A.4.1

FILE

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live

Evan Bayh
Governor
Kathy Prosser
Commissioner

105 South Meridian Street
P.O. Box 6015
Indianapolis, Indiana 46206-6015
Telephone 317-232-8603
Environmental Helpline 1-800-451-6027

RECEIVED
MAR 16 1993
OFFICE OF RCRA
WASTE MANAGEMENT DIVISION
EPA, REGION V

Mr. John J. Murphy
Vice President
American Chemical Services, Inc.
P.O. Box 190
Griffith, IN 46319

March 10, 1993

RECEIVED MAR 23 1993
WMD RCRA
RECORD CENTER Part A

Dear Mr. Murphy:

Re: Extension of Time
Closure Activities
American Chemical Services, Inc.
Griffith, Indiana
IND 016360265

The Indiana Department of Environmental Management (IDEM) has received your letter dated March 1, 1993, requesting an extension of time to complete closure activities. The extension is requested to complete additional decontamination and sampling procedures.

Upon review of your letter, the IDEM grants a thirty (30) day extension to complete closure activities. Closure activities must be completed by April 3, 1993.

If you have any questions regarding this correspondence, please contact Mr. Stephen West at 317/232-3264.

Sincerely,

Victor P. Windle

Victor P. Windle, Chief
Plan Review and Permit Section
Hazardous Waste Management Branch
Solid and Hazardous Waste Management

cc: Mr. Hak Cho, U.S. EPA, Region V
Mr. Dave Dabertin, IDEM N.W. Office
Mr. Steve Pekera
Mr. Dave Harrison
Ms. Karyl Schmidt
File: IC1c, Lake Co.

FILE

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live

Evan Bayh
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Kathy Prosser
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105 South Meridian Street
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Indianapolis, Indiana 46206-6015
Telephone 317-232-8603
Environmental Helpline 1-800-451-6027

RECEIVED
FEB 10 1993
OFFICE OF RCRA
WASTE MANAGEMENT DIV.
EPA, REGION V

VIA CERTIFIED MAIL - P323-805-648

February 4, 1993

Mr. John J. Murphy,
Vice President
American Chemical Services, Inc.
P.O. Box 190
Griffith, IN 46319

RECEIVED
WMD RCRA
RECORD CENTER
FEB 24 1993

Dear Mr. Murphy:

Re: Extension Of Time
Closure Activities
American Chemical Services, Inc.
Griffith, Indiana
IND 016360265

The Indiana Department of Environmental Management (IDEM) has received your letter dated January 14, 1993, requesting an extension of time to complete closure activities. The extension is requested due to winter weather conditions.

Upon review of your letter, the IDEM grants a thirty (30) day extension to complete closure activities. Closure activities must be completed by March 3, 1993.

If you have any questions regarding this correspondence, please contact Mr. Stephen West at 317/232-3264.

Sincerely,

Victor P. Windle

Victor P. Windle, Chief
Plan Review and Permit Section
Hazardous Waste Management Branch
Solid and Hazardous Waste Management

cc: Mr. Hak Cho, U.S. EPA, Region V
Mr. Dave Dabertin, IDEM NW Office
File: IC1c, Lake Co.

EICHHORN, EICHHORN & LINK
ATTORNEYS AT LAW
200 RUSSELL STREET
P.O. BOX 6328
HAMMOND, INDIANA
46325

FREDERICK F. EICHHORN, JR.
WILLIAM H. EICHHORN
FREDERICK H. LINK
DAVID C. JENSEN
RICHARD M. SCHUMACHER
PETER L. HATTON
PAUL A. RAKE
RICHARD A. HANNING
MAUREEN JOHNS GRIMMER
CHARLES W. WEBSTER
SHERRY L. CLARKE
JOHN M. McCRUM

JEANNE B. BLUMENTHAL
DOUGLAS B. STEBBINS
LINDA J. KIBLER
PRISCILLA A. HEROCHIK

TELEPHONE
(219) 931-0560

TELECOPIER
(219) 931-5370

October 19, 1990

Mr. Steve Siegel
U.S. Environmental Protection
Agency, Region V
230 South Dearborn Street
Chicago, IL 60604

RE: American Chemical Service, Inc.
RCRA Closure
Our File No. 510.5536

Dear Mr. Siegel:

This is to confirm our telephone conversation of October 17, 1990, that the RCRA Closure Plan submitted to IDEM on October 3, 1990 is not being requested to be considered confidential.

If you have any other questions, please do not hesitate to call.

Very truly yours,

EICHHORN, EICHHORN & LINK

By: Maureen Johns Grimmer
Maureen Johns Grimmer

MJG/ld

EICHHORN, EICHHORN & LINK
ATTORNEYS AT LAW
200 RUSSELL STREET
P.O. BOX 6328
HAMMOND, INDIANA 46325
TELEPHONE (219) 931-0560
TELECOPIER (219) 931-5370

FREDERICK F. EICHHORN, JR.
WILLIAM H. EICHHORN
FREDERICK H. LINK
DAVID C. JENSEN
RICHARD M. SCHUMACHER
PETER L. HATTON
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SHERRY L. CLARKE
JOHN M. McCRUM
DOUGLAS B. STEBBINS

JEANNE B. BLUMENTHAL
LINDA J. KIBLER
JON M. PINNICK
KENNETH W. DAVIDSON

8585 BROADWAY
SUITE 825
MERRILLVILLE, INDIANA 46410
TELEPHONE (219) 736-4400
TELECOPIER (219) 736-4414

REPLY TO:

Merrillville
Office

OF COUNSEL
ROY R. ROBERTSON, JR.

December 18, 1991

RECEIVED
DEC 24 1991
OFFICE OF RCRA
Waste Management Division
U.S. EPA, REGION V

Mr. Mitch Mosier
Plan Review and Permit Section
Indiana Department of Environmental
Management
P.O. Box 6015
Indianapolis, IN 46206-6015

COPY

Re: RCRA Closure
American Chemical Service, Inc.
IND. 016 360 256
Our File No. 510.5536

Dear Mr. Mosier:

Pursuant to your Notice of Deficiency dated August 30, 1991, enclosed please find four (4) copies of the amended closure plan for American Chemical Service, Inc. which addresses all IDEM comments.

If you need any further information regarding this plan, American Chemical will be happy to answer questions or discuss any areas of concern by telephone or at a meeting. Please feel free to contact me at your convenience.

Very truly yours,

EICHHORN, EICHHORN & LINK

By: _____
Maureen Johns Grimmer

MJG/ld
cc w/o enc: Daniel Bakk
RCRA Enforcement Branch (5HR-12)
U.S. EPA, Region V
77 West Jackson Boulevard
Chicago, IL 60604

EICHHORN, EICHHORN & LINK

Wayde Hartivich (5HS-11)
U.S. EPA, Region V
77 West Jackson Boulevard
Chicago, IL 60604

Steve Siegel
U.S. EPA, Region V
77 West Jackson Boulevard
Chicago, IL 60604

Bruce Palin, Chief
Solid & Hazardous Waste Branch, IDEM
P.O. Box 6015
Indianapolis, IN 46206-6015

bcc:

John Murphy
American Chemical Service, Inc.
P.O. Box 190
Griffith, IN 46319

Steven Stanford, CPG
Environmental Division Manager
ATEC Associates
2646 Highway Avenue
Highland, IN 46322

COPY

FILE

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live

Evan Bayh
Governor
Kathy Prosser
Commissioner

105 South Meridian Street
P.O. Box 6015
Indianapolis, Indiana 46206-6015
Telephone 317-232-8603
Environmental Helpline 1-800-451-6027

RECEIVED
AUG 10 1992
OFFICE OF RCRA
Waste Management Division
U.S. EPA, REGION V

VIA CERTIFIED MAIL - P749-694-856

August 4, 1992

Mr. John J. Murphy,
Vice President
American Chemical Services, Inc.
P.O. Box 190
Griffith, IN 46319

Dear Mr. Murphy:

Re: Modified Approved Closure Plan
American Chemical Services, Inc.
Griffith, Indiana
IND 016360265

The total closure plan, dated October 2, 1990, and amended December 6, 1991, for the container and tank storage areas and solvent distillation units at American Chemical Services, Griffith, Indiana has been approved with the following modification:

> Provide revised Figures 1 and 2 indicating which four (4) borings will be extended to the first aquifer, and a facility map indicating proposed background boring locations, subject to IDEM approval, before beginning closure activities.

A public notice of the closure plan was published in the The Times of Munster. The public comment period began on the date of publication, November 28, 1990, and ended on December 28, 1990. No comments were received.

Applicable closure activities must be completed in accordance with the approved plan within one hundred eighty (180) days of the receipt of this approval letter. When closure is completed, the owner or operator must submit to the Commissioner, certification in accordance with 40 CFR 270.11(d) and 40 CFR 265.115, both by the owner or operator and by an independent registered professional engineer, that the facility has been closed in accordance with the specifications in the approved closure plan. The response must indicate the facility's desired future status. Mail four (4) copies of your response and certification to:

of the Technical Secretary of the Solid Waste Management Board, located at 105 South Meridian Street, P.O. Box 6167, Indianapolis, Indiana 46206-6167;

2. the date of the postmark on the envelope containing the petition, if the petition is mailed by United States mail; or

3. the date on which the petition is deposited with a private carrier, as shown by a receipt issued by the carrier, if the petition is sent by private carrier.

Please direct all questions regarding the closure process to Mr. Stephen West of my office at 317/232-3264.

Sincerely,

Timothy J. Method

Timothy J. Method
Assistant Commissioner for
Solid and Hazardous Waste Management

cc: Mr. Hak Cho, U.S. EPA, Region V
Ms. Fayola Wright, U.S. EPA, Region V
Mr. Wayde Hartwick, U.S. EPA, Region V
Mr. Dave Dabertin, IDEM N.W. Office
Lake County Health Department

FILE

RECEIVED
JUL 27 1992
OFFICE OF RCRA
Waste Management Division
U.S. EPA, REGION V

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live

Part A

Evan Bayh
Governor
Kathy Prosser
Commissioner

105 South Meridian Street
P.O. Box 6015
Indianapolis, Indiana 46206-6015
Telephone 317-232-8603
Environmental Helpline 1-800-451-6027

VIA CERTIFIED MAIL - P749-794-874

July 24, 1992

Mr. John J. Murphy,
Vice President
American Chemical Services, Inc.
P.O. Box 190
Griffith, IN 46319

Dear Mr. Murphy:

Re: Closure of Solids Mixing Area
American Chemical Services, Inc.
Griffith, Indiana
IND 016360265

The Indiana Department of Environmental Management (IDEM) has received your certification dated May 12, 1992, that partial closure has been completed as outlined in the approved closure plan for the Solids Mixing Area. With receipt of this certification, partial closure is completed as required by 40 CFR Part 265.

American Chemical Services, Inc. originally notified the U.S. EPA, Region V, as a hazardous waste treatment and storage facility with the following hazardous waste activities: container storage, tank storage, and tank treatment. The closure certification indicated that the following hazardous waste activity has been eliminated: solids mixing area (waste pile). This activity was not included in the notification to the U.S. EPA. With completion of partial closure, the facility status remains an interim status treatment and storage facility.

This is also to notify you that your facility is no longer required by 329 IAC 3.1-14-4 to maintain financial assurance for the closure of the solids mixing area. Financial assurance is still required for the remainder of the units on-site until total closure is completed and closure certification is accepted by the IDEM.

If you have any questions regarding this correspondence, please contact Mr. Stephen West at 317/232-3264.

Sincerely,

Timothy J. Method

Timothy J. Method
Assistant Commissioner
Solid and Hazardous Waste Management

cc: Lake County Health Department
Mr. Hak Cho, U.S. EPA, Region V
Ms. Fayola Wright, U.S. EPA, Region V
Mr. Jeff Stevens
Ms. Jenny Dooley
Mr. Jim Hunt

H. Cho
PART A

FILE

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

105 South Meridian Street
P.O. Box 6015
Indianapolis 46206-6015
Telephone 317/232-8603

RECEIVED
SEP 3 1991
OFFICE OF RCRA
Waste Management Division
U.S. EPA, REGION V

August 30, 1991

VIA CERTIFIED MAIL - P404-637-280

Mr. John J. Murphy
American Chemical Service, Inc.
P.O. Box 190
Griffith, Indiana 46319

Re: Closure Plan
Notice of Deficiency
Technical Review
American Chemical Services, Inc.
Griffith, Indiana
IND 016360256
65

Dear Mr. Murphy:

The Indiana Department of Environmental Management (IDEM) has received the closure plan for American Chemical Services, Inc., dated October 8, 1990. The closure plan has been reviewed for technical adequacy and determined to be inadequate pursuant to 329 IAC 3.

The enclosed Notice of Deficiency (NOD) outlines the specific deficiencies and provides discussion relevant to the revision. The information requested by the NOD must be submitted, in full, as an amended closure plan. This is required before the closure plan may be considered technically adequate.

The completed closure plan must be received by this office within thirty (30) days of receipt of this notice. Each page of your submission must be uniquely numbered and must have the date of the submission.

Please submit four (4) copies of the amended closure plan to the IDEM to the address above. A certification statement identical to the one stated in 329 IAC 3-34-2 must accompany all submissions.

Notice of Deficiency
Technical Review
American Chemical Services, Inc.
Griffith, Indiana
IND 016360256

General Comments

1) Include a certification statement for the closure plan.

Technical Comments

1) Tanks and Vessels, Page 12. All tanks and vessels will require high pressure steam cleaning and triple rinsing after the solid residues have been manually scraped and/or brushed from the interior surfaces. Samples of the final rinsate must be analyzed for Volatile Organic Compounds (VOCs) and EP-tox metals (totals). Modify as necessary.

2) Tank and Vessel Closure Criteria, Page 12. Visual inspection is inadequate for RCRA clean closures. Minimum proposal expectations of the IDEM concerning clean closure criteria for tanks and vessels are as follows:

   Samples will be considered clean when;

   A. Concentrations of all VOCs are at or below detection limits.

   B. Concentrations of EP-tox metals (totals) are at or below the primary drinking water standards.

3) Tanks and Vessel Closure Criteria, Page 12. An HNU may be used to determine the level of protection required for personal protection, however, clean closure will require rinsate analyses, see comments numbered 1 and 2. Modify as necessary.

4) Container Storage Area and Concrete Surfaces, Page 13. Sandblasting is not a recommended method of decontamination. The storage areas and concrete surfaces undergoing closure will require a high pressure steam cleaning followed by triple rinsing after scraping and/or brushing of the surfaces until they are visibly clean and free of hazardous waste and/or hazardous waste residue. Samples of the final rinsate will be analyzed for VOC's and EP-tox metals (totals). Modify as necessary.

5) Container Storage Area Closure Criteria, Page 14. Visual inspection is not adequate for RCRA clean closures. The minimum proposal expectations of the IDEM concerning clean closure criteria of storage areas and concrete surfaces are as follows:

EICHHORN, EICHHORN & LINK
ATTORNEYS AT LAW
200 RUSSELL STREET
P.O. BOX 6328
HAMMOND, INDIANA
46325

FREDERICK F. EICHHORN, JR.
WILLIAM H. EICHHORN
FREDERICK H. LINK
DAVID C. JENSEN
RICHARD M. SCHUMACHER
PETER L. HATTON
PAUL A. RAKE
RICHARD A. HANNING
MAUREEN JOHNS GRIMMER
CHARLES W. WEBSTER
SHERRY L. CLARKE
JOHN M. McCRUM

JEANNE B. BLUMENTHAL
DOUGLAS B. STEBBINS
LINDA J. KIBLER
PRISCILLA A. HEROCHIK

TELEPHONE
(219) 931-0560

TELECOPIER
(219) 931-5370

October 2, 1990

RECEIVED
OCT 5 - 1990
OFFICE OF RCRA
Waste Management Division
U.S. EPA, REGION V

Mr. Mitch Mosier
Plan Review and Permit Section
Indiana Department of Environmental
Management
P.O. Box 6015
Indianapolis, IN 46206-6015

RE: RCRA Closure
American Chemical Service, Inc.
IND. 016 360 256
Our File No. 510.5536

Dear Mr. Mosier:

Enclosed American Chemical Service, Inc. is submitting an original and five (5) copies of its Closure Plan for all of its hazardous waste treatment, storage and disposal units. It is being submitted pursuant to the Consent Agreement with U.S. EPA, Docket No. V-W-89-R-37.

By copy of this letter copies of the closure plan are being forwarded to Daniel Bakk, U.S. EPA RCRA Enforcement Branch and Robert Swale, U.S. EPA Remedial Project Manager for the American Chemical Service Site under CERCLA. Also by copy of this letter Steve Siegel, U.S. EPA Office of Regional Counsel and Marty Harmless, Chief, Solid & Waste Hazardous Branch are being notified of the submission of the closure plan.

If you need any further information regarding this plan American Chemical will be happy to answer questions or discuss any

areas of concern either by telephone or at a meeting. Please feel free to contact me at your convenience.

Very truly yours,

EICHHORN, EICHHORN & LINK

By: Maureen Johns Grimmer
Maureen Johns Grimmer

MJG/ld
Enc.

cc: Daniel Bakk w/enc.
RCRA Enforcement Branch (5HR-12)
U.S. EPA, Region V
230 South Dearborn St.
Chicago, IL 60604

Robert Swale w/enc. (5HS-11)
U.S. EPA - Region V
230 South Dearborn Street
Chicago, IL 60604

Steve Siegel w/o enc.
U.S. EPA - Region V
230 South Dearborn Street
Chicago, IL 60604

Marty Harmless, Chief, w/o enc.
Solid & Hazardous Waste Branch, IDEM
P.O. Box 6015
Indianapolis, IN 46206-6015

FILE

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
NANCY A. MALOLEY, Commissioner

105 South Meridian Street
P.O. Box 6015
Indianapolis 46206-6015
Telephone 317-232-8603

VIA CERTIFIED MAIL - P395-654-993

December 19, 1988

RECEIVED
DEC 21 1988
OFFICE OF RCRA
Waste Management Division
U.S. EPA, REGION V

Mr. James Tarpo, President
American Chemical Service, Inc.
P.O. Box 190
Griffith, Indiana 46319

Re: Closure Plan Modification and Approval
American Chemical Service, Inc.
Griffith, Indiana
IND 016360265

Dear Mr. Tarpo:

The revised partial closure plan, dated August 23, 1988, for American Chemical Service's former solids mixing area (waste pile), has been approved with the enclosed modifications.

A public notice of the closure plan was published in the Hammond Times. The public comment period began on the date of publication, August 25, 1986, and ended on September 25, 1986. No comments were received.

Applicable closure activities must be completed in accordance with the modified closure plan within one hundred eighty (180) days after the date of this letter. Within sixty (60) days of completion of closure, the owner or operator must submit to the Commissioner a certification of closure pursuant to 329 IAC 3-21-6 and 3-34-2(d). The certification must state that the facility has been closed in accordance with the specifications in the approved closure plan and be signed by the owner or operator and by an independent registered professional engineer. The response must indicate the facility's future desired status. Please mail your response and certification to:

Mr. Thomas E. Linson, Chief
Plan Review and Permit Section
Hazardous Waste Management Branch
Solid and Hazardous Waste Management
Indiana Department of Environmental Management
105 South Meridian Street
P.O. Box 6015
Indianapolis, Indiana 46206-6015

In addition, Section 206 of the Hazardous and Solid Waste Amendments of 1984 (HSWA) requires that corrective actions be performed for all releases of hazardous waste or constituents from any solid waste management unit. The U.S. Environmental Protection Agency has the authority to implement this provision, therefore, American Chemical Service, Inc. may still be subject to HSWA requirements.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review and a petition for a stay of effectiveness. These petitions must be submitted to the Indiana Department of Environmental Management within fifteen (15) days of your receipt of this notice. The petitions must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision, or otherwise entitled to review by law. The petitions must specifically identify those portions or conditions of the modified closure plan for which a stay and/or administrative review is being requested.

Please direct all questions regarding the closure process to Ms. Debra Dubenetzky of my office at AC 317/232-3221.

Sincerely,

Bruce H Palin

Bruce H. Palin
Acting Assistant Commissioner for
Solid and Hazardous Waste Management

DD/lea

Enclosure

cc: Mr. Hak Cho, U.S. EPA, Region V (with enclosure)
Mr. Bernie Orenstein, U.S. EPA, Region V
Lake County Health Department (with enclosure)
Mr. Jeff Stevens
Ms. Catherine Lynch (with enclosure)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
NANCY A. MALOLEY, Commissioner

105 South Meridian Street
P.O. Box 6015
Indianapolis 46206-6015
Telephone 317-232-8603

September 28, 1988

Mr. Hak Cho, Chief
Indiana Section
U.S. Environmental Protection Agency
Region V
230 South Dearborn Street
Chicago, Illinois 60604

Re: Land Disposal Facility
American Chemical Services
IND 016360265

Dear Mr. Cho:

It has come to my attention that one of the land disposal closure plans with which this office is currently working is not on the U.S. Environmental Protection Agency's (U.S. EPA) Land Disposal List. The facility is American Chemical Services, Griffith, Indiana, IND 016360265.

This facility has a waste pile, in addition to container and tank storage. Please place this facility on the Land Disposal List. Documentation to support the existence of a waste pile at this facility is enclosed.

If you have any questions in regard to this matter, please contact me at AC 317/232-3292.

Very truly yours,

Thomas E. Linson, Chief
Plan Review and Permit Section
Hazardous Waste Management Branch
Solid and Hazardous Waste Management

TEL/drc

Enclosure

cc: Mr. Joe Boyle, U.S. EPA, Region V
Mr. Bernie Orenstein, U.S. EPA, Region V
Mr. Thomas Russell

Gus Bloom
Please file
thanks!

FILE

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
NANCY A. MALOLEY, Commissioner

105 South Meridian Street
P.O. Box 6015
Indianapolis 46206-6015
Telephone 317-232-8603

August 2, 1988

VIA CERTIFIED MAIL - P 652 575 223

Mr. James Tarpo, President
American Chemical Service, Inc.
P.O. Box 190
Griffith, Indiana 46319

Re: Notice of Deficiency
Closure Plan Review
American Chemical Service, Inc.
IND 016360265

Dear Mr. Tarpo:

The Indiana Department of Environmental Management (IDEM) has completed a review of the closure plan submitted by American Chemical Service, Inc., on August 25, 1987, as the result of a Notice of Deficiency (NOD) dated April 15, 1987. The closure plan addresses closure of the former solids mixing area (waste pile). Based upon our review, the closure plan has been found to be deficient. The enclosed NOD lists the deficient items which must be addressed in order to reconsider the closure plan for approval. Please address each deficiency in the same format as the enclosed NOD.

American Chemical Service should respond to the enclosed NOD by consolidating all their materials and submitting one complete, comprehensive amended closure plan. Please submit five (5) copies of the amended closure plan. American Chemical Service must respond to this notice within fifteen (15) days from the date of this letter. If a complete response to this NOD is not received by August 17, 1988, the IDEM will prepare and approve a modified closure plan to be implemented by American Chemical Service. Requests for an extension of time to prepare an NOD response will not be granted.

Should you have any questions regarding this closure plan review, please contact Ms. Debra Dubenetzky of my staff at AC 317/232-3221.

Very truly yours,

Thomas L. Russell

Thomas L. Russell, Chief
Hazardous Waste Management Branch
Solid and Hazardous Waste Management

DD/td

Enclosure

cc: Mr. Hak Cho, U.S. EPA, Region V (with enclosure)
Mr. Bernie Orenstein, U.S. EPA, Region V

NOTICE OF DEFICIENCY

Closure Plan Review
American Chemical Service, Inc.
Griffith, Indiana
IND 016360265

GENERAL CLOSURE DEFICIENCIES

I.A CLOSURE PERFORMANCE STANDARD: 329 IAC 3-21-2 and 329 IAC 3-26-8(b)

1. Waste Material Remaining in the Solids Mixing Area

As indicated in the initial closure plan submitted to the IDEM by ACS on June 24, 1986, the maximum inventory of waste material during the life of the Solids Mixing Area was 1000 cubic feet and the present waste accumulation in this inactive unit was estimated to be 20 cubic feet. The residue layer of the walls and floor is 1/8" thick at maximum and when removed will generate a volume of 10.09 cubic feet.

The closure plan submitted on August 25, 1987, in response to the April 15, 1987 Notice of Deficiency, indicates that today there is no inventory of waste material in the unit. However, there is no explanation of the final disposition of the 20 cubic feet of waste indicated in the June 24, 1986, plan or the status of the residue layer on the walls and floor of the unit.

Comment:

Explain the discrepancies in the two closure plan submittals regarding the quantity of waste material remaining in the unit, including the waste residue layer. Provide a detailed description of the wastes and waste residues currently on site in the unit.

ACS must clearly identify and characterize the hazardous waste streams that have been stored/treated at the unit and describe the maximum inventory of waste handled at the solids mixing area.

The facility must close this unit so no further maintenance would be required. This is done by controlling, minimizing or eliminating post-closure escape of hazardous waste or hazardous waste constituents to the ground or surface water. The facility must assess the waste stream and waste material remaining at the site to determine if the waste is hazardous. ACS must submit the analysis of this assessment and why the materials are hazardous (i.e., listed or characteristic). The facility must describe and justify the plan to control the hazardous waste or hazardous waste constituents in areal and vertical extent.

2. Soil Sampling Plan

ACS has stated in the August 25, 1987, closure plan submittal that:

"Before commencing closure activities on the Former Solids Mixing Area, American Chemical Service (ACS) intends to take random core samples of the soil surrounding the area. The samples will be analyzed to determine if there is soil contamination."

However, the map of the area indicates that judgement samples are to be collected.

Comment:

The facility must specifically state the measures that will ensure that the hazardous waste management unit will be closed in such a manner that will minimize or eliminate the escape of hazardous waste or hazardous constituents from the unit. The facility must define soil cleanup levels for contaminated soils. The IDEM recommends cleanup to background levels since this will avoid costly and timely toxicological site specific surveys which are typically beyond the scope of most contractors.

In assessing the extent of possible soil contamination, ACS must specify a background standard and how that standard is to be determined. There must be an adequate method to determine when the soils have been removed or decontaminated to that standard. The plan must describe how the soils will be disposed or decontaminated; the cleanup level criteria to be used; and the testing program to be followed to judge the success of the decontamination or removal effort.

3. Post-Closure Maintenance

In regard to post-closure maintenance, the ACS closure plan indicates post-closure maintenance will not be necessary because ACS plans to dismantle the former solids mixing structure, randomly sample and analyze the concrete, and then properly dispose of the material. The structure subsoil will be randomly sampled and if necessary removed and disposed of properly.

Comment:

A closure plan for a waste pile requires a detailed description of the steps needed to remove or decontaminate all waste residues, contaminated containment system components, contaminated subsoils, structures and equipment. However, if after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of the contaminated components, subsoils, structures, and equipment it becomes apparent to ACS that not all contaminated subsoils can be practically removed or decontaminated, then the waste pile (solids mixing area) must be closed in accordance with the post-closure requirements that apply to landfills (329 IAC 3-28-5) and post-closure care performed. In the case of a waste pile, the common reason for not removing the contaminated subsoil is that it is in the saturated zone. Should this be the case, a groundwater monitoring program would be required.

ACS must specify what will be done if they cannot remove or decontaminate all the soils and subsoils. The facility must also specify how they will determine when it is not practical to remove or decontaminate the subsoils and close the unit under the requirements of 329 IAC 3-28-5.

.B-1 DESCRIPTION OF PARTIAL AND/OR FINAL CLOSURE: 329 IAC 3-21-3

1. Partial/Final Closure

Partial closure means the proper closure of certain hazardous waste management units at a facility that contains other active hazardous waste management units. Final closure is the proper closure of all hazardous waste units at the facility. Prior to closure, the facility must submit a closure plan to the IDEM which specifies how the hazardous waste units will be closed in a manner that controls, minimizes, or eliminates any impact on human health and the environment. The plan must be approved by the IDEM before it can be implemented. In accordance with 329 IAC 3-21-3, ACS has submitted a partial closure plan for the former solids mixing area.

Comment:

As previously requested in the April 15, 1987 NOD, ACS must also provide a complete and technical description of the closure process for any other planned partial closures and for final facility closure. The final facility closure plan must cover the maximum extent of the hazardous waste management unit operations, which includes those process codes identified in the revised Part A Permit Application approved by IDEM on December 10, 1987, and any areas where soil contamination has occurred.

2. Partial Closure

ACS has stated closure of the former solids mixing area (waste pile) will proceed as follows:

1. Collect four (4) random soil core samples from the adjacent surrounding area (6-inch core). See site plan.

2. If surrounding soil must be removed, concrete structure will first be dismantled and disposed of.

3. Dismantling to be done with bulldozer. Sections broken off main structure in sizes to facilitate transporting - air hammer will be used to facilitate proper sizing and a cutting torch will be used to cut the support rods. At this time, the concrete will be randomly sampled, analyzed, and disposed in an approved landfill.

4. Sections will be stored in the adjacent holding area until proper disposition is arranged.

   The concrete will be loaded into semi-trailers with the bulldozer.

5. Once concrete has been removed and relocated in adjacent holding area, structure subsoil will be randomly sampled and analyzed. If necessary, subsoil and surrounding soil will be removed with bulldozer to adjacent holding area until proper disposition is arranged.

6. Surrounding and subsoils will be loaded with the bulldozer from the adjacent holding area into semi-trailers for transportation to the landfill. ACS has made application for a permit to landfill this solid material at the CID Processing Center (Site Code 031039001) 138th and Calumet Expressway, Calumet City, IL 60409 (18 miles from ACS). Status of this permit application is currently unknown to IDEM staff.

In the original ACS closure plan submitted to IDEM on June 24, 1986, ACS indicated they would be decontaminating the concrete walls and floors of the solids mixing area by hand scraping and power brushing. The revised plan submitted in August 1987, in response to the NOD, makes no mention of these decontamination efforts prior to dismantling the concrete pad.

Comment:

ACS must explain the discrepancies in the two closure plan submittals regarding decontamination of the concrete structure. ACS must clarify their intentions of what they intend to do with the waste and waste residues remaining in the former solids mixing area.

ACS must also clarify whether CID Processing Center is the final hazardous waste disposal facility to receive the total volume of contaminated concrete and soils.

I.B-2 MAXIMUM EXTENT OF OPERATION: 329 IAC 3-21-3(b)

ACS assumes that any soil contamination would be minimal and an area of 10 feet in width and 6 inches deep surrounding the structure would contain the maximum extent of possible contamination from this unit. ACS has indicated this represents 52 cubic yards and 112,000 lbs. of soil. The soil would be loaded with a bulldozer from the adjacent holding area into semi-trailers for transportation to the landfill. The Company indicates soil will be removed only if soil sampling proves contamination.

Comment:

The facility must assess the extent of the operation and how that would effect the extent of hazardous waste over the site. This assessment must identify the possible movement of waste by traffic, wind, and water movement. This assessment must identify the maximum extent of any contaminated soils which might exist adjacent to the waste pile. ACS must identify any new sites which might be created in the removal process. This new waste pile may be from storage of the contaminated concrete or soil that is being decontaminated or removed.

By removing hazardous wastes and residues during partial and final closure, the owner or operator may become a generator of hazardous waste and must handle that waste in accordance with all applicable requirements of 329 IAC 3. ACS has indicated that soil will be removed only if the soil sampling proves contamination. Should this be the case, then ACS should not land dispose of the contaminated soil in a sanitary landfill. The soil would have to be managed as a hazardous waste. ACS must provide the location of the final TSDF to receive the volume of contaminated soil.

I.B-4 DESCRIPTION OF DECONTAMINATION AND REMOVAL OF HAZARDOUS WASTE AND RESIDUES: 329 IAC 3-21-3, 329 IAC 3-21-5, and 329 IAC 3-26-8(a)

ACS must describe and justify the removal depth and extent if any contaminated soils are encountered. ACS must also describe the equipment used to remove or decontaminate the soils and the procedure to decontaminate that equipment (e.g. bulldozer, holding area, etc.).

I.B-5 ESTIMATE OF YEAR OF CLOSURE AND SCHEDULE OF CLOSURE: 329 IAC 3-21-3(b)

Amend the schedule of partial closure to include revisions to the closure plan which revise the steps to complete the closure process and extend the time to complete closure. Include additional requirements noted in this review.

I.B-6 AMENDMENT OF PLAN: 329 IAC 3-21-3(c)

Although ACS has stated no amendments to the plan are expected, ACS must comply with the requirements of this section should they become applicable due to unexpected events which may require modification of the closure plan.

I.D CERTIFICATION OF CLOSURE: 329 IAC 3-21-6

The closure certifications must be submitted within sixty (60) days of completion of closure as carried out in accordance with the specifications in the approved closure plan.

I.E-1 COST ESTIMATE WHEN CLOSURE IS MOST EXPENSIVE: 329 IAC 3-22-3(a)

1. Waste Material Remaining in the Solids Mixing Area

As indicated in the initial closure plan submitted to the IDEM on June 24, 1986, the present waste accumulation in the unit was estimated to be 20 cubic feet. The decontamination procedure proposed of hand scraping and power brushing 1/8" of waste residue from the concrete walls and floors would generate an additional volume of 10.09 cubic feet to be secured in 1 1/2" open head drums.

Comment:

ACS must provide a description for a 1 1/2" open head drum.

If the present waste accumulation and waste residues are hazardous, then the $55.00 per drum disposal estimate may be underestimated. ACS must revise the closure cost figures as appropriate. By removing hazardous waste residues during partial and final closure, the owner or operator may become a generator of hazardous wastes and must handle hazardous waste in accordance with all applicable requirements of 329 IAC 3.

If ACS intends to decontaminate the concrete prior to dismantling the unit, as indicated in the June 1986 closure plan submittal, then the closure cost estimate of $23,696.00 specified in the August 1987 submittal will need to be revised to reflect the decontamination of the concrete structure.

2. Loading and Transferring of Concrete

The schedule of closure indicated in Section I.B-5 of the ACS response to the April 15, 1987 NOD, shows the loading and transferring of concrete for the landfill occurring on days 23 to 25, a total of three days. However, the closure cost estimate only reflects 16 hours, which represents two days as follows:

I.B-5 Estimate of Year of Closure and Schedule of Closure

A. Rental of Bulldozer with an operator at $35.00/hour
2) Loading concrete for landfill - 16 hours $560.00

The closure cost estimate also does not reflect any costs for decontaminating equipment such as the bulldozer, the concrete in the former solids mixing area and adjacent holding area, nor does it include any costs for analytical methods, such as testing rinsate, when assessing the success of decontamination efforts.

Comment:

ACS must revise the schedule of closure and/or closure cost estimate to account for the loading and transferring of concrete.

ACS must also revise the schedule of closure and closure cost estimate to account for the decontamination or removal of all hazardous wastes, residues, contaminated containment system components, equipment, structures, and soils. The cost estimate must also reflect the costs of analytical testing to detemine the success of decontamination efforts.

I.E-3 REVISIONS TO CLOSURE COST ESTIMATES: 329 IAC 3-22-3(b) and (c)

Although ACS has stated in the August 25, 1987, closure plan submittal that no revisions to the closure cost estimates are expected, ACS must revise the closure cost estimate to include revisions to the closure plan which increase the cost of closure. Include additional requirements noted in this review.

In accordance with the requirements of 329 IAC 3-22-3(b), ACS must annually update the closure cost estimate to reflect increases due to inflation.

I.F FINANCIAL ASSURANCE FOR CLOSURE: 329 IAC 3-22

The August 25, 1987, closure plan specifies a closure cost estimate totaling $23,696.00 which reflects the cost of closure activities described in that submittal.

In a letter dated August 31, 1987, ACS enclosed a copy of an updated ledger printout of ACS Trust Fund Number 0100000001 which reflected an amended closure cost estimate for the former solids mixing area. The ledger printout shows that on August 26, 1987, $21,578.00 was deposited as an addition to the trust fund balance.

The closure cost estimate specified in the June 24, 1986, closure plan totals $2,118.00 which reflects the cost of closure activities described in that submittal. With that closure plan was a copy of a ledger printout which indicated a deposit of $2,118.00 on June 16, 1986, to the trust account.

It appears that ACS added the $21,578.00 to the $2,118.00 amount already in the trust fund account to cover the costs of closure activities described in the August 25, 1987 submittal. This seems to indicate that ACS no longer plans to decontaminate the concrete as proposed in their June 24, 1986 closure plan.

Comment:

ACS must clarify the status of their June 24, 1986 closure plan.

I.G LIABILITY COVERAGE: 329 IAC 3-22-24

ACS must explain and describe the status of their efforts to seek and secure this coverage.

CLOSURE OF WASTE PILE DEFICIENCIES

IV.B-1 DETAILED DESCRIPTION OF STEPS NECESSARY TO CLOSE WASTE PILE: 329 IAC

In the description of closure steps specified in the August 1987 closure plan, ACS has not addressed any backfilling of clean non-contaminated soil should any contaminated soils require removal. ACS must address this possiblity and specify from where the clean fill would be obtained. These costs must also be reflected in the closure cost estimate.

IV.B-3 ESTIMATE OF THE MAXIMUM INVENTORY OF WASTE AT WASTE PILE: 329 IAC 3-2

The facility must provide a description of the hazardous waste (D001) which was mixed with sand in the mixing area. This description should include the standard chemical name or names, EPA hazardous identification number, reason for hazard ranking, and the maximum volume of waste on site at any one time. Results of any previous waste analyses performed on the flammable solids (D001) and documentation supporting those analyses would be particularly useful if available.

ACS must explain the discrepancies in information specified in their two closure plan submittals concerning the amount of hazardous waste and hazardous waste residues remaining in the former solids mixing area unit.

IV.B-4a CRITERIA FOR DETERMINING THE EXTENT OF DECONTAMINATION NECESSARY: 329 IAC 3-21-3, 329 IAC 3-21-5, and 329 IAC 3-26-8

The purpose of this closure plan is to assess the degree and extent of contamination of the soil and impact on the groundwater or adjacent surface waterways. ACS must provide a detailed description of the criteria for determining the extent of decontamination necessary to satisfy the closure performance standard.

The facility must specify a sampling plan of the soils and subsoils to establish a closure standard. This sampling plan must describe the collection, location, and statistical procedures. The list of parameters to be analyzed should be based upon the inventory of all wastes at the site and the hazardous characteristics. The closure plan is not complete in its description of the sample depth to determine the extent of the contamination. The total metals samples and the EP Toxic samples should be done at six (6)-inch intervals to two (2) feet and one (1)-foot intervals thereafter to a depth of four (4) feet or until two consecutive samples are uncontaminated. The soil samples for any possible organic parameters should be done at one (1) foot intervals into the saturated soils. The plan must include a scenario detailing when groundwater

monitoring is necessary. This need should be based on the results of the soil analysis in the saturated zone. If it is determined that groundwater monitoring is required, the closure plan should be modified to include an adequate groundwater monitoring system.

The description of the soil sample locations is inaccurate; for random samples, the closure plan should include a grid for the soil samples. The sample locations should be determined with a statistical confidence of coverage of the site. Two (2) background samples will be required. This background sampling should be at the same sampling intervals as the other sample sites and shown to be not affected by this facility (i.e., not downgradient from the unit with respect to run-on/run-off direction).

The closure plan does not adequately describe a sampling technique that assures that there will be no cross contamination or false positive readings of contaminates. The sampling equipment must be washed with nonphosphate laboratory grade soap and triple rinsed with distilled/deionized water between each location and each sample interval.

The plan does not describe how the contaminates might be transported on the surface of the site. In order to determine the impact on the adjacent surface waterways, the plan should include a narrative on the run-off/run-on control at the site. Also needed are the location of any subsurface drainage structures. If a point discharge is used then water samples above and below that point should be taken. These water samples should be analyzed for total metals and the organic parameters.

The facility is encouraged to use a contract laboratory whose Quality Assurance Program Plan contains the sixteen (16) essential elements listed in Attachment 1, "Essential Elements of a Quality Assurance Project Plan", which is included at the conclusion of this NOD.

The waste analysis included in the closure plan submittal is not adequate to demonstrate that incompatible wastes were not mixed. An appropriate waste analysis must be provided to demonstrate compliance with 329 IAC 3-26-3. If such an analysis cannot be provided, the facility may be required to analyze soils for constituents specified in 40 CFR Part 261 -- Appendix VIII (329 IAC 3-6-9, Hazardous Constituents) in order to comply with the landfill closure requirements pursuant to 329 IAC 3-26-7. Judgement samples are acceptable if a rationale and justification of sample locations is provided in the closure plan. For example, structural defects or cracks for samples beneath the unit and stressed or discolored vegetation surrounding the unit.

The sample containers, preservation methods and holding times need to be defined for each respective group of parameters. For example, for soil samples to be analyzed for metals, the sample should be collected in a one (1) liter plastic container and iced or refrigerated to a minimum 4 degrees Celsius until delivered to the contract laboratory. The IDEM recommends for volatile organic compounds that the soil samples be delivered as soon as possible to the laboratory and the extraction procedure begun immediately. The samples should be collected with a minimum of headspace and the sample transferred into the sample container in such a manner as to not disturb the soil or its inherent properties (i.e., do no pack the soil into the vial). The containers for volatile organic analytes (VOA's) must have teflon septums. Chain-of-custody documentation needs to accompany each set of samples and must address each parameter for each unique sample. Chain-of-custody procedures described in the most recent edition of "Test Methods for Evaluating Solid Waste,

Physical/Chemical Methods," EPA Publication SW-846, should be used.

The parameters to be analyzed should be derived from inventory logs of hazardous wastes previously or presently stored at the facility. In the event the facility cannot provide adequate documentation of such wastes or previous waste analyses, the IDEM recommends that the facility analyze the soils adjacent to and beneath the management unit for total metals, EP toxic metals, volatile organics and semivolatile organics (see Attachments 2, 3, and 4 at the end of this NOD). The methods for analyzing these groups of parameters should be those found in the most recent edition of SW-846. For example, samples to be analyzed for VOA's should follow the protocol in method 8240. All methods necessary for an analysis need to be documented, including any extraction or preparatory methods.

Samples necessary for standard quality assurance/quality control measures need to be defined. This should include blanks, duplicates, reference standards, etc. The frequency of collection or use of these types of samples also should be provided (e.g., one duplicate for every ten individual samples with at least one duplicate collected for the background samples). Detection limits (for each parameter) and control limits (for each QA/QC sample) need to be established and/or defined. For example, any blank quantified above the detection limit will be considered out-of-control and the analysis for that parameter or group of parameters will be repeated.

Data reduction and validation techniques need to be documented. The facility needs to demonstrate to what extent analytical calculations will be performed by either instruments or by hand. This information may be provided by consultation with the contract laboratory. Sample results, however, should not be corrected for any reason other than automatic background correction. Corrections for contaminated blanks, spike recoveries, or other justifiable reason when necessary shall be clearly labeled and documented to the extent that review by any one other than the laboratory quality assurance officer will be obvious that such a correction has been made. Routine procedures to assess data precision, accuracy, and completeness should also be documented. For example, completeness is determined by dividing the number of samples analyzed by the number of samples collected and multiplying the result by 100%; the result should always be above 95%.

IV.B-4b PROCEDURES FOR CLEANING EQUIPMENT AND STRUCTURES AND REMOVING CONTAMINATED SOILS: 329 IAC 3-21-3, 329 IAC 3-21-5, and 329 IAC 3-26-8

As requested in the April 15, 1987 NOD, ACS must specify how they will decontaminate the equipment used in removal of the contaminated structures and soils. Decontamination procedures for the equipment and structures, such as steam cleaning or flushing with an appropriate solvent, must be described with the cleaning agents or solvents clearly identified. Indicate whether the cleaning agents or solvents are suitable for the types of wastes stored. Describe how contaminated cleaning agents or solvents will be properly managed as hazardous wastes.

Specify how cleaning equipment, such as power brushes, will be decontaminated or properly disposed of as hazardous wastes.

ACS must describe in detail the procedure to detemine that the adjacent soils are contaminated or not contaminated. Describe how contaminated soils will

be removed from the site and locations of final disposal.

If the concrete and soils are hazardous wastes, then the facility must handle the concrete and soils as such in accordance with all applicable requirements of 329 IAC 3.

IV.B-4c METHODS FOR ADDITIONAL SAMPLING AND TESTING TO DEMONSTRATE SUCCESS OF DECONTAMINATION: 329 IAC 3-21-3, 329 IAC 3-21-5, and 329 IAC 3-26-8

The concrete and soil sampling plan did not establish how the success of the decontamination or removal shall be determined. Since the organic parameters represent chemicals which are not naturally occurring, any organics found at the site would be considered as introduced from a non-natural source. Therefore, the background for organics is established at the detectable limit for that parameter. The background value for metals at each depth should be found by a statistical method that determines to a certain confidence level that there is no contamination from the waste pile present by using the background samples discussed above.

ACS must, in detail, describe the sampling procedure which includes the sampling equipment, sampling interval, sampling containers, testing parameters, sample size, and cleaning of sampling equipment. ACS must justify the selection of test procedures and demonstrate that they are indicative of the waste stored at the waste pile. ACS must justify the number of samples and the depth interval in relationship with the mobility of the test parameters. ACS must demonstrate that the number of samples are statistically significant to determine to a certain confidence level that there is no contamination from the waste pile present.

IV.B-5 DETAILED SCHEDULE FOR CLOSURE OF WASTE PILE: 329 IAC 3-21-3(b)(4)

In the August 1987 closure plan submittal, decontamination of the structure or equipment was not addressed in the schedule of closure for the waste pile. Adjust the schedule of closure and closure cost estimate to account for these activities.

IV.H-1 DETAILED DESCRIPTION OF REMOVAL OF WASTE INVENTORY: 329 IAC 3-26-8

As requested in the April 15, 1987 NOD, ACS must specify the disposition of the waste inventory at the waste pile at the time of closure. The following information must be included:

1. An estimate of the quantity of waste sent off-site;
2. A description of any treatment performed prior to transport, if applicable;
3. The time required to remove the waste off-site;
4. Distance to the final TSDF;
5. Description of treatment or disposal methods at the final TSDF; and

6. Operating status of the TSDF (i.e., interim status or permitted facility). Include the EPA identification number if applicable.

ACS must also provided a detailed description for the removal of waste, the containment system, and contaminated surface subsoils. Include the following information:

1. Method of waste and other contaminated material removal;

2. Location where the material is to be moved to;

3. Method of transportation;

4. Loading procedures;

5. Procedures for protection of surface water and groundwater sources during the work;

6. Method of controlling wind dispersal of the material; and

7. Special handling procedures (such as for ignitable or reactive wastes).

IV.H-2 DETAILED DESCRIPTION OF REMOVAL OF HAZARDOUS WASTE RESIDUES: 329 IAC 3-26-8 and 329 IAC 3-21-5

As previously requested in the April 15, 1987 NOD, ACS must describe how all hazardous waste residues, contaminated containment system components, contaminated subsoils, and structures and equipment contaminated with waste and leachate will be removed or decontaminated at closure and managed as hazardous waste. A description of the sampling and testing program used to verify decontamination of the equipment and subsoils must be provided as well as the criteria and parameters used to verify decontamination.

ATTACHMENT 1

ESSENTIAL ELEMENTS OF A QUALITY ASSURANCE PROJECT PLAN

1. Title Page
2. Table of Contents
3. Project Description
4. Project Organization and Responsibility
5. QA Objectives
6. Sampling Procedures
7. Sample Custody
8. Calibration Procedures and Frequency
9. Analytical Prodecures
10. Data Reduction, Validation, and Reporting
11. Internal Quality Control Checks
12. Performance and System Audits
13. Preventive Maintenance
14. Specific Routine Procedures Used to Assess Data Precision, Accuracy, and Completeness
15. Corrective Action
16. Quality Assurance Reports to Management

ATTACHMENT 2

COMPOUNDS DETECTED USING INDIANA METHOD 8240 FOR VOLATILE ORGANICS

Acetone

Acrolein

Acrylonitrile

Benzene

Carbon Disulfide

Carbon Tetrachloride

Chlorobenzene

1,2-dichloroethane (total)

1,1,1-trichloroethane

1,1-dichloroethane

1,1,2-trichloroethane

Chloroethane

Chloroform

1,1,2,2-tetrachloroethane

2-chloroethylvinylether

1,1-dichloroethene

1,2-dichloroethene (total)

1,2-dichloropropane

Cis-1,3-dichloropropene

Trans-1,3-dichloropropene

Ethylbenzene

Methylene Chloride

Chloromethane

Bromomethane

Bromoform

ATTACHMENT 2 (Con't.)

COMPOUNDS DETECTED USING INDIANA METHOD 8240 FOR VOLATILE ORGANICS

Bromodichloromethane

Fluorotrichloromethane

Dichlorodifluoromethane

Chlorodibromomethane

2-Hexanone

Paraldehyde

Methylethylketone (2-Butanone)

Methylisobutylketone (MiBK)

Styrene

Tetrahydrofuran

Tetrachloroethylene

Toluene

Trichloroethylene

Vinyl acetate

Vinyl chloride

Xylenes (total)

Ethyl Ether

Isobutanol

Cyclohexanone

n-Butanol

1,1,2-Trichloro-1,2,2-Trifluoroethane

Ethyl Acetate

4-Methyl-2-Pentanone

ATTACHMENT 3

COMPOUNDS DETECTED USING INDIANA METHOD 8270 FOR SEMI-VOLATILE ORGANICS

BASE/NEUTRAL EXTRACTABLES

1-3 Dichlorobenzene

1-4 Dichlorobenzene

Hexachloroethane

Bis(2-chloroethyl) ether

1,2-Dichlorobenzene

Bis(2-chloroisopropyl) ether

N-Nitrosodi-n-Propylamine

Nitrobenzene

Hexachlorobutadiene

1,2,4-Trichlorobenzene

Isophorone

Naphthalene

Bis(2-chloroethoxy) methane

Hexachlorocyclopentadiene

2-Chloronaphthalene

Acenaphthylene

Acenaphthene

Dimethyl phthalate

2,6-Dinitrotoluene

Fluorene

4-Chlorophenyl phenyl ether

2,4-Dinitrotoluene

Diethylphthalate

N-Nitrosodiphenylamine

ATTACHMENT 3 (Con't.)

BASE/NEUTRAL EXTRACTABLES

Hexachlorobenzene

4-Bromophenyl phenyl ether

Phenanthrene

Anthracene

Dibutyl phthalate

Fluoranthene

Pyrene

Benzidine

Butyl benzyl phthalate

Bis(2-ethylhexyl) phthalate

Chrysene

Benzo(a)anthracene

3,3'-Dichlorobenzidine

Di-n-octyl phthalate

Benzo(b)fluoranthene

Benzo(k)fluoranthene

Benzo(a)pyrene

Indeno(1,2,3-c,d)pyrene

Dibenzo(a,h) anthracene

Benzo(ghi)perylene

N-Nitrosodimethyl amine

1,2-Diphenylhydrazine

Aniline

Benzyl alcohol

4-Chloroaniline

Dibenzofuran

2-Methylnapthalene

ATTACHMENT 3 (Con't.)

BASE/NEUTRAL EXTRACTABLES

2-Nitroaniline

3-Nitroaniline

4-Nitroaniline

Carbazole

Pyridine

Dinitrobenzene(s)

2-Picoline

Tetrachlorobenzene(s)

Toluenediamine

ACID EXTRACTABLES

2-Chlorophenol

2-Nitrophenol

Phenol

2,4-Dimethylphenol

2,4-Dichlorophenol

2,4,5-Trichlorophenol

4-Chloro-3-methylphenol

2,4-Dinitrophenol

2-Methyl-4,6-dinitrophenol

Pentachlorophenol

4-Nitrophenol

Benzoic acid

2-Methylphenol

4-Methylphenol

2,4,6-Trichlorophenol

ATTACHMENT 4

INORGANIC PARAMETERS

Analytical Parameters	Water Sample Detection Limits (mg/ml)	Non-Water Matrices (Soil, etc.) (mg/ml)	Analytical Method (SW-846)
Arsenic	0.005	5.0	7060
Barium	0.050	5.0	7080, 6010
Cadmium	0.005	1.0	7130, 7131, 6010
Chromium	0.010	5.0	7190, 7191, 6010
Lead	0.010	5.0	7420, 7421
Mercury	0.0002	0.2	7470, 7471
Nickel	0.010	5.0	7520, 6010
Selenium	0.005	1.0	7740
Silver	0.010	5.0	7760, 6010
Total Cyanide	0.005	25.0	9010, 9012
Total Sulfide	1.00	25.0	9030

American Chemical Service, Inc.
P.O. Box 190 · Griffith, Indiana 46319
(219) 924-4370 · Chicago Phone (312) 768-3400

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OFFICE OF SOLID AND HAZARDOUS WASTE MGMT DEM

August 21, 1987

Mr. Terry F. Gray, Chief
Plan Review and Permit Section
Hazardous Waste Management Branch
Solid and Hazardous Waste Management
Department of Environmental Management
P.O. Box 6015
Indianapolis, IN 46206-6015

Re: Response to Notice of Deficiency
Closure Plan Review
American Chemical Service, Inc.
IND 016360265

Dear Mr. Gray:

It was the understanding of American Chemical Service, Inc. (ACS) that the delays incurred during the discussions of the department's action to reclassify the Former Solids Mixing Area as a Waste Pile was considered a form of response to the NOD of April 15, 1987. Apparently the department has decided to view these discussions differently and therefore has given ACS only 13 days to respond to the April 15, 1987 NOD. ACS has attempted, with the little time afforded, to formulate revisions to the Closure Plan of June 18, 1986 for the Former Solids Mixing Area.

In response to your letter of August 13, 1987, neither ACS nor U.S.EPA (who had actually viewed the operation) classified the Former Solids Mixing Area as a Waste Pile. That arbitrary decision was made by the department staff and was based on incorrect information and some pictures taken by a staff member. The enclosed U.S.EPA Memorandum concerning regulatory classifications depicted examples that only vaguely related to the past operations of the Former Solids Mixing Area. In your letter, you also made ACS aware that the department is requesting the U.S.EPA to put the Former Solids Mixing Area on the land disposal list. At this time, ACS is requesting under the provisions of the Freedom of Information

Act, 5U.S.C. S552, access to all the documents and information relating to this action by the department. Please supply ACS with these records. If you or your staff have any questions, please contact me at 219/924-3144.

