

STATE OF MISSISSIPPI
DAVID RONALD MUSGROVE, GOVERNOR
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
CHARLES H. CHISOLM, EXECUTIVE DIRECTOR

FILE COPY

November 21, 2001

Mr. Steve Boswell
Vicksburg Chemical Company
PO Box 821003
Vicksburg, Mississippi 39182

Dear Mr. Boswell:

Re: Inspection Report
Vicksburg Chemical Company
Vicksburg, Warren County

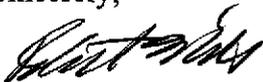
Air-AIRS AFS	14900041
Air-Title V Operating	278000041
GP-Sara Title III	MSR110030
Hazardous Waste-EPA ID	MSD990714081
Water-NPDES	MS0027995

Enclosed is a copy of the Compliance Evaluation Inspection report(s) completed as a result of this office's inspection at Vicksburg Chemical Company on 8/28/01. The report(s) should be used by you as a guide for complying with requirements and limitations stated in your permit(s).

On 8/28/01 a joint State/EPA inspection was performed at the facility to determine compliance with large quantity generator status hazardous waste regulations, Title V air permit requirements, NPDES requirements, and stormwater regulations. An amendment to this inspection report will be transmitted to Vicksburg Chemical Company upon receipt of the expected EPA RCRA Inspection report from Region 4.

If you have any questions concerning this matter, please contact me at 601-961-5624.

Sincerely,



D. Scott Mills, PE
Chemical Branch
Environmental Compliance and Enforcement Division

Agency Interest No. 1766
INS20010002



FILE COPY

MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

James I. Palmer, Jr., Executive Director

9 March 1999

Mr. John Miles
Vicksburg Chemical
P.O. Box 821003
Vicksburg, MS 39180

Dear Mr. Miles:

Re: Compliance Evaluation Inspection
Vicksburg Chemical Company
NPDES Permit No. MS0027995
Madison County, Madison, MS

Enclosed is a copy of the Compliance Evaluation Inspection Report, which includes Hazardous waste, Title V, and NPDES, completed as a result of this office's inspection at Vicksburg Chemical 11 and 12 January 1999. The report should be used as a guide for complying with requirements and limitations stated in your applicable permits.

See enclosed report for comments.

If you have any questions concerning this matter, please contact us at 961-5056

Respectfully,

Steven R Bailey
Environmental Enforcement and Compliance Division

Enclosures:

cc: Mr. Paul Zetterholm (w/attachment)

OFFICE OF POLLUTION CONTROL

P.O. Box 10385 Jackson, MS 39289.0385 Phone 601.961.5171 Fax 601.354.6612



EPA

United States Environmental Protection Agency, Washington, D.C. 20460
NPDES Compliance Inspection Report

Form Approved
OMB No. 2040-0003
Approval Expires
7-31-85

Section A: National Data System Coding

Transaction Code	NPDES	YR/MO/DAY	Inspection Type	Inspector	Facility Type	Sched'd
N	MS0027995	99/01/11	C	S	2	May
Reserved	Facility Evaluation Rating	BI	QA	Reserved		
	3	N	N			

Section B: Facility Data

Name and Location of Facility Inspected		Entry Time:	Permit Effective Date:
Vicksburg Chemical Warren County		8:00	9/10/96
		Exit Time/Date:	Permit Expiration Date:
			9/9/2001
Name(s) of On-Site Representative(s)		Title(s)	Phone No(s)
Mr. Steve Boswell		Director of Environmental Affairs	636-1231
Name, Address of Responsible Official		Title	
Mr. John Miles Vicksburg Chemical P.O. Box 821003 Vicksburg, MS 39180		Plant Manager	
		Phone No.	Contacted YES__ NO__
		601-636-1231	

Section C: Areas Evaluated During Inspection (S-Satisfactory, M-Marginal, U-Unsatisfactory, N-Not Evaluated)

<input checked="" type="checkbox"/> Permit	<input checked="" type="checkbox"/> Flow Measurement	<input checked="" type="checkbox"/> Pretreatment
<input checked="" type="checkbox"/> Operations & Maintenance	<input checked="" type="checkbox"/> Records/Reports	<input checked="" type="checkbox"/> Laboratory
<input checked="" type="checkbox"/> Compliance Schedules	<input checked="" type="checkbox"/> Sludge Disposal	<input checked="" type="checkbox"/> Facility Site Review
<input checked="" type="checkbox"/> Effluent/Receiving Waters	<input checked="" type="checkbox"/> Self-Monitoring Program	<input checked="" type="checkbox"/> Other

