UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V
HAZARDOUS WASTE MANAGEMENT PERMIT

Name of Permittee: General Motors Corporation (GMC) Inland Division

Facility Location: 2701 Home Avenue Dayton, Ohio

EPA Identification Number: OHD000817023

Effective Date: Date of issuance

Expiration Date: 10 years after effective date

Authorized Activities

In reference to GMC's application for a hazardous waste management permit under the Solid Waste Disposal Act, Subtitle C, as amended (42 U.S.C., Section 6901, et seq., commonly known as the Resource Conservation and Recovery Act or RCRA) and the administrative record, you are authorized to conduct at the above-named facility the following hazardous waste management activities:

X Storage	Treatment	Disposal
X Container	Tank	Injection Well
X Tank	Surface Impoundment	Landfill
Waste Pile	Incinerator	Land Application
Surface Impoundment	Other	Surface Impoundment

Applicable Regulations:

The conditions of this permit were developed in accordance with the applicable provisions of 40 CFR Part:

X 270	X 264, Subpart G	264, Subpart K
X 261	X 264, Subpart H	264, Subpart L
X 262	X 264, Subpart I	264, Subpart O
X 264, Subpart A-E	X 264. Subpart J	

and are effective on the date of issuance of this decision. You must operate in accordance with the terms and conditions of this permit which are Attachments I through VII, attached hereto and made a part hereof.

Permit Approval:

This permit approval is based upon the administrative record which is maintained at the United States Environmental Protection Agency (U.S. EPA) Region V Office.

Issued this 23rd day of September, 1983

by Basil G. Constantelos
Basil G. Constantelos, Director
Waste Management Division

STATEMENT OF BASIS

Inland Division of General Motors Corporation
OHD 000-817-013

On May 19, 1980, (40 CFR FR 33066) pursuant to the requirements of Section 3001 through 3006 of the Resource Conservation and Recovery Act, as amended, (RCRA of the Act), the United States Environmental Protection Agency (U.S. EPA) promulgated regulations to protect human health and the environment from the improper management of hazardous waste. Section 3005 of the Act and Code of Federal Regulations, 40 CFR Parts 270 and 124, establish a permit system governing the storage of hazardous wastes. Final regulations for storage facilities appeared in the Federal Register on January 12, 1981. These regulations enable U.S. EPA to issue permits for hazardous waste storage facilities in the State of Ohio which has yet to receive authorization to administer and enforce such permitting activities in lieu of the Federal program under Section 3006 of the Act. A facility which receives a RCRA permit shall comply with U.S. EPA regulations pertaining to design, operation, performance, accident prevention and preparedness, closure and financial responsibility. This Statement of Basis briefly describes the derivation of conditions of the draft permit in support of U.S. EPA's proposal to issue a RCRA permit of GMC, Inland Division, 2701 Home Avenue, Dayton, Ohio to store hazardous wastes.

On July 12,1983, GMC, Inland submitted its revised and complete application for a RCRA permit in accordance with 40 CFR Section 122.25. To receive a RCRA permit, a facility shall demonstrate compliance with applicable technical standards in 40 CFR 264 published on May 19, 1980, (45 FR 33221) and January 12, 1981, (46 FR 2848), as well as financial requirements published on April 7, 1982, (47 FR 15047) and April 16, 1982, (47 FR 16554). After reviewing GMC, Inland's application, U.S. EPA has tentatively determined that the above standards and requirements have been met. The draft permit conditions include all of these requirements. The preambles to the May 19, 1980, and January 12, 1981, regulations explain the rational for these requirements.

Also incorporated in the draft conditions are requirements for the facility to comply with the terms of its proposed Waste Analysis Plan, Preparedness and Prevention Plan, Personnel Training Plan, and Closure Plan. These terms have been determined by U.S. EPA as necessary to comply with the technical standards governing the treatment and storage of hazardous wastes.

Permittee

I.D. Number OHD 000 817 013
Permit Number

Inland Division of General
Motor Corporation
2701 Home Avenue
Dayton, Ohio 45401

Pursuant to the Solid Waste Disposal Act, as a amended by the Resource Conservation and Recovery Act of 1976, as amended (42 USC §6901 et seq., commonly known as RCRA) and regulations promulgated thereunder by the U.S. Environmental Protection Agency (EPA) (codified and to be codified in Title 40 of the Code of Federal Regulations), a permit is issued to GMC, Inland Division (hereafter called the Permittee), to operate a hazardous waste storage facility located in Dayton, Ohio, on 2701 Home Avenue, at latitude 39° 45' 00" N and longtitude 84° 14' 20" W.

The Permittee must comply with all terms and conditions of this permit. This permit consists of the conditions contained herein (including those in any attachments) and the applicable regulations contained in 40 CFR Parts 260 through 264 and 270 and 124 as specified in the permit. Applicable regulations are those which are in effect on the date of issuance of this permit. (See 40 CFR §270.32(b)).

This permit is bassed on the assumption that the information submitted in the permit application attached to the Permittee's letter dated September 28, 1982, as modified by subsequent amendments dated January 13, 1983 and July 12, 1983 (hereafter referred to as the application) is accurate and that the facility will be constructed and operated as specified in the application. Any inaccuracies found in this information may be grounds for the termination or modification of this permit (See 40 CFR §270.41, §270.42 and §270.43) and potential enforcement action. The Permittee must inform EPA of any deviation from or changes in the information in the application which would affect the Permittee's ability to comply with the applicable regulations or permit conditions.

This permit is effective as of
, and shall remain in effect until
, unless revoked and reissued, or terminated (40 CFR §270.41 and .43) or continued in accordance with §270.51.

TABLE OF CONTENTS

	Page
Table of Contents	i
Attachments	
I. Permit Conditions	
Standard Conditions	1
General Facility Conditions	7
Storage in Containers	11
Storage in Tanks	13
II. Waste Analysis Plan	
III. Inspection Plan	
IV. Personnel Training Plan	
V. Contingency Plan	
VI. Closure Plan	
VII. Description of Wastes	

ATTACHMENT I

PERMIT CONDITIONS

I. STANDARD CONDITIONS

A. EFFECT OF PERMIT

The Permittee is allowed to store hazardous waste in accordance with the conditions of this permit. Any storage of hazardous waste not authorized in this permit is prohibited. Compliance with this permit constitutes compliance, for purposes of enforcement, with Subtitle C of RCRA. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local laws or regulations. Compliance with the terms of this permit does not constitute a defense to any order issued or any action brought under Section 3013 or Section 7003 of RCRA, Section 106(a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (42 U.S.C. 9606 (a), commonly known as CERCLA), or any other law providing for protection of public health or the environment.

B. PERMIT ACTIONS

This permit may be modified, revoked and reissued, or terminated for cause as specified in 40 CFR 270.41, 270.42, and 270.43. The filing of a request for a permit modification, revocation and reissuance, or termination or the notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any permit condition.

C. SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

D. DUTIES AND REQUIREMENTS

1. Duty to Comply. The Permittee shall comply with all conditions of this permit, except to the extent and for the duration such noncompliance is authorized by an emergency permit. Any permit noncompliance, other than non-compliance authorized by an emergency permit, constitutes a violation of RCRA and is grounds for enforcement action, permit termination, revocation and reissuance, modification, or denial of a permit renewal application.

2. Duty to Reapply. If the Permittee wishes to continue an activity allowed by this permit after the expiration date of this permit, the Permittee shall submit a complete application for a new permit at least 180 days before this permit expires.

3. Permit Expiration. This permit and all conditions herein will remain in effect beyond the permit's expiration date if the Permittee has submitted a timely, complete application (see 40 CFR 270.13 - 270.16) and through no fault of the Permittee the Regional Administrator has not issued a new permit as set forth in 40 CFR 270.51.

4. Need to Halt or Reduce Activity Not a Defense. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

5. Duty to Mitigate. The Permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.

6. Proper Operation and Maintenance. The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facility or similar systems only when necessary to achieve compliance with the conditions of the permit.

7. Duty to Provide Information. The Permittee shall furnish to the Regional Administrator, within a reasonable time, any relevant information which the Regional Administrator may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Regional Administrator, upon request, copies of records required to be kept by this permit.

8. Inspection and Entry. The Permittee shall allow the Regional Administrator, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to:

   (a) Enter at reasonable times upon the Permittee's premises where a regulated activity is located or conducted, or where records must be kept under the conditions of this permit;

(b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

(d) Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by RCRA, any substances or parameters at any location.

9. Monitoring and Records.

(a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste to be analyzed must be the appropriate method from Appendix I of 40 CFR Part 261. Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods SW-846, June 1982; Standard Methods for the Examination of Water and Wastewater, 1980; or an equivalent method as specified in the attached Waste Analysis Plan, Attachment II.

(b) The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports and records required by this permit, and records of all data used to complete the application for this permit for a period of at least 3 years from the date of the sample, measurement, report or record. These periods may be extended by request of the Regional Administrator at any time and are automatically extended during the course of any unresolved enforcement action regarding this facility.

(c) Records of monitoring information shall specify:

(i) The dates, exact place, and times of sampling or measurements;

(ii) The individuals who performed the sampling or measurements;

(iii) The dates analyses were performed;

(iv) The individuals who performed the analyses;

(v) The analytical techniques or methods used; and

(vi) The results of such analyses.

10. Reporting Planned Changes. The Permittee shall give notice to the Regional Administrator as soon as possible of any planned physical alterations or additions to the permitted facility.

11. Certification of Construction or Modification. The Permittee may not commence storage of hazardous waste at modified or newly constructed storage areas at the facility until:

(a) The Permittee has submitted to the Regional Administrator by certified mail or hand delivery a letter signed by the Permittee and a registered professional engineer stating that the storage area(s) has (have) been constructed or modified in compliance with the permit; and

(b) (i) The Regional Administrator has inspected the modified or newly constructed storage area(s) and finds it (them) is in compliance with the conditions of the permit; or

(ii) The Regional Administrator has either waived the inspection or has not within 15 days notified the Permittee of his or her intent to inspect.

12. Anticipated Noncompliance. The Permittee shall give advance notice to the Regional Administrator of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

13. Transfer of Permits. This permit may be transferred to a new owner or operator only if it is modified or revoked and reissued pursuant to 40 CFR 270.41(b)(2) or 270.42(d). Before transferring ownership or operation of the facility during its operating life, the Permittee shall notify the new owner or operator in writing of the requirements of 40 CFR Parts 264 and 270.

14. Compliance Schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

15. Twenty-four Hour Reporting. The Permittee shall report to the Regional Administrator any noncompliance with the permit which may endanger health or the environment. Any such information shall be reported orally within 24 hours from the time the Permittee becomes aware of the circumstances. This report shall include the following:

(a) Information concerning the release of any hazardous waste which may endanger public drinking water supplies.

(b) Information concerning the release or discharge of any hazardous waste, or of a fire or explosion at the facility, which could threaten the environment or human health outside the facility. The description of the occurrence and its cause shall include:

(i) Name, address, and telephone number of the owner or operator;

(ii) Name, address, and telephone number of the facility;

(iii) Date, time, and type of incident;

(iv) Name and quantity of materials involved;

(v) The extent of injuries, if any;

(vi) An assessment of actual or potential hazard to the environment and human health outside the facility, where this is applicable; and

(vii) Estimated quantity and disposition of recovered material that resulted from the incident.

A written submission shall also be provided within 5 days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the periods of noncompliance (including exact dates and times); whether the noncompliance has been corrected; and if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The Permittee need not comply with the five day written notice requirement if the Regional Administrator waives the requirement and the Permittee submits a written report within fifteen days of the time the Permittee becomes aware of the circumstances.

16. Other Noncompliance. The Permittee shall report all other instances of noncompliance not otherwise required to be reported above, at the time monitoring reports, as required by this permit, are submitted. The reports shall contain the information listed in condition I.D.15.

17. Other Information. Whenever the Permittee becomes aware that he failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Regional Administrator, the Permittee shall promptly submit such facts or information.

E. Signatory Requirement. All reports or other information requested by the Regional Administrator shall be signed and certified as required by 40 CFR 270.11.

F. Confidential Information. The Permittee may claim confidential any information required to be submitted by this permit in accordance with 40 CFR 270.12.

G. Documents To Be Maintained at Facility Site. The Permittee shall maintain at the facility, until closure is completed and certified by an independent registered professional engineer, the following documents and amendments, revisions and modifications to these documents:

(1) Waste analysis plan as required by 40 CFR 264.13 and this permit.

(2) Personnel training documents and records as required by 40 CFR 264.16(d) and this permit.

(3) Contingency plan as required by 40 CFR 264.53(a) and this permit.

(4) Closure plan as required by 40 CFR 264.112(a) and this permit.

(5) Cost estimate for facility closure as required by 40 CFR 264.142(d) and this permit.

(6) Operating record as required by 40 CFR 264.73 and this permit.

(7) Inspection schedules as required by 40 CFR 264.15(b) and this permit.

II. GENERAL FACILITY CONDITIONS

A. Design and Operation of Facility. The Permittee shall maintain and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste constituents to air, soil, or surface water which could treaten human health or the environment.

B. Required Notice.

(1) The Permittee shall notify the Regional Administrator in writing at least four weeks in advance of the date the permittee expects to receive hazardous waste from a foreign source. Notice of subsequent shipments of the same waste from the same foreign source in the same calendar year is not required.

(2) When the Permittee is to receive hazardous waste from an off-site source (except where the Permittee is also the generator), he must inform the generator in writing that he has the appropriate permits for, and will accept, the waste the generator is shipping. The Permittee must keep a copy of this written notice as part of the operating record. (See Condition II.K.1).

C. General Waste Analysis. The Permittee shall follow the procedures described in the attached waste analysis plan, Attachment II.

D. Security. The Permittee shall comply with the security provisions of 40 CFR 264.14(b) and (c).

E. General Inspection Requirements. The Permittee shall follow the inspection schedule, Attachment III. The Permittee shall remedy any deterioration or malfunction discovered by an inspection as required by 40 CFR 264.15(c). Records of inspections shall be kept as required by 40 CFR 264.15(d).

F. Personnel Training. The Permittee shall conduct personnel training as required by 40 CFR 264.16. This training program shall follow the attached outline, Attachment IV. The Permittee shall maintain training documents and records as required by 40 CFR 264.16(d) and (e).

G. General Requirements for Ignitable, Reactive, or Incompatible Waste. The Permittee shall comply with the requirements of 40 CFR 264.17(a).

H. Preparedness and Prevention

1. Required Equipment. At a minimum, the Permittee shall equip the facility with the equipment set forth in the contingency plan, Attachment V, as required by 40 CFR 264.32.

2. Testing and Maintenance of Equipment. The Permittee shall test and maintain the equipment specified in the previous permit condition as necessary to assure its proper operation in time of emergency.

3. Access to Communications or Alarm System. The Permittee shall maintain access to the communications or alarm system as required by 40 CFR 264.34.

