,734.0	4,043.7	3,974.6	68.6
TOTAL LIQUID SHIPPED	TONS	5,280.3	10,667.9	7,243.0	3,424.9
MELTER PRODUCTION	TONS	4,892.0	10,632.6	6,879.4	3,753.2

Liquid shipments were good, but melter production was down a little. We shipped the last of our creosote during the month. In total we shipped 2 truck loads of creosote, 2 truck loads of pencil pitch, plus 69 truck loads and 33 tank cars of liquid pitch. We also unloaded a 6,600 ton vessel of pencil pitch during the month. This was the first vessel discharged through the new operations at berth #7, at the Port of Longview and many problems developed, resulting in the doubling of the normal time for the discharge of this volume.

MANUFACTURING COSTS (000)

MONTH			YEAR TO DATE		
ACTUAL	ESTIMATE	PROGRAM	ACTUAL	PROGRAM	+/- $
$173	$172	$174	$332	$348	-$16

SAFETY/ENVIRONMENTAL

	MONTH	YTD
HOURS WORKED	2,001	3,829
LOSS TIME ACCIDENTS	0	0

There were no lost time accidents or OSHA reportable incidents during the month.

TQM UPDATES/PRODUCTION IMPROVEMENTS

Work continues on the pier modifications portion of the liquid pitch unloading project; this work should be finished in the next 45 days. P.O.'s have been issued for the civil and mechanical work on the pipeline and new tank portion of the project. Work on this portion will start as soon as the building permit is issued, hopefully on the 19th.

FUTURE ACTIVITIES

We have a 2,200 ton vessel of pencil pitch due in late March.

SALES

ALCOA-WENATCHEE: Everything is fine here. They're still taking 3 cars per week. They plan to top unload their first pitch car in the next 2 weeks. 8 of the 18 cars in this service have been converted and 4 more cars are in route to the shop. All conversions should be complete by mid year.

CFAC: Nothing to report here.

INTALCO: Shipments were off a little due to some unscheduled maintenance problems that they had. March will also be off as a result of some scheduled maintenance.

KAISER - MEAD & TACOMA: Mead, reduced their weekly release from 5 to 4 cars, claiming that's what they are unloading each week, so there is no need to ship more than that. Based on their annual usage, they should use 5.25 cars per week, so down the road, they're going to need more pitch. Tacoma is steady at 5 truck loads per week.

TAYLOR LUMBER: We shipped Taylor the last 2 truck loads of creosote that we had in inventory, the end of another era. Back in the 1970's we shipped as much as 5,000,000 gallons a year through the terminal.

VANALCO: Nothing new to report here.

Amos S. Kamerer

cc: T.J. Turner

INTEROFFICE COMMUNICATION

To: J. T. Dietz
Location: K-1650
Subject: Monthly Highlights
July 2001

From: A. S. Kamerer
Location: Portland
Date: 8/2/01

PLANT OPERATIONS

SAFETY/ENVIRONMENTAL

	MONTH	YTD
HOURS WORKED	1068	8138
LOST TIME ACCIDENTS	0	0

There were no lost time accidents or OSHA reportable incidents during the month, marking three(3) consecutive years without any reportable incidents. The SH&E committee did not meet during the month and no new procedures were issued. Training was completed on two new procedures. The SH&E monthly reporting spreadsheets are attached, to the cover e-mail.

SHIPMENTS

COMMODITY	UNIT	MONTH	YTD	PRIOR YTD	Inc/Dec. YTD
PENCIL PITCH	TONS	0	60	456	-396
LIQUID PITCH	TONS	1,562	7,515	15,871	-8,356
INTALCO TRANSSHIPMENT	TONS	0	3,525	15,421	-11,896
TOTAL LIQ. THROUGH PUT	TONS	1,562	11,040	31,292	-20,252

We shipped 18 tank carloads of liquid pitch during the month. We have now emptied two of our liquid pitch storage tanks and the liquid pitch vessel-unloading pipeline. We have jack hammered loose the tank bottoms and built up coke in tank T-68 and are doing the same now in tank T-65. At the rate we are going, this will take several additional weeks to be completed. We have the first vacuum truck visit scheduled for next week, to start removing this material. Our actual monthly plant operating expenses will be below our estimate of $145,000.

TQM UPDATES & PRODUCTION IMPROVEMENTS

We are still monitoring the monthly data on our TQM projects dealing with our natural gas usage and overall terminal operating cost reductions. To date this year, we have reduced our natural gas usage by some 60 %.

CAPITAL PROJECTS

I did not hear anything from Northwest Natural during the month with regard to their plan to replace the fire hydrant water supply pipeline that runs down the center of the plant, from 4" and 6" diameter pipe, to 8" diameter pipe. I have traced them this week, but my contact is traveling. This will be every helpful with the new Fire Suppression System capital project that we have been working on, now, for quite some time.

FUTURE ACTIVITIES

There is nothing new to report regarding the one interested party that is looking at terminaling asphalt through the facility. Their problem is getting firm commitments for the raw material, before they can proceed with us.

SALES

ALCOA-WENATCHEE: These folks have now curtailed all production at the smelter. However, we are still shipping them 1 car per week, as they continue to make anodes for the Warrick smelter.

CFAC: Nothing new to report here.

INTALCO: Nothing new to report here.

KAISER - MEAD & TACOMA: These folks are still resisting the BPA's offer to stay closed through October 2003.

VANALCO: Nothing to report here.

Goldendale & Northwest Aluminum CO's: Goldendale is now the only smelter still operating in the US Pacific Northwest. Only operating 34 pots, or 6.5% of their total capacity.

Amos S. Kamerer

cc: K. J. Fitzgerald, K-1600
T. J. Turner, Portland
J. Patterson, K-1650

INTEROFFICE COMMUNICATION

To: J. T. Dietz
Location: K-1650
Subject: Monthly Highlights
September 2001

From: A. S. Kamerer
Location: Portland
Date: 10/2/01

PLANT OPERATIONS

SAFETY/ENVIRONMENTAL

	MONTH	YTD
HOURS WORKED	1052	10,473
LOST TIME ACCIDENTS	0	0

There were no lost time accidents or OSHA reportable incidents during the month, marking our thirty-eight consecutive month without any reportable incidents. The SH&E committee did not meet during the month and did not issue any new procedures. No training was completed during the month, only a Safety Meeting was held on the 19th. The SH&E monthly reporting spreadsheets are attached, to the cover e-mail.

SHIPMENTS

COMMODITY	UNIT	MONTH	YTD	PRIOR YTD	Inc/Dec. YTD
PENCIL PITCH	TONS	0	60	665	-605
LIQUID PITCH	TONS	1,261	10,229	18,253	-8,024
INTALCO TRANSSHIPMENT	TONS	0	3,525	19,684	-16,159
TOTAL LIQ. THROUGH PUT	TONS	1,261	13,754	37,937	-24,183

We shipped 15 tank carloads of liquid pitch during the month. Work continues on jack hammering and vacuum truck cleaning two of our liquid pitch storage tanks, T-65 & T-68. We should be completed with this work over the next 4 weeks, or so. We will then need to do some internal repairs to tank T-65. Our actual monthly plant operating expenses should be right at estimate of $148,000.