Section D: Summary of Findings/Comments

1. Facility is maintaining all necessary records, logs and all other permit requirements.

2. The facility is not in compliance the their phosphorus limit for the months of September and October of 1998.

Names and Signatures of Inspectors	Agency/Office/Telephone	Date
Steven R. Bailey	Office of Pollution Control	13 January 1999
Signature of Reviewer	Agency/Office	Date
<i>Steve R. Bailey</i>	Office of Pollution Control	

Regulatory Office Use Only

Action Taken	Date	<input type="checkbox"/> Noncompliance <input type="checkbox"/> Compliance
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RCRA INSPECTION REPORT

1. Inspector and Author of Report

Steven Bailey
Mississippi Department of Environmental Quality - MDEQ
Environmental Enforcement and Compliance Division

2. Facility Information

Vicksburg Chemical Company
P.O. Box 821003
Vicksburg, MS 39182

3. Responsible Company Official

Mr. Steven T. Boswell
Director of Environmental Affairs

4. Inspection Participants

Steven Bailey - MDEQ
Steven Boswell - Vicksburg Chemical Company

5. Date and Time of Inspections

January 12, 1998 @ 8:00 a.m.

6. Applicable Regulations

Mississippi Hazardous Waste Management Regulations (MHWMR) 261,
262, 265.16, 265 subparts c, d and I and 268.

7. Purpose of Inspection

Compliance Evaluation Inspection (CEI) to determine facility's
compliance with the applicable MHWMR.

8. Facility Description

Vicksburg Chemical Company is located in Warren County,
Mississippi. The facility consists of a 650-acre plant that is
divided into two separate and distinct operations known as the
North Plant and the South Plant. About 130 acres of the plant
site is currently being used or has at one time been used.

The North Plant produces potassium nitrate, liquid chlorine, and
liquid nitrogen tetroxide. Raw materials for the North Plant
include potassium chloride and nitric acid.

The south Plant formerly manufactured chlorinated pesticides,
nitrogen-based herbicides, and other agricultural chemicals. The
only active operations at the South Plant are a nitric acid unit

constructed in 1986, a potassium carbonate (k-carb) unit constructed in 1994 and a phosphate salt plant constructed in 1998.

9. Findings

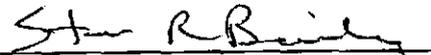
Vicksburg Chemical had sent one shipment of P123, P020 for disposal since their previous RCRA inspection. The shipment consisted of 45,000 lbs. of the material and was shipped on 8/98. The land ban form was attached.

At the time of the inspection, there was no container management area due to construction of the phosphate salts plant. Personnel training records which include job title, written job description, type of training and amount of training are kept on site. The facility is equipped with two-way radios and telephones that are available to contact emergency response personnel. Shipping manifests and the contingency plan were well organized and updated according to regulations.

10. Conclusions

There were no apparent violations of the MHWMR at the time of the inspection.

11. Signed


Inspector

12. Approval

cc: Mindy Gardner, EPA

Inspection Report Form - General

Facility Name: Vicksburg Chemical Company Date: January 12, 1999

Address: Rifle Range Road
 Vicksburg, Mississippi

Inspected By: Steve Bailey

Person Contacted: Steven Boswell, Director of Environmental Affairs

Facility No: 2780-00041

Is facility major or minor? Major

Purpose of Inspection:

- | | | | |
|--------------------------|-------------------------|-------------------------------------|-----------|
| <input type="checkbox"/> | Compliance Verification | <input type="checkbox"/> | O&M |
| <input type="checkbox"/> | Performance Evaluation | <input type="checkbox"/> | VEE |
| <input type="checkbox"/> | Complaint Investigation | <input checked="" type="checkbox"/> | Annual |
| <input type="checkbox"/> | Surveillance | <input type="checkbox"/> | Follow-up |
| <input type="checkbox"/> | Other (Explain): | | |

Current Permit Status: Operating Permit expired August 1, 1996; Title V permit application submitted April 17, 1998.

Source Description: Chemical Plant, producing potassium nitrate, nitric acid, and potassium carbonate.

Applicable Regulations:

- SIP
- PSD
- NSPS
- NESHAPS

Cite regulation by description or regulatory section number:

APC-S-1; Nitric Acid Plant: 40 CFR 60, Subpart A and G; Foster Wheeler Boiler: 40 CFR 60 Subpart A and Db.

State any permit conditions not being complied with and describe noncompliance:

None

INSPECTION REPORT FORM - MISCELLANEOUS PROCESSES

Facility Name: Vicksburg Chemical Company

Date: January 12, 1999

Emission Point No./Name: AA-001 / Nitric Acid Plant

Description of Process:

Raw Materials: Ammonia, Air, and Water

Processing Operations: Ammonia and air are mixed and passed over a catalyst to oxidize the ammonia to nitric oxide. The gases are then cooled and condensed to form nitrogen dioxide. The nitrogen dioxide is sent through an adsorption tower where it is dissolved in water to form nitric acid.