4. Required Aisle Space. At a minimum, the Permittee shall maintain aisle space as required by 40 CFR 264.35.

5. Arrangements with Local Authorities. The Permittee shall attempt to make arrangements with State and local authorities as required by 40 CFR 264.37. If State or local officials refuse to enter into preparedness and prevention arrangements with the Permittee, the Permittee must document this refusal in the operating record.

I. Contingency Plan.

1. Implementation of Plan. The Permittee shall immediately carry out the provisions of the contingency plan, Attachment V, and follow the emergency procedures described by 40 CFR 264.56 whenever there is a fire, explosion, or release of hazardous waste or constituents which threatens or could threaten human health or the environment.

2. Copies of Plan. The Permittee shall comply with the requirements of 40 CFR 264.53.

3. Amendments to Plan. The Permittee shall review and immediately amend, if necessary, the contingency plan, as required by 40 CFR 264.54.

4. Emergency Coordinator. The Permittee shall comply with the requirements of 40 CFR 264.55, concerning the emergency coordinator.

J. Manifest System. The Permittee shall comply with the manifest requirements of 40 CFR 264.71, 264.72, and 264.76.

K. Recordkeeping and Reporting.

1. Operating Record. The Permittee shall maintain a written operating record at the facility in accordance with 40 CFR 264.73(a), (b)(1), (2), (3), (4), (5), (6), and (8).

2. Biennial Report. The Permittee shall comply with the biennial report requirements of 40 CFR 264.75.

L. Closure.

1. Performance Standard. The Permittee shall close the facility as required by 40 CFR 264.111 and in accordance with the closure plan, Attachment VI.

2. Amendment to Closure Plan. The Permittee shall amend the closure plan in accordance with 40 CFR 264.112(b) whenever necessary.

3. Notification of Closure. The Permittee shall notify the Regional Administrator at least 180 days prior to the date he expects to begin closure.

4. Time Allowed For Closure. After receiving the final volume of hazardous waste, the Permittee shall treat or remove from the site all hazardous waste in accordance with the schedule specified in the closure plan, Attachment VI. After receiving the final volume of hazardous waste, the Permittee shall complete closure activities in accordance with the schedule specified in the closure plan, Attachment VI.

5. Disposal or Decontamination of Equipment. The Permittee shall decontaminate and/or dispose of all facility equipment as required by 40 CFR 264.114 and the closure plan, Attachment VI.

6. Certification of Closure. The Permittee shall certify that the facility has been closed in accordance with the specifications in the closure plan as required by 40 CFR 264.115.

M. Cost Estimate for Facility Closure. The Permittee's original closure cost estimate, prepared in accordance with 40 CFR 264.142(a), is specified in Attachment VI.

1. The Permittee must adjust the closure cost estimate for inflation within 30 days after each anniversary of the date on which the first closure cost estimate was prepared, as required by 40 CFR 264.142(b).

2. The Permittee must revise the closure cost estimate whenever there is a change in the facility's closure plan as required by 40 CFR 264.142(c).

3. The Permittee must keep at the facility the latest closure cost estimate as required by 40 CFR 264.142(d).

N. Financial Assurance for Facility Closure. The Permittee shall demonstrate continuous compliance with 40 CFR 264.143 by providing documentation of financial assurance, as required by 40 CFR 264.151, in at least the amount of the cost estimates required by permit condition II.M. Changes in financial assurance mechanisms must be approved by the Regional Administrator pursuant to 40 CFR 264.143.

O. Liability Requirements. The Permittee shall demonstrate continuous compliance with the requirements of 40 CFR 264.147 and the documentation requirements of 40 CFR 264.151, including the requirement to have and maintain liability coverage for sudden and accidental occurrences in the amount of at least $1 million per occurrence with an annual aggregate of at least $2 million, exclusive of legal defense costs.

P. Incapacity of Owners or Operators, Guarantors, or Financial Institutions.

The Permittee shall comply with 40 CFR 264.148 whenever necessary.

III. STORAGE IN CONTAINERS

A. Waste Identification. The Permittee may store up to a total of 12,550 gallons of following wastes in containers at the facility, subject to the terms of this permit:

U.S. EPA HazardousWaste Number	Hazardous Waste
D001	Ignitable wastes such as polyol
D008	wastes containing lead such as paint sludge
F002	spent halogenated solvents
U223	toluene diisocyanate (TDI)

Condition of Containers. If a container holding hazardous waste is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, the Permittee shall transfer the hazardous waste from such container to a container that is in good condition or otherwise manage the waste in compliance with the conditions of this permit.

C. Compatibility of Waste with Containers. The Permittee shall assure that the ability of the container to contain the waste is not impaired as required by 40 CFR 264.172.

D. Management of Containers. The Permittee shall manage containers as required by 40 CFR 264.173.

E. Containment. The Permittee shall construct, operate and maintain the containment system in accordance with the requirements of 40 CFR 264.175.

F. Special Requirements for Ignitable or Reactive Waste. The Permittee shall not locate containers holding ignitable or reactive waste within 15 meters (50 feet) of the facility's property line.

G. Special Requirements for Incompatible Waste.

1. Prior to placing incompatible wastes or incompatible wastes and materials in the same container, the Permittee shall comply with 40 CFR 264.17(b).

2. The Permittee shall not place hazardous waste in an unwashed container that previously held an incompatible waste or material.

3. The Permittee shall separate containers of incompatible wastes, as required bv 40 CFR 264.177(c),

4. The Permittee must document compliance with III. G. (1) and (2) as required by 40 CFR 264.17(c) and place this documentation in the operating record (condition II. K.1).

IV. STORAGE IN TANKS

A. Waste Identification. The Permittee may store up to a total of 7500 gallons of the following hazardous wastes in tanks, subject to the terms of this permit:

U.S. EPA Hazardous Waste Number	Hazardous Waste
F002	Spent halogenated solvents
F003	Spent non-halogenated solvents such as xylene
F005	Spent non-halogenated solvents such as brake resins
D006	wastes containing cadmium such as various paints
D007	wastes containing chromium such as various paints
D008	wastes containing lead such as various cements

B. Design of Tanks. The Permittee shall maintain all tanks as required by 40 CFR 264.191. The Permittee shall maintain the minimum shell thickness specified below at all times to ensure sufficient shell strength.

Tank #1	.04 inches
Tank #2	.20 inches

C. General Operating Requirements.

1. The Permittee shall protect tanks from accelerated corrosion, erosion or abrasion as required by 40 CFR 264.192(a).

2. The Permittee shall prevent overfilling of tanks, as required by 40 CFR 264.192(b).

D. Special Requirements for Ignitable or Reactive Wastes.

1. The Permittee shall not place ignitable or reactive waste in a tank unless the procedures required by 40 CFR 264.198(a) are followed.

2. The Permittee shall document compliance with IV. D.I as required by 40 CFR 264.17(c) and place this documentation in the operating record (condition II.K.1).

E. Special Requirements for Incompatible Wastes.

1. The Permittee shall not place incompatible wastes in the same tank or place hazardous waste in a tank that previously held an incompatible waste or material unless the procedures required by 40 CFR 264.17(b) are followed.

2. The Permittee shall document compliance with IV. E.1 as required by 40 CFR 264.17(c) and place this documentation in the operating record (Condition II. K.1).

"REV. 2/24/89"

RECEIVED
JAN 26 1989
U. S. EPA, REGION V
SWB — PMS

PERMIT

ATTACHMENT II

WASTE ANALYSIS PLAN

General Motors Corporation
OHD 000-817-023

COPY 2

REV. 2/24/89

GENERAL WASTE ANALYSIS PLAN

FOR

INLAND DIVISION, G.M.C.

HAZARDOUS WASTE FACILITIES

Timothy Wojdacz, P.E.

REV. 2/24/89

GENERAL WASTE ANALYSIS PLAN

INTRODUCTION

Section 265.13 of the E.P.A. Interim Status Standards for Owners and Operators of Hazardous Waste Facilities requires that "before an owner or operator treats, stores, or disposes of any hazardous waste, he must obtain a detailed chemical and physical analysis of a representative sample of the waste." Section 265.13 further requires that a written plan for waste analysis must be developed and followed for all owners or operators.

Subpart C of 40CFR261 lists the criteria for characterizing a solid waste as a hazardous waste. The characteristics are those of ignitability, corrosivity, reactivity, and E.P. toxicity.

Subpart D of 40CFR261 contains lists of hazardous wastes. A solid waste is a hazardous waste if it is listed, unless it has been excluded under 260.20 or 260.22.

An analysis plan should take into consideration the above criterial and provide the necessary data to allow classification by the generator and disposal by the disposal contractor. The following plan is designed to meet the requirements of the regulations with reference to attached appendices for specific methodology.

GENERAL WASTE ANALYSIS PLAN

I. SAMPLING

A. Requirement for Sampling

All solid waste generated by Inland that is designated for treatment, storage, or disposal will be evaluated by the Environmental Engineering personnel and samples for detailed chemical and physical analysis will be obtained as required.

It will be the responsibility of the Waste Management supervision to notify Environmental Engineering when they have reason to believe that the generated waste composition has changed, or they have an "unknown" waste material. Environmental Engineering will maintain and distribute a list of waste material that has been characterized.

B. Sampling Responsibility

The person with the appropriate environmental responsibility will be the primary person responsible for obtaining samples of the waste material, submitting them to an approved testing lab, and evaluating the results.

They are currently as follows:

Inland (Dayton) - Tim Wojdacz, Supv. Envir. Eng.
Inland (Vandalia) - Tim Wojdacz, Supv. Envir. Eng.

C. Sampling Methods

The methods and equipment used for sampling waste materials will vary. The following methods are considered by the E.P.A. to be acceptable and are attached as Appendix I.

Extremely Viscous Liquid	ASTM Standard D140-70
Crushed or Powdered Material	ASTM Standard D346-75
Soil or Rock-like Material	ASTM Standard D420-69
Fly Ash-like Material	ASTM Standard D2234-76
Containerized Liquid Wastes	"Coliwasa" - Test Methods for the Evaluation of Solid Waste, Physical / Chemical Methods" U.S.E.P.A.

I. SAMPLING (Continued)

C. Sampling Methods (Continued)

New and/or alternate methods, with E.P.A. approval, may be substituted at any time.

D. Sampling Frequency

The analysis must be repeated as necessary to ensure that it is accurate and up-to-date. Frequency of analysis will be as follows:

1. All "unknown" waste materials will be sampled and characterized when they are delivered to the Waste Management area for storage and/or disposal.
   (NOTE! An "unknown" waste material is one that has not been previously characterized.)

2. Analysis for specific waste materials will be repeated if the process generating the waste has changed.

3. Analysis for specific waste materials will be repeated if an analysis by the disposal contractor does not match Inland's original analysis.

4. Analysis data will be reviewed on an annual basis and determination made as to which require repeating.

II. TEST METHODS AND PARAMETERS

A. Selection of Parameters

1. Liquid Wastes

Wastes classified as liquids will be analyzed for the following:

a. pH (S.U.)
b. Physical state
c. Flash point - closed cup
d. Viscosity (centistokes)
e. Vapor pressure
f. Specific gravity
g. Heating value Btu/lb.
h. Layers
i. Total solids
j. Ash content
k. Total cyanide
l. Free cyanide
m. Sulfate
n. Chloride
o. Heavy metals, (silver, arsenic, barium, cadmium, copper, mercury, nickel, lead, selenium, zinc).

II. TEST METHODS AND PARAMETERS (Continued)

A. Selection of Parameters (Continued)

2. Solid and Semi-Solid Wastes

These wastes will be analyzed for the preceding, except those which do not apply to solid or semi-solid materials.

3. Other Parameters

a. Materials which are suspected of containing PCB's will be analyzed for PCB content.

b. Materials which are suspected of being E.P. toxic will be analyzed according to the E.P.A. E.P toxicity test.

B. Rationale for Selection of Parameters

Analysis of liquid, solid, and semi-solid waste for the above listed parameters, along with the generator's knowledge of the materials used and the processes generating the waste, will be sufficient to determine if the waste material is an R.C.R.A. hazardous waste and to provide background data for proper management of the waste material.

C. Test Methods

The following test methods are to be used in testing for the preceding parameters: (Methods included as Appendix II).

METHODS

	E.P.A.[3]	STD METHODS[2]	OTHER[4]
pH (S.U.)	5.2[1]	p460	
Flash Point			ASTM D-93
Viscosity			ASTM D-88
Vapor Pressure			ASTM D-323
Specific Gravity		p121	
Heating Value			ASTM D-2015
Layers		p95, 129	Observation
Total Solids	160.3	p89	ASTM D-96
Ash Content		p95	
Total Cyanide	8.55[1]	p361	
Free Cyanide	8.55[1]	p376	
Sulfate	376.1, 377.1	p493	ASTM D-129
Chloride		p303	ASTM D-808
Silver	272.1, .2	p148	
Arsenic	206.3	p285	
Barium	208.1, .2	p152	
Cadmium	213.1, .2	p148	
Chromium	218.1, .2	p148	
Copper	220.1, .2	p148	
Mercury	245.1	p156	
Nickel	149.1, .2	p148	
Lead	239.1, .2	p159	
Selenium	270.3	p159	
Zinc	289.1, .2	p148	
E.P. Toxicity	SW-846 Section 7.0[1]		
PCB's	SW-846 Section 8.0[1]		

NOTE 1: "Test Methods for the Evaluation of Solid Waste, Physical / Chemical Methods" U.S.E.P.A.

NOTE 2: Standard Methods for the Examination of Water and Wastewater, 14th Edition, 1975.

NOTE 3: "Methods for Chemical Analysis of Water and Wastes" U.S.E.P.A.

NOTE 4: American Society for Testing and Materials, (A.S.T.M.) Philadelphia, Pennsylvania.

NOTE: New and/or alternate test methods, with E.P.A. approval, may be substituted at any time.

III. EVALUATION OF TEST RESULTS

A. Review of Materials and Processes

Environmental Engineering will review the materials and processes used in generating the waste material. This information will be used and checked against Subpart D of 40CFR261 to determine if the generated waste is a listed hazardous waste. If the waste material is a listed hazardous waste, the analytical data will be reviewed and will either become part of the background data or be used to justify possible de-listing studies.

B. Review of Solid Waste Characteristics

If the waste material is not a listed hazardous waste, criteria under Subpart C of 40CFR261 must be reviewed in order to characterize the waste material. The characteristics are ignitability, corrosivity, reactivity, and E.P. toxicity.

Careful attention to these requirements and a review of the analytical data will provide a basis for classifying the waste material as hazardous or non-hazardous.

C. Use of Data by Disposal Contractor

The analysis plan provides for sufficient testing to fulfill requirements of the disposal contractors used by Inland. In the event that changes in the requirements are imposed, the plan will be reviewed and necessary revisions instigated.

Date: 1/2/83
Revision No.: 1

C2 IV. ADDITIONAL REQUIREMENTS FOR WASTES GENERATED OFFSITE

The products produced at this plant were originally developed and continue to be produced by the Inland Dayton and Vandalia plants. As such, the raw materials, by-products, and waste are identical to those found at the on-site facility.

The drummed wastes shipped to Inland will be labeled and manifested as required for interstate shipment. The General Waste Analysis and Sampling plans developed for wastes generated on-site will, therefore, apply to these wastes as well.