TQM UPDATES & PRODUCTION IMPROVEMENTS

We are still monitoring the monthly data on our TQM projects dealing with our natural gas usage and overall terminal operating cost reductions. To date this year, we have reduced our natural gas usage by some 60 %.

CAPITAL PROJECTS

Northwest Natural advises that the capital project to replace the fire hydrant water supply pipeline that runs down the center of the plant, from 4" and 6" diameter pipe, to 8" diameter pipe, has been delayed until the first quarter of next year. Thus, this will delay any work on our capital project for the new Fire Suppression System, as we will need for these new lines to be installed, and tested for flow and pressure ratings, before we can proceed with our design.

FUTURE ACTIVITIES

I'm still talking with two interested parties about possibly terminaling asphalt for them through the facility. The development of this business, if it develops, has been further delayed as a result of the continuing good weather, here in the Northwest. We just finished our precipitation weather year, at the end of September and it was the driest year **ever.** . Portland recorded 23" of total precipitation, which was 38% below the normal amount of 37.3". This has effected the asphalt construction season, there still going strong. Thus, the interested parties have no idea of what the Winter prices for asphalt will be, which is the key element in deciding to build a Winter inventory, or not.

SALES

ALCOA-WENATCHEE: These folks have now curtailed all production at the smelter. However, we are still shipping them 2 cars every other week, as they continue to make anodes for the Warrick smelter. They did call during the month to discuss the issues involved with a possible re-start next year on July 1st.

CFAC: Nothing new to report here.

INTALCO: These folks also called during the month about issues involved with a possible re-start next year on July 1st.

KAISER - MEAD & TACOMA: These folks also called during the month about re-start issues, however, later in the month they announced that there would be nothing until at least October 1, 2002.

VANALCO: The Federal Bankruptcy Courts have agreed in principle for the sale of the Vanalco facility to one of three possible buyers'. I'll keep you posted as this unfolds.

Goldendale & Northwest Aluminum Co's: Nothing new to report here.

Amos S. Kamerer

cc: K. J. Fitzgerald, K-1600
T. J. Turner, Portland

INTEROFFICE COMMUNICATION

To: J. T. Dietz
Location: K-1650
Subject: Month Highlights
August 2000

From: A. S. Kamerer
Location: Portland
Date: 9/6/00

PLANT OPERATIONS

SAFETY/ENVIRONMENTAL

	MONTH	YTD
HOURS WORKED	1680	14275
LOST TIME ACCIDENTS	0	0

There were no lost time accidents or OSHA reportable incidents during the month, marking our 25th consecutive month without any reportable incidents. The SH&E committee met during the month and continued working on new procedures, plus, John Marcinowski and Traci Self made a visit to the plant with a system update. Their report on their visit was very complementary to the committee and all of the efforts they have put forward on the implantation of this program. I am very proud of their efforts. The SH&E monthly reporting spreadsheets are attached, to the cover e-mail.

SHIPMENTS/PRODUCTION

COMMODITY	UNIT	MONTH	YTD	PRIOR YTD	Inc/Dec. YTD
PENCIL PITCH	TONS	80.0	585.1	538.4	46.7
LIQUID PITCH	TONS	1323.4	17194.6	26696.2	-9501.6
INTALCO TRANSSHIPMENT	TONS	1718.9	17140.1	16549.6	590.9
TOTAL LIQUID SHIPPED	TONS	3042.3	34334.7	43245.8	-8911.1
TOTAL PROCESSED	TONS	3993.7	36362.7	42667.3	-6304.6

Production and shipment were at expected levels. We shipped 4 truckloads of target pencil pitch, plus, 50 truckloads and 15 tank carloads of liquid pitch, during the month. We received a 7,600 tons vessel of liquid pitch during the month. I expect that our monthly expenses will be below estimate of $176,000. We were able to take advantage of Intalco's 2 week annual maintenance shutdown during the month, where we did not have any truck shipments, thus, we were able to have everyone work only the day shift, which permitted us do some much needed maintenance of our own. The biggest project was the cleaning of all of the sumps through out the plant, including the oil water separator.

INTEROFFICE COMMUNICATION

To: J. T. Dietz
Location: K-1650
Subject: March Highlights

From: A. S. Kamerer
Location: Portland
Date: 04/07/00

PLANT OPERATIONS

S H & E

	MONTH	YTD
HOURS WORKED	2,361	6,610
LOST TIME ACCIDENTS	0	0

There were no lost time accidents or OSHA reportable incidents during the month. March completed our 20th consecutive month without any reportable incidents We had a serious near miss accident during the month that resulted in one employee resigning, rather than taking a drug test, and the termination of another employee for failure to follow proper safety procedures. This resulted in a reduction of our hourly work force from 7 to 5 employees. Regardless of the short term hardship that this has caused us from an operating point of view, we will be better off in the long run. You cannot preach safety as your number one goal, and then not follow through with proper enforcement when something like this takes place. . The SH&E committee met during the month and outlined Rail Car Movement due to the near miss accident. Mark and I met with DEQ, Air Quality during the month regarding their concerns that our fume recovery system is not adequate. We will be responding shortly, with a proposal to make the required modifications, while requesting a variance to our permit, while this work is taking place, so that no citations will be issued until the work is completed.

SHIPMENTS/PRODUCTION

COMMODITY	UNIT	MONTH	YTD	PRIOR YTD	Inc/Dec. YTD
PENCIL PITCH	TONS	60.3	161.2	178.3	-17.1
LIQUID PITCH	TONS	2,373.5	7,855.0	10,088.7	-2,233.7
INTALCO TRANSSHIPMENT	TONS	1,925.1	6,698.9	5,484.6	+1,214.3
TOTAL LIQUID SHIPPED	TONS	4,298.6	14,553.9	15,572.8	-1,018.9
TOTAL PROCESSED	TONS	5,301.0	15,588.5	15,842.2	-253.7

Liquid pitch shipments were below average as Intalco had two weeks of scheduled maintenance and only took half of their normal shipments We shipped 3 truck loads of target pencil pitch, plus 79 truck loads and 18 tank car loads of liquid pitch during the month.

MANUFACTURING COSTS (000)

MONTH			YEAR TO DATE		
ACTUAL	ESTIMATE	PROGRAM	ACTUAL	PROGRAM	+/- $
$ 176	$178	$180	$547	$542	$5

TQM UPDATES/PRODUCTION IMPROVEMENTS

With all of the events of this month, there is nothing to report on our projects.

CAPITAL PROJECTS

The mechanical work on the radar level indicators installation to tanks T-65 and T-68 was completed during the month. The electrical hook up and testing will be completed next month. The last 2 projects on the liquid unloading project were also completed this month. Work on re-insulating the roof of tank T-68 will start next month.

FUTURE ACTIVITIES

We will be receiving 600 MT of Chinese pencil pitch in April and our next vessel of liquid pitch from Korea. We are finalizing the arrangement for our open house in May for the new liquid pitch unloading project.

SALES

ALCOA-WENATCHEE: Nothing to report here, Stickney is current with releases.