Products/By-Products: Nitric Acid / NO_x

**Emissions & Control Devices: NO_x / Absorber
(Complete Appropriate Control Device Sheets)**

Permit conditions not being complied with and description of noncompliance:None

Comments: Visible Emissions were observed to be approximately 20%

INSPECTION REPORT FORM - MISCELLANEOUS PROCESSES

Facility Name: Vicksburg Chemical Company

Date: January 12, 1999

Emission Point No./Name: AA-002 / Potassium Nitrate Plant

Description of Process:

Raw Materials: Potassium Chloride and Nitric Acid

Processing Operations: Potassium Chloride and Nitric Acid are reacted to form potassium nitrate, and nitrogen tetroxide. The potassium nitrate is then crystallized, centrifuged, dried and then sent to packing and storage.

Products/By-Products: Potassium Nitrate, Chlorine, and Nitrogen Tetroxide / None

**Emissions & Control Devices: Nitrogen Oxides, Chlorine, Particulate Matter / Scrubbers, Baghouses, and Adsorber
(Complete Appropriate Control Device Sheets)**

Permit conditions not being complied with and description of noncompliance:None

INSPECTION REPORT FORM - MISCELLANEOUS PROCESSES

Facility Name: Vicksburg Chemical Companyx

Date: January 12, 1999

Emission Point No./Name: AA-002 / Potassium Nitrate Plant, X-9 pulping leg vent

Description of Process:

Raw Materials: Potassium Chloride and Nitric Acid

Processing Operations: Potassium Chloride and Nitric Acid are reacted to form potassium nitrate, chlorine, and nitrogen tetroxide. The potassium nitrate is then crystallized, centrifuged, dried and then sent to packing and storage.

Products/By-Products: Potassium Nitrate, Chlorine, and Nitrogen Tetroxide / None

**Emissions & Control Devices: Nitrogen Nitrate, Chlorine, and Particulate Matter / adsorber
(Complete Appropriate Control Device Sheets)**

Permit conditions not being complied with and description of noncompliance:None

INSPECTION REPORT FORM - SCRUBBERS

Facility Name: Vicksburg Chemical Company

Date: January 12, 1999

Emission Point No./Name: AA-002 / Potassium Nitrate Plant, C-10 gas scrubber vents, East and West stacks.

Scrubbing Liquid: Water Solution Reactant Solution

Scrubber Type:

- Spray Tower/Wet Washer
- Sieve Tray/Bubbler Cap/Packed Column
- Orifice
- Venturi
- Other, Explain:

Demisting Method: Cyclone
 Vanes
 Pad
 No Demisting
 Other, Explain:

Operating Conditions: Unkn gpm @ Unkn psig
Unkn inches water gauge pressure drop
Rainout Occurring: Yes No

Scrubbing Liquid: Once Through Recycled

If recycled, Unkn gpm makeup rate

If water, describe settling basin: None

For solution/reactant systems:

Chemical makeup of liquid: 6% Caustic

How is scrubber discharge handled/treated: A 2% solution is discharged to the wastewater treatment plant.

Emissions: Not Visible Visible, Dust Trail-off,
% Opacity (Do VEE)

Comments: Emission Point is operated with a tank of 15 % NaOH solution. The NaOH solution is analyzed until the NaOH reaches a concentration of 6% and then the analysis is run once per hour. Log book was available to demonstrate analysis. During the inspection only the West stack was venting.

INSPECTION REPORT FORM - SCRUBBERS

Facility Name: Vicksburg Chemical Company

Date: January 12, 1999

Emission Point No./Name: AA-002 / Potassium Nitrate Plant, C-15 centrifuge, dryer, and rectifier scrubber

Scrubbing Liquid: Water Solution Reactant Solution

Scrubber Type:

- Spray Tower/Wet Washer
- Sieve Tray/Bubbler Cap/Packed Column
- Orifice
- Venturi
- Other, Explain: Reverse Flood Tower

Demisting Method: Cyclone
 Vanes
 Pad
 No Demisting
 Other, Explain: Brinks Mist Eliminator

Operating Conditions: 1475 gpm @ Unkn psig
14 inches water gauge pressure drop
Rainout Occurring: Yes No

Scrubbing Liquid: Once Through Recycled

If recycled, 23 gpm makeup rate

If water, describe settling basin: None, the scrubbing liquid is recycled to the C-3 column

For solution/reactant systems:

Chemical makeup of liquid: 5% HNO₃

How is scrubber discharge handled/treated: Returned to process

Emissions: Not Visible Visible, Dust Trail-off,
% Opacity (Do VEE)

Comments: None

INSPECTION REPORT FORM - MISCELLANEOUS PROCESSES

Facility Name: Vicksburg Chemical Company

Date: January 12, 1999

Emission Point No./Name: AA-002 / Potassium Nitrate Plant, Extended Absorber, C-7

Description of Process:

Raw Materials: Potassium Chloride and Nitric Acid

Processing Operations: Potassium Chloride and Nitric Acid are reacted to form Potassium Nitrate, Chlorine, and Nitrogen Tetroxide.