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ATTACHMENT III

INSPECTION PLAN

General Motors Corporation
OHD 000-817-023

F-2 Inspection Schedule 40 CFR 264.15, 264.174, 264.194

F-2a General Inspection Requirements

The Inland Division conducts regular inspections of the facility for equipment malfunction or deterioration, discharges, or other factors that could cause or lead to the release of hazardous waste constituents or adversely affect the environment or threaten human health.

Table F-1 presents inspection schedules for the monitoring equipment, safety and emergency equipment, security devices, operating and structural equipment, the container storage area, tanks and tank storage area. The items listed are listed to improve prevention and early detection of possible hazards. Each item includes problems to look for and the inspection frequency.

These items which are under the direct control of the Waste Management personnel are inspected daily or weekly as specified in the inspection logs (Figures f-4 and 5).

The inspection of certain non-routine items is best handled at Inland by other support personnel. These items are listed on a Special Inspection Log (Figure f-6). The Waste Management personnel will maintain this log and ensure that the inspections called for are being made as needed. These special items are discussed as follows:

1. Spill Absorbant Materials - As specified in the SPCC Plan, Environmental Engineering and Maintenance have the responsibility to keep the SPCC sheds stocked. Periodic inspections are, therefore, carried out to see that adequate materials are on hand.

2. Fire Extinguishers - Plant Security inspects all fire extinguishers plantwide monthly. The inspection records are maintained at a location remote from the HWM facility.

INSPECTION SCHEDULE

Area/Equipment	Specific Item	Types of Problems	Frequency
Monitoring Equipment	Liquid Level Indicators	Wire cable corroded or frayed Sticking float or pulley Note level	Daily
Safety and Emergency Equipment	Absorbant Material	Out of stock Note approximate quantity	Monthly/As Needed
	Absorbant Pads Absorbant Boom (Vandalia Only)	Out of stock Note approximate quantity	Monthly/As Needed
	Empty Drums	Out of stock, corrosion, damage Note approximate quantity	Weekly
	Emergency Shower	Water pressure, leaking	Weekly
	Fire Extinguishers	Needs charging	Monthly/As Needed
	Fire Alarm	Power failure	Per Plant Security schedule

TABLE F-1

INSPECTION SCHEDULE (Continued)

Area/Equipment	Specific Item	Types of Problems	Frequency
Security Devices	Security Fence	Corrosion, damage to chainlink fabric, damage to barb wire	Weekly
Container Storage Area	Container Placement	Wrong location or area Aisle space, stacking	Weekly
	Container Condition	Corrosion, leakage Open lids, labels missing*	Weekly
	Pallets	Damage, weakness	Weekly
	Concrete Pad	Cracks, wet spots, debris, settling	Weekly
	Containment Trench	Liquid present, cracks	Daily
	Warning Signs	Damage, hanging improperly	Weekly
	General Housekeeping	Debris Spilled material	Weekly Daily
	Storage Area Roof	Leaks, missing panels, deterioration	Weekly

*Labels to be inspected for date and content identification upon arrival.

TABLE F-1 (Continued)

INSPECTION SCHEDULE (Continued)

Area/Equipment	Specific Item	Types of Problems	Frequency
Operating Equipment (Tank Area)	Concrete Curb	Cracks, deterioration	Weekly
	Base, Foundation	Cracks, wet spots, settling	Weekly
	Tank Shell & Walls	Corrosion, discoloration, cracks, buckles, bulges, rust spots, blisters	Weekly
	Tank Supports	Corrosion, cracking, deterioration, damage	Weekly
	Pipes, Valves, and Fittings	Loss of metal thickness, leaks, corrosion, bad seals	Weekly
	Containment Trench	Liquid present	Daily
	Rainwater Release Valve	Open, inoperable	Daily
	Barrel Dumpers	Hydraulic fluid leaking or low Frayed or deteriorated hoses	Weekly
	Recirculation Pump	Oil reservoir filled, oil leaking	Daily

TABLE F-1 (Continued)

INSPECTION SCHEDULE (Continued)

Area/Equipment	Specific Item	Types of Problems	Frequency
Tank Area (Internal)	Tank Shell	Corrosion, loss of metal thickness, cracking	Yearly
NOTE: Tank to be checked by outside contractor			
Underground Oil Tank	Structural Integrity	"Stick check" for leaks	Yearly
		Note liquid level (feet)	Daily

TABLE F-1 (Continued)

DAILY INSPECTION LOG

Item	Types of Problems	OK	Other: Indicate Problems or Repairs and Date
Bulk Tank Liquid Level Indicator	Wire cable corroded, frayed. Sticking float or pulley. Note level (gallons)		
Recirculation Pump	Seals leaking. Motor overload.		
Tank Area Containment Trench	Debris. Liquid present.		
Rainwater Release Valve	Inoperable open. (Should be closed.)		
Mixing Pump	Fluid in exhaust air. Oil reservoir empty. Oil leaking.		
Mix Tank	Sticking float. Agitators stopped. Recirculating lines plugged.		
Container Area Trench	Debris. Liquid present. Cracks.		
Oil Tank	Note level, depth (feet).		
Truck Loading Area	Spilled material.		

Inspector's Name/Title _____

Date and Time of Inspection _____

FIGURE f-4

Item	Types of Problems	OK	Repairs and Date
Empty Drums	Out of stock, damage Note: Approximate number on hand.		
Storage Area Roof	Corrosion, leaks, missing or loose panels.		Date: 6/3/83 Revision No.: 1
Emergency Shower	Leaking, low water pressure.		
Security Fence	Corrosion, damage to chain-link fabric, barbwire.		
Container Storage Placement	Wrong location or area, aisle space, stacking height.		
Drum Condition	Corrosion, leakage, open lids, labels missing or illegible.*		
Pallets	Damage, weakness.		
Concrete Pad	Cracks, wet spots, settling, debris.		
Warning Signs	Damage, hanging improperly		
Tank Storage Concrete Curb	Cracks, deterioration.		
Base, Foundation	Cracks, wet spots, settling.		
Tank Shell & Walls	Corrosion, discoloration, cracks, buckles, bulges, rust spots, blisters.		
Tank Supports	Corrosion, cracking, deterioration, damage		
Pipes, Valves & Fittings	Loss of metal thickness, leaks, bad seals, corrosion.		
Barrel Dumpers	Oil reservoir filled, oil leaks, frayed or deteriorated hoses.		
General Housekeeping	Debris.		

* Labels to be inspected for date & content identification upon arrival.

Inspector's Name/Title _____

Date and Time of Inspection _____

FIGURE f-5

SPECIAL INSPECTION LOG

Item	Types of Problems	Inspection Responsibility	Date of Last Inspection
Spill Absorbants Pads Materials Boom (Vandalia Only)	Damage Out of stock	Environmental Engineering	
Fire Extinguishers	Need charging	Plant Security	
Fire Alarm	Malfunctions	Plant Security (ADT)	Performed Daily
Waste Tank (Internal)	Weakness Corrosion, Loss of Metal Thickness	Outside Contractor	
Underground Oil Tank	Perform annual "stick check"	Hazardous Waste Management	

SPECIAL INSPECTION LOG

FIGURE f-6

3. Fire Alarms - The fire alarms are tied into the ADT system. As part of the Plant Security check-route, the alarms are checked nightly by a key-switch to ensure that they are capable of sending the proper signals.

4. Waste Tank (Internal) - Due to the inherent safety hazards involved in entering enclosed tanks, this inspection will be performed by an outside contractor with the proper training and equipment. The Waste Management Department will coordinate the inspection to be held once per year unless otherwise indicated.

5. Underground Oil Tank - The Waste Management Department conducts annual "stick-checks" of the liquid depth over a two to three day period when no liquids have been added to the tank. The tank will be known to be free of leakage as long as the liquid depth does not vary significantly.

F-2b Specific Process Inspection Requirements

F-2b(1) Container Inspections

Inspections of the container storage area will be conducted per the schedule provided in Table F-1. Results of each inspection will be recorded on the Daily and Weekly Inspection Log sheets as appropriate.

Information requested on the log sheets includes the inspector's name and title, date and time of the inspections, any problems or observations, and remedial action. Problems to look for are provided on the log sheets to ensure a complete inspection.

F-2b(2) Tank Inspections

Inspections of the tank area and operating equipment will be conducted and results will be noted on the aforementioned Daily and Weekly Inspection Log sheets. Internal tank inspections will be conducted annually as discussed in Section F-2a.

F-2c Remedial Action

If a hazard is imminent or has been discovered during the course of an inspection or between inspections, remedial action will be taken immediately. Minor repairs and remedial action are to be noted on the inspection log. In the event of a major problem or material release, the emergency procedures detailed in the SPCC Plan and Contingency Plan (Section G) will be implemented.

F-2d Inspection Log

The inspection log sheets will be chronologically maintained in a 3-ring binder in the Hazardous Waste Management office. The inspection records will be kept for 3 years as required. The 3-ring binder also includes a copy of the inspection schedule and other pertinent information.

F-3 Waiver of Preparedness and Prevention Requirements 40 CFR 264.32

Inland does not wish to request a waiver of the requirements under 40 CFR Section 264, Subpart C. Requirements of this subpart are primarily addressed in Section D, Section F, and Section G of this application. Internal and external communications, emergency equipment, and fire control equipment are discussed in Sections F and G. Aisle space requirements are addressed in Sections D, F, and G.

F-4 Preventive Procedures, Structures, and Equipment 40 CFR 122.25(a)(8)

F-4a Loading/Unloading Operations

A tank truck unloading procedure has been developed and incorporated into the SPCC Plan (See Appendix 2, page 5). This plan effectively minimizes hazards involved in handling bulk materials.

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ATTACHMENT IV

PERSONNEL TRAINING PLAN

General Motors Corporation
OHD 000-817-023

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SECTION H

PERSONNEL TRAINING

The information contained in this section outlines the Personnel Training Program for the Inland Division, GMC, Hazardous Waste Storage Facility in accordance with the requirements of 40 CFR 122.25(a)12 and 264.16.

H-1 Outline of Training Program 40 CFR 122.25(a)12

H-1a Job Titles and Duties

Inland is primarily a manufacturing concern and generator of hazardous waste materials involving several departments. The foremen and group leaders of the various departments are responsible for placing the generated wastes into containers (55 gallon drums) provided by the Waste Management Department, and proper labeling and securing of drum lids. The material handling personnel transport the drums to the Hazardous Waste Storage area. The names of the personnel currently handling the above responsibilities are on file in the Personnel Department. These are employees directly involved with the handling of waste in the Waste Management Department: the General Foreman of Waste Management and 2 operators. Management responsibilities involving compliance with RCRA regulations but not involving actual handling of the wastes are split between the Supervisor of the Environmental Engineering Section of the

Plant Engineering Department and the General Foreman of the Waste Management Department. Maintenance personnel (i.e., electricians, plumbers, etc.) work in the Waste Managements area, but they do not handle wastes directly. The duties, responsibilities, and qualifications of each of the above positions follow.

REV. 2/24/89

Position Title: Supervisor, Environmental Engineering

Name of Employee: Tim Wojdacz

Responsibilities and Duties:

- Supervises the personnel in the Environmental Engineering Section of the Plant Engineering Department.

- Responsible for the design, purchase, installation, and monitoring of all air, water, and solid waste control systems on site.

- Assists the divisional Safety and Health Department in engineering requirements of the Noise Abatement Program and ventilation systems for hazardous materials.

- Assists the Emergency Coordinator for all hazardous waste activities.

- Obtains all required permits and licenses or modifications of same from local, state, and federal regulatory agencies.

- Resolves problems involving permits and licenses from local, state, and federal regulatory agencies.

- Assists the Health and Safety Department in the preparation and presentation of training materials involving environmental concerns.

- Notifies proper authorities in emergency situations involving environmental areas.

- Environmental Department personnel regularly inspect plant grounds and facilities fro status of air, water, and solid/hazardous waste emissions and control.

- Consults with Maintenance supervision, Plant Security, and/or Safety and Health Department personnel (safety engineers and industrial hygienists) in emergency situations.

- Drafts and submits to the General Manager all required reports to local, state, or federal EPA agencies.

- Serves as member of the Hazardous material Review Committee with representatives of the Chemical Engineering, Safety and Health, Transportation, and Waste Management Departments to review all new material requests for use, all existing material in use, and issue "use" documents to concerned departments covering proper handling, safety precautions, and disposal requirements.

- Reports to the Administrator of Plant Engineering.

Experience and Qualifications:

- B.S. Degree in Engineering is required.

- 1-3 years experience in industrial pollution control.

- Training and/or experience in hazardous waste management is desirable.

Position Title: General Supervisor, Waste Management Department

REV. 2/24/89

Name of Employee: Gail Spears

Position Responsibilities and Duties:

- Overall operation of Inland's Waste Management Department, including the Hazardous Waste Storage area.

- Maintains facility compliance with RCRA and other permits.

- Supervises operators and reviews their performance.

- Trains operators to: Operate materials/drum handling equipment safely and effectively and handle leaks, spills, and emergency situations, including personnel safety procedures and protective equipment.

- Maintains operating log, monitoring records, maintenance records, inspection records, personnel training records, hazardous waste manifests, and all other required records.

- Notifies the Emergency Coordinator, Environmental Engineering, and if so directed, proper authorities in emergency situations.

- Schedules all maintenance and repairs to structures and equipment in the waste management facility.

- Oversees Maintenance personnel doing both scheduled and unscheduled maintenance and repair work to be sure he is not releasing hazardous waste to the environment or contaminating himself.

- Serves as member of the Hazardous Material Review Committee (see Environmental Engineering responsibilities for details).

- Visits and evaluates waste disposal facilities used by Inland.

- Reports to the Superintendent of Quality Assurance.

Experience and Qualifications:

- B.S. degree or equivalent in-plant experience.

- Previous supervisory experience at first line or higher or equivalent managerial experience in other staff areas.

- Hazardous waste management experience helpful but not required.

- Special training in the functions and operation of a hazardous waste handling and storage facility will be provided by Inland.

REV. 2/24/89

Position Title: Operators

Names of Employees: Current Employees on file

Position Responsibilities:

- Reports to the General Foreman of the Waste Management Department.
- Operates waste handling equipment.
- Reviews incoming wastes and segregates to proper storage location.
- Inspects tanks, drums, and other equipment as required for proper operation and structural integrity.
- Inspects drum storage area for evidence of leaks and spills and improperly located drums.
- Makes appropriate entries into operating log, monitoring records, inspection records, and maintenance records, and files them as per the established system.
- Notifies the General Foreman and other plant authorities as required in emergency situations.

Experience and Qualifications:

- Based on contractual union agreement.

Because of the magnitude and variety of chemicals and chemical compounds used in the manufacturing processes at Inland and their related health and safety concerns, Inland has had an ongoing training program for many years. This program has been under the direction of the Health and Safety Department. All employees, through monthly departmental safety meetings, are given instruction on the proper handling, safety precautions, and disposal requirements of hazardous materials and/or waste and the initiation of emergency procedures when required.