CFAC: Nothing to report here.

INTALCO: Shipments were off several hundred tons, this month due to some scheduled down time for maintenance. April should be back to normal.

KAISER - MEAD & TACOMA: Shipments were about normal for the month. I went to Mead on the 31st to take a physical inventory of the consignment pitch. I will do the same at Tacoma at the end of April.

VANALCO: Nothing new to report here.

Amos S. Kamerer

cc: T.J. Turner
J. Patterson K-1600

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Capt. Peter J. Morrison MAIMS

Peter Brauns Bs. NS.

CERTFICATE OF WEIGHT
M/V OSPREY ARROW

Vessel: Tern Arrow
Request of: Koppers Industries
Commodity: Liquid Pencil Pitch

Voyage No. 132
Location: Koppers Industrie
Port: Port of Portland

TANK	DATE	TIME	TEMP (C°)	DENSITY	GAUGE	M³	M/TONS	S/TONS
No. 1	8-Oct	6:30	197	1.226115	1.161	3482.67	4270.156	4707.036
	9-Oct	6:00	N/A	0.000000	17.237	0.00	0.000	0.000
	Total:						**4270.156**	4707.036
No. 2	Tank Empty		0	0.000000		0.00	0.000	0.000
	Tank Empty		0	0.000000		0.00	0.000	0.000
	Total:						**0.000**	0.000
	GRAND TOTAL:						***4270.156***	***4707.036***
	By Shore Tank:						**4212.075**	***4643.012***
	Difference:						***58.081***	***64.024***

SEAPORT MARINE SURVEYS, INC.

Peter Brauns Bs. NS
Marine Surveyor

Post-it® Fax Note 7671 | Date 10/21/04 | # of pages ▶ 2

To Jim Dietz | From Peter

Co./Dept. Please call Pat | Co. Discovery

Phone # | Phone #

Fax # | Fax #

FROM :KOPPERS FAX NO. :5032852831 Oct. 21 2004 11:42AM P1
5032852831
Koppers005000

Oct. 21 2004 11:42AM P2
FAX NO. :5032852831
FROM :KOPPERS
Koppers005001

SEAPORT
MARINE SURVEYS, INC.
Serving the Ports of Alaska, The Pacific Northwest, Northern California and the Mississippi River System

Capt. Peter J. Morrison MAIMS

Peter Brauns Bs. NS.

8221 Hazel Dell Avenue, Suite 201
Vancouver, WA 98665
U.S.A.

Office & 24 Hour: (503) 285-2246
Office: (360) 574-7463
Fax: (360) 574-7284
email: survey@seaportmarine.com
Cellular Phone: (503) 957-3429
email: pjm@seaportmarine.com
Cellular Phone: (503) 957-3438
email: pb@seaportmarine.com

CERTFICATE OF WEIGHT
SHORE TANK NO. 200

Vessel:	Osprey Arrow	**Voyage No.**	145
Request of:	Koppers Industries	**Location:**	Koppers Industries
Commodity:	Liquid Pencil Pitch	**Port:**	Port of Portland

DATE	TIME	TEMP (F°)	DENSITY	GAUGE	GALLONS	M^3	M/TONS	S/TONS
8-Oct	7:00	357	1.233614	3.63	119774	453.40	559.315	616.539
9-Oct	10:15	390	1.225254	28.23	1022102	3869.08	4740.604	5225.615
Total:							**4181.289**	**4609.076**
Line Displacement:							**30.786**	**33.936**
Grand Total							**4212.075**	**4643.012**

SEAPORT MARINE SURVEYS, INC.

Peter Brauns Bs. NS
Marine Surveyor

INTALCO/KOPPERS LIQUID PITCH TRANSSHIPMENT AGREEMENT

THIS AGREEMENT, is made and entered into as of this sixth day of December, 1999, between **Intalco Aluminum Corporation** ("Intalco"), and **Koppers Industries, Inc** ("Koppers"), (this "Agreement").

RECITALS

Koppers operates a pitch melting and transshipment facility that has the capability of unloading liquid pitch from ocean going vessels, storing liquid pitch, blending liquid pitch with other liquid pitch and loading trucks or railcars with liquid pitch. Intalco desires to deliver liquid pitch in ocean vessels to the Koppers unloading berth located adjacent to its Portland facilities and to have said liquid pitch unloaded, blended with other liquid pitch, stored and loaded into trucks for shipment to its primary aluminum reduction facility located in Ferndale, Washington. Koppers desires to provide such receiving, unloading, blending, storage, and truck loading services to Intalco and has the capacity to do so during the term of this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants and conditions herein contained, Intalco and Koppers, intending to be legally bound, hereby agree as follows:

1. DEFINITIONS. As used in this Agreement and any attachments hereto, the following terms have the following meanings:

1.1 "Discharge Terminal" means the Koppers unloading berth located adjacent to the Portland Facility capable of accommodating vessels carrying Kosco Liquid Pitch always afloat at an arrival draft of 36 feet.

1.2 "Dollars" or "$" means United States dollars.

1.3 "Intalco Inventory" means Kosco Liquid Pitch and Liquid Pitch, as defined in Paragraphs 1.5 and 1.6 herein, respectively, stored at the Portland Facility.

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1.4 "Intalco Plant" means the primary aluminum smelter operated by Intalco located in at Ferndale, Washington.

1.5 "Kosco Liquid Pitch" shall mean electrode binder pitch in liquid form supplied by Intalco and meeting the chemical and physical specifications set forth in Appendix A-1 to this Agreement.

1.6 "Liquid Pitch" shall mean electrode binder pitch in liquid form blended to meet the Specifications utilizing Kosco Liquid Pitch and other liquid pitch as supplied by Koppers.

1.7 "Loading Station" means the Liquid Pitch load out station for trucks which comprises a part of the Portland Facility.

1.8 "Portland Facility" means the pitch melter, storage and transshipment facility owned and operated by Koppers located in the vicinity of Portland, Oregon.

1.9 "Specifications" shall mean the chemical and physical specifications for Liquid Pitch set forth in Appendix A-2 to this Agreement.

1.10 "Ton" shall mean a metric ton of 2,204.6 pounds.

1.11 "Transshipment Fees" shall have the meaning set forth in Paragraph 4.1 of Section 4 of this Agreement.

1.12 "Transshipment Services" shall mean the following services which Koppers shall furnish or cause to be furnished including: (i) receiving Kosco Liquid Pitch vessels nominated by Intalco or others on its behalf at the Discharge Terminal, including management of certain provisions of that certain Contract of Affreightment by and between Intalco and Gearbulk Pool Limited, the scope and nature of such management to be agreed between the parties and reflected as an amendment to this Agreement at a later date, (ii) unloading Kosco Liquid Pitch from such vessels, (iii) storing Kosco Liquid Pitch in an uncontaminated state, (iv) blending Kosco Liquid Pitch with other Koppers liquid pitch to meet the Specifications, (v) storing Liquid Pitch and (vi) loading an amount of Liquid Pitch into trucks provided by Intalco which shall equal the total amount of Kosco Liquid Pitch delivered to the Discharge Terminal, as further defined in Paragraph 5.2 hereunder.