Products/By-Products: Potassium Nitrate, Chlorine, and Nitrogen Tetroxide / Nitrogen Oxides.

**Emissions & Control Devices: Nitrogen Oxides / Absorber
(Complete Appropriate Control Device Sheets)**

Permit conditions not being complied with and description of noncompliance:None

INSPECTION REPORT FORM - SCRUBBERS

Facility Name: Vicksburg Chemical Company

Date: January 12, 1999

Emission Point No./Name: AA-002 / Potassium Nitrate Plant, Extended Absorber, C-7

Scrubbing Liquid: Water Solution Reactant Solution

Scrubber Type:

- Spray Tower/Wet Washer
- Sieve Tray/Bubbler Cap/Packed Column
- Orifice
- Venturi
- Other, Explain:

- Demisting Method:** Cyclone
 Vanes
 Pad
 No Demisting
 Other, Explain:

Operating Conditions: 10 gpm @ Unkn psig
Unkn inches water gauge pressure drop
Rainout Occurring: Yes No

Scrubbing Liquid: Once Through Recycled

If recycled, gpm makeup rate

If water, describe settling basin: Discharged to the waste water treatment system

For solution/reactant systems:

Chemical makeup of liquid: 100% Water

How is scrubber discharge handled/treated: Discharged to the waste water treatment system

Emissions: Not Visible Visible, Dust Trail-off,
% Opacity (Do VEE)

Comments: None

INSPECTION REPORT FORM - MISCELLANEOUS PROCESSES

Facility Name: Vicksburg Chemical Company

Date: January 12, 1999

Emission Point No./Name: AA-002 / Potassium Nitrate Plant, Prill Tower

Description of Process:

Raw Materials: Potassium Chloride and Nitric Acid

Processing Operations: Potassium Chloride and Nitric Acid are reacted to form potassium nitrate, chlorine, and nitrogen tetroxide. The Potassium Nitrate is crystallized, centrifuged, dried and then packed or stored.

Products/By-Products: Potassium Nitrate, Chlorine, Nitrogen Tetroxide, and Bromine / None.

**Emissions & Control Devices: Nitrogen Oxides, Chlorine, and Particulate Matter / None
(Complete Appropriate Control Device Sheets)**

Permit conditions not being complied with and description of noncompliance:None

INSPECTION REPORT FORM - SCRUBBERS

Facility Name: Vicksburg Chemical Company

Date: January 12, 1999

Emission Point No./Name: AA-002 / Cooler Scrubber

Scrubbing Liquid: Water Solution Reactant Solution

Scrubber Type:

- Spray Tower/Wet Washer
- Sieve Tray/Bubbler Cap/Packed Column
- Orifice
- Venturi
- Other, Explain:

Demisting Method: Cyclone
 Vanes
 Pad
 No Demisting
 Other, Explain: Mist Eliminator

Operating Conditions: Unkn gpm @ Unkn psig
9 inches water gauge pressure drop
Rainout Occurring: Yes No

Scrubbing Liquid: Once Through Recycled

If recycled, 5-15 gpm makeup rate

If water, describe settling basin: Water is discharged to the drain system in the plant.

For solution/reactant systems:

Chemical makeup of liquid: 100% Water

How is scrubber discharge handled/treated: Discharged to the drain system in the plant

Emissions: Not Visible Visible, Dust Trail-off,
% Opacity (Do VEE)

Comments: None

INSPECTION REPORT FORM - BAGHOUSE

Facility Name: Vicksburg Chemical Company

Date: January 12, 1999

Emission Point No./Name: AA-002 / Storage Baghouse

Size of Baghouse: Total No. of Bags: 100

No. of Independent Sections: 2

Size of a Bag: 5 Inches Diam. by 7 Ft. Long

Type of Bag: Woven Felted

Type Olefin-Polyester

Dirty air in on Inside Outside of Bags

Bag Cleaning Method:

Shaking

Reverse Air

Pulse Jet

Other:

Operating Conditions: 1 inch water gauge pressure drop

Unkn ACFM @ Unkn degrees Fahrenheit

Emissions: Not Visible Visible, % Opacity

Emissions Visible, Vapor Plume

Maintenance: Monitored every day

Leaks in baghouse, ducts Yes No

Date and description of last repair: 3 months prior to inspection

Date and description of next anticipated repair: In accordance with pressure drop and stack opacity that is observed.