The Supervisor of Environmental Engineering and the General Supervisor of the Waste Management Department have attended the RCRA training seminar presented by General Motors Environmental Activities personnel and other seminars sponsored by groups outside the Corporation.

The supervision of the waste generating departments have been instructed in the proper methods of filling containers, labeling and preparation to the hazardous waste storage area. Material handling personnel have been instructed in the safe handling of hazardous materials, not to move improperly prepared or labeled drums, and the emergency procedures for accidents and spills.

In addition to the above, Inland has a trained fire brigade under the direction of the Chief of Plant Security. Inland also has a volunteer spill control and clean-up team trained and directed by the Safety and Health Department, who has also held spill control training sessions for all Maintenance personnel.

At the present time the Health and Safety Department, with the assistance of the Environmental group, is preparing a new video tape presentation for all employees concerning hazardous materials and wastes, their proper handling, and emergency procedures.

These departments are also preparing a "Training Manual" consolidating all of the previously mentioned program to be used in future training and as a reference for employees involved in the generating, transporting, or the preparation and/or storage of wastes for offsite disposal.

The following is a general outline of the training manual.

I. Introduction

A. Chemical Hazards

B. The Resource Conservation and Recovery Act - RCRA

II. Facility and Process Descriptions

A. Description of Wastes Generated

B. Handling Procedures

1. Generating department

2. Transporting to Waste Management Area

C. Description of Waste Management Area

D. Key Terms of Permit

E. Normal Routine Operations

F. Waste Analysis

G. Record Keeping and Reporting Requirements

H. Security

I. Inspections

III. Emergency Procedures and Contingency Plan

A. Emergency Coordinator

B. Emergency Procedures

C. Emergency Communications/Telephone Numbers and Alarms

D. Location and Use of Emergency Equipment

E. Spill Control

F. Fire and Explosion

G. Tornados, Hurricanes, and Severe Storms

Appendix - As Required

SECTION I - Introduction

This section of the manual introduces employees to the general classes and characteristics of chemicals and chemical wastes that can be hazardous to health and the environment. In this context, the terms toxicity, reactivity, corrosivity, and ignitability are defined. It is Inland's policy that each employee handling chemical substances (raw materials, finished products, byproducts, and wastes) respect them and be aware of these potential hazards. The company's policy on the use of protective clothing and safety equipment to prevent accidental worker exposures and releases to the environment of hazardous chemicals and wastes is presented.

The authority for regulating hazardous wastes under the Resource Conservation and Recovery Act (RCRA) also is discussed. The regulatory framework for classifying hazardous wastes, setting operational standards, and permitting procedures and achieving compliance is presented. The RCRA permit for Inland (when receive) will also be included so that each employee is familiar with its terms.

SECTION II - Storage of Hazardous Wastes at Inland

This section focuses on the types of hazardous wastes that are generated and potentially stored at Inland, normal/routine storage operations, and procedures for maintaining compliance with the RCRA permit (e.g., waste analysis, recordkeeping, inspections, and security). A site diagram showing the dimensions, capacity, and relative position of each storage area (tanks and containers) is included.

Training for normal or routine operating conditions includes the following topics.

- Proper operation and maintenance of the storage facility.
- Scheduled inspections.

- Purpose and use of security and communications systems.
- Monitoring requirements for tracking and recording the operation of the facility.
- Record keeping requirements and procedures.

SECTION III - Emergency and Contingency Plans

The third section of the training manual provides detailed instructions on steps to be taken in the event of an emergency such as a waste spill or fire, power outage, or damage from wind and storms. The Emergency Coordinator is clearly identified, as are emergency telephone numbers and directions for locating and using on-site emergency equipment, alarms, and communications. the contingency plan is also detailed.

This manual will be used for both the training of new employees and for annual reviews of previously trained employees.

H-1c Training Director

At Inland, the duties of Training Director are carried out as a dual responsibility of the Health and Safety Department and the Supervisor of Environmental Engineering.

The minimum qualifications for individuals coordinating the training program include a B.S. degree in one of the following disciplines:

Engineering
Chemistry
Industrial Hygiene

Coordinators also attend available seminars on the safe management of hazardous wastes. Examples of such seminars attended to date include:

Date	Topic	Sponsor
June, 1980	Hazardous Waste Regulation	Smith & Schnacke
Sept., 1980	Hazardous Waste Management	GM Regional Meeting
April, 1980	Hazardous Material Trans.	GM Regional Meeting

H-1d Relevance of Training to Job Position

The training will vary on a job requirement basis.

A. All employees are given a general program covering the hazards involved, precautions to be observed, and emergency procedures.

B. The departmental supervision and group leaders in the departments generating hazardous waste will be trained in the proper handling and container filling procedures, such as lid securing, labeling, etc., safety precautions, and emergency procedures.

C. Material handling personnel receive training in the proper handling of hazardous materials and/or wastes, safety precautions, and emergency procedures especially involving accidents or spills.

D. Maintenance personnel, Plant Security, fire brigade and spill team members receive further training in emergency procedures, fire prevention and control, spill control and clean-up, and contingency plan implementation.

E. Waste management Department personnel receive training in all areas of hazardous waste management procedures, including the implementation of the contingency plan.

H-1e Training for Emergency Response

Inland's training program is designed to ensure that personnel not only handle hazardous materials and/or wastes in a safe manner, but also respond to emergency situations. The program trains hazardous waste handling/management personnel to maintain compliance under both normal operating conditions and emergency situations.

Training elements addressing non-routine or emergency situations include:

- Procedure for response to fire or explosions.
- Response to spills and procedures for containment and control.
- Emergency communication procedures and alarm systems.
- Procedure for locating and using facility emergency equipment.

As previously mentioned, in addition to the Hazardous Waste Management personnel, the Inland Maintenance, Security, fire brigade and spill control personnel are on standby for response when required for plant emergencies.

H-2 Implementation of Training Program

The Supervisor of Environmental Engineering and the General Supervisor of Waste Management have been trained, and the Waste Management Supervisor has provided training for all current waste handling personnel prior to this submittal. As explained previously, other involved areas of plant personnel have received various degrees of training. All new employees will receive training within the six months of assignment to the Waste Management Area as per the RCRA requirements.

Employees will have an annual review and update of their training program.

Records documenting the job title for each position, job descriptions, names of employees, and completed training programs (both introductory and review) will be kept onsite in the personnel office of the Inland Division. These records will be kept until closure of the facility for current employees and for three years from the date of the individual employee's termination for former employees.

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ATTACHMENT V

CONTINGENCY PLAN

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SECTION G

CONTINGENCY PLAN

The information contained herein is submitted in accordance with the requirements for a Contingency Plan, as contained in 40 CFR Section 122.25 (a)(7) and Section 264 Subpart D.

Contingency Plan

G-1 General Information

This contingency plan is for Inland Division of General Motors Corporation, covering both the Dayton and Vandalia plants. It is divided into three sections as follows:

1. Inland's Contingency Plan and Emergency Procedures for Waste Storage and Handling Area.
2. SPCC Plan - Oil Storage.
3. Emergency Procedures as set forth by Plant Security.

The requirements of Section 264 Subpart D will be addressed as necessary by references to these sections included as Appendix 1,2, and 3.

G-2 Emergency Coordinator

In the event of an emergency situation at the facility, the discoverer is to notify the nearest Plant Security officer on duty or dial 7-8743 (Plant Security) to initiate chain of communication shown on page 10 of Appendix 1. The emergency coordinator shall be the highest ranking Plant Security officer on duty. The primary coordinators are Tom Liles, Security Coordinator, Dayton, and L.K. Stapleton, Security Coordinator, Vandalia. Other emergency coordinators and telephone numbers are listed on pages 17 & 18 of the Contingency Plan. If the emergency involves a release or potential release of hazardous materials to the environment, the emergency coordinator

will be aided by the Environmental Engineering personnel listed on page 10, Appendix 1. The primary emergency coordinator and alternates have complete authority to commit all resources of the company in the event of an emergency.

G-3 Implementation of the Contingency Plan

The decision to implement the contingency plan depends on the specific situation and whether or not an imminent or actual incident could threaten human health or the environment. The immediate response to an emergency and criteria for assessment of the need to implement the contingency plan are shown on pages 1 and 2 of Appendix 1. Page 18 lists Fire and Police Department telephone numbers. The emergency coordinator will help those agencies determine that measures, such as evacuation of local residents, may be necessary. In the event of a spill or release that threatens human health or the environment outside the facility, the notification procedures shown on Appendix 2, pages 3 and 4, are to be followed.

G-4 Emergency Response Procedures

G-4a Notification

As indicated above, whenever there is an imminent or actual emergency situation, the emergency coordinator will immediately activate internal facility alarm system (if not already done) and internal communication systems to notify facility personnel. Subsequently, appropriate fire and/or police departments, local, state, and federal agencies will be notified, followed by reports as necessary to GM Central Office.

G-4b Identification of Hazardous Wastes

The emergency coordinator will immediately identify the character, source, amount, and area extent of any release. Waste Management and Environmental Engineering personnel will provide any necessary support in such a situation.

G-4c Assessment

The coordinator will assess hazards, both direct and indirect, to human health or the environment.

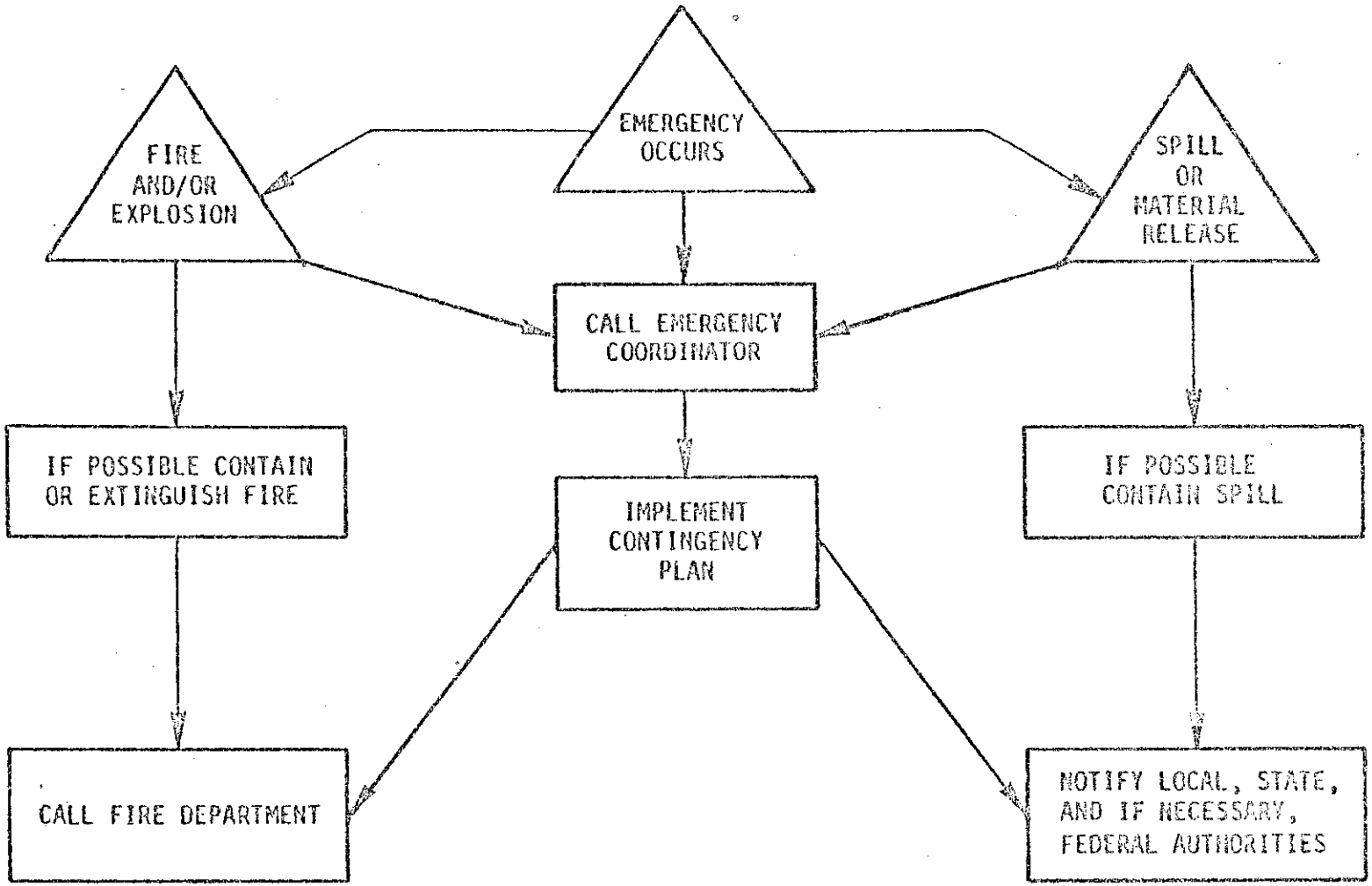
G-4d Control Procedures

Potential accidents fall under three general classifications: (1) fire and/or explosions, (2) spills or material release, and (3) surface water flooding. Flooding is unlikely at Inland due to its position above the flood plain. Natural disasters and civil disturbances (such as strikes or bomb threats) are considered as to their affect on one of the first two categories. Figure g-1 summarizes the emergency plan of action.

Fire and/or Explosion

The storage tank and waste containers are easily accessible to emergency equipment by roads through the plant and by a blacktop road between the Hazardous Waste Management facility and the railroad tracks. The City of Dayton maintains two fire stations within a mile of Inland/Dayton.

Inland also maintains its own fire brigade during working hours. The primary duties of this group would be to prevent the spread of fire or material release prior to the arrival of the Dayton Fire Department.



EMERGENCY PLAN OF ACTION

FIGURE g-1

Additional measures that will be taken at the direction of the Emergency Coordinator will include, but not be limited to, (1) isolating the fire by closing fire doors or by removing nearby flammable materials and wastes where possible, (2) stopping work in nearby areas or operations that may affect the emergency situation, (3) keeping the area clear of personnel not actively involved in fighting the fire, and (4) removing any injured personnel and obtaining qualified medical treatment. Page 5 of Appendix 3 lists precautionary measures to be taken by Plant Security personnel in the event of a major emergency of long duration.

There are two systems of evacuation signals. Plant-wide evacuation of the manufacturing areas, the office building, or both, can be signalled by alarm horns controlled from a key-switch located in the main Plant Security post. Localized evacuation of areas near a fire would be signalled by audible alarms that are set off by each individual fire alarm box.

Evacuation routes are posted in normally occupied buildings and evacuation procedures are discussed twice yearly with employes as a safety contact (Figure g-2). Personnel who are not in an affected area will stay in their respective work areas until the evacuation signal is given. Supervisors in unaffected areas will remain with their personnel and be ready to evacuate and account for those under their supervision if necessary. The evacuation routes for the waste management area are included in the contingency plan.