Very Truly Yours,

John J. Murphy
Vice President
American Chemical Service, Inc.

General Closure Deficiencies Responses

I.A. Closure Performance Standards:

The Former Solids Mixing Area has been inactive since November 1983. Before that time, the area was used to render flammable solid hazardous waste non-hazardous by mixing with sand and today there is no inventory of waste material in the unit. Enclosed is an analysis of the treated non-hazardous material. This analysis was included in a letter written to Mr. Dennis Williamson of your department on July 16, 1986.

Before commencing closure activities on the Former Solids Mixing Area, American Chemical Service, Inc.(ACS) intends to take random core samples of the soil surrounding the area. The samples will be analyzed to determine if there is soil contamination. Based on the analysis of the non-hazardous material mentioned above, the possibility of contaminated surrounding soil is unlikely and at this time the removal of the surrounding soil will be considered only as an alternative to the closure plan.

Post-closure maintenance will not be necessary because ACS plans to dismantle the Former Solids Mixing structure, randomly sample, and analyze the concrete and then properly dispose of the material. The structure subsoil will be randomly sampled and if necessary removed and disposed of properly.

I.B-1 Description of Final Closure:

As mentioned above, the first step in the closure of the Former Solids Mixing Area will be to collect random soil core samples from the adjacent surrounding area (see the Former Solids Mixing Area Site Plan). It is assumed that the analysis will prove the soil non-contaminated but, as an alternative, if the surrounding soil must be removed, this will be done after the concrete structure has been dismantled and disposed of.

The dismantling of the concrete structure will be done with a bulldozer. Sections will be broken off the main structure in sizes to facilitate transporting. At this time, the concrete will be randomly sampled, analyzed and disposed of in an approved landfill. To facilitate proper sizing, an air hammer will be used to prefracture the concrete and a cutting torch will be used to cut the support rods. The sections will be stored in the adjacent holding area until proper disposition is arranged. The volume of concrete is 52 cubic yards and weighs 211,000 pounds. The concrete will be loaded into semi-trailers with the bulldozer.

and transported to the landfill.

Once the concrete has been removed and relocated in the adjacent holding area, the structure subsoil will be randomly sampled and analyzed. If necessary, the subsoil and surrounding soil will be removed with the bulldozer to the adjacent holding area until proper disposition is arranged. As discussed earlier, this is an alternative to the closure plan, but for discussion purposes the following assumptions are made. Because only solids were handled in this area and because the accumulation of non-hazardous material was not stored at the Solids Mixing Area for more than 6 hours at any one time, the surrounding and subsoils contamination would be minimal. It is assumed at this time, that an area of 10 feet wide and 6 inches deep surrounding the structure would contain the maximum extent of possible contamination from the Former Solids Mixing Area. This volume represents 52 cubic yards of soil at a weight of 112,000 pounds. This material would be loaded with the bulldozer from the adjacent holding area into semi-trailers for transportation to the landfill. Again this soil will be removed only after the soil samples prove contamination.

ACS has made application for a permit to landfill this solid material at the CID Processing Center (Site Code 0310390001) 138th and Calumet Expressway Calumet City, IL 60409 (18 miles from ACS). The earliest the application can be reviewed and the permit issued is December 1, 1987.

I.B-2 Maximum Extent of Operation:

This alternative was discussed in I.B-1.

I.B-4 Description of Decontamination and Removal of Hazardous Waste and Residues:

The steps required to remove the structure of the Former Solids Mixing Area and the soil (if necessary) were discussed in I.B-1. The criteria for determining the extent of decontamination is the removal of contaminated concrete and soil to acceptable levels. This will be accomplished by collecting the following random samples. Prior to any closure activities, 4 random surrounding soil samples (6" core) will be taken. The approximate location is shown on the attached Former Solids Mixing Area Site Plan. During the dismantling of the concrete

structure, 4 random samples of the concrete will be taken from the approximate locations also indicated on the site plan. After the removal of the concrete, the 4 structure subsoil samples (6" core) will be taken and are shown on the site plan. The sample quantity will be 1 pint. The samples will be analyzed as solid waste according to methods of SW-846 by TEI Analytical, Inc. 7177 North Austin Nile IL 60648. The results will be in the same format as the analytical report sent to Mr. Dennis Williamson on July 16, 1986.

I.B-5 Estimate of Year of Closure and Schedule of Closure:

This schedule is based on the following assumptions:

A.) ACS has a permit to landfill the material discussed.
B.) The turnaround on soil & concrete sample analysis from TEI Analytical is three weeks.
C.) The closure plan is approved.
D.) Closure activities are conducted during a period of time when the ground is not frozen.

The Former Solids Mixing Area has been inactive since November 1983 and the closure activities could begin as soon as the assumptions listed above are met.

Day 1-The 4 random surrounding soil samples are taken and forwarded to TEI for analysis.

Day 2-The work and adjacent loading areas are secured to prevent through traffic. (See attached Former Solids Mixing Area Site Plan). Equipment as mentioned in I.B-1 is located in the closure site area.

Day 3 to 8-The concrete structure of the Former Solids Mixing Area is dismantled, sized and located in the adjacent holding area. Random samples are taken of the concrete and forwarded to TEI for analysis.

Day 9-Random samples of the structure subsoil are taken and forwarded to TEI for analysis.

Day 16-The results of the surrounding soil samples are received and analyzed.

Day 23-The results of the concrete samples are received and analyzed.

Day 23 to 25-The loading and transferring of the concrete for landfill.

Day 24-The results of the structure subsoil samples are received and analyzed.

Day 26 to 29-As an alternative to the closure plan, if necessary, the surrounding and/or subsoil is scraped and collected in the adjacent holding area.

Day 30 to 31-As an alternative to the closure plan, the loading and transferring of the soil(s) for landfill.

Day 32-Certification of Closure.

I.B-6 Amendment of Plan:

No amendments to the plan are expected.

I.D Certification of Closure:

When the Former Solids Mixing Area closure is completed, as outlined above, certification will be submitted by both ACS and an independent registered professional engineer stating that the facility has been closed in accordance with the approved closure plan.

I.E-1 Cost Estimate When Closure is Most Expensive:

A. Rental of a Bulldozer with an operator at $35.00/hour:
   1.) Concrete structure dismantling 48 hours-$1680.00
   2.) Loading concrete for landfill 16 hours-$ 560.00
   3.) Alternative soil scraping 32 hours-$1120.00
   4.) Alternative loading soil for landfill 16 hours-$560.00

B. Rental of support equipment:
   1.) Air Compressor and hammer
       $50.00/day for 6 days - $300.00
   2.) Cutting Torch assembly w/gas
       $50.00/day for 6 days - $300.00
   3.) Manual Tools (shovels, rakes, etc.)- $100.00

C. Laborers to work with the bulldozer
2 men @ $9.00/hour for 224 hours - $2016.00

D. Analytical on 12 samples at $400.00 each - $4800.00

E. Land disposal of 52 cubic yards (211,000 pounds)
6 loads of concrete at $1300.00/load- $7800.00
Alternative land disposal of 52 cubic yards (112,000 pounds)
3 loads of soil at $1300.00/load - $3900.00

F. Inspection and certification by an independent professional engineer
8 hours at $70.00/hour - $ 560.00

Total $23696.00

I.E-3 Revisions to Closure Cost Estimates:

No revisions to the Closure Cost Estimates are expected.

I.F Financial Assurance for Closure:

The American Chemical Service, Inc. Trust Fund Number 0100000001 has been amended to reflect the increased closure costs (see the attached letter and check to First National Bank-Valparaiso). An updated ledger printout of the trust fund will be forwarded to the department as soon as possible.

I.G Liability Coverage:

ACS has not been able to renew it's Environmental Impairment Liability Insurance (EIL) as required by 320IAC 4.1-22-24. During the time of non-placement, ACS has kept the department aware of it's efforts with 60 day status letters. ACS is continuing to explore mechanisms for satisfying the EIL requirements.

Closure of Waste Piles* Deficiencies Responses

American Chemical Service, Inc. does not have an accumulation of hazardous waste in storage at the Former Solids Mixing Area. The operation of the unit was terminated in November 1983. The concrete structure is the only thing existing from the unit. The closure of this structure was discussed in the General Closure Deficiencies response.

IV.B-1 Detailed Description of Steps Necessary to Close Waste Piles*:

Refer to I.B-1 of the General Closure Deficiencies Responses.

IV.B-2 Identification of Maximum Extent of Operation of the Waste Pile*:

Refer to the Former Solids Mixing Area Site Plan.

IV.B-3 Estimate of the Maximum Inventory of Waste at Waste Piles*:

Refer to I.A. and I.B-1 of the General Closure Deficiencies Responses.

IV.B-4a Criteria for Determining the Extent of Decontamination Necessary:

Refer to I.B-1 and I.B-4 of the General Closure Deficiencies Responses and the Former Solids Mixing Area Site Plan.

IV.B-4b Procedures for Cleaning Equipment and Structures and Removing Contaminated Soils:

Refer to I.B-1 and I.B-4 of the General Closure Deficiencies Responses.

IV.B-4c Methods for Sampling and Testing to Demonstrate Success of Decontamination:

Refer to I.B-4 of the General Closure Deficiencies Responses.

IV.B-5 Detailed Schedule for Closure of Waste Pile*:

Refer to I.B-5 of the General Closure Deficiencies Responses.

IV.C-1 Wastes from Waste Pile* Treated, Remove, or Disposed of Within 90 Days:

Refer to I.A. and I.B-5 of the General Closure Deficiencies Responses.

*Waste Pile is not the correct classification of the Former Solids Mixing Area.

IV.C-2 Closure of Waste Pile* Within 180 Days:

Refer to I.B-5 of the General Closure Deficiencies Responses.

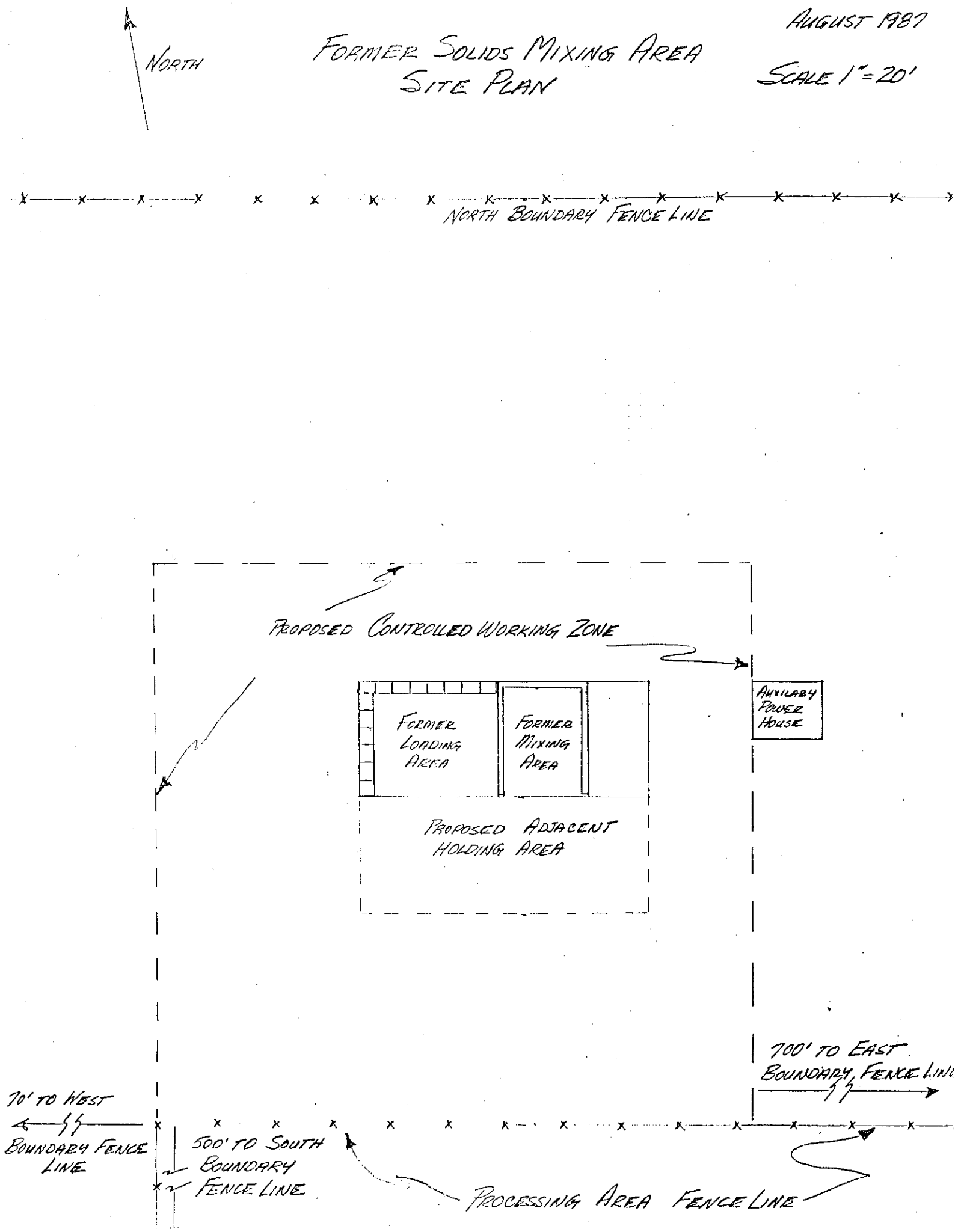
IV.H-1 Detailed Description of Removal of Waste Inventory:

Refer to I.B-1 of the General Closure Deficiencies Responses.

IV.H-2 Detailed Description of Removal of Hazardous Waste Residues:

Refer to I.B-1 and I.B-4 of the General Closure Deficiencies Responses.

*Waste Pile is not the correct classification of the Former Solids Mixing Area.



AUGUST 1987
FORMER SOLIDS MIXING AREA
SITE PLAN
SCALE 1" = 20'
NORTH
NORTH BOUNDARY FENCE LINE
PROPOSED CONTROLLED WORKING ZONE
FORMER LOADING AREA
FORMER MIXING AREA
AUXILARY POWER HOUSE
PROPOSED ADJACENT HOLDING AREA
700' TO EAST BOUNDARY FENCE LINE
70' TO WEST BOUNDARY FENCE LINE
500' TO SOUTH BOUNDARY FENCE LINE
PROCESSING AREA FENCE LINE

DETAIL OF PROPOSED WORKING ZONE FOR CLOSURE OF FORMER SOLIDS MIXING AREA SCALE 1" = 15'

1 AUGUST 1987

NORTH

ROPE LINE

FENCE LINE

FORMER MIXING AREA:

FLOOR - 12" THK CONCRETE REINFORCED #5 BAR

WALLS - 12" THK x 36" HT. CONCRETE REINFORCED #5 BAR

FORMER LOADING AREA:

FLOOR - 12" THK CONCRETE REINFORCED #5 BAR

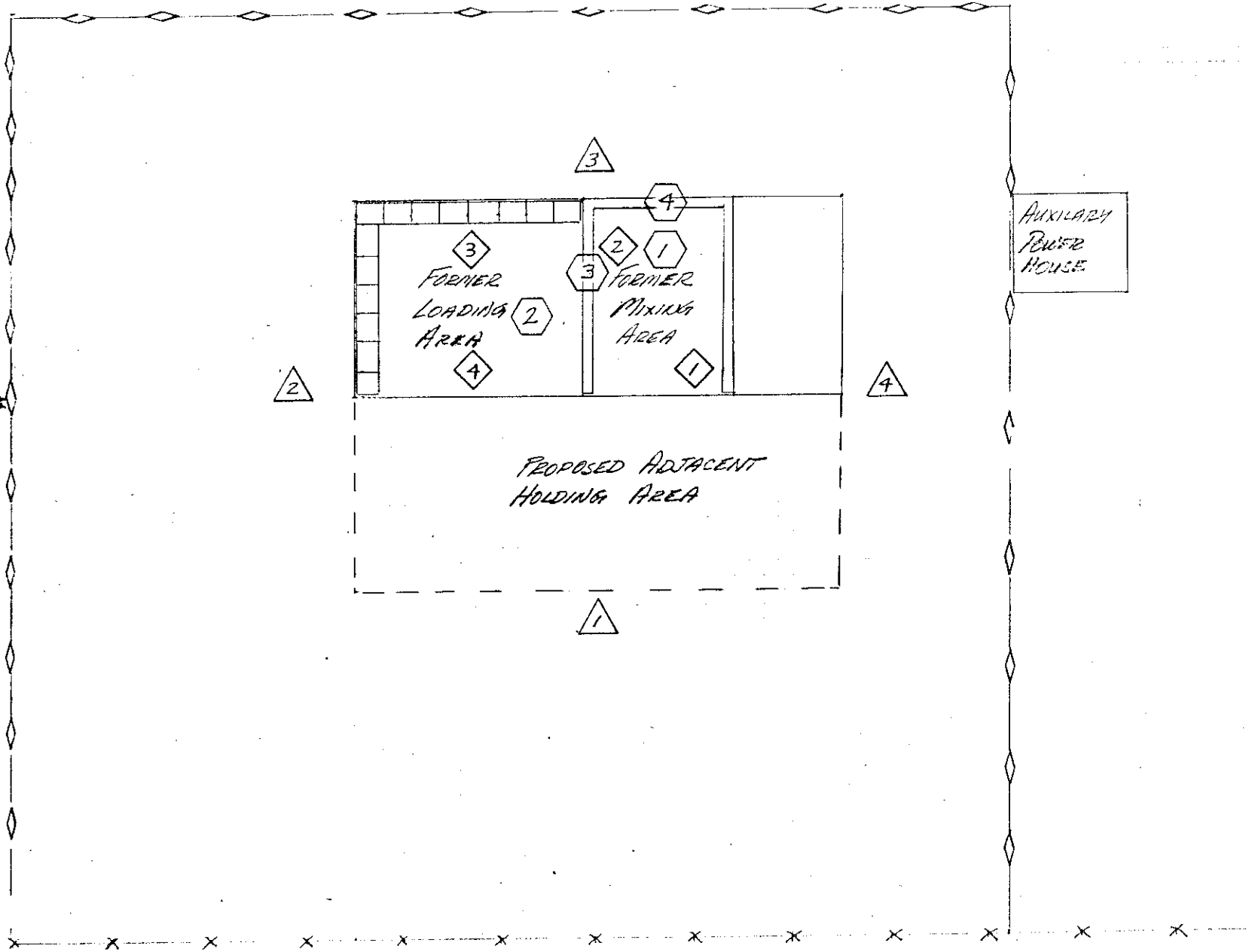
WALLS - 14 NON-ATTACHED 3'x2'x3' HT CONCRETE BLOCKS

PROPOSED SAMPLE LOCATIONS:

△ - SURROUND SOIL SAMPLES

⬡ - CONCRETE SAMPLES

◇ - STRUCTURE SUBSOIL SAMPLES



State Form 4336

E-Gregg

DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

INDIANAPOLIS

OFFICE MEMORANDUM

DATE: August 22, 1986

TO: Dennis Williamson
Plan Review and Permit Section

THRU: Christa Henson CON 8/25/86
Bruce Palin BNP/CON 8/25/86
Terry Gray TFG 8/27/86

FROM: Elaine Gregg EMG 8-26-86
Engineering Section

SUBJECT: Partial Closure Plan for the Former Solids Mixing Area at the American Chemical Service, Inc. Griffith, Indiana IND 016360265

I have reviewed the partial closure plan received from American Chemical Service, Inc., of Griffith, Indiana, on June 24, 1986, and the waste analysis submitted July 16, 1986, and have found the plan to be approvable. However, the following information should be provided by American Chemical Service, Inc., before final closure is completed:

1. Indicate whether the Former Solids Mixing Area is enclosed within a building. If the area is unprotected, the soil surrounding the area must be sampled to prove that runoff from the mixing area has not contaminated the surrounding soil.

2. Please describe and include in the schedule the steps taken to decontaminate the cleanup equipment as well as the Solids Mixing Area. Include testing methods which will be used to ensure that no hazardous waste remains in the mixing area.

3. The disposal site where the drums will be sent should be identified.

4. When partial closure is completed, the owner or operator must submit certification by both the owner or operator and an independent registered professional engineer that the closure was completed in accordance with the specifications contained in the approved closure plan.

EMG/cl

2768 H

LAKE COUNTY
AMERICAN CHEMICAL SERVICE
I Clu

american Chemical Service, Inc.

P.O. Box 190 • Griffith, Indiana 46319
(219) 924-4370 • Chicago Phone (312) 768-3400

JUN 24 12 03 PM

DIVISION OF LAND
POLLUTION CONTROL
STATE
BOARD OF HEALTH

June 18, 1986

Mr. Terry F. Gray, Chief
Plan Review and Permit Section
Department of Environmental Management
1330 W. Michigan Street
Indianapolis, IN 46206-1964

Dear Mr. Gray,

Re: Request for closure approval of the Former Solids Mixing Area at American Chemical Service, Inc. Griffith, IN 46319-0190 IND 016360265

Enclosed are the Closure Plan, Cost Estimate for Closure and the Financial Assurance for Closure as required for the closure of the Former Solids Mixing Area. American Chemical Service, Inc. is prepared to begin closure upon receipt of a written approval from the Technical Secretary. If additional information is requested, please contact this writer.

Very truly yours,

John J. Murphy

John J. Murphy
Vice President
American Chemical Service

JJM/rl

JUN 26 1986 JUN 26

AMERICAN CHEMICAL SERVICE INC. IND016360265

CLOSURE PLAN FOR SOLIDS MIXING AREA
6-11-86

This attachment details the decontamination procedure for the Solids Mixing Area. The maximum inventory during the life of the Solids Mixing Area was 1000 cu. ft. of waste material. This unit has been inactive for a period of time and the present waste accumulation is approximately 20 cu. ft. The facility is constructed of concrete with a floor area of 643 sq.ft. and a wall area of 327 sq.ft.

Decontamination Procedure:

1.) Hand scrape the interior surface (walls & floor) of the Solids Mixing Area. The residue layer is 1/8" thick at maximum and when removed will generate a volume of 10.09 cu.ft. This volume of waste will be secured in 1½" open head drums.

Labor - 2 days 16 man hours

2.) The interior surface (walls & floor) of the facility will be power brushed. The removal of a 1/8" layer will generate a volume of 10.09 cu.ft. Again this waste will be secured in 1½" open head drums.

Labor - 3 days 24 man hours

3.) Prepare 3-open head drums for shipment to landfill.

Labor - 1 man hour

Schedule:

1.) 2-2-87 Closure commences

2.) 2-3-87 Hand scraping of the interior surfaces completed

3.) 2-6-87 Power brushing of the interior surfaces completed

4.) 2-9-87 Open head drums prepared to shipment to the landfill and closure is completed.

JUN 26 1986

AMERICAN CHEMICAL SERVICE INC. IND016360265

CLOSURE COST ESTIMATE FOR SOLIDS MIXING AREA
6-11-86

The closure cost estimate is based on the following assumptions:

1.) Maximum solids waste in the Solids Mixing Area is 21 cu.ft of material.

2.) Disposal of the solid waste to be $55.00 per drum.

3.) No economic value of the decontamination site.

4.) Labor costs to be $10.00 per hour with an overhead factor of 300% or $40.00 per hour.

CLOSURE COST ESTIMATE

1.)	Hand scraping	16 man hours @ $40.00/Hr	$ 640.00
2.)	Power brushing	24 man hours @ $40.00/Hr	960.00
3.)	Solids for disposal	3 drums @ $55.00/drum	165.00
			$1,765.00
		Contingency factor (20%)	353.00
			$2,118.00

JUN 26 1986

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
NANCY A. MALOLEY, Commissioner

105 South Meridian Street
P.O. Box 6015
Indianapolis 46206-6015
Telephone 317-232-8603

RECEIVED
AUG 18 1987
U.S. EPA REGION V
WASTE MANAGEMENT DIVISION
HAZARDOUS WASTE ENFORCEMENT BRANCH

AUG 14 1987

Mr. John J. Murphy
Vice President
American Chemical Service, Inc.
P.O. Box 190
Griffith, IN 46319

Re: Response to Notice of Deficiency

Dear Mr. Murphy:

This is in response to your July 15, 1987, letter. In this letter, you have again requested that your solid mixing area be reclassisfied from a waste pile to a tank.

American Chemical Service (ACS) orginally submitted a closure plan for the "area" dated June 18, 1986. The closure plan never defined the area as a tank or a waste pile and it was not included on the facility Part A or original notification. The plan was public noticed in the Hammond Times on August 25, 1986, as closing a "solid mixing area (waste pile)." A Notice of Deficiency (NOD) dated April 15, 1987, was sent to ACS by the Indiana Department of Environmental Management (IDEM) detailing deficiences in the closure plan. The IDEM received a letter dated May 14, 1987, from ACS asking for us to reclassify their solids mixing area from a waste pile to a tank. Our response, dated June 19, 1987, maintained our original waste pile determination.

A recent EPA memorandum of guidance dated March 25, 1987, on this very subject (waste pile vs tank) is enclosed. This guidance basically confirms the original decision stated in our June 19th letter.

The guidance focuses on the terms "contain" and "noncontainerized" and states that, "If the waste is contained within the unit by virtue of the fact that it is a cohesive solid, the unit is a pile. If the unit would contain any waste, including a free-flowing liquid, it is a tank."

This argument can also be coupled with the fact that this area was not "designed" as a hazardous waste treatment area, but as a drum storage area. Therefore this area was not "designed to contain an accumulation of hazardous waste" which is a requirement stated in the definition of a tank in 320 IAC 4.1-1-7.

We do not base our decision solely on the EPA guidance memorandum. This only serves to strengthen the points previously mentioned. The requirement of containment, the non-earthen tank definition requirement verses the sand wall, the structual support requirement and the design requirement-all support the waste pile classification. With these facts in mind, we must assert our previous decision that the solid mixing area is a waste pile.

As you have discussed with my staff, you are free to present your arguments to the Commissioner of the IDEM. You should also be aware that, with this letter, we will be requesting the U.S. EPA to put this waste pile area on the land disposal list.

Due to the delays of written correspondence and the complex issues we are dealing with, over 60 days have passed since we should of recieved a response to your original NOD. Therefore, we require a response to the NOD in our offices by August 26, 1987. If you have any questions, please contact Mr. Robert Cappiello of my staff at AC 317/232-3221.

Very truly yours,

Terry F. Gray

Terry F. Gray, Chief
Plan Review and Permit Section
Hazardous Waste Management Branch
Solid and Hazardous Waste Management

RJC/ram

Enclosure

cc: Mr. Hak Cho, U.S. EPA, Region V (with enclosure)
Mr. Bernie Orenstein, U.S. EPA, Region V
Mr. Bill Muno, U.S. EPA, Region V (with enclosure)

Gray

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
SOLID WASTE AND EMERGENCY RESPONSE

MAR 25 1987

MEMORANDUM

SUBJECT: Regulatory Classification of Three and Four-Sided, Floored Structures, OSW-185

FROM: Marcia E. Williams, Director
Office of Solid Waste
Marcia

TO: Karl Bremer, Acting Director
Region V Solid Waste Branch (5HS-JCK-13)

Thank you for your patience in waiting for our response to your memorandum of April 23, 1986, requesting guidance on how nine examples of three and four-sided, floored structures should be regulated -- as tanks or waste piles. As you noted, the ramifications of these decisions are significant since tanks and waste piles are subject to different regulatory standards. For example, waste piles are subject to the land disposal restrictions and have lost interim status unless the November 7, 1986, certification deadlines were met.

We have been having a great deal of trouble and have spent a great deal of time in an effort to develop a methodology that could be used to identify these various odd-shaped units. We believe that such an approach is necessary to ensure that similar units located throughout the country can be classified on a consistent basis by Regional and State permitting authorities. Unfortunately, there is a great deal of overlap with respect to the definitions of "tank" and "pile" found at 40 CFR 260.10. This overlap can create a problem when it is necessary to identify certain specific units such as those described in the attachment to your memo. We concluded that the only viable long-term solution is a regulatory "fix" that will be described in detail below.

For the short term, on the advice of our Office of General Counsel and the Office of Waste Programs Enforcement, we would advise that individual units be identified identically to the applicant's Part A designation unless the unit clearly cannot be

a specific type of unit (e.g., flowing liquids cannot be managed in piles; primarily earthen units cannot be tanks). If permitting or closure requirements are deemed inadequate, we would use the corrective action (assuming there is a permitted unit at the facility) and omnibus authorities to impose additional requirements, as necessary, to protect human health and the environment. The advantage of this approach is that it provides the most legally defensible position in view of the ambiguities of the various regulatory definitions. The disadvantages include our inability to use omnibus authorities for 90-day accumulation and wastewater treatment tanks that do not require RCRA permits, and our inability to apply corrective action requirements to these same units at facilities with no other permitted units.

As explained above, our long-term strategy for dealing with these units would be to make regulatory changes as needed. In that regard, we are considering a regulatory fix that we would pursue as expeditiously as possible. This approach involves reviewing the various definitions found in 40 CFR 260.10 including those for (a) tanks, (b) piles, and (c) surface impoundments, and miscellaneous units under Subpart X. While various definitions tend to overlap (for example, both tanks and piles can accept solid, non-flowing waste), we are able to make certain distinctions. For example, the definition of tank states that tanks contain materials; the definition of a pile states that a pile is a <u>noncontainerized</u> accumulation of solid, non-flowing hazardous waste.

Therefore, our approach to classifying these units would be to focus on the terms "contain" and "noncontainerized." The methodology that we have developed to classify these units is to first review the regulatory definitions. In general, this enables one to distinguish tanks and piles from surface impoundments and Subpart Q or Subpart X units. However, there is considerable overlap in the definition of tank and pile. Where either definition might apply, we would ask the question -- Is containerization a function of the structure or is it a function of the waste itself? If the waste is contained within the unit by virtue of the fact that it is a cohesive solid, the unit is a pile. If the unit would contain any waste, including a free-flowing liquid, it is a tank.

We would describe this approach in a <u>Federal Register</u> notice and, in the same notice, would propose to amend the regulatory definitions of pile and tank, as required, so that this methodology could be employed nationally. For your information, we are providing an attachment that classifies each of the nine units based on our use of the proposed methodology.

We welcome your input in critiquing our long-term strategy. Additionally, if you would like to discuss this matter in more detail, please have your staff contact either Bob Dellinger, Bob April, or Bill Kline of my staff at (202) 382-7917.

Attachment

cc: Hazardous Waste Branch Chiefs, Regions I-IV, VI-X
Lloyd Guerci, RCRA Enforcement
Matt Hale, Permits Branch
Robert Tonetti, Land Disposal Branch
Mark Greenwood, Office of General Counsel

ATTACHMENT I

Proposed Long-Term Approach Applied
to Nine Specific Units

Unit 1 is a four-sided structure used to store dry waste on a floor that slopes towards the part of the building that has three doors designed to admit front-end loaders and dump trucks. The building floor is not designed to contain the waste (that is, if the material being stored in the structure were a liquid, it could escape). Although the company has designated the unit as a 90-day storage tank, our methodology would classify this unit as a waste pile with some wind dispersion control.

Unit 2 is a four-sided structure with windows and a 20-foot opening partially closed with a 3-foot removable steel barrier. This unit was originally identified on Part A of the permit application as a storage waste pile, and Region V correctly denied a subsequent request to redesignate the unit as a tank. Applying our methodology, we would classify this unit as a waste pile. If the waste were a liquid, it could escape; thus, only the characteristics of the waste allow it to be contained. The structure is not designed to contain waste.

According to a consent order between the State and the company, Unit 3, when built, will either treat reactive waste in gondolas or in free form on the floor by adding water to the unit. If the unit treats reactive waste in gondolas, the unit serves as a §264.175 containment system for containers and should be subject to the Subpart I container regulation. If the wastes are treated in free form on the floor, the unit cannot be a waste pile since the unit will be flooded with water, with the water contained during waste treatment. Therefore, the unit is a tank when waste is managed on the floor in such a manner that all the waste is kept within the unit. However, if the waste is mounded higher than the retaining sides or highest level of the floor, then the unit would be subject to the Subpart X regulation, proposed on November 7, 1986 (51 FR 40726). Specifically, applying our methodology, Unit 3 could be operated, at times, as a container area, a tank, or a miscellaneous unit. While operating as a particular type of unit, the specific unit standards would apply; thus the permit would contain standards for each operating mode for which the unit would be used. To do this, the most stringent design and operating standards that would apply in each of these situations would be incorporated into the permit. For example, this unit would eventually have to be closed under the most stringent closure requirements applicable to any of its operating modes. Should the permittee maintain that the unit is always operated as a tank, it could be permitted as such. In a case where the height of the waste was found to exceed the height of

the walls, the Region would have a choice of enforcement actions. The Region would either enforce against an improperly operated tank (no freeboard) or a false permit application.

Unit 4 was initially a four-walled concrete tank that flooded a reactive waste with water to render the waste nonreactive. However, one wall has been removed, and the fourth side is now bermed with sand while the unit is inundated with water to render a reactive waste nonreactive. After treatment, the berm is broken, and the liquid flows into a drain in a concrete slab also bermed with sand. Since the sand berm is not stationary when emptying the unit, the unit is not a tank. Although the waste is nonflowing when covered with water, the unit is not a pile because piles are not designed to contain liquids. Therefore, using our approach, we would classify the unit as an interim status Subpart Q unit, which will eventually be permitted under the Subpart X standards.

Unit 5 is designed to solidify sludges that contain free liquids. From the limited amount of information available about the unbuilt unit, the unit would have a roof, 3 walls, a sloping floor, and a leak detection system. Applying our methodology, this unit would be classified as a tank or a pile depending on its operating mode. If wastes are always kept lower than the floor and wall height, the unit would be a tank. However, if the waste is managed in such a manner that the wastes pile up above the floor and wall height, the unit would be a pile. The containment that is provided in the latter case would partially be a function of the waste being managed, not solely of the design of the structure.

Unit 6 mixes noncontainerized wastewater treatment sludges with lime when the sludge contains free liquids. The floor of the unit slopes towards catch basins which collect the liquids that separate from the piles. Applying our methodology, Unit 6 would be a waste pile. The unit is managed so that waste exceeds the height of the retaining walls. If this waste were a liquid, it could escape the unit. Therefore, we would argue that the structure is not designed to contain waste; the properties of the material allow it to be contained in this unit.

In Unit 7, hazardous waste sludges and nonhazardous wastes would be mixed with sand and coal ash to eliminate free liquids. The proposed unit has a run-off control drainage system that is designed to collect liquids draining into floor drains from the waste pile. This design has a 12-inch reinforced floor over a 6-mil polyethylene sheet, a leak detection system, and a 10-inch reinforced concrete slab underneath. Under our proposed approach, this unit would be a waste pile. Liquids are controlled by drains, not contained. As with Units 1, 2, and 6, the structure is not

designed to contain the waste, in that slope of the floor is not sufficient to qualify as the fourth side of a four-sided tank.

Unit 8, which is to be closed, contains EP toxic metal dust that has been premixed in a cement truck with another waste to control fugutive dusts. A front-end loader mixes in foundry sand (which contains clays) to render the waste nonhazardous. The unit is concrete, below grade, and has three concrete walls with metal wall extensions that rise eight feet above the sloping floor. Applying our methodology, this unit could either be a tank or a pile depending on how wastes are managed. If waste is never piled up higher than the highest floor level, it would be a tank. However, if waste is piled higher than the level of the concrete wall, it would be a pile.

Unit 9 managed listed and characteristic waste in solid, semi-solid, and liquid form in a below grade, three-walled structure with a sloped concrete floor and a pump-out sump at the bottom. According to the dimensions of the unit, utilizing the maximum capacity of the unit would fill the unit over to the top of the sloping floor. Therefore, under our proposed methodology, it would not be a tank. Although the unit handled liquid waste, the unit would be closed as a waste pile if the waste was kept solid and nonflowing. Otherwise, the unit would need to close as a miscellaneous unit.

In summary, applying our methodology, Units 1, 2, 6, and 7 appear to be waste piles; Unit 4 is a Subpart Q treatment unit. Depending on the mode of operation, Unit 3 would either be a containment system for containers, a Subpart X miscelleneous unit, or a tank. Units 5 and 8 would be either tanks or piles, depending on how wastes are managed, and Unit 9 would either be a waste pile or a miscellaneous unit.

S Form 4336

File

DEPARTME T OF ENVIRONMENTAL I. NAGEMENT

INDIANAPOLIS

OFFICE MEMORANDUM

DATE: May 18, 1987

TO: Robert Cappiello
Plan Review and Permit Section

THRU: David Berrey
Terry Gray TFG 5/21/87

FROM: Lewis R. Schoenberger
Compliance Monitoring Section

SUBJECT: Preclosure Inspection of American Chemical Services
Griffith, Indiana

On April 15, 1987, I conducted a preclosure inspection of American Chemical Services, P.O. Box 190, Griffith, Indiana 46319. The facility was represented by Mr. James Tarpo.

According to the information you have provided to me, the facility is in the process of closing a hazardous waste solids mixing area. This area had been used to mix sand with various hazardous waste streams prior to shipment off-site.

On the day of inspection, the decontamination of the cement floor and walls had not begun. Sand was still present, scattered around the area in small quantities. Raw materials stored in 55-gallon drums were stored in the area. There were 35 drums of soy bean oil, 23 drums of hexane, 6 drums of formic acid, 8 drums of phosphoric acid and numerous empty drums stored on the mixing pad area, or against the outer wall of the area (see photographs). The presence of these drums obscured my view of much of the mixing area.

Closure of this mixing area can not be started until all of the products currently stored there have been removed. By the same token, verification of final closure of the area cannot occur if raw materials are stored there.

Scraping the surface of the cement to remove hazardous waste residues and cement impregnated with hazardous waste appears appropriate. However, the walls and floor have been chipped and gouged by the equipment used in the area. Hence, I have reservations concerning whether the removal of 1/8 inch of concrete from the surface will be sufficient for removal of listed hazardous waste constituents. This will have to be discussed further. In addition, it is possible, if not probable that hazardous waste contaminated sand may have been blown out of the area by wind or carried out on the tires of vehicles working in the area or surface water run-off. Hence, I believe soil samples from the area immediately to the south of the mixing area should be collected and analyzed for the hazardous waste characteristics and volatile organics as part of the closure plan prior to final closure. If these initial samples indicate significant concentrations of contaminants in the soil immediately adjacent to the mixing area, more samples should be collected and analyzed from the area of potential soil contamination.

LRS/drc

Cappello

American Chemical Service, Inc.
P.O. Box 190 • Griffith, Indiana 46319
(219) 924-4370 • Chicago Phone (312) 768-3400

MAY 18 8 39 AM '87
OFFICE OF SOLID AND HAZARDOUS WASTE MGMT DEM

May 14, 1987

Mr. Terry F. Gray, Chief
Plan Review and Permit Section
Hazardous Waste Management Branch
Solid and Hazardous Waste Management
P.O. Box 6015
Indianapolis, IN 46206-6015

Re: Notice of Deficiency
Closure Plan Review April 15, 1987
American Chemical Service, Inc.
IND 016360265

Dear Mr. Gray:

In response to your Notice of Deficiency (NOD) dated April 15, 1987, American Chemical Service, Inc. (ACS) believes that the Former Solids Mixing Area would be more correctly classified as a tank rather than a waste pile. The basis for this assertion is contained in an explanation of the solids treatment activities conducted utilizing the Former Solids Mixing Area.

Between March 1982 and November 1983 non-listed ignitable solids (D001) were collected in the ACS Drum Containment Area. The solids were stored in 1½ yard closed top lift truck hoppers in the Drum Containment Area. When approximately 9 yards of solids were collected and weather permitting all the solids were treated in the Former Solids Mixing Area and shipped on the same day. The solids were mixed with sand at a ratio of 4 sand to 1 solids to render the mixture non-hazardous. The mixture was then loaded into semi-trailers and shipped to the landfill.

The Former Solids Mixing Area is a stationary structure constructed on a concrete base 20' wide by 50' long and 12" thick. The mixing area measures 20' x 15' with 36" high walls (12" thick) on three sides. The loading area measures 20' x 24' with 2 walls constructed of 3' by 2' and 3' high concrete blocks. The two areas have a common concrete wall 36" high, 20' long and 12" thick.

The procedure for treating the solids began with the preparation of the mixing area. The base of the mixing area was covered with approximately 12" of sand. The open end of the area was closed to contain the solids with a 30" high sand wall. The solids from a hopper were dumped into the mixing area with a fork truck. Sand was placed on top of the solids and mixed with a backhoe. When thoroughly mixed, the mixture was transferred to the loading area. Then 15 yards of the mixture was loaded into a semi-trailer and transported. All the collected solids were mixed and loaded during a 6 hour period and no accumulation of the mixture was left stored in the loading area. Based on the definition of a tank versus a waste pile and the above explanation, ACS believes it more appropriate to close the Former

Solids Mixing Area as a tank rather than a waste pile. If this request is acceptable to the department, ACS will respond with a schedule for amending the present closure plan taking into account the General Closure Deficiences outlined in the April 15, 1987 NOD.

Also enclosed is the March 16, 1987 60 day status report on the ACS efforts to secure Environmental Impairment Liability Insurance.

If your have any questions, please contact me at ACS 219/924-3144.

Very truly yours,

John J. Murphy
Vice President
American Chemical Service, Inc.

JJM/rl

Lake Co
IC16

File

STATE of INDIANA

DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT

105 South Meridian Street
P.O. Box 6015
Indianapolis, Indiana 46206-6015

April 15, 1987

Mr. James Tarpo, President
American Chemical Services, Inc.
P.O. Box 190
Griffith, IN 46319

Re: Notice of Deficiency
Closure Plan Review
American Chemical Services, Inc.
IND 016360265

Dear Mr. Tarpo:

The Indiana Department of Environmental Management (IDEM) has completed a closure plan review (waste pile - solids mixing area) of the plan submitted on June 18, 1986. We have found this plan to be deficient. The items that need to be addressed are listed in the attached Notice of Deficiency (NOD).

In the January 14, 1987, letter to the IDEM, you informed us that you have not been able to renew your Environmental Impairment Liability Insurance. Please address this issue on your response to this NOD.

Your response to this Notice should be received by our office within 30 days of the date on this letter. If you have any questions, please contact Mr. Robert Cappiello of my staff at AC 317/232-3221.

Very truly yours,

Terry F. Gray

Terry F. Gray, Chief
Plan Review and Permit Section
Hazardous Waste Management Branch
Solid and Hazardous Waste Management

RJC/rmw
Enclosure
cc: Mr. Hak Cho, U.S. EPA, Region V
Mr. Bernie Orenstein, U.S. EPA, Region V
bcc: Mr. Jeff Stevens(with enclosure)

Notice of Deficiency
Closure Plan Review
American Chemical Service, Inc.
Griffith, Indiana
IND 016360265

GENERAL CLOSURE DEFICIENCIES

I.A. Closure Performance Standards: 320 IAC 4.1-21-2, 4.1-26-7(b)

Describe how closure miminizes the need for post-closure maintenance and controls, minimizes, or eliminates post-closure escape of hazardous waste, hazardous constituents, contaminated run-off, or waste decomposition products to the ground or surface waters or to the atmosphere.

Assess the potential for the release of hazardous waste or hazardous constituents from any contaminated soils remaining on the site after closure. The standard for clean closure of a unit is to remove contaminated soils to background levels for hazardous constituents found in the wastes. The facility is required to provide a sampling plan for soils, which specifies a random sampling location methodology, sampling and analytical methods, and a statistical method for comparing the data. If after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components, subsoils, structures, and equipment, the owner or operator finds that not all contaminated subsoils can be practicably removed or decontaminated, he must close the facility and perform post-closure care in accordance with the post-closure requirements that apply to landfills (320 IAC 4.1-28-4).

I.B-1 Description of Partial and/or Final Closure: 320 IAC 4.1-21-3(a)

Provide a complete and technical description of the closure process for this partial closure, any other planned partial closures, and for final facility closure. The final facility closure plan must cover the maximum extent of the hazardous waste management unit operations, including any areas where soil contamination has occurred.

I.B-2 Maximum Extent of Operation: 320 IAC 4.1-21-3(a)

To ensure that the final closure plan is comprehensive, the plan must specifically identify the maximum extent of the facility hazardous waste management unit operations which will be partially closed, if applicable, and finally closed. The maximum extent of operations includes any contaminated soils which might exist adjacent to the waste pile.

I.B-4 Description of Decontamination and Removal of Hazardous Waste and Residues: 320 IAC 4.1-21-3, 4.1-21-5 and 4.1-26-7(a)

Provide a detailed description of the steps needed to remove or decontaminate all hazardous wastes, residues, contaminated containment system components, equipment, structures, and soils during partial and final closure. The description includes, but is not limited to, criteria for determining the extent of decontamination necessary to satisfy the closure performance standard, methods for sampling and testing surrounding soils,

procedures for cleaning equipment and removing contaminated soils, and methods for properly disposing of contaminated wastes, residues, and soils. Sampling must specify a random sampling location methodology, sampling and analytical methods, and a statistical method for comparing the data.

I.B-5 Estimate of Year of Closure and Schedule of Closure: 320 IAC 4.1-21-3(a)(4)

Provide the date of closure and a schedule for final closure including the total time to close the facility and the time required for intervening closure activities. These activities include the removal of any contaminated soils and residues found in and around the waste pile and decontamination of any structures associated with the unit.

I.B-6 Amendment of Plan: 320 IAC 4.1-21-3(b)

When the plan is amended to include potential soil contamination, describe:

1. The changes in the facility operation or design which affect the closure plan;

2. The change in the expected year of closure; or

3. Any unexpected events which may require modification of the closure plan.

I.D Certification of Closure: 320 IAC 4.1-21-6

The closure plan must state that when closure is completed, certification will be submitted both by the owner or operator and by an independent registered professional engineer that the facility has been closed in accordance with the approved closure plan.

I.E-1 Cost Estimate When Closure is Most Expensive: 320 IAC 4.1-22-3(a)

Provide a copy of the up-to-date closure cost estimate, calculated to cover the cost of closure when the cost would be greatest. The closure cost estimate must be based on the costs of having a third party, neither a parent nor a subsidiary of the owner/operator, close the facility. The cost estimate must take into account the additional costs if extensive soil contamination is found.

Provide a detailed cost estimate that includes a separate line for each activity or task performed during closure. Support line item estimates with calculations or subtotals based on unit prices, labor hours, equipment rental rates, disposal fees, and volume or quantity figures.

The closure cost estimate may not include the following:

-- Any salvage value that may be realized by the sale of hazardous wastes, facility structures, or equipment, land or other facility assets at the time of partial or final closure; and

-- A zero cost for hazardous wastes that an owner or operator assumes a third party will take at no charge.

I.E-3 Revisions to Closure Cost Estimates: 320 IAC 4.1-22-3(c)

Revise the closure cost estimate to include revisions to the closure plan which increase the cost of closure. Include additional requirements noted in this review.

I.F Financial Assurance for Closure: 320 IAC 4.1-22

Provide a copy of the established financial assurance mechanism for facility closure. The mechanism must be one of the following:

-- closure trust fund: 320 IAC 4.1-22-5
-- surety bond guaranteeing payment into a closure trust fund: 320 IAC 4.1-22-6
-- closure letter of credit: 320 IAC 4.1-22-7
-- closure insurance: 320 IAC 4.1-22-8
-- financial test and corporate guarantee for closure: 320 IAC 4.1-22-9
-- multiple financial mechanisms: 320 IAC 4.1-22-10
-- financial mechanisms for multiple facilities: 320 IAC 4.1-22-11

I.G Liability Coverage: 320 IAC 4.1-22-24

Coverage for Sudden Accidental Occurrences: 320 IAC 4.1-22-24(a)

Provide documentation and endorsement or certification of compliance with applicable liability requirements for sudden accidental occurrences. Liability coverage must be maintained for sudden accidental occurrences in the amount of at least $1 million per occurrence with an annual aggregate of at least $2 million. Liability coverage may be demonstrated in one of three ways: Endorsement or Certification, 320 IAC 4.1-22-24(1); Financial Test for Liability Coverage, 320 IAC 4.1-22-24(2); or Use of Multiple Insurance Mechanisms, 320 IAC 4.1-22-24(3). Liability coverage must be maintained until closure certifications are received by the Assistant Commissioner.

Financial Test for Liabilty Coverage: 320 IAC 4.1-22-24(f)

Submit a letter signed by the owner's or operator's chief financial officer and worded as specified by 320 IAC 4.1-22-32, a copy of the independent certified public accountant's report on examination of the applicant's financial statements for the latest fiscal year, and a special report from the certified public accountant. If the applicant is using the financial test to demonstrate both assurance for closure and liability coverage, this letter must be submitted to cover both forms of financial responsibility. Under these circumstances, a separate letter as specified by 320 IAC 4.1-22-31 is not required.

Use of Multiple Insurance Mechanisms: 320 IAC 4.1-22-24-(a)(3)

Submit items demonstrating required lability coverage through a combination of endorsement or certification and financial test. The amounts of coverage demonstrated must total at least the minimum amounts required by 320 IAC 4.1-22-24(a).

CLOSURE OF WASTE PILES DEFICIENCIES

IV.B-1 Detailed Description of Steps Necessary to Close Waste Piles: 320 IAC 4.1-21-3(a)

Provide a complete and detailed technical description of the closure process such that:

1. The reasoning behind and procedures for closure are understandable;

2. The schedule can be justified;

3. Closure cost estimates can be substantiated; and

4. Financial assurance can be judged to be adequate.

IV.B-2 Identification of Maximum Extent of Operation of the Waste Pile: 320 IAC 4.1-21-3

Provide a complete and detailed physical description of the waste pile and/or piles treatment/storage area, including the type of construction materials, so that the testing, removal, and decontamination procedures can be judged to be adequate. Recommend a site map, drawn to scale, be included.

IV.B-3 Estimated of the Maximum Inventory of Waste at Waste Piles: 320 IAC 4.1-21-3(a)(2)

Provide supporting calculations for estimated amount of hazardous wastes, including residues, at all waste piles and the maximum amount of contaminated soils and residues found in and around those units.

IV.B-4a Criteria for Determining the Extent of Decontamination Necessary: 320 IAC 4.1-21-3, 4.1-21-5 and 4.1-26-7

Specify the criteria to be used to judge the extent of decontamination. This will generally be on the basis of detection of, or specific concentrations for, appropriate hazardous wastes or constituents in a soil sampling program or groundwater monitoring program.

IV.B-4b Procedures for Cleaning Equipment and Structures and Removing Contaminated Soils: 320 IAC 4.1-21-3, 4.1-21-5, and 4.1-26-7

Specify the decontaminated procedures for the equipment and structures, such as steam cleaning or flushing with an appropriate solvent. Cleaning agents or solvents must be clearly identified. Indicate whether the cleaning

agent or solvent is suitable for the types of wastes stored. Describe how contaminated cleaning agents or solvents will be properly managed as hazardous wastes.

Specify how cleaning equipment, such as brushes, will be decontaminated or properly disposed of as hazardous wastes.

Describe how contaminated soils will be removed from the surrounding area. Provide a detailed description of the steps including, but not limited to, procedures for removing contaminated soils, methods for sampling and testing surrounding soils, and methods and locations of final disposal.

By removing hazardous wastes and residues during partial and final closure, the owner or operator may become a generator of hazardous waste and must handle that waste in accordance with all applicable requirement of 320 IAC 4.1.

IV.B-4c Methods for Sampling and Testing to Demonstrate Success of Decontamination: 320 IAC 4.1-21-3, 4.1-21-5, and 4.1-26-7

Specify a testing program to determine if the standard of decontamination has been met. The testing program must include a description of sampling procedures, test parameters, and analytical methods to be used.

Specify the sampling procedures and demonstrate that the number of samples is sufficient. Indicate how samples are judged to be representative.

Demonstrate that the testing parameters are consistent with those selected as criteria for decontamination. They must be indicative of the wastes stored at the waste pile.

Identify analytical methods for each parameter. Methods of SW-846 normally are used. A justification must be provided for any analytical methods specified other than those in SW-846.

IV.B-5 Detailed Schedule for Closure of Waste Pile: 320 IAC 4.1-21-3(a)(4)

Provide a schedule for closure of the waste pile. The schedule must include, at a minimum, the total time required to close the waste pile and the time required for intervening closure activities which will allow tracking of the progress of closure. The schedule must also include intervening closure activities associated with structures decontamination and removal of any contaminated soils.

IV.C-1 Wastes from Waste Pile Treated, Removed, or Disposed of Within 90 days: 320 IAC 4.1-21-4(a)

The closure schedule must show that within 90 days of receiving the final volume of hazardous wastes, or 90 days after approval of the plan, whichever is later, all wastes will be treated, removed from the site, or disposed on-site.

IV.C-2 Closure of Waste Pile Within 180 days: 320 IAC 4.1-21-4(b)

The closure schedule must show that closure will be completed within 180 days after receipt of the final volume of waste, or within 180 days after approval of the closure plan, whichever is later.