1.13 "Transport" means the trucks to be supplied by Intalco for the transport of Liquid Pitch from the Portland Facility to the Intalco Plant.

1.14 "Year" means a calendar year unless otherwise stated.

2. TERM AND TERMINATION.

2.1 Term. This Agreement shall become effective upon execution by the parties provided that the actual delivery of Liquid Pitch and the commencement of Transshipment Services shall commence on or about December 21, 1999 upon the arrival of the first ocean vessel carrying Kosco Liquid Pitch, or such other date as the parties shall agree in writing. This Agreement shall be for an initial term of five (5) years commencing at the time of the first Notice of Readiness at the nominated load port of the vessel carrying Kosco Liquid Pitch and shall continue for additional terms of five (5) calendar years each thereafter; provided, that either party may terminate this Agreement at the end of the initial term or any additional term by giving not less than two (2) years prior written notice to the other party.

2.2 Termination. Either party may terminate this Agreement if the other party shall (i) default in the performance of any of its obligations hereunder and such default remains without remedy for a period of fifteen (15) days after written notice thereof is received by the party in default; provided, however, that if such default is not amenable to cure within said fifteen (15) day period, such longer time as is necessary, so long as the party in default has commenced and diligently pursued to cure the default within the fifteen (15) day period; (ii) a party has become insolvent, has made an assignment for the benefit of creditors, has involuntarily or voluntarily been placed into bankruptcy or is otherwise unable to meet its obligations for reasons not expressly excused by other terms of this Agreement.

2.3 Effect of Termination. In addition to the other rights and remedies that may be available to the parties upon termination of this Agreement, Koppers shall transship to Intalco all remaining Liquid Pitch and Kosco Liquid Pitch, if any, stored at the Portland Facility substantially in accord with previous delivery schedules, or, at Intalco's sole option, the parties may negotiate for Koppers' purchase of any remaining Liquid Pitch or Kosco Liquid Pitch on terms mutually agreeable to the parties.

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3. TRANSSHIPMENT SERVICES.

3.1 Services to be Provided by Koppers.

3.1.1 Transshipment Services. Koppers shall provide Transshipment Services such that Intalco may receive Liquid Pitch from the Portland Facility and transport Liquid Pitch to the Intalco Plant in accordance with the applicable Intalco Plant planning schedule. The parties shall mutually agree to the delivery program for Kosco Liquid Pitch for the applicable year, subject to modification from time to time by mutual agreement of the parties and confirmed in writing.

3.1.2 Maximum Through-Put. The maximum volume of Kosco Liquid Pitch and Liquid Pitch to be covered under this Agreement shall not exceed the annual requirements for the Intalco Plant. The current annual requirement for such smelter is approximately 24,000 Tons.

3.1.3 Management and Labor. Koppers shall provide for or contract for the provision of all management, supervision and labor needed to provide the Transshipment Services (including staff and professional support services), stevedoring services and equipment necessary to unload Kosco Liquid Pitch at the Discharge Terminal, all at its own cost and expense. Payment for Koppers' Transshipment Services shall be made by Intalco in accordance with Section 4.

3.1.4 Liens. Intalco Inventory shall, at all times, be the property of Intalco, and Koppers shall not take any action, or fail to take any action, which would cause Kosco Liquid Pitch or Liquid Pitch hereunder to be subject to any lien, charge or encumbrance during the performance of Transshipment Services. Koppers shall execute and deliver such documents as Intalco may reasonably request to preserve or protect its ownership interest in Kosco Liquid Pitch and Liquid Pitch.

3.1.5 Standard of Performance. Koppers shall perform its obligations hereunder in a safe, diligent, competent and efficient manner in accordance with standard practices in the industry and in compliance with all applicable federal, state and local laws, rules and regulations.

3.1.6 Information/Records. Koppers shall provide Intalco such information and shall maintain such records as Intalco reasonably may request concerning the Transshipment Services. Without limiting the foregoing, Koppers shall provide Intalco within five (5) business days following the end of each calendar month a year-to-date summary of all cargoes of Kosco Liquid Pitch received at the Discharge Terminal and stored at the Portland Facility, and a year-to-date summary of Liquid Pitch delivered to Transport. The difference between these two quantities shall equal the Intalco Inventory at the Portland Facility for the respective month-end. Koppers shall maintain true and complete records pertaining to all Liquid Pitch transshipped by it and its fees under this Agreement and shall permit Intalco and its agents reasonable access to audit such records.

3.1.7 Access. Intalco and its agents may visit at all reasonable times those portions of the Portland Facility used by Koppers in performing Transshipment Services hereunder upon forty eight (48) hours prior notice to Koppers; provided, that such visits shall not interfere with Koppers' business.

3.1.8 Stevedoring Reimbursement, Wharfage Fees and Demurrage. Koppers shall, at its cost, arrange for all stevedoring services on all vessels delivering Kosco Liquid Pitch at the Discharge Terminal. Such fees and charges are included in the Transshipment Fees. Koppers shall also reimburse Intalco for demurrage paid by Intalco due to failure by Koppers to: (i) receive and unload vessels within the time allowed subject to, and as defined in, the provisions of Appendix C; and (ii) to load Transport at a rate of not less than one Transport per hour.

3.2 Obligations of Intalco.

3.2.1 Ocean Transport. Intalco shall, at its cost, arrange all ocean transport related to delivering Kosco Liquid Pitch to the Discharge Terminal.

3.2.2 Coordination of Transshipment Services. Koppers shall receive Kosco Liquid Pitch in accordance with an arrival schedule mutually agreed upon between the parties, as such arrival schedule may be amended from time to time by mutual agreement by the parties and confirmed in writing. In the event a modification to the arrival schedule herein before defined is required, the party requesting modification shall provide the other with a minimum of thirty (30) days advance written notice of such request.

As of the date of this Agreement, the parties have agreed to optimize the logistics of vessels transporting liquid pitch to the Discharge Terminal by pooling Kosco Liquid Pitch with third parties and, unless otherwise agreed by Koppers and Intalco, Kosco Liquid Pitch and third party liquid pitch shall be delivered in accordance with an arrival schedule mutually acceptable and agreed to by both parties in writing.

3.2.3 Transport Arrangements. Intalco shall, at its cost, be responsible for arranging the transportation of Liquid Pitch from the Portland Facility to the Intalco Plant. Intalco acknowledges that the Portland Facility has limited storage capabilities and agrees to receive in Transport approximately two thousand (2,000) Tons Liquid Pitch per month to Transport, unless a variation in such monthly volume is mutually agreed upon by the parties. Koppers agrees to use its best efforts to load Transport at a rate of not less than one (1) Transport per hour.