When the fire has been extinguished and the safety of personnel is no longer endangered, the Emergency Coordinator and the supervisor of the fire fighters will determine that the "all clear" signal may be

SAFETY CONTACT

SUPERVISOR'S GUIDELINE FOR EVACUATION PROCEDURES

The following should be presented to and discussed with each employee at least twice each year as a safety contact.

1. Upon hearing evacuation signal, follow instructions as to shut down of equipment, then proceed to leave the area by the predetermined route and exit. An alternate route and exit should also be discussed.

2. Maintain a distance of at least an arm's length behind the person ahead of you. On stairs, keep two steps behind.

3. DO NOT run, climb over machinery or conveyors, or jump from docks or stairs.

4. Yelling, loud talk or unnecessary noise will not be tolerated. Listen for and obey instructions from your foreman or leader.

5. When out of working area, remain with your group until told to re-enter area or disperse.

6. DO NOT attempt to take coat, purse, or other personal articles with you.

7. Report to your foreman any blocked aisles, stairs, or doors designated as exits.

8. A map or drawing showing all the emergency exits throughout the building should be reviewed should the employee be working in a different location other than the normal working area at the time of the emergency.

EVACUATION GUIDELINE

10-25-76

FIGURE g-2

given. All emergency equipment used in the emergency must be cleaned and ready for reuse prior to resumption of plant operation in the affected areas. This includes restocking SPCC sheds if necessary, and replacing any other equipment listed in Appendix 1, page 3 through 6 of the contingency plan.

In the event hazardous waste has been released as a result of the fire, it and any water containing that waste must be recovered and stored in accordance with the following procedures, unless it can be demonstrated that the recovered waste is not hazardous.

Until such determination is made, or the released material is disposed of and clean-up is complete, no incompatible waste may be stored in the affected area.

Spills or Material Release

The Inland Spill Prevention Control and Countermeasure Plan spells out procedures to be followed to control the accidental release of liquid materials. The same procedures as detailed on Appendix 2, pages 3, 4, 7, and 8, apply to other material releases, with additional precautions as necessary. Containment of the spill is the first priority. An in-plant spill control team is trained in the proper techniques to contain spilled or leaked material as discussed in Section H. A situation in which the Spill Team could not contain the liquid flow to the facility property would trigger the notification requirements on the above referenced page 3.

If the spilled material poses a fire or explosion risk, the emergency coordinator will assemble the in-plant fire brigade or notify the Dayton Fire Department as necessary and in accordance with the procedures related above. The contingency plan, Appendix 1, page 10, lists individuals and telephone numbers for reference.

In the event the leak is in the tank area, the mixing, transfer, and barrel dumping operations will be immediately shut down. The containment area around the tanks has the capacity to hold 150% of the tank's contents, allowing adequate time to provide for clean-up. A list of contractors capable of providing clean-up services is shown in the SPCC Plan (Appendix 2), in case the clean-up is of such magnitude as to be beyond the capability of in-plant personnel.

If for some reason a spill occurs outside the containment area, normal containment procedures will apply (diking the flow of liquids with absorbent materials, etc.). Only those personnel directly involved in the emergency operation will be allowed in the hazardous area. The evacuation routes from the waste management area are shown on page 12 of the contingency plan (Appendix 1).

In the unlikely event of formation of a toxic vapor cloud (as by outbreak of fire or reaction with surrounding materials), immediate notification will be given to the Dayton Fire and Police Departments be begin evacuation proceedings for nearby residents. Evacuation procedures for in-plant personnel were discussed above.

If the control and clean-up of an accidental spill, release, or fire is within the capabilities of company personnel and local response teams, the Ohio EPA, Division of Surveillance and National Response Center will not be notified unless one of the following occurs:

1. A spill discharges to a sewer leading to Wolf Creek and/or the Great Miami River, and the quantity of hazardous material spilled is equal to or greater than the reportable quantity specified in 40 CFR Part 117.

2. One thousand gallons or more of oil is spilled in a single event. If a lesser quantity is spilled but has entered a storm sewer, appropriate measures will be taken to intercept the spill at or prior to the outfall. Local and state authorities may be requested to assist in this effort. If the oil is discharged to a sanitary sewer, the City of Dayton Sewage Treatment Plant (225-5443) will be notified. See pages 3-4 SPCC Plan (Appendix 2).
3. The spill involves other hazardous materials not listed, but used at the plant, if they pose an actual or potential hazard to life or property.

It is Inland's policy to comply with regulations developed under the Comprehensive Environmental Liability and Compensation Act of 1980 (Superfund) which call for report of a spill of one pound or more of any hazardous material for which a reportable quantity has not been established, but which is listed under applicable environmental legislation.

Since the entire waste management area and most surrounding land is paved, a large spill onto unprotected ground that may contaminate ground water is unlikely. A procedure that will be used if necessary is given on page 39a of the Inland SPCC Plan.

Other Emergency Situations

In the case of other emergency conditions, there is increased risk of fire, explosions, or material releases (i.e., bomb threats or civil disturbances). Plant Security has determined precautions to be followed under those conditions to minimize such risk (Appendix 3).

REV. 2/24/89

INLAND DIVISION, GMC

RCRA HAZARD ASSESSMENT TEST REPORT

Sample I.D. Oil Trim & Sludge (Ref. GMI-22) P.O. # 589554
Testing Lab ILWD, Inc. Date Sub. April, 1981 Date Rec'd May, 1981

261.21 IGNITABILITY

Flash point 130 ^{o}F (Min. allowed 140 ^{o}F)

261.22 CORROSIVITY

pH _____ (2 < pH > 12.5 allowed)
NACE corrosion rate _____ MM/year (Max. allowed 6.35 MM/year)

261.23 REACTIVITY

Acid labile cyanide _____
Acid labile sulfide _____

261.24 EPTOXICITY

Sample type: Solid _____ Semi-solid _____ Liquid _____
If liquid or semi-solid, filterable solids = _____%

NOTE! If sample contains less than -.5% nonfilterable solids, the filtrate is the extract.

Analytical Results

Values are concentrations of constituents in extract.

Constituent	Concentration, mg/l	Maximum concentration allowed, mg/l
Arsenic	_____	5.0
Barium	_____	100.0
Cadmium	_____	1.0
Chromium, total	_____	5.0
Chromium, hexavalent	_____	5.0
Lead	_____	5.0
Mercury	_____	0.2
Selenium	_____	1.0
Silver	_____	5.0
Endrin		0.02
Lindane	_____	0.4
Methoxychlor	_____	0.4
Toxaphene	_____	0.5
2,4-D	_____	0.5
2,4,5-tP	_____	1.0

Submitted by: Howard P. Jordan Title: Supervisor, Environmental Eng.

G-4e Prevention of Recurrence or Spread of Fires, Explosions, or Releases 40 CFR 264.56 (c)

The Emergency Coordinator will take all reasonable measures necessary to prevent the occurrence, recurrence, or spread of fire, explosions, or releases of other hazardous waste, including stopping operations, containing and collecting waste and isolating or removing containers.

The Hazardous Material Data sheets, available in the plant for all hazardous materials in use, give specific information on precautionary measures to take.

G-4f Storage and Treatment of Released Material 40 CFR 264.56 (g)

Immediately after an emergency, the Emergency Coordinator will provide for the treatment, storage, or disposal of recovered waste, contaminated water, and contaminated absorbent material or soil.

G-4g Incompatible Wastes 40 CFR 264.56 (h)

The Emergency Coordinator will ensure that no incompatible waste will be stored, treated, or disposed of in the area of the released waste until clean-up operations are complete, and that all emergency equipment is cleaned and/or replaced and fit for its intended use.

If the emergency situation involved notification to the Regional Administrator and state or local authorities, those authorities will be subsequently notified that post-emergency maintenance is complete and operations will be resumed.

G-4h Container Spills and Leakage 40 CFR 264.171

If a leaking container is discovered, the leak will be stopped, if possible, until the material can be transferred into a sound container. Any spilled material will be cleaned up by absorbing onto absorbant material and disposing, or by flushing with sufficient water into the containment system. The appropriate technique will depend on the nature and amount of material.

G-4i Tank Spills and Leakage 40 CFR 264.194 (c)

In the event of a leak developing in a waste tank or the process piping, operations will be immediately shut down. If it is not possible to stop the leak by closing piping valves, etc., the tank would be drained into a suitable tank wagon.

If the waste is leaking too rapidly to allow securing a tank wagon, the clean waste drum on hand in the waste management area would be used. Disposal of spilled material in the containment system is covered above.

G-4j Waste Pile and Containment System 40 CFR 264.227 and 264.255

These sections are not applicable since Inland does not manage a waste pile.

G-5 Emergency Equipment 40 CFR 264.52 (e)

See the Contingency Plan (Appendix 1, pages 3 - 6) for a list of emergency equipment available.

G-6 Coordination Agreements 40 CFR 264.52 (c) and 264.37

Copies of the Contingency Plan have been given to the local and state agencies listed below. A subsequent meeting and tour of the facility was held on February 11, 1981, to further familiarize them with the plan.

Mr. Grover W. O'Conner
Director & Chief of Police
Dayton Police Department
335 W. Third Street
Dayton, Ohio 45402

Mr. Thomas A. Beckett, Administrator
St. Elizabeth Hospital
601 Miami Boulevard West
Dayton, Ohio 45406

Mr. Frank L. Krug, Fire Chief
Dayton Fire Department
300 N. Main Street
Dayton, Ohio 45402

Mr. Tom Winston
State of Ohio EPA
Box 1049
361 E. Broad Street
Columbus, Ohio 43216

Mr. Robert Treiber, Fire Chief
Vandalia Fire Department
333 James E. Bohanan Memorial Drive
Vandalia, Ohio 45377

Mr. James R. Higgins, Police Chief
Vandalia Police Department
333 James E. Bohanan Memorial Drive
Vandalia, Ohio 45377

In addition, local waste handling contractors have agreed to provide a tank wagon on short notice. A list of clean-up contractors is included in the SPCC Plan (Appendix 2).

G-7 Evacuation Plan 40 CFR 264.52 (f)

Evacuation procedures are covered in part G-4d and are reviewed with employees twice yearly during safety meetings. The evacuation map for the Hazardous Waste Management facility is shown in Appendix 1, page 13.

G-8 Required Reports 40 CFR 264.56 (d), (i) & (j)

Any emergency event that occurs that could threaten human health or the environment will be reported in writing within 15 days to the EPA Regional Administrator and the Ohio EPA. A copy of the reporting form for such events is included in the Waste Handling Contingency Plan. An internal form for reporting spills, whether they endanger the environment or not, is also used and is reproduced here as Figure g-3.

REV. 2/24/89

REPORT OF CHEMICAL SPILL

DATE OF SPILL_____ PLANT_____

TIME REPORTED_____ BLDG._____

REPORTED BY _____ DEPT._____

Nature, quantity and location of spill --_____

_____

_____

_____

Cause of spill --_____

_____

_____

_____

Did spill reach waterway? Yes_____ No_____

"YES", description and location of spill --_____

_____

_____

_____

_____

Description of clean-up or containment measures implemented at spill site -

_____

_____

_____

_____

_____

PREPARED BY_____

DATE_____

SAMPLE SPILL REPORT FORM

FIGURE g-3

REV. 2/24/89

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U. S. EPA, REGION V
SWB — PMS

PERMIT

ATTACHMENT VI

CLOSURE PLAN

General Motors Corporation
OHD 000-817-023

COPY 2

CLOSURE PLAN

(For Storage Facilities in
existence prior to November 19, 1980)

I. INTRODUCTION

Under the U.S. EPA regulations, 40 CFR Part 265, Subpart G, sections 265.110 thru 265.120, each facility which stores, treats, or disposes of hazardous wastes must have a Closure Plan on file. This Closure Plan has been prepared to cover the following facility:

1. EPA ID Number OHD000817023

2. Owner's Name: General Motors Corporation

   Plant and Adress: Inland Division
   2701 Home Avenue
   Dayton, Ohio 45417

3. This Plan has been prepared by Howard P. Jordan
   (Name & Job Title)
   Supv., Environ. Engineering

   May 15, 1981
   (Date)

   This Plan has been revised by Timothy Wojdacz
   (Name & Job Title)
   Supv., Environ. Engineering

   January 15, 1989

4. The attached chart shows the facilities for storage of hazardous wastes.

See Attached Prints.

Timothy Wojdacz

II. MAXIMUM WASTE INVENTORY

The following table shows the estimated annual quantity of wastes taken from page 3 of our part B permit:

EPA HAZARDOUS WASTE NO.	EST. ANNUAL QUANTITY	PROCESS CODE
D001	30,000 pounds	S01
F003	540,000 pounds	S02
U223	60,000 pounds	S01

III. SCHEDULE FOR CLOSING

This facility does not have a definite closure date. If you must have a closure date, use 10 yrs. hence from revised date listed on first page. The following schedule is open-ended. It lists the timetable for closure in terms of elapsed time subsequent to the time that EPA, or an EPA authorized state agency, has approved this Closure Plan (see Section 265.112(c)).

DAY 1 - Plant termination of hazardous waste activity.

DAY 10 - Contents of tanks removed to drums or bulk tankers for disposal.

DAY 15 - All scrap solvents removed for disposal.

DAY 18 - All underground tanks filled with aqueous detergent solution for removal of residue materials. A 5% solution of an alkali cleaner will be used.

DAY 20-23 - The detergent solutions will be pumped out and transported via portable tanks to one off site wastewater treatment facility.

DAY 23-29 - The cleaned above and underground tanks will be rinsed with water to remove any balance of wash solution. This too will be transported via the portable tanks for treatment at the batch wastewater treatment facility. Samples of this rinse water will be analyzed by Chem. Lab. Rinsing will continue until the lab tests indicate the wastes are no longer hazardous under RCRA.

DAY 30 - The trenching around the perimeter of the drum storage pad will be examined and any residue will be removed.

DAY 30-40 - The empty above and underground tanks upon complete decontamination will be either:

A. Removed, or
B. Filled with dry sand and welded closed.

DAY 40-50 - The soil immediately around the fill and drain lines will be removed and transported to secure chemical landfill.

DAY 50 - Closure should be complete.

DAY 52-57 - The concrete pad will be steam cleaned and the residue removed to drums and transported off site for disposal.

DAY 55 - Certification of closure by independent registered professional engineer.