IV.H-1 Detailed Description of Removal of Waste Inventory: 320 IAC 4.1-26-7 and 4.1-21-5

Specify the disposition of the waste inventory at the waste pile at the time of closure. Include:

1. An estimate of the quantity of hazardous waste sent off-site;

2. A description of any treatment performed prior to transport, if applicable;

3. The time required to remove the wastes off-site;

4. Distance to the final Treatment, Storage, and Disposal Facility (TSDF);

5. Description of treatment or disposal methods at the final TSDF; and

6. Operating status of the TSDF (i.e., interim status or permitted facility). Include EPA ID number, if applicable.

Provide a detailed description for removal of waste, containment or liner system (if applicable), and contaminated surface subsoils. Include:

1. Method of waste, liner (if any), and other contaminated material removal;

2. Location where the material is to be moved to;

3. Method of transportation;

4. Loading procedures;

5. Procedures for protection of surface water and groundwater sources during the work;

6. Method of controlling wind dispersal of the material; and

7. Special handling procedures (such as for ignitable or reactive wastes).

IV.H-2 Detailed Description of Removal of Hazardous Waste Residues: 320 IAC 4.1-26-7 and 4.1-21-5

Describe how all hazardous waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment

contaminated with waste and leachate will be removed or decontaminated at closure and managed as hazardous waste. Describe the sampling and testing program used to verify the decontamination of equipment and subsoils. Include the parameters and criteria used to verify decontamination of equipment and subsoils. If after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components, subsoils, structures, and equipment, the owner or operator finds that not all contaminated subsoils can be practicably removed or decontaminated, he must close the facility and perform post-closure care in accordance with the closure and post-closure requirements that apply to landfills (320 IAC 4.1-28-4).

1. An estimate of the quantity of contaminated waste residues at the waste pile;

2. A description of any treatment performed prior to transport, if applicable;

3. The time required to remove the waste residues off-site;

4. Distance to the final TSDF;

5. A description of treatment or disposal methods at the final TSDF; and

6. Operating status of the facility (i.e., interim status or permitted facility). Include EPA ID number, if applicable.

By removing hazardous waste residues during partial and final closure, the owner or operator may become a generator of hazardous wastes and must handle hazardous waste in accordance with all applicable requirements in 320 IAC 4.1.

File
Lake Cont.
IC/b

A.T. Kearney, Inc.
699 Prince Street
P.O. Box 1405
Alexandria, Virginia 22313
703 836 6210

Management
Consultants

FEB 5 9 49 AM '87

OFFICE OF SOLID
AND HAZARDOUS
WASTE MGMT
DEM

February 5, 1987

AT KEARNEY

Ms. Pat Vogtman
Regional Project Officer
U.S. Environmental Protection Agency
230 South Dearborn Street
Chicago, Illinois 60604

Reference: EPA Contract No. 68-01-7038; Work Assignment No. R05-12-14; Review of American Chemical Services, Inc. Closure Plan, Griffith, Indiana, IND 016360265; Final Deliverable

Dear Ms. Vogtman:

Enclosed please find the Interim Status Closure Plan review for American Chemical Services, Inc., Griffith, Indiana.

The deficiency comments enclosed include requirements for assessing potential soil contamination resulting from the facility's hazardous waste practices. The facility should be required to amend their closure plan to include procedures and clean-up costs resulting from any soil contamination associated with the facility's waste pile. Since the standard for clean closure of a unit is to remove contaminated soils to background levels for constituents found in the wastes, the facility should be required to provide a sampling plan for soils which specifies a random sampling location methodology, sampling and analytical methods, and a statistical method for comparing the data.

American Chemical Services has several Interim Status tanks and container storage areas which are to be closed in 1995; therefore, the facility must have detailed Interim Status Closure Plans for these units in order to be permitted (under HSWA provisions all container storage areas and all non-land disposal treatment facilities are to be permitted by November 1982). No such plans were provided by the facility for review. These closure plans, which must be maintained by the facility, may be reviewed during an interim status compliance inspection. American Chemical Services has been requested to provide a comprehensive final closure plan in order to assure that the waste pile closure is consistent with the overall facility plan.

The facility has not been able to renew its Environmental Impairment Liability Insurance as required by RCRA. This issue should be further addressed by the facility.

The closure review included review of file documents and correspondence from IDEM files in addition to the facility closure plan. The facility has been instructed to assemble the deficiency response and other relevant information into one comprehensive closure plan.

Please call me if you have any questions.

Sincerely,

Mary Cervera

Mary Thoma Cervera, P.E.
Technical Director

Enclosure

cc: H. Cho, EPA Region V
~~T. Gray, IDEM~~
R. Capiello, IDEM
D. Beasley
K. Breeden
J. Gers
J. Grieve
G. Magnus
S. Smith, PRA

A.4.2

CLOSURE PLAN MODIFICATIONS

American Chemical Service, Inc.
Griffith, Indiana
IND 016360265

Dec. 19, 1988

2.0 CLOSURE PLAN

I.A. CLOSURE PERFORMANCE STANDARD: 329 IAC 3-21-2 and 329 IAC 3-26-8(b)

WASTE CHARACTERIZATION

The waste characterization data summarized in Appendix A of the August 23, 1988, closure plan submittal includes the waste analysis results for the sands and solids mixture which was previously submitted to the Indiana Department of Environmental Management (IDEM) in a letter from American Chemical Service (ACS) dated July 16, 1986. However, information concerning the specific analytical method utilized and the appropriate sampling identification/description were not provided to support the waste analysis results for the sands and solids mixture. An analysis of the hazardous waste solids alone (not mixed with sand) has also not been provided.

In the August 2, 1988, Notice of Deficiency (NOD), the IDEM commented that ACS must clearly identify and characterize the hazardous waste streams that have been stored/treated at the former solids mixing area unit. The IDEM also made the following statements in the NOD:

Page 7, Section IV.B-3 -

"The facility must provide a description of the hazardous waste (D001) which was mixed with sand in the mixing area. This description should include the standard chemical name or names, EPA hazardous identification number, reason for hazard ranking, and the maximum volume of waste on site at any one time. Results of any previous waste analyses performed on the flammable solids (D001) and documentation supporting those analyses would be particularly useful if available."

Page 9, Section IV.B-4a -

"The parameters to be analyzed should be derived from inventory logs of hazardous wastes previously or presently stored at the facility. In the event the facility cannot provide adequate documentation of such wastes or previous waste analyses, the IDEM recommends that the facility analyze the soils adjacent to and beneath the management unit for total metals, EP toxic metals, volatile organics and semi-volatile organics (see Attachments 2, 3, and 4 at the end of this NOD). The methods for analyzing these groups of parameters should be those found in the most recent edition of SW-846. For example, samples to be analyzed for VOA's should follow the protocol in method 8240. All methods necessary for an analysis need to be documented, including any extraction or preparatory methods."

In addition to sampling and analysis for total metals as proposed in the closure plan dated August 23, 1988, ACS must also perform sampling and analysis for EP toxic metals, volatile organic analytes (VOA's), and semi-volatile organic analytes (SVOA's) as described in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, " EPA Publication SW-846 Third Edition, March 1987. This sampling and analysis is being required because:

a. additional waste analyses data with supporting documentation were not provided,

b. wastes exhibiting the characteristic of ignitability (D001) were stored/treated in this unit, and

c. sampling of volatile organic compounds (VOC's) was recommended in a memorandum dated May 18, 1987, by the IDEM inspector who conducted the April 15, 1987, pre-closure inspection of the former solids mixing unit.

SAMPLING AND ANALYSIS PLAN

The following modifications to the sampling and analysis plan proposed in Appendix B, "Subsoil and Concrete Sampling and Analysis Plan," must be implemented by American Chemical Service:

1.1 General

VOA's, SVOA's, EP toxic metals, and total metals represent the parameters of concern at this site.

1.2 Sample Grid Space and Depth Intervals

On page 9, Section I.B-2, of the closure plan, ATEC has stated that their visual observation of the soil adjacent to the unit indicates the presence of occasional solid bits of the waste solids material, generally less than one inch in physical dimension. At a distance of approximately ten (10) feet from the unit, these particles of solid material are no longer visible.

In order not to miss areas of potential contamination visible within ten feet of the unit, the surrounding soils grid must be established by starting the grid sampling stations no more than five (5) feet off of the southwest corner of the concrete pad.

1.3 Sampling Stations

A. Within thirty (30) days of the date of approval of the modified closure plan, ACS must revise and submit the following sections within the closure plan in order to address criteria for determining the lateral or horizontal extent of soil contamination:

1. soil sampling and analysis plan,

2. soil boring locations indicated in Figure #2,

3. closure cost estimate,

4. description of partial closure, and

5. schedule of closure.

In the event soil contamination is detected during sampling and analysis of the sampling locations illustrated in Figure 2, a soil sampling and analysis plan must be developed and submitted to the IDEM for approval which identifies additional sampling locations to be analyzed to demonstrate that hazardous wastes have not migrated beyond twenty (20) feet from the unit.

B. The closure plan is not complete in its description of the sample depth to determine the extent of possible contamination. The total metals samples and EP Toxic samples should be done at six (6)-inch intervals to two (2) feet and one (1)-foot intervals thereafter to a depth of four (4) feet or until two consecutive samples are uncontaminated. The soil samples for any possible organic parameters should be done at one (1)-foot intervals into the saturated soils or until two consecutive samples are uncontaminated; as was specified in the August 2, 1988, NOD.

Due to the variation in the thickness of the horizons of the soil, contaminates may be bound in the soils at different depths. Therefore, two (2) vertical interval samples must show no contamination above cleanup levels for any analyzed constituent (see Section 1.6(C) - "Cleanup Options"). At least two consecutive vertical sample intervals must be collected and analyzed at each of the initial sampling station locations illustrated in Figure 2, i.e., two consecutive 6-inch intervals (0-6 and 6-12 inches) for metals; and two consecutive one foot intervals (0-12 and 12-24 inches) for organics.

If a sampling station shows contamination above cleanup levels, then the grid must be extended outward from that sampling station at the same grid spacing (e.g., 20 foot intervals), and the new station must be sampled until two consecutive vertical interval samples show no concentrations above cleanup levels for any analyzed constituent. This procedure shall continue until:

1. all sample stations have two consecutive vertical sample intervals showing no contamination or

2. until the sample intervals have been extended vertically to the maximum depth specified in the modified soil sampling and analysis plan, (i.e., four feet for EP Toxic and total metals, and into the saturated soils for organics).

C. Possible contamination of the subsoils through the subsurface drainage structure must be determined (see location of possible drainage structure in the lower left corner of picture # 2 included in "Figures" section of the August 23, 1988 closure plan submittal). If the drainage structure has an opening to the subsoil, then American Chemical Service must sample the soils surrounding the subsurface drainage structure. This sampling and analysis may be necessary due to the highly granular texture of the surficial soils and the lack of a berm around the former solids mixing structure to control surface runoff.

The sampling and analysis plan for the subsurface drainage structure or structures, if applicable, shall be the same as described for the soils adjacent to the solids mixing unit with the following exceptions:

1. one sample shall be taken of the sediments (if present) within the drainage structure,

2. one sample of the soils outside of the drainage structure - one foot above the bottom of the structure, and

3. one sample of the first six (6) inches of soil below the bottom of the drainage structure.

If any one of these samples shows contamination, then the drainage structure and one foot of soil surrounding the structure, to the depth of the next sample interval, must be removed and properly disposed of as hazardous waste. Continuation of the vertical sampling of soils in relation to this structure shall proceed as described in the sampling and analysis plan to be utilized in order to determine the vertical extent of contamination in the soils adjacent to the solids mixing unit. One sampling station for each vertical interval is sufficient.

1.5 Decontamination

The sampling and analysis plan does not describe procedures for treatment and/or disposal of rinsate generated from decontamination of equipment or sampling media. Within thirty (30) days of the date of approval of the modified closure plan, ACS must submit an addendum to the plan which provides procedures for collection, testing for hazardous constituents, and disposal if the collected rinsate proves to be hazardous.

1.6 Sampling and Assessment of Results

A. Within thirty (30) days of the date of approval of the modified closure plan, documentation must be provided to justify the location of background samples. For example, an area of no traffic or other activity which may affect the integrity of the background environment. Pictures and other documentation, e.g., inspection certifications, of where hazardous waste activities did occur will reinforce this justification.

B. Because the chemical constituents in the natural soils change through the horizons of the soil, the four background samples must be analyzed at each sampling interval as the other samples. In other words, soil samples taken from a given interval at each subsoil sampling location will be compared to the corresponding interval in the background samples.

C. Soils must be removed from those contaminated sampling station locations to: (a) the depth of the next sample interval, (i.e., to the top of the two vertical sample intervals showing no contamination), and (b) a horizontal radius of twenty (20) feet around the sampling station location.

ACS must remove all contaminated soils until testing demonstrates the following cleanup standards have been met:

For EP toxic <u>and</u> total metals -- no contamination remains above background, plus one standard deviation.

For VOA's and SVOA's -- soil removal or decontamination to detection limits.

2.0 Sample Preservation and Shipment

Sample containers, preservation methods, and holding times for all parameters, i.e., EP toxic and total metals, VOA's, and SVOA's, must be in accordance with the most recent edition of EPA Publication SW-846.

3.0 Analytical Parameters

A. Under subsection "3.1 - General," the detection limits must be changed to milligrams per liter (mg/L) to accurately reflect parts per million instead of parts per thousand.

The analytical methods proposed for inorganics in Section 3.1, were partially reproduced from Attachment #4 of the August 2, 1988 Notice of Deficiency. However, due to a typographical error, the detection limits in that attachment were incorrectly expressed in milligrams per milliliter (mg/ml), not milligrams per liter (mg/L), as was intended.

B. The appropriate SW-846 methods must also be utilized in the analysis of soil samples for EP Toxic metals, VOA's and SVOA's as well as preparatory and extraction procedures.

C. Analysis of soil samples for total sulfide is not required.

D. Analysis of soil samples for total cyanide is only necessary if ACS has stored or treated cyanide wastes at the facility.

**** Please refer to the attachments at the end of this document for recommended guidance on sampling and analysis.**

POST-CLOSURE MAINTENANCE

Compliance with the terms of this modified closure plan 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. 9601), commonly known as CERCLA, as amended by the Superfund Amendments and Reauthorization Act of 1986 (42 U.S.C. 9606(a)), commonly known as SARA; or any other law providing for protection of public health or the environment.

A post-closure plan will have to be prepared if clean closure cannot be achieved.

I.B-1. DESCRIPTION OF PARTIAL AND/OR FINAL CLOSURE: 329 IAC 3-21-3

An error has been noted in the third paragraph of this section which states:

> "The Part B Application includes process codes identified in the Part A Permit Application approved by the IDEM on December January 2, 1986"

The third paragraph of this section should read as follows:

> "The Part B Application includes process codes identified in the Part A Permit Application dated January 22, 1986, which was approved

by the IDEM on December 10, 1987."

Description of Partial Closure

Items #1 and #2

Closure procedures described in items #1 and #2 must be revised to address the modifications made to the subsoil and concrete sampling and analysis plan.

Items #2 through #4

Procedures described in items #2, #3, and #4 for contaminated subsoil removal, contaminated concrete decontamination and/or removal, decontamination of equipment, and verification of the success of decontamination efforts; are inadequate to satisfy the closure performance standard. The following modifications to the closure procedures are required:

A. Due to the chipped and gouged condition of the concrete structure, it is unlikely that the unit could be successfully decontaminated. Therefore, the concrete pad and walls must be removed and disposed as hazardous waste.

B. The subgrade soils under the concrete pad must be included in the grid of the surrounding soils. This will add two (2) additional subsoil sampling locations.

C. Closure of the former solids mixing area will proceed as follows:

1. Soil samples will be collected and analyzed as described in the modified soil sampling and analysis plan (i.e., samples adjacent to the solids mixing unit, samples adjacent to the subsurface drainage structure, and samples to determine background concentrations). ACS also has the option of collecting these soil samples after the concrete structure has been removed.

2. ACS must remove the concrete structure in the former solids mixing area prior to removal of any surrounding soils. The concrete structure must be dismantled and appropriately disposed of as a hazardous waste at a permitted facility. As described in the August 21, 1987, closure plan submittal, dismantling will be done with a bulldozer. Sections to be broken off the main structure in sizes to facilitate proper sizing and a cutting torch will be used to cut the support rods.

3. Because of the possibility of creating a new waste pile with the contaminated concrete, the concrete sections removed must be placed directly into the trucks which will carry the waste off-site for disposal. Disposal of all contaminated concrete must occur within ninety (90) days following removal.

4. Once the concrete has been removed, the subgrade soils beneath the concrete pad will be sampled and analyzed. (See #1 above).

5. If analytical testing indicates the subsurface drainage structure must be removed, the contaminated structure must be removed and placed directly into the truck which will carry the waste off-site for hazardous waste disposal.

6. If analytical results indicate the necessity of soil removal, the

contaminated soils removed must be placed directly into the trucks which will carry the waste off-site for hazardous waste disposal. Once again, this will eliminate the possibility of creating a new waste pile with the contaminated soil.

7. Soil samples will be taken to determine the success of soil decontamination/removal efforts and may be collected and analyzed after the removal of contaminated soils. These samples shall be collected and analyzed as described in the modified soil sampling and analysis plan.

8. ACS shall backfill any excavated areas with clean non-contaminated soil.

9. The CID Processing Center (Site Code 0310390001), located at 138th and Calumet Expressway, Calumet City, Illinois, will be the final hazardous waste disposal facility to receive the total volume of contaminated concrete and/or soils, and the contaminated subsurface drainage structure.

I.B-4. DESCRIPTION OF DECONTAMINATION AND REMOVAL OF HAZARDOUS WASTE AND RESIDUES: 329 IAC 3-21-3, 329 IAC 3-21-5, and 329 IAC 3-26-8(a)

Within thirty (30) days of the date of approval of the modified closure plan, ACS must submit the following information to the IDEM:

A. As previously stated in the August 2, 1988 NOD, the closure plan must include a description of the sampling and testing program used to verify decontamination of the equipment used in removal of the contaminated concrete and soils.

B. Waste removal and decontamination procedures described on pages 10 and 11 do not document procedures for treatment and/or disposal of rinsate generated from decontamination of equipment and sampling media. The plan must provide procedures for collection, testing for hazardous constituents, and disposal if the collected rinsate proves to be hazardous.

C. ACS must revise the closure plan to specify how cleaning equipment, such as brushes, will be decontaminated or properly disposed of as hazardous waste.

D. ACS must also revise the closure plan to specify the method and location for disposal of the decontamination pad material.

I.B-5. ESTIMATE OF YEAR OF CLOSURE AND SCHEDULE OF CLOSURE: 329 IAC 3-21-3(b)

Within thirty (30) days of the date of approval of the modified closure plan, ACS must revise and resubmit to the IDEM a schedule of closure for this unit which reflects modifications to the closure plan, e.g., modification of the description of partial closure, etc.

A detailed schedule of closure similar to the format of the August 21, 1987, closure plan submittal is recommended.

I.B-6. AMENDMENT OF PLAN: 329 IAC 3-21-3(c)

The closure plan must be amended and submitted in accordance with the time requirements specified in 329 IAC 3-21-3(c).

If an unexpected event occurs during the partial closure period, the owner or operator must amend and submit a modified plan to the Commissioner no more than thirty (30) days after the unexpected event.

I.D. CERTIFICATION OF CLOSURE: 329 IAC 3-21-6

All supplemental information requested in the modified closure plan must be submitted to the IDEM and approved prior to the submittal of closure certification. Certifications of closure will not be accepted or acknowledged unless the additional information requested in the modified closure plan has been approved.

A certification of closure, signed by both the owner or operator and a registered professional engineer, must be submitted by the owner/operator to the Commissioner within sixty (60) days of completion of closure.

I.E-1. COST ESTIMATE WHEN CLOSURE IS MOST EXPENSIVE: 329 IAC 3-22-3(a)

Within thirty (30) days of the date of approval of the modified closure plan, ACS must revise and submit a closure cost estimate which reflects modifications to the closure plan. Additional costs will include:

1. increased number of soil sampling stations, i.e., under and surrounding concrete pad, and around the subsurface drainage structure;
2. analysis of all samples for total metals, EP Toxic metals, VOA's and SVOA's;
3. disposal of contaminated concrete;
4. removal and disposal of contaminated subsurface drainage structure and adjacent soils, if necessary;
5. removal and disposal of any additional contaminated soils adjacent to former solids mixing unit, if necessary;
6. removal and disposal of contaminated soils from under the concrete structure, if necessary;
7. testing and analysis of rinsate, and proper disposal if hazardous;
8. testing and analysis to determine the success of decontamination efforts;
9. removal and disposal of decontamination pad; and
10. the cost of backfilling the excavated area.

The closure cost estimate should also include, as contingency cost, an additional sum equal to ten percent (10%) of the total cost.

I.E-3. REVISIONS TO CLOSURE COST ESTIMATES: 329 IAC 3-22-3(b) and (c)

The closure cost estimate must be revised to cover increased costs due to modification of the closure plan.

The mechanisms used to meet the financial assurance requirements must also be adjusted accordingly to reflect the revised closure cost estimate and submitted to the IDEM.

In accordance with 329 IAC 3-22-3(c), ACS must revise the closure cost estimate no later than thirty (30) days after a revision has been made to increase the cost of closure. The revised closure cost estimate must be adjusted for inflation as specified in 329 IAC 3-22-3(b).

I.F. FINANCIAL ASSURANCE FOR CLOSURE: 329 IAC 3-22

Within thirty (30) days of the date of approval of the modified closure plan, ACS must submit a revised closure cost estimate for this partial closure in accordance with the modified closure plan. In addition, ACS must also submit copies of the revised financial assurance mechanisms which reflect the increased costs to close the facility in accordance with the modified closure plan.

ATTACHMENT #1

Page____ of _____

SAMPLE SHEET

Sample ID _____ DEM/OSHWM Control # _____

Field Test Performed	Result
_____	_____
_____	_____

Sample Types (circle all applicable)

Mon. Well	Lagoon	Ash	Indust. Waste
Res. Well	Leachate	Soil	Waste Pile
Creek	Oil	Sludge	Solid
Ditch	Solvent	Sand	Liquid
Truck	Drum	other_____	
Blank (Equip./Trip)		Duplicate (of_____)	
Background			

Sample Date: ___-___-___ Time: ___:___ AM/PM

Containers	#	Preservatives		Lab/Lot Number
1 L plastic	___	H_2SO_4	(50%)	_____
1 L glass	___	HNO_3	(conc.)	_____
500 ml glass	___	NaOH	(50%)	_____
40 ml vial	___	Zn-Acetate	(2N)	_____
_____	___	Sample Iced		_____
		No preservatives used for non-aqueous samples		

Additional Sample Location Information:

_____

_____

_____

Additional Sample Type Information/Observations: (depth taken, color, odor, size, clarity, density, suspended solids, colloidal, etc.)

_____

_____

_____

Deviations From Sampling Plan: _____

_____

_____

Sampling Equipment Used: _____

_____

Signature_____

Attachment 2

ANALYTES AND PROTOCOLS

Analytical Parameters	Non-Water Matrices (Soil,etc.) (mg/kg dry wt. basis)	Analytical Method (SW-846)	Holding Time
Total Metals			
Arsenic	5.0	7060	6 months
Barium	5.0	7080	6 months
Cadmium	1.0	7130, 7131	6 months
Chromium	5.0	7190, 7191	24 hours
Lead	5.0	7420, 7421	6 months
Mercury	0.2	7470, 7471	6 months
Nickel	5.0	7520	6 months
Selenium	1.0	7740	6 months
Silver	5.0	7760	6 months
Other Inorganics			
Total Cyanide	25.0	9010, 9012	14 days

Parameter	SW-846 Method Number	Indiana Method Number	Holding Time
Total and Amenable Cyanide	9010	9010	14 days
Acid Digestion of Sediment, Sludges, and Soils	3050	3050	Not Applicable
Soxhlet Extraction	3450	3450	Not Applicable
Soil pH	9045	9045	Not Applicable

Attachment 2
(cont'd.)

Parameter	SW-846 Method Number	Indiana Method Number
Sample Preparation - Metals		
-- Acid Digestion Procedure for Flame Atomic Absorption Spectroscopy or Inductively Coupled Spectroscopy	3005	3005
-- Acid Digestion Procedure for Flame Atomic Absorption Spectroscopy or Inductively Coupled Spectroscopy	3010	3010
-- Acid Digestion Procedure for Furnace Atomic Absorption Spectroscopy	3020	3020
-- Dissolution Procedures for Oils, Greases or Waxes	3040	3040
-- Acid Digestion of Sediment, Sludges, and Soils	3050	3050
-- Fusion Procedure for Solid Samples	--	3065
Sample Extractions and Preparation - Organics		
-- Soxhlet Extraction	3540	3540
-- Sonication Extraction	3550	3550
-- Waste Dilution	3580	3580
-- Purge and Trap	5030	5030
Cleanup - Organics		
-- Alumina Column Cleanup	3610	3610
-- Alumina Column Cleanup and Separation of Petroleum Wastes	3611	3611
-- Florisil Column Cleanup	3620	3620
-- Silica Gel Cleanup	3630	3630
-- Gel-Permeation Cleanup	3640	3640
-- Acid-Base Partition Cleanup	3650	3650
-- Sulfur Cleanup	3660	3660
Miscellaneous Screening Methods - Organics		
-- Headspace	3810	3810
-- Hexadecane Extraction and Screening Of Purgeable Organics	3820	3820

Attachment 3

VOLATILE ORGANIC ANALYSIS (VOA)
Method 8240

Target Compound List and Recommended Quantitation Limits

	Volatiles	Quantitation Limits Low Soil/Sediment ug/kg	Holding Time
1.	Chloromethane	10	14 days (recommend extraction begin immediately upon delivery to lab)
2.	Bromomethane	10	
3.	Vinyl Chloride	10	
4.	Chloroethane	10	
5.	Methylene Chloride	5	
6.	Acetone	10	
7.	Carbon Disulfide	5	
8.	1,1-Dichloroethene	5	
9.	1,1-Dichloroethane	5	
10.	1,2-Dichlroethene (total)	5	
11.	Chloroform	5	
12.	1,2-Dichloroethane (tot)	5	
13.	Butanone (MEK)	10	
14.	1,1,1-Trichloroethane	5	
15.	Carbon Tetrachloride	5	
16.	Vinyl Acetate	10	
17.	Bromodichloromethane	5	
18.	1,2-Dichloropropane	5	
19.	Cis-1,3-Dichloropropene	5	
20.	Trichloroethene	5	
21.	Dibromochloromethane	5	
22.	1,1,2-Trichloroethane	5	
23.	Benzene	5	
24.	Trans-1,3-Dichloropropene	5	
25.	Bromoform	5	
26.	4-Methyl-2-Pentanone	10	
27.	2-Hexanone (MIBK)	10	
28.	Tetrachloroethene	5	
29.	Toluene	5	
30.	1,1,2,2-Tetrachloroethane	5	
31.	Chlorobenzene	5	
32.	Ethyl Benzene	5	
33.	Styrene	5	
34.	Xylenes (total)	5	
35.	Acrolein	10	
36.	Acrylonitrile	10	
37.	2-Chloroethylvinylether	10	
38.	Fluorotrichloromethane	5	
39.	Dichlorodifluoromethane	5	
40.	Paraldehyde	10	
41.	Tetrahydrofuran	10	
42.	Ethyl Ether	5	
43.	Isobutanol	10	

Volatiles	Quantitation Limits Low Soil/Sediment ug/kg	Holding Time
44. Cyclohexanone	10	14 days
45. n-Butanol	10	
46. 1,1,2-Trichloro-1,2-2-Trifluorethane	5	
47. Ethyl Acetate	10	

* Specific quantitation limits are highly matrix dependent. The quantitation limits listed herein are provided for guidance and may not always be achievable.

Attachment 4

SEMI-VOLATILE ORGANICS (SVOA)
Methods 8270, 3810, 3820

Target Compound List and Recommended Quantitation Limits

Semi-Volatiles	Quantitation Limits Low Soil/Sediment ug/kg
48. Phenol	330
49. bis(2-Chloroethyl) Ether	330
50. 2-Chlorophenol	330
51. 1,3-Dichlorobenzene	330
52. 1,4-Dichlorobenzene	330
53. Benzyl Alcohol	660
54. 1,2-Dichlorobenzene	330
55. 2-Methylphenol	330
56. bis (2-Chloroisopropyl) ether	330
57. 4-Methylphenol	330
58. N-Nitrosodipropylamine	330
59. Hexachloroethane	330
60. Nitrobenzene	330
61. Isophorone	330
62. 2-Nitrophenol	330
63. 2,4-Dimethylphenol	330
64. Benzoic acid	1600
65. bix (2-Chloroethoxy)	330
66. 2,4-Dichlorophenol	330
67. 1,2,4-Trichlorobenzene	330
68. Naphthalene	330
69. 4-Chloroaniline	660
70. Hexachlorobutadiene	330
71. 4-Chloro-3-methylphenol (para-chloro-meta-cresol)	660
72. 2-Methylnaphthalene	330
73. Hexachlorocyclo-pentadiene	330
74. 2,4,6-Trichlorophenol	330
75. 2,4,5-Trichlorophenol	1600
76. 2-Chloronaphthalene	330
77. 2-Nitroaniline	1600
78. Dimethylphthalate	330
79. Acenaphthylene	330
80. 2,6-Dinitrotoluene	330
81. 3-Nitroaniline	1600
82. Acenaphthene	330
83. 2,4-Dinitrophenol	1600
84. 4-Nitrophenol	1600
85. Dibenzofuran	330
86. 2,4-Dinitrotoluene	330
87. Diethylphthalate	330
88. 4-Chlorophenyl-phenyl ether	330

Semi-Volatiles	Quantitation Limits Low Soil/Sediment ug/kg
89. Fluorene	330
90. 4-Nitroaniline	1600
91. 4,6-Dinitro-2-Methylphenol	1600
92. N-nitrosodiphenylamine	330
93. 4-Bromophenyl-phenylether	330
94. Hexachlorobenzene	330
95. Pentachlorophenol	1600
96. Phenanthrene	330
97. Anthracene	330
98. Di-n-butylphthalate	330
99. Fluoranthene	330
100. Pyrene	330
101. Butylbenzylphthalate	330
102. 3,3'-Dichlorobenzidine	660
103. Benzo(a)anthracene	330
104. Chrysene	330
105. Bis (2-ethylhexyl) phthalate	330
106. Di-n-octylphthalate	330
107. Benzo(b)fluoranthene	330
108. 1,4,5,6-Tetrachlorophenol	1600
109. Benzidine	1600
110. 1,2-Diphenylhydrazine	330
111. n-Nitrosodimethylamine	330
112. Aniline	330
113. Carbazole	1600
114. Pyridine	330
115. Dinitrobenzene(s)	1600
116. 2-Picoline	1600
117. 1,2,3,4-Tetrachlorobenzene	330
118. Toluenediamine	1600
119. 1,2,4,5-Tetrachlorobenzene	330
120. Benzo(k)fluoranthene	330
121. Benzo(a)pyrene	330
122. Indeno(1,2,3-cd)pyrene	330
123. Dibenzo(a,h)anthracene	330
124. Benzo(g,h,i)perylene	330

* Specific quantitation limits are highly matrix dependent. The quantitation limits listed herein are provided for guidance and may not always be achievable.

Attachment 5

CALIBRATION PROCEDURES AND FREQUENCY

Parameter	Initial	Continuing	Comments
Metals	3 point and blank w/every analysis lot of furnace and flame. ICAP calibrated according to instrument manufacturers specs	From different stock at beginning and every 10 samples	MSA for EP TOX or matrices with interferences
Cyanide and Phenols	Blank and 5 standards	Blank and 2 standards	No more than 20 runs on each calibration
Volatile Organic Analysis	5 point	Daily or every 12 hours	QC check standard when use new stocks of standards
Semi-Volatile Organic Analysis	5 point	Every 12 hours unless initial performed	QC check standard when use new stocks of standards

Attachment 6

QUALITY CONTROL PROCEDURES

Parameter	Spikes and Surrogates	Reference Samples
Metals	1 spike sample in set of 20 or less samples added prior to digestion, or whenever a new matrix is processed.	Every set of samples
Gas Chromatography	1 spike sample and 1 duplicate spike sample in 10 or less samples. Surrogates added to all samples.	Every set of samples
Gas Chromatography/ Mass Spectroscopy	1 spike sample and 1 duplicate spike sample in 10 or less samples. Surrogates added to all samples.	Every set of samples
Cyanide	1 spiked sample per 20 analyses (or sample set), or whenever a new matrix is processed.	Every set of samples

Parameter	Field Blanks	Lab Blanks	Lab Duplicates	Field Duplicates
EP Toxicity	NA	1 per analyt. run	1 in 10 or sample set	1 in 10 or sample set
Total Metals	1 in 20 or sample set	1 per analyt. run	1 in 20 or sample set	1 in 20 or sample set
Gas Chromatography	1 per sample set	1 per analyt. run	1 in 10 or sample set	1 in 10 or sample set
Gas Chromatography/ Mass Spectroscopy	1 per sample set	1 per analyt. run	1 in 10 or sample set	1 in 10 or sample set
Cyanide	1 per sample set	1 per analyt. run	1 in 20 or sample set	1 in 20 or sample set

Attachment 7

SPECIFIC ROUTINE PROCEDURES USED TO ASSESS DATA PRECISION ACCURACY AND COMPLETENESS

7.1 Calculation of Mean Values and Estimates of Precision

The mean, C of a series of replicate measurements of concentration C_i, is calculated as:

$$\bar{C} = \frac{1}{n} \sum_{i=1}^{n} \bar{C}_i$$

where n = number of replicate measurements;

C, C_i, are both in mg/l or mg/kg.

The estimate of precision of duplicate measurements is expressed as the relative percent difference (RPD)

$$RPD = \frac{C_2 - C_1}{\bar{C}} \times 100$$

The estimate of precision of a series of replicate measurements (primarily used in GC/MS analysis) is expressed as the relative standard deviation (RSD), where

$$SD = \pm \sqrt{\frac{\sum_{i=1}^{n} (C_i - \bar{C})^2}{n-1}}$$

and

$$RSD = \frac{SD}{\bar{C}} \times 100$$

7.2 Assessment of Accuracy

Accuracy will be evaluated by comparing the mean recovery of surrogate compounds or spikes analytes against the goals identified in this plan. The recovery of a surrogate compound will be defined as:

$$Recovery, \% = \frac{C_S V_S \text{ (or } W_S)}{Q_S} \times 100$$

The recovery of a spiked analyte will be defined as:

$$\text{Recovery, \%} = \frac{\text{total analyte found - analyte originally present}}{\text{analyte added}} \times 100$$

where C_S = measured concentration or surrogate compound in sample, mg/l (or mg/kg)

$V_S(W_S)$ = total volume (or weight) of sample to which surrogate was added, L (or kg)

Q_S = quantity of surrogate compound added to sample, mg.

7.3 Completeness

Completeness will be evaluated by comparing the number of samples acquired for analysis to the number of samples analyzed.

$$\text{Completeness, \%} = \frac{\text{Number of Samples Analyzed}}{\text{Number of Samples Acquired}} \times 100$$

IDEM recommends each analytical test to be at least 95 percent.

A.T. Kearney, Inc.
699 Prince Street
P.O. Box 1405
Alexandria, Virginia 22313
703 836 6210

Management
Consultants

February 5, 1987

ATKEARNEY

Ms. Pat Vogtman
Regional Project Officer
U.S. Environmental Protection Agency
230 South Dearborn Street
Chicago, Illinois 60604

Reference: EPA Contract No. 68-01-7038; Work Assignment No. R05-12-14; Review of American Chemical Services, Inc. Closure Plan, Griffith, Indiana, IND 016360265; Final Deliverable

Dear Ms. Vogtman:

Enclosed please find the Interim Status Closure Plan review for American Chemical Services, Inc., Griffith, Indiana.

The deficiency comments enclosed include requirements for assessing potential soil contamination resulting from the facility's hazardous waste practices. The facility should be required to amend their closure plan to include procedures and clean-up costs resulting from any soil contamination associated with the facility's waste pile. Since the standard for clean closure of a unit is to remove contaminated soils to background levels for constituents found in the wastes, the facility should be required to provide a sampling plan for soils which specifies a random sampling location methodology, sampling and analytical methods, and a statistical method for comparing the data.

American Chemical Services has several Interim Status tanks and container storage areas which are to be closed in 1995; therefore, the facility must have detailed Interim Status Closure Plans for these units in order to be permitted (under HSWA provisions all container storage areas and all non-land disposal treatment facilities are to be permitted by November 1982). No such plans were provided by the facility for review. These closure plans, which must be maintained by the facility, may be reviewed during an interim status compliance inspection. American Chemical Services has been requested to provide a comprehensive final closure plan in order to assure that the waste pile closure is consistent with the overall facility plan.

The facility has not been able to renew its Environmental Impairment Liability Insurance as required by RCRA. This issue should be further addressed by the facility.

The closure review included review of file documents and correspondence from IDEM files in addition to the facility closure plan. The facility has been instructed to assemble the deficiency response and other relevant information into one comprehensive closure plan.

Please call me if you have any questions.

Sincerely,

Mary Cervera

Mary Thoma Cervera, P.E.
Technical Director

Enclosure

cc: H. Cho, EPA Region V
T. Gray, IDEM
R. Capiello, IDEM
D. Beasley
K. Breeden
J. Gers
J. Grieve
G. Magnus
S. Smith, PRA

American Chemical Service, Inc.
Griffith, Indiana
Interim Status (265) Closure Plan
Review Comments

Completeness Check

I.A. Closure Performance Standards: 265.111; 320 IAC 4.1-21-2

Describe how closure minimizes the need for post-closure maintenance and controls, minimizes, or eliminates post-closure escape of hazardous waste, hazardous constituents, contaminated run-off, or waste decomposition products to the ground or surface waters or to the atmosphere.

Assess the potential for release of hazardous waste or hazardous constituents from any contaminated soils remaining on the site after closure. The standard for clean closure of a unit is to remove contaminated soils to background levels for constituents found in the wastes. The facility is required to provide a sampling plan for soils, which specifies a random sampling location methodology, sampling and analytical methods, and a statistical method for comparing the data. If after removing or decontaminating all residues and making all reasonable efforts to effect removal or decontamination of contaminated components, subsoils, structures, and equipment, the owner or operator finds that not all contaminated subsoils can be practicably removed or decontaminated, he must close the facility and perform post-closure care in accordance with the post-closure requirements that apply to landfills (265.310; 320 IAC 4.1-28-4).

I.B-1 Description of Partial and/or Final Closure: 265.112(a); 320 IAC 4.1-21-3(a)

Provide a complete and technical description of the closure process for this partial closure, any other planned partial closures, and for final facility closure. The final facility closure plan must cover the maximum extent of the hazardous waste management unit operations including any areas where soil contamination has occurred.

I.B-2 Maximum Extent of Operation: 265.112(a)(1); 320 IAC 4.1-21-3(a)

To ensure that the final closure plan is comprehensive, the plan must specifically identify the maximum extent of the facility hazardous waste management unit operations which will be partially closed, if applicable, and finally closed. The maximum extent of operations includes any contaminated soils which might exist adjacent to the waste pile.

I.B-4 Description of Decontamination and Removal of Hazardous Waste and Residues: 265.112 and 265.114; 320 IAC 4.1-21-3 and 4.1-21-5

Provide a detailed description of the steps needed to remove or decontaminate all hazardous wastes, residues, contaminated containment system components, equipment, structures, and soils during partial and final closure. The description includes, but is not limited to criteria for determining the extent of decontamination necessary to satisfy the closure performance standard, methods for sampling and testing surrounding soils, procedures for cleaning equipment and removing contaminated soils, and methods for properly disposing of contaminated wastes, residues, and soils.

I.B-5 Estimate of Year of Closure and Schedule of Closure: 265.112(a)(4); 320 IAC 4.1-21-3(a-4)

Provide the date of closure and a schedule for final closure including total time to close the facility and time required for intervening closure activities which include removal of any contaminated soils and residues found in and around the waste pile, and decontamination of any structures associated with the unit.

I.B-6 Amendment of Plan: 265.112(b); 320 IAC 4.1-21-3(b)

When the plan is amended to include potential soil contamination, describe:

1) The changes in the facility operation or design which affect the closure plan;

2) The change in the expected year of closure; or

3) The unexpected events which require modification of the closure plan.

I.C-1 Wastes Treated, Removed, or Disposed of within 90 Days and Extensions of Time Period: 40 CFR 265.113(a); 320 IAC 4.1-21-4(a)

The closure schedule must show that within 90 days of receiving the final volume of hazardous wastes, or 90 days after approval of the plan, whichever is later, all wastes will be treated, removed from the site, or disposed on-site.

Any request for extension of closure time must be substantiated by the demonstrations required per 40 CFR 262.113(a).

I.C-2 Closure Completed within 180 Days and Extensions of Time Period: 40 CFR 265.113(b); 320 IAC 4.1-21-4(b)

The closure schedule must show that closure will be completed within 180 days after receipt of the final volume of waste, or within 180 days after approval of the closure plan, whichever is later.

Any request for extension of completion of the closure must be substantiated by the demonstrations required per 40 CFR 265.113(b).

I.D Certification of Closure: 40 CFR 265.115; 320 IAC 4.1-21-6

Closure plan must state that when closure is completed, certification will be submitted both by the owner or operator and by an independent registered professional engineer that the facility has been closed in accordance with the approved closure plan.

I.E-1 Cost Estimate When Closure Is Most Expensive: 265.142(a); 320 IAC 4.1-22-3(a)

Provide a copy of the up-to-date closure cost estimate, calculated to cover the cost of closure when the cost would be greatest. The closure cost estimate must be based on the costs of having a third party, neither a parent nor a subsidiary of the owner/operator, close the facility.

Provide a detailed cost estimate that includes a separate line item for each activity or task performed during closure. Support line item estimates with calculations or sub-totals based on unit prices, labor hours, equipment rental rates, disposal fees and volume or quantity figures.

The closure cost estimate may not include:

- Any salvage value that may be realized by the sale of hazardous wastes, facility structures, or equipment, land or other facility assets at the time of partial or final closure.

- A zero cost for hazardous wastes that an owner or operator assumes a third party will take at no charge.

I.E-3 Revisions to Closure Cost Estimate

Revise the closure cost estimate to include revisions to the closure plan which increase the cost of closure. Include additional requirements noted in this review.

I.F Financial Assurance for Closure: 265.143; 320 IAC 4.1-22-4

Provide a copy of the established financial assurance mechanism for facility closure. The mechanism must be one of the following:

- closure trust fund: 265.143(a)
- surety bond guaranteeing payment into a closure trust fund: 265.143(b)
- closure letter of credit: 265.143(c)
- closure insurance: 265.143(d)
- financial test and corporate guarantee for closure: 265.143(e)
- multiple financial mechanisms: 265.143(f)
- financial mechanisms for multiple facilities: 265.143(g)

Closure Trust Fund: 265.143(a)

Provide a copy of the closure trust fund agreement with the wording required by 264.151(a)(1) and a formal certification of acknowledgment.

Surety Bond Guaranteeing Payment into a Closure Trust Fund: 265.143(b)

Provide a copy of the surety bond with the wording required by 264.151(b) and a copy of the standby trust agreement. The bond must guarantee that the owner or operator will fund the standby trust fund in an amount equal to the penal sum of the bond before the beginning of final closure of the facility, or fund the standby trust fund in an amount equal to the penal sum within 15 days of an order to begin closure, or provide alternate financial assurance if the bond is cancelled.

Closure Letter of Credit: 265.143(c)

Provide a copy of the irrevocable letter of credit with the wording required by 264.151(d) and a copy of the standby trust agreement. The letter of credit, at least equal to the current closure cost estimate, must be issued for a period of at least one year.

Closure Insurance: 265.143(d)

Provide a copy of the certificate of insurance with the wording required in 264.151(e).

Financial Test and Corporate Guarantee for Closure: 265.143(e)

Submit a letter signed by the owner's or operator's chief financial officer and worded as specified by 264.151(f), a copy of the independent certified public accountant's report on examination of the application's financial statements for the latest fiscal year, and a special report from the certified public accountant. If a parent company is guaranteeing closure for a subsidiary facility, the corporate guarantee must accompany the preceding items.

Use of Multiple Financial Mechanisms: 265.143(f)

Provide a copy of a combination of trust fund agreements, surety bonds guaranteeing payment into a closure trust fund, letters of credit, or insurance, together which provide financial assurance for the amount of closure.

Use of Financial Mechanism for Multiple Facilities: 265.143(g)

Provide a copy of a financial assurance mechanism for more than one facility showing, for each facility, the EPA ID number, name, address, and amount of funds closure assured by the mechanism. The amount of funds available through the mechanism must be no less than the sum of funds that would be available if a separate mechanism had been established and maintained for each facility.

I.G Liability Coverage: 265.147; 320 IAC 4.1-22-24

Coverage for Sudden Accidental Occurrences: 265.147(a)

Provide documentation of compliance with applicable liability requirements for sudden accidental occurrences. Liability coverage must be maintained for sudden accidental occurrences in the amount of at least $1 million per occurrence with an annual aggregate of at least $2 million. Liability coverage may be demonstrated in one of three ways: Endorsement or Certification (265.147(a)(1); Financial Test for Liability Coverage (265.147(1)(2); Use of Multiple Insurance Mechanisms (265.147(a)(3). Liability coverage must be maintained until closure certifications are received by the Technical Secretary.

Endorsement or Certification: 265.147(a)(1)

Submit a signed duplicate or original of the Hazardous Waste Facility Liability Endorsement, with the wording specified by 264.151(i), or of a Certificate of Liability Insurance, with the wording specified by 264.151(j).

Financial Test for Liability Coverage: 265.147(a)(2), 265.147(f)

Submit a letter signed by the owner's or operator's chief financial officer and worded as specified by 264.151(g), a copy of the independent certified public accountant's report on examination of the applicant's financial statements for the latest fiscal year, and a special report from the certified public accountant. If the applicant is using the financial test to demonstrate both assurance for closure and liability coverage, the letter specified in 264.151(g) must be submitted to cover both forms of financial responsibility. Under these circumstances, a separate letter as specified by 264.151(f) is not required.

Use of Multiple Insurance Mechanisms: 265.147(a)(3)

Submit items demonstrating required liability coverage through a combination of endorsement or certification and financial test. The amounts of coverage demonstrated must total at least the minimum amounts required by 265.146.

IV. Closure of Waste Piles

IV.B-1 <u>Detailed Description of Steps Necessary to Close Waste Piles</u>: 265.112(a); 320 IAC 4.1-21-3(a)

Provide a complete and detailed technical description of the closure process such that:

1) The reasoning behind and procedures for closure are understandable;
2) The schedule can be justified;
3) Closure cost estimates can be substantiated; and
4) Financial assurance can be judged to be adequate.

IV.B-2 <u>Identification of Maximum Extent of Operation of the Waste Piles</u>: 265.112(a); 320 IAC 4.1Ø21Ø3(a-1)

Provide a complete and detailed physical description of the waste pile and/or piles treatment/storage area , including the type of construction materials, so that the testing, removal and decontamination procedures can be judged to be adequate. Recommend a site map, drawn to scale, be included.

IV.B-3 <u>Estimate of Maximum Inventory of Waste at Waste Piles</u>: 265.112(a)(2); 320 IAC 4.1-21-3(a-2)

Provide supporting calculations for estimated amount of hazardous wastes, including residues, at all waste piles and the maximum amount of contaminated soils and residues found in and around those units.

IV.B-4a <u>Criteria for Determining the Extent of Decontamination Necessary</u>: 265.112 and 265.114; 320 IAC 4.1-21-3 and 4.1-21-5

Specify the criteria to be used to judge the extent of decontamination. This will generally be on the basis of detection of, or specific concentrations for, appropriate hazardous wastes or constituents in a soil sampling program or a groundwater monitoring program.

IV.B-4b <u>Procedures for Cleaning Equipment and Structures and Removing Contaminated Soils</u>: 265.112 and 265.114; 320 IAC 4.1-21-3 and 4.1-21-5

Specify the equipment and structures decontamination procedures, such as steam cleaning or flushing with appropriate solvent. Cleaning agents or solvents must be clearly identified. Indicate whether the cleaning agent or solvent is suitable for the types of wastes stored. Describe how contaminated cleaning agents or solvents will be properly managed as hazardous wastes.

Specify how cleaning equipment, such as brushes, will be decontaminated or properly disposed of as hazardous wastes.

Describe how contaminated soils will be removed from the surrounding area. Provide a detailed description of the steps including, but not limited to, procedures for removing contaminated soils, methods for sampling and testing surrounding soils, and methods and locations of final disposal.

By removing hazardous wastes and residues during partial and final closure, the owner or operator may become a generator of hazardous wastes and must handle that waste in accordance with all applicable requirements of 40 CFR 262.

IV.B-4c <u>Methods for Sampling and Testing to Demonstrate Success of Decontamination</u>: 265.112 and 265.114; 320 IAC 4.1-21-3 and 4.1-21-5

Specify a testing program to determine if the standard of decontamination has been met. The testing program must include a description of sampling procedures, test parameters, and analytical methods.

Specify the sampling procedures and demonstrate that the number of samples is sufficient. Indicate how samples are judged to be representative.

Demonstrate that the testing parameters are consistent with those selected as criteria for decontamination. They must be indicative of the wastes stored at the waste pile.

Identify analytical methods for each parameter. Methods from SW-846 normally are used. A justification must be provided for any analytical methods specified other than those in SW-846.

IV.B-5 <u>Detailed Schedule for Closure of Waste Pile</u> 265.112(a)(4); 320 IAC 4.1-21-3(a)(4)

Provide a schedule for closure of the waste pile. The schedule must include, at a minimum, the total time required to close the waste pile and the time required for intervening closure activities which will allow tracking of the progress of closure. The schedule must also include intervening closure activities associated with structures decontamination and removal of any contaminated soils.

IV.C-1 <u>Wastes from Waste Pile Treated, Removed or Disposed of Within 90 Days and Extensions of Time Period</u>: 265.113(a); 320 IAC 4.1-21-4(a)

The closure schedule must show that within 90 days of receiving the final volume of hazardous wastes, or 90 days after approval of the plan, whichever is later, all wastes will be treated, removed from the site, or disposed on-site.

Any request for extension of closure time must be substantiated by the demonstrations required per 40 CFR 262.113(a).

IV.C-2 <u>Closure of Waste Pile within 180 Days and Extensions of Time Period</u>: 265.113(b); 320 IAC 4.1-21-4(b)

The closure schedule must show that closure will be completed within 180 days after receipt of the final volume of waste, or within 180 days after approval of the closure plan, whichever is later.

IV.H-1. <u>Detailed description of removal of waste inventory</u> 265.258; 320 IAC 4.1-26-7

Specify the disposition of the waste inventory at the waste pile at the time of closure. Include:

1) An estimate of the quantity of hazardous waste sent off site;
2) A description of any treatment performed prior to transport, if applicable;
3) The time required to remove the wastes off-site;
4) Distance to the final Treatment, Storage, and Disposal Facility (TSDF);
5) Description of treatment or disposal methods at the final TSDF; and
6) Operating status of the TSDF (i.e., interim status or permitted facility). Include EPA I.D.#, if applicable.

Provide a detailed description for removal of waste, containment or liner system (if applicable), and contaminated surface and subsoils. Include:

1) Method of waste, liner (if any), and other contaminated material removal;
2) Location where the material is to be moved to;
3) Method of transportation;
4) Loading procedures;
5) Procedures for protection of surface water and ground water sources during the work;
6) Method of controlling wind dispersal of the material; and
7) Special handling procedures (such as for ignitable or reactive wastes).

IV.H-2. Detailed description of removal of hazardous waste residues

265.258; 320 IAC 4.1-26-7

Describe how all hazardous waste residues, contaminated containment system components (liners, etc.), contaminated subsoils, and structures and equipment contaminated with waste and leachate will be removed or decontaminated at closure and managed as hazardous waste. Describe the sampling and testing program used to verify the decontamination of equipment and subsoils. Include the parameters and criteria used to verify decontamination of equipment and subsoils. If after removing or decontaminating all residues and making all reasonable efforts to effect removal of decontamination of contaminated components, subsoils, structures, and equipment, the owner or operator finds that not all contaminated subsoils can be practicably removed or decontaminated, he must close the facility and perform post-closure care in accordance with the closure and post-closure requirements that apply to landfills (265.310; 320 IAC 4.1-28-4).

Include the following:

1) An estimate of the quantity of hazardous waste residues at the waste pile;
2) A description of any treatment performed prior to transport, if applicable;
3) The time required to remove the waste residues off-site;
4) Distance to the final treatment, storage, and disposal facility (TSDF);
5) A description of treatment or disposal methods at the final TSDF; and
6) Operating status of the facility (i.e., interim status or permitted facility). Include EPA I.D. No., if applicable.

By removing hazardous waste residues during partial and final closure, the owner or operator may become a generator of hazardous wastes and must handle hazardous waste in accordance with all applicable requirements in 40 CFR 262.

Any request for extension of completion of the closure must be substantiated by the demonstrations required per 40 CFR 265.113(b).

REFERENCES

1. American Chemical Services Inc., Closure Plan For Solids Mixing Area dated Junte 11, 1986, and Waste Analysis (Solids Mixing Area) dated July 16, 1986.

2. American Chemical Services Inc., Closure Plan - Amended August 16, 1985.

3. American Chemical Services Inc., Closure Plan dated May 19, 1981.

4. American Chemical Services Inc., Closure Plan completeness Checklist, June 18, 1986.

5. Office Memorandum from Elaine Gregg to Dennis Williamson, IDEM, August 22, 1986.

6. Letter from American Chemical Services to IDEM (Ms. Nancy Maloley) with respect to Environmental Impairment Liability Insurance, November 20, 1986.