How is collected dust stored, handled, disposed of? Returned to storage building by screw conveyor

Comments: This emission point was under maintenance to fix an air lock problem.

INSPECTION REPORT FORM - SCRUBBERS

Facility Name: Vicksburg Chemical Company

Date: January 12, 1999

Emission Point No./Name: AA-002 / Bagging and Loading Scrubber

Scrubbing Liquid: Water Solution Reactant Solution

Scrubber Type:

- Spray Tower/Wet Washer
- Sieve Tray/Bubbler Cap/Packed Column
- Orifice
- Venturi
- Other, Explain:

Demisting Method: Cyclone
 Vanes
 Pad
 No Demisting
 Other, Explain:

Operating Conditions: Unkn gpm @ Unkn psig
Unkn inches water gauge pressure drop
Rainout Occurring: Yes No

Scrubbing Liquid: Once Through Recycled

If recycled, 10 gpm makeup rate

If water, describe settling basin: Discharged to waste water treatment system

For solution/reactant systems:

Chemical makeup of liquid: 100% Water

How is scrubber discharge handled/treated: Discharged to waste water treatment system

**Emissions: Not Visible Visible, Dust Trail-off,
% Opacity (Do VEE)**

Comments: In Operation at the time of inspection.

INSPECTION REPORT FORM - BOILERS

Facility Name: Vicksburg Chemical Company

Date: January 12, 1999

Emission Point No./Name: AA-005 / Eclipse Boiler

Rated Boiler Size: 10.5 MMBTUH
OR
Unkn lbs steam/hr @ Unkn psig

Operating Rate @ Insp: 0 MMBTUH
OR
0 lbs steam/hr @ 0 psig

Fuel(s) Being Used: Natural Gas @ 0 MCFH
 Fuel Oil, No. @ Gal/hr
 Coal @ tons/hr; type;
 %ash; % sulfur
 Woodwaste: Sawdust @ tons/hr
 Shavings @ tons/hr
 Hogged Fuel @ tons/hr
 Bark @ tons/hr

Other Fuels, Explain: None

For Solid Fuels, Describe Fuel Stoking Method: None

Soot Blowing: Periodic Manual
 Continuous Automatic

Schedule: None

Air Pollution Controls: None Baghouse
 Cyclone ESP
 Multiclone
 Scrubber (For Particulate)

Complete Appropriate Control Device Sheets

Stack Emissions: Opacity 0% By VEE CEM
 Sulfur Dioxide lbs/MMBTU by CEM
 Nitrogen Oxides lbs/MMBTU by CEM

Comment: This unit was not in operation during the inspection. The Natural Gas Usage Rate is noted.
October-December 1997: 0.0011 MMCF
April-June 1998: 0 MMCF

INSPECTION REPORT FORM - BOILERS

Facility Name: Vicksurg Chemical Company

Date: January 12, 1999

Emission Point No./Name: AA-006 / KNO₃ Melt Tank

Rated Boiler Size: 28 MMBTUH
OR
Unkn lbs steam/hr @ Unkn psig

Operating Rate @ Insp: Unkn MMBTUH
OR
Unkn lbs steam/hr @ Unkn psig

Fuel(s) Being Used: Natural Gas @ 534,219 SCFH
 Fuel Oil, No. @ Gal/hr
 Coal @ tons/hr; type;
%ash; % sulfur
 Woodwaste: Sawdust @ tons/hr
 Shavings @ tons/hr
 Hogged Fuel @ tons/hr
 Bark @ tons/hr

Other Fuels, Explain: None

For Solid Fuels, Describe Fuel Stoking Method: None

Soot Blowing: Periodic Manual
 Continuous Automatic

Schedule: None

Air Pollution Controls: None Baghouse
 Cyclone ESP
 Multiclone
 Scrubber (For Particulate)

Complete Appropriate Control Device Sheets

Stack Emissions: Opacity 0% By (X) VEE CEM
Sulfur Dioxide lbs/MMBTU by CEM
Nitrogen Oxides lbs/MMBTU by CEM