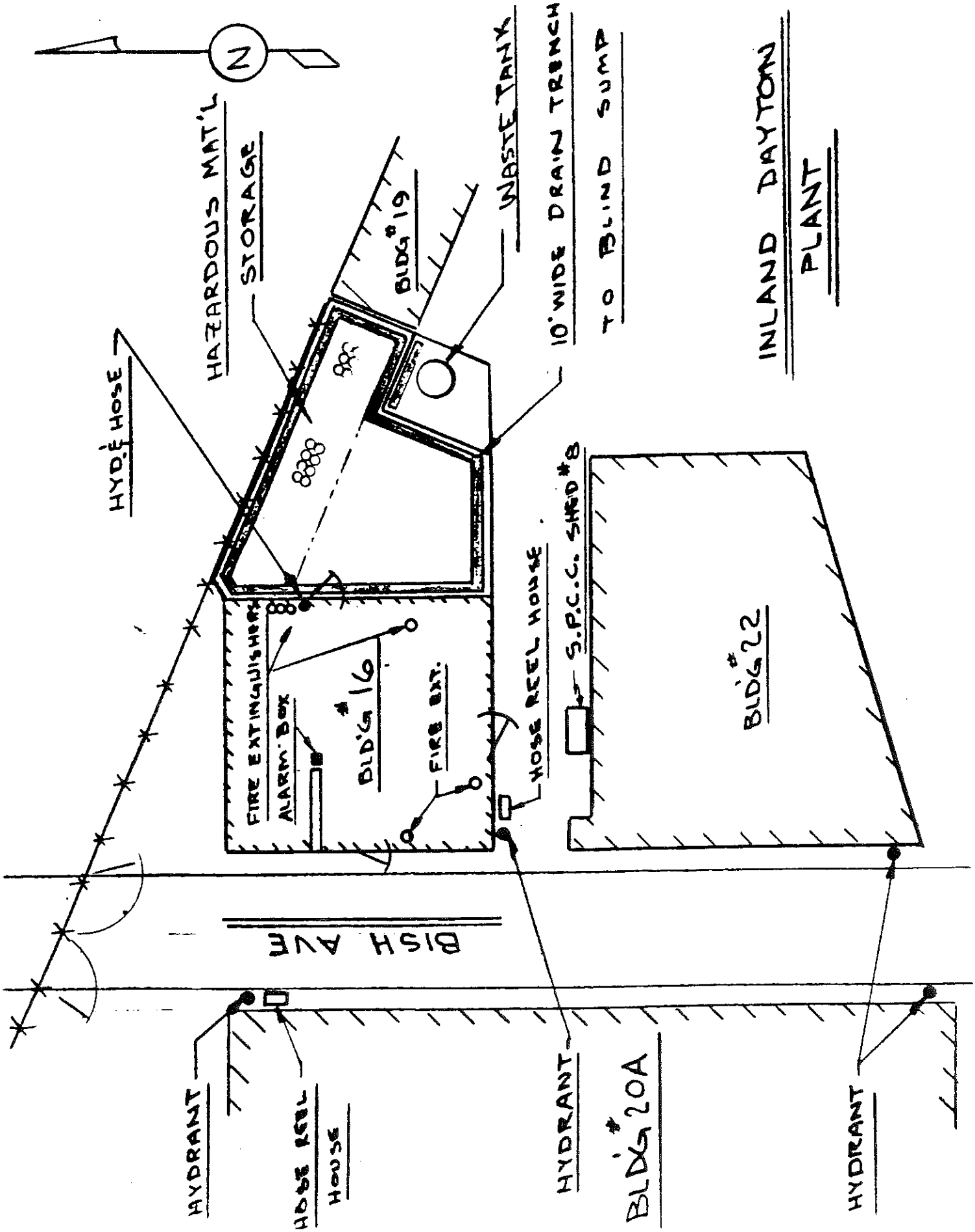
IV. COST ESTIMATES FOR CLOSURE (To be updated annually by May 15.)

Prepared by Timothy Wojdacz (Plant Engineering)
Name and Job Title
Supv. Environmental Engineering

Ralph Drake
Financial Control and Audit (Financial Dept.)
Name and Job Title

Area	Total Cost
Drummed Waste	$ 15,241.29
Underground Oil Tank	$ 18,289.55
Solvent Tank	$ 9,144.77
Cleaning of Storage Pad	$ 4,572.39
Total	$ 47,248.00

as of 1/15/89


N
HAZARDOUS MAT'L STORAGE
BLDG #19
WASTE TANK
10' WIDE DRAIN TRENCH TO BLIND SUMP
INLAND DAYTON PLANT
HYDE HOSE
FIRE EXTINGUISHER
ALARM BOX
BLDG #16
FIRE EXT.
HOSE REEL HOUSE
S.P.C.C. SHED #8
BLDG #22
BISH AVE
HYDRANT
HOSE REEL HOUSE
HYDRANT
BLDG #20A
HYDRANT

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ATTACHMENT VII

DESCRIPTION OF WASTES

General Motors Corporation
OHD 000-817-023

COPY 2

SECTION C

WASTE CHARACTERISTICS

This section describes the chemical and physical nature of the hazardous wastes generated and potentially stored at the Inland Division, GMC Dayton facilities. Also included is the "Waste Analysis Plan" for sampling, testing, and evaluating the wastes to assure that sufficient information is available for safe handling of the wastes. The information submitted is in accordance with the requirements of 40 CFR 122.25(a)(2) and (3).

C-1 Chemical and Physical Analysis 40 CFR 122.25(2)

List of Hazardous Wastes Potentially Stored at Facility

Hazardous wastes are stored at this facility in 55 gallon containers, one 7,000 gallon tank, and one 500 gallon tank.

Storage capacity is:

228	Containers (Drums)
1	7,000 Gallon Tank
1	500 Gallon Tank

Containers

All the waste materials are delivered by the generating departments to the Waste Management Hazardous Waste Storage area in containers (55 gallon drums). Many of Inland's hazardous waste streams have been found compatible and acceptable for incineration. These materials are transferred from the containers into the 7,000 gallon tank prior to shipment to the incinerator company. A preshipment sample is supplied to the incinerator source prior to each shipment for their evaluation. The sample is drawn out of a sample tap provided on the tank for this purpose.

Since the material in the tank is constantly agitated, the sample will be a representative composite. It flows directly into a 1 gallon metal container which is then sealed and delivered to a designated representative of the incinerator source for analysis.

Containers of all other waste not suitable for bulk disposal are placed onto the storage pad prior to shipment for recycling, recovery, or disposal.

Waste Analysis

Table C-1 lists the hazardous waste potentially stored at the Inland facility, their associated hazard classification, and the basis for the hazard classification. In most cases the classification is based on known characteristics of the waste, such as ignitability, reactivity, corrosivity, or EP toxicity analyses. For listed wastes, the classification is based on the listing.

Waste Handling

All waste drums are labeled in the generating department prior to delivery to the waste management area; the label describes the contents of the container and its associated hazard (ignitability, corrosivity, reactivity, or toxicity). This practice informs the workers handling these wastes of the associated hazards so that appropriate precautions can be taken.

Wastes that were generated off-site (at the Vandalia plant) and transported to this facility to be bulked for incineration are inspected visually and for proper odor when opened before being poured into the mixing tank. If a drum should be found to be mislabeled and its true contents are recognizable by way of the operator's experience, the drum would be relabeled properly and the manifest revised accordingly. If the contents are not immediately obvious, the drum is to be held for analysis and characterization according to the sampling plan described later in this section.

This inspection of each drum's contents, whether generated off-site or on-site, and the container management practices described in Section D serve to prevent the accidental mixing of reactive wastes. Precautions to prevent accidental ignition of ignitable wastes are likewise described in detail in Section D. Details regarding the tanks, containers, storage areas, and personnel training are presented in other sections of this application.

Following Table C-1 are the RCRA Hazard Assessment sheets for the various wastes potentially stored, and a sample composite (Figure C-2) test (C-3) for the wastes placed into the bulk tank prior to being sent for incineration.

The composition of the bulk wastes and the container wastes vary at any given point in time because the various waste streams are not generated in a uniform manner.

Table C-1

WASTES, ASSOCIATED HAZARDS, AND BASIS FOR HAZARD DESIGNATION

WASTE	HAZARD	BASIS FOR HAZARD DESCRIPTION
Cement	Ignitable Toxic	Coating has flash point of 115 ^{o}F, EP toxic lead (D008).
Cement and Oil	Ignitable Toxic	Coating has flash point of 115 ^{o}F. EP toxic lead (D008).
Cement and Solvent	Ignitable Toxic	Coating has flash point of 115 ^{o}F, EP toxic lead (D008), solvent mix MEK (U159), MIBK (U161), perchlor (U210), toluene (U220), xylene (U239)
Paint	Ignitable Toxic	Flash Point - 100 ^{o}F EP toxic, cadmium and lead.
Paint Sludge	Ignitable Toxic	Flash Point - 100 ^{o}F EP toxic, cadmium and lead.
Wax and Water	Ignitable	Flash Point - 135 ^{o}F
Polyol	Ignitable	Flash Point - 135 ^{o}F
Grinding Sludge	Ingitable	Flash Point - 120 ^{o}F
Isocyanate (TDI & MDI)	Reactive	Listed waste - U223
Solvex	Corrosive	ph < 1.0
Oil Sludge	Ignitable	Flash Point - 80 ^{o}F
Cleaning Liquid	Ignitable	Flash Point - 110 ^{o}F
Polymer	Ignitable	Flash Point - 110 ^{o}F
Sludge		Flash Point - 140 ^{o}F. Handled as hazardous waste because of flash point.

Table C-1 (Continued)

WASTES, ASSOCIATED HAZARDS, AND BASIS FOR HAZARD DESIGNATION

WASTE	HAZARD	BASIS FOR HAZARD DESCRIPTION
Silicone	Ignitable	Flash Point - 100 ^{o}F
Brake Resins	Ignitable	Flash Point - 80 ^{o}F. Contains listed F003 & F005.
Oil Trim and Sludge	Ignitable	Flash Point - 130 ^{o}F
Catalyst	Ignitable	Flash Point - 135 ^{o}F
Neoprene	Ignitable	Flash Point - 70 ^{o}F. Contains listed producted xylene (U239)
Chloroform	Listed	U044
Mold Release	Ignitable	Flash Point - 80 ^{o}F
Fyrol-CEF	Ignitable	Flash Point - 120 ^{o}F

INLAND DIVISION, GMC

RCRA HAZARD ASSESSMENT TEST REPORT

Sample I.D. Cement (Ref. GMI-01) P.O. # 589554
Testing Lab ILWD, Inc. Date Sub. April, 1981 Date Rec'd May, 1981

261.21 IGNITABILITY

Flash point 115 °F (Min. allowed 140 °F)

261.22 CORROSIVITY

pH _____ (2 < pH > 12.5 allowed)
NACE corrosion rate _____ MM/year (Max. allowed 6.35 MM/year)

261.23 REACTIVITY

Acid labile cyanide _____
Acid labile sulfide _____

261.24 EPTOXICITY

Sample type: Solid X Semi-solid _____ Liquid _____
If liquid or semi-solid, filterable solids = _____%

NOTE! If sample contains less than -.5% nonfilterable solids, the filtrate is the extract.

Analytical Results

Values are concentrations of constituents in extract.

Constituent	Concentration, mg/l	Maximum concentration allowed, mg/l
Arsenic	--	5.0
Barium	NMA ug/g	100.0
Cadmium	< 0.46 ug/g	1.0
Chromium, total	< 0.46 ug/g	5.0
Chromium, hexavalent	--	5.0
Lead	1282 ug/g	5.0
Mercury	< 0.06 ug/g	0.2
Selenium	--	1.0
Silver	--	5.0
Endrin		0.02
Lindane	--	0.4
Methoxychlor	--	10.0
Toxaphene	--	0.5
2,4-D	--	10.0
2,4,5-tP	--	1.0

Submitted by: Howard P. Jordan Title: Supervisor, Environmental Eng.

INLAND DIVISION, GMC

RCRA HAZARD ASSESSMENT TEST REPORT

Sample I.D. Cement & Oil (Ref. GMI-01-2) P.O. # 589554
Testing Lab ILWD, Inc. Date Sub. April, 1981 Date Rec'd May, 1981

261.21 IGNITABILITY

Flash point 115 °F (Min. allowed 140 °F)

261.22 CORROSIVITY

pH _____ (2 < pH > 12.5 allowed)
NACE corrosion rate _____ MM/year (Max. allowed 6.35 MM/year)

261.23 REACTIVITY

Acid labile cyanide _____
Acid labile sulfide _____

261.24 EPTOXICITY

Sample type: Solid _____ Semi-solid X Liquid _____
If liquid or semi-solid, filterable solids = Variable %

NOTE! If sample contains less than -.5% nonfilterable solids, the filtrate is the extract.

Analytical Results

Values are concentrations of constituents in extract.

Constituent	Concentration, mg/l	Maximum concentration allowed, mg/l
Arsenic	--	5.0
Barium	NMA	100.0
Cadmium	< 0.46 ug/g	1.0
Chromium, total	< 0.46 ug/g	5.0
Chromium, hexavalent	--	5.0
Lead	1282 ug/g	5.0
Mercury	< 0.06 ug/g	0.2
Selenium		1.0
Silver		5.0
Endrin		0.02
Lindane		0.4
Methoxychlor		0.4
Toxaphene		0.5
2,4-D		0.5
2,4,5-tP		1.0

Submitted by: Howard P. Jordan Title: Supervisor, Environmental Eng.

INLAND DIVISION, GMC

RCRA HAZARD ASSESSMENT TEST REPORT

Sample I.D. Cement & Solvent (GMI-01-3) P.O. # 589554
Testing Lab ILWD, Inc. Date Sub. April, 1981 Date Rec'd May, 1981

261.21 IGNITABILITY

Flash point 115 °F (Min. allowed 140 °F)

261.22 CORROSIVITY

pH _____ (2 < pH > 12.5 allowed)
NACE corrosion rate _____ MM/year (Max. allowed 6.35 MM/year)

261.23 REACTIVITY

Acid labile cyanide _____
Acid labile sulfide _____

261.24 EPTOXICITY

Sample type: Solid _____ Semi-solid _____ Liquid _____
If liquid or semi-solid, filterable solids = Variable %

NOTE! If sample contains less than -.5% nonfilterable solids, the filtrate is the extract.

Analytical Results

Values are concentrations of constituents in extract.

Constituent	Concentration, mg/l	Maximum concentration allowed, mg/l
Arsenic	--	5.0
Barium	NMA	100.0
Cadmium	< 0.46 ug/g	1.0
Chromium, total	< 0.46 ug/g	5.0
Chromium, hexavalent	--	5.0
Lead	1282 ug/g	5.0
Mercury	< 0.46 ug/g	0.2
Selenium		1.0
Silver		5.0
Endrin		0.02
Lindane		0.4
Methoxychlor		0.4
xaphene		0.5
,4-D		0.5
2,4,5-tP		1.0

Submitted by: Howard P. Jordan Title: Supervisor, Environmental Eng.

INLAND DIVISION, GMC

RCRA HAZARD ASSESSMENT TEST REPORT

Sample I.D. Paint (Ref. GMI-02) P.O. # 589554
Testing Lab ILWD, Inc. Date Sub. April, 1981 Date Rec'd May, 1981

261.21 IGNITABILITY

Flash point < 100 °F (Min. allowed 140 °F)

261.22 CORROSIVITY

pH _____ (2 < pH > 12.5 allowed)
NACE corrosion rate _____ MM/year (Max. allowed 6.35 MM/year)

261.23 REACTIVITY

Acid labile cyanide _____
Acid labile sulfide _____

261.24 EPTOXICITY

Sample type: Solid _____ Semi-solid _____ Liquid _____
If liquid or semi-solid, filterable solids = _____%

NOTE! If sample contains less than -.5% nonfilterable solids, the filtrate is the extract.