Facility Name American Chemical Servi Inc.
ID Number IND 016360265

INTERIM STATUS CLOSURE PLANS
[40 CFR PART 265; 320 IAC 4.1-15 THROUGH 4.1-32]
(Revised as of July 1, 1985; Revised as of Jan. 17, 1986)

		Provided (Y/N) or NA	Adequate (Y/N)	Reference	Comments
I.	GENERAL CLOSURE REQUIREMENTS [40 CFR 265 SUBPART G; 320 IAC 4.1 RULE 21]				
A.	Closure performance standards [40 CFR 265.111; 320 IAC 4.1-21-2]	Y	N	1	See Comment I.A
B.	Content of Closure Plan				
B-1.	Description of partial and/or final closure [40 CFR 265.112(a); 320 IAC 4.1-21-3(a)]	Y	N	1 (pg.2)	See Comment I. B-1
B-2.	Maximum extent of operation [40 CFR 265.112(a)(1); 320 IAC 4.1-21-3(a-1)]	Y	N	1(pg.2)	See Comment I. B-2
B-3.	Estimate of maximum inventory of wastes [40 CFR 265.112(a)(2); 320 IAC 4.1-21-3(a-2)]	Y	Y	1 (pg.2)	
B-4.	Description of decontamination and removal of hazardous waste and residues [40 CFR 265.112 and 265.114; 320 IAC 4.1-21-3 and 4.1-21-5]	Y	N	1 (pg.2,3)	See Comment I.B-4

Facility Name American Chemical Servi. Inc.
ID Number IND 016360265

		Provided (Y/N) or NA	Adequate (Y/N)	Reference	Comments
B-5.	Estimate of year of closure and schedule of closure [40 CFR 265.112(a)(4); 320 IAC 4.1-21-3(a-4)]	Y	N	1 (pg.2)	See Comment I.B-5
B-6.	Amendment of plan [40 CFR 265.112(b); 320 IAC 4.1-21-3(b)]	Y	N	1 (pg.2)	See Comment I.B-6
B-7.	Closure plan submission 180 days before beginning closure [40 CFR 265.112(c); 320 IAC 4.1-21-3(c)]	Y	Y	1 (pg.1)	
C.	Time Allowed for Closure				
C-1.	Wastes treated, removed, or disposed of within 90 days and extensions of time period [40 CFR 265.113(a); 320 IAC 4.1-21-4(a)]	Y	N	1 (pg.1)	See Comment I.C-1
C-2.	Closure completed within 180 days and extensions of time period [40 CFR 265.113(b); 320 IAC 4.1-21-4(b)]	Y	N	1 (pg.1)	See Comment I.C-2
D.	Certification of closure [40 CFR 265.115; 320 IAC 4.1-21-6]	N			See Comment I.D
E.	Closure Cost Estimate				
E-1.	Cost estimate when closure is most expensive [40 CFR 265.142(a); 320 IAC 4.1-22-3(a)]	Y	N	1 (pg.2)	See Comment I.E-1

Facility Name American Chemical Servi. Inc.
ID Number IND 016360265

		Provided (Y/N) or NA	Adequate (Y/N)	Reference	Comments
E-2.	Adjustments for inflation [40 CFR 265.142(b); 320 IAC 4.1-22-3(b)]	NA			
E-3.	Revisions to closure cost estimate [40 CFR 265.142(c); 320 IAC 4.1-22-3(c)]	N			See Comment I.E-3
F.	Financial assurance for closure [40 CFR 265.143, 320 IAC 4.1-22-4]	Y	N	1(pp. 3-8)	See Comment I.F
G.	Liability coverage [40 CFR 265.147; 320 IAC 4.1-22-24]	N			See Comment I.G

Facility Name American Chemical Servi. Inc.
ID Number IND 016360265

		Provided (Y/N) or NA	Adequate (Y/N)	Reference	Comments
II.	CLOSURE OF CONTAINER STORAGE AREA				
A.	Closure performance standards for container storage area [40 CFR 265.111; 320 IAC 4.1-21-2]	(Address this item under Section I A.)			
B.	Content of Closure Plan				
B-1.	Detailed description of steps necessary to close container storage area [40 CFR 265.112(a); 320 IAC 4.1-21-3(a)]	NA			
B-2.	Identification of maximum extent of operation of container storage area [40 CFR 265.112(a)(1); 320 IAC 4.1-21-3(a-1)]	NA			
B-3.	Estimate of maximum inventory of waste in container storage area [40 CFR 265.112(a)(2); 320 IAC 4.1-21-3(a-2)]	NA			

Facility Name American Chemical Servi Inc.
ID Number IND 016360265

		Provided (Y/N) or NA	Adequate (Y/N)	Reference	Comments
B-4.	Description of steps necessary for decontamination and removal of hazardous waste and residues				
B-4a.	Detailed description of removal of hazardous waste inventory [40 CFR 265.11 and 265.114; 320 IAC 4.1-21-3 and 4.1-21-5]	NA			
B-4b.	Criteria for determining the extent of decontamination necessary [40 CFR 265.112 and 265.114; 320 IAC 4.1-21-3 and 4.1-21-5]	NA			
B-4c.	Procedures for cleaning equipment and structures and removing contaminated soils [40 CFR 265.112 and 265.114; 320 IAC 4.1-21-3 and 4.1-21-5]	NA			
B-4d.	Detailed description of removal of waste residues [40 CFR 265.112 and 265.114; 320 IAC 4.1-21-3 and 4.1-21-5]	NA			
B-4e.	Methods for sampling and testing to demonstrate success of decontamination [40 CFR 265.112 and 265.114; 320 IAC 4.1-21-3 and 4.1-21-5]	NA			

Facility Name American Chemical Servi Inc.
ID Number IND 016360265

		Provided (Y/N) or NA	Adequate (Y/N)	Reference	Comments
B-5.	Detailed schedule for closure of container storage area [40 CFR 265.112(a)(4); 320 IAC 4.1-21-3(a)(4)]	NA			
C.	Time Allowed for Closure				
C-1.	Wastes from container storage area treated, removed, or disposed of within 90 days and extensions of time period [40 CFR 265.113(a); 320 IAC 4.1-21-4(a)]	NA			
C-2.	Closure of container storage area completed within 180 days and extensions of time period [40 CFR 265.113(b); 320 IAC 4.1-21-4(b)]	NA			

Facility Name American Chemical Servi. Inc.
ID Number IND 016360265

		Provided (Y/N) or NA	Adequate (Y/N)	Reference	Comments
III.	CLOSURE OF TANK STORAGE UNIT				
A.	Closure performance standards for tanks [40 CFR 265.111; 320 IAC 4.1-21-2]	(Address this item under Section I A.)			
B.	Content of Closure Plan				
B-1.	Detailed description of steps necessary to close tank [40 CFR 265.112(a);320 IAC 4.1-21-3-(a)]	NA			
B-2.	Identification of maximum extent of tank storage operation [40 CFR 265.112(a)(1)' 320 IAC 4.1-21-3(a-1)]	NA			
B-3.	Estimate of maximum inventory of waste in tank [40 CFR 265.112 (a)(2); 320 IAC 4.1-21-3(a-2)	NA			
B-4.	Description of steps necessary for decontamination				
B-4a.	Criteria for determining the extent of decontamination necessary [40 CFR 265.112 and 265.114; 320 IAC 4.1-21-3 and 4.1-21-5]	NA			

Facility Name American Chemical Servi. Inc.
ID Number IND 016360265

		Provided (Y/N) or NA	Adequate (Y/N)	Reference	Comments
B.4b.	Procedures for cleaning equipment and structures and removing contaminated soils [40 CFR 265.112 and 265.114; 320 IAC 4.1-21-3 and 4.1-21-5]	NA			
B-4c.	Methods for sampling and testing to demonstrate success of decontamination [40 CFR 265.112 and 265.114; 320 IAC 4.1-21-3 and 4.1-21-5]	NA			
B-5.	Detailed Schedule for Closure of tank storage area [40 CFR 265.112; (a)(4); 320 IAC 4.1-21-3(a)(4)]	NA			
C.	Time Allowed for Closure				
C-1.	Wastes from tank treated, removed, or disposed of within 90 days and extensions of time period [40 CFR 265.113(a)	NA			
C-2.	Closure of tank completed within 180 days and extensions of time period [40 CFR 265.113(b); 320 IAC 4.1-21-4(b)	NA			
H.	Removal of Hazardous Waste and Hazardous Waste Residues				

Facility Name American Chemical Servi. Inc.
ID Number IND 016360265

	Provided (Y/N) or NA	Adequate (Y/N)	Reference	Comments
H-1. Detailed description of removal of waste inventory [40 CFR 265.197: 320 IAC 4.1-24-5]	NA			
H-2. Detailed description of removal of hazardous waste residues [40 CFR 265.197; 320 IAC 4.1-24-5]	NA			

Facility Name American Chemical Servi. Inc.
ID Number IND 016360265

		Provided (Y/N) or NA	Adequate (Y/N)	Reference	Comments
IV.	CLOSURE OF WASTE PILE				
A.	Closure performance standards for waste piles [40 CFR 265.111; 320 IAC 4.1-21-2]	(Address this item under Section I A.)			
B.	Content of Closure Plan				
B-1.	Detailed description of steps necessary to close waste pile [40 CFR 265.112(a);320 IAC 4.1-21-3-(a)]	Y	N	1(pg. 2)	See Comment IV. B-1
B-2.	Identification of maximum extent of waste pile operation [40 CFR 265.112(a)(1); 320 IAC 4.1-21-3(a-1)]	Y	N	1(pg. 2)	See Comment IV. B-2
B-3.	Estimate of maximum inventory of waste at waste pile [40 CFR 265.112(a)(2); 320 IAC 4.1-21-3(a-2)	Y	N	1(pg. 2)	See Comment IV. B-3
B-4.	Description of steps necessary for decontamination				
B-4a.	Criteria for determining the extent of decontamination necessary [40 CFR 265.112 and 265.114; 320 IAC 4.1-21-3 and 4.1-21-5]	Y	N	1(pg 2,3)	See Comment IV.B-4a

Facility Name American Chemical Servi Inc.
ID Number IND 016360265

		Provided (Y/N) or NA	Adequate (Y/N)	Reference	Comments
B-4b.	Procedures for cleaning equipment and structures and removing contaminated soils [40 CFR 265.112 and 265.114; 320 IAC 4.1-21-3 and 4.1-21-5]	Y	N	1(pg. 2)	See Comment IV.B-4b
B-4c.	Methods for sampling and testing to demonstrate success of decontamination [40 CFR 265.112 and 265.114; 320 IAC 4.1-21-3 and 4.1-21-5]	Y	N	1(pg. 2)	See Comment IV.B-4c
B-5.	Detailed Schedule for Closure of waste pile [40 CFR 265.112; (a)(4); 320 IAC 4.1-21-3(a)(4)]	Y	N	1(pg. 2)	See Comment IV.B-5
C.	Time Allowed for Closure				
C-1.	Wastes from waste pile treated, removed, or disposed of within 90 days and extensions of time period [40 CFR 265.113(a); 320 IAC 4.1-21-4(a)]	Y	N	1(pg. 2)	See Comment IV.C-1
C-2.	Closure of waste pile completed within 180 days and extensions of time period [40 CFR 265.113(b); 320 IAC 4.1-21-4(b)	Y	N	1(pg. 2)	See Comment IV.C-2

Facility Name American Chemical Servi. , Inc.
ID Number IND 016360265

		Provided (Y/N) or NA	Adequate (Y/N)	Reference	Comments
H.	Removal of Hazardous Waste and Hazardous Waste Residues				
H-1.	Detailed description of removal of waste inventory [40 CFR 265.258: 320 IAC 4.1-26-7]	Y	N	1(pg. 2)	See Comment IV. H-1
H-2.	Detailed description of removal of hazardous waste residues [40 CFR 265.258; 320 IAC 4.1-26-7]	Y	N	1(pg. 2)	See Comment IV. H-2

CONFIDENTIAL Confidentiality Denied 16 APR 1987

American Chemical Service INc. IND 016360265

CLOSURE PLAN - AMENDED 8-16-85

The American Chemical Service hazardous waste closure plan assumes maximum storage volumes exist at the time of closure. The daily operating records, at the time of closure, will indicate the precise type, quantity and identity of waste linked to the specific manifest number. The plant will be operated in a routine manner to reduce inventory. This will be followed by a final decontamination procedure.

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IND 016360265

CLOSURE PLAN - AMENDED 8-16-85

Maximum Condition Assumed

1. Container Storage area has a maximum number (300) 55 gallon drums. This quantity, 16500 gallons, will consist of wastes coded D001,F001,F002,F003 & F005. The drums will contain primarily liquids; however a maximum of 10% settled solids may be present. Material is stored awaiting reclamation.

2. Solvent reclamation storage tanks are full; containing crude solvents ready to be distilled. These are the tank, capacities and possible hazard codes. Tanks contain primarily liquid, but may contain up to 5000 gals. total of settled solids.

TANK	QUANTITY	CODE
1A	2750	D001, F001, F002, F003, F005
1B	2750	D001, F001, F002, F003, F005
116	10800	D001, F001, F002, F003, F005
117	10800	D001, F001, F002, F003, F005
118	10800	D001, F001, F002, F003, F005
119	10800	D001, F001, F002, F003, F005
120	6000	D001, F001, F002, F003, F005
121	10500	D001, F001, F002, F003, F005
122	10500	D001, F001, F002, F003, F005
123	19500	D001
124	19500	D001
125	19500	D001
126	19500	D001
	153700	

3. Injectant storage tanks are full of high chloride injectant blending stocks, low chloride injectant blending stocks, and blended injectant. Tanks will contain as much as 12000 gals. of settled solids.

A.) Tank 203 containing 150,000 pounds of hazard codes D001 F001, F002, F003 and F005. This tank contains injectant blending feed stock at about 10000 BTU/LB and approximately 20% chlorides.

B.) Tanks 202,204,205 and 206, contain low chloride injectant blending feed stock. The total capacity of these tanks is 75000 gallons; Hazard codes of stored material will be D001, F001, F002, Foo3 and F005.

C.) Tanks 210, 211 and 212 contain blended injectant ready for shipment. The total capacity is 70,000 gallons.

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IND 016360265

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CLOSURE PLAN - AMENDED 8-16-85

ROUTINE FACILITY OPERATION FOR REMOVAL OF INVENTORY OF ALL HAZARDOUS WASTE

Inventory reduction will be accomplished by normal plant operations as detailed in the Routine Procedures Training File for handling hazardous waste material located at American Chemical Service.

1.) Container Storage Area

A.) All Free liquid in 300 drums will be pumped to solvent reclaiming storage tanks. Empty RCRA drums will be loaded and shipped to drum reconditioner.

Labor - 3 days 24 man hours

B.) Partially filled solid drums will be cut open, combined and prepared for shipment to landfill. The total quantity will be approximately 30-55 gallon drums

Labor - 2 days 16 man hours

2.) Solvent Reclamation Storage
These crude solvent storage tanks are emptied by routine charging of distillation equipment as detailed in Routine Procedure Training File.

A.) Tanks 123, 124, 125 and 126 with total volume of 78000 gallons of D001 coded material will be charged 4000 gal at a time into #1 & #2 units and 2300 gallons at a time into #3 unit. Figuring a 24 hour cycle time, and a 70% yield of distillate, this process will produce:

54600 gallons distillate
23400 gallons distillate bottoms to be pumped to and blended in injectant area

Labor - 8 days 64 man hours

B.) Tanks 1A, 1B, 116, 117, 118, 119, 120, 121 and 122 with total volume of 75700 gallons of material possible coded with D001, F001, F002, F003, and F005 will be charged 4000 gallons at a time into #1 & #2 units and 2300 gals at a time into #3 unit. Figuring a 24 hour cycle time and a 70% yield of distillate, this process will produce:

52990 gallons distillate
22710 gallons distillate bottoms to be pumped to and blended in injectant area

Labor - 8 days 64 man hours

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16 APR 1987

3.) Routine blending and shipping of injectant as a blast furnace injectant would continue, as described in Routine Training File at a guaranteed rate of 70,000 gallons per week.

CONFIDENTIAL
IND 016360265

Confidentiality Denied 16 APR 1987

The maximum volume on hand would be:

A.) Container storage area
D001, F001, F002, F003, and F005 — 16500 gallons

B.) Reclaim area storage
1. Still bottoms
D001, F001, F002, F003 and F005 — 46110 gallons
2. Free liquid from emptied flat bottom tanks
123, 124, 125 and 126
D001, (200 each tank) — 800 gallons

C.) Injectant blending area
1. Blended Injectant
210, 211 and 212 tanks — 70000 gallons
2. Fuel blending stock in 202, 204, 205 and 206 tanks
codes D001, F001, F002, F003 and F005 — 75000 gallons
3. High Chloride injectant blending stock in 203 tank
codes D001, F001, F002, F003 and F005 — 150000 pounds

(Special disposal of any remaining inventory in 203 tank may be required)

4. Material used to flush entire system — 1000 gallons

Total inventory to be shipped from injectant blending area as injectant is: 225410 gallons

Shipped at minimum rate of 70000 gallons per week will require 3 weeks and 2 days.

Labor - 20 days 160 man hours

Decontamination Procedure

Decontamination will begin after inventory removal is accomplished and area closed.

1. Container storage area pad and sump will be scraped and solid material collected will be put in open head drum and prepared for shipment to landfill.
1 drum solid

Labor - 1 day 8 man hours

2. Solvent reclamation area
A) Flat bottom tanks manheads will be removed, free liquids pumped to injectant blending area and tank entered to remove settled solids which will be put into open head drums for landfill. This work will be performed as described in Routine Procedure Training file.
For tanks 123, 124, 125 and 126 there will be about 200 gallons free liquid each and 1000 gallons settled solids each.

Labor - 8 days 124 man hours

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B) Cone bottom tanks man heads will be removed. Tank is entered to remove settled solids which will be put into open head drums for landfill. This work will be performed as described in Routine Procedure Training file.
For tanks 1A, 1B, 116, 117, 118, 119, 120, 121, and 122 there will be 100 gallons of settled solids in each.

Labor - 3 days 48 man hours

3. Injectant Blending Area
   A) Tank 203 will be emptied as much as possible by blending into fuel. Any remaining inventory will be specially disposed.
   B) Tank 202, 203, 204, 205 and 206 which have been emptied will have manheads removed, free liquids pumped to 210 tank and tank entered to remove settled solids which will be put into open head drums for landfill. This work will be performed as described in Routine Procedure Training file. There will be about 200 gallons free liquid each tank and about 1500 gallons settled solids in each tank.

Labor - 10 days 160 man hours

   C) Tanks 210, 211 and 212 which have been emptied by shipping out material as blast furnace injectant will have man heads removed free liquids pumped into truck for shipment as injectant. Tanks will then be entered to remove settled solids which will be put into open head drums for landfill. This work will be performed as described in Routine Procedure Training file. For these blended injectant tanks free liquid will be 400 gallons each tank and 1200 gallons settled solids each tank.

Labor - 6 days 96 man hours

Final Decontamination Procedure

All tanks and equipment will be water blasted by an outside contractor. (C.M.C. letter attached.)

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CLOSURE PLAN - AMENDED 8-16-85

Schedule

1. 9-1-95 Closure commences
2. 9-5-95 Container storage pumping solids removal, and pad scraping completed.
3. 9-15-95 Solvent reclamation storage liquid removed
4. 9-22-95 All liquid crude pumped from reclamation crude tanks and distilled
5. 10-1-95 All injectant and injectant blending stock tanks empty to suction lines.
6. 10-14-95 Reclamation tanks opened and decontaminated
7. 10-28-95 Injectant blending tanks opened and decontaminated
8. 11-5-95 Injectant blend tanks opened and decontaminated
9. 11-19-95 Final high pressure water decontamination of all tanks and equipment complete

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The maximum volume on hand would be:

A.) Container storage area
D001, F001, F002, F003, and F005 — 16500 gallons

B.) Reclaim area storage
1. Still bottoms
D001, F001, F002, F003 and F005 — 46110 gallons
2. Free liquid from emptied flat bottom tanks
123, 124, 125 and 126
D001, (200 each tank) — 800 gallons

C.) Injectant blending area
1. Blended Injectant
210, 211 and 212 tanks — 70000 gallons
2. Fuel blending stock in 202, 204, 205 and 206 tanks
codes D001, F001, F002, F003 and F005 — 75000 gallons
3. High Chloride injectant blending stock in 203 tank
codes D001, F001, F002, F003 and F005 — 150000 pounds

(Special disposal of any remaining inventory in 203 tank may be required)

4. Material used to flush entire system — 1000 gallons

Total inventory to be shipped from injectant blending area as injectant is: 225410 gallons

Shipped at minimum rate of 70000 gallons per week will require 3 weeks and 2 days.

Labor - 20 days 160 man hours

Decontamination Procedure

Decontamination will begin after inventory removal is accomplished and area closed.

1. Container storage area pad and sump will be scraped and solid material collected will be put in open head drum and prepared for shipment to landfill.
1 drum solid

Labor - 1 day 8 man hours

2. Solvent reclamation area
A) Flat bottom tanks manheads will be removed, free liquids pumped to injectant blending area and tank entered to remove settled solids which will be put into open head drums for landfill. This work will be performed as described in Routine Procedure Training file.
For tanks 123, 124, 125 and 126 there will be about 200 gallons free liquid each and 1000 gallons settled solids each.

Labor - 8 days 124 man hours

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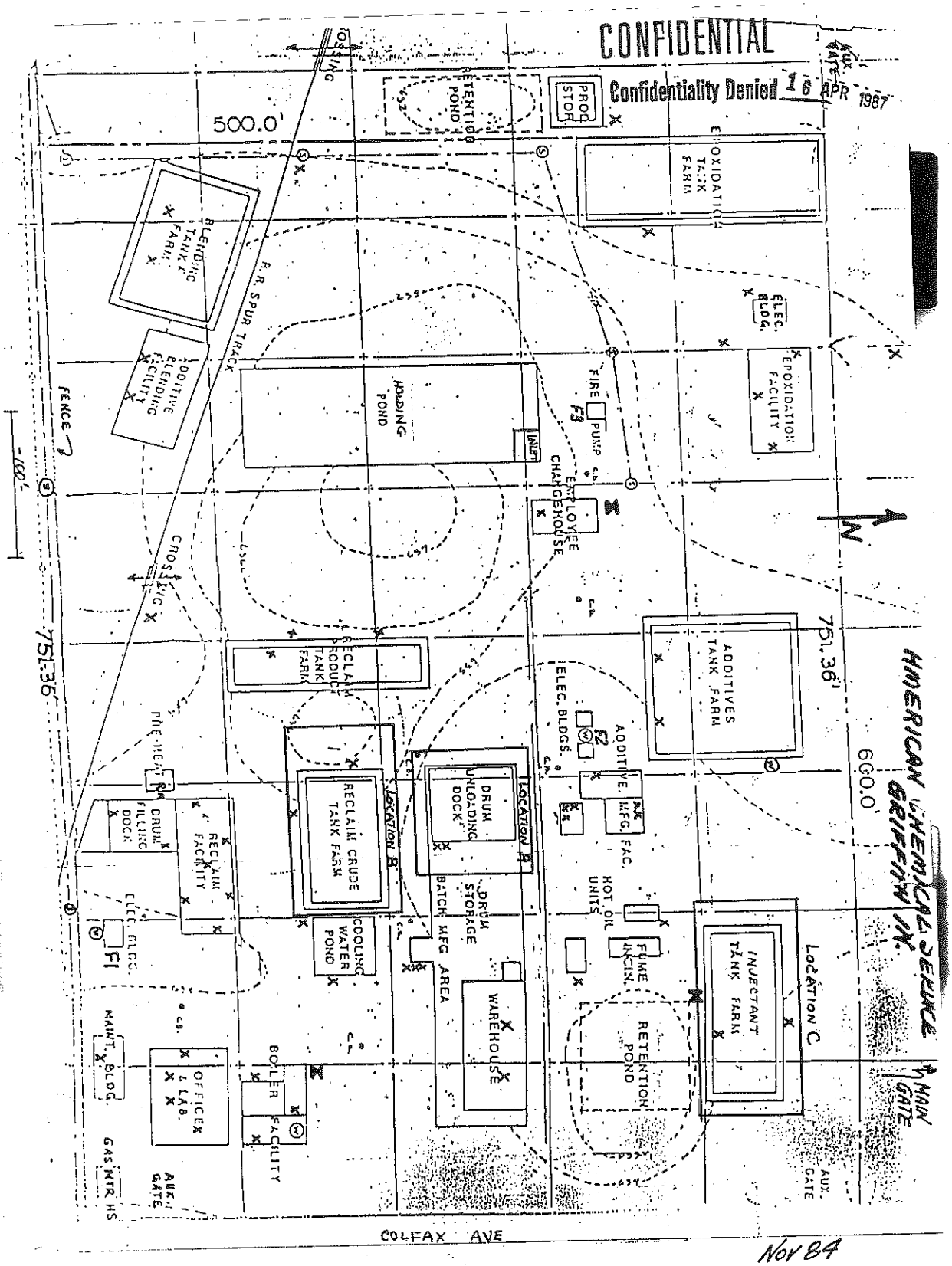

Nov 84

LEGEND -

x - PORTABLE HAND EXTINGUISHERS (DRY CHEMICAL) 20#

⊠ - PORTABLE WHEEL EXTINGUISHER (DRY CHEMICAL) 120#

F - STATIONARY HOSE FOAM UNITS 6%

1 - RECLAIM - RADIUS 200' 1½" LINE

2 - ADDITIVE - RADIUS 300' 1½" LINE

3 - EPOXIDATION - RADIUS 350' 2½" LINE

FIGURE 1

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IND 016360265

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CLOSURE PLAN - AMENDED 8-16-85

ROUTINE FACILITY OPERATION FOR REMOVAL OF INVENTORY OF ALL HAZARDOUS WASTE

Inventory reduction will be accomplished by normal plant operations as detailed in the Routine Procedures Training File for handling hazardous waste material located at American Chemical Service.

1.) Container Storage Area

A.) All Free liquid in 300 drums will be pumped to solvent reclaiming storage tanks. Empty RCRA drums will be loaded and shipped to drum reconditioner.

Labor - 3 days 24 man hours

B.) Partially filled solid drums will be cut open, combined and prepared for shipment to landfill. The total quantity will be approximately 30-55 gallon drums

Labor - 2 days 16 man hours

2.) Solvent Reclamation Storage
These crude solvent storage tanks are emptied by routine charging of distillation equipment as detailed in Routine Procedure Training File.

A.) Tanks 123, 124, 125 and 126 with total volume of 78000 gallons of D001 coded material will be charged 4000 gal at a time into #1 & #2 units and 2300 gallons at a time into #3 unit. Figuring a 24 hour cycle time, and a 70% yield of distillate, this process will produce:

54600 gallons distillate
23400 gallons distillate bottoms to be pumped to and blended in injectant area

Labor - 8 days 64 man hours

B.) Tanks 1A, 1B, 116, 117, 118, 119, 120, 121 and 122 with total volume of 75700 gallons of material possible coded with D001, F001, F002, F003, and F005 will be charged 4000 gallons at a time into #1 & #2 units and 2300 gals at a time into #3 unit. Figuring a 24 hour cycle time and a 70% yield of distillate, this process will produce:

52990 gallons distillate
22710 gallons distillate bottoms to be pumped to and blended in injectant area

Labor - 8 days 64 man hours

CLOSURE PLAN - AMENDED 8-16-85

Maximum Condition Assumed

1. Container Storage area has a maximum number (300) 55 gallon drums. This quantity, 16500 gallons, will consist of wastes coded D001,F001,F002,F003 & F005. The drums will contain primarily liquids; however a maximum of 10% settled solids may be present. Material is stored awaiting reclamation.

2. Solvent reclamation storage tanks are full; containing crude solvents ready to be distilled. These are the tank, capacities and possible hazard codes. Tanks contain primarily liquid, but may contain up to 5000 gals. total of settled solids.

TANK	QUANTITY	CODE
1A	2750	D001, F001, F002, F003, F005
1B	2750	D001, F001, F002, F003, F005
116	10800	D001, F001, F002, F003, F005
117	10800	D001, F001, F002, F003, F005
118	10800	D001, F001, F002, F003, F005
119	10800	D001, F001, F002, F003, F005
120	6000	D001, F001, F002, F003, F005
121	10500	D001, F001, F002, F003, F005
122	10500	D001, F001, F002, F003, F005
123	19500	D001
124	19500	D001
125	19500	D001
126	19500	D001
	153700	

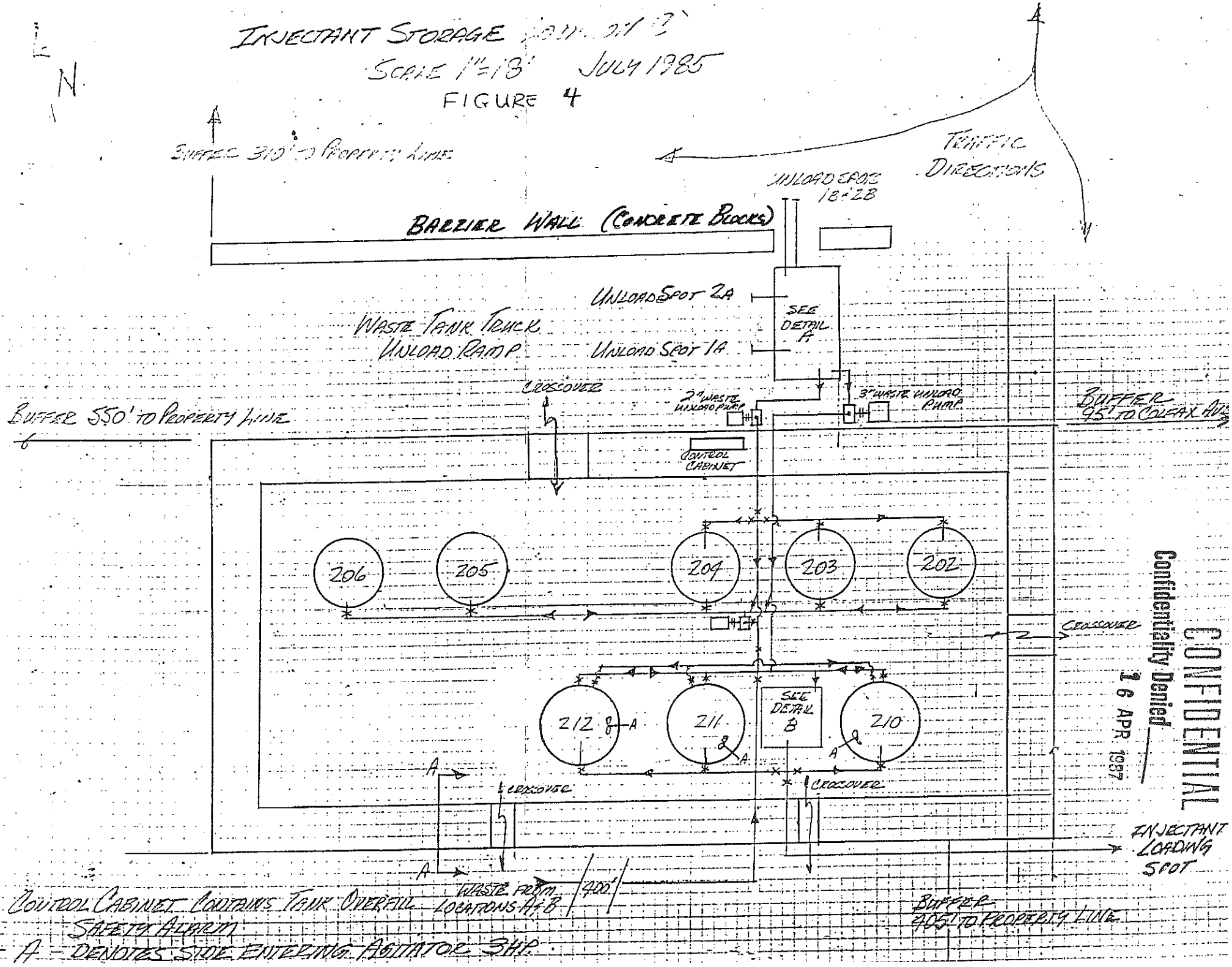
3. Injectant storage tanks are full of high chloride injectant blending stocks, low chloride injectant blending stocks, and blended injectant. Tanks will contain as much as 12000 gals. of settled solids.

A.) Tank 203 containing 150,000 pounds of hazard codes D001 F001, F002, F003 and F005. This tank contains injectant blending feed stock at about 10000 BTU/LB and approximately 20% chlorides.

B.) Tanks 202,204,205 and 206, contain low chloride injectant blending feed stock. The total capacity of these tanks is 75000 gallons; Hazard codes of stored material will be D001, F001, F002, Foo3 and F005.

C.) Tanks 210, 211 and 212 contain blended injectant ready for shipment. The total capacity is 70,000 gallons.

INJECTANT STORAGE
SCALE 1"=18' JULY 1985
FIGURE 4



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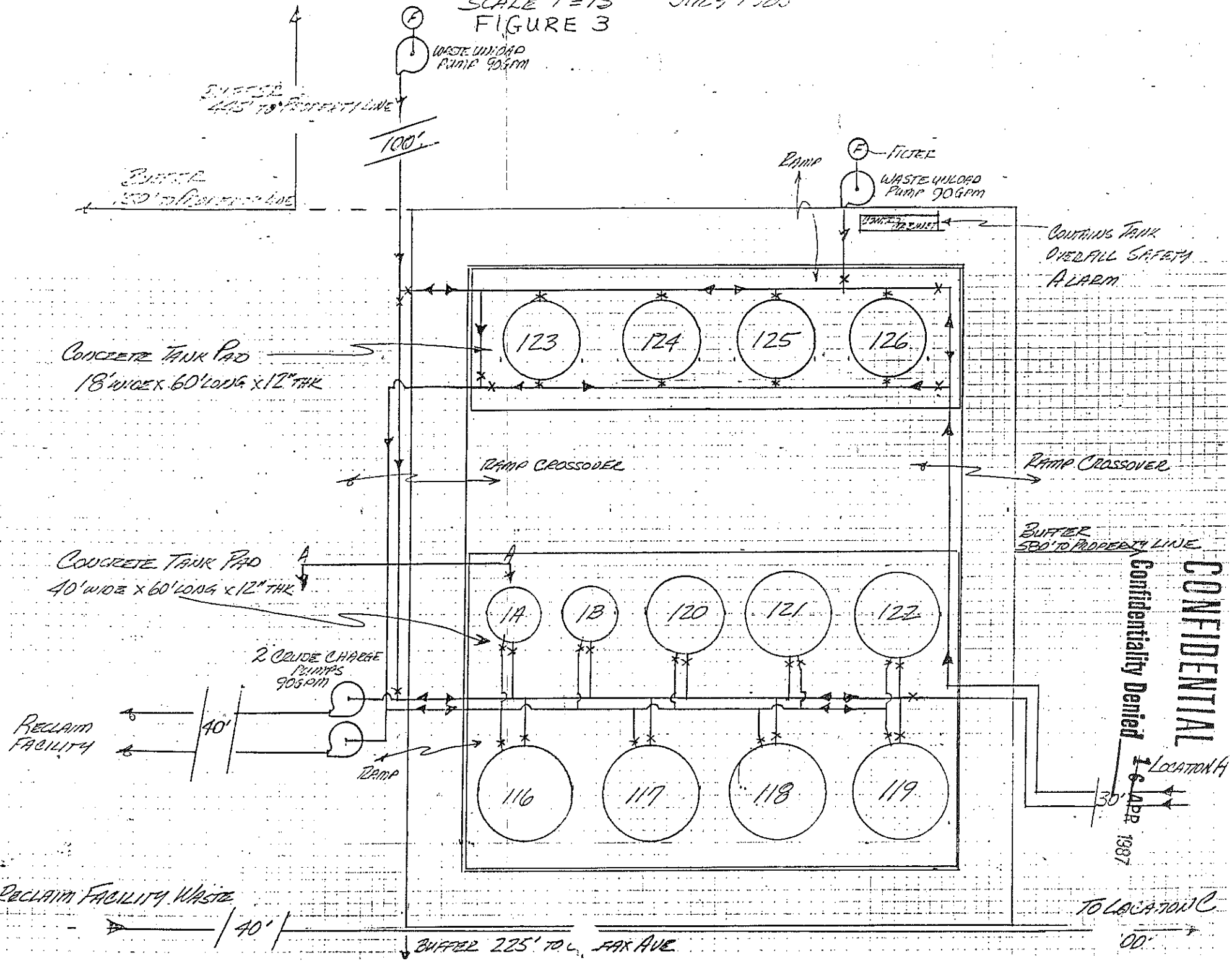
16 APR 1987

- CONTROL CABINET CONTAINS TANK OVERFILL SAFETY ALARM
- A - DENOTES SIDE ENTERING AGITATOR 3HP

SCALE 1" = 15' JULY 1985

FIGURE 3



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live

Evan Bayh
Governor
Kathy Prosser
Commissioner

105 South Meridian Street
P.O. Box 6015
Indianapolis, Indiana 46206-6015
Telephone 317-232-8603
Environmental Helpline 1-800-451-6027

Ms. Pamela Almus
First National Bank Valparaiso
14 Indiana Avenue
P.O. Box 2147
Valparaiso, Indiana 46384-2147

August 3, 1993

RECEIVED AUG 31 1993
WMD RCRA
RECORD CENTER Part A

Dear Ms. Almus:

Re: Closure Certification
American Chemical Services, Inc.
Griffith, Indiana
IND 016360265

Per your telephone request on July 27, 1993, the following information is provided. The Indiana Department of Environmental Management (IDEM) received certification from American Chemical Services, Inc., dated March 31, 1993, that total closure had been completed as outlined in the approved closure plan for the hazardous waste container storage area, tank storage areas, and tank treatment units. On June 8, 1993, the IDEM acknowledged that total closure was completed as required by 40 CFR 265, Subpart G.

In accordance with 329 IAC 3.1-14-12, the IDEM notified American Chemical Service, Inc. that they are no longer required by 329 IAC 3.1-14-4 and 329 IAC 3.1-14-24(e) to maintain financial assurance and liability coverage for the closure of the hazardous waste management units.

If you have any questions, please contact Mr. Stephen West at 317/232-3264.

Sincerely,

Victor P. Windle

Victor P. Windle, Chief
Plan Review and Permit Section
Hazardous Waste Management Branch
Solid and Hazardous Waste Management

cc: Mr. Hak Cho, U.S. EPA, Region V
Mr. Jeff Stevens
Mr. John Murphy, ACS
File: IC1c, Lake Co.

FILE

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live

Evan Bayh
Governor
Kathy Prosser
Commissioner

105 South Meridian Street
P.O. Box 6015
Indianapolis, Indiana 46206-6015
Telephone 317-232-8603
Environmental Helpline 1-800-451-6027

RECEIVED
JUN 15 1993
OFFICE OF RCRA
WASTE MANAGEMENT DIV.
EPA REGION V

VIA CERTIFIED MAIL - P125-270-824

June 8, 1993

Mr. John J. Murphy
Vice President
American Chemical Services, Inc.
P.O. Box 190
Griffith, IN 46319

RECEIVED
WMD RCRA
RECORD CENTER
JUL 01 1993
Part A

Dear Mr. Murphy:

Re: Container and Tank Units
Closure Certification
American Chemical Services, Inc.
Griffith, Indiana
IND 016360265

The Indiana Department of Environmental Management (IDEM) has received your certification dated March 31, 1993, that total closure has been completed as outlined in the approved closure plan for the container storage area, tank storage areas, and tank treatment units at American Chemical Service, Inc. With receipt of this certification, total closure is completed as required by 40 CFR 265, Subpart G.

The four units have been adequately decontaminated and closed in accordance with the approved closure plan. Tanks and vessels were decontaminated and sold as scrap. Tanks numbered 7 and 20 were decontaminated and final rinse samples met clean levels. These tanks may be reused in the future. Appurtenant equipment was adequately decontaminated and/or disposed of as hazardous waste. Concrete surfaces in the tank farms and the container storage area were adequately decontaminated and final rinsate met clean closure levels. However, soils surrounding the units are contaminated with F-code solvents and RCRA metals. It is our understanding that the facility is being remediated via Superfund under the direction of the U.S. EPA, Region V, and the IDEM Office of Environmental Response. The units themselves may be certified closed and the underlying contaminated soils addressed through the Superfund action and/or RCRA Corrective Action.

American Chemical Service, Inc. originally notified the U.S. EPA, Region V, as a storage and treatment facility with the following hazardous waste management activities: container and tank storage and tank treatment. The approved closure plan indicated that all of the following hazardous waste activities have been eliminated: container and tank storage and tank treatment. With the completion of closure, the facility status is now classified as a large quantity generator.

This is also to notify you that your facility is no longer required by 329 IAC 3.1-14-4 and 329 IAC 3.1-14-24(e) to maintain financial assurance and liability coverage for the closure of the hazardous waste management units.

If you have any questions regarding this correspondence, please contact Mr. Stephen West at 317/232-3264.

Sincerely,

David Wersan

David Wersan
Assistant Commissioner
Solid and Hazardous Waste Management

cc: Lake County Health Department
Mr. Hak Cho, U.S. EPA, Region V
Mr. Wayde Hartwick, U.S. EPA, Region V
Ms. Fayola Wright, U.S. EPA, Region V
Mr. David Dabertin, IDEM N.W. Office
Mr. Steve Buckel
Ms. Jenny Dooley
Ms. Gabrielle Hauer
Mr. Jim Hunt
Mr. Eric Schmidt
Mr. Jeff Stevens
File: IC1c, Lake Co.

A.4.5

CSX TRANSPORTATION

Law Department
500 Water Street (J150)
Jacksonville, FL 32202
Phone: (904) 359-1894
Personal FAX: (904) 245-2857
E-Mail: peggy_rounds@csx.com

Peggy L. Rounds
Paralegal

March 24, 2004

Via Overnight Mail

Mr. Thomas Skinner
Regional Administrator – Region V
U.S. Environmental Protection Agency
77 West Jackson Boulevard
Chicago, IL 60604

Re: American Chemical Service, Inc. Facility
Facility I.D. No. IND016360265

Dear Mr. Skinner:

In accordance with the Federal Regulations for Hazardous Waste Management governing financial assurance requirements relating to closure and post-closure care and liability coverage, enclosed are:

1. Financial Test Letter for the remedial activity at the American Chemical Service, Inc. Facility in Griffith, Indiana, which letter has been signed on behalf of CSX Transportation, Inc. by Oscar Munoz, Executive Vice President and Chief Financial Officer.

2. A copy of the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission which contains a copy of the Company's independent certified public accountant's report on examination of the Company's financial statements for the latest completed fiscal year, ended 2003.

3. An original signed copy of the Special Report from the Company's independent certified public accountant, Ernst & Young, comparing the selected financial data referred to in Mr. Favorite's letter with the Company's 2003 year-end financial statements.

Should the Environmental Protection Agency have any questions or require additional information on the financial assurance instruments provided you herewith, please let me know.

Very truly yours,

Peggy L. Rounds
Paralegal

Enclosures

cc: Oscar Munoz, C-900
Executive Vice President and Chief Financial Officer.

Marvin F. Metge, Esq.
Metge, Spitzer & Kreid
33 North LaSalle Street, Suite 2700
Chicago, IL 60602-2605

Paul J. Kurzanski
Director Environmental Remediation

Jeff Styron
Counsel

CSX TRANSPORTATION

500 Water St.- C-900
Jacksonville, FL 32202
(904) 359-1329
Fax (904) 359-1859

Oscar Munoz
Executive Vice President and
Chief Financial Officer

March 22, 2004

Mr. Thomas Skinner, Regional Administrator
U.S. Environmental Protection Agency
Region V
77 West Jackson Boulevard
Chicago, IL 60604

Re: AMERICAN CHEMICAL SERVICE, INC, FACILITY
GRIFFITH, INDIANA
FACILITY ID NO. IND 016360265

Dear Mr. Skinner:

I am the Chief Financial Officer of CSX Transportation, Inc., 500 Water Street, Jacksonville, Florida 32202. This letter is in support of the use of the financial test to demonstrate financial responsibility for liability coverage and closure and/or post-closure care as specified in subpart H of 40 CFR parts 264 and 265.

The firm identified above is the owner or operator of the following facilities for which liability coverage for both sudden and nonsudden accidental occurrences is being demonstrated through the financial test specified in subpart H of 40 CFR parts 264 and 265:

Waycross Railyard Facility
Facility I.D. No. GAD991275900
CSX Transportation, Inc.
Haines Avenue Extension
Waycross, Georgia 31501

Tremont Road
HSI # 10003
CSX Transportation, Inc.
Savannah, Georgia

Former Beazer East/Koppers Richmond Facility
Facility ID No. VAD003121977
CSX Transportation, Inc.
4005 Charles City Road
Richmond, Virginia 23231

Former Beazer East/Koppers Green Spring Facility
EPA I.D. No. WVD003080959
CSX Transportation, Inc.
Green Spring, West Virginia

American Chemical Service, Inc. Facility
Facility I.D. No. IND016360265
420 S. Colfax Avenue
Griffith, Indiana 46319

Powell Duffryn Site
HSI Site No 10101
Hutchinson Island, Savannah, GA

Raceland Site
EPA ID No. KYD-985-066-653
CSX Transportation, Inc.
Raceland, Kentucky

The firm identified above guarantees, through the guarantee specified in subpart H of 40 CFR parts 264 and 265, liability coverage for both sudden and nonsudden accidental occurrences at the following facilities owned or operated by the following: None. The firm identified above is: None.

1. The firm identified above owns or operates the following facilities for which financial assurance for closure or post-closure care or liability coverage is demonstrated through the financial test specified in subpart H of 40 CFR parts 264 and 265. The current closure and/or post-closure cost estimate covered by the test are shown for each facility:

American Chemical Service, Inc. Facility
Facility I.D. No. IND016360265
420 S. Colfax Avenue
Griffith, Indiana 46319

COST ESTIMATE				
UNIT	**INTERIM STATUS**		**POST-CLOSURE**	
	CLOSURE	INSPECTION AND MONITORING COSTS	CORRECTIVE ACTION PROGRAM	INSPECTION AND MONITORING COSTS
CONSENT DECREE	-0-	250,000	-0-	$900,000
TOTALS	-0-	250,000	-0-	$750,000

Whitehouse Waste Oil Pits Site
Facility I. D. No. FLD980602767
Approximate Address:
10 miles west of downtown Jacksonville, Duval County, Florida
Northeast of the intersection of U. S. Highway 90 and
Chaffee Road in Whitehouse, Duval County, Florida

The amount of cost estimated at the Whitehouse Waste Oil Pits Site is $14,067,054.00. Wachovia Bank National Association is holding $1,202,472.89 on account for this Site. This leaves roughly $12,864,581.11 as remainder of the estimated costs. Pursuant to the Whitehouse Waste Oil Pits Site Consent Decree, this firm must demonstrate Financial Security for 26.25% of the estimated cost, which is $3,376,952.54. Therefore, this firm's demonstrated amount of financial security is $3,376,952.54.

2. The firm identified above guarantees, through the guarantee specified in subpart H of 40 CFR parts 264 and 265, the closure and post-closure care or liability coverage of the following facilities owned or operated by the guaranteed party. The current cost estimates for closure or post-closure care so guaranteed are shown for each facility: None.

3. In States where EPA is not administering the financial requirements of subpart H of 40 CFR parts 264 and 265, this firm is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in subpart H of 40 CFR parts 264 and 265. The current closure or post-closure cost estimates covered by such a test are shown for each facility:

Powell Duffryn Site
HSI Site No. 10101
Hutchinson Island, Savannah, Georgia

The amount of cost estimated at the Powell Duffryn Site is $1,392,900. Pursuant to the Powell Duffryn Site Corrective Action Plan, this firm must demonstrate Financial Security for 33.33% of the estimated cost, which is $464,300.00. In 2002, $80,667.00 was spent by CSX Transportation on this project. Therefore, this firm's current demonstrated amount of financial security is $383,633.00.

Raceland Site
EPA ID No. KYD-985-066-653
CSX Transportation, Inc.
Raceland, Kentucky

COST ESTIMATE				
UNIT	**INTERIM STATUS**		**POST-Remediation**	
	Investigation	Remediation	Operation & Maintenance	Monitoring
Paint Shop AOCs	33,000	150,000	40,000	50,000
TOTAL	33,000	150,000	40,000	50,000

Former Beazer East/Koppers Richmond Facility
Facility ID No. VAD003121977
CSX Transportation, Inc.
4005 Charles City Road
Richmond, Virginia 23231

COST ESTIMATE				
UNIT	**INTERIM STATUS**		**POST-CLOSURE**	
	CLOSURE	INSPECTION AND MONITORING COSTS	CORRECTIVE ACTION PROGRAM	INSPECTION AND MONITORING COSTS
CLOSED RCRA SURFACE IMPOUNDMENT	COMPLETE	-0-	-0-	$1,218,937
TOTAL	-0-	-0-	-0-	$1,218,937

Waycross Railyard Facility
Facility I.D. No. GAD991275900
RCRA Facility Permit No. HW-049(D)
CSX Transportation, Inc.
Haines Avenue Extension
Waycross, Georgia 31501

COST ESTIMATE				
UNIT	**CLOSURE**	**POST-CLOSURE**		
		INVESTI-GATION PROGRAM	CORRECTIVE ACTION PROGRAM	15-YEAR OPERATING COSTS
OLD DRUM STORAGE AREA	COMPLETE	COMPLETE	-0-	$1,233,092
ALUM SLUDGE BASIN	COMPLETE	COMPLETE	-0-	$876,722
ACID-LIME SLUDGE AREA	COMPLETE	COMPLETE	$575,000	$489,454
LOCOMOTIVE SHOP AREA	COMPLETE	COMPLETE	-0-	$1,539,132
LOCOMOTIVE PAINT & AIR BRAKE SHOP, OLD ENGINE HOUSE AND OLD CLEAN-ING VAT SLUDGE PITS	COMPLETE	$150,000	-0-	$311,360
OLD REFUSE AREA NO.2 AND OLD RUNOFF POND AREA	COMPLETE	$150,000	-0-	-0-
TOTALS:	$0	$300,000	$575,000	$4,449,760

Tremont Road
HSI # 10003
CSX Transportation, Inc.
Savannah, Georgia

COST ESTIMATE			
UNIT	**CLOSURE**	**POST-CLOSURE**	
		CORRECTIVE ACTION	INSPECTION & MONITORING
LOCATION 1	COMPLETE	-0-	$312,000
LOCATION 2	COMPLETE	-0-	$442,000
LOCATION 3	COMPLETE	-0-	$120,000
SUB-TOTALS	-0-	-0-	$874,000

Former Beazer East/Koppers Green Spring Facility
EPA ID No. WVD003080959
CSX Transportation, Inc.
Green Spring, West Virginia

COST ESTIMATE				
UNIT	**INTERIM STATUS**		**POST-CLOSURE**	
	CLOSURE	INSPECTION AND MONITORING COSTS	CORRECTIVE ACTION PROGRAM	INSPECTION AND MONITORING COSTS
SURFACE IMPOUNDMENT (AERATION BASINS A & B)	COMPLETE	COMPLETE	-0-	$339,500
TOTAL	-0-	-0-	-0-	$339,500

4. The firm identified above owns or operates the following hazardous waste management facilities for which financial assurance for closure or, if a disposal facility, post-closure care, is not demonstrated either to EPA or a State through the financial test or any other financial assurance mechanism specified in subpart H of 40 CFR parts 264 and 265 or equivalent or substantially equivalent State mechanisms. The current closure and/or post-closure cost estimates not covered by such financial assurance are shown for each facility: None.

5. This firm is the owner or operator or guarantor of the following UIC facilities for which financial assurance for plugging and abandonment is required under part 144 and is assured through a financial test. The current closure cost estimates as required by 40 CFR 144.62 are shown for each facility: None.

This firm is required to file a Form 10K with the Securities and Exchange Commission (SEC) for the latest fiscal year.

The fiscal year of this firm ends on December 26. The figures for the following items marked with an asterisk are derived from this firm's independently audited, year-end financial statements for the latest completed fiscal year, ended December 26, 2003.

Part B. Closure or Post-Closure Care and Liability Coverage

ALTERNATIVE II

1.	Sum of current closure and post-closure cost estimates	$ 12,790,782.54
2.	Amount of annual aggregate liability coverage to be demonstrated	$ 8,000,000.00
3.	Sum of lines 1 and 2	$ 20,790,782.54
4.	Current bond rating of most recent issuance and name of rating service	BBB S&P
5.	Date of issuance of bond	January 1, 1957
6.	Date of maturity of bond	January 1, 2007
*7.	Tangible net worth	$ 5,342,850,172.00
*8.	Total assets in the U.S.	N/A

		YES	NO
9.	Is line 7 at least $10 million?	X	
10.	Is line 7 at least 6 times line 3?	X	
*11.	Are at least 90% of assets located in the U.S.? If not, complete line 12	X	
12.	Is line 8 at least 6 times line 3?	N/A	

I hereby certify that the wording of this letter is identical to the wording specified in 40 CFR 264.151(g) as such regulations were constituted on the date shown immediately below.

CSX TRANSPORTATION, INC.

By: _____

Oscar Munoz
Executive Vice President and
Chief Financial Officer
March 22, 2004

ERNST & YOUNG

Ernst & Young LLP
Suite 1500
50 North Laura Street
Jacksonville, Florida 32202

Phone: (904) 358-2000
www.ey.com

Report of Independent Certified Public Accountants On Applying Agreed-Upon Procedures

Mr. Oscar Munoz
Executive Vice President and Chief Financial Officer
CSX Transportation, Inc.
500 Water Street
Jacksonville, Florida 32202

Dear Mr. Munoz:

We have performed the procedures, enumerated below, which were agreed to by CSX Transportation, Inc. (the Company) and the U.S. Environmental Protection Agency, Region V (Agency), solely to assist you with respect to the schedule: Part B. Closure or Post-Closure Care and Liability Coverage Alternative II (the Schedule), included in your letter dated March 22, 2004 to the Agency. We were informed by officials and other personnel of the Company who have responsibility for accounting and financial matters that the Schedule is presented on the basis prescribed by Subpart H of 40 CFR Parts 264 and 265 of the permitted facilities standards of the U.S. Environmental Protection Agency in the Federal Regulations. This engagement to apply agreed-upon procedures was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. The sufficiency of the procedures is solely the responsibility of the Company and the Agency. Consequently, we make no representation regarding the sufficiency of the procedures described below either for the purpose for which this report has been requested or for any other purpose.