4. CHARGES.

4.1 Transshipment Fee. Intalco shall pay Koppers a Transshipment Fee for performing Transshipment Services and all items included therein during the term of this Agreement as follows:

4.1.1 Year One (The period starting with the first delivery of Kosco Liquid Pitch to the Discharge Terminal through December 31, 2000): $29.50 per Ton;

4.1.2 Each Year Thereafter: $29.50, plus Koppers actual fuel and utilities costs per ton, plus Escalators capped at 3%.

4.1.3 Escalators:
- (i) United States CPI
- (ii) Koppers actual labor cost increases
- (iii) Koppers actual lease cost increases

5. BILLING AND PAYMENT.

5.1 Billing of Transshipment Fee. Promptly after loading each Transport, Koppers shall send Intalco a notice of delivery which shall include such pertinent information about each delivery as mutually agreed by Koppers and Intalco. Within five (5) business days of the end of each calendar month, Intalco shall send Koppers an advice of the amount due Koppers for Transshipment Fees calculated on the basis of the number of Tons of Liquid Pitch loaded on Transport during such calendar month.

5.2 True-Up of Quantities and Fees. Within thirty (30) calendar days following the termination of this Agreement, Koppers and Intalco shall true-up any difference between the quantity

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of Kosco Liquid Pitch delivered by Intalco and received by Koppers and the quantity of Liquid Pitch loaded on Transport. For purposes of such calculations, each Intalco vessel's Quantification Certificate shall govern as to the quantity of Kosco Liquid Pitch delivered by Intalco to Koppers and the Certified Scale Weights used to weigh the Transport shall govern as to the quantity of Liquid Pitch loaded on Transport. Any excess or deficiency shall be adjusted in accordance with Paragraph 2.3.

5.3 Billing Address. All applicable notices pursuant to this Section 5 shall be sent to the following address unless another address is specified by Intalco in writing and pursuant to the provisions of Section 12.4 of this Agreement:

Alcoa Primary Metals Division
2300 Riverview Tower
900 South Gay Street
Knoxville, TN 37902
Attention: Carbon Materials

5.4 Payment. Amounts due Koppers for Transshipment Fees calculated on the basis of the number of Tons of Liquid Pitch loaded on Transport during each calendar month shall be due and payable within thirty (30) days of the last day of such calendar month. All payments required to be made by Intalco pursuant to this Agreement shall be made in United States Dollars. Notwithstanding any payment made hereunder, Intalco shall not be deemed to have accepted any Liquid Pitch that is not in Specification.

6. WEIGHTS AND ADJUSTMENTS.

6.1 Intalco Representative. Intalco shall have the right to have a representative present at any and all times to observe the unloading of vessels and the determination of Transport weights by Koppers.

6.2 Weights. For purposes of determining the quantity of Liquid Pitch delivered and the Transshipment Fees payable to Koppers, the parties shall use the Intalco Plant scales unless other certified scales are mutually agreed to in writing.

6.2.1 Accuracy of Weights. The scales used to weigh Transport shall be calibrated and certified as accurate by the Washington Department of Weights and Measures at least once each Year. Any errors in these scales shall be corrected and the parties shall in good faith determine, to the extent possible, any appropriate adjustment to prior invoices for Transshipment Fees that can be established to have been in error.

6.3 Contamination of Kosco Liquid Pitch Delivered at the Port Facilities. Koppers shall immediately notify Intalco and its agents if Kosco Liquid Pitch in an Intalco vessel exhibits any contamination by moisture or other foreign material or fails to meet the specifications set forth in Appendix A-1 hereto. Koppers shall cooperate with Intalco and its agents with respect to any claim that may be made on the vessel owner.

6.4 Liquid Pitch Specification.

6.4.1 Sampling and Certification. Koppers shall sample Liquid Pitch and analyze such sample in accordance with Appendix B. A certified copy of the analysis shall be promptly sent to the Intalco Plant.

6.4.2 Warranty to Specifications. Koppers shall blend Kosco Liquid Pitch with other liquid pitch to meet the Liquid Pitch specification attached hereto as Appendix A-2 ("Specification"). Koppers shall warrant, as to each shipment, that said Liquid Pitch meets the Specification and Intalco may, in its sole discretion: (i) reject any Liquid Pitch delivery that fails to meet the Specification; (ii) obtain from Koppers replacement liquid pitch which meets the Specifications, with Koppers being obligated to provide such replacement liquid pitch within a reasonable time after Intalco provides written notice to Koppers that the Liquid Pitch provided to Intalco does not conform to the Specifications and that Intalco desires to obtain replacement liquid pitch or (iii) negotiate a reduction in the Transshipment Fee attributable to such off-Specification Liquid Pitch. In negotiating such reduction in the Transshipment Fee, the diminished value of such material and Intalco's cost of using such off-Specification Liquid Pitch in its manufacturing process shall be considered.

7. INDEMNIFICATION.

7.1 Indemnification. Each party agrees to indemnify and hold harmless the other party from and against any and all claims, demands, losses, costs (including reasonable attorneys' fees and legal costs), expenses, damages, suits, actions, proceedings, causes of action, obligations and liabilities of whatsoever character: (i) arising from or in connection with the indemnifying party's failure to perform any of its obligations under this Agreement; or (ii) due to injury to or death (whenever occurring) of persons, and loss or destruction of or damage to property (including loss of use) directly or indirectly arising from or connected with, or claimed to have arisen from or to have been connected with, any intentional misconduct or negligent act or omission of the indemnifying party or its employees, under or in connection with the performance of this Agreement. Without limiting the generality of the foregoing, the indemnifying party agrees, at the other party's request, to defend any such claim, demand or the like brought against the other party based on any such failure, injury, death, or loss, including attorneys' fees, in connection with such defense, provided that the other party gives the indemnifying party prompt notice of the nature of such claim or demand and provides such assistance, at the indemnifying party's expense, in connection therewith as the indemnifying party reasonably may request. The obligations hereunder shall survive the termination of this Agreement.

7.2 Consequential Damages and Lost Profits. Neither party hereto shall be responsible to the other party for any indirect, incidental, consequential or punitive damages resulting from or connected with its performance under this Agreement, except that this Paragraph shall not be deemed to limit in any way amounts recoverable under any insurance provided under Section 8 and this limitation on damages shall not apply if it is determined by judicial process that the responsible party acted willfully or was grossly negligent.

8. INSURANCE.

Koppers will, during the progress of the Transshipment Services, maintain and, prior to starting the Transshipment Services, provide Intalco with written certification of:

(1) Worker's Compensation Insurance to satisfy the laws of the state in which the Transshipment Services are being done. This policy will include a Longshore and Harbor Workers' Compensation Act Coverage Endorsement. Koppers' Worker's Compensation Insurer agrees to waive rights of subrogation against Intalco except for claims caused by Intalco's sole negligence;

(2) Employers' Liability Insurance for Bodily Injury per accident with limits of not less than $5,000,000 and Bodily Injury by Disease with limits of not less than $5,000,000 per policy;

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(3) Commercial General Liability Insurance for personal injury and property damage, including contractual liability insurance, with combined limits of not less than $5,000,000 per occurrence;

(4) Terminal Operators/Wharfingers, Stevedores and Pollution Liability ,including contractor liability insurance, with limits of not less than $5,000,000 per occurrence.