Analytical Results

Values are concentrations of constituents in extract.

Constituent	Concentration, mg/l	Maximum concentration allowed, mg/l
Arsenic	--	5.0
Barium	--	100.0
Cadmium	12.8	1.0
Chromium, total	1.3	5.0
Chromium, hexavalent	--	5.0
Lead	11.2	5.0
Mercury		0.2
Selenium		1.0
Silver		5.0
Endrin		0.02
Lindane		0.4
Methoxychlor		0.4
Toxaphene		0.5
2,4-D		0.5
2,4,5-tP		1.0

Submitted by: Howard P. Jordan Title: Supervisor, Environmental Eng.

INLAND DIVISION, GMC

RCRA HAZARD ASSESSMENT TEST REPORT

Sample I.D. Paint Sludge (Ref. GMI-02-2) P.O. # 589554
Testing Lab ILWD, Inc. Date Sub. April, 1981 Date Rec'd May, 1981

261.21 IGNITABILITY

Flash point 100 °F (Min. allowed 140 °F)

261.22 CORROSIVITY

pH _____ (2 < pH > 12.5 allowed)
NACE corrosion rate _____ MM/year (Max. allowed 6.35 MM/year)

261.23 REACTIVITY

Acid labile cyanide _____
Acid labile sulfide _____

261.24 EPTOXICITY

Sample type: Solid _____ Semi-solid _____ Liquid _____
If liquid or semi-solid, filterable solids = _____%

NOTE! If sample contains less than -.5% nonfilterable solids, the filtrate is the extract.

Analytical Results

Values are concentrations of constituents in extract.

Constituent	Concentration, mg/l	Maximum concentration allowed, mg/l
Arsenic	--	5.0
Barium	--	100.0
Cadmium	< 1.0	1.0
Chromium, total	5.08	5.0
Chromium, hexavalent		5.0
Lead	30.5	5.0
Mercury		0.2
Selenium		1.0
Silver		5.0
Endrin		0.02
Lindane		0.4
Methoxychlor		0.4
Toxaphene		0.5
2,4-D		0.5
2,4,5-tP		1.0

Submitted by: Howard P. Jordan Title: Supervisor, Environmental Eng.

INLAND DIVISION, GMC

RCRA HAZARD ASSESSMENT TEST REPORT

Sample I.D. Paint & Solvent (Ref. GMI-03) P.O. # 589554
Testing Lab ILWD, Inc. Date Sub. April, 1981 Date Rec'd May, 1981

261.21 IGNITABILITY

Flash point 100 °F (Min. allowed 140 °F)

261.22 CORROSIVITY

pH _____ (2 < pH > 12.5 allowed)
NACE corrosion rate _____ MM/year (Max. allowed 6.35 MM/year)

261.23 REACTIVITY

Acid labile cyanide _____
Acid labile sulfide _____

261.24 EPTOXICITY

Sample type: Solid _____ Semi-solid _____ Liquid _____
If liquid or semi-solid, filterable solids = _____%

NOTE! If sample contains less than -.5% nonfilterable solids, the filtrate is the extract.

Analytical Results

Values are concentrations of constituents in extract.

Constituent	Concentration, mg/l	Maximum concentration allowed, mg/l
Arsenic	--	5.0
Barium	--	100.0
Cadmium	12.8	1.0
Chromium, total	1.3	5.0
Chromium, hexavalent	--	5.0
Lead	11.2	5.0
Mercury		0.2
Selenium		1.0
Silver		5.0
Endrin		0.02
Lindane		0.4
Methoxychlor		0.4
Toxaphene		0.5
2,4-D		0.5
2,4,5-tP		1.0

Submitted by: Howard P. Jordan Title: Supervisor, Environmental Eng.

INLAND DIVISION, GMC

RCRA HAZARD ASSESSMENT TEST REPORT

Sample I.D. Wax & Water (Ref. GMI-04) P.O. # 589479
Testing Lab ILWD, Inc. Date Sub. April, 1981 Date Rec'd May, 1981

261.21 IGNITABILITY

Flash point 100 °F (Min. allowed 140 °F)

261.22 CORROSIVITY

pH 6.2 (2 < pH > 12.5 allowed)
NACE corrosion rate _____ MM/year (Max. allowed 6.35 MM/year)

261.23 REACTIVITY

Acid labile cyanide _____
Acid labile sulfide _____

261.24 EPTOXICITY

Sample type: Solid _____ Semi-solid _____ Liquid _____
If liquid or semi-solid, filterable solids = _____%

NOTE! If sample contains less than -.5% nonfilterable solids, the filtrate is the extract.

Analytical Results

Values are concentrations of constituents in extract.

Constituent	Concentration, mg/l	Maximum concentration allowed, mg/l
Arsenic	< 0.01	5.0
Barium	< 0.1	100.0
Cadmium	< 0.01	1.0
Chromium, total	< 0.01	5.0
Chromium, hexavalent	--	5.0
Lead	< 0.1	5.0
Mercury	< 0.001	0.2
Selenium	0.02	1.0
Silver	< 0.01	5.0
Endrin		0.02
Lindane		0.4
Methoxychlor		0.4
Toxaphene		0.5
2,4-D		0.5
2,4,5-tP		1.0

Submitted by: Howard P. Jordan Title: Supervisor, Environmental Eng.

INLAND DIVISION, GMC

RCRA HAZARD ASSESSMENT TEST REPORT

Sample I.D. Polyol (GMI-07) P.O. # 589479
Testing Lab ILWD, Inc. Date Sub. April, 1981 Date Rec'd May, 1981

261.21 IGNITABILITY

Flash point 135 °F (Min. allowed 140 °F)

261.22 CORROSIVITY

pH _____ (2 < pH > 12.5 allowed)
NACE corrosion rate _____ MM/year (Max. allowed 6.35 MM/year)

261.23 REACTIVITY

Acid labile cyanide _____
Acid labile sulfide _____

261.24 EPTOXICITY

Sample type: Solid _____ Semi-solid _____ Liquid _____
If liquid or semi-solid, filterable solids = _____%

NOTE! If sample contains less than -.5% nonfilterable solids, the filtrate is the extract.

Analytical Results

Values are concentrations of constituents in extract.

Constituent	Concentration, mg/l	Maximum concentration allowed, mg/l
Arsenic		5.0
Barium		100.0
Cadmium		1.0
Chromium, total		5.0
Chromium, hexavalent		5.0
Lead		5.0
Mercury		0.2
Selenium		1.0
Silver		5.0
Endrin		0.02
Lindane		0.4
Methoxychlor		0.4
Toxaphene		0.5
2,4-D		0.5
2,4,5-tP		1.0

Submitted by: Howard P. Jordan Title: Supervisor, Environmental Eng.

INLAND DIVISION, GMC

RCRA HAZARD ASSESSMENT TEST REPORT

Sample I.D. Grinding Sludge (GMI-09) P.O. # 589554
Testing Lab ILWD, Inc. Date Sub. April, 1981 Date Rec'd May, 1981

261.21 IGNITABILITY

Flash point 120 °F (Min. allowed 140 °F)

261.22 CORROSIVITY

pH 7.4 (2 < pH > 12.5 allowed)
NACE corrosion rate _____ MM/year (Max. allowed 6.35 MM/year)

261.23 REACTIVITY

Acid labile cyanide _____
Acid labile sulfide _____

261.24 EPTOXICITY

Sample type: Solid _____ Semi-solid _____ Liquid _____
If liquid or semi-solid, filterable solids = _____%

NOTE! If sample contains less than -.5% nonfilterable solids, the filtrate is the extract.

Analytical Results

Values are concentrations of constituents in extract.

Constituent	Concentration, mg/l	Maximum concentration allowed, mg/l
Arsenic	< 0.01	5.0
Barium	0.3	100.0
Cadmium	< 0.01	1.0
Chromium, total	< 0.02	5.0
Chromium, hexavalent		5.0
Lead	< 0.1	5.0
Mercury	< 0.0025	0.2
Selenium	< 0.01	1.0
Silver	< 0.01	5.0
Endrin		0.02
Lindane		0.4
Methoxychlor		0.4
Toxaphene		0.5
2,4-D		0.5
2,4,5-tP		1.0

Submitted by: Howard P. Jordan Title: Supervisor, Environmental Eng.

INLAND DIVISION, GMC

RCRA HAZARD ASSESSMENT TEST REPORT

Sample I.D. Isocyanate (Ref. GMI-11) P.O. # 589479
Testing Lab ILWD, Inc. Date Sub. April, 1981 Date Rec'd May, 1981

261.21 IGNITABILITY

Flash point _____ °F (Min. allowed 140 °F)

261.22 CORROSIVITY

pH _____ (2 < pH > 12.5 allowed)
NACE corrosion rate _____ MM/year (Max. allowed 6.35 MM/year)

261.23 REACTIVITY

Acid labile cyanide _____
Acid labile sulfide _____

261.24 EPTOXICITY

Sample type: Solid _____ Semi-solid _____ Liquid _____
If liquid or semi-solid, filterable solids = _____ %

NOTE! If sample contains less than -.5% nonfilterable solids, the filtrate is the extract.

Analytical Results

Values are concentrations of constituents in extract.

Constituent	Concentration, mg/l	Maximum concentration allowed, mg/l
Arsenic	_____	5.0
Barium	_____	100.0
Cadmium	_____	1.0
Chromium, total	_____	5.0
Chromium, hexavalent	_____	5.0
Lead	_____	5.0
Mercury	_____	0.2
Selenium	_____	1.0
Silver	_____	5.0
Endrin		0.02
Lindane	_____	0.4
Methoxychlor	_____	0.4
Toxaphene	_____	0.5
2,4-D	_____	0.5
2,4,5-tP	_____	1.0

Submitted by: Howard P. Jordan Title: Supervisor, Environmental Eng.

REV. 2/24/89

INLAND DIVISION, GMC

RCRA HAZARD ASSESSMENT TEST REPORT

Sample I.D. Solvex (GMI-12) P.O. # 589554
Testing Lab ILWD, Inc. Date Sub. April, 1981 Date Rec'd May, 1981

261.21 IGNITABILITY

Flash point Smothers Flame °F (Min. allowed 140 °F)

261.22 CORROSIVITY

pH < 1.0 (2 < pH > 12.5 allowed)
NACE corrosion rate _____ MM/year (Max. allowed 6.35 MM/year)

261.23 REACTIVITY

Acid labile cyanide _____
Acid labile sulfide _____

261.24 EPTOXICITY

Sample type: Solid _____ Semi-solid _____ Liquid X
If liquid or semi-solid, filterable solids = _____%

NOTE! If sample contains less than -.5% nonfilterable solids, the filtrate is the extract.

Analytical Results

Values are concentrations of constituents in extract.

Constituent	Concentration, mg/l	Maximum concentration allowed, mg/l
Arsenic	NMA	5.0
Barium		100.0
Cadmium	< 0.42	1.0
Chromium, total	1.68	5.0
Chromium, hexavalent		5.0
Lead	< 4.2	5.0
Mercury		0.2
Selenium	NMA	1.0
Silver	2.93	5.0
Endrin		0.02
Lindane		0.4
Methoxychlor		0.4
Toxaphene		0.5
2,4-D		0.5
2,4,5-tP		1.0

Submitted by: Howard P. Jordan Title: Supervisor, Environmental Eng.

INLAND DIVISION, GMC

RCRA HAZARD ASSESSMENT TEST REPORT

Sample I.D. Oil Sludge (Ref. GMI-13) P.O. # 589554
Testing Lab ILWD, Inc. Date Sub. April, 1981 Date Rec'd May, 1981

261.21 IGNITABILITY

Flash point 80 °F (Min. allowed 140 °F)

261.22 CORROSIVITY

pH _____ (2 < pH > 12.5 allowed)
NACE corrosion rate _____ MM/year (Max. allowed 6.35 MM/year)

261.23 REACTIVITY

Acid labile cyanide _____
Acid labile sulfide _____

261.24 EPTOXICITY

Sample type: Solid _____ Semi-solid _____ Liquid _____
If liquid or semi-solid, filterable solids = _____%

NOTE! If sample contains less than -.5% nonfilterable solids, the filtrate is the extract.

Analytical Results

Values are concentrations of constituents in extract.

Constituent	Concentration, mg/l	Maximum concentration allowed, mg/l
Arsenic	0.2	5.0
Barium	< 0.2	100.0
Cadmium	< 0.01	1.0
Chromium, total	< 0.01	5.0
Chromium, hexavalent		5.0
Lead	0.4	5.0
Mercury	0.0006	0.2
Selenium	0.2	1.0
Silver	< 0.01	5.0
Endrin		0.02
Lindane		0.4
Methoxychlor		0.4
Toxaphene		0.5
2,4-D		0.5
2,4,5-tP		1.0

Submitted by: Howard P. Jordan Title: Supervisor, Environmental Eng.

REV. 2/24/89

INLAND DIVISION, GMC

RCRA HAZARD ASSESSMENT TEST REPORT

Sample I.D. Cleaning Liquid (GMI-14) P.O. # 589554
Testing Lab ILWD, Inc. Date Sub. April, 1981 Date Rec'd May, 1981

261.21 IGNITABILITY

Flash point 110 °F (Min. allowed 140 °F)

261.22 CORROSIVITY

pH 9.3 (2 < pH > 12.5 allowed)
NACE corrosion rate _____ MM/year (Max. allowed 6.35 MM/year)

261.23 REACTIVITY

Acid labile cyanide _____
Acid labile sulfide _____

261.24 EPTOXICITY

Sample type: Solid _____ Semi-solid _____ Liquid _____
If liquid or semi-solid, filterable solids = _____%

NOTE! If sample contains less than -.5% nonfilterable solids, the filtrate is the extract.

Analytical Results

Values are concentrations of constituents in extract.

Constituent	Concentration, mg/l	Maximum concentration allowed, mg/l
Arsenic	0.1	5.0
Barium	< 0.2	100.0
Cadmium	< 0.01	1.0
Chromium, total	0.03	5.0
Chromium, hexavalent		5.0
Lead	< 0.1	5.0
Mercury	< 0.0005	0.2
Selenium	0.1	1.0
Silver	< 0.1	5.0
Endrin		0.02
Lindane		0.4
Methoxychlor		0.4
Toxaphene		0.5
2,4-D		0.5
2,4,5-tP		1.0

Submitted by: Howard P. Jordan Title: Supervisor, Environmental Eng.

REV. 2/24/89

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RCRA HAZARD ASSESSMENT TEST REPORT

Sample I.D. Polymer (Ref. GMI-16) P.O. # 589479
Testing Lab ILWD, Inc. Date Sub. April, 1981 Date Rec'd May, 1981

261.21 IGNITABILITY

Flash point 110 °F (Min. allowed 140 °F)

261.22 CORROSIVITY

pH _____ (2 < pH > 12.5 allowed)
NACE corrosion rate _____ MM/year (Max. allowed 6.35 MM/year)

261.23 REACTIVITY

Acid labile cyanide _____
Acid labile sulfide _____

261.24 EPTOXICITY

Sample type: Solid _____ Semi-solid _____ Liquid _____
If liquid or semi-solid, filterable solids = _____%

NOTE! If sample contains less than -.5% nonfilterable solids, the filtrate is the extract.