Our procedures and findings were as follows:

- We compared the amount on Line 7 of the Schedule, ($5,342,850,172) (which your letter dated March 22, 2004, as the Executive Vice President and Chief Financial Officer of CSX Transportation, Inc., Jacksonville, Florida to the Agency specifies as having been derived from the independently audited, year end consolidated financial statements of CSX Transportation, Inc. for the fiscal year ended December 26, 2003), with the Company-prepared reconciliation of net assets per the 2003 audited consolidated financial statements to net tangible assets (rounded to the nearest thousand dollars), as defined in Subpart H of 40 CFR Parts 264 and 265 of the permitted facilities standards of the U.S. Environmental

Protection Agency in the Federal Regulations, and found them to be in agreement (rounded to the nearest thousand dollars).

- We inquired of the Company's management regarding the information included on Line 11 of the Schedule, and the Company's management indicated in excess of 90% of the Company's assets are located in the United States.

We were not engaged to and did not conduct an audit, the objective of which would be the expression of an opinion on the Schedule. Accordingly, we do not express such an opinion. Had we performed additional procedures other matters might have come to our attention that would have been reported to you. This report relates only to the specified data on the Schedule to the Agency, and does not extend to any financial statements of CSX Transportation, Inc. taken as a whole.

This report is intended solely for the information and use of CSX Transportation, Inc. and the U.S. Environmental Protection Agency, Region V, and is not intended to be and should not be used by anyone other than these specified parties.

Very truly yours,

Ernst + Young LLP

March 22, 2004

CSX TRANSPORTATION

Law Department
500 Water Street (J150)
Jacksonville, FL 32202
Phone: (904) 359-1894
Personal FAX: (904) 245-2857
E-Mail: peggy_rounds@csx.com

Peggy L. Rounds
Paralegal

March 26, 2003

Via Overnight Mail

Mr. Thomas Skinner
Regional Administrator – Region V
U.S. Environmental Protection Agency
77 West Jackson Boulevard
Chicago, IL 60604

Re: American Chemical Service, Inc. Facility
Facility I.D. No. IND016360265

Dear Mr. Skinner:

In accordance with the Federal Regulations for Hazardous Waste Management governing financial assurance requirements relating to closure and post-closure care and liability coverage, enclosed are:

1. Financial Test Letter for the remedial activity at the American Chemical Service, Inc. Facility in Griffith, Indiana, which letter has been signed on behalf of CSX Transportation, Inc. by Frederick J. Favorite, Jr., Senior Vice President-Finance.

2. A copy of the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission which contains a copy of the Company's independent certified public accountant's report on examination of the Company's financial statements for the latest completed fiscal year, ended 2002.

3. An original signed copy of the Special Report from the Company's independent certified public accountant, Ernst & Young, comparing the selected financial data referred to in Mr. Favorite's letter with the Company's 2002 year-end financial statements.

Should the Environmental Protection Agency have any questions or require additional information on the financial assurance instruments provided you herewith, please let me know.

Very truly yours,

Peggy L Rounds

Peggy L. Rounds
Paralegal

Enclosures

cc: Frederick J. Favorite, Jr. - J120
Senior Vice President-Finance

Marvin F. Metge, Esq.
Metge, Spitzer & Kreid
33 North LaSalle Street, Suite 2700
Chicago, IL 60602-2605

Paul J. Kurzanski
Senior Manager-Environmental Remediation

Pam Korchun
Assistant General Counsel

Charlie Beard
McGuireWoods, LLP

CSX TRANSPORTATION

500 Water Street (J120)
Jacksonville, FL 32202
(904) 359-1738
FAX: (904) 359-7426

Frederick J. Favorite, Jr.
Senior Vice President-Finance

March 25, 2003

Mr. Thomas Skinner, Regional Administrator
U.S. Environmental Protection Agency
Region V
77 West Jackson Boulevard
Chicago, IL 60604

Dear Sir:

I am the chief financial officer of CSX Transportation, Inc., 500 Water Street, Jacksonville, Florida 32202. This letter is in support of the use of the financial test to demonstrate financial responsibility for liability coverage and closure and/or post-closure care as specified in subpart H of 40 CFR parts 264 and 265.

The firm identified above is the owner or operator of the following facilities for which liability coverage for both sudden and nonsudden accidental occurrences is being demonstrated through the financial test specified in subpart H of 40 CFR parts 264 and 265:

American Chemical Service, Inc. Facility
Facility I.D. No. IND016360265
420 S. Colfax Avenue
Griffith, Indiana 46319

Waycross Railyard Facility
Facility I.D. No. GAD991275900
CSX Transportation, Inc.
Haines Avenue Extension
Waycross, Georgia 31501

Former Beazer East/Koppers Richmond Facility
Facility ID No. VAD003121977
CSX Transportation, Inc.
4005 Charles City Road
Richmond, Virginia 23231

Former Beazer East/Koppers Green Spring Facility
EPA I.D. No. WVD003080959
CSX Transportation, Inc.
Green Spring, West Virginia

The firm identified above guarantees, through the guarantee specified in subpart H of 40 CFR parts 264 and 265, liability coverage for both sudden and nonsudden accidental occurrences at the following facilities owned or operated by the following: None. The firm identified above is: None

1. The firm identified above owns or operates the following facilities for which financial assurance for closure or post-closure care or liability coverage is demonstrated through the financial test specified in subpart H of CFR parts 264 and 265. The current closure and/or post-closure cost estimate covered by the test are shown for each facility:

American Chemical Service, Inc. Facility
Facility I.D. No. IND016360265
420 S. Colfax Avenue
Griffith, Indiana 46319

COST ESTIMATE				
UNIT	**INTERIM STATUS**		**POST-CLOSURE**	
	CLOSURE	INSPECTION AND MONITORING COSTS	CORRECTIVE ACTION PROGRAM	INSPECTION AND MONITORING COSTS
CONSENT DECREE	-0-	-0-	-0-	$900,000
TOTAL	-0-	-0-	-0-	$900,000

Whitehouse Waste Oil Pits Site
Facility I. D. No. FLD980602767
Approximate Address: 10 miles west of downtown Jacksonville,
Duval County, Florida
Northeast of the intersection of U. S. Highway 90 and
Chaffee Road in Whitehouse, Duval County, Florida

The amount of cost estimated at the Whitehouse Waste Oil Pits Site is $14,067,054.00. First Union Bank is holding $2,929,622.03 on account for this Site. This leaves roughly $11,137,431.97 as remainder of the estimated costs. Pursuant to the Whitehouse Waste Oil Pits Site Consent Decree, this firm must demonstrate Financial Security for 26.25% of the estimated cost, which is $2,923,575.89. Therefore, this firm's demonstrated amount of financial security is $2,923,575.89.

2. The firm identified above guarantees, through the guarantee specified in subpart H of 40 CFR parts 264 and 265, the closure and post-closure care or liability coverage of the following facilities owned or operated by the guaranteed party. The current cost estimates for closure or post-closure care so guaranteed are shown for each facility: None.

3. In States where EPA is not administering the financial requirements of subpart H of 40 CFR parts 264 and 265, this firm is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in subpart H of 40 CFR parts 264 and 265. The current closure or post-closure cost estimates covered by such a test are shown for each facility:

Former Beazer East/Koppers Richmond Facility
Facility ID No. VAD003121977
CSX Transportation, Inc.
4005 Charles City Road
Richmond, Virginia 23231

COST ESTIMATE				
UNIT	**INTERIM STATUS**		**POST-CLOSURE**	
	CLOSURE	INSPECTION AND MONITORING COSTS	CORRECTIVE ACTION PROGRAM	INSPECTION AND MONITORING COSTS
SURFACE IMPOUNDMENT	COMPLETE	-0-	-0-	$1,332,581
TOTAL	-0-	-0-	-0-	$1,332,581

The amount of cost estimated at the Whitehouse Waste Oil Pits Site is $14,067,054.00. First Union Bank is holding $2,929,622.03 on account for this Site. This leaves roughly $11,137,431.97 as remainder of the estimated costs. Pursuant to the Whitehouse Waste Oil Pits Site Consent Decree, this firm must demonstrate Financial Security for 26.25% of the estimated cost, which is $2,923,575.89. Therefore, this firm's demonstrated amount of financial security is $2,923,575.89.

2. The firm identified above guarantees, through the guarantee specified in subpart H of 40 CFR parts 264 and 265, the closure and post-closure care or liability coverage of the following facilities owned or operated by the guaranteed party. The current cost estimates for closure or post-closure care so guaranteed are shown for each facility: None.

3. In States where EPA is not administering the financial requirements of subpart H of 40 CFR parts 264 and 265, this firm is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in subpart H of 40 CFR parts 264 and 265. The current closure or post-closure cost estimates covered by such a test are shown for each facility:

Former Beazer East/Koppers Richmond Facility
Facility ID No. VAD003121977
CSX Transportation, Inc.
4005 Charles City Road
Richmond, Virginia 23231

COST ESTIMATE				
UNIT	**INTERIM STATUS**		**POST-CLOSURE**	
	CLOSURE	INSPECTION AND MONITORING COSTS	CORRECTIVE ACTION PROGRAM	INSPECTION AND MONITORING COSTS
SURFACE IMPOUNDMENT	COMPLETE	-0-	-0-	$1,332,581
TOTAL	-0-	-0-	-0-	$1,332,581

Former Beazer East/Koppers Green Spring Facility
EPA ID No. WVD003080959
CSX Transportation, Inc.
Green Spring, West Virginia

COST ESTIMATE				
UNIT	**INTERIM STATUS**		**POST-CLOSURE**	
	CLOSURE	INSPECTION AND MONITORING COSTS	CORRECTIVE ACTION PROGRAM	INSPECTION AND MONITORING COSTS
SURFACE IMPOUNDMENT (AERATION BASINS A & B)	COMPLETE	COMPLETE	-0-	$363,750
TOTAL	-0-	-0-	-0-	$363,750

Waycross Railyard Facility
Facility I.D. No. GAD991275900
CSX Transportation, Inc.
Haines Avenue Extension
Waycross, Georgia 31501

COST ESTIMATE				
UNIT	**CLOSURE**	**POST-CLOSURE**		
		INVESTI-GATION PROGRAM	CORRECTIVE ACTION PROGRAM	15-YEAR OPERATING COSTS
OLD DRUM STORAGE AREA	COMPLETE	COMPLETE	-0-	$1,321,170
ALUM SLUDGE BASIN	COMPLETE	COMPLETE	-0-	$939,345
ACID-LIME SLUDGE AREA	COMPLETE	$100,000	-0-	$484,260
LOCOMOTIVE SHOP AREA	COMPLETE	COMPLETE	-0-	$1,649,070
LOCOMOTIVE PAINT & AIR BRAKE SHOP, OLD ENGINE HOUSE AND OLD CLEAN-ING VAT SLUDGE PITS	COMPLETE	$150,000	-0-	$333,600
OLD REFUSE AREA NO.2 AND OLD RUNOFF POND AREA	COMPLETE	$150,000	-0-	-0-
TOTAL	$0	$400,000	-0-	$4,727,445

4. The firm identified above owns or operates the following hazardous waste management facilities for which financial assurance for closure or, if a disposal facility, post-closure care, is not demonstrated either to EPA or a State through the financial test or any other financial assurance mechanisms specified in subpart H of 40 CFR parts 264 and 265 or equivalent or substantially equivalent State mechanisms. The current closure and/or post-closure cost estimates not covered by such financial assurance are shown for each facility: None.

5. This firm is the owner or operator or guarantor of the following UIC facilities for which financial assurance for plugging and abandonment is required under part 144 and is assured through a financial test. The current closure cost estimates as required by 40 CFR 144.62 are shown for each facility: None.

This firm is required to file a Form 10K with the Securities and Exchange Commission (SEC) for the latest fiscal year.

The fiscal year of this firm ends on December 27. The figures for the following items marked with an asterisk are derived from this firm's independently audited, year-end financial statements for the latest completed fiscal year, ended December 27, 2002.

Part B. Closure or Post-Closure Care and Liability Coverage

ALTERNATIVE II

1.	Sum of current closure and post-closure cost estimates	$ 10,647,351.89
2.	Amount of annual aggregate liability coverage to be demonstrated	$ 8,000,000.00
3.	Sum of lines 1 and 2	$ 18,647,351.89
4.	Current bond rating of most recent issuance and name of rating service	Baa3 Moody's
5.	Date of issuance of bond	January 1, 1957
6.	Date of maturity of bond	January 1, 2007
*7.	Tangible net worth	$ 5,372,704,407.00
*8.	Total assets in the U.S.	NA

		YES	NO
9.	Is line 7 at least $10 million?	X	
10.	Is line 7 at least 6 times line 3?	X	
*11.	Are at least 90% of assets located in the U.S.? If not, complete line 12	X	
12.	Is line 8 at least 6 times line 3?	NA	

I hereby certify that the wording of this letter is identical to the wording specified in 40 CFR 264.151(g) as such regulations were constituted on the date shown immediately below.

CSX TRANSPORTATION, INC.

By: Frederick J. Favorite, Jr.
Frederick J. Favorite, Jr.
Senior Vice President-Finance
March 25, 2003

CSX TRANSPORTATION

Law Department
500 Water Street (J150)
Jacksonville, FL 32202
Phone: (904) 359-1403
FAX: (904) 359-7518

C. Keith Meiser
Senior Counsel
Admitted in Florida and Maryland

April 2, 2002

VIA OVERNIGHT MAIL
Mr. Thomas Skinner
Regional Administrator – Region V
U.S. Environmental Protection Agency
77 West Jackson Boulevard
Chicago, IL 60604

RECEIVED
APR 3 2002
DIVISION FRONT OFFICE
Waste, Pesticides & Toxics Division
U.S. EPA - REGION 5

Re: American Chemical Service, Inc. Facility
Facility I.D. No. IND016360265

Dear Mr. Lyons:

In accordance with the Federal Regulations for Hazardous Waste Management governing financial assurance requirements relating to closure and post-closure care and liability coverage, enclosed are:

1. Financial Test Letter for the remedial activity at the American Chemical Service, Inc. Facility in Griffith, Indiana, which letter has been signed on behalf of CSX Transportation, Inc. by Frederick J. Favorite, Jr., Senior Vice President-Finance.

2. A copy of the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission which contains a copy of the Company's independent certified public accountant's report on examination of the Company's financial statements for the latest completed fiscal year, ended 2001.

3. An original signed copy of the Special Report from the Company's independent certified public accountant, Ernst & Young, comparing the selected financial data referred to in Mr. Favorite's letter with the Company's 2001 year-end financial statements.

Should the Environmental Protection Agency have any questions or require additional information on the financial assurance instruments provided you herewith, please let me know.

Very truly yours,

C. Keith Meiser

C. Keith Meiser

Enclosures

cys: Frederick J. Favorite, Jr. - J120
Senior Vice President-Finance

Marvin F. Metge, Esq.
Metge, Spitzer & Kreid
33 North LaSalle Street, Suite 2700
Chicago, IL 60602-2605

Paul J. Kurzanski
Senior Manager-Environmental Remediation

plr\ckm\letters\fin.ass.(04-02-02).acs

CSX TRANSPORTATION

500 Water Street (J120)
Jacksonville, FL 32202
(904) 359-1738
FAX: (904) 359-7426

Frederick J. Favorite, Jr.
Senior Vice President-Finance

March 27, 2002

Mr. Thomas Skinner, Regional Administrator
U.S. Environmental Protection Agency
Region V
77 West Jackson Boulevard
Chicago, IL 60604

Dear Sir:

I am the chief financial officer of CSX Transportation, Inc., 500 Water Street, Jacksonville, Florida 32202. This letter is in support of the use of the financial test to demonstrate financial responsibility for liability coverage and closure and/or post-closure care as specified in subpart H of 40 CFR parts 264 and 265.

The firm identified above is the owner or operator of the following facilities for which liability coverage for both sudden and nonsudden accidental occurrences is being demonstrated through the financial test specified in subpart H of 40 CFR parts 264 and 265, paragraph 391-3-11-.05 of the Rules of the Georgia Department of Natural Resources, Environmental Protection Division, 9 VAC (Virginia Administrative Code) 20-60-264 and 265 of the Virginia Hazardous Waste Management Regulations, and 33-20-7.6 of the Environmental Regulations of West Virginia, (the last three incorporating by reference subpart H of 40 CFR parts 264 and 265):

American Chemical Service, Inc. Facility
Facility I.D. No. IND016360265
420 S. Colfax Avenue
Griffith, Indiana 46319

Waycross Railyard Facility
Facility I.D. No. GAD991275900
CSX Transportation, Inc.
Haines Avenue Extension
Waycross, Georgia 31501

Former Beazer East/Koppers Richmond Facility
Facility ID No. VAD003121977
CSX Transportation, Inc.
4005 Charles City Road
Richmond, Virginia 23231

Former Beazer East/Koppers Green Spring Facility
EPA I.D. No. WVD003080959
CSX Transportation, Inc.
Green Spring, West Virginia

The firm identified above guarantees, through the guarantee specified in subpart H of 40 CFR parts 264 and 265, liability coverage for both sudden and nonsudden accidental occurrences at the following facilities owned or operated by the following subsidiaries of the firm: None.

1. The firm identified above owns or operates the following facilities for which financial assurance for closure and/or post-closure care or liability coverage is demonstrated through the financial test specified in subpart H of CFR parts 264 and 265, paragraph 391-3-11-.05 of the Rules of the Georgia Department of Natural Resources, Environmental Protection Division, 9 VAC 20-60-264 and 265 of the Virginia Hazardous Waste Management Regulations, and 33-20-7.6 of the Environmental Regulations of West Virginia, (the last three incorporating by reference subpart H of 40 CFR parts 264 and 265). The current closure and/or post-closure cost estimates covered by the test are shown for each facility:

American Chemical Service, Inc. Facility
Facility I.D. No. IND016360265
420 S. Colfax Avenue
Griffith, Indiana 46319

C O S T E S T I M A T E				
UNIT	**INTERIM STATUS**		**POST-CLOSURE**	
	CLOSURE	INSPECTION AND MONITORING COSTS	CORRECTIVE ACTION PROGRAM	INSPECTION AND MONITORING COSTS
CONSENT DECREE	-0-	-0-	-0-	$1,000,000
TOTAL	-0-	-0-	-0-	$1,000,000

Waycross Railyard Facility
Facility I.D. No. GAD991275900
CSX Transportation, Inc.
Haines Avenue Extension
Waycross, Georgia 31501

C O S T E S T I M A T E				
UNIT	**CLOSURE**	**POST-CLOSURE**		
		INVESTI-GATION PROGRAM	CORRECTIVE ACTION PROGRAM	15-YEAR OPERATING COSTS
OLD DRUM STORAGE AREA	COMPLETE	COMPLETE	-0-	$1,495,710
ALUM SLUDGE BASIN	COMPLETE	COMPLETE	$330,000	$885,915
ACID-LIME SLUDGE AREA	COMPLETE	$100,000	-0-	$508,635
LOCOMOTIVE SHOP AREA	COMPLETE	COMPLETE	-0-	$1,598,190
LOCOMOTIVE PAINT & AIR BRAKE SHOP, OLD ENGINE HOUSE AND OLD CLEANING VAT SLUDGE PITS	COMPLETE	$150,000	-0-	$1,125,000
OLD REFUSE AREA NO.2 AND OLD RUNOFF POND AREA	COMPLETE	$150,000	-0-	-0-
TOTAL	$0	$400,000	$330,000	$5,613,450

Former Beazer East/Koppers Richmond Facility
Facility ID No. VAD 003121977
CSX Transportation, Inc.
4005 Charles City Road
Richmond, Virginia 23231

C O S T E S T I M A T E				
UNIT	**INTERIM STATUS**		**POST-CLOSURE**	
	CLOSURE	INSPECTION AND MONITORING COSTS	CORRECTIVE ACTION PROGRAM	INSPECTION AND MONITORING COSTS
CLOSED RCRA SURFACE IMPOUNDMENT	COMPLETE	-0-	-0-	$1,471,346
TOTAL	-0-	-0-	-0-	$1,471,346

Former Beazer East/Koppers Green Spring Facility
EPA ID No. WVD003080959
CSX Transportation, Inc.
Green Spring, West Virginia

C O S T E S T I M A T E				
UNIT	**INTERIM STATUS**		**POST-CLOSURE**	
	CLOSURE	INSPECTION AND MONITORING COSTS	CORRECTIVE ACTION PROGRAM	INSPECTION AND MONITORING COSTS
SURFACE IMPOUNDMENT (AERATION BASINS A & B)	COMPLETE	COMPLETE	-0-	$388,000
TOTAL	-0-	-0-	-0-	$388,000

2. The firm identified above guarantees, through the guarantee specified in subpart H of 40 CFR parts 264 and 265, the closure and/or post-closure care or liability coverage of the following facilities owned or operated by the guaranteed party. The current cost estimates for the closure and/or post-closure care so guaranteed are shown for each facility: None.

3. In states where EPA is not administering the financial requirements of subpart H of 40 CFR parts 264 and 265, this firm is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in Subpart H of 40 CFR parts 264 and 265. The current closure and/or post-closure cost estimates covered by such a test or guarantee are shown for each facility:

Waycross Railyard Facility
Facility I.D. No. GAD991275900
CSX Transportation, Inc.
Haines Avenue Extension
Waycross, Georgia 31501

C O S T E S T I M A T E				
UNIT	CLOSURE	POST-CLOSURE		
		INVESTI-GATION PROGRAM	CORRECTIVE ACTION PROGRAM	15-YEAR OPERATING COSTS
OLD DRUM STORAGE AREA	COMPLETE	COMPLETE	-0-	$1,495,710
ALUM SLUDGE BASIN	COMPLETE	COMPLETE	$330,000	$885,915
ACID-LIME SLUDGE AREA	COMPLETE	$100,000	-0-	$508,635
LOCOMOTIVE SHOP AREA	COMPLETE	COMPLETE	-0-	$1,598,190
LOCOMOTIVE PAINT & AIR BRAKE SHOP, OLD ENGINE HOUSE AND OLD CLEAN-ING VAT SLUDGE PITS	COMPLETE	$150,000	-0-	$1,125,000
OLD REFUSE AREA NO.2 AND OLD RUNOFF POND AREA	COMPLETE	$150,000	-0-	-0-
TOTAL	$0	$400,000	$330,000	$5,613,450

Former Beazer East/Koppers Richmond Facility
Facility ID No. VAD003121977
CSX Transportation, Inc.
4005 Charles City Road
Richmond, Virginia 23231

C O S T E S T I M A T E				
UNIT	INTERIM STATUS		POST-CLOSURE	
	CLOSURE	INSPECTION AND MONITORING COSTS	CORRECTIVE ACTION PROGRAM	INSPECTION AND MONITORING COSTS
SURFACE IMPOUNDMENT	COMPLETE	-0-	-0-	$1,471,346
TOTAL	-0-	-0-	-0-	$1,471,346

Former Beazer East/Koppers Green Spring Facility
EPA ID No. WVD003080959
CSX Transportation, Inc.
Green Spring, West Virginia

C O S T E S T I M A T E				
UNIT	**INTERIM STATUS**		**POST-CLOSURE**	
	CLOSURE	INSPECTION AND MONITORING COSTS	CORRECTIVE ACTION PROGRAM	INSPECTION AND MONITORING COSTS
SURFACE IMPOUNDMENT (AERATION BASINS A & B)	COMPLETE	COMPLETE	-0-	$388,000
TOTAL	-0-	-0-	-0-	$388,000

4. The firm identified above owns or operates the following hazardous waste management facilities for which financial assurance for closure or, if a disposal facility, post-closure care, is not demonstrated either to EPA or a State through the financial test or any other financial assurance mechanism specified in subpart H of 40 CFR parts 264 and 265 or equivalent or substantially equivalent State mechanisms. The current closure and/or post-closure cost estimates not covered by such financial assurance are shown for each facility: None.

5. This firm is the owner or operator or guarantor of the following UIC facilities for which financial assurance for plugging and abandonment is required under 40 CFR part 144 and is assured through a financial test. The current closure cost estimates as required by 40 CFR 144.62 are shown for each facility: None.

This firm is required to file a Form 10-K with the Securities and Exchange Commission (SEC) for the latest fiscal year.

The fiscal year of this firm ends on December 28. The figures for the following items marked with an asterisk are derived from this firm's independently audited, year-end financial statements for the latest completed fiscal year, ended December 28, 2001.

Part B. Closure or Post-Closure Care and Liability Coverage

ALTERNATIVE II

1.	Sum of current closure and post-closure cost estimates	$ 9,202,796
2.	Amount of annual aggregate liability coverage to be demonstrated	$ 8,000,000
3.	Sum of lines 1 and 2	$ 17,202,796
4.	Current bond rating of most recent issuance and name of rating service	Baa Moody's
5.	Date of issuance of bond	January 1, 1957
6.	Date of maturity of bond	January 1, 2007
*7.	Tangible net worth	$ 5,279,794,787
*8.	Total assets in the U.S.	NA

		YES	NO
9.	Is line 7 at least $10 million?	X	
10.	Is line 7 at least 6 times line 3?	X	
*11.	Are at least 90% of assets located in the U.S.? If not, complete line 12	X	
12.	Is line 8 at least 6 times line 3?	NA	

I hereby certify that the wording of this letter is identical to the wording specified in 40 CFR 264.151(g) as such regulations were constituted on the date shown immediately below.

CSX TRANSPORTATION, INC.

By: Frederick J. Favorite, Jr.
Senior Vice President-Finance
March 27, 2002

plr\ckm\letters\skinner (03-27-02).fjf

IND 016 360 265

MOTOROLA

RECEIVED
APR 2 2002
DIVISION FRONT OFFICE
Waste, Pesticides & Toxics Division
U.S. EPA - REGION 5

Mr. Francis X. Lyons
United States Environmental Protection Agency
Region V
77 West Jackson Blvd
Chicago, IL 60604

Re: Financial Assurance Requirement - American Chemical Services (ACS) Consent Decree

Dear Mr. Lyons:

Pursuant to the RD/RA Consent Decree for the ACS Superfund Site ("the RD/RA Consent Decree") Paragraph 55, Motorola, Inc. (hereinafter the Company) hereby makes its submission of information demonstrating its ability to complete the work required in the RD/RA Consent Decree. The Company has elected to demonstrate such ability through the financial test set forth in 40 C.F.R. §264.143(f) and 40 C.F.R.§ 264.151(f).

I am the Chief Financial Officer of Motorola Inc., 1303 East Algonquin Road, Schaumburg, Illinois 60196. This letter is in support of the Company's use of the financial test to demonstrate financial assurance for the work required by the RD/RA Consent Decree.

1. The Company is a Settling Defendant pursuant to the RD/RA Consent Decree for the following facility for which financial assurance for the work required in the RD/RA Consent Decree is demonstrated through the financial test specified in Subpart H of 40 C.F.R. § Parts 264 and 265. The current amount for which financial assurance is required pursuant to the RD/RA Consent Decree:

Name	Facility	Financial Assurance Required
Motorola , Inc. 1303 E. Algonquin Rd Schaumburg, IL 60196	American Chemical Services, Inc. 420 S. Colfax Avenue Griffith, IN 46319 Facility I.D. IND016360265	$615,140.55

2. The Company guarantees, through the guarantee specified in Subpart H of 40 C.F.R. Parts 264 and 265, the closure or post closure care of the following facilities owned or operated by the guaranteed party. The current cost estimates for the closure or post closure care are shown for each facility:

(None)

The Company identified above is not the direct or higher-tier parent corporation of the owner or operator.

3. In States where the EPA is not administering the financial requirements of Subpart H of 40 C.F.R. Parts 264 and 265, the Company, as owner or operator or guarantor, is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in Subpart H of 40 C.F.R. Parts 264 and 265. The current closure and/or post-closure cost estimates covered by such a test are shown for each facility:

(None)

4. The Company is the owner or operator of the following hazardous waste management facilities for which financial assurance for closure or, if a disposal facility, post-closure care, is not demonstrated either to EPA or a State through the financial test or any other financial assurance mechanism specified in Subpart H of 40 C.F.R. Parts 264 and 265 or equivalent or substantially equivalent State mechanisms. The current closure and/or post-closure cost estimates not covered by such financial assurance are shown for each facility:

(None)

5. The Company is the owner or operator of the following UIC facilities for which financial assurance for plugging and abandonment is required under 40 C.F.R. Part 144. The current closure cost estimates as required by 40 C.F.R.§ 144.62 are shown for each facility:

(None)

The Company is required to file a Form 10K with the Securities and Exchange Commission ("SEC") for the latest fiscal year.

The fiscal year of the Company ends on December 31st. The figures for the following items marked with an asterisk are derived from the Company's independently audited, year-end financial statements for the latest completed fiscal year, ended December 31, 2001:

ALTERNATIVE I

		DOLLARS	$MILLIONS
1.	Amount for which financial assurance is required pursuant to the RD/RA Consent Decree:	615,140.55	
*2.	Total liabilities:		19,222
*3.	Tangible net worth:		11,904
*4.	Net worth:		13,691
*5.	Current assets:		17,149
*6.	Current liabilities:		9,698
7.	Net working capital [line 5 minus line 6] :		7,451
*8.	The sum of net income (loss) plus depreciation, depletion, and amortization:		(1,385)
*9.	Total assets in U.S. (required only if less than 90% of firm's assets are located in the U.S.):.		18,974
10.	Is line 3 at least $10 million? Yes		
11.	Is line 3 at least 6 times line 1? Yes		
12.	Is line 7 at least 6 times line 1? Yes		
*13.	Are at least 90% of assets located in the U.S.? No If not, complete line 14		
14.	Is line 9 at least 6 times line 1? Yes		
15.	Is line 2 divided by line 4 less than 2.0? Yes		
16.	Is line 8 divided by line 2 greater than 0.1? No		
17.	Is line 5 divided by line 6 greater than 1.5? ~~No~~ YES 1.768		

I hereby certify that the wording of this letter is consistent* with the wording specified in 40 C.F.R. § 264.151(f) as required by 40 C.F.R. § 264.143(f), as such regulations were constituted on the date shown immediately below.

Carl F Koenemann

Carl F. Koenemann
Executive Vice President and
Chief Financial Officer
March 29, 2002

* The wording of the letter has been edited minimally in order to identify Motorola's status as a settling defendant pursuant to an RD/RA Consent Decree, and not as an owner/operator of the facility.

KPMG

303 East Wacker Drive
Chicago, IL 60601-5212

Telephone 312 665 1000
Fax 312 665 6000

Independent Accountants' Report
on Applying Agreed-Upon Procedures

The Board of Directors
Motorola, Inc.:

United States Environmental Protection Agency,
Region V:

We have performed the procedures enumerated below, which were agreed to by the management of Motorola, Inc. (the Company) and the United States Environmental Protection Agency, Region V (the Agency), solely to assist these parties in evaluating the Company's submission of information demonstrating its ability to complete the work required in the RD/RA Consent Decree for the ACS Superfund Site. This agreed-upon procedures engagement was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. The sufficiency of these procedures is solely the responsibility of those parties specified in this report. Consequently, we make no representation regarding the sufficiency of the procedures described below either for the purpose for which this report has been requested or for any other purpose. Our procedures and findings are as follows:

The following data is included in the letter dated March 29, 2002, and signed by Carl F. Koenemann, Executive Vice President and Chief Financial Officer of Motorola, Inc.

Description	Balance (in millions)
Total liabilities	$19,222
Tangible net worth	11,904
Net worth	13,691
Current assets	17,149
Current liabilities	9,698
Net working capital	7,451
Sum of net income (loss) plus depreciation, depletion, and amortization	(1,385)
Total assets in the United States	18,974

We agreed the amounts which represent current assets and current liabilities described above to the consolidated balance sheet of Motorola, Inc. and subsidiaries as of December 31, 2001.

We calculated the amounts which represent the sum of net income (loss) plus depreciation, depletion, and amortization described above based on amounts displayed in the consolidated

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statement of operations of Motorola, Inc. and subsidiaries as of December 31, 2001, in the notes accompanying the consolidated financial statements, or in the summary schedules that support the amounts disclosed in the notes to the consolidated financial statements, and found them to be in agreement.

We calculated the amounts which represent total liabilities, net worth, net working capital, tangible net worth and total assets in the United States described above based on amounts displayed in the consolidated balance sheet of Motorola, Inc. and subsidiaries as of December 31, 2001, in the notes accompanying the consolidated financial statements, or in the summary schedules that support the amounts disclosed in the notes to the consolidated financial statements, and found them to be in agreement.

We were not engaged to, and did not, conduct an examination, the objective of which would be the expression of an opinion on the consolidated financial data set forth above. Accordingly, we do not express such an opinion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you.

This report is intended solely for the information and use of management of the Company and the Agency and is not intended to be and should not be used by anyone other than these specified parties.

KPMG LLP

March 29, 2002

FORM 10-K

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

(X) ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 28, 2001

OR

( ) TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission file number 1-3359

CSX TRANSPORTATION, INC.
(Exact name of registrant as specified in its charter)

Virginia (State or other jurisdiction of incorporation or organization)	54-6000720 (I.R.S. Employer Identification No.)
500 Water Street, Jacksonville, FL. (Address of principal executive offices)	32202 (Zip Code)

Registrant's telephone number, including area code: (904) 359-3100

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Name of each exchange on which each class is registered
Louisville and Nashville Railroad Company First and Refunding Mortgage 3-3/8% Bonds, Series F, due April 1, 2003	New York Stock Exchange
Louisville and Nashville Railroad Company First and Refunding Mortgage 2-7/8% Bonds, Series G, due April 1, 2003	New York Stock Exchange
Monon Railroad 6% Income Debentures, due January 1, 2007	New York Stock Exchange

Exhibit Index can be found on page 7.

REGISTRANT MEETS THE CONDITIONS SET FORTH IN GENERAL INSTRUCTION I (1) (a) AND (b) OF FORM 10-K AND IS THEREFORE FILING THIS FORM WITH THE REDUCED DISCLOSURE FORMAT.

Securities Registered Pursuant to Section 12(g) of the Act: None.

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes (X) No ( )

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. (X)

State the aggregate market value of the voting stock held by nonaffiliates of the registrant. The aggregate market value of the voting stock at February 22, 2002, was $-0-, excluding the voting stock held by the parent of the registrant.

Indicate the number of shares outstanding of each of the registrant's classes of common stock, as of the latest practicable date. The registrant has 9,061,038 shares of common stock, par value $20.00, outstanding at February 22, 2002.

CSX TRANSPORTATION, INC. AND SUBSIDIARIES
2001 FORM 10-K ANNUAL REPORT
Table of Contents

Item No.		Page
	PART I	
1	Business	4-5
2.	Properties	4-5
3.	Legal Proceedings	5
4.	Submission of Matters to a Vote of Security Holders	5
	PART II	
5.	Market for Registrant's Common Stock and Related Stockholder Matters	5
6.	Selected Financial Data	5
7.	Management's Discussion and Analysis	5
7.A.	Quantitative and Qualitative Disclosures About Market Risk	6
8.	Financial Statements and Supplementary Data	6
9.	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	6
	PART III	
10.	Directors, Executive Officers, Promoters and Control Persons of the Registrant	6
11.	Executive Compensation	6
12.	Security Ownership of Certain Beneficial Owners and Management	6
13.	Certain Relationships and Related Transactions	6
	PART IV	
14.	Exhibits, Financial Statement Schedules and Reports on Form 8-K	7-8
	Signatures	9
	Index to Consolidated Financial Statements	10

PART I

Items 1. & 2. Business and Properties

General

CSX Transportation, Inc. (CSXT or the company) is engaged principally in the business of railroad transportation and operates a system composed of approximately 23,000 miles of first main line track in 23 states, the District of Columbia, and two Canadian provinces. Headquartered in Jacksonville, Florida, CSXT conducts railroad operations in its own name and through railroad subsidiaries, employing an average of approximately 35,000 employees during its most recent fiscal year

CSXT is a wholly-owned subsidiary of CSX Corporation (CSX). CSX is a publicly-owned Virginia corporation with headquarters at One James Center, 901 East Cary Street, Richmond, Virginia, 23219-4031. CSX also owns other transportation businesses which include CSX Intermodal, Inc., an intermodal and trucking company; CSX Lines, LLC, an ocean container-shipping company; and CSX World Terminals, LLC, a container-freight terminal company. CSX also has interests in real estate, resorts and resort management.

During 1999, CSXT's rail system expanded significantly with the integration of Conrail Inc. (Conrail) in the Northeast, brought about by the joint CSX /Norfolk Southern Corporation (Norfolk Southern) acquisition of Conrail that was approved by federal regulators in 1998. CSXT now operates in every major market east of the Mississippi River and serves more ports than any railroad in the country.

For information concerning business conducted by CSXT during 2001, see "Management's Discussion and Analysis" on pages 32-37.

Roadway

On December 28, 2001, CSXT's consolidated system consisted of 40,520 miles of track as follows:

	Track Miles
First Main	23,297
Second Main	5,518
Passing, Crossovers and Turnouts	2,865
Way and Yard Switching	8,840
Total	40,520

Included above are 6,601 miles of leased track, 6,509 miles of track under trackage right agreements with other railroads (including 5,755 miles of track leased from Conrail) and 256 miles of track under operating contracts.

Equipment

On December 28, 2001, CSXT and subsidiaries owned or leased the following:

	Owned	Leased	Total
Locomotives			
Freight	2,350	808	3,158
Switching	177	25	202
Auxiliary Units	181	11	192
Total	2,708	844	3,552
Freight Cars			
Gondolas	15,854	16,720	32,574
Open Top Hoppers	12,618	12,548	25,166
Box Cars	10,318	8,512	18,830
Covered Hoppers	11,186	6,937	18,123
Flat Cars	964	18,979	19,943
Other	808	5	813
Total	51,748	63,701	115,449

Included in leased equipment are 665 locomotives and 17,415 freight cars leased from Conrail.

Item 3. Legal Proceedings

In response to this item, the information set forth on pages 34-35 of this document in "Management's Discussion and Analysis," under the caption "Legal Proceedings" is incorporated by reference.

Item 4. Submission of Matters to a Vote of Security Holders

Information omitted in accordance with General Instruction I(2)(c).

PART II

Item 5. Market for Registrant's Common Stock and Related Stockholder Matters

There is no market for CSXT's common stock as CSXT is a wholly-owned subsidiary of CSX. During the years 2001, 2000 and 1999, CSXT paid dividends on its common stock aggregating $212 million, $220 million and $219 million, respectively.

Item 6. Selected Financial Data

Information omitted in accordance with General Instruction I(2)(a)

Item 7. Management's Discussion and Analysis

Information omitted in accordance with General Instruction I(2)(a).
However, in compliance with said Instruction, see "Management's Discussion and Analysis" on pages 32-37.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

The company is subject to risk relating to changes in the price of diesel fuel. Forward purchase agreements have been entered into with various suppliers for approximately 294 million gallons of fuel, which is approximately 50% of the 2002 requirement, at a weighted average price of 78 cents per gallon. The company is subject to fluctuations in prices for the remainder of its 2002 needs. A one cent change in the price per gallon of fuel would impact fuel expense by approximately $3 million.

CSXT participates in the CSX cash management plan, under which excess cash is advanced to CSX for investment. CSX then makes cash funds available to CSXT as needed for use in their operations, and are committed to repay all amounts due on demand should circumstances require. CSXT is charged for borrowings or compensated for investments based on returns earned by the plan portfolio. At December 28, 2001, CSXT had a $1.1 billion deficit balance relating to CSXT's participation in the CSX cash management plan, which is included in Due to Parent Company in the statement of financial position. A 1% increase or decrease in the borrowing rate would have approximately a $11 million affect on interest expense.

Item 8. Financial Statements and Supplementary Data

The consolidated financial statements of CSXT and notes thereto required in response to this item are included herein (refer to Index to Consolidated Financial Statements on page 10).

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

PART III

Item 10. Directors, Executive Officers, Promoters and Control Persons of the Registrant

Information omitted in accordance with General Instruction I(2)(c).

Item 11. Executive Compensation

Information omitted in accordance with General Instruction I(2)(c).

Item 12. Security Ownership of Certain Beneficial Owners and Management

Information omitted in accordance with General Instruction I(2)(c).

Item 13. Certain Relationships and Related Transactions

Information omitted in accordance with General Instruction I(2)(c).

PART IV

Item 14. Exhibits, Financial Statement Schedules and Reports on Form 8-K

(a) 1. Financial Statements

See Index to Consolidated Financial Statements on page 10.

2. Financial Statement Schedules

The information required by Schedule II is included in Note 10 to the consolidated financial statements. All other financial statement schedules are not applicable.

3. Exhibits

(3.1) Articles of Incorporation, as amended (incorporated by reference to Exhibit 3.1 to Form 10-K dated March 8, 1996)

(3.2) By-laws of the Registrant, as amended (incorporated by reference to Exhibit 3.2 to Form 10-K dated March 14, 2000)

(4.1) Articles of Incorporation, as amended (See Exhibit 3.1)

(4.2) By-laws of the Registrant, as amended (See Exhibit 3.2)

Pursuant to Regulation S-K, Item 601 (b)(4)(iii), instruments that define the rights of holders of the Registrant's long-term debt securities, where the long-term debt securities authorized under each instrument do not exced 10% of the Registrants' total assets, have been omitted and will be furnished to the Commission upon request.

(10.1) Transaction Agreement, dated as of June 10, 1997, by and among CSX Corporation, CSX Transportation, Inc., Norfolk Southern Corporation, Norfolk Southern Railway Company, Conrail Inc., Consolidated Rail Corporation, and CRR Holdings LLC, with certain schedules thereto (incorporated by reference to Exhibit 10.1 to Form 8-K dated June 11, 1999)

(10.2) Amendment No. 1, dated as of August 22, 1998, to the Transaction Agreement, dated as of June 10, 1997, by and among CSX Corporation, CSX Transportation, Inc., Norfolk Southern Corporation, Norfolk Southern Railway Company, Conrail Inc., Consolidated Rail Corporation, and CRR Holdings LLC (incorporated by reference to Exhibit 10.2 to Form 8-K dated June 11, 1999)

(10.3) Amendment No. 2, dated as of June 1, 1999, to the Transaction Agreement, dated June 10, 1997, by and among CSX Corporation, CSX Transportation, Inc., Norfolk Southern Corporation, Norfolk Southern Railway Company, Conrail Inc., Consolidated Rail Corporation, and CRR Holdings, LLC (incorporated by reference to Exhibit 10.3 to Form 8-K dated June 11, 1999)

(10.4) Amendment No. 3, dated as of August 1, 2000, to the Transaction Agreement by and among CSX Corporation, CSX Transportation, Inc., Norfolk Southern Corporation, Norfolk Southern Railway Company, Conrail Inc., Consolidated Rail Corporation, and CRR Holdings LLC.

(10.5) Operating Agreement, dated as of June 1, 1999, by and between New York Central Lines LLC and CSX Transportation, Inc. (incorporated by reference to Exhibit 10.4 to Form 8-K dated June 11, 1999)

(10.6) Shared Assets Area Operating Agreement for North Jersey, dated as of June 1, 1999, by and among Consolidated Rail Corporation, CSX Transportation, Inc., and Norfolk Southern Railway Company, with exhibit thereto (incorporated by reference to Exhibit 10.5 to Form 8-K dated June 11, 1999)

(10.7) Shared Assets Area Operating Agreement for Southern Jersey/Philadelphia, dated as of June 1, 1999, by and among Consolidated Rail Corporation, CSX Transportation, Inc., and Norfolk Southern Railway Company, with exhibit thereto (incorporated by reference to Exhibit 10.6 to Form 8-K dated June 11, 1999)

(10.8) Shared Assets Area Operating Agreement for Detroit, dated as of June 1, 1999, by and among Consolidated Rail Corporation, CSX Transportation, Inc., and Norfolk Southern Railway Corporation, with exhibit thereto (incorporated by reference to Exhibit 10.7 to Form 8-K dated June 11, 1999)

(10.9) Monongahela Usage Agreement, dated as of June 1, 1999, by and among CSX Transportation, Inc., Norfolk Southern Railway Company, Pennsylvania Lines LLC, and New York Central Lines LLC, with exhibit thereto (incorporated by reference to Exhibit 10.8 to Form 8-K dated June 11, 1999)

(21) Omitted in accordance with General Instruction I(2)(c)

(24)* Powers of Attorney

(b) Reports on Form 8-K

None

* Filed Herewith

Signatures

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on the 12th day of March, 2002.

CSX TRANSPORTATION, INC.

/s/ JAMES L. ROSS
James L. Ross
(Principal Accounting Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Signatures	Title
/s/ John W. Snow John W. Snow*	Chairman of the Board and Director
/s/ Allan F. Crown Allan F. Crown*	Executive Vice President Transportation and Director
/s/ Mark G. Aron Mark G. Aron*	Director
/s/ Andrew B. Fogarty Andrew B. Fogarty*	Director
/s/ P. Michael Giftos P. Michael Giftos*	Executive Vice-President and Chief Commercial Officer and Director
/s/ Paul R. Goodwin Paul R. Goodwin*	Director
/s/ Michael J. Ward Michael J. Ward*	President (Principal Executive Officer) and Director
/s/ Frederick J. Favorite Frederick J. Favorite*	Senior Vice-President-Finance (Principal Finance Officer)

*By: /s/ Rachel Geiersbach
Rachel Geiersbach
Attorney-in-Fact

CSX TRANSPORTATION, INC. AND SUBSIDIARIES
Index to Consolidated Financial Statements

	Page
Report of Independent Auditors	11
CSX Transportation, Inc. and Subsidiaries	
Consolidated Financial Statements and Notes to Consolidated Financial Statements Submitted Herewith:	
Consolidated Statement of Earnings - Fiscal Years Ended December 28, 2001, December 29, 2000 and December 31, 1999	12
Consolidated Statement of Cash Flows - Fiscal Years Ended December 28, 2001, December 29, 2000 and December 31, 1999	13
Consolidated Statement of Financial Position - December 28, 2001 and December 29, 2000	14
Consolidated Statement of Retained Earnings Fiscal Years Ended December 28, 2001, December 29, 2000 and December 31, 1999	15
Notes to Consolidated Financial Statements	16

REPORT OF ERNST & YOUNG LLP, INDEPENDENT AUDITORS

To the Shareholder and Board of Directors
of CSX Transportation, Inc.

We have audited the accompanying consolidated statements of financial position of CSX Transportation, Inc. and subsidiaries as of December 28, 2001 and December 29, 2000, and the related consolidated statements of earnings, cash flows, and retained earnings for each of the three fiscal years in the period ended December 28, 2001. These financial statements are the responsibility of the company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of CSX Transportation, Inc. and subsidiaries at December 28, 2001 and December 29, 2000, and the consolidated results of their operations and their cash flows for each of the three fiscal years in the period ended December 28, 2001, in conformity with accounting principles generally accepted in the United States.

/s/ ERNST & YOUNG LLP

Jacksonville, Florida
February 13, 2002

CSX TRANSPORTATION, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF EARNINGS
(Millions of Dollars)

	Fiscal Years Ended		
	December 28, 2001	December 29, 2000	December 31, 1999
OPERATING REVENUE			
Merchandise	$ 3,460	$ 3,513	$ 3,238
Automotive	794	869	760
Coal, Coke and Iron Ore	1,739	1,623	1,565
Other	89	70	60
Total	6,082	6,075	5,623
OPERATING EXPENSE			
Labor and Fringe Benefits	2,464	2,463	2,225
Materials, Supplies and Other	1,100	1,103	1,029
Conrail Operating Fee, Rent and Services	353	382	249
Related Party Service Fees	186	214	287
Building & Equipment Rent	413	517	495
Depreciation	522	494	468
Fuel	525	577	317
New Orleans Litigation Provision	60	-	-
Workforce Reduction Program	-	-	53
Total	5,623	5,750	5,123
OPERATING INCOME	459	325	500
Other Expense, net	5	35	51
Interest Expense, net	130	120	77
EARNINGS BEFORE INCOME TAXES	324	170	372
Income Tax Expense	121	73	159
NET EARNINGS	$ 203	$ 97	$ 213

See accompanying Notes to Consolidated Financial Statements.

CSX TRANSPORTATION, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF CASH FLOWS
(Millions of Dollars)

	Fiscal Years Ended		
	December 28, 2001	December 29, 2000	December 31, 1999
OPERATING ACTIVITIES			
Net Earnings	$ 203	$ 97	$ 213
Adjustments to Reconcile Net Earnings to Net Cash Provided			
Depreciation	522	494	468
Deferred Income Taxes	131	100	155
Workforce Reduction Program	-	-	53
Other Operating Activities	6	(4)	15
Changes in Operating Assets and Liabilities			
Accounts and Notes Receivable	2	173	(467)
Redemption of Accounts Receivable	(28)	(4)	310
Other Current Assets	(20)	(37)	77
Accounts Payable	20	(199)	284
Other Current Liabilities	11	(144)	87
Net Cash Provided by Operating Activities	847	476	1,195
INVESTING ACTIVITIES			
Property Additions	(848)	(822)	(1,299)
Short-term Investments	(220)	-	-
Other Investing Activities	(4)	(2)	47
Net Cash Used by Investing Activities	(1,072)	(824)	(1,252)
FINANCING ACTIVITIES			
Long-term Debt Issued	-	185	284
Long-term Debt Repaid	(185)	(102)	(107)
Advances from CSX	619	446	-
Cash Dividends Paid to Affiliate	(212)	(220)	(219)
Other Financing Activities	2	31	(42)
Net Cash Provided (Used) by Financing Activities	224	340	(84)
Net Decrease in Cash and Cash Equivalents	(1)	(8)	(141)
CASH AND CASH EQUIVALENTS			
Cash and Cash Equivalents at Beginning of Period	28	36	177
Cash and Cash Equivalents at End of Period	$ 27	$ 28	$ 36
SUPPLEMENTAL CASH FLOW INFORMATION			
Interest Paid – Net of Amounts Capitalized	$ 98	$ 103	$ 75
Income Taxes Paid	$ 59	$ 5	$ 5

See accompanying Notes to Consolidated Financial Statements.

CSX TRANSPORTATION, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF FINANCIAL POSITION
(Millions of Dollars)

	December 28, 2001	December 29, 2000
ASSETS		
Current Assets		
Cash and Cash Equivalents	$ 27	$ 28
Short-term Investments	220	-
Accounts Receivable	289	271
Notes Receivable	62	3
Materials and Supplies	181	168
Deferred Income Taxes	142	109
Income Taxes Receivable	78	63
Other Current Assets	32	31
Total Current Assets	1,031	673
Properties	16,644	16,395
Accumulated Depreciation	(4,427)	(4,518)
Properties-Net	12,217	11,877
Affiliates and Other Companies	198	200
Other Long-term Assets	567	547
Total Assets	$ 14,013	$ 13,297
LIABILITIES		
Current Liabilities		
Accounts Payable	$ 820	$ 849
Labor and Fringe Benefits Payable	320	311
Casualty, Environmental and Other Reserves	178	177
Current Maturities of Long-term Debt	170	108
Income and Other Taxes Payable	192	120
Due to Parent Company	1,107	462
Due to Affiliate	125	125
Other Current Liabilities	196	180
Total Current Liabilities	3,108	2,332
Casualty, Environmental and Other Reserves	532	578
Long-term Debt	1,033	1,156
Deferred Income Taxes	3,250	3,085
Other Long-term Liabilities	577	624
Total Liabilities	8,500	7,775
SHAREHOLDER'S EQUITY		
Common Stock, $20 Par Value:		
Authorized 10,000,000 Shares;		
Issued and Outstanding 9,061,038 Shares	181	181
Other Capital	1,380	1,380
Retained Earnings	3,952	3,961
Total Shareholder's Equity	5,513	5,522
Total Liabilities and Shareholder's Equity	$ 14,013	$ 13,297

See accompanying Notes to Consolidated Financial Statements.

CSX TRANSPORTATION, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF RETAINED EARNINGS
(Millions of Dollars)

	December 28, 2001	December 29, 2000	December 31, 1999
Beginning Balance	$ 3,961	$ 4,084	$ 4,090
Net Earnings	203	97	213
Dividends – Common	(212)	(220)	(219)
Ending Balance	$ 3,952	$ 3,961	$ 4,084

See accompanying Notes to Consolidated Financial Statements.

NOTE 1. SIGNIFICANT ACCOUNTING POLICIES

Nature of Operations

CSX Transportation, Inc. (CSXT) is a rail freight transportation company operating a system composed of approximately 23,000 route miles of track in 23 states, the District of Columbia and two Canadian provinces. Rail shipments include merchandise traffic, automobiles and related products, and coal, coke and iron ore. Merchandise traffic accounted for 57% of rail revenue in 2001, while automotive traffic accounted for 13% and coal, coke and iron ore accounted for 29%. Merchandise traffic includes chemicals, paper and forest products, agricultural products, minerals, metals, phosphates and fertilizer, and food and consumer products. Coal shipments originate principally from mining locations in the eastern United States and primarily supply domestic utility and export markets.

CSXT is a wholly-owned subsidiary of CSX Corporation (CSX).

Principles of Consolidation

The consolidated financial statements include CSXT and its majority-owned subsidiaries. All significant intercompany accounts and transactions have been eliminated. Investments in companies that are not majority-owned are carried at either cost or equity, depending on the extent of control.

Fiscal Year

CSXT follows a 52/53 week fiscal reporting calendar. Fiscal years 2001 and 2000 consisted of 52 weeks. Fiscal year 1999 consisted of 53 weeks. A 52-week fiscal year consists of four 13-week quarters; a 53-week year reports an extra week in the first quarter.

Cash and Cash Equivalents

Cash and cash equivalents primarily consist of cash in banks and short-term investments with an original maturity of less than 3 months.

Short-term Investments

Included in short-term investments is $220 million of deposits relating to the New Orleans case discussed in Note 14.

Materials and Supplies

Materials and supplies consist primarily of fuel and items for maintenance of property and equipment, and are carried at average cost.

Properties

All properties are stated at cost, less an allowance for accumulated depreciation. Track-related structures and rolling stock are depreciated using the group-life method over estimated useful lives of three to 50 years.