INSPECTION REPORT FORM - BOILERS

Facility Name: Vicksburg Chemical Company

Date: January 12, 1999

Emission Point No./Name: AA-007 / 11.0 MMBTU/Hr KNO₃ dryer

Rated Boiler Size: 15.0 MMBTUH
OR
Unkn lbs steam/hr @ psig

Operating Rate @ Insp: Unkn MMBTUH
OR
Unkn lbs steam/hr @ Unkn psig

Fuel(s) Being Used: Natural Gas @ 952,300 SCFH
 Fuel Oil, No. @ Gal/hr
 Coal @ tons/hr; type;
%ash; % sulfur
 Woodwaste: Sawdust @ tons/hr
 Shavings @ tons/hr
 Hogged Fuel @ tons/hr
 Bark @ tons/hr

Other Fuels, Explain: None

For Solid Fuels, Describe Fuel Stoking Method: None

Soot Blowing: Periodic Manual
 Continuous Automatic

Schedule: None

Air Pollution Controls: None Baghouse
 Cyclone ESP
 Multiclone
 Scrubber (For Particulate)

Complete Appropriate Control Device Sheets

Stack Emissions: Opacity % By VEE CEM
Sulfur Dioxide lbs/MMBTU by CEM
Nitrogen Oxides lbs/MMBTU by CEM

Comment: The emissions from this source are piped to emission point AA-002, C-10 Scrubber

Inspection Report Form - Miscellaneous Processes

Facility Name: Vicksburg Chemical Company

Date: January 12, 1999

Emission Point No./Name: AC-001, Sodium Hypochlorite Bleach Plant

Description of Process: Chlorine emissions are reacted with a dilute caustic soda solution in a reactor/scrubber to form a bleach product. The scrubber removes the chlorine, which reacts in the scrubber to form bleach (sodium hypochlorite). The product is then transferred to storage tanks.

Raw Materials: Dilute Caustic Soda and Chlorine

Emissions & Control Devices: Scrubber
(Complete Appropriate Control Device Sheets)

Describe any problems noted or permit conditions not being complied with:

None

INSPECTION REPORT FORM - SCRUBBERS

Facility Name: Vicksburg Chemical Company

Date: January 12, 1999

Emission Point No./Name: AC-001, Sodium Hypochlorite bleach plant

Scrubbing Liquid: Water Solution Reactant Solution

Scrubber Type:

Spray Tower/Wet Washer

Sieve Tray/Bubbler Cap/Packed Column

Orifice

Venturi

Other, Explain:

Demisting Method: Cyclone

Vanes

Pad

No Demisting

Other, Explain:

Operating Conditions: 1 tph @ 20 inches water gauge pressure drop

Rainout Occurring: Yes No

Scrubbing Liquid: Once Through Recycled

If recycled, 18.75 gpm makeup rate

If water, describe settling basin: Discharged to waste water treatment system

For solution/reactant systems:

Chemical makeup of liquid: 18% NaOH and 82% Water

How is scrubber discharge handled/treated: Discharged to waste water treatment system

Emissions: Not Visible Visible, Dust Trail-off,
% Opacity (Do VEE)

Comments: None

Inspection Report Form - Miscellaneous Processes

Facility Name: Vicksburg Chemical Company

Date: January 12, 1999

Emission Point No./Name: AB-000, Potassium Carbonate Plant

Description of Process: KCL is received by railcar and dissolved in water. The solution is heated to produce a K_2CO_3 stream and NH_3 and CO_2 vapors. Dry solid quicklime (CaO) is mixed with water to produce hydrated lime. After centrifuging the mixtures, the heavy impurities are discarded and the $NH_3/CaCl_2$ /water solution is fed to the ammonia stripper to remove NH_3 , which is recovered in the ammonium carbonate absorber. The bottoms liquor effluent from the stripper is a $CaCl_2$ -KCL solution. The ammonia is regenerated to be recycled in the ammonium carbonate absorber. Residual water is removed from the K_2CO_3 product in a natural gas fired dryer system.

Raw Materials: KCL, Water, CaO

Products/By-Products: K_2CO_3

Describe any problems noted or permit conditions not being complied with:
None

Emission Points Associated with the Potassium Carbonate Plant:

AB-001 Potassium Chloride Unloading Operation

AB-002 Quick Lime Silo

AB-003 Slaked Lime Surge Tank

AB-004 Evaporator Condensor

AB-005 Potassium Carbonate Surge Tank

AB-006 Dryer System with Scrubber

AB-007 Potassium Carbonate Product Silo

AB-008 Product Bagging Surge Silo

AB-009 Product Bulk Loading Silo

AB-010 Potassium Carbonate Vent Scrubber

AB-011 Potassium Carbonate Bulk Loadout Unit

The Potassium Carbonate Plant was not loading at the time of the inspection and no visible emissions were noted.