Koppers agrees and will certify to Intalco that prior to starting the Transshipment Services and during the progress of the Transshipment Services that Intalco will be an additional insured on Koppers' Commercial General Liability and Terminal Operators/Wharfingers, Stevedores and Pollution Liability Insurance policies, and that all Koppers' insurance identified above will specifically indicate that, except with respect to liabilities arising out of the activities of Intalco, coverage will be primary without right of contribution of any other insurance carried by or on behalf of Intalco. All of the above mentioned Koppers insurance will be occurrence-based coverages. Any insurance deductible shall be paid by Koppers and is not a reimbursable expense under this Agreement.

9. STATUS OF THE PARTIES. Each party shall perform its obligations hereunder at its own risk as an independent contractor. Neither party is an agent of the other and shall not incur any liability in the name of or on behalf of the other party or any affiliate thereof.

10. REPRESENTATIONS AND WARRANTIES OF THE PARTIES.

10.1 Representations and Warranties of Koppers. Koppers represents and warrants to Intalco as follows:

10.1.1 Koppers has full right and authority and capability to enter into and perform this Agreement.

10.1.2 All third party or governmental consents or approvals necessary for Koppers to perform its obligations hereunder have been obtained.

10.1.3 Koppers is not a party to any agreement, contract or understanding that would prevent or impair it from carrying out its obligations hereunder or that would impair or interfere with Intalco's ownership of Kosco Liquid Pitch or Liquid Pitch in Koppers' possession.

10.2 Representations and Warranties of Intalco. Intlaco represents and warrants that it has full right and authority to enter into and perform this Agreement, that no third party or governmental consents or approvals are necessary for Intalco to perform its obligations hereunder; and, that Intalco is not a party to any agreement, contract or understanding that would prevent or impair it from carrying out its obligations hereunder.

10.3 Further Actions. Both parties covenant to take all such actions that shall be necessary to cause such representations to remain true at all times during the term hereof. Both parties agree to provide, at the written request of the other party, satisfactory evidence of the veracity of any of the foregoing representations at any time during the term hereof. Without limiting the foregoing, Koppers agrees to execute and deliver such documents as Intalco may require to perfect its ownership of Kosco Liquid Pitch and Liquid Pitch while it is under the control of or in the possession of Koppers.

11. FORCE MAJEURE.

11.1 Excuse From Performance. Neither Intalco nor Koppers shall be responsible for damages caused by delay or failure to perform, in whole or in part, its obligations hereunder if such delay or failure is attributable to Force Majeure.

11.2 Definition of Force Majeure. Force Majeure shall be any cause which is beyond the reasonable control of the party claiming Force Majeure that prevents its performance in whole or in part, including without limitation, acts of God, acts of Government, earthquakes, floods, storms, strikes, (including strikes of the employee of the parties hereto), lockouts, fires, riots, interference by civil or military authorities, or the outbreak of war or insurgence, or acts of war (declared or undeclared), a loss of electric power or any other cause whether or not similar to the causes or occurrences enumerated above.

11.3 Notice to Other Party. The party seeking the benefit of this Section 11 shall give prompt written notice to the other party of any event of Force Majeure and shall take all reasonable steps to restore performance under this Agreement; provided that such party shall not be required to settle any labor dispute which it in its sole discretion deems not to be in its best interest.

11.4 Relief from Performance. Koppers and Intalco shall be relieved from liability for failure to perform hereunder for the time and to the extent such failure is occasioned by an event of Force Majeure.

11.5 Extension of Agreement. The parties shall meet and determine whether to extend the agreement for a period equal to the duration of the Force Majeure or to terminate the Agreement as to the Transshipment Services that could not be performed during the period of impairment.

12. MISCELLANEOUS.

12.1 Amendment. This Agreement shall not be amended except by a writing duly executed by Koppers and Intalco.

12.2 Entire Agreement. For purposes herein, the term "Agreement" shall include this Agreement and the Schedules, Appendices and other documents attached hereto or expressly incorporated by reference herein, each of which shall be incorporated herein for all purposes by this reference. This Agreement contains all of the terms and conditions agreed upon by the parties relating to the contemporaneous agreement, negotiations, correspondence, undertakings and communications of the parties, oral or written, respecting the subject matter hereof.

12.3 Governing Law. This Agreement shall be governed by, and construed in accordance with the laws of the Commonwealth of Pennsylvania, excepting only the laws of such state governing the choice of laws or the conflict of laws.

12.4 Notices. All notices, requests, demands and other communications made in connection with this Agreement shall be in writing and shall be deemed to have been duly given on the date of delivery, if delivered to the person identified below, or sent by facsimile with confirming copy sent by mail, or three days after mailing if mailed by certified or registered mail, postage prepaid, return receipt requested, or if sent by receipted private delivery service, addressed to the respective parties as follows:

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If to Koppers:

Koppers Industries, Inc.
Carbon Materials and Chemical Division
436 Seventh Avenue
Pittsburgh, Pennsylvania 15219-1800
Attention: Vice President and General Manager
Phone: (412) 227-2288
Facsimile: (412) 227-2207

With copy to:

Koppers Industries, Inc.
436 Seventh Avenue
Pittsburgh, Pennsylvania 15219-1800
Attention: Vice President, Secretary
Phone: (412) 227-2456
Facsimile: (412) 227-2333

If to Intalco:

Alcoa Primary Metals Division
2300 Riverview Tower
900 South Gay Street
Knoxville, TN 37902
Attention: Carbon Materials

Such persons and addresses may be changed, from time to time, by means of a written notice given in the manner provided in this Section.

12.5 Severability. If any provision of this Agreement is held to be unenforceable for any reason, it shall be adjusted rather than avoided, if possible, in order to achieve the intent of the parties to this Agreement to the full extent possible. In any event, all other provisions of this Agreement shall be deemed valid and enforceable to the full extent possible.

12.6 Construction. No provision of this Agreement shall be construed more strictly against any party on the grounds that the party or its counsel drafted this provision. The headings and captions contained herein are for the convenience of the parties and shall not be deemed to govern the substantive rights and duties of the parties. In the event of a conflict between this Agreement and any provision in any of the Appendices or Schedules made a part of this Agreement, the provisions of the Agreement shall govern.

12.7 Waiver. No waiver of any term or condition contained in this Agreement shall be effective unless it is signed by the party claimed to be bound by the waiver. The waiver of any term or condition of this Agreement by any party shall not be construed as a waiver of any subsequent breach or failure of the same term or condition, or a waiver of any other term or condition of this Agreement.

12.8 Survival of Representations and Warranties. All representations and warranties contained in this Agreement, or in the Appendices or Schedules attached hereto or other documents delivered pursuant to this Agreement, shall survive the termination of this Agreement. The obligations and rights of Koppers and Intalco set forth herein shall survive termination of this Agreement, to the extent applicable, if upon termination any Kosco Liquid Pitch or Liquid Pitch remains stored at the Portland Facility until Koppers transships any remaining Kosco Liquid Pitch or Liquid Pitch, or as otherwise provided under Paragraph 2.3.

12.9 Assignment. This Agreement shall not be assigned without the prior written consent of the other party, which consent shall not be unreasonably withheld.