NOTE 1. SIGNIFICANT ACCOUNTING POLICIES, Continued

Properties, Continued

Regulations enforced by the Surface Transportation Board (STB) of the U.S. Department of Transportation require periodic formal studies of ultimate service lives for all railroad assets. Resulting service life estimates are subject to review and approval by the STB. For retirements or disposals of depreciable rail assets that occur in the ordinary course of business, the asset cost (net of salvage value or sales proceeds) is charged to accumulated depreciation and no gain or loss is recognized. For retirements or disposals of depreciable non-operating property, and for all dispositions of land, gains or losses are recognized at the time of disposal. Expenditures that significantly increase asset values or extend useful lives are capitalized. Repair and maintenance expenditures are charged to operating expense when the work is performed.

Properties and other long-lived assets are reviewed for impairment whenever events or business conditions indicate the carrying amount of such assets may not be fully recoverable. Initial assessments of recoverability are based on estimates of undiscounted future net cash flows associated with an asset or group of assets. Where impairment is indicated, assets are evaluated and their carrying amount is reduced to fair value based on discounted net cash flows or other estimates of fair value.

Revenue & Expense Recognition

Transportation revenue and expense is recognized proportionately as freight moves from origin to destination. Other revenue and expense, which relates to switching, demurrage and incidental service charges, as well as interline switching settlements, is recognized when the service is performed.

Environmental Costs

Environmental costs are charged to expense when they relate to an existing condition caused by past operations and do not contribute to current or future revenue generation. Liabilities are recorded when CSXT's responsibility for environmental remedial efforts is deemed probable, and the costs can be reasonably estimated. Generally, the timing of these accruals coincides with the completion of a feasibility study or CSXT's commitment to a formal plan of action.

Common Stock and Other Capital

There have been no changes in common stock during the last three years.

Casualty Reserve Management

CSXT incurs claims for occupational injuries, personal injuries and accidents. Casualty reserves are estimated based upon the first reporting of an accident or personal injury, and updated as information develops. Liabilities for accidents are based upon the type and severity of the injury or claim and the use of current trends and historical data. The company believes it has recorded liabilities in sufficient amounts to cover all identified claims, and estimates of incurred, but not reported, personal injury and accident claims. Unreported occupational injuries are not subject to reasonable estimation, thus no provision is made for incurred, but not reported occupation injuries. Occupational injury, personal injury and accident liabilities amount to $435 million and $457 million at December 28, 2001 and December 29, 2000, respectively.

NOTE 1. SIGNIFICANT ACCOUNTING POLICIES, Continued

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires that management make estimates in reporting the amounts of certain revenues and expenses for each fiscal year and certain assets and liabilities at the end of each fiscal year. Actual results may differ from those estimates. Significant estimates must be made in determining litigation, arbitration, casualty and environmental reserves.

Prior-Year Data

Certain prior-year data have been reclassified to conform to the 2001 presentation.

NOTE 2. INTEGRATED RAIL OPERATIONS WITH CONRAIL

Background

CSX and Norfolk Southern Corporation (Norfolk Southern) completed the joint acquisition of Conrail Inc. (Conrail) in May 1997. Conrail owns the primary freight railroad system serving the Northeastern United States, and its rail network extends into several midwestern states and into Canada. CSX and Norfolk Southern, through a jointly owned acquisition entity, hold economic interests in Conrail of 42% and 58%, respectively, and voting interests of 50% each. CSX and Norfolk Southern received regulatory approval from the STB to exercise joint control over Conrail in August 1998, and their respective rail subsidiaries subsequently began integrated operations over allocated portions of the Conrail lines in June 1999.

CSXT and Norfolk Southern Railway Company (Norfolk Southern Railway), the rail subsidiary of Norfolk Southern, operate their respective portions of the Conrail system pursuant to various operating agreements that took effect on June 1, 1999. Under these agreements, the railroads pay operating fees to Conrail for the use of right-of-way and rent for the use of equipment. Conrail continues to provide rail services in certain shared geographic areas for the joint benefit of CSXT and Norfolk Southern Railway for which it is compensated on the basis of usage by the respective railroads. The majority of Conrail's operations workforce transferred to CSXT or Norfolk Southern Railway, although certain operations personnel, as well as certain management and administrative employees, remain at Conrail to oversee its ongoing business activities.

NOTE 2. INTEGRATED RAIL OPERATIONS WITH CONRAIL, Continued

CSXT's Accounting for its Integrated Rail Operations With Conrail

Upon integration, substantially all of Conrail's customer freight contracts were assumed by CSXT and Norfolk Southern Railway. As a result, beginning June 1, 1999, CSXT's operating revenue includes revenue from traffic previously moving on Conrail lines. Operating expenses reflect corresponding increases for costs incurred to handle the new traffic and operate the former Conrail lines. Effective June 1, 1999, operating expenses also include an expense category, "Conrail Operating Fee, Rent and Services," which reflects payments to Conrail for the use of right-of-way and equipment, as well as charges for transportation, switching and terminal services provided by Conrail in the shared areas operated for the joint benefit of CSXT and Norfolk Southern Railway.

As a result of the integration, a number of employees' positions at Conrail were eliminated and certain duplicate facilities were closed. Under the agreements among the parties, CSXT and Norfolk Southern Railway assumed various obligations related to these actions. During 2001, 2000, and 1999, CSXT incurred approximately $35, $42, and $66 million, respectively, of costs related to separation and relocation of Conrail employees and for lease payments on certain Conrail facilities no longer being used after the integration. These costs are reflected in "Materials, Supplies and Other" expense in CSXT's consolidated statement of earnings.

Transactions With Conrail

The agreement under which CSXT operates its allocated portion of the Conrail route system has an initial term of 25 years and may be renewed at CSXT's option for two five-year terms. Operating fees paid to Conrail under the agreement are subject to adjustment every six years based on the fair value of the underlying system. Lease agreements for the Conrail equipment operated by CSXT cover varying terms. CSXT is responsible for all costs of operating, maintaining, and improving the routes and equipment under these agreements. Future minimum payments to Conrail under the operating, equipment, and shared area agreements total $259 million for 2002, $256 million for 2003, $262 million for 2004, $255 million for 2005, $245 million for 2006 and $4 billion for years after 2006.

At December 28, 2001 and December 29, 2000, CSXT had amounts payable to Conrail of approximately $88 million and $127 million, respectively, representing expenses incurred under the operating, equipment, and shared area agreements.

NOTE 3. WORKFORCE REDUCTION PROGRAM

CSXT recorded a charge of $53 million, $32 million after tax, in the fourth quarter of 1999 to recognize the cost of a program to reduce its non-union workforce by approximately 725 positions. A voluntary early retirement program completed in December 1999 accounted for approximately 640 of the position reductions, with the remainder achieved through a combination of involuntary terminations and normal attrition. Approximately 75% of the retirements and separations occurred by the end of 1999, and the remainder occurred over the first half of fiscal year 2000. Early retirement benefits offered under the voluntary program accounted for $20 million of the charge and were paid from CSX's pension and postretirement benefit plans. Separation benefits were paid from cash generated by operations. Approximately half of the separation benefits were paid in 1999, with the remainder in 2000.

The company also completed a smaller, non-voluntary program that was announced in late 2000 and continued through 2001. This program resulted in approximately 220 position reductions. Expense of $5 million was recorded in each of 2001 and 2000.

NOTE 4. SUPPLEMENTAL CONSOLIDATED STATEMENT OF EARNINGS FINANCIAL DATA.

Operating expense includes the following:

	2001	2000	1999
Selling, General and Administrative Expense	$911	$731	$935

NOTE 5. OTHER EXPENSE, Net

	2001	2000	1999
Income from Real Estate Operations[a]	$ (83)	$ (47)	$ (66)
Net Losses from Accounts Receivable Sold	78	77	63
Conrail Transition Expenses	-	-	67
Miscellaneous	10	5	(13)
Total	$ 5	$ 35	$ 51

(a) Gross revenue from real estate operations was $114 million, $77 million and $95 million in 2001, 2000 and 1999, respectively.

NOTE 6. INCOME TAXES

Income tax expense information is as follows:

	2001	2000	1999
Current			
Federal	$ (11)	$ (33)	$ 15
State and Foreign	1	6	(11)
Total	(10)	(27)	4
Deferred			
Federal	117	85	94
State	14	15	61
Total	131	100	155
Total Expense	$ 121	$ 73	$ 159

Income tax expense reconciled to the tax computed at statutory rates is as follows:

	2001		2000		1999	
Tax at Statutory Rates	$ 113	35%	$ 60	35%	$ 130	35%
State Income Taxes	10	3	13	8	33	9
Other	(2)	(1)	-	-	(4)	(1)
Total Expense	$ 121	37%	$ 73	43%	$ 159	43%

Deferred state income tax expense in 1999 includes $27 million for the increase in the company's effective deferred state income tax rate, which is applied to CSXT's cumulative temporary differences, as a result of the sale of certain CSX assets.

The significant components of deferred tax assets and liabilities include:

	December 28, 2001	December 29, 2000
Deferred Tax Assets		
Productivity/Restructuring Charges	$ 102	$ 107
Employee Benefit Plans	97	136
Other	429	360
Total	628	603
Deferred Tax Liabilities		
Accelerated Depreciation	3,451	3,291
Other	285	288
Total	3,736	3,579
Net Deferred Tax Liabilities	$ 3,108	$ 2,976

NOTE 6. INCOME TAXES, Continued

CSXT and its subsidiaries are included in the consolidated federal income tax return filed by CSX. The consolidated current federal income tax expense or benefit is allocated to CSXT and its subsidiaries as though CSXT had filed a separate consolidated federal return. At December 28, 2001 and December 29, 2000, approximately $110 million and $45 million of income taxes due to CSX were included in Other Current Liabilities, respectively.

Examinations of the federal income tax returns of CSX and its principal subsidiaries have been completed through 1990. Returns for 1991 through 1998 are currently under examination. Management believes adequate provision has been made for any adjustments that might be assessed.

NOTE 7. RELATED PARTIES

At December 28, 2001, CSXT had a $1.1 billion deficit balance relating to CSXT's participation in the CSX cash management plan, which is included in Due to Parent Company in the statement of financial position. At December 29, 2000, CSXT had a $446 million deficit balance under the terms of the cash management plan. CSXT incurred interest (expense)/income of $(30) million, $(13) million, and $3 million in 2001, 2000, and 1999, respectively, relating to CSXT's participation in the plan. These amounts are included in interest expense on the statement of earnings. Under this plan, excess cash is advanced to CSX for investment and CSX makes cash funds available to its subsidiaries as needed for use in their operations. Depending on the position, CSXT and CSX are committed to repay all amounts due each other on demand should circumstances require. The companies are charged for borrowings or compensated for investments based on returns earned by the plan portfolio. The average borrowing rate for the year 2001 was 3.36%

Related Party Service Fees expense consists of amounts related to a management service fee charged by CSX; data processing related charges from CSX Technology, Inc. (CSX Technology); the reimbursement, under an operating agreement, from CSX Intermodal, Inc. (CSXI), for costs incurred by CSXT related to intermodal operations; charges from Total Distribution Services, Inc. (TDSI), for services provided at automobile ramps; and charges from TRANSFLO Terminal Services, Inc. (TRANSFLO) for services provided at bulk commodity facilities. The management service fee charged by CSX represents compensation for certain corporate services provided to CSXT. These services include, but are not limited to, development of corporate policy and long-range strategic plans, allocation of capital, placement of debt, maintenance of employee benefit plans, internal audit and tax administration. The fee is calculated as a percentage of CSX's investment in CSXT. The data processing related charges are compensation to CSX Technology for the development, implementation and maintenance of computer systems, software and associated documentation for the day-to-day operations of CSXT. CSX Technology, CSXI, TDSI, and TRANSFLO are wholly-owned subsidiaries of CSX.

NOTE 7. RELATED PARTIES, Continued

CSXT and CSX Insurance Company (CSX Insurance), a wholly-owned subsidiary of CSX, have entered into a loan agreement whereby CSXT may borrow up to $125 million from CSX Insurance. The loan is payable in full on demand. At December 28, 2001, and December 29, 2000, $125 million was outstanding under the agreement. Interest on the loan is payable monthly at .45% over the LIBOR rate, and was 2.563% at December 28, 2001 and 7.065% at December 29, 2000. Interest expense related to the loan was $6 million, $7 million and $5 million for the fiscal years ended December 28, 2001, December 29, 2000, and December 31, 1999, respectively.

CSXT participates with CSX Lines, LLC (CSX Lines), a wholly-owned subsidiary of CSX, in four sale-leaseback arrangements. Under these arrangements, CSX Lines sold equipment to a third party and CSXT leased the equipment and assigned the lease to CSX Lines. CSX Lines is obligated for all lease payments and other associated equipment expenses. If CSX Lines defaults on its obligations under the arrangements, CSXT would assume the asset lease rights and obligations of $51 million at December 28, 2001.

NOTE 8. ACCOUNTS RECEIVABLE

CSXT has an ongoing agreement to sell without recourse, on a revolving basis each month, an undivided percentage ownership interest in all rail freight accounts receivable to CSX Trade Receivables Corporation (CTRC), a wholly-owned subsidiary of CSX. Accounts receivable sold under this agreement totaled $966 million at December 28, 2001 and $947 million at December 29, 2000. In addition, through November 2001, CSXT had a revolving agreement with a financial institution to sell with recourse on a monthly basis an undivided percentage ownership interest in all miscellaneous accounts receivable. Accounts receivable sold under this agreement was $47 million at December 29, 2000. The sale of receivables have been reflected as reductions of "Accounts Receivable" in the consolidated statement of financial position. The net losses associated with sales of receivables were $78 million, $77 million, and $63 million for the fiscal years ended December 28, 2001, December 29, 2000, and December 31, 1999, respectively.

CSXT has retained the responsibility for servicing accounts receivable sold to CTRC. The average servicing period is approximately one month. No servicing asset or liability has been recorded since the fees CSXT receives for servicing the receivables approximates the related costs.

NOTE 9. PROPERTIES

	December 28, 2001		
	Cost	Accumulated Depreciation	Net
Road	$ 11,035	$ 2,343	$ 8,692
Equipment	5,467	2,077	3,390
Other	142	7	135
Total	$ 16,644	$ 4,427	$ 12,217

	December 29, 2000		
	Cost	Accumulated Depreciation	Net
Road	$ 10,718	$ 2,423	$ 8,295
Equipment	5,532	2,093	3,439
Other	145	2	143
Total	$ 16,395	$ 4,518	$ 11,877

NOTE 10. CASUALTY, ENVIRONMENTAL AND OTHER RESERVES [a]

Activity relating to casualty, environmental and other reserves is as follows:

	Casualty Reserves	Environmental Reserves	Separation Liabilities	Total
Balance December 25, 1998	$ 335	$ 75	$ 285	$ 695
Charged to Expense	266	3	-	269
Payments and Other Reductions	(166)	(25)	(16)	(207)
Balance December 31, 1999	435	53	269	757
Charged to Expense	209	-	-	209
Payments	(187)	(12)	(12)	(211)
Balance December 29, 2000	457	41	257	755
Charged to Expense	155	1	-	157
Payments	(177)	(10)	(14)	(202)
Balance December 28, 2001	$ 435	$ 32	$ 243	$ 710

(a) Balances include current portion of casualty and environmental reserves and separation liabilities, respectively, of $148 million, $15 million and $15 million at December 28, 2001, $147 million, $15 million and $15 million at December 29, 2000 and $146 million, $20 million and $15 million at December 31, 1999.

NOTE 10. CASUALTY, ENVIRONMENTAL AND OTHER RESERVES, Continued

CSXT incurs claims for occupational injuries, personal injuries and accidents. Casualty reserves are estimated based upon the first reporting of an accident or personal injury and updated as information develops. Liabilities for accidents are based upon the type and severity of the injury or claim and the use of current trends and historical data. The company believes it has recorded liabilities in sufficient amounts to cover all identified claims and an estimate of incurred, but not reported personal injury and accident claims. Unreported occupational injuries are not subject to reasonable estimation, thus no provision is made for incurred, but not reported occupation injuries.

Separation liabilities at December 28, 2001 relate to productivity charges recorded in 1991 and 1992 to provide for the estimated costs of implementing workforce reductions, improvements in productivity and other cost reductions. The remaining liabilities are expected to be paid out over the next 15 to 20 years.

NOTE 11. LONG-TERM DEBT

Type and Maturity Date	Average Interest Rates at Dec. 28, 2001	Dec. 28, 2001	Dec. 29, 2000
Equipment Obligations (2002-2015)	7 %	$ 950	$ 1,038
Mortgage Bonds (2002-2003)	3 %	55	56
Capital Leases and Other Obligations (2002-2021)	7 %	198	170
Total		1,203	1,264
Less Debt Due Within One Year		170	108
Total Long-Term Debt		$ 1,033	$ 1,156

CSXT has long-term debt maturities for 2002 through 2006 aggregating $170 million, $196 million, $107 million, $110 million and $106 million, respectively.

A portion of the properties and certain other assets of CSXT and its subsidiaries are pledged as security for various long-term debt issues.

NOTE 12. FAIR VALUE OF FINANCIAL INSTRUMENTS

Fair values of the company's financial instruments are estimated by reference to quoted prices from market sources and financial institutions, as well as other valuation techniques. At December 28, 2001, the fair value of long-term debt, including current maturities, was $1.27 billion, compared with a carrying amount of $1.2 billion. At December 29, 2000, the fair value of long-term debt, including current maturities, was $1.28 billion, compared with a carrying amount of $1.26 billion. The fair value of long-term debt has been estimated using discounted cash flow analyses based upon the company's current incremental borrowing rates for similar types of financing arrangements. The fair value of all other financial instruments approximates carrying value.

NOTE 13. EMPLOYEE BENEFIT PLANS

Pension Plans

CSXT, in conjunction with CSX and its subsidiaries, sponsor defined benefit pension plans principally for salaried employees. The plans provide eligible employees with retirement benefits based principally on years of service and compensation rates near retirement. CSX allocates to CSXT a portion of the net pension expense for the CSX pension plans based on CSXT's relative level of participation. The allocated expense from the various CSX pension plans amounted to a credit of $3 million in 2001 and $2 million in 2000 and expense of $33 million in 1999. During 1999, CSXT received $109 million ($66 million after tax) in pension assets from CSX through capital contributions.

Savings Plans

CSXT maintains savings plans for virtually all full-time salaried employees and certain employees covered by collective bargaining agreements of CSXT and subsidiary companies. Expense for these plans was $13 million for 2001, $14 million for 2000 and $20 million for 1999.

Other Postretirement Benefit Plans

In addition to the CSX defined benefit pension plans, CSXT participates with CSX and other affiliates in two defined benefit postretirement plans that provide medical and life insurance benefits to most full-time salaried employees upon their retirement. The postretirement medical plan is contributory, with retiree contributions adjusted annually. The life insurance plan is non-contributory. CSX allocates to CSXT a portion of the expense for these plans based on CSXT's relative level of participation. The allocated expense amounted to $31 million in 2001, $22 million in 2000 and $20 million in 1999.

Other Plans

Under collective bargaining agreements, the company participates in a number of union-sponsored, multi-employer benefit plans. Payments to these plans are made as part of aggregate

NOTE 13. EMPLOYEE BENEFIT PLANS, Continued

Other Plans, Continued

assessments generally based on number of employees covered, hours worked, tonnage moved or a combination thereof. Total contributions of $285 million, $242 million and $168 million, respectively, were made to these plans in 2001, 2000 and 1999.

Certain officers and key employees of CSXT participate in stock purchase, performance and award plans of CSX. CSXT is allocated its share of any cost to participate in these plans.

NOTE 14. COMMITMENTS AND CONTINGENCIES.

Commitments

Lease Commitments

In addition to the agreements covering routes and equipment leased from Conrail, CSXT leases equipment from other parties under agreements with terms up to 21 years. Non-cancelable, long-term leases generally include provisions for maintenance, options to purchase at fair value and to extend the terms. At December 28, 2001, minimum equipment rentals under non-cancelable operating leases totaled approximately $124 million for 2002, $112 million for 2003, $92 million for 2004, $90 million for 2005, $83 million for 2006 and $517 million thereafter.

Rent expense on equipment operating leases, exclusive of the Conrail agreements, amounted to $413 million, $517 million, and $495 million in 2001, 2000, and 1999, respectively. Included in these amounts were net daily rental charges on railroad operating equipment of $289 million, $369 million and $341 million in 2001, 2000, and 1999, respectively.

Long-Term Operating Agreements

In addition to its contractual arrangement to operate specified portions of Conrail's rail system, CSXT has various long-term railroad operating agreements that allow for exclusive operating rights over various railroad lines. Under these agreements, CSXT is obligated to pay usage fees of approximately $10 million annually. The terms of these agreements range from 30 to 40 years.

Purchase Commitments

The company has entered into fuel purchase agreements for approximately 50% of its fuel requirements over the next twelve months. These agreements amount to approximately 294 million gallons in commitments at a weighted average of 78 cents per gallon. These contracts require the company to take monthly delivery of specified quantities of fuel at a fixed price. These contracts cannot be net settled.

The company also has a commitment under a long-term maintenance program for approximately 40% of its fleet of locomotives. The agreement expires in 2024 and totals $2.7 billion. Minimum payments under this agreement are $120 million of 2002, $124 million for 2003, $125 million for 2004, $131 million for 2005, $159 million for 2006 and $2.1 billion thereafter.

NOTE 14. COMMITMENTS AND CONTINGENCIES, Continued

Contingencies

STB Proceeding

On December 21, 2001, Duke Energy Corporation filed a complaint before the US Surface Transportation Board alleging that certain CSXT common carrier coal rates are unreasonably high. A similar complaint was filed by Duke against Norfolk Southern. At this time the outcome of the proceeding against CSXT is uncertain and would only apply to billings subsequent to 2001. CSXT is pursuing an aggressive legal strategy in its defense against this complaint.

New Orleans Tank Car Fire

In September 1997 a state court jury in New Orleans, Louisiana returned a $2.5 billion punitive damages award against CSXT. The award was made in a class-action lawsuit against a group of nine companies based on personal injuries alleged to have arisen from a 1987 tank car fire.

In October 1997 the Louisiana Supreme Court set aside the punitive damages judgment, ruling the judgment should not have been entered until all liability issues were resolved. In February 1999 the Louisiana Supreme Court issued a further decision authorizing and instructing the trial court to enter individual punitive damage judgments in favor of the 20 plaintiffs who had received awards of compensatory damages.

On November 5, 1999, the trial court issued an opinion that granted CSXT's motion for judgment notwithstanding the verdict and effectively reduced the amount of the punitive damages verdict from $2.5 billion to $850 million. A judgment reflecting the $850 million punitive award has been entered against CSXT. CSXT has obtained and posted an appeal bond.

In June 2001 the Louisiana Court of Appeal for the Fourth Circuit affirmed the judgment of the trial court, which reduced the punitive damages verdict from $2.5 billion to $850 million. CSXT moved the Louisiana Fourth Circuit Court for rehearing of certain issues raised in its appeal; that motion was denied in August 2001.

CSXT then filed with the Louisiana Supreme Court an application that the court take jurisdiction over and reverse the 1997 punitive damages award. The Louisiana Supreme Court's jurisdiction in this case is discretionary. Opposing papers were filed by counsel in October 2001. If the Louisiana Supreme Court takes jurisdiction of the case, an additional round of briefing and oral argument may precede any decision by the court.

NOTE 14. COMMITMENTS AND CONTINGENCIES, Continued

New Orleans Tank Car Fire, Continued

On November 21, 2001, CSXT announced that it had reached a proposed settlement of the litigation, subject to a fairness hearing and court approval. The amount to be paid by CSXT under the proposed settlement is $220 million to resolve all claims arising out of the 1987 fire and evacuation (whether or not included in the present class-action lawsuit). A preliminary settlement agreement between CSXT and the plaintiffs' management committee on behalf of the plaintiff case has been preliminarily approved by the trial court, and has been publicly filed. CSXT incurred a charge of $60 million before tax, $37 million after tax, in the fourth quarter of 2001 to account for the expense of the settlement, net of insurance recoveries. The trial court has set April 2, 2002, as the date for a fairness hearing at which the court will consider final approval of the settlement. CSXT expects that the settlement will be finally approved shortly after that hearing . The Louisiana Supreme Court has ordered that the proceeding before it be deferred in light of the proposed settlement.

If the proposed settlement is not approved and the litigation thereby disposed of, CSXT intends to continue to pursue an aggressive legal strategy, including the pursuit of the proceedings in the Louisiana Supreme Court and, if necessary, proceedings before the United States Supreme Court.

Other Legal Proceedings

A number of other legal actions are pending against CSXT in which claims are made in substantial amounts. While the ultimate results of these legal actions cannot be predicted with certainty, management does not currently expect that the resolution of these matters will have a material adverse effect on CSXT's consolidated results of operations, financial position or cash flows. CSXT is also party to a number of actions, the resolution of which could result in gain realization in amounts that could be material to results of operations in the quarter received.

Environmental

CSXT is a party to various proceedings involving private parties and regulatory agencies related to environmental issues. CSXT has been identified as a potentially responsible party (PRP) at 108 environmentally impaired sites that are or may be subject to remedial action under the Federal Superfund statute (Superfund) or similar state statutes. A number of these proceedings are based on allegations that CSXT, or its railroad predecessors, sent hazardous substances to the facilities in question for disposal. Such proceedings arising under Superfund or similar state statutes can involve numerous other waste generators and disposal companies and seek to allocate or recover costs associated with site investigation and cleanup, which could be substantial.

NOTE 14. COMMITMENTS AND CONTINGENCIES, Continued

Environmental, Continued

CSXT is involved in a number of administrative and judicial proceedings and other clean-up efforts at 227 sites, including the sites addressed under the Superfund statute or similar state statutes, where it is participating in the study and/or clean-up of alleged environmental contamination. The assessment of the required response and remedial costs associated with most sites is extremely complex. Cost estimates are based on information available for each site, financial viability of other PRPs, where available, and existing technology, laws and regulations. CSXT's best estimates of the allocation method and percentage of liability when other PRPs are involved are based on assessments by consultants, agreements among PRPs, or determinations by the U.S. Environmental Protection Agency or other regulatory agencies.

At least once each quarter, CSXT reviews its role, if any, with respect to each such location, giving consideration to the nature of CSXT's alleged connection to the location (i.e., generator, owner or operator), the extent of CSXT's alleged connection (i.e., volume of waste sent to the location and other relevant factors), the accuracy and strength of evidence connecting CSXT to the location, and the number, connection and financial position of other named and unnamed PRPs at the location. The ultimate liability for remediation can be difficult to determine with certainty because of the number and credit-worthiness of PRPs involved. Through the assessment process, CSXT monitors the creditworthiness of such PRPs in determining ultimate liability.

Based upon such reviews and updates of the sites with which it is involved, CSXT has recorded, and reviews at least quarterly for adequacy, reserves to cover estimated contingent future environmental costs with respect to such sites. The recorded liabilities for estimated future environmental costs at December 28, 2001 and December 29, 2000, were $32 million and $41 million, respectively. These recorded liabilities, which are undiscounted, include amounts representing CSXT's estimate of unasserted claims, which CSXT believes to be immaterial. The liability has been accrued for future costs for all sites where the company's obligation is probable and where such costs can be reasonably estimated. The liability includes future costs for remediation and restoration of sites as well as any significant ongoing monitoring costs, but excludes any anticipated insurance recoveries. The majority of the December 28, 2001, environmental liability is expected to be paid out over the next five to seven years, funded by cash generated from operations.

The company does not currently possess sufficient information to reasonably estimate the amounts of additional liabilities, if any, on some sites until completion of future environmental studies. In addition, latent conditions at any given location could result in exposure, the amount and materiality of which cannot presently be reliably estimated. Based upon information currently available, however, the company believes its environmental reserves are adequate to accomplish remedial actions to comply with present laws and regulations, and that the ultimate liability for these matters will not materially affect its overall results of operations and financial condition.

NOTE 15. QUARTERLY DATA (Unaudited)

	2001			
	1st	2nd	3rd	4th[a]
Operating Revenue	$ 1,532	$ 1,556	1,495	$ 1,499
Operating Income	98	152	124	85
Net Earnings	31	84	57	31

	2000			
	1st	2nd	3rd	4th
Operating Revenue	$ 1,515	$ 1,548	$ 1,500	$ 1,512
Operating Income	71	63	90	101
Net Earnings	22	24	27	24

(a) CSXT recorded a provision in the fourth quarter of 2001 to account for the proposed settlement of the 1987 New Orleans tank car fire litigation. This charge reduced earnings by $60 million, $37 million after-tax.

2001 OPERATING RESULTS

Traffic By Commodity

	Carloads (Thousands)		Revenue (Millions of Dollars)	
	2001	2000	2001	2000
Merchandise				
Phosphates and Fertilizer	441	486	$ 306	$ 316
Metals	325	346	406	414
Food and Consumer Products	166	161	241	224
Paper and Forest Products	478	523	633	657
Agricultural Products	372	361	501	483
Chemicals	580	598	960	993
Minerals	427	439	384	398
Government	10	11	29	28
Total Merchandise	2,799	2,925	3,460	3,513
Automotive	516	586	794	869
Coal, Coke and Iron Ore				
Coal	1,722	1,660	1,671	1,546
Coke	39	46	46	47
Iron Ore	38	49	22	30
Total Coal, Coke and Iron Ore	1,799	1,755	1,739	1,623
Total Carloads	5,114	5,266		
Other Revenue			89	70
Total Operating Revenue			$ 6,082	$ 6,075

CSXT earned $459 million of operating income in 2001 vs. $325 million in 2000. Excluding the New Orleans Litigation Provision of $60 million, operating income for 2001 was $519 million. Operating revenue remained consistent at $6.1 billion, but operating expense decreased 2% to $5.6 billion compared to $5.8 billion in 2000.

Volume decreases associated with the economic downturn affected revenue. Only volumes for food and consumer, agricultural products and coal were up on a year-over-year basis. Volume decreases were offset by an increase of 7% in coal, coke and iron ore revenues reflecting the coal volume increases, various pricing initiatives and mix improvements. Operating expenses decreased 2% between 2000 and 2001 to $5.6 billion. The $127 million decrease was made up of decreases in Conrail operating fee, rent and services; building and equipment rent; and, fuel, being offset by the New Orleans litigation provision and increases in depreciation. Building and equipment rent decreased $104 million primarily due to reduced car hire

2001 OPERATING RESULTS, Continued

as the railroad took cars offline and ran more efficiently. Fuel expense was $52 million or 9% lower in 2001 as compared to 2000. The 6 cent decrease in the average price per gallon resulted in $34 million of the decrease with $18 million attributable to lower fuel consumption. Conrail operating fees, rents and services decreased by $29 million due mostly to continued cost savings.

OTHER MATTERS

Integrated Rail Operations with Conrail

Background and Integration

On June 1, 1999, CSXT and Norfolk Southern Railway Company (Norfolk Southern Railway), Norfolk Southern's rail subsidiary, formally began integrated operations over their respective portions of the Conrail rail system. This step implemented the operating plan envisioned by CSX and Norfolk Southern Railway when they completed the joint acquisition of Conrail in May 1997 and received regulatory approval permitting them to exercise joint control over Conrail in August 1998.

Under this operating plan, CSXT added approximately 4,400 route miles of track in the Northeastern and Midwestern United States and in Canada to its existing lines concentrated in the Middle Atlantic and Southeastern United States. To service the new operations, approximately 5,600 former Conrail employees joined the company. CSXT now operates a network of approximately 23,000 route miles in 23 states, the District of Columbia, and two Canadian provinces. CSXT employs approximately 35,000 employees across the combined system.

CSXT and Norfolk Southern Railway operate their respective portions of the Conrail system pursuant to various operating agreements that took effect on June 1, 1999. Under these agreements, the railroads pay operating fees to Conrail for the use of right-of-way and rent for the use of equipment. Conrail continues to provide rail service in certain shared geographic areas for the joint benefit of CSXT and Norfolk Southern Railway for which it is compensated on the basis of usage by the respective railroads. CSX and Norfolk Southern, through a jointly-owned acquisition entity, hold economic interests in Conrail of 42% and 58%, respectively, and voting interests of 50% each.

OTHER MATTERS, Continued

Financial Effects

Upon integration, substantially all of Conrail's customer freight contracts were assumed by CSXT and Norfolk Southern Railway. As a result, beginning June 1, 1999, CSXT's operating revenue includes revenue from traffic previously moving on Conrail. Operating expenses reflect corresponding increases for costs incurred to handle the new traffic and operate the former Conrail lines. Effective June 1, 1999, operating expenses also include an expense category, "Conrail Operating Fee, Rent and Services", which reflects payments to Conrail for the use of right-of-way and equipment, as well as charges for transportation, switching and terminal services provided by Conrail in the shared areas operated for the joint benefit of CSXT and Norfolk Southern Railway.

Legal Proceedings

STB Proceeding

On December 21, 2001, Duke Energy Corporation (Duke) filed a complaint before the U.S. Surface Transportation Board alleging that certain CSXT common carrier coal rates are unreasonably high. A similar complaint was filed by Duke against Norfolk Southern. At this time the outcome of the proceeding against CSXT is uncertain and would only apply to billings subsequent to 2001. CSXT is pursuing an aggressive legal strategy in its defense against this complaint.

New Orleans Tank Car Fire Litigation

In September 1997 a state court jury in New Orleans, Louisiana returned a $2.5 billion punitive damages award against CSXT. The award was made in a class-action lawsuit against a group of nine companies based on personal injuries alleged to have arisen from a 1987 tank car fire.

In October 1997 the Louisiana Supreme Court set aside the punitive damages judgment, ruling the judgment should not have been entered until all liability issues were resolved. In February 1999 the Louisiana Supreme Court issued a further decision authorizing and instructing the trial court to enter individual punitive damage judgments in favor of the 20 plaintiffs who had received awards of compensatory damages.

On November 5, 1999, the trial court issued an opinion that granted CSXT's motion for judgment notwithstanding the verdict and effectively reduced the amount of the punitive damages verdict from $2.5 billion to $850 million. A judgment reflecting the $850 million punitive award has been entered against CSXT. CSXT has obtained and posted an appeal bond.

In June 2001 the Louisiana Court of Appeal for the Fourth Circuit affirmed the judgment of the trial court, which reduced the punitive damages verdict from $2.5 billion to $850 million. CSXT moved the Louisiana Fourth Circuit Court for rehearing of certain issues raised in its appeal; that motion was denied in August 2001.

CSXT then filed with the Louisiana Supreme Court an application that the court take jurisdiction over and reverse the 1997 punitive damages award. The Louisiana Supreme Court's jurisdiction in this case is discretionary. Opposing papers were filed by counsel in October 2001. If the Louisiana Supreme Court takes jurisdiction of the case, an additional round of briefing and oral argument may precede any decision by the court.

OTHER MATTERS, Continued

New Orleans Tank Car Litigation, Continued

On November 21, 2001, CSXT announced that it had reached a proposed settlement of the litigation, subject to a fairness hearing and court approval. The amount to be paid by CSXT under the proposed settlement is $220 million to resolve all claims arising out of the 1987 fire and evacuation (whether or not included in the present class-action lawsuit). A preliminary settlement agreement between CSXT and the plaintiffs' management committee on behalf of the plaintiff case has been preliminarily approved by the trial court, and has been publicly filed. CSXT incurred a charge of $60 million before tax, $37 million after tax, in the fourth quarter of 2001 to account for the expense of the settlement, net of insurance recoveries. The trial court has set April 2, 2002, as the date for a fairness hearing at which the court will consider final approval of the settlement. CSXT expects that the settlement will be finally approved shortly after that hearing . The Louisiana Supreme Court has ordered that the proceeding before it be deferred in light of the proposed settlement.

If the proposed settlement is not approved and the litigation thereby disposed of, CSXT intends to continue to pursue an aggressive legal strategy, including the pursuit of the proceedings in the Louisiana Supreme Court and, if necessary, proceedings before the United States Supreme Court.

Other Legal Proceedings

A number of other legal actions are pending against CSXT in which claims are made in substantial amounts. While the ultimate results of these legal actions cannot be predicted with certainty, management does not currently expect that resolution of these matters will have a material adverse effect on the consolidated results of operations, financial position or cash flows of the company. The company is also party to a number of actions, the resolution of which could result in gain realization in amounts that could be material to results of operations in the quarter received.

Casualty Reserve Management

CSXT incurs claims for occupational injuries, personal injuries and accidents. Casualty reserves are estimated based upon the first reporting of an accident or personal injury, and updated as information develops. Liabilities for accidents are based upon the type and severity of the injury or claim and the use of current trends and historical data. The company believes it has recorded liabilities in sufficient amounts to cover all identified claims, and estimates of incurred, but not reported, personal injury and accident claims. Unreported occupational injuries are not subject to reasonable estimation, thus no provision is made for incurred, but not reported occupation injuries. Occupational injury, personal injury and accident liabilities amount to $435 million and $457 million at December 28, 2001 and December 29, 2000, respectively.

Environmental Matters

CSXT generates and transports hazardous and nonhazardous waste in its current and former operations, and is subject to federal, state and local environmental laws and regulations. The company has identified 227 sites at which it is, or may be, liable for remediation costs associated with alleged contamination or for alleged violations of environmental requirements. Approximately 108 of these sites are, or may be, subject to remedial action under the federal Superfund statute or similar state statutes. Certain federal legislation imposes joint and several liability for the remediation of identified sites. Consequently, CSXT's ultimate environmental liability may include costs relating to other parties, in addition to costs relating to its own activities at each site.

OTHER MATTERS, Continued

Environmental Matters, Continued

A liability of $32 million has been accrued at December 28, 2001, for future costs at all sites where the company's obligation is probable and where such costs can be reasonably estimated. However, the ultimate cost could be higher or lower than the amounts currently provided. The liability includes future costs for remediation and restoration of sites, as well as for ongoing monitoring costs, but excludes any anticipated recoveries from third parties. Cost estimates were based on information available for each site, financial viability of other potentially responsible parties (PRPs), and existing technology, laws and regulations. CSXT believes it has made adequate provision for its ultimate share of costs at sites subject to joint and several liability. However, the ultimate liability for remediation is difficult to determine with certainty because of the number of PRPs involved, site-specific cost-sharing arrangements with other PRPs, the degree of contamination by various wastes, the scarcity and quality of data related to many of the sites and/or the speculative nature of remediation costs. The majority of the year-end 2001 environmental liability is expected to be paid out over the next five to seven years, funded by cash generated from operations. Total expenditures associated with protecting the environment and remedial environmental cleanup and monitoring efforts amounted to $32 million in 2001, compared with $36 million in 2000 and $35 million in 1999. During 2002, the company expects to incur preventive and remedial environmental expenditures in the range of $35 million to $40 million. Future environmental obligations are not expected to have a material impact on the results of operations or financial position of the company.

Workforce Reduction Program

CSXT recorded a charge of $53 million, $32 million after tax, in the fourth quarter of 1999 to recognize the cost of a program to reduce its non-union workforce by approximately 725 positions. A voluntary early retirement program completed in December 1999 accounted for approximately 640 of the position reductions, with the remainder achieved through a combination of involuntary terminations and normal attrition. Approximately 75% of the retirements and separations occurred by the end 1999 and the remainder occurred over the first half of fiscal year 2000. Early retirement benefits offered under the voluntary program accounted for $20 million of the charge and were paid from CSX's pension and postretirement benefit plans. Separation benefits were paid from cash generated by operations. Approximately half of the separation benefits were paid in 1999 with the remainder in 2000.

The company also completed a smaller, non-voluntary program that was announced in late 2000 and continued through 2001. This program resulted in approximately 220 position reductions. Expense of $5 million was recorded in both 2001 and 2000.

OTHER MATTERS, Continued

Forward Looking Statements

Estimates and forecasts in Management's Discussion and Analysis and in other sections of this 10-K are based on many assumptions about complex economic and operating factors with respect to industry performance, general business and economic conditions and other matters that cannot be predicted accurately and that are subject to contingencies over which the company has no control. Such forward-looking statements are subject to uncertainties and other factors that may cause actual results to differ materially from the views, beliefs, and projections expressed in such statements. The words "believe," "expect," "anticipate," "project," and similar expressions signify forward-looking statements. Readers are cautioned not to place undue reliance on any forward-looking statements made by or on behalf of the company. Any such statement speaks only as of the date the statement was made. The company undertakes no obligation to update or revise any forward-looking statement.

Factors that may cause actual results to differ materially from those contemplated by these forward-looking statements include, among others, the following possibilities: (i) general economic or business conditions, either nationally or internationally, an increase in fuel prices, a tightening of the labor market or changes in demands of organized labor resulting in higher wages, or increased benefits or other costs or disruption of operations may adversely affect the businesses of the company; (ii) legislative or regulatory changes, including possible enactment of initiatives to reregulate the rail industry, may adversely affect the businesses of the company; (iii) possible additional consolidation of the rail industry in the near future may adversely affect the operations and business of the company; and (iv) changes may occur in the securities and capital markets.

Exhibit 24

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS that the undersigned director of CSX TRANSPORTATION, INC., a Virginia corporation, which is to file with the Securities and Exchange Commission, Washington, D.C., under the provisions of the Securities Act of 1934, as amended, a Form 10-K Annual Report pursuant to Section 13 of the Securities Act of 1934, hereby constitutes and appoints Rachel E. Geiersbach his true and lawful attorney-in-fact and agent, for him and his name, place and stead to sign said Form 10-K, and any and all amendments thereto, with power where appropriate to affix the corporate seal of said corporation thereto and to attest said seal, and to file said Form 10-K, and any and all amendments thereto, with all exhibits thereto, and any and all other documents in connection therewith, with the Securities and Exchange Commission, hereby granting unto said attorney-in-fact and agent full power and authority to do and perform any and all acts and things requisite and necessary to be done in and about the premises as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent may lawfully do or cause to be done by virtue hereof.

IN WITNESS WHEREOF, the undersigned has hereunto set his hand this 5th day of March, 2002.

/s/ John W. Snow
John W. Snow

/s/ Allan F. Crown
Allan F. Crown

/s/ Mark G. Aron
Mark G. Aron

/s/ Andrew B. Fogarty
Andrew B. Fogarty

/s/ James L Ross
James L. Ross

/s/ P. Michael Giftos
P. Michael Giftos

/s/ Paul R. Goodwin
Paul R. Goodwin

/s/ Michael J. Ward
Michael J. Ward

/s/ Frederick J. Favorite
Frederick J. Favorite

CSX TRANSPORTATION

Law Department
500 Water Street (J150)
Jacksonville, FL 32202
Phone: (904) 359-1403
FAX: (904) 359-7518

C. Keith Meiser
Senior Counsel
Admitted in Florida and Maryland

April 11, 2001

VIA OVERNIGHT MAIL
Mr. Francis X. Lyons
Regional Administrator – Region V
U.S. Environmental Protection Agency
77 West Jackson Boulevard
Chicago, IL 60604

RECEIVED
APR 13 2001
DIVISION FRONT OFFICE
Waste, Pesticides & Toxics Division
U.S. EPA – REGION 5

Re: American Chemical Service, Inc. Facility
Facility I.D. No. IND016360265

Dear Mr. Lyons:

In accordance with the Federal Regulations for Hazardous Waste Management governing financial assurance requirements relating to closure and post-closure care and liability coverage, enclosed are:

1. Financial Test Letter for the remedial activity at the American Chemical Service, Inc. Facility in Griffith, Indiana, which letter has been signed on behalf of CSX Transportation, Inc. by Frederick J. Favorite, Jr., Senior Vice President-Finance.

2. A copy of the Company's Annual Report on Form 10-K filed with the Securities and Exchange Commission which contains a copy of the Company's independent certified public accountant's report on examination of the Company's financial statements for the latest completed fiscal year, ended 2000.

3. An original signed copy of the Special Report from the Company's independent certified public accountant, Ernst & Young, comparing the selected financial data referred to in Mr. Favorite's letter with the Company's 2000 year-end financial statements.

Should the Environmental Protection Agency have any questions or require additional information on the financial assurance instruments provided you herewith, please let me know.

Very truly yours,

C. Keith Meiser

C. Keith Meiser

Enclosures

cys: Frederick J. Favorite, Jr. - J120
Senior Vice President-Finance

Marvin F. Metge, Esq.
Metge, Spitzer & Kreid
33 North LaSalle Street, Suite 2700
Chicago, IL 60602-2605

Paul J. Kurzanski
Senior Manager-Environmental Remediation

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ERNST & YOUNG

Ernst & Young LLP
Suite 1800
1 Independent Drive
Jacksonville, Florida 32202

Phone: (904) 358-2000
www.ey.com

Report of Independent Accountants On Applying Agreed-Upon Procedure

Mr. Frederick J. Favorite, Jr.
Senior Vice President–Finance
CSX Transportation, Inc.
500 Water Street
Jacksonville, Florida 32202

Dear Mr. Favorite:

We have performed the procedures, enumerated below, which were agreed to by CSX Transportation, Inc. (the Company) and the U.S. Environmental Protection Agency, solely to assist you with respect to the schedule: Part B. Closure or Post-Closure Care and Liability Coverage Alternative II to the U.S. Environmental Protection Agency (the Schedule). We were informed by officials and other personnel of the Company who have responsibility for accounting and financial matters that the Schedule is presented on the basis prescribed by Subpart H of 40 CFR Parts 264 and 265 of the permitted facilities standards of the U.S. Environmental Protection Agency in the Federal Regulations. This engagement to apply agreed-upon procedures was performed in accordance with standards established by the American Institute of Certified Public Accountants. The sufficiency of the procedures is solely the responsibility of the Company and the U.S. Environmental Protection Agency. Consequently, we make no representation regarding the sufficiency of the procedures described below either for the purpose for which this report has been requested or for any other purpose.

Our procedures and findings were as follows:

- We compared the amount on Line 7 of the Schedule, ($5,279,794,787) (which your letter dated March 27, 2002, as the Senior Vice President–Finance of CSX Transportation, Inc., Jacksonville, Florida to the U.S. Environmental Protection Agency specifies as having been derived from the independently audited, year end consolidated financial statements of CSX Transportation, Inc. for the fiscal year ended December 28, 2001), with the Company-prepared reconciliation of net assets per the 2001 audited consolidated financial statements to net tangible assets as defined in Subpart H of 40 CFR Parts 264 and 265 of the permitted

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facilities standards of the U.S. Environmental Protection Agency in the Federal Regulations, and found them to be in agreement.

- We inquired of the Company's management regarding the information included on Lines 8 and 11 of the Schedule, as applicable, and they stated in excess of 90% of the Company's assets are located in the United States.

We were not engaged to, and did not perform an audit, the objective of which would be the expression of an opinion on the Schedule. Accordingly, we do not express such an opinion. Had we performed additional procedures other matters might have come to our attention that would have been reported to you. This report relates only to the specified data on the Schedule to the U.S. Environmental Protection Agency, and does not extend to any financial statements of CSX Transportation, Inc. taken as a whole.

This report is intended solely for the information and use of CSX Transportation, Inc. and the U.S. Environmental Protection Agency and is not intended to be and should not be used by anyone other than these specified parties.

Very truly yours,

Ernst & Young LLP

March 28, 2002

CSX TRANSPORTATION

500 Water Street (J120)
Jacksonville, FL 32202
(904) 359-1738
FAX: (904) 359-7426

Frederick J. Favorite, Jr.
Senior Vice President-Finance

April 4, 2001

Mr. Francis X. Lyons, Regional Administrator
U.S. Environmental Protection Agency
Region V
77 West Jackson Boulevard
Chicago, IL 60604

Dear Sir:

I am the Chief Financial Officer of CSX Transportation, Inc., 500 Water Street, Jacksonville, Florida 32202. This letter is in support of the use of the financial test to demonstrate financial responsibility for liability coverage and closure and/or post-closure care as specified in subpart H of 40 CFR parts 264 and 265.

The firm identified above is the owner or operator of the following facilities for which liability coverage for both sudden and nonsudden accidental occurrences is being demonstrated through the financial test specified in subpart H of 40 CFR parts 264 and 265, paragraph 391-3-11-.05 of the Rules of the Georgia Department of Natural Resources, Environmental Protection Division, 9 VAC (Virginia Administrative Code) 20-60-264 and 265 of the Virginia Hazardous Waste Management Regulations, and 33-20-7.6 of the Environmental Regulations of West Virginia, (the last three incorporating by reference subpart H of 40 CFR parts 264 and 265):

American Chemical Service, Inc. Facility
Facility I.D. No. IND016360265
420 S. Colfax Avenue
Griffith, Indiana 46319

Waycross Railyard Facility
Facility I.D. No. GAD991275900
CSX Transportation, Inc.
Haines Avenue Extension
Waycross, Georgia 31501

Former Beazer East/Koppers Richmond Facility
Facility ID No. VAD003121977
CSX Transportation, Inc.
4005 Charles City Road
Richmond, Virginia 23231

Former Beazer East/Koppers Green Spring Facility
EPA I.D. No. WVD003080959
CSX Transportation, Inc.
Green Spring, West Virginia

The firm identified above guarantees, through the guarantee specified in subpart H of 40 CFR parts 264 and 265, liability coverage for both sudden and nonsudden accidental occurrences at the following facilities owned or operated by the following subsidiaries of the firm: None.

1. The firm identified above owns or operates the following facilities for which financial assurance for closure and/or post-closure care or liability coverage is demonstrated through the financial test specified in subpart H of CFR parts 264 and 265, paragraph 391-3-11-.05 of the Rules of the Georgia Department of Natural Resources, Environmental Protection Division, 9 VAC 20-60-264 and 265 of the Virginia Hazardous Waste Management Regulations, and 33-20-7.6 of the Environmental Regulations of West Virginia, (the last three incorporating by reference subpart H of 40 CFR parts 264 and 265). The current closure and/or post-closure cost estimates covered by the test are shown for each facility:

American Chemical Service, Inc. Facility
Facility I.D. No. IND016360265
420 S. Colfax Avenue
Griffith, Indiana 46319

C O S T E S T I M A T E				
UNIT	**INTERIM STATUS**		**POST-CLOSURE**	
	CLOSURE	INSPECTION AND MONITORING COSTS	CORRECTIVE ACTION PROGRAM	INSPECTION AND MONITORING COSTS
CONSENT DECREE	-0-	-0-	-0-	$1,150,000
TOTAL	-0-	-0-	-0-	$1,150,000

Waycross Railyard Facility
Facility I.D. No. GAD991275900
CSX Transportation, Inc.
Haines Avenue Extension
Waycross, Georgia 31501

C O S T E S T I M A T E				
UNIT	**INTERIM STATUS**		**POST-CLOSURE**	
	CLOSURE	DETECTION MONITORING PROGRAM	CORRECTIVE ACTION PROGRAM	20-YEARS OPERATING COSTS
OLD DRUM STORAGE AREA	COMPLETE	COMPLETE	-0-	$1,705,330
ALUM SLUDGE BASIN	COMPLETE	COMPLETE	$522,500	$2,326,786
ACID-LIME SLUDGE AREA	COMPLETE	COMPLETE	-0-	$ 776,688
LOCOMOTIVE SHOP AREA	COMPLETE	COMPLETE	-0-	$1,755,754
LOCOMOTIVE PAINT & AIR BRAKE SHOP, OLD ENGINE HOUSE AND OLD CLEANING VAT SLUDGE PITS	COMPLETE	$150,000	$522,500	$1,500,000
OLD REFUSE AREA NO.2 AND OLD RUNOFF POND AREA	COMPLETE	$150,000	$250,000	$0
TOTAL	$0	$300,000	$1,295,000	$8,064,558

Former Beazer East/Koppers Richmond Facility
Facility ID No. VAD 003121977
CSX Transportation, Inc.
4005 Charles City Road
Richmond, Virginia 23231

C O S T E S T I M A T E				
UNIT	**INTERIM STATUS**		**POST-CLOSURE**	
	CLOSURE	INSPECTION AND MONITORING COSTS	CORRECTIVE ACTION PROGRAM	INSPECTION AND MONITORING COSTS
CLOSED RCRA SURFACE IMPOUNDMENT	COMPLETE	-0-	-0-	$1,410,212
TOTAL	-0-	-0-	-0-	$1,410,212

Former Beazer East/Koppers Green Spring Facility
EPA ID No. WVD003080959
CSX Transportation, Inc.
Green Spring, West Virginia

C O S T E S T I M A T E				
UNIT	**INTERIM STATUS**		**POST-CLOSURE**	
	CLOSURE	INSPECTION AND MONITORING COSTS	CORRECTIVE ACTION PROGRAM	INSPECTION AND MONITORING COSTS
SURFACE IMPOUNDMENT (AERATION BASINS A & B)	COMPLETE	COMPLETE	-0-	$412,250
TOTAL	-0-	-0-	-0-	$412,250

2. The firm identified above guarantees, through the guarantee specified in subpart H of 40 CFR parts 264 and 265, the closure and/or post-closure care or liability coverage of the following facilities owned or operated by the guaranteed party. The current cost estimates for the closure and/or post-closure care so guaranteed are shown for each facility: None.