Inspection Report Form - Miscellaneous Processes

Facility Name: Vicksburg Chemical Company

Date: January 12, 1999

Emission Point No./Name: AD-000, Phosphate Products Process

Description of Process: The process produces various salts of phosphoric acid by the neutralization of wet-process phosphoric acid with the corresponding base.

Raw Materials: Mono-Ammonium Phosphate, Di-Ammonium Phosphate, Mono-Potassium Phosphate, Di-Potassium Phosphate, Mono-Sodium Phosphate, Di-Sodium Phosphate, Tri-Sodium Phosphate.

Products/By-Products: Mono-Ammonium Phosphate, Di-Ammonium Phosphate, Mono-Potassium Phosphate, Di-Potassium Phosphate, Mono-Sodium Phosphate, Di-Sodium Phosphate, Tri-Sodium Phosphate

Emissions: Not Visible Visible, Dust Trail-off,
% Opacity (Do VEE)

Comments: None

file RCRA



MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

James I. Palmer, Jr., Executive Director

27 July 1998

CERTIFIED MAIL Z 039 743 815

Mr. Steve Boswell
Environmental Management
Vicksburg Chemical Corporation
P.O. Box 821003
Vicksburg, MS 39180

Re: Compliance Evaluation Inspection (CEI)
NPDES Permit No. MS0027995
Hazardous Waste No. MSD 990 714 081

Dear Mr Boswell:

Enclosed please find the inspection reports and checklists that were completed as a result of the Compliance Evaluation Inspections for your NPDES Permit and your Hazardous Waste Permit on 14 July 1998. The inspection revealed no apparent violations.

If you have any questions, please contact me at (601) 961-5056.

Sincerely,

A handwritten signature in cursive script that reads "Steven R Bailey".

Steven R Bailey
Environmental Compliance and Enforcement Division

OFFICE OF POLLUTION CONTROL

P.O. Box 10385 Jackson, MS 39289.0385 Phone 601.961.5171 Fax 601.354.6612

RCRA INSPECTION REPORT

1. Inspector and Author of Report

Steven Bailey
Mississippi Department of Environmental Quality - MDEQ
Environmental Enforcement and Compliance Division

2. Facility Information

Vicksburg Chemical Company
P.O. Box 821003
Vicksburg, MS 39182

3. Responsible Company Official

Mr. Steven T. Boswell
Director of Environmental Affairs

4. Inspection Participants

Steven Bailey - MDEQ
Steven Boswell - Vicksburg Chemical Company

5. Date and Time of Inspections

July 14, 1998 @ 8:07 a.m.

6. Applicable Regulations

Mississippi Hazardous Waste Management Regulations (MHWMR) 261,
262, 265.16, 265 subparts c, d and I and 268.

7. Purpose of Inspection

Compliance Evaluation Inspection (CEI) to determine facility's
compliance with the applicable MHWMR.

8. Facility Description

Vicksburg Chemical Company is located in Warren County,
Mississippi. The facility consists of a 650-acre plant that is
divided into two separate and distinct operations known as the
North Plant and the South Plant. About 130 acres of the plant
site is currently being used or has at one time been used.

The North Plant produces potassium nitrate, liquid chlorine, and
liquid nitrogen tetroxide. Raw materials for the North Plant
include potassium chloride and nitric acid.

The south Plant formerly manufactured chlorinated pesticides,
nitrogen-based herbicides, and other agricultural chemicals. The
only active operations at the South Plant are a nitric acid unit

constructed in 1986 and a potassium carbonate (k-carb) unit constructed in 1994:

9. Findings

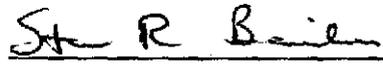
Vicksburg Chemical had sent one shipment of P123, P020 for disposal since their previous RCRA inspection. The shipment consisted of 45,110 lbs. of the material and was shipped on 3/10/98. The land ban form was attached.

At the time of the inspection, there was no container management area due to construction of the phosphate salts plant. Personnel training records which include job title, written job description, type of training and amount of training are kept on site. The facility is equipped with two-way radios and telephones that are available to contact emergency response personnel. Shipping manifests and the contingency plan were well organized and updated according to regulations.

10. Conclusions

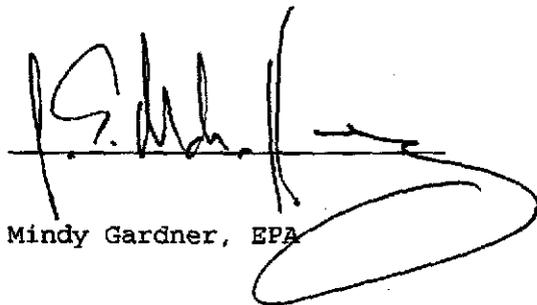
There were no apparent violations of the MHWMR at the time of the inspection.