12.10 Licenses. Each party shall be responsible for obtaining all licenses and any other government approvals and authorizations required for such party in connection with the transactions contemplated here and for all costs associated therewith. The parties agree to cooperate with each other in obtaining such licenses and approvals to the extent reasonably possible.

12.11 Good Faith Cooperation and Additional Documents. Koppers shall use its best good faith efforts to fulfill all of the conditions set forth in this Agreement over which it has control or influence. Likewise, Intalco shall use its best good faith efforts to fulfill all of the conditions set forth in this Agreement over which it has control or influence.

12.12 Taxes. Koppers will bear and pay all applicable taxes of the United States and any other country, including any political subdivision of any of them, if the tax is based on or measured by gross receipts or net income, or payment of which is required to maintain a legal existence or a general right to transact business within the taxing jurisdiction.

Intalco agrees to pay all value added tax and sales and use tax (including any gross receipts tax imposed similar to a sales and use tax) imposed by any foreign, national, state or local taxing authority on the ultimate purchase price of all Transshipment Services provided under this Agreement. If Koppers is required to collect such value added tax or sales and use tax on behalf of any taxing jurisdiction, Koppers shall provide to Intalco invoices which separately state and clearly indicate the amount of tax, and Intalco shall remit any such tax to Koppers. Notwithstanding whether Koppers must collect value added tax or sales and use tax from Intalco, Koppers shall state on every invoice the taxing jurisdiction (e.g. country, state and local jurisdiction) in which the Transshipment Services invoiced, or allocated portion thereof, were provided. If applicable, in lieu of payment for any sales and use tax, Koppers shall accept a properly executed exemption or direct pay certificate from Intalco.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the date first set forth above.

INTALCO ALUMINUM CORPORATION	KOPPERS INDUSTRIES, INC.
By Louis A Hartley	By Kenneth J Fitzgerald
Title Vice President, Purchasing	Title Vice President and General Manager Carbon Materials and Chemicals Division

Koppers005006

Appendix A-1

KOSCO LIQUID PITCH SPECIFICATIONS AND TESTING PROCEDURES

Application: Used as binder for carbon anodes

Physical and Chemical Properties:

CHARACTERISTIC	TEST METHOD	TARGET	SPECIFICATIONS
Softening Point °C	ASTM-D-3104	108-109	110 ±2
Quinoline Insoluble wt%	ASTM-D-2318	10-12	10 ±2
Toluene Insoluble wt%	ASTM-D-4072	—	Min. 28
Coking Value	ASTM-D-2416 Conradson	—	Min. 55
Specific Gravity 25°C	ASTM-D-2320	—	Min. 1.31
Distillation @ 360°C wt%	ASTM-D-2569	Max. 2.0	Max. 3.0
Ash wt%	ASTM-D-2415	—	Max. 0.3
Sodium ppm	Atomic Absorption	Max. 120	Max. 220

Any mesophase content of the total quinoline insolubles shall not exceed 2.0% and have a maximum micron size of 10.

APPENDIX A-2

LIQUID PITCH SPECIFICATIONS AND TESTING PROCEDURES

Application: Used as binder for carbon anodes

Physical and Chemical Properties:

CHARACTERISTIC	TEST METHOD	TARGET	SPECIFICATIONS
Softening Point °C	ASTM-D-3104	110	110 ±2
Quinoline Insoluble wt%	ASTM-D-2318	10	10 ±2
Toluene Insoluble wt%	ASTM-D-4072	28 ±2	Min. 26
Beta Resins	%TI - %QI	15	Min. 14
Coking Value	ASTM-D-2416 Conradson	56 ±2	Min. 54
Specific Gravity 25°C	ASTM-D-2320 or D-71	1.32 ±0.01	Min. 1.31
Distillation @ 360°C wt%	ASTM-D-2569	3.0 ±1	Max. 5.0
Water wt%	ASTM-D-95	Traces	Max. 0.2
Sulfur wt%	ASTM-D-3177 or D-4239	0.4-0.5	Max. 0.6
Ash wt%	ASTM-D-2415	0.30 ±0.05	Max. 0.35
Calcium ppm	Atomic Absorption	70 ±30	Max. 100
Sodium ppm	Atomic Absorption	170 ±30	Max. 200
Lead ppm	X-ray fluorescence	Minimum	Max. 105
Atomic C/H Ratio	Alcan Q.I.	4	Min. 3.50
Viscosity Centipoise	Brookfield	2,300 at 160°C	3,000 Max. at 160°C
			20,000 Max. at 140°C

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APPENDIX B

SAMPLING AND ANALYSIS PROCEDURES

Liquid Pitch Sampling

Each Transport shipment of Liquid Pitch shall be sampled at the time of loading and such sample shall be retained by Koppers for six (6) months. The Transport is tandem, therefore one (1) softening point test is run which is reported for both loads. One (1) sample per day of Liquid Pitch delivered to Transport shall be sent to the Intalco Plant for its analysis.

Each week Koppers shall tabulate the chemical and physical properties, according to the Specifications of Appendix A-2 (except metals, carbon/hydrogen ratio, and viscosity), of deliveries to Transport in the previous week ("Weekly Analysis Report"). Immediately upon completion, Koppers shall send such Weekly Analysis Report to the Intalco Plant by facsimile or such other means acceptable to the Intalco Plant.

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At the end of each calendar month, a tabulation of the last twenty-five (25) batches of Liquid Pitch delivered to Transport shall be sent to the Intalco Plant. The performance of the critical variables of softening point, ash, and quinoline insolubles (QI) shall be graphed. A monthly composite of all batches sampled during such calendar month shall be sent to the Koppers Harmarville Research Center to be analyzed for metals, carbon/hydrogen, ratio, and viscosity. The results of the Harmarville analysis shall be promptly sent to the Intalco Plant.

APPENDIX C

DISCHARGE CONDITIONS

1. Estimated Time of Arrival ("ETA") at Discharge Terminal. Immediately upon the Intalco vessel's sailing from the load port, Intalco will instruct the vessel to give written notice to Koppers and Intalco's agent at the Discharge Terminal of (i) the date and time of departure from the load port, (ii) quantity of Kosco Liquid Pitch loaded as per the Quantification Certificate and (iii) the ETA at the Discharge Terminal. Thereafter, Intalco will instruct the vessel to give Koppers five (5) written notices of the ETA at the Discharge Terminal. The first such notice will be given ten (10) days prior to the ETA, together with estimated arrival draft at Discharge Terminal in feet in saltwater / fresh / brackish basis. The second notice will be given seven (7) days prior to the ETA. The third notice will be given three (3) days prior to the ETA, the fourth notice will be given forty-eight (48) hours prior to the ETA and the fifth notice will be given twenty-four (24) hours prior to the ETA. Such notices will be given to:

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Koppers Industries Inc.	Olympic Steamship Company Inc.
7540 N.W. Saint Helens Road	8220 South 212th Street
Portland, Oregon 97210-3663	Kent, Washington 98032 U.S.A.
Attn: ~~Ames Kamerer~~	Attn: Mr. Mark Bentzen
Telephone: (503) 286-3681	Telephone: (206) 872-7223
Facsimile: (503) 285-2831	Facsimile: (206) 396-3291

2. Notice of Readiness ("NOR"). NOR to discharge may be tendered in free pratique at any time in or out of office hours, after the Intalco vessel has arrived at the Discharge Terminal and is in every respect ready to discharge, whether in berth or not. If the Discharge Terminal is available upon the Intalco vessel's arrival, NOR will be tendered after the Intalco vessel has berthed and is all fast. If the Discharge Terminal is not available upon arrival and quarantine is only available after berthing, NOR may be tendered when the Intalco vessel has anchored at a position within or near the Discharge Terminal where waiting vessels usually lie and where the Intalco vessel is placed at the effective disposition of Koppers. If quarantine inspection is available only after berthing, then NOR may be tendered as above, without free pratique, provided that time lost in obtaining free pratique will not count as laytime or demurrage even if the Intalco vessel is already on demurrage, unless quarantine inspection is conducted during discharge.