3. In states where EPA is not administering the financial requirements of subpart H of 40 CFR parts 264 and 265, this firm is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in Subpart H of 40 CFR parts 264 and 265. The current closure and/or post-closure cost estimates covered by such a test or guarantee are shown for each facility:

Waycross Railyard Facility
Facility I.D. No. GAD991275900
CSX Transportation, Inc.
Haines Avenue Extension
Waycross, Georgia 31501

C O S T E S T I M A T E				
UNIT	**INTERIM STATUS**		**POST-CLOSURE**	
	CLOSURE	DETECTION MONITORING PROGRAM	CORRECTIVE ACTION PROGRAM	20-YEARS OPERATING COSTS
OLD DRUM STORAGE AREA	COMPLETE	COMPLETE	-0-	$1,705,330
ALUM SLUDGE BASIN	COMPLETE	COMPLETE	$522,500	$2,326,786
ACID-LIME SLUDGE AREA	COMPLETE	COMPLETE	-0-	$776,688
LOCOMOTIVE SHOP AREA	COMPLETE	COMPLETE	-0-	$1,755,754
LOCOMOTIVE PAINT & AIR BRAKE SHOP, OLD ENGINE HOUSE AND OLD CLEANING VAT SLUDGE PITS	COMPLETE	$150,000	$522,500	$1,500,000
OLD REFUSE AREA NO.2 AND OLD RUNOFF POND AREA	COMPLETE	$150,000	$250,000	$0
TOTAL	$0	$300,000	$1,295,000	$8,064,558

Former Beazer East/Koppers Richmond Facility
Facility ID No. VAD003121977
CSX Transportation, Inc.
4005 Charles City Road
Richmond, Virginia 23231

C O S T E S T I M A T E				
UNIT	**INTERIM STATUS**		**POST-CLOSURE**	
	CLOSURE	INSPECTION AND MONITORING COSTS	CORRECTIVE ACTION PROGRAM	INSPECTION AND MONITORING COSTS
SURFACE IMPOUNDMENT	COMPLETE	-0-	-0-	$1,410,212
TOTAL	-0-	-0-	-0-	$1,410,212

Former Beazer East/Koppers Green Spring Facility
EPA ID No. WVD003080959
CSX Transportation, Inc.
Green Spring, West Virginia

C O S T E S T I M A T E				
UNIT	**INTERIM STATUS**		**POST-CLOSURE**	
	CLOSURE	INSPECTION AND MONITORING COSTS	CORRECTIVE ACTION PROGRAM	INSPECTION AND MONITORING COSTS
SURFACE IMPOUNDMENT (AERATION BASINS A & B)	COMPLETE	COMPLETE	-0-	$412,250
TOTAL	-0-	-0-	-0-	$412,250

4. The firm identified above owns or operates the following hazardous waste management facilities for which financial assurance for closure or, if a disposal facility, post-closure care, is not demonstrated either to EPA or a State through the financial test or any other financial assurance mechanism specified in subpart H of 40 CFR parts 264 and 265 or equivalent or substantially equivalent State mechanisms. The current closure and/or post-closure cost estimates not covered by such financial assurance are shown for each facility: None.

5. This firm is the owner or operator or guarantor of the following UIC facilities for which financial assurance for plugging and abandonment is required under 40 CFR part 144 and is assured through a financial test. The current closure cost estimates as required by 40 CFR 144.62 are shown for each facility: None.

This firm is required to file a Form 10-K with the Securities and Exchange Commission (SEC) for the latest fiscal year.

The fiscal year of this firm ends on December 29. The figures for the following items marked with an asterisk are derived from this firm's independently audited, year-end financial statements for the latest completed fiscal year, ended December 29, 2000.

Part B. Closure or Post-Closure Care and Liability Coverage

ALTERNATIVE II

1.	Sum of current closure and post-closure cost estimates	$ 12,632,020
2.	Amount of annual aggregate liability coverage to be demonstrated	$ 8,000,000
3.	Sum of lines 1 and 2	$ 20,632,020
4.	Current bond rating of most recent issuance and name of rating service	Baa Moody's
5.	Date of issuance of bond	January 1, 1957
6.	Date of maturity of bond	January 1, 2007
*7.	Tangible net worth	$ 5,295,437,000
*8.	Total assets in the U.S.	NA

		YES	NO
9.	Is line 7 at least $10 million?	X	
10.	Is line 7 at least 6 times line 3?	X	
*11.	Are at least 90% of assets located in the U.S.? If not, complete line 12	X	
12.	Is line 8 at least 6 times line 3?	NA	

I hereby certify that the wording of this letter is identical to the wording specified in 40 CFR 264.151(g) as such regulations were constituted on the date shown immediately below.

CSX TRANSPORTATION, INC.

By: Frederick J. Favorite, Jr.
Senior Vice President-Finance
April 4, 2001

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ERNST & YOUNG

Ernst & Young LLP
Suite 1800
1 Independent Drive
Jacksonville, Florida 32202

Phone: (904) 358-2000
www.ey.com

Report of Independent Accountants

Mr. Frederick J. Favorite, Jr.
Senior Vice President–Finance
CSX Transportation, Inc.
500 Water Street
Jacksonville, Florida 32202

Dear Mr. Favorite:

We have performed the procedures, enumerated below, which were agreed to by CSX Transportation, Inc. (the Company) and the U.S. Environmental Protection Agency, solely to assist you with respect to the schedule: Closure or Post-Closure Care and Liability Coverage Alternative II to the U.S. Environmental Protection Agency (the Schedule). We were informed by officials and other personnel of the Company who have responsibility for accounting and financial matters that the Schedule is presented on the basis prescribed by Subpart H of 40 CFR Parts 264 and 265 of the permitted facilities standards of the U.S. Environmental Protection Agency in the Federal Regulations. This engagement to apply agreed-upon procedures was performed in accordance with standards established by the American Institute of Certified Public Accountants. The sufficiency of the procedures is solely the responsibility of the Company and the U.S. Environmental Protection Agency. Consequently, we make no representation regarding the sufficiency of the procedures described below either for the purpose for which this report has been requested or for any other purpose.

Our procedures and findings were as follows:

- We have compared the amount on Line 7 of the Schedule, ($5,295,437,000) (which your letter dated April 4, 2001, as the Senior Vice President–Finance of CSX Transportation, Inc., Jacksonville, Florida to the U.S. Environmental Protection Agency specifies as having been derived from the independently audited, year end consolidated financial statements of CSX Transportation, Inc. for the fiscal year ended December 29, 2000), with the Company-prepared reconciliation of net assets per the 2000 audited consolidated financial statements to net tangible assets (rounded to the nearest thousand dollars), as defined in Subpart H of 40 CFR Parts 264 and 265 of the permitted facilities standards of the U.S. Environmental

Protection Agency in the Federal Regulations, and found them to be in agreement (rounded to the nearest thousand dollars).

- We inquired of the Company's management regarding the information included on Lines 8 and 11 of the Schedule and they stated in excess of 90% of the Company's assets are located in the United States.

We were not engaged to, and did not perform an audit, the objective of which would be the expression of an opinion on the Schedule. Accordingly, we do not express such an opinion. Had we performed additional procedures other matters might have come to our attention that would have been reported to you. This report relates only to the specified data on the Schedule to the U.S. Environmental Protection Agency, and does not extend to any financial statements of CSX Transportation, Inc. taken as a whole.

This report is intended solely for the information and use of CSX Transportation, Inc. and the U.S. Environmental Protection Agency and is not intended to be and should not be used by anyone other than these specified parties.

Very truly yours,

Ernst & Young LLP

April 6, 2001

FILE

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

105 South Meridian Street
P.O. Box 6015
Indianapolis 46206-6015
Telephone 317/232-8603

December 21, 1990

VIA CERTIFIED MAIL - P404-637-571

Mr. John Murphy
American Chemical Service, Inc.
P.O. Box 190
Griffith, Indiana 46319

Re: Reimbursement Request for
Closure Expenditures
American Chemical Service, Inc.
Griffith, Indiana
IND 016360265

Dear Mr. Murphy:

The Indiana Department of Environmental Management (IDEM) has received the November 15, 1990, letter requesting approval to decrease funds in the Trust Agreement at First National Bank, Valparaiso, Indiana for the closure of American Chemical Service's (ACS) hazardous waste management facility. At this time, it would be inappropriate for the IDEM to grant such approval. The IDEM requests that ACS maintain their present financial assurance until more information is available.

Based upon a preliminary review of the October 2, 1990, closure plan, additional information will be required. When the IDEM receives an amended closure plan and approves the estimated closure costs, the fund in the Trust Agreement must be adjusted to reflect that amount.

If you have any questions, please contact Mr. Mitch Mosier of the Plan Review and Permit Section at AC 317/232-4534.

Sincerely,

Thomas E. Linson, Chief
Hazardous Waste Management Branch
Solid and Hazardous Waste Management

MJM/go

cc: Mr. Hak Cho, U.S. EPA, Region V
Ms. Fayola Wright, U.S. EPA, Region V
Mr. Jeff Stevens

Cuffield Ungaretti Harris & Slavin

CHICAGO OFFICE:
3500 Three First National Plaza, Chicago, Illinois 60602
Telephone: 312/977-4400 · Fax: 312/977-4405

WASHINGTON OFFICE:
1747 Pennsylvania Avenue, N.W., Suite 900, Washington, D.C. 20006
Telephone: 202/872-4310 · Fax: 202/833-1274

July 12, 1990

Steve Siegel, Esq.
Assistant Regional Counsel (5CS TUB-3)
United States Environmental Protection Agency
111 West Jackson
3rd Floor
Chicago, Illinois 60604

Re: American Chemical Services CERCLA Site -- Griffith, Indiana
Our File #10615-00001

Dear Mr. Siegel:

Enclosed please find a copy of correspondence which we recently received from Maureen Johns Grimmer, Eichhorn, Eichhorn & Link, counsel for ACS, regarding ACS's inability to maintain adequate liability coverage and the continued permitting of its facility.

Very truly yours,

Andrew H. Perellis

AHP:cc
ahp0414

Enclosure

cc: Thomas M. Giller, Esq.
Ms. Elizabeth S. Kucera

EICHHORN, EICHHORN & LINK
ATTORNEYS AT LAW
200 RUSSELL STREET
P.O. BOX 6328
HAMMOND, INDIANA
46325

FREDERICK F. EICHHORN, JR.
WILLIAM H. EICHHORN
FREDERICK H. LINK
DAVID C. JENSEN
RICHARD M. SCHUMACHER
PETER L. HATTON
PAUL A. RAKE
RICHARD A. HANNING
MAUREEN JOHNS GRIMMER
CHARLES W. WEBSTER
SHERRY L. CLARKE
JOHN M. McCRUM

JEANNE B. BLUMENTHAL
DOUGLAS B. STEBBINS
LINDA J. KIBLER
PRISCILLA A. HEROCHIK

TELEPHONE
(219) 931-0560

TELECOPIER
(219) 931-5370

July 5, 1990

FILE

received
7-9-90

Mr. Andrew H. Perellis
Coffield, Ungaretti, Harris
& Slavin
3500 Three First National
35th Floor
Chicago, Illinois 60602

Re: American Chemical Service, Inc.
Our File No. 510.5264

Dear Mr. Perellis:

As you are aware, American Chemical Service, Inc. received a Complaint, Findings of Violation and Compliance Order filed August 3, 1989 from the U.S. Environmental Protection Agency concerning the Company's inability to maintain adequate liability coverage for sudden accidental occurrences for its RCRA facility pursuant to the requirements of 329 IAC 3-22-24(a). The owner or operator must maintain liability coverage for sudden accidental occurrences in the amount of at least $1,000,000 per occurrence with an annual aggregate of at least $2,000,000. In May, the Company entered into a consent agreement in which the Company agreed to stop accepting all hazardous waste and submit a closure plan if it does not secure financial assurance by September 5, 1990.

The continued permitting of the Company's RCRA facility is important to the ACS Steering Committee. The Company's inability to receive and treat liquid hazardous waste will greatly increase the cost of remediation of the site as any liquid hazardous waste would have to be sent off-site for treatment. Secondly, a RCRA permit enhances the value of the Company and thus enhances its ability to generate funds. Therefore, it is in the financial interest of each Steering Committee member for this RCRA facility to retain its permit.

Insurance companies have flatly rejected the Company's applications due to its inclusion on the Superfund list. Due to its small size the Company is unable to meet the financial test as set forth in the regulations. IDEM has given notice of their intent to deny the Company's petition for a variance of the

requirement. There are, however, alternatives available for demonstrating financial assurance.

American Chemical Service, Inc. is proposing that the Steering Committee, a single member or any combination of members provide a corporate guarantee pursuant to 40 CFR 264.147(g) and 40 CFR 264.147(a)(6) for the financial assurance required. While this has the potential to involve a significant amount of money, the Company has never received a claim from a third party for a sudden accidental occurrence and the risk of an occurrence of significant magnitude is negligible.

Such an arrangement would be structured so as not to affect the current litigation. It would though benefit the Steering Committee by allowing liquid waste treatment to continue, facilitating remediation and reducing its attendant costs, as well as allowing the Company to maintain its value. Please advise the full committee of this proposal as soon as possible and request the members to give it full consideration. I see no useful purpose to the Steering Committee being served if this facility is forced to stop receiving hazardous waste on September 5, 1990 and is closed.

I look forward to your reply.

Very truly yours,

EICHHORN, EICHHORN & LINK

By: Maureen Johns Grimmer
Maureen Johns Grimmer

MJG/slg

To Jeff Stevens

american Chemical Service, Inc.
P.O. Box 1[illegible] Griffith, Indiana 46319
(219) 924-4370 · Chicago Phone (312) 768-3400

SEP 2 9 15 AM '87

OFFICE OF SOLID AND HAZARDOUS WASTE MGMT DEM

August 31, 1987

Mr. Terry F. Gray, Chief
Plan Review and Permit Section
Hazardous Waste Management Branch
Solid and Hazardous Waste Management
Department of Environmental Management
P.O. Box 6015
Indianapolis, IN 46206-6015

Re: Financial Assurance for
Closure of Former Solid
Mixing Area.
American Chemical Service, Inc
IND 016360265

Dear Mr. Gray,

As indicated in the Reponse to Notice of Deficiency Closure Plan Review dated August 21, 1987, enclosed is copy of an updated ledger printout of the American Chemical Service, Inc. Trust Fund Number 0100000001. This printout reflects the amended closure costs for the Former Solids Mixing Area. If there are any questions, please contact me at 219/924-3144.

Very truly yours,

John J. Murphy

John J. Murphy
Vice President
American Chemical Service, Inc.

JJM/rl

Enclosre

FIRST NATIONAL BANK
VALPARAISO • PORTAGE • HEBRON
CHESTERTON • KOUTS
INDIANA
(219) 462-4161

TRUST DEPARTMENT

RUN DATE
08-27-87

FIRST NATIONAL BANK, VALPARAISO
LEDGER
FROM 08-01-87 TO 08-27-87

FIRST NATIONAL BANK, VALPARAISO
TRUSTEE
AMERICAN CHEMICAL SERVICES, INC.

NUMBER: 0100000001
DATE OPENED: 12-06-82
OFFICER: 001 - S. A. KRIEGER
BRANCH CODE: 01 - MAIN OFFICE

DATE DDDD	DESCRIPTION DDDDDDDDDDD	INVESTMENTS DDDDDDDDDDD	PRINCIPAL CASH DDDDDDDDD	INCOME CASH DDDDDD
08-03-87	********** BEGINNING BALANCE **********			
	********** PRINCIPAL INVESTMENT **********	210,575.48	0.00	0.00
08-03-87	INTEREST ON AMOUNT 567.32 FEDERATED CASH MANAGEMENT FUND # 59 U. S. GOVERNMENT OBLIGATIONS			567.32
08-04-87	PURCHASE ACM ASSET **INVESTMENTS REFER TO PRINCIPAL INVESTMENT ** FEDERATED CASH MANAGEMENT FUND # 59 U. S. GOVERNMENT OBLIGATIONS	567.32	567.32-	
08-26-87	AMERICAN CHEMICAL SERVICES DEPOSIT		21,578.00	
08-27-87	PURCHASE ACM ASSET **INVESTMENTS REFER TO PRINCIPAL INVESTMENT ** FEDERATED CASH MANAGEMENT FUND # 59 U. S. GOVERNMENT OBLIGATIONS	21,578.00	21,578.00-	
	******* INCOME TO PRINCIPAL TRANSFERS RESULTING FROM ******* ********** AUTOMATED CASH MANAGEMENT PROCESSING **********		567.32	567.32-
	********** NEW BALANCE ********** ********** PRINCIPAL INVESTMENT **********	232,720.80	0.00-	0.00

American Chemical Service, Inc.
P.O. Box 190 • Griffith, Indiana 46319
(219) 924-4370 • Chicago Phone (312) 768-3400

August 21, 1987

First National Bank-Valparaiso
P.O. Box 2147
Valparaiso, IN 46383-2147

Attn: Mr. Steve Kreiger

Dear Mr. Kreiger:

Enclosed is a deposit check for an addition to the American Chemical Service, Inc. Trust Fund. Please return an updated ledger printout reflecting this transaction.

Very Truly Yours,

James Tarpo

James Tarpo
President
American Chemical Service, Inc.

AMERICAN CHEMICAL SE. ,CE
GRIFFITH, IND. 46319

HARRIS BANK

Harris Trust and Savings Bank
Chicago, Illinois 60690

8910

2-28/710

August 24 1987

PAY The sum of $21,578 and 00 cts DOLLARS $21578.00

TO THE ORDER OF

First National Bank of Valparaiso
PO Box 2147
Valparaiso, IN 46384-2147

P

⑈008910⑈ ⑆071000288⑆ 170⑈642⑈3⑈

DELUXE CHECK PRINTERS

AMERICAN CHEMICAL SERVICE

DETACH AND RETAIN THIS STATEMENT
THE ATTACHED CHECK IS IN PAYMENT OF ITEMS DESCRIBED BELOW.
IF NOT CORRECT PLEASE NOTIFY US PROMPTLY. NO RECEIPT DESIRED.

NO 8910

DELUXE - FORM WVC-2 V-7

Addition to American Chemical Service, Inc. Trust Fund

$21,578.00

11000

James

FRED. S. JAMES & CO. OF ILLINOIS 230 West Monroe Street, Chicago, Illinois 60606 312 346-3000 Telex 255121

June 25, 1987

Mr. John J. Murphy
Vice President
American Chemical Service, Inc.
P. O. Box 190
Griffith, IN 46319

Re: General Liability Insurance
Environmental Impairment Liability
Insurance

Dear John:

This will serve to confirm our meeting and discussion of June 23.

You requested our input concerning the feasibility of providing insurance to cover your General Libility and "sudden and accidental" Environmental Impairment Liability exposures.

Based upon a review of your exposures and our previous experience with this type of coverage, it is our opinion that it would be feasible for you to establish a "captive" insurance company to provide these coverages.

The following briefly outlines the concept, mechanics, and cost of such a program:

A. CONCEPT

Insured creates a wholly-owned subsidiary insurance company, or "captive," which insures the exposures of the parent Insured and issues certificates of insurance as necessary.

B. MECHANICS

1. Insured selects a site for the domicile of the captive and fulfills the applicable pre-formation requirements of that jurisdiction, such as filing of a business plan and the public notification of intent to form an insurer.

JUN 26 '87 14:54 FRED S JAMES & CO CHGO ILL

James

2. Upon approval by the domicile, Insured capitalizes the captive in accordance with the requirements of the jurisdiction.

3. Insured purchases required underwriting, accounting and management services from captive management company.

4. Insured pays "premium" to captive to provide the desired coverages at the desired limit of liability. After payment of applicable costs and taxes, captive has balance of premium available to invest in accordance with regulations of domicile.

5. Captive issues policy and any required certificates of insurance.

6. Captive pays any losses for which it becomes liable.

7. Any necessary claim and engineering services are purchased from outside sources.

8. No other insurance company is involved, either as fronting company or reinsurer.

C. COST ESTIMATES

The following cost estimates are based on the assumption that the captive would be established in the State of Vermont. Should another domicile be selected, the costs could change somewhat, but would remain very close to those shown below. These cost estimates assume a policy with a limit of liability of $1,000,000 per occurrence and $2,000,000 in the aggregate. This single policy would be issued to provide coverage for both General Liability and Environmental Impairment Liability.

The costs shown below are estimated costs for the formation of a Vermont captive insurance company. Costs and capitalization vary somewhat by domicile, but these costs are representative of the expenses involved in the formation of a single-parent captive insurance company.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
NANCY A. MALOLEY, Commissioner

105 South Meridian Street
P.O. Box 6015
Indianapolis 46206-6015
Telephone 317-232-8603

June 16, 1987

RECEIVED
JUN 22 1987
U.S. EPA, REGION V
WASTE MANAGEMENT BRANCH
HAZARDOUS WASTE PROGRAM

VIA CERTIFIED MAIL P 395 652 409

Mr. James Tarpo, President
American Chemical Services, Inc.
P.O. Box 190
Griffith, IN 46319

Re: Letter of Warning
IND 016360265

Dear Mr. Tarpo:

Please be advised that according to U.S. EPA mandate, this Office can no longer exercise enforcement discretion by accepting a "good faith effort" standard in lieu of the liability coverage required by 320 IAC 4.1-22-24. Therefore, failure to bring this facility into compliance with 320 IAC 4.1-22-24 by August 17, 1987, will result in the referral of this matter to the Enforcement Section. If you have any questions regarding this matter, please contact me at AC 317/232-8901.

Very truly yours,

Jeffrey W. Stevens

Jeffrey W. Stevens
Legal Analyst
Solid and Hazardous Waste Management

JWS/rmw
Enclosure
cc: Ms. Sally Swanson, U.S. EPA, Region V
Mr. Bernie Orenstein, U.S. EPA, Region V

american Chemical Service, Inc.
TECHNICAL PRODUCTS
P.O. Box 190 · Griffith, Indiana 46319
(219) 924-4359

JAN 30 2 47 PM '87
OFFICE OF SOLID AND HAZARDOUS WASTE MGMT DEM

January 27, 1987

Mr. Jeffery W. Stevens
Legal Analyst
Solid and Hazardous Waste Management
Indiana Department of Environmental Mgt.
105 South Meridian Street
Indianapolis, IN 46225

Dear Mr. Stevens,

Re: American Chemical Service, Inc
IND 016360265
Financial Assurance

American Chemical Service, Inc. apologizes for overlooking the November 6, 1986 reporting deadline and hopes this letter will rectify the oversite.

As of November 6, 1986 the Principle Investment of the Financial Assurance for Closure Trust Fund (Number 0100000001) held at the First National Bank, Valparaiso was sufficient to cover the current Cost Estimate for Closure and the annual inflation adjustment for 1986. A copy of the Trust Ledger is inclosed with this letter.

On June 18, 1986, a letter was written to Mr. Terry F. Gray, Chief of the Plan Review and Permit Section (Department of Environmental Management) requesting closure approval for the Former Solids Mixing Area at American Chemical Service, Inc. The Financial Assurance for Closure Trust Fund was increased on June 16, 1986 for $2118.00 to cover the Cost Estimate for Closure of the Former Solids Mixing Area. If Additional information is requested, please contact this writer at American Chemical 219/924-3144.

Very truly yours,

John J. Murphy
Vice President
American Chemical Service

JJM/rl

FIRST NATIONAL BANK
VALPARAISO • PORTAGE • HEBRON
CHESTERTON • KOUTS
INDIANA
(219) 462-4161

TRUST DEPARTMENT

01-23-87

STATEMENT OF HOLDINGS

ACCOUNT NUMBER: 0100000001

DESCRIPTION: FIRST NATIONAL BANK, VALPARAISO
TRUSTEE
AMERICAN CHEMICAL SERVICES, INC.

SECURITY NUMBER	ASSET NAME	LOT/TYPE	SHARES/PAR VALUE	BOOK VALUE	DIV RATE	MATURITY D
00089833410	FEDERATED CASH MANAGEMENT FUND # 59 U. S. GOVERNMENT OBLIGATIONS	01/024	79,341.62	79,341.62	5.747	00-00-00
93161700275	FIRST NATIONAL BANK, VALPARAISO CERTIFICATE OF DEPOSIT #31617 DUE 03 09 87 RATE 5.50%	01/006	100,000.00	100,000.00	5.500	03-09-87

ACCOUNT TOTAL * 179,341.62

up from $164,000 in 1985

STATE OF INDIANA

DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT

INDIANAPOLIS, 46225

105 South Meridian Street

January 20, 1987

VIA CERTIFIED MAIL P 395 652 380

Mr. John J. Murphy
Vice President
American Chemical Service, Inc.
P.O. Box 190
Griffith, IN 46319

Re: IND016360265
Financial Assurance

Dear Mr. Murphy:

Our records indicate that the facility indicated above is not in compliance with the Indiana RCRA financial assurance rules for the following reason(s):

1. No information submitted on closure/post-closure cost estimate changes regarding:

   a. Change in cost estimate.

   b. Annual inflation adjustment.

2. The annual valuation of the trust, due November 6, 1986, as required by section ten of the trust, has not been received.

Failure to respond to this notice by February 19, 1987, will result in the referral of this matter to the Enforcement Section. If you have any questions regarding this, please contact me at AC 317/232-8901.

Very truly yours,

Jeffrey W. Stevens

Jeffrey W. Stevens
Legal Analyst
Solid and Hazardous Waste Management

JWS/tjd
cc: Ms. Sally K. Swanson, U.S. EPA, Region V

STATE of INDIANA

DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT

INDIANAPOLIS, 46225

105 South Meridian Street

January 20, 1987

VIA CERTIFIED MAIL P 395 652 380

Mr. John J. Murphy
Vice President
American Chemical Service, Inc.
P.O. Box 190
Griffith, IN 46319

Re: IND016360265
Financial Assurance

Dear Mr. Murphy:

Our records indicate that the facility indicated above is not in compliance with the Indiana RCRA financial assurance rules for the following reason(s):

1. No information submitted on closure/post-closure cost estimate changes regarding:

   a. Change in cost estimate.

   b. Annual inflation adjustment.

2. The annual valuation of the trust, due November 6, 1986, as required by section ten of the trust, has not been received.

Failure to respond to this notice by February 19, 1987, will result in the referral of this matter to the Enforcement Section. If you have any questions regarding this, please contact me at AC 317/232-8901.

Very truly yours,

Jeffrey W. Stevens

Jeffrey W. Stevens
Legal Analyst
Solid and Hazardous Waste Management

JWS/tjd
cc: Ms. Sally K. Swanson, U.S. EPA, Region V

American Chemical Service, Inc.
P.O. Box 190 • Griffith, Indiana 46319
(219) 924-4370 • Chicago Phone (312) 768-3400

JAN 21 2 06 PM '87
OFFICE OF SOLID
AND HAZARDOUS
WASTE MGMT
DEM

January 14, 1987

Ms. Nancy Maloley
Commissioner
Indiana Dept of Environmental Mgt.
105 South Meridian Street
Indianapolis, Indiana 46225

Dear Ms. Maloley,

Re: American Chemical Service, Inc.
Compliance Status with RCRA
Interim Status Financial Requirements·
60 Day Status Report

As of this date American Chemical Service, Inc. is still not able to renew it's Environmental Impairment Liability Insurance as required by RCRA. American Chemical Service, Inc. will continue to pursue all the available markets for EIL placement. Until such time, American Chemical Service, Inc. will continue to provide a 60 Day Status Report to the Indiana Department of Environmental Management.

Very truly yours,

John J. Murphy
Vice President
American Chemical Service, Inc.

JJM/rl

cc: Mr. Jeff Stevens
Department of Environmental Mgt.

American Chemical Service, Inc.
P.O. Box 190 • Griffith, Indiana 46319
(219) 924-4370 • Chicago Phone (312) 768-3400

March 16, 1987

Ms. Nancy Maloley
Commissioner
Indiana Dept of Environmental Mgt.
105 South Meridian Street
Indianapolis, IN 46225

Dear Ms. Maloley,

Re: American Chemical Service, Inc.
Compliance Status with RCRA
Interim Status Financial Requirements
60 Day Status Report

As of this date American Chemical Service, Inc. is still not able to renew it's Environmental Impairment Liability Insurance as required by RCRA. Please find enclosed a recent correspondence with our insurance broker, Fred S. James & Co. of Illinois. American Chemical Service, Inc. will continue to pursue all the available markets for EIL placement. Until such time, American Chemical Service, Inc. will continue to provide a 60 Day Status Report to the Indiana Department of Environmental Management.

Very truly yours,

John J. Murphy
Vice President
American Chemical Service, Inc.

JJM/rl

cc: Mr. Jeff Stevens
Department of Environmental Mgt.

TECHNICAL REVIEW SHEET
Part B Applications and
Closure/Post-Closure Plans

Name of Facility American Chemical Service Inc

EPA I.D. Number IND 016360265

Location of Facility Griffith

Type of Closure ☐ Part B ☐ Interim Status ☐ Other

CMEL Initial Evaluation Date: ____/____/____

Instructions

Below is a checklist for the review of this plan. Please provide your initials and dates of review in this area. Comments should be typewritten and attached to the sheet. After your Section's review, please return to Sheryl Atkins of the Plan Review and Permit Section.

Section (Check One)	Initials	Begin Date	End Date	Returned To Plan Reviewer
☐ Engineer				
☐ Chemist				
☐ Geologist				
☐ Attorney	skh	10-25-85	10-25-85	11-7-85

Comments No financial documents received with referral. Susan Hyndman

American Chemical Service, Inc.
P.O. Box 190 Griffith, Indiana 46319
(219) 924-4370 Chicago Phone (312) 768-3400

FEB 23 8 55 AM '87
OFFICE OF SOLID
AND HAZARDOUS
WASTE MGMT
DEM

February 20, 1987

Mr. Jeffery W. Stevens
Legal Analyst
Solid and Hazardous Waste Management
Indiana Department of Environmental Mgt
P.O. Box 6015
Indianapolis, IN 46225

Dear Mr. Stevens,

Re: American Chemical Service, Inc.
IND016360265
Financial Assurance

Please find enclosed the information you requested during our telecon today. During my review of the information, I discovered an error in the amount required in the Trust Fund. As of this date I have taken the necessary steps to correct this error. Enclosed are copies of the letter and deposit check to the First National Bank - Valparaiso. As soon as an updated ledger printout is received, I will forward a copy to your attention. If additional information is requested, please contact me at 219/924-3144.

Very truly yours,

John J. Murphy

John J. Murphy
Vice President
American Chemical Service

JJM/rl

american Chemical Service, Inc.
P.O. Box 190 • Griffith, Indiana 46319
(219) 924-4370 • Chicago Phone (312) 768-3400

February 20, 1987

First National Bank - Valparaiso
P.O. box 2147
Valparaiso, IN 46384-2147

Attn: Mr. Steve Kreiger

Dear Mr. Kreiger,

Enclosed is a deposit check for an addition to the American Chemical Service, Inc. Trust Fund. Please return an updated ledger printout reflecting this transaction.

Yours very truly,

James Tarpo

James Tarpo
President
American Cheical Service

JT/rl

AMERICAN CHEMICAL SERVICE
GRIFFITH, IND. 46319

HARRIS BANK
Harris Trust and Savings Bank
Chicago, Illinois 60690

7702

2-28
710

Feb. 19 19 87

PAY The sum of $1,739 and 69 cts DOLLARS $ 1739.69

TO THE ORDER OF
First National Bank of Valparaiso
P.O. Box 2147
Valparaiso, IN 46384-2147

P

⑈007702⑈ ⑆071000288⑆ 170⑈642⑈3⑈

DELUXE CHECK PRINTERS

AMERICAN CHEMICAL SERVICE

DETACH AND RETAIN THIS STATEMENT
THE ATTACHED CHECK IS IN PAYMENT OF ITEMS DESCRIBED BELOW.
IF NOT CORRECT PLEASE NOTIFY US PROMPTLY. NO RECEIPT DESIRED.

NO 7702

DELUXE - FORM WVC-2 V-7

Addition to American Chemical Serivce Trust Fund--------$1739.69 11000

Brings Trust to $205,924.35

RECLAIM FACILITY

Closure Cost Estimate: 320 IAC 4.1-34-5
320 IAC 4.1-47-3

The Closure Cost Estimate is based on the following assumptions:

1.) The maximum volume of hazardous waste to be processed in the Still System is as follows:

A.)	Process Piping	325 gallons
B.)	Process Pumps	4 gallons
C.)	Wet Hazardous Waste Solids	610 gallons
D.)	Stills are void of free liquids	
E.)	Solids from API Separator and the building trench	50 gallons

2.) Condensed steaming liquids generated from the decontamination procedure can be sent to the POTW.

3.) Facility equipment and personnel are available to perform the closure.

4.) Waste codes for the materials to be processed are D001, F001, F002, F003, & F005.

5.) No economic value of the reclaimed solvent collected during closure.

6.) Cost of $.27 per gallon to burn injectant at kiln.

7.) No economic value of decontaminated equipment.

8.) Labor cost to be $10.00 per hour with and overhead factor of four. Rate would be $40.00 per hour.

9.) Dispersion electrical cost is $.40 per hour.

10.) Steam decontamination cost are $8.00 per hour for 1000# of steam per hour and $1.60 per hour for 200# of steam per hour.

11.) Cooling tower cost of condensing decontaminating steam is $3.02 per hour.

The estimated closure cost will be as follows:

A.) Removal of all free liquids:

1.)	Inter connecting piping containing hazardous waste	- 16 man hours	
2.)	Transfer pumps	- 4 man hours	
3.)	Inter connecting piping containing reclaimed solvents	- 8 man hours	
	Total	- 28 man hours	$1120.00
	Injectant Liquid	- 329 gallons	$ 88.83

DEC 19 1986

B.) Removal of the wet hazardous waste solids:

1.)	Removal of the solids from all the units	- 48 man hours	
2.)	Dispersion of the solids and transferring to the Injectant Area	- 16 man hours	
3.)	Decontamination preparation	- 4 man hours	
	Total	- 68 man hours	$2720.00
	Injectant Liquid	- 1270 gallons	$ 329.40
	Despersion Electrical Costs	- 16 hrs	$ 6.40

C.) Decontamination of vessels, discharge piping and confinement equipment:

1.)	Decontaminate the stills	- 48 man hours	
2.)	Drain pipework and equipment	- 8 man hours	
3.)	Decontaminate residue transfer line	- 4 man hours	
4.)	Drain residue transfer line	- 4 man hours	
5.)	Scrape building floor trench, API Separator, disperse solids and transfer to the Injectant Area	- 32 man hours	
	Total	- 96 man hours	$3840.00
	Decontamination steam 48 hours at 1000# per hour		$ 384.00
	4 hours at 200# per hour		$ 6.40
	Condensing decontamination steam 48 hours		$ 144:96
	Injectant Liquid - 100 gallons		$ 27.00
	Dispersion Electrical Costs 2 hours		$ .80
	Total Estimated Cost		$8667.79
	Contingency Factor (20%)		$1733.56
	Funded Value of Trust		$10401.35

DEC 19 1986

AMERICAN CHEMICAL SERVICE INC. IND016360265

CLOSURE COST ESTIMATE FOR SOLIDS MIXING AREA
6-11-86

The closure cost estimate is based on the following assumptions:

1.) Maximum solids waste in the Solids Mixing Area is 21 cu.ft of material.

2.) Disposal of the solid waste to be $55.00 per drum.

3.) No economic value of the decontamination site.

4.) Labor costs to be $10.00 per hour with an overhead factor of 300% or $40.00 per hour.

CLOSURE COST ESTIMATE

1.)	Hand scraping	16 man hours @ $40.00/Hr	$ 640.00
2.)	Power brushing	24 man hours @ $40.00/Hr	960.00
3.)	Solids for disposal	3 drums @ $55.00/drum	165.00
			$1,765.00
		Contingency factor (20%)	353.00
			$2,118.00

CONTAINER STORAGE AREA
RECLAIM STORAGE AREA
INJECTANT STORAGE & BLENDING AREA

I-4 American Chemical Service Inc. IND016360265

CLOSURE COST ESTIMATE - AMENDED 12-19-86

The closure cost extimate is based on the following assumptions:

1. Maximum waste in storage tanks and container storage.
   153,700 gal. in crude solvent storage.
   16,500 gal. in container storage.
   140,000 gal. of injectant and blending stock.
   16,000 gal. of high chloride injectant blending stock.

2. Reclamation and injectant blending plants operated at present through put volumes, below maximum capacity.

3. Waste codes in inventory, only those shown in revised Part A.

4. No economic value of reclaimed solvents produced during closure.

5. Cost of 27¢ per gallon to burn injectant at kiln.

6. Disposal of high chloride blending stock to be 22¢ per pound.

7. Disposal of solid tank settings to be $55.00 per drum.

8. No economic value of decontaminated equipment.

9. Labor costs to be $10.00 per hour; an overhead factor of four.

I-4 (con't) CLOSURE COST ESTIMATE

1. Container Storage Area		
A. Pump 300 drums 24 man hours.		
B. Solids dug and combined 16 man hours.		
Total	40 man hours	$ 1,600.00
2. Reclamation Tank Farm		
A. Pumping to distillation equipment and processing into distillate and distillation bottoms.	128 man hours	5,120.00
3. Injectant and Blending Stock Tanks		
A. Injectant blended and shipped to lime company	160 man hours	6,400.00
B. Cost for 150,000 lbs at 22¢/# high chloride material shipped to incinerator (See Mr. Frank letter attached)		33,000.00
C. Lime plant fuel charge	197,365 gals	53,288.00
4. Decontamination		
A. Container storage scrape pad and sump	8 man hours	320.00
B. Reclamation tank opened and decontaminated	172 man hours	6,880.00
C. Injectant blending stock tanks opened and decontaminated	160 man hours	6,400.00
D. Injectant blend tanks combined and decontaminated	96 man hours	3,840.00
E. Total solids for disposal		
Container Area	31 drums	
Reclaim Flat Bottom Tanks	80 drums	
Reclaim Cone Bottom Tanks	15 drums	
Injectant Blend Stock Tanks	146 drums	
Blended Injectant Tanks	73 drums	
Total	345 drums @	$55.00/drum 18,975.00
F. Final decontamination of piping, pumps and tanks with water and detergent; and disposal of wash water. See Correct Maintenance letter attached		40,000.00
Total		$175,822.00
Contingency factor (10%)		17,583.00
Funded Value of Trust		$193,405.00

FIRST NATIONAL BANK
VALPARAISO • PORTAGE • HEBRON
CHESTERTON • KOUTS
INDIANA
(219) 462-4161

TRUST DEPARTMENT

RUN DATE
02-10-87

FIRST NATIONAL BANK, VALPARAISO
LEDGER

FIRST NATIONAL BANK, VALPARAISO
TRUSTEE
AMERICAN CHEMICAL SERVICES, INC.

NUMBER: 0100000001
DATE OPENED: 12-06-82
OFFICER: 001 - S. A. KRIEGER
BRANCH CODE: 01 - MAIN OFFICE

DATE	DESCRIPTION	INVESTMENTS	PRINCIPAL CASH	INCOME CASH
02-02-87	********** BEGINNING BALANCE **********		250.00	378.31
	********** PRINCIPAL INVESTMENT **********	179,341.62		
02-02-87	PURCHASE ACM ASSET **INVESTMENTS REFER TO PRINCIPAL INVESTMENT ** FEDERATED CASH MANAGEMENT FUND # 59 U. S. GOVERNMENT OBLIGATIONS	378.31	378.31-	0.00
02-09-87	ADDITIONAL DEPOSIT RECEIVED FROM AMERICAN CHEMICAL SERVICES	0.00	24,464.73	0.00
02-10-87	PURCHASE ACM ASSET **INVESTMENTS REFER TO PRINCIPAL INVESTMENT ** FEDERATED CASH MANAGEMENT FUND # 59 U. S. GOVERNMENT OBLIGATIONS	24,464.73	24,464.73-	0.00
	******* INCOME TO PRINCIPAL TRANSFERS RESULTING FROM ******* ********** AUTOMATED CASH MANAGEMENT PROCESSING **********		378.31	378.31-
	********** NEW BALANCE **********		250.00	0.00
	********** PRINCIPAL INVESTMENT **********	204,184.66		

FIRST NATIONAL BANK
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INDIANA
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TRUST DEPARTMENT

02-10-87

STATEMENT OF HOLDINGS

ACCOUNT NUMBER: 010000001

DESCRIPTION: FIRST NATIONAL BANK, VALPARAISO
TRUSTEE
AMERICAN CHEMICAL SERVICES, INC.

SECURITY NUMBER	ASSET NAME	LOT/TYPE	SHARES/PAR VALUE	BOOK VALUE	DIV RATE	MATURITY DT
00089833410	FEDERATED CASH MANAGEMENT FUND # 59 U. S. GOVERNMENT OBLIGATIONS	01/024	104,184.66	104,184.66	5.619	00-00-00
93161700275	FIRST NATIONAL BANK, VALPARAISO CERTIFICATE OF DEPOSIT #31617 DUE 03 09 87 RATE 5.50%	01/006	100,000.00	100,000.00	5.500	03-09-87

ACCOUNT TOTAL * 204,184.66

CHARLES WELTER
CHAIRMAN, PRESIDENT
& CHIEF EXECUTIVE OFFICER
JOHN REMSTER
SR. VICE PRESIDENT, CASHIER
ERIC GARRARD
VICE PRESIDENT - SR. LOAN OFFICER
WAYNE WELTER
VICE PRESIDENT & DIRECTOR OF
MARKETING AND PERSONNEL
DAVID PERRY
VICE PRESIDENT
WILLIAM J. VAUGHAN
VICE PRESIDENT - MORTGAGE LOANS
RICHARD THOMPSON
VICE PRESIDENT - AUDITOR
DONALD WIGGINS
VICE PRESIDENT
CAL SALYER
VICE PRESIDENT

FIRST NATIONAL BANK
VALPARAISO
P.O. BOX 2147
VALPARAISO, INDIANA 46384-2147
TELEPHONE 219-462-4161

DON FRY
ASST. VICE PRESIDENT OPERATIONS
DONNA J. HOWELL
ASST. OPERATIONS OFFICER
ROY COLE
ASST. VICE PRESIDENT
JACK EDDY
ASST. VICE PRESIDENT
STANLEY G. ZIHERL, JR.
COMPTROLLER & INVESTMENT OFFICER
MARY LOU HAWKINS
ASSISTANT CASHIER
JOYCE CAVAN
ASSISTANT CASHIER
MARY ACKERMAN
SAVINGS OFFICER

TRUST
STEVE KRIEGER
VICE PRESIDENT & SENIOR TRUST OFFICER
CYNTHIA J. PARTLOW
ASST. TRUST OFFICER

June 17, 1986

James Tarpo, President
American Chemical Services, Inc.
P.O. Box 190
Griffith, Indiana 46319

Re: American Chemical Services Trust

Dear Mr. Tarpo:

Enclosed please find a ledger and statement of holdings on the above captioned trust account. Per your request, the ledger reflects the most recent transaction.

If you have any questions, please contact me at the bank.

Sincerely,

Steven Krieger

Steven A. Krieger
Vice President & Senior Trust Officer
FIRST NATIONAL BANK, VALPARAISO

SAK/maa

enclosure

JUN 26 1986

FIRST NATIONAL BANK
VALPARAISO • PORTAGE • HEBRON
CHESTERTON • KOUTS
INDIANA
(219) 462-4161

TRUST DEPARTMENT

RUN DATE
06-17-86

FIRST NATIONAL BANK, VALPARAISO
LEDGER

FIRST NATIONAL BANK, VALPARAISO
TRUSTEE
AMERICAN CHEMICAL SERVICES, INC.

NUMBER: 0100000001
DATE OPENED: 12-06-82
OFFICER: 001 - S. A. KRIEGER
BRANCH CODE: 01 - MAIN OFFICE

DATE	DESCRIPTION	INVESTMENTS	PRINCIPAL CASH	INCOME CASH
03-10-86	********** BEGINNING BALANCE **********		0.00	855.91
	********** PRINCIPAL INVESTMENT **********	164,000.00		
03-10-86	INTEREST ON AMOUNT 6,011.06 FIRST NATIONAL BANK, VALPARAISO CERTIFICATE OF DEPOSIT # 29959 DUE 09 08 86, RATE 7.13%	0.00	0.00	6,011.06
03-18-86	FIRST NATIONAL BANK, VALPARAISO 1986 FIDUCIARY FEES	0.00	0.00	750.00-
05-01-86	TRANSFER FROM INCOME CASH TO PRINCIPAL CASH	0.00	6,116.97	6,116.97-
05-01-86	PURCHASE ACM ASSET **INVESTMENTS REFER TO PRINCIPAL INVESTMENT ** FEDERATED CASH MANAGEMENT FUND # 59 U. S. GOVERNMENT OBLIGATIONS	6,116.97	6,116.97-	0.00
05-31-86	INTEREST ON AMOUNT 33.44 FEDERATED CASH MANAGEMENT FUND # 59 U. S. GOVERNMENT OBLIGATIONS	0.00	0.00	33.4[illegible]
06-03-86	TRANSFER FROM INCOME CASH TO PRINCIPAL CASH	0.00	33.44	33.44-
06-03-86	PURCHASE ACM ASSET **INVESTMENTS REFER TO PRINCIPAL INVESTMENT ** FEDERATED CASH MANAGEMENT FUND # 59 U. S. GOVERNMENT OBLIGATIONS	33.44	33.44-	0.00
06-16-86	TRANSFER FROM PRINCIPAL CASH TO INCOME CASH	0.00	0.00	0.00
06-16-86	DEPOSIT TO ACCOUNT FROM AMERCIAN CHEMICAL SERVICES	0.00	2,118.00	0.00
06-17-86	PURCHASE ACM ASSET **INVESTMENTS REFER TO PRINCIPAL INVESTMENT ** FEDERATED CASH MANAGEMENT FUND # 59 U. S. GOVERNMENT OBLIGATIONS	1,868.00	1,868.00-	0.00

JUN 26 1986

FIRST NATIONAL BANK
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TRUST DEPARTMENT

RUN DATE
06-17-86

FIRST NATIONAL BANK, VALPARAISO
LEDGER

FIRST NATIONAL BANK, VALPARAISO
TRUSTEE
AMERICAN CHEMICAL SERVICES, INC.

NUMBER: 0100000001
DATE OPENED: 12-06-82
OFFICER: 001 - S. A. KRIEGER
BRANCH CODE: 01 - MAIN OFFICE

DATE	DESCRIPTION	INVESTMENTS	PRINCIPAL CASH	INCOME CASH
	********** NEW BALANCE **********		250.00	0.00
	********** PRINCIPAL INVESTMENT **********	172,018.41		

JUN 26 1986

FIRST NATIONAL BANK
VALPARAISO • PORTAGE • HEBRON
CHESTERTON • KOUTS
INDIANA
(219) 462-4161

TRUST DEPARTMENT

06-17-86

STATEMENT OF HOLDINGS

ACCOUNT NUMBER: 0100000001

DESCRIPTION: FIRST NATIONAL BANK, VALPARAISO
TRUSTEE
AMERICAN CHEMICAL SERVICES, INC.

SECURITY NUMBER	ASSET NAME	LOT/TYPE	SHARES/PAR VALUE	BOOK VALUE	DIV RATE	MATURITY DT
00089833410	FEDERATED CASH MANAGEMENT FUND # 59 U. S. GOVERNMENT OBLIGATIONS	01/024	8,018.41	8,018.41	6.501	00-00-00
92995900275	FIRST NATIONAL BANK, VALPARAISO CERTIFICATE OF DEPOSIT # 29959 DUE 09 08 86, RATE 7.13%	01/006	164,000.00	164,000.00	7.130	09-08-86
ACCOUNT TOTAL *				172,018.41		

JUN 20 1986

american Chemical Service, Inc.

P.O. Box 190 • Griffith, Indiana 46319
(219) 924-4370 • Chicago Phone (312) 768-3400

June 13, 1986

First National Bank-Valparaiso
P.O. Box 2147
Valparaiso, IN 46384-2147

Attn: Mr. Steve Kreiger

Dear Mr. Kreiger,

Enclosed is a deposit check for an addition to the American Chemical Service, Inc. trust fund. Please return an updated ledger printout reflecting this transaction.

Very truly yours

James Tarpo

James Tarpo
President
American Chemical Service

JT/rl

JUN 26 1986

AMERICAN CHEMICAL SERVICE
GRIFFITH, IND. 46319

HARRIS BANK
Harris Trust and Savings Bank
Chicago, Illinois 60690

6161

June 13 1986

2-28
710

PAY The sum of $2,118 and 00 cts DOLLARS $ 2118.00

TO THE ORDER OF
First National Bank of Valparaiso
P.O. Box 2147
Valparaiso, IN 46384-2147

P

⑈006161⑈ ⑆071000288⑆ 170⑈642⑈3⑈

DELUXE CHECK PRINTERS

AMERICAN CHEMICAL SERVICE

DETACH AND RETAIN THIS STATEMENT
THE ATTACHED CHECK IS IN PAYMENT OF ITEMS DESCRIBED BELOW.
IF NOT CORRECT PLEASE NOTIFY US PROMPTLY. NO RECEIPT DESIRED.

NO 6161

DELUXE - FORM WVC-2 V-7

Addition to Closure Guarantee---------$2,118.00 11000

JUN 26 1986

11-6-86- 1986 accting Due

FIRST NATIONAL BANK
VALPARAISO
P.O. BOX 2147
TELEPHONE 219-462-4161

JAN 17 10 57 AM '86
DIVISION OF LAND
POLLUTION CONTROL
STATE
BOARD OF HEALTH

January 9, 1986

Indiana Environmental Board
One State Building
Indianapolis, Indiana 46204

Re: American Chemical Services Trust

Dear Sirs:

Enclosed please find the 1985 accounting on the above captioned trust.

Upon reviewing the accounting, if you have any questions, please contact me.

Sincerely,

FIRST NATIONAL BANK, VALPARAISO

Cynthia J. Partlow

Cynthia J. Partlow
Assistant Trust Officer

enclosure

CJP/lez

FIR NATIONAL BANK
VALPARAISO • PORTAGE • HEBRON
CHESTERTON • KOUTS
INDIANA
(219) 462-4161

TRUST DEPARTMENT

RUN DATE
01-01-86

FIRST NATIONAL BANK, VALPARAISO
LEDGER

FIRST NATIONAL BANK, VALPARAISO
TRUSTEE
AMERICAN CHEMICAL SERVICES, INC.

NUMBER: 0100000001
DATE OPENED: 12-06-82
OFFICER: 001 - S. A. KRIEGER
BRANCH CODE: 01 - MAIN OFFICE

DATE	DESCRIPTION	INVESTMENTS	PRINCIPAL CASH	INCOME CASH
03-19-85	********** BEGINNING BALANCE **********		66.00-	0.00
	********** PRINCIPAL INVESTMENT **********	156,022.10		
03-19-85	FIRST NATIONAL BANK, VALPARAISO 1985 TRUSTEE FEE	0.00	0.00	750.00-
06-10-85	INTEREST ON AMOUNT 6,783.49 FIRST NATIONAL BANK, VALPARAISO CERTIFICATE OF DEPOSIT #26781 DUE 06 10 85 RATE 8.60%	0.00	0.00	6,783.49
06-10-85	PROCEEDS FROM SALE OF BOND **INVESTMENTS REFER TO PRINCIPAL INVESTMENT ** PAR VALUE AMOUNT 156,022.10 FIRST NATIONAL BANK, VALPARAISO CERTIFICATE OF DEPOSIT #26781 DUE 06 10 85 RATE 8.60%	156,022.10-	156,022.10	0.00
06-10-85	FIRST NATIONAL BANK, VALPARAISO CERTIFICATE OF DEPOSIT DUE 9/9/85, 7.0% **INVESTMENTS REFER TO PRINCIPAL INVESTMENT ** PAR VALUE AMOUNT 161,989.59 FIRST NATIONAL BANK, VALPARAISO CERTIFICATE OF DEPOSIT #28932 DUE 09 09 85 RATE 7.00%	161,989.59	161,989.59-	0.00
08-01-85	TRANSFER FROM INCOME CASH TO PRINCIPAL CASH	0.00	6,033.49	6,033.49-
09-09-85	INTEREST ON AMOUNT 2,866.32 FIRST NATIONAL BANK, VALPARAISO CERTIFICATE OF DEPOSIT #28932 DUE 09 09 85 RATE 7.00%	0.00	0.00	2,866.32
09-09-85	PROCEEDS FROM SALE OF BOND **INVESTMENTS REFER TO PRINCIPAL INVESTMENT ** PAR VALUE AMOUNT 161,989.59 FIRST NATIONAL BANK, VALPARAISO CERTIFICATE OF DEPOSIT #28932 DUE 09 09 85 RATE 7.00%	161,989.59-	161,989.59	0.00

FIRST NATIONAL BANK
VALPARAISO • PORTAGE • HEBRON
CHESTERTON • KOUTS
INDIANA
(219) 462-4161

TRUST DEPARTMENT

RUN DATE
01-01-86

FIRST NATIONAL BANK, VALPARAISO
LEDGER

****
****

FIRST NATIONAL BANK, VALPARAISO
TRUSTEE
AMERICAN CHEMICAL SERVICES, INC.

NUMBER: 0100000001
DATE OPENED: 12-06-82
OFFICER: 001 - S. A. KRIEGER
BRANCH CODE: 01 - MAIN OFFICE

DATE	DESCRIPTION	INVESTMENTS	PRINCIPAL CASH	INCOME CASH
09-11-85	PURCHASED BONDS **INVESTMENTS REFER TO PRINCIPAL INVESTMENT ** PAR VALUE AMOUNT 164,000.00 FIRST NATIONAL BANK, VALPARAISO CERTIFICATE OF DEPOSIT # 29959 DUE 03 10 86, RATE 7.25%	164,000.00	164,000.00-	0.00
10-01-85	TRANSFER FROM INCOME CASH TO PRINCIPAL CASH	0.00	2,010.41	2,010.41-
	********** NEW BALANCE **********		0.00	855.91
	********** PRINCIPAL INVESTMENT **********	164,000.00		

FIRS. NATIONAL BANK
VALPARAISO • PORTAGE • HEBRON
CHESTERTON • KOUTS
INDIANA
(219) 462-4161

TRUST DEPARTMENT

01-02-86

STATEMENT OF HOLDINGS

ACCOUNT NUMBER: 0100000001

DESCRIPTION: FIRST NATIONAL BANK, VALPARAISO
TRUSTEE
AMERICAN CHEMICAL SERVICES, INC.