Analytical Results

Values are concentrations of constituents in extract.

Constituent	Concentration, mg/l	Maximum concentration allowed, mg/l
Arsenic		5.0
Barium	< 5.0	100.0
Cadmium	< 0.25	1.0
Chromium, total	< 0.25	5.0
Chromium, hexavalent		5.0
Lead	5.0	5.0
Mercury	0.319	0.2
Selenium		1.0
Silver	12.0	5.0
Endrin		0.02
Lindane		0.4
Methoxychlor		0.4
Toxaphene		0.5
2,4-D		0.5
2,4,5-tP		1.0

Submitted by: Howard P. Jordan Title: Supervisor, Environmental Eng.

INLAND DIVISION, GMC

RCRA HAZARD ASSESSMENT TEST REPORT

Sample I.D. Sludge (Ref. GMI-18) P.O. # 589554
Testing Lab ILWD, Inc. Date Sub. April, 1981 Date Rec'd May, 1981

261.21 IGNITABILITY

Flash point 140 °F (Min. allowed 140 °F)

261.22 CORROSIVITY

pH _____ (2 < pH > 12.5 allowed)
NACE corrosion rate _____ MM/year (Max. allowed 6.35 MM/year)

261.23 REACTIVITY

Acid labile cyanide _____
Acid labile sulfide _____

261.24 EPTOXICITY

Sample type: Solid _____ Semi-solid _____ Liquid _____
If liquid or semi-solid, filterable solids = _____%

NOTE! If sample contains less than -.5% nonfilterable solids, the filtrate is the extract.

Analytical Results

Values are concentrations of constituents in extract.

Constituent	Concentration, mg/l	Maximum concentration allowed, mg/l
Arsenic	0.8	5.0
Barium	< 0.2	100.0
Cadmium	< 0.01	1.0
Chromium, total	0.02	5.0
Chromium, hexavalent		5.0
Lead	< 0.1	5.0
Mercury	0.0007	0.2
Selenium	0.25	1.0
Silver	< 0.01	5.0
Endrin		0.02
Lindane		0.4
Methoxychlor		0.4
Toxaphene		0.5
2,4-D		0.5
2,4,5-tP		1.0

Submitted by: Howard P. Jordan Title: Supervisor, Environmental Eng.

INLAND DIVISION, GMC

RCRA HAZARD ASSESSMENT TEST REPORT

Sample I.D. Silicone (Ref. GMI-20) P.O. # 589479
Testing Lab ILWD, Inc. Date Sub. April, 1981 Date Rec'd May, 1981

261.21 IGNITABILITY

Flash point 100 °F (Min. allowed 140 °F)

261.22 CORROSIVITY

pH _____ (2 < pH > 12.5 allowed)
NACE corrosion rate _____ MM/year (Max. allowed 6.35 MM/year)

261.23 REACTIVITY

Acid labile cyanide _____
Acid labile sulfide _____

261.24 EPTOXICITY

Sample type: Solid _____ Semi-solid _____ Liquid _____
If liquid or semi-solid, filterable solids = _____%

NOTE! If sample contains less than -.5% nonfilterable solids, the filtrate is the extract.

Analytical Results

Values are concentrations of constituents in extract.

Constituent	Concentration, mg/l	Maximum concentration allowed, mg/l
Arsenic		5.0
Barium		100.0
Cadmium		1.0
Chromium, total		5.0
Chromium, hexavalent		5.0
Lead		5.0
Mercury		0.2
Selenium		1.0
Silver		5.0
Endrin		0.02
Lindane		0.4
Methoxychlor		0.4
Toxaphene		0.5
2,4-D		0.5
2,4,5-tP		1.0

Submitted by: Howard P. Jordan Title: Supervisor, Environmental Eng.

INLAND DIVISION, GMC

RCRA HAZARD ASSESSMENT TEST REPORT

Sample I.D. Brake Resins (Ref. GMI-21) P.O. # 589479
Testing Lab ILWD, Inc. Date Sub. April, 1981 Date Rec'd May, 1981

261.21 IGNITABILITY

Flash point 80 °F (Min. allowed 140 °F)

261.22 CORROSIVITY

pH _____ (2 < pH > 12.5 allowed)
NACE corrosion rate _____ MM/year (Max. allowed 6.35 MM/year)

261.23 REACTIVITY

Acid labile cyanide _____
Acid labile sulfide _____

261.24 EPTOXICITY

Sample type: Solid _____ Semi-solid _____ Liquid _____
If liquid or semi-solid, filterable solids = _____%

NOTE! If sample contains less than -.5% nonfilterable solids, the filtrate is the extract.

Analytical Results

Values are concentrations of constituents in extract.

Constituent	Concentration, mg/l	Maximum concentration allowed, mg/l
Arsenic	--	5.0
Barium	< 4.0	100.0
Cadmium	< 0.2	1.0
Chromium, total	0.79	5.0
Chromium, hexavalent	--	5.0
Lead	1.98	5.0
Mercury	0.170	0.2
Selenium	--	1.0
Silver	1.39	5.0
Endrin		0.02
Lindane		0.4
Methoxychlor		0.4
Toxaphene		0.5
2,4-D		0.5
2,4,5-tP		1.0

Submitted by: Howard P. Jordan Title: Supervisor, Environmental Eng.

INLAND DIVISION, GMC

RCRA HAZARD ASSESSMENT TEST REPORT

Sample I.D. Catalyst (Ref. GMI-23) P.O. # 589479
Testing Lab ILWD, Inc. Date Sub. April, 1981 Date Rec'd May, 1981

261.21 IGNITABILITY

Flash point 135 °F (Min. allowed 140 °F)

261.22 CORROSIVITY

pH 9.5 (2 < pH > 12.5 allowed)
NACE corrosion rate _____ MM/year (Max. allowed 6.35 MM/year)

261.23 REACTIVITY

Acid labile cyanide _____
Acid labile sulfide _____

261.24 EPTOXICITY

Sample type: Solid _____ Semi-solid _____ Liquid _____
If liquid or semi-solid, filterable solids = _____%

NOTE! If sample contains less than -.5% nonfilterable solids, the filtrate is the extract.

Analytical Results

Values are concentrations of constituents in extract.

Constituent	Concentration, mg/l	Maximum concentration allowed, mg/l
Arsenic	< 0.01	5.0
Barium	< 0.1	100.0
Cadmium	< 0.01	1.0
Chromium, total	< 0.01	5.0
Chromium, hexavalent		5.0
Lead	< 0.1	5.0
Mercury	< 0.001	0.2
Selenium	< 0.01	1.0
Silver	< 0.01	5.0
Endrin		0.02
Lindane		0.4
Methoxychlor		0.4
Toxaphene		0.5
2,4-D		0.5
2,4,5-tP		1.0

Submitted by: Howard P. Jordan Title: Supervisor, Environmental Eng.

REV. 2/24/89

INLAND DIVISION, GMC

RCRA HAZARD ASSESSMENT TEST REPORT

Sample I.D. Neoprene Solvent (Ref. GMI-29) P.O. # 589554
Testing Lab ILWD, Inc. Date Sub. April, 1981 Date Rec'd May, 1981

261.21 IGNITABILITY

Flash point < 70 °F (Min. allowed 140 °F)

261.22 CORROSIVITY

pH _____ (2 < pH > 12.5 allowed)
NACE corrosion rate _____ MM/year (Max. allowed 6.35 MM/year)

261.23 REACTIVITY

Acid labile cyanide _____
Acid labile sulfide _____

261.24 EPTOXICITY

Sample type: Solid _____ Semi-solid _____ Liquid _____
If liquid or semi-solid, filterable solids = _____%

NOTE! If sample contains less than -.5% nonfilterable solids, the filtrate is the extract.

Analytical Results

Values are concentrations of constituents in extract.

Constituent	Concentration, mg/l	Maximum concentration allowed, mg/l
Arsenic		5.0
Barium		100.0
Cadmium		1.0
Chromium, total		5.0
Chromium, hexavalent		5.0
Lead		5.0
Mercury		0.2
Selenium		1.0
Silver		5.0
Endrin		0.02
Lindane		0.4
Methoxychlor		0.4
Toxaphene		0.5
2,4-D		0.5
2,4,5-tP		1.0

Submitted by: Howard P. Jordan Title: Supervisor, Environmental Eng.

INLAND DIVISION, GMC

RCRA HAZARD ASSESSMENT TEST REPORT

Sample I.D. Chloroform (Ref. GMI-30) P.O. # 589554
Testing Lab ILWD, Inc. Date Sub. April, 1981 Date Rec'd May, 1981

261.21 IGNITABILITY

Flash point 140 °F (Min. allowed 140 °F)

261.22 CORROSIVITY

pH _____ (2 < pH > 12.5 allowed)
NACE corrosion rate _____ MM/year (Max. allowed 6.35 MM/year)

261.23 REACTIVITY

Acid labile cyanide _____
Acid labile sulfide _____

261.24 EPTOXICITY

Sample type: Solid _____ Semi-solid _____ Liquid _____
If liquid or semi-solid, filterable solids = _____%

NOTE! If sample contains less than -.5% nonfilterable solids, the filtrate is the extract.

Analytical Results

Values are concentrations of constituents in extract.

Constituent	Concentration, mg/l	Maximum concentration allowed, mg/l
Arsenic		5.0
Barium		100.0
Cadmium		1.0
Chromium, total		5.0
Chromium, hexavalent		5.0
Lead		5.0
Mercury		0.2
Selenium		1.0
Silver		5.0
Endrin		0.02
Lindane		0.4
Methoxychlor		0.4
taphene		0.5
,4-D		0.5
2,4,5-tP		1.0

Submitted by: Howard P. Jordan Title: Supervisor, Environmental Eng.

REV. 2/24/89

INLAND DIVISION, GMC

RCRA HAZARD ASSESSMENT TEST REPORT

Sample I.D. Mold Release (Ref. GMI-32) P.O. # 589479
Testing Lab ILWD, Inc. Date Sub. April, 1981 Date Rec'd May, 1981

261.21 IGNITABILITY

Flash point 80 °F (Min. allowed 140 °F)

261.22 CORROSIVITY

pH _____ (2 < pH > 12.5 allowed)
NACE corrosion rate _____ MM/year (Max. allowed 6.35 MM/year)

261.23 REACTIVITY

Acid labile cyanide _____
Acid labile sulfide _____

261.24 EPTOXICITY

Sample type: Solid _____ Semi-solid _____ Liquid _____
If liquid or semi-solid, filterable solids = _____%

NOTE! If sample contains less than -.5% nonfilterable solids, the filtrate is the extract.

Analytical Results

Values are concentrations of constituents in extract.

Constituent	Concentration, mg/l	Maximum concentration allowed, mg/l
Arsenic		5.0
Barium		100.0
Cadmium		1.0
Chromium, total		5.0
Chromium, hexavalent		5.0
Lead		5.0
Mercury		0.2
Selenium		1.0
Silver		5.0
Endrin		0.02
Lindane		0.4
Methoxychlor		0.4
Toxaphene		0.5
2,4-D		0.5
2,4,5-tP		1.0

Submitted by: Howard P. Jordan Title: Supervisor, Environmental Eng.

REV. 2/24/89

INLAND DIVISION, GMC

RCRA HAZARD ASSESSMENT TEST REPORT

Sample I.D. Fyrol-CEF (Ref. GMI-34) P.O. # 589479
Testing Lab ILWD, Inc. Date Sub. April, 1981 Date Rec'd May, 1981

261.21 IGNITABILITY

Flash point 120 °F (Min. allowed 140 °F)

261.22 CORROSIVITY

pH _____ (2 < pH > 12.5 allowed)
NACE corrosion rate _____ MM/year (Max. allowed 6.35 MM/year)

261.23 REACTIVITY

Acid labile cyanide _____
Acid labile sulfide _____

261.24 EPTOXICITY

Sample type: Solid _____ Semi-solid _____ Liquid _____
If liquid or semi-solid, filterable solids = _____%

NOTE! If sample contains less than -.5% nonfilterable solids, the filtrate is the extract.

Analytical Results

Values are concentrations of constituents in extract.

Constituent	Concentration, mg/l	Maximum concentration allowed, mg/l
Arsenic		5.0
Barium		100.0
Cadmium		1.0
Chromium, total		5.0
Chromium, hexavalent		5.0
Lead		5.0
Mercury		0.2
Selenium		1.0
Silver		5.0
Endrin		0.02
Lindane		0.4
Methoxychlor		0.4
Toxaphene		0.5
2,4-D		0.5
2,4,5-tP		1.0

Submitted by: Howard P. Jordan Title: Supervisor, Environmental Eng.

REV. 2/24/89

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RCRA HAZARD ASSESSMENT TEST REPORT

Sample I.D. _____ P.O. # _____
Testing Lab ILWD, Inc. Date Sub. April, 1981 Date Rec'd May, 1981

261.21 IGNITABILITY

Flash point _____ °F (Min. allowed 140 °F)

261.22 CORROSIVITY

pH _____ (2 < pH > 12.5 allowed)
NACE corrosion rate _____ MM/year (Max. allowed 6.35 MM/year)

261.23 REACTIVITY

Acid labile cyanide _____
Acid labile sulfide _____

261.24 EPTOXICITY

Sample type: Solid _____ Semi-solid _____ Liquid _____
If liquid or semi-solid, filterable solids = _____%

NOTE! If sample contains less than -.5% nonfilterable solids, the filtrate is the extract.

Analytical Results

Values are concentrations of constituents in extract.

Constituent	Concentration, mg/l	Maximum concentration allowed, mg/l
Arsenic	_____	5.0
Barium	_____	100.0
Cadmium	_____	1.0
Chromium, total	_____	5.0
Chromium, hexavalent	_____	5.0
Lead	_____	5.0
Mercury	_____	0.2
Selenium	_____	1.0
Silver	_____	5.0
Endrin		0.02
Lindane	_____	0.4
Methoxychlor	_____	0.4
Toxaphene	_____	0.5
2,4-D	_____	0.5
2,4,5-tP	_____	1.0

Submitted by: Howard P. Jordan Title: Supervisor, Environmental Eng.

COMPONENT	% BY VOLUME OF MIXTURE
Polyol	28.7
Paint	15.4
Cement Glue	14.9
Paint and Solvent	12.6
Wax and Water	5.9
Caustic Cleaning Liquid	2.7
Trichlorofluoromethene	2.0
Flammable (Non-halogenated) Solvents	2.0
Wax and Solvent	2.0
Chlorinated Solvents	2.0
Silicone	2.4
Rubber Cement	1.2
Flush Trim Water	0 - 1.2
Resin and Water	0 - 1.2
Corrosive Zinc	0 - 1.2
Detergent	0 - 1.2
Mold Release	0 - 1.2
Grinding Oil	0 - 1.2
Antifreeze	0 - 1.2
Polysulfide Rubber	0 - 1.2

TYPICAL BULK WASTE

COMPOSITE FOR INCINERATION

Figure c-2