3. Discharge. Intalco vessels will deliver Kosco Liquid Pitch as designated by Intalco in accordance with the following:

3.1. Kosco Liquid Pitch will be loaded at a temperature of not less than one hundred eighty degrees Celsius (180°C) and not more than two hundred and forty degrees Celsius (240°C). The Intalco vessel is equipped to maintain Kosco Liquid Pitch at the loaded temperature until completion of delivery at the shoreside manifold at the Discharge Terminal. The Intalco vessel is not obliged to increase or decrease the Kosco Liquid Pitch temperature during the voyage unless instructed by Intalco. If so instructed, the Intalco vessel will act accordingly;

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3.2. The Intalco vessel's gantry cranes will be positioned so as not to interfere in any way with discharging operations. Any interruption or loss of time caused as a result of failure to do so will not count as laytime or demurrage even if the Intalco vessel is already on demurrage;

3.3. The Intalco vessel will keep and maintain tight mooring lines at all times during discharging operations. Any interruption or loss of time caused as a result of slack mooring lines will not count as laytime or demurrage even if the Intalco vessel is already on demurrage;

3.4. All pitch tanks and permanent manifolds will be freely accessible to discharge hoses including all lifting and rigging equipment;

3.5. Any time lost as a result of the Intalco vessel's inability to ballast or deballast will not count as laytime nor as demurrage even if the Intalco vessel is already on demurrage;

3.6. All required hoses used for discharging of Kosco Liquid Pitch shall be supplied by Koppers at Koppers' risk, time and expense. The Intalco vessel shall be discharged by hose;

3.7. The Intalco vessel, at its risk, time and expense, including such risk, time and expense assumed by the Intalco vessel, shall discharge Kosco Liquid Pitch to shoreside manifold at the Discharge Terminal as per the Intalco vessel's rated capacity under the supervision of the Master;

3.8. The Intalco vessel's crew will connect and disconnect the hoses for discharge at the Intalco vessel's manifold free of risk, time and expense to Koppers before and after discharge operations and during the course of such operations as may be required for shifting, by weather or by environmental conditions, unless applicable local union regulations require that such connecting and disconnecting of hoses at the Intalco vessel's manifold be performed by shoreside labor, in which case it will be free of risk, time and expense to the Intalco vessel. Time used to connect and disconnect the discharge hoses at the Intalco vessel's manifold will count as laytime used;

3.9. If shifting of the Intalco vessel alongside the berth is required, the Intalco vessel will permit for this purpose, the use of its engines, winches and other essential gear, and will provide the necessary power and assistance free of expense to Koppers. If failure on the part of the Intalco vessel to perform these functions results in loss of loading or discharging time, such time will not count as laytime used or demurrage even if the Intalco vessel is already on demurrage;

3.10. The Intalco vessel's jib crane will be operated in a manner so as not to compromise the connection between the hose and the shoreside manifold. Jib cranes will be in good working order with the necessary power and winch men from the Intalco vessel's crew to drive them. If shore regulations do not allow the Intalco vessel's crew to work at the winches, then shore winch men will be employed which risk, time and expense shall be for Koppers' account. The Intalco vessel will also supply free use of light as on board, day or night, if required during discharging;

3.11. The Intalco vessel's liquid pitch tanks shall be emptied to the extent possible by Koppers at the Discharge Terminal. Cleaning, if required by the Intalco vessel, will be performed by such vessel's crew at its risk, time and expense. Disposition of any remaining liquid pitch must be in compliance with any and all federal, state and local laws, rules and regulations and at the Intalco vessel's risk, time and expense;

3.12. Koppers and/or Koppers' stevedores shall be responsible for any damage caused by any act of neglect, omission or default of stevedores or Koppers employees at the Discharge Terminal. The Master of the Intalco vessel will immediately notify the stevedores as well as Koppers and Intalco, in writing, of any such damage. Such notice will be given in sufficient time prior to the Intalco vessel's departure to permit the stevedores to properly survey and investigate the damage, taking appropriate action to complete any repairs deemed necessary. In the absence of such notice, no damage will be deemed to have occurred. Time reasonably required to complete repair of such damage will count as laytime.

4. Laytime. Laytime for discharging will commence twelve (12) hours after NOR is properly tendered at the Discharge Terminal, whether in berth or not, or upon commencement of discharge, whichever occurs first. Except for stop work union meetings and officially recognized union holidays applicable to the Discharge Terminal, Koppers will be allowed laytime for discharging at an average flow rate of three hundred (300) Tons per running hour per weather working day of twenty-four (24) consecutive hours, Sundays and holidays excluded unless used (SHEXUU). Discharge of Kosco Liquid Pitch will be deemed complete and laytime will cease at such time as the liquid pitch unloading hose is disconnected from the Intalco vessel. Time lost while waiting for the Discharge Terminal shall count as laytime. Time used in shifting from anchorage to berth and obtaining free pratique at the Discharge Terminal will not count as laytime used or demurrage even if the Intalco vessel is already on demurrage. Such shifting time is defined to be that time from weighing anchor to all fast at the Discharge Terminal. Time actually used before commencement of laytime shall count as laytime used. Upon completion of loading and discharge, Intalco's agent at the Discharge Terminal will provide a Statement of Facts ("SOF") signed by the Master, Intalco and Koppers. Such SOF shall be conclusive evidence of the details relating to the discharge of the Intalco vessel and shall be used for the calculation of laytime between Intalco and Koppers. For purposes of calculating laytime only, time lost by reason of a Force Majeure Event, will not count as laytime used in discharging unless any Kosco Liquid Pitch is actually discharged during such time. Furthermore, such time will not count as laytime used nor demurrage even if the Intalco vessel is already on demurrage. Time lost during normal local union rule stoppages will not count as laytime or demurrage.

Demurrage, if any, at the Discharge Terminal shall be paid by Koppers to Intalco at the rate of U.S. $16,000 per day, pro rata for any portion of a day, for all time used in excess of laytime allowed. Payment of any such demurrage by Koppers to Intalco shall be made in accordance with Paragraph 5.4 of the Agreement.

Despatch, if any, at the Discharge Terminal shall be paid by Intalco to Koppers at the rate of U.S. $8,000 per day, pro rata for any portion of a day, for all laytime saved.

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