CURITY NUMBER	ASSET NAME	LOT/TYPE	SHARES/PAR VALUE	BOOK VALUE	DIV RATE	MATURITY DT
92995900275	FIRST NATIONAL BANK, VALPARAISO CERTIFICATE OF DEPOSIT # 29959 DUE 03 10 86, RATE 7.25%	01/006	164,000.00	164,000.00	7.250	03-10-86
ACCOUNT TOTAL *				164,000.00		

12/4/85

CHARLES WELTER
CHAIRMAN, PRESIDENT
& CHIEF EXECUTIVE OFFICER
JOHN REMSTER
SR. VICE PRESIDENT, CASHIER
ERIC GARRARD
VICE PRESIDENT - SR. LOAN OFFICER
WAYNE WELTER
VICE PRESIDENT & DIRECTOR OF
MARKETING AND PERSONNEL
DAVID PERRY
VICE PRESIDENT
WILLIAM J. VAUGHAN
VICE PRESIDENT - MORTGAGE LOANS
MICHAEL SCOTT
VICE PRESIDENT - OPERATIONS
DONALD WIGGINS
ASST. VICE PRESIDENT
CAL SALYER
ASST. VICE PRESIDENT
ROY COLE
ASST. VICE PRESIDENT

FIRST NATIONAL BANK
VALPARAISO
P.O. BOX 2147
VALPARAISO, INDIANA 46383
TELEPHONE 219-462-4161

JACK EDDY
ASST. VICE PRESIDENT
STANLEY G. ZIHERL, JR.
COMPTROLLER & INVESTMENT OFFICER
RICHARD THOMPSON
AUDITOR
MARY LOU HAWKINS
ASSISTANT CASHIER
JOYCE CAVAN
ASSISTANT CASHIER
MARY ACKERMAN
SAVINGS OFFICER

TRUST
STEVE KRIEGER
VICE PRESIDENT & SENIOR TRUST OFFICER
CYNTHIA J. PARTLOW
ASST. TRUST OFFICER

November 19, 1985

Indiana Environmental Board
1 State Building
Indianapolis, Indiana 46204

RE: American Chemical Services Trust

DEC 5 10 35 AM '85
DIVISION OF LAND
POLLUTION CONTROL
STATE
BOARD OF HEALTH

Gentlemen:

Enclosed please find a copy of the current annual accounting for the American Chemical Services Trust. Under a trust agreement dated December 6, 1982 between American Chemical Services and the First National Bank, Valparaiso, provides for an annual accounting for the Indiana Environmental Board.

If there are any questions regarding the enclosed accounting, please contact me.

Sincerely,

FIRST NATIONAL BANK, VALPARAISO

Cynthia J. Partlow

Cynthia J. Partlow
Assistant Trust Officer

CJP/lez

Enclosure

cc: John Murphy
American Chemical Services Trust
P.O. Box 190
Griffith, Indiana 46319

CAG-E

NOV 27 1985

FIRST NATIONAL BANK
VALP SO • PORTAGE • HEBRON
HESTERTON • KOUTS
INDIANA
(219) 462-4161

TRUST DEPARTMENT

RUN DATE
11-18-85

FIRST NATIONAL BANK, VALPARAISO
LEDGER

FIRST NATIONAL BANK, VALPARAISO
TRUSTEE
AMERICAN CHEMICAL SERVICES, INC.

NUMBER: 0100000001
DATE OPENED: 12-06-82
OFFICER: 001 - S. A. KRIEGER
BRANCH CODE: 01 - MAIN OFFICE

DATE	DESCRIPTION	INVESTMENTS	PRINCIPAL CASH	INCOME CASH
12-10-84	********** BEGINNING BALANCE **********		66.00-	0.00
	********** PRINCIPAL INVESTMENT **********	148,198.46		
12-10-84	TRANSFER FROM INCOME CASH TO PRINCIPAL CASH	0.00	7,823.64	7,823.64-
12-10-84	PURCHASE FNBV C.D. #26781 DUE 6/10/85 **INVESTMENTS REFER TO PRINCIPAL INVESTMENT ** PAR VALUE AMOUNT 156,022.10 FIRST NATIONAL BANK, VALPARAISO CERTIFICATE OF DEPOSIT #26781 DUE 06 10 85 RATE 8.60%	156,022.10	156,022.10-	0.00
12-10-84	INTEREST ON AMOUNT 7,823.64 FIRST NATIONAL BANK, VALPARAISO REPURCHASE AGREEMENT #4878 DUE 12 10 84 RATE 10.50%	0.00	0.00	7,823.64
12-10-84	MATURED FNBV RPA#4878 DUE 12/10/84 **INVESTMENTS REFER TO PRINCIPAL INVESTMENT ** PAR VALUE AMOUNT 148,198.46 FIRST NATIONAL BANK, VALPARAISO REPURCHASE AGREEMENT #4878 DUE 12 10 84 RATE 10.50%	148,198.46-	148,198.46	0.00
03-19-85	FIRST NATIONAL BANK, VALPARAISO 1985 TRUSTEE FEE	0.00	0.00	750.00-
06-10-85	INTEREST ON AMOUNT 6,783.49 FIRST NATIONAL BANK, VALPARAISO CERTIFICATE OF DEPOSIT #26781 DUE 06 10 85 RATE 8.60%	0.00	0.00	6,783.49
06-10-85	PROCEEDS FROM SALE OF BOND **INVESTMENTS REFER TO PRINCIPAL INVESTMENT ** PAR VALUE AMOUNT 156,022.10 FIRST NATIONAL BANK, VALPARAISO CERTIFICATE OF DEPOSIT #26781 DUE 06 10 85 RATE 8.60%	156,022.10-	156,022.10	0.00

FIRST NATIONAL BANK, VALPARAISO
TRUSTEE
AMERICAN CHEMICAL SERVICES, INC.

NUMBER: 0100000001
DATE OPENED: 12-06-82
OFFICER: 001 - S. A. KRIEGER
BRANCH CODE: 01 - MAIN OFFICE

DATE	DESCRIPTION	INVESTMENTS	PRINCIPAL CASH	INCOME CASH
06-10-85	FIRST NATIONAL BANK, VALPARAISO CERTIFICATE OF DEPOSIT DUE 9/9/85, 7.0% **INVESTMENTS REFER TO PRINCIPAL INVESTMENT ** PAR VALUE AMOUNT 161,989.59 FIRST NATIONAL BANK, VALPARAISO CERTIFICATE OF DEPOSIT #28932 DUE 09 09 85 RATE 7.00%	161,989.59	161,989.59-	0.00
08-01-85	TRANSFER FROM INCOME CASH TO PRINCIPAL CASH	0.00	6,033.49	6,033.49-
09-09-85	INTEREST ON AMOUNT 2,866.32 FIRST NATIONAL BANK, VALPARAISO CERTIFICATE OF DEPOSIT #28932 DUE 09 09 85 RATE 7.00%	0.00	0.00	2,866.32
09-09-85	PROCEEDS FROM SALE OF BOND **INVESTMENTS REFER TO PRINCIPAL INVESTMENT ** PAR VALUE AMOUNT 161,989.59 FIRST NATIONAL BANK, VALPARAISO CERTIFICATE OF DEPOSIT #28932 DUE 09 09 85 RATE 7.00%	161,989.59-	161,989.59	0.00
09-11-85	PURCHASED BONDS **INVESTMENTS REFER TO PRINCIPAL INVESTMENT ** PAR VALUE AMOUNT 164,000.00 FIRST NATIONAL BANK, VALPARAISO CERTIFICATE OF DEPOSIT # 29959 DUE 03 10 86, RATE 7.25%	164,000.00	164,000.00-	0.00
10-01-85	TRANSFER FROM INCOME CASH TO PRINCIPAL CASH	0.00	2,010.41	2,010.41-
	********** NEW BALANCE **********		0.00	855.91
	********** PRINCIPAL INVESTMENT **********	164,000.00		

FIRST NATIONAL BANK
VALPARAISO • PORTAGE • HEBRON
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INDIANA
(219) 462-4161

TRUST DEPARTMENT

11-18-85

STATEMENT OF HOLDINGS

ACCOUNT NUMBER: 0100000001

DESCRIPTION: FIRST NATIONAL BANK, VALPARAISO
TRUSTEE
AMERICAN CHEMICAL SERVICES, INC.

SECURITY NUMBER	ASSET NAME	LOT/TYPE	SHARES/PAR VALUE	BOOK VALUE	DIV RATE	MATURITY DT
995900275	FIRST NATIONAL BANK, VALPARAISO CERTIFICATE OF DEPOSIT # 29959 DUE 03 10 86, RATE 7.25%	01/006	164,000.00	164,000.00	7.250	03-10-86
ACCOUNT TOTAL *				164,000.00		

WILLIAM J. WELTER
CHAIRMAN OF THE BOARD
CHARLES WELTER
PRESIDENT
JOHN REMSTER
SR. VICE PRESIDENT, CASHIER
DAVE RICHARDSON
SR. VICE PRESIDENT
ERIC GARRARD
VICE PRESIDENT - COMMERCIAL LOANS
WAYNE WELTER
VICE PRESIDENT AND DIRECTOR OF
MARKETING AND PERSONNEL
DAVID PERRY
VICE PRESIDENT
ROY COLE
ASST. VICE PRESIDENT
DON WIGGINS
ASST. VICE PRESIDENT

FIRST NATIONAL BANK
VALPARAISO
P.O. BOX 301
TELEPHONE 219-462-4161

RECEIVED
NOV 20 1984
INDIANA ENVIRONMENTAL
MANAGEMENT BOARD

WILLIAM SCHUMACHER
ASST. VICE PRESIDENT & INVESTMENT OFFICER
JACK EDDY
LOAN REVIEW
STEVE HANTELMAN
COMPTROLLER
MICHAEL SCOTT
ASST. VICE PRESIDENT OPERATIONS
MARY LOU HAWKINS
ASSISTANT CASHIER
JOYCE CAVAN
ASSISTANT CASHIER
MARY ACKERMAN
SAVINGS OFFICER
RICHARD THOMPSON
AUDITOR

TRUST
STEVE KRIEGER
VICE PRESIDENT AND SENIOR TRUST OFFICER
CYNTHIA J. PARTLOW
ASST. TRUST OFFICER

November 9, 1984

Indiana Environmental Board
1 State Building
Indianapolis, Indiana 46204

RE: American Chemical Services Trust

Gentlemen:

Enclosed please find a copy of the current annual accounting for the American Chemical Services Trust. Under trust agreement dated December 6, 1982 between American Chemical Services and the First National Bank, Valparaiso, provides for an annual accounting for the Indiana Environmental Board.

If there are any questions regarding the enclosed accounting please contact me.

Sincerely,

FIRST NATIONAL BANK, VALPARAISO

Cynthia J. Partlow

Cynthia J. Partlow
Assistant Trust Officer

cjp

enclosure

NOV 21 2 35 PM '84
DIV. OF LAND POLLUTION CONTROL
STATE BOARD OF HEALTH

WILLIAM J. WELTER
CHAIRMAN OF THE BOARD
CHARLES WELTER
PRESIDENT
JOHN REMSTER
SR. VICE PRESIDENT, CASHIER
DAVE RICHARDSON
SR. VICE PRESIDENT
ERIC GARRARD
VICE PRESIDENT - COMMERCIAL LOANS
WAYNE WELTER
VICE PRESIDENT AND DIRECTOR OF
MARKETING AND PERSONNEL
DAVID PERRY
VICE PRESIDENT
ROY COLE
ASST. VICE PRESIDENT
DON WIGGINS
ASST. VICE PRESIDENT

FIRST NATIONAL BANK
VALPARAISO
P.O. BOX 391
TELEPHONE 219-462-4161

WILLIAM SCHUMACHER
ASST. VICE PRESIDENT & INVESTMENT OFFICER
JACK EDDY
LOAN REVIEW
STEVE HANTELMAN
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SAVINGS OFFICER
RICHARD THOMPSON
AUDITOR

TRUST
STEVE KRIEGER
VICE PRESIDENT AND SENIOR TRUST OFFICER
CYNTHIA J. PARTLOW
ASST. TRUST OFFICER

November 9, 1984

John Murphy
American Chemical Services
P.O. Box 190
Griffith, Indiana 46319

RE: American Chemical Services Trust

Dear Mr. Murphy:

Enclosed please find a copy of the current annual accounting for the American Chemical Services Trust.

If you have any questions please contact me.

Sincerely,

FIRST NATIONAL BANK, VALPARAISO

Cynthia J. Partlow

Cynthia J. Partlow
Assistant Trust Officer

cjp

enclosure

cc: Indiana Environmental Board
1 State Building
Indianapolis, INDIANA 46204

FIRST NATIONAL BANK
PARAISO • PORTAGE • HEBRON
CHESTERTON • KOUTS
INDIANA
(219) 462-4161

AMERICAN CHEMICAL SERVICES TRUST
ANNUAL ACCOUNTING
NOVEMBER 6, 1983 - NOVEMBER 6, 1984

RECEIPTS:

11-06-84	Cash balance remaining from last accounting dated 11-6-83:		$ 0.00
12-12-83	Matured First National Bank Repurchase Agreement #4625, 9.05%	principal	139,024.93
		interest	3,145.44
06-12-84	Matured First National Bank Repurchase Agreement #4721, 9.50%	principal	142,170.37
		interest	6,753.09
	TOTAL RECEIPTS:		$ 291,093.83

DISBURSEMENTS:

12-15-83	Purchased First National Bank Repurchase Agreement #4721, due 6-12-84, 9.50%	$ 142,170.37
03-06-84	First National Bank, Valparaiso, trust fee	711.00
06-12-84	Purchased First National Bank Repurchase Agreement #4878, due 12-10-84, 10.50%	148,198.46
09-07-84	First National Bank, Valparaiso, tax preparation fee	80.00
	TOTAL DISBURSEMENTS:	$ 291,159.83
	CASH BALANCE REMAINGING AS OF 11-6-84:	$ (-66.00)

ASSETS HELD OTHER THAN CASH:

First National Bank Repurchase Agreement #4878, due 12-10-84, 10.5%, interest at maturity	$ 148,198.46
TOTAL VALUE OF ACCOUNT AS OF 11-6-84:	$ 148,132.46

STATE OF INDIANA

INDIANAPOLIS

STATE BOARD OF HEALTH

AN EQUAL OPPORTUNITY EMPLOYER

Address Reply to:
Indiana State Board of Health
1330 West Michigan Street
P. O. Box 1964
Indianapolis, IN 46206-1964

October 9, 1984

TO: Mr. James Tarpo, President
American Chemical Service, Inc.
P.O. Box 190
Griffith, IN 46319

Dear Sir or Madam:

Re: EPA ID#IND016360265

Our records indicate that the facility indicated above is not in compliance with the Indiana RCRA financial assurance rules for the following reason(s):

[ ] No information submitted on closure/post-closure cost estimate changes regarding:[1]
  [ ] change in cost estimate
  [ ] annual inflation adjustment.

[ ] No current (1983) update of your financial test filing.[2]

[ ] No current (1983) update of your corporate guarantee letter.[3]

[ ] No special report from the independent certified public accountant.[4]

[ ] No copy of the independent certified public accountant's report on the firm's financial statements for the prior fiscal year.[5]

[ ] No filing of proof of insurance for liability protection for:[6]
  [ ] sudden occurrences
  [ ] non-sudden occurrences

[ ] No proof of current annual installment to closure/post-closure trust fund.[7]

[ ] Failure to file a standby trust agreement for closure/post-closure assurance along with your [ ] surety bond or [ ] irrevocable letter of credit.[8]

RECEIVED
OCT 15 1984
WASTE MANAGEMENT
BRANCH

[ ] The proof of insurance submitted is not in compliance, and must be submitted on Indiana forms 320 IAC 4-7-35 or 320 IAC 4-7-36.

[X] Other: Schedule A of Trust Agreement needs facility I D number, name and address, and cost update. Also, the Trustee's annual valuation due as of 11-6-83 has not been received.

Comments:

Failure to respond to this notice within thirty (30) days will result in initiation of an administrative enforcement action. If you have any questions regarding this, please contact me at 317/ 243-5046.

Very truly yours,

Jeffrey W. Stevens

Jeffrey W. Stevens
Division of Land Pollution Control

cc: Ms. Sally Swanson, Region V, U.S. EPA

[ ] Major
[ ] Non-Major

DIVISION OF LAND P LUTION CONTROL

Transmitted to EPA __ __/__

HAZARDOUS WASTE COMPLIANCE AND ENFORCEMENT LOG - Major Facilities Only

Submitted by JWS

1a. U.S. EPA ID # IND 016360265

1b. State ID #

2. Facility Name American Chemical Services

3. Griffith City

[ ] Non-notifier

4. Agency doing evaluation
S = State
J = Joint State/U.S. EPA
E = U.S. EPA (etc)
[5]

5a DATE OF INITIAL EVALUATION WHICH IS THE BASIS FOR THIS REPORT (may be date of a previous inspection or review or other) 10 (M) 5 (D) 84 (Y)

5b Inspection Comment:

6. TYPE OF EVALUATION COVERED BY THIS REPORT (check one box only)

- [ ] Compliance Evaluation Inspection
- [ ] Sampling Inspection
- [X] Detailed Record Review
- [ ] Groundwater Inspection
- [ ] Follow-up Inspection (to enforcement action)
- [ ] Other

7. Date of the Evaluation in #6 if the Evaluation follows an Initial Evaluation (either blank or different from date in #5) __ (M) __ (D) __ (Y)

For State Use

8. Area & Class of Violation (enter number of violations by area and class) If no violation(s), enter a zero in the box(es)

[ ] Incompliance

Class of Violation	Groundwater	Closure/ Post Closure	Financial	Manifest	Compliance Schedule	Part B App	Other
I							
II							
III			1				

9. Enforcement Action (Listing must include Class I violations; (If there are only class II or III, enter the enforcement action for output tracking purposes.)

10. Comment (limited to 80 characters):

Violation Class (if not I)	Violation Area	Type of Action (enter code)	Date of Action	Compliance Date Scheduled	Compliance Date Actual	Status Code	Status Date	Resp* Agency	Free Field	Penalty (if any) Assessed	Penalty (if any) Collected
III	FIN	3	10/4/84	11/14/84		X					

ary 3, 1984 State Form 18231

S 5-027 2/84

*Assumed to be State unless indicated otherwise

CANCELLED

American Chemical Service INc. IND 016360265

CLOSURE COST ESTIMATE - AMENDED 8-16-85

The closure cost estimate is based on the following assumptions:

1. Maximum waste in storage tanks and container storage.
   153,700 gal. in crude solvent storage.
   16,500 gal. in container storage.
   145,000 gal. of injectant and blending stock
   150,000 lbs. of high chloride injectant blending stock.

2. Reclamation and injectant blending plants operated at present through put volumes, below maximum capacity.

3. Waste codes in inventory, only those shown in revised Part A.

4. No economic value of reclaimed solvents produced during closure.

5. No net cost of material produced and shipped as blast furnace injectant. Cadence Chemical Resource letter attached.

6. Disposal of high chloride blending stock to be 22¢ per pound, Mr. Frank letter attached.

7. Disposal of solid tank settlings to be $55.00 per drum. Fondessy invoice attached.

8. No economic value of decontaminated equipment.

9. Labor costs to be $10.00 per hour; an overhead factor of four.

CONFIDENTIAL
CANCELLED

CLOSURE COST ESTIMATE

1. Container storage area		
A. Pump 300 drums 24 man hours.		
B. Solids dug and combined 16 man hours		
total	40 man hours	$1600.00
2. Reclamation tank farm		
A. Pumping to distillation equipment and processing into distillate and distillation bottoms.	128 man hours	$5120.00
3. Injectant and blending stock tanks		
A. Injectant blended and shipped to steel company	160 man hours	$6400.00
B. Cost for 150,000lbs at 22¢/# high chloride material shipped to incinerator (See Mr. Frank letter attached)		$33000.00
4. Decontamination		
A. Container storage scrape pad and sump	8 man hours	320.00
B. Reclamation tank opened and decontaminated	172 man hours	6880.00
C. Injectant blending stock tanks opened and decontaminated	160 man hours	6400.00
D. Injectant blend tanks combined and decontaminated	96 man hours	3840.00
E. Total solids for disposal		
Container area	31 drums	
Reclam. flat bottom tanks	80 drums	
Reclam. cone bottom tanks	15 drums	
Injectant blend stock tanks	146 drums	
Blended injectant tanks	73 drums	
total	345 drums @ $55.00/drum	18975.00
F. Final decontamination of piping, pumps and tanks with water and detergent; and disposal of wash water. See Correct Maintenance letter attached		40000.00
total		122535.00
Contingency factor (20%)		25597.00
Funded Value of Trust		148132.46

(15) Closure Cost Estimate - Amended 5-19-82

1. Pump drum contents to bulk storage, 48 man hours.	$480
2. Cut open drums not emptied and dump solids into bins, 16 man hours.	$160
3. Mix solids with sand and haul to landfill 10% x 600 drums x 55gallons/drum x $.66.	$2200
4. Clean drum storage area, 8 man hours.	$80
5. Pump liquids from tanks to tank trucks 60 trucks x 2 hours x $10/hour.	$1200
6. Freight to waste fuel processor 10¢/gallon x 350,000 gallons.	$35,000
7. Charge from fuel processor 20¢/gal. x 350,000 gals.	$70,000
8. Remove manheads on flat bottomed tanks and remove solids, 400 man hours.	$4,000
9. Mix solids (13,500 gallons) with sand and haul to landfill 66¢ x 13,500 gallons.	$9,000
10. Cleaning tanks and piping $300/tank.	$6,300
11. Disposal of wash water at treatment plant 14¢/gal. x 20,000 gallons.	$2,800

Total cost for closure estimated @ $131,220. Trust fund for entire cost funded 12-8-82.

(16) Post Closure Cost Estimate

Not applicable

Schedule A

EXHIBIT A

The current and acting President and Secretary of American Chemical Service, Inc. are authorized by the Grantor to sign all written orders, requests and instructions to the Trustee.

Marsh & McLennan

Marsh & McLennan, Incorporated
222 South Riverside Plaza
Chicago, Illinois 60606
Telephone 312 648-6000

APR 2 3 09 PM '84
DIV. OF LAND POLLUTION CONTROL
STATE BOARD OF HEALTH

March 30, 1984

Mr. Jeff Stevens
Indiana State Board of Health
1330 West Michigan Street
Indianapolis, Indiana 46206

Re: American Chemical Service, Inc.
420 South Colfax Street
Griffith, Indiana
EPA Identification No. IND016360265

Dear Jeff:

Thank you for sending me the new wording being required for insurance filings for hazardous waste facilities.

This new wording is present in the enclosed Hazardous Waste Facility Liability Endorsement issued by National Union Fire Insurance Company under their Policy No. GLA1169026RA issued effective March 12, 1984. This endorsement is to replace the certificate currently on record by USF&G under Policy No. PL026222790.

You advised in our conversation that Item (D) of the filing requires 60-days notice of cancellation before you can recognize a new carrier. Therefore I am sending this notice to you by certified mail and assume we can terminate the USF&G policy 60 days from the date you receive and sign for this letter and its enclosure. Please confirm.

To avoid confusion in event of a loss during this 60-day period, I am instructing USF&G and National Union that where duplicate cover exists, USF&G will respond with excess limits should they be required.

Please advise if I can be of further assistance.

Regards,

Maureen A. Toth
Assistant Vice President

MAT/ph

cc: John Murphy
American Chemical Service

Robert Hare
USF&G

Margo Carbone
National Union Fire Ins. Co.

Mary Klein

This endorsement, effective 12:01 A.M. March 12, 1984 forms a part of policy No. GLA 116 90 26 RA issued to American Chemical Service, Inc. by National Union Fire Insurance Company of Pittsburgh, Pa.

HAZARDOUS WASTE FACILITY LIABILITY ENDORSEMENT

1. This endorsement certifies that the policy to which the endorsement is attached provides liability insurance covering bodily injury and property damage in connection with the insured's obligation to demonstrate financial responsiblity under 320 IAC 4-7-26. The coverage applies at

EPA Identification Number	Name	Address
IND016360265	American Chemical Service Inc.	420 South Colfax Griffith, Ind.

for "sudden accidental occurrences, ". The limits of liability are 1,000,000 each occurrence/2,000,000 aggregate, exclusive of legal defense costs.

2. The insurance afforded with respect to such occurrences is subject to all of the terms and conditions of the policy; provided, however, that any provisions of the policy inconsistent with subsections (a) through (e) of this Paragraph 2 are hereby amended to conform with subsections (a) through (e):

(a) Bankruptcy or insolvency of the insured shall not relieve the Insurer of its obligations under the policy to which this endorsement attached.

(b) The Insurer is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the insured for any such payment made by the Insurer. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated as specified in 320 IAC 4-7-26 (f).

(c) Whenever requested by the Technical Secretary of the Indiana Environmental Management Board (EMB), the Insurer agrees to furnish to the Technical Secretary signed duplicated original of the policy and all endorsements.

(d) Cancellation of this endorsement, whether by the Insurer of the insured, will be effective only upon written notice and only after the expiration of sixty (60) days after a copy of such written notice is received by the Technical Secretary .

(e) Any other termination of this endorsement will be effective only upon written notice and only after expiration of thirty (30) days after a copy of such written notice is received by the Technical Secretary.

HAZARDOUS WASTE FACILITY LIABILITY ENDORSEMENT (cont'd)

Attached to and forming part of policy No. GLA 116 90 26 RA issued by National Union Fire Insurance Company of Pittsburgh, Pa. herein called the Insurer, To American Chemical Service, Inc. of 420 South Colfax, Griffith, Ind. this 12 day of March. The effective date of said policy is the day of March 12, 1984.

I hereby certify that the wording of this endorsement is indentical to the wording specified in 320 IAC 4-7-35 as such regulation was constituted on the date first above written, and that the Insurer is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

James A. Fowler

AUTHORIZED REPRESENTATIVE

Authorized Representative of National Union Fire Insurance Company

Of Pittsburgh, Pa.

70 Pine Street

New York, New York 10270

Fir. assur. file

STATE of INDIANA

STATE BOARD OF HEALTH

AN EQUAL OPPORTUNITY EMPLOYER

INDIANAPOLIS

Address Reply to:
Indiana State Board of Health
1330 West Michigan Street
P. O. Box 1964
Indianapolis, IN 46206

April 4, 1984

Ms. Maureen A. Toth
Assistant Vice President
Marsh & Mc Lennan, Incorporated
222 South Riverside Plaza
Chicago, IL 60606

Dear Ms. Toth:

Re: American Chemical Service, Inc.
Griffith, IN
EPA ID# IND 016360265

This letter is to confirm your question regarding the 60 day notice of cancellation in your letter of March 30, 1984. However, the insurance certificate needs to bear an original signature rather than a stamp, as per 320 IAC 4-7-26.

Thank you again in advance for your attention to this matter.

Very Truly Yours,

Jeff Stevens

Jeff Stevens
Hearing Officer

JWS/lsm

ECS

ENVIRONMENTAL
COMPLIANCE
SERVICES
INC.

December 13, 1985

Mr. Y. J. Kimm
U.S. EPA - Region 5
230 So. Dearborn St.
Chicago, Illinois 60604

IND 016360265.

Re: American Chemical Service, Inc.
Policies: S9961843 & MU1553354

*****CANCELLATION NOTICE*****

You are hereby notified of the cancellation of the captioned policies for American Chemical Service, effective March 12, 1986.

Our records indicate that you are holding a certificate of insurance for our client.

If you have any question about this cancellation, please contact this office.

Very truly,

S. J. Samuel

Stuart J. Samuel
Environmental Compliance Services, Inc.
Underwriting Manager

RECEIVED
DEC 17 1985
SOLID WASTE DIVISION
U.S. EPA, REGION V

SJS/bal

721 E. Lancaster Avenue, Downingtown, PA 19335 Phone (215) 269-6731

american Chemical Service, Inc.
P.O. Box 190 · Griffith, Indiana 46319
(219) 924-4370 · Chicago Phone (312) 768-3400

420 S. Colfax Ave
Griffith -

AUG 13 2 43 PM '82
DIV. OF LAND POLLUTION CONTROL
STATE BOARD OF HEALTH

August 11, 1982

State of Indiana
1330 West Michigan St.
P.O. Box 1964
Indianapolis, IN 46206

Subject: Filling Proof of Financial Assurance

Attached is our recent letter to the U.S.E.P.A. in regard to R.C.R.A. Financial Requirements. It describes our current situation in regard to closure guarantee and liability insurance documentation.

We are not sure how we stand in terms of State of Indiana regulations, whether we should request a variance from the EMB.

If our proposal to the U.S.E.P.A. is in conflict we ask that a variance be granted to us. Our E.P.A. I.D. number is INDO-16360265.

Although we are entangled in a maze of insurance red tape, we expect to have the situation resolved by 10-6-82. We will forward the necessary documents to the EMB and the U.S.E.P.A. as we receive them.

Yours very truly,

AMERICAN CHEMICAL SERVICE

James Tarpo

James Tarpo
President

JT/lt
Enclosure 2

American Chemical Service, Inc.
P.O. Box 190 • Griffith, Indiana 46319
(219) 924-4370 • Chicago Phone (312) 768-3400

August 6, 1982

Regional Administrator
U.S. Environmental Protection Agency
Attn: RCRA Financial Requirements
Box A3587
Chicago, IL 60690-3587

Gentlemen:

We are requesting a ninety-day extension of the July 6, 1982 and July 15, 1982 "Financial Responsibility Under RCRA in Non-Authorized States" filing dates.

Closure Guarantee
We are at this time unable to secure a bond, letter of credit, or insurance policy to guarantee our closure cost. In addition we do not meet the financial test, nor are we in a position to set up a trust. However, we have been assured by our insurance agent that closure insurance will be available to us through The St. Paul Companies. We expect to have it in force by October 6, 1982.

Sudden and Accidental Insurance
We have attached a Certificate of Insurance from our carrier. It does not contain the required hazardous waste endorsement. We have been advised by our agent that our carrier will provide the endorsement within the next sixty days.

We will submit the above document as soon as they become available to us.

Yours very truly,

AMERICAN CHEMICAL SERVICE

James Tarpo
President

JT/lt

Enclosure

NAME AND ADDRESS OF AGENCY

HAMMOND NATIONAL COMPANY
5248 Hohman Avenue
P. O. Box 607
Hammond, Indiana 46325

NAME AND ADDRESS OF INSURED

AMERICAN CHEMICAL SERVICE INC. &
SAGINAW SALES INC.
S/E Corner Colfax & C&O Railroad
Griffith, Indiana 46319

COMPANIES AFFORDING COVERAGES

COMPANY LETTER A UNITED STATES FIDELITY & GUARANTY CO.

COMPANY LETTER B MISSION INSURANCE COMPANY

COMPANY LETTER C

COMPANY LETTER D

COMPANY LETTER E

This is to certify that policies of insurance listed below have been issued to the insured named above and are in force at this time. Notwithstanding any requirement, term or condition of any contract or other document with respect to which this certificate may be issued or may pertain, the insurance afforded by the policies described herein is subject to all the terms, exclusions and conditions of such policies.

COMPANY LETTER	TYPE OF INSURANCE	POLICY NUMBER	POLICY EXPIRATION DATE	Limits of Liability in Thousands (000)	EACH OCCURRENCE	AGGREGATE
A	GENERAL LIABILITY X COMPREHENSIVE FORM PREMISES—OPERATIONS EXPLOSION AND COLLAPSE HAZARD UNDERGROUND HAZARD X PRODUCTS/COMPLETED OPERATIONS HAZARD CONTRACTUAL INSURANCE BROAD FORM PROPERTY DAMAGE INDEPENDENT CONTRACTORS PERSONAL INJURY	1CC012510982	7/1/83	BODILY INJURY	$ 300	$ 300
				PROPERTY DAMAGE	$ 100	$ 100
				BODILY INJURY AND PROPERTY DAMAGE COMBINED	$	$
				PERSONAL INJURY		$
	AUTOMOBILE LIABILITY COMPREHENSIVE FORM OWNED HIRED NON-OWNED			BODILY INJURY (EACH PERSON)	$	
				BODILY INJURY (EACH ACCIDENT)	$	
				PROPERTY DAMAGE	$	
				BODILY INJURY AND PROPERTY DAMAGE COMBINED	$	
	EXCESS LIABILITY X UMBRELLA FORM X OTHER THAN UMBRELLA FORM	M884270 CEP019902509	7/1/83 7/1/83	BODILY INJURY AND PROPERTY DAMAGE COMBINED	$ 4,000 1,000	$ 4,000 1,000
	WORKERS' COMPENSATION and EMPLOYERS' LIABILITY			STATUTORY		
					$	
	OTHER					

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES

Cancellation: Should any of the above described policies be cancelled before the expiration date thereof, the issuing company will endeavor to mail 30 days written notice to the below named certificate holder but failure to mail such notice shall impose no obligation or liability of any kind upon the company.

NAME AND ADDRESS OF CERTIFICATE HOLDER

U.S. ENVIRONMENTAL PROTECTION AGENCY
Attn: R.C.R.A.
Financial Requirements

DATE ISSUED: July 7, 1982

AUTHORIZED REPRESENTATIVE

Steve J. Svetic - Vice President
Treasurer

STATE OF INDIANA

STATE BOARD OF HEALTH

AN EQUAL OPPORTUNITY EMPLOYER

INDIANAPOLIS

Address Reply to:
Indiana State Board of Health
1330 West Michigan Street
P. O. Box 1964
Indianapolis, IN 46206

July 25, 1983

TO: Mr. James Tarpo, President
American Chemical Service, Inc.
P.O. Box 190
Griffith, IN 46319

Dear Sir:

Re: EPA ID# 016360265

Our records indicate that the facility indicated above is not in compliance with the Indiana RCRA financial assurance rules for the following reason(s):

[X] No information submitted on closure/post-closure cost estimate changes regarding:[1]
  [X] change in cost estimate
  [X] annual inflation adjustment.

[ ] No current (1983) update of your financial test filing.[2]

[ ] No current (1983) update of your corporate guarantee letter.[3]

[ ] No special report from the independent certified public accountant.[4]

[ ] No copy of the independent certified public accountant's report on the firm's financial statements for the prior fiscal year.[5]

[X] No filing of proof of insurance for liability protection for:[6]
  [X] sudden occurrences
  [ ] non-sudden occurrences

[ ] No proof of current annual installment to closure/post-closure trust fund.[7]

[ ] Failure to file a standby trust agreement for closure/post-closure assurance along with your [ ] surety bond or [ ] irrevocable letter of credit.[8]

[X] The proof of insurance submitted is not in compliance, and must be submitted on Indiana forms 320 IAC 4-7-35 or 320 IAC 4-7-36.

[X] Other: No filing whatever on financial assurance for closure.

Comments:

You have not communicated with us since you requested the time extension for closure insurance.

Failure to respond to this notice within thirty (30) days will result in initiation of an administrative enforcement action. If you have any questions regarding this, please contact me at 317/633-0770.

Very truly yours,

Patrick J. Haynes
Division of Land Pollution Control

cc: Ms. Sally Swanson, Region V, U.S. EPA

RCRA FINANCIAL ASSURANCE ENFORCEMENT LETTER

N O T E S

The Indiana rules on the RCRA financial assurance requirements may be found in the May 1983 issue of the Indiana Register. Copies of the complete Indiana RCRA rules (320 IAC 4) may be obtained (via first class mail) by sending a check for $2.50, which covers copying and postage, payable to the Indiana State Board of Health, to Ms. Beth Ward, Division of Land Pollution Control, Indiana State Board of Health, P.O. Box 1964, Indianapolis, IN 46206.

1. See 320 IAC 4-7-5 & 320 IAC 4-7-15.

2. See 320 IAC 4-7-11(d), 320 IAC 4-7-21(d), 320 IAC 4-7-32 and 320 IAC 4-7-33.

3. See 320 IAC 4-7-11(i), 320 IAC 4-7-21(i) and 320 IAC 4-7-34.

4. See 320 IAC 4-7-11(c)(3) and 320 IAC 4-7-21(c)(3).

5. See 320 IAC 4-7-11)c)(2) and 320 IAC 4-7-21(c)(2).

6. Liablility Insurance, see 320 IAC 4-7-26 and forms 320 IAC 4-7-35 or 320 IAC 4-7-36. Liability coverage by financial test: 320 IAC 4-7-26(f) and 320 IAC 4-7-33.

7. See 320 IAC 4-7-7(c) and 320 IAC 4-7-17(c).

8. See 320 IAC 4-7-8 and 320 IAC 4-7-18, or 320 IAC 4-7-9 and 320 IAC 4-7-19.

UNITED STATES FIDELITY AND GUARANTY COMPANY
BALTIMORE, MARYLAND

HAZARDOUS WASTE FACILITY
CERTIFICATE OF LIABILITY INSURANCE

1. The UNITED STATES FIDELITY AND GUARANTY COMPANY, (the "Insurer"), of 100 Light Street, Baltimore, Maryland, hereby certifies that it has issued liability insurance covering bodily injury and property damage to

AMERICAN CHEMICAL SERVICE, INC. (the "insured"),
(Name of Insured)

of 420 SOUTH COLFAX, COLFAX AVENUE & C & O RAILROAD, GRIFFITH, INDIANA
(Address of Insured)

in connection with the insured's obligation to demonstrate financial responsibility under 40 CFR 264.147 or 265.147.

The coverage applies at:

(a) 420 SOUTH COLFAX, GRIFFITH, INDIANA (Name and Address of Facility) — INDO 16360265 (EPA Identification Number)

(b) _____ (Name and Address of Facility) — _____ (EPA Identification Number)

(c) _____ (Name and Address of Facility) — _____ (EPA Identification Number)

for:

Facility (a): ☒ sudden accidental occurrences ☐ nonsudden accidental occurrences
(indicate one or both of the above)

Facility (b): ☐ sudden accidental occurrences ☐ nonsudden accidental occurrences
(indicate one or both of the above)

Facility (c): ☐ sudden accidental occurrences ☐ nonsudden accidental occurrences
(indicate one or both of the above)

The limits of liability are $ 1,000 ,000 each occurrence, and $ 2,000 ,000 annual aggregate, exclusive of legal defense costs.

The coverage is provided under policy number PL 026 222560,

issued on October 28, 1982 (date). The effective date of said policy is October 28, 1982 (date).

(Continued)

2. The Insurer further certifies the following with respect to the insurance described in Paragraph 1:

(a) Bankruptcy or insolvency of the insured shall not relieve the Insurer of its obligations under the policy.

(b) The Insurer is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the insured for any such payment made by the Insurer. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated as specified in 40 CFR 264.147(f) or 265.147(f).

(c) Whenever requested by a Regional Administrator of the U.S. Environmental Protection Agency (EPA), the Insurer agrees to furnish to the Regional Administrator a signed duplicate original of the policy and all endorsements.

(d) Cancellation of the insurance, whether by the Insurer or the insured, will be effective only upon written notice and only after the expiration of sixty (60) days after a copy of such written notice is received by the Regional Administrator(s) of the EPA Region(s) in which the facility(ies) is (are) located.

(e) Any other termination of the insurance will be effective only upon written notice and only after the expiration of thirty (30) days after a copy of such written notice is received by the Regional Administrator(s) of the EPA Region(s) in which the facility(ies) is (are) located.

I hereby certify that the wording of this instrument is identical to the wording specified in 40 CFR 264.151(j) as such regulation was constituted on the date first above written, and that the Insurer is licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

(Signature)

Steve J. Svetic
(Name)

Agent, Authorized Representative of
(Title)

UNITED STATES FIDELITY AND GUARANTY COMPANY

456 North Meridian
Indianapolis, Indiana 46204
(Branch Office Address)

HUTTON, NELSON & McDONALD / CERTIFIED PUBLIC ACCOUNTANTS
814 COMMERCE DRIVE, OAK BROOK, ILLINOIS 60521, 312/789-9199

The Board of Directors
American Chemical Service, Inc.

We have examined the balance sheet of American Chemical Service, Inc. as of August 29, 1981 and August 30, 1980 and the related statements of income and retained earnings and changes in financial position for the fiscal years then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, such financial statements present fairly the financial position of American Chemical Service, Inc. as of August 29, 1981 and August 30, 1980 and the results of its operations and the changes in its financial position for the fiscal years then ended, in conformity with generally accepted accounting principles applied on a consistent basis.

Hutton, Nelson & McDonald

Oak Brook, Illinois
November 2, 1981

AMERICAN CHEMICAL SERVICE, INC.

BALANCE SHEET

AUGUST 29, 1981 AND AUGUST 30, 1980

ASSETS

	1981	1980
Current assets		
Cash	$ 66,702	$ 5,358
Investments, at cost which approximates market value	396,512	279,139
Accounts receivable		
Trade	445,421	367,335
Other	3,350	350
Accrued interest receivable		21,055
Inventories	19,220	28,078
Prepaid expenses	37,037	40,016
Total current assets	968,242	741,331
Investment in securities, at cost (market value $422,750 in 1981 and $213,500 in 1980)	420,175	211,167
Property, plant and equipment		
Land	1,925	1,925
Buildings and improvements	313,742	302,044
Office equipment	93,690	35,355
Automobiles and trucks	37,994	34,606
Machinery and equipment	568,799	354,839
Reclaim facility	222,624	222,624
Amoco project #575	381,850	362,050
Epoxol unit	138,745	140,390
Amoco project #677	93,988	107,192
Amoco additives facilities expansion	443,086	365,949
Sewer	46,183	46,183
Construction in process	4,875	30,817
	2,347,501	2,003,974
Accumulated depreciation and amortization	1,283,492	1,075,258
	1,064,009	928,716
Other assets		
Investment - Thermo Chem, Inc., at cost		700
Equipment deposits	1,975	
	$2,454,401	$1,881,914

LIABILITIES

	1981	1980
Current liabili es		
Accounts pay e	$ 184,957	$ 200,507
Accrued liab ties		
Salaries a wages	459,680	355,887
Real estat and personal property taxes	26,000	22,500
Payroll t s accrued and withheld	6,933	6,232
Employees etirement Plan contribution	179,321	59,633
Income ta s	46,600	32,417
To l current liabilities	903,491	677,176
Stockholder equity		
Common st k, no par value; authorized 2,000 shares; ssued and outstanding 1,128 and 1,000 s ires at stated value of $50 per share	56,400	56,400
Addition paid-in capital	71,596	71,596
Retained arnings	1,422,914	1,076,742
	1,550,910	1,204,738
	$2,454,401	$1,881,914

The accompanying notes are an integral part of these financial statements.

AMERICAN CHEMICAL SERVICE, INC.

STATEMENT OF INCOME AND RETAINED EARNINGS

YEARS (52 WEEKS) ENDED AUGUST 29, 1981 AND AUGUST 30, 1980

	1981	1980
Sales	$4,415,055	$3,487,179
Cost of sales	2,883,677	2,383,992
Gross profit	1,531,378	1,103,187
Selling and administrative expenses	1,083,742	786,361
Operating income	447,636	316,826
Other income (expense)		
Interest, rents and miscellaneous income	69,323	67,183
Gain on sale of fixed assets	4,436	76,420
Interest expense	(813)	(1,165)
Income before income taxes	520,582	459,264
Income taxes	174,410	138,404
Net income	346,172	320,860
Retained earnings		
Beginning of year	1,076,742	755,882
End of year	$1,422,914	$1,076,742
Earnings per share		
Net income	$307.00	$284.00

The accompanying notes are an integral part of these financial statements.

AMERICAN CHEMICAL SERVICE, INC.

STATEMENT OF CHANGES IN FINANCIAL POSITION

YEARS (52 WEEKS) ENDED AUGUST 29, 1981 AND AUGUST 30, 1980

	1981	1980
Working capital provided		
Net income	$346,172	$ 320,860
Add expenses not requiring an outlay of working capital		
Depreciation and amortization	228,114	160,362
Working capital provided from operations	574,286	481,222
Cost of investment sold - Thermo Chem, Inc.	700	
Depreciated cost of asset dispositions	5,627	14,530
	580,613	495,752
Working capital applied		
Decrease in long-term debt		16,801
Additions to plant and equipment	369,034	396,753
Increase in investments	209,008	211,167
Equipment deposits	1,975	
	580,017	624,721
Increase (decrease) in working capital	$ 596	$(128,969)

CHANGES IN WORKING CAPITAL

	1981	1980
Increase (decrease) in current assets		
Cash	$ 61,344	$ (29,563)
Investments	117,373	(37,152)
Accounts receivable	81,086	31,907
Accrued interest receivable	(21,055)	21,055
Inventories	(8,858)	(261)
Prepaid expenses	(2,979)	8,069
Increase (decrease) in current assets	226,911	(5,945)
Increase (decrease) in current liabilities		
Current maturities of long-term debt		(13,531)
Accounts payable	(15,550)	29,869
Accrued liabilities	241,865	106,686
Increase in current liabilities	226,315	123,024
Increase (decrease) in working capital	$ 596	$(128,969)

The accompanying notes are an integral part of these financial statements.

AMERICAN CHEMICAL SERVICE, INC.

NOTES TO FINANCIAL STATEMENTS

SUMMARY OF ACCOUNTING POLICIES

Investments - Investments are valued at cost or market whichever is lower.

Inventories - Inventories are priced at the last-in, first-out dollar value method.

Plant and Equipment - Plant, acquired in 1955 in a tax-free exchange under Internal Revenue Code section 351 for capital stock and debentures, was valued at a price agreed upon by Directors of the Company. Subsequent additions are at cost. Depreciation and amortization charged to income are computed using the declining-balance and straight-line methods based on the estimated useful lives of the assets.

Employees' Retirement Plan - The Company has a trusteed voluntary contributory profit-sharing plan covering all eligible employees not covered by another pension or profit-sharing plan to which the Company contributes. The employer contribution shall be determined annually by the Board of Directors not to exceed the amount allowable under the Internal Revenue Code.

Earnings Per Common Share - Earnings per common share are computed by dividing net income by the weighted average number of shares of common stock outstanding.

Investment Tax Credit - The Company follows the practice of taking the investment tax credit as a reduction of the provision for income taxes in the year the credit is obtained.

INVENTORIES

Major classifications of inventories, priced at the last-in, first-out (LIFO) dollar value method, are as follows:

	1981	1980
Raw materials and supplies	$12,248	$21,921
Finished goods	6,972	6,157
	$19,220	$28,078

INVENTORIES (Continued)

If the first-in, first-out (FIFO) method of inventory valuation had been used by the Company, inventories would have been approximately $18,635 and $20,463 higher than reported at August 29, 1981 and August 30, 1980.

DEPRECIATION AND AMORTIZATION

Depreciation and amortization were charged to income, based on the estimated useful lives of the assets, in the following amounts:

	1981	1980	Estimated Life - Years
Buildings and improvements	$ 17,416	$ 17,544	10 - 40
Office equipment	13,055	5,157	5 - 10
Automobiles and trucks	12,288	9,135	3 - 4
Machinery and equipment	59,396	35,305	2 - 15
Reclaim facility	15,235	19,080	8 - 30
Amoco project #575	5,420	12,684	6 - 30
Epoxol unit	207	345	4 - 5
Amoco project #677	9,748	10,369	6 - 30
Amoco additives facilities expansion	93,040	48,434	20
Sewer	2,309	2,309	5 - 8
	$228,114	$160,362	

EMPLOYEES' RETIREMENT PLANS

Contributions to employee benefit plans amounted to $238,701 in 1981 and $101,650 in 1980.

RECLASSIFICATIONS

Certain items in the 1980 financial statements have been reclassified to agree with the 1981 presentation with no effect on net income.

SUPPLEMENTARY INFORMATION

ACCOUNTANTS' OPINION ON SUPPLEMENTARY INFORMATION

Our examination was made for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplementary information, contained in the following pages, is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information has been subjected to the auditing procedures applied in the examination of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

Watten, Nelson & McDonald

CERTIFIED PUBLIC ACCOUNTANTS

Oak Brook, Illinois
November 2, 1981

AMERICAN CHEMICAL SERVICE, INC.

STATEMENT OF INCOME IN PERCENTAGE OF SALES

YEARS (52 WEEKS) ENDED AUGUST 29, 1981 AND AUGUST 30, 1980

	1981	1980
Sales	100.0%	100.0%
Cost of sales	65.3	68.4
Gross profit	34.7	31.6
Selling and administrative expenses	24.6	22.5
Operating income	10.1	9.1
Other income (expense)	1.7	4.1
Income before income taxes	11.8	13.2
Income taxes	4.0	4.0
Net income	7.8%	9.2%

AMERICAN CHEMICAL SERVICE, INC.

COST OF SALES

YEARS (52 WEEKS) ENDED AUGUST 29, 1981 AND AUGUST 30, 1980

	1981	1980
Cost of material sold and used	$ 614,297	$ 583,462
Direct labor	404,193	370,175
Indirect operating expenses		
Trucking costs	342,289	224,754
Yard expense and sludge removal	159,000	78,975
Supervisory salaries	517,074	409,397
Rent	11,403	11,524
Electric power and gas	249,856	206,805
Fuel	13,021	34,175
Repairs	192,395	154,211
Yard truck expense	3,108	14,185
Insurance	83,609	84,034
Sewer expense	11,198	8,567
Boiler supplies	16,423	16,401
Laboratory supplies	5,209	1,773
Depreciation	215,742	145,878
Uniform service and clothing allowance	13,391	11,131
Small tools	1,239	2,650
Payroll taxes	30,230	25,895
	$2,883,677	$2,383,992

AMERICAN CHEMICAL SERVICE, INC.

SELLING AND ADMINISTRATIVE EXPENSES

YEARS (52 WEEKS) ENDED AUGUST 29, 1981 AND AUGUST 30, 1980

	1981	1980
Salaries		
Officer	$ 80,145	$ 71,823
Office	24,925	22,837
Salesmen	56,092	45,665
Commissions	8,405	17,823
Depreciation		
Buildings	8,658	9,327
Office equipment	3,714	5,157
Postage	2,443	1,919
Telephone and telegraph	16,995	15,124
Printing and stationery	6,648	4,322
Advertising	639	836
Legal and audit	13,288	7,864
Dues and subscriptions	3,230	2,376
Contributions	1,940	644
Group insurance	50,410	48,284
Travel and sales expense	32,259	25,566
Bad debts	891	343
Office maintenance	8,232	7,040
Taxes		
Payroll	22,328	17,844
Indiana gross income	41,979	34,591
Real estate and personal property	22,559	17,983
Officer's life insurance	1,007	1,031
Data processing	4,436	5,356
Contributions to employee benefit plans	238,701	101,650
Miscellaneous	3,526	3,914
Additional compensation	430,292	317,042
	$1,083,742	$786,361

AMERICAN CHEMICAL SERVICE, INC.

PROPERTY, PLANT AND EQUIPMENT

YEAR (52 WEEKS) ENDED AUGUST 29, 1981

	Asset				Accumulated Depreciation				
	Cost, Beginning of Year	Additions	Sales and Retirements	Cost, End of Year	Balance, Beginning of Year	Current-year Provision	Sales and Retirements	Balance, End of Year	Cost Less Accumulated Depreciation
Land	$ 1,925	$	$	$ 1,925	$	$	$	$	$ 1,925
Buildings and improvements	302,044	11,698		313,742	75,801	17,416		93,217	220,525
Office equipment									
Office furniture	35,355	969	4,908(B)	31,416	21,640	3,714	4,847(B)	20,507	10,909
Data processing equipment		62,274		62,274		9,341		9,341	52,933
	35,355	63,243	4,908(B)	93,690	21,640	13,055	4,847(B)	29,848	63,842
Automobiles and trucks	34,606	9,138	5,750(C)	37,994	7,282	12,288	2,875(C)	16,695	21,299
Machinery and equipment									
Tractors and trailers	26,019			26,019	25,196	549		25,745	274
Pumps	40,686	975		41,661	29,972	3,740		33,712	7,949
Wells	4,573	5,060		9,633	4,573	759		5,332	4,301
Stills	146,145	171,392		317,537	113,875	34,256		148,131	169,406
Laboratory equipment	17,620	1,979		19,599	7,432	2,897		10,329	9,270
Incinerator and fuel waste system	68,941	33,022		101,963	33,557	13,594		47,151	54,812
Welding machine	799	1,532		2,331	701	231		932	1,399
Wiring	4,876			4,876	3,836	231		4,067	809
Project 160	4,805			4,805	4,740	43		4,783	22
Equipment - Colfax	40,375			40,375	36,490	3,096		39,586	789
	354,839	213,960		568,799	260,372	59,396		319,768	249,031
Reclaim facility	222,624			222,624	91,352	15,235		106,587	116,037
Amoco project #575	362,050	19,800		381,850	337,387	5,420		342,807	39,043
Epoxol unit	140,390		1,645(B)	138,745	139,872	207	1,645(B)	138,434	311
Amoco project #677	107,192		13,204(B)	93,988	77,724	9,748	10,513(B)	76,959	17,029

AMERICAN CHEMICAL SERVICE, INC.

PROPERTY, PLANT AND EQUIPMENT
(Continued)

YEAR (52 WEEKS) ENDED AUGUST 29, 1981

	Asset				Accumulated Depreciation				
	Cost, Beginning of Year	Additions	Sales and Retirements	Cost, End of Year	Balance, Beginning of Year	Current-year Provision	Sales and Retirements	Balance, End of Year	Cost Less Accumulated Depreciation
Amoco additives facilities expansion	$ 365,949	$ 77,137	$	$ 443,086	$ 48,434	$ 93,040	$	$ 141,474	$ 301,612
Sewer	46,183			46,183	15,394	2,309		17,703	28,480
Construction in progress	30,817	296,642 (322,584)(A)		4,875					4,875
	$2,003,974	$ 369,034	$19,757(B) 5,750(C)	$2,347,501	$1,075,258	$228,114	$17,005(B) 2,875(C)	$1,283,492	$1,064,009

(A) Completed items transferred to asset categories
(B) Abandoned
(C) Sales

American Chemical Service, Inc. has an established $100,000 line of credit with the Mercantile National Bank of Indiana; Hammond, Indiana.

Also, the corporation owns $500,000 of common stocks held in a margin account by E.F. Hutton, Flossmor, Illinois. These assets establish an additional $250,000 in credit.