11. Signed



Inspector

12. Approval



cc: Mindy Gardner, EPA

Part 1

General Site Information

Facility Name: Vicksburg Chemical
Address: _____

I.D. Number: MSD 990 714 081
Contact: Steve Baswell
Title: _____
Phone Number: 601-636-1231

Type of Ownership:

Federal State County Municipal Private

Facility Status:

Generator Transporter Treatment Storage Disposal

Regulatory Status:

Interim Status Part B Submitted
 Permitted Part B in Preparation

Principal Inspector Name: _____ Title: _____
Organization: _____ Phone Number: _____

Inspection Participants:

<u>Name</u>	<u>Title</u>	<u>Representing</u>
<u>Steve Baswell</u>	<u>Environmental Director</u>	<u>VCC</u>
<u>Steve Parkay</u>	<u>EEIT</u>	<u>MDEQ</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Part _____

GENERAL FACILITY CHECKLIST

Section A - General Facility Standards

1. Does facility have EPA Identification No.? Yes No NA
- a. If yes, EPA I.D. No. MSD 990 7140 81
If no, explain. _____
2. Has facility received hazardous waste from a foreign source? Yes No NA
- a. If yes, has it filed a notice with the Regional Administrator? Yes No NA

Waste Analysis

3. Does facility maintain a copy of the waste analysis plan at the facility? Yes No NA
- a. If yes, does it include: (264.13) (265.13)
1. Parameters for which each waste will be analyzed? Yes No NA
2. Test methods used to test for these parameters? Yes No NA
3. Sampling method used to obtain sample? Yes No NA
4. Frequency with which the initial analyses will be reviewed or repeated? Yes No NA
5. (For offsite facilities) waste analyses that generators have agreed to supply? Yes No NA
6. (For offsite facilities) procedures which are used to inspect and analyze each movement of hazardous waste, including:
- a. Procedures to be used to determine the identity of each movement of waste. Yes No NA
- b. Sampling method to be used to obtain representative sample of the waste to be identified. Yes No NA
4. Does the facility provide adequate security through: (264.14) (265.14)
- a. 24-hour surveillance system (e.g., television monitoring or guards)? Yes No NA

OR

- b. 1. Artificial or natural barrier around facility (e.g., fence or fence and cliff)? Yes No NA

Describe fence

AND

2. Means to control entry through entrances (e.g., attendant, television monitors, locked entrance, controlled roadway access)? Yes No NA

Describe _____

General Inspection Requirements (264.15) (265.15)

5. Does the owner/operator maintain a written schedule at the facility for inspecting:

- | | | | |
|--|---|-----------------------------|-----------------------------|
| a. Monitoring equipment? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> NA |
| b. Safety and emergency equipment? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> NA |
| c. Security devices: | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> NA |
| d. Operating and structural equipment? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> NA |
| e. Types of problems of equipment:-- | | | |
| 1. Malfunction | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> NA |
| 2. Operator error | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> NA |
| 3. Discharges | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> NA |

6. Does the owner/operator maintain an inspection log? Yes No NA

- a. If yes, does it include:

- | | | | |
|---|---|-----------------------------|-----------------------------|
| 1. Date and time of inspection? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> NA |
| 2. Name of inspector? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> NA |
| 3. Notation of observations? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> NA |
| 4. Date and nature of repairs or remedial action? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> NA |
| 5. Identification of potential problems? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> NA |

- b. Are there any malfunctions or other deficiencies not corrected? (Use narrative explanation sheet.) Yes No NA

- c. Are records kept a minimum of three years? Yes No NA

Personnel Training (264.16) (265.16)

7. Does the owner/operator maintain personnel training records at the facility? Yes No NA

Date of most recent training: 2 / 98

How long are they kept? indefinitely

- a. If yes, do they include:

- | | | | |
|--|---|-----------------------------|-----------------------------|
| 1. Job title and written job description of each position? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> NA |
| 2. Description of type and amount of training? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> NA |
| 3. Records of training given to facility personnel? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> NA |

Requirements for Ignitable, Reactive, or Incompatible Waste
(264.17) (265.17)

8. Does facility handle ignitable or reactive wastes?

Yes No NA

a. If yes, is waste separated and confined from sources of ignition or reaction (open flames, smoking, cutting and welding, hot surfaces, frictional heat), sparks (static, electrical, or mechanical), spontaneous ignition (e.g., from heat-producing chemical reactions), and radiant heat?

1. If yes, use narrative explanation sheet to describe separation and confinement procedures.
2. If no, use narrative explanation sheet to describe sources of ignition or reaction.

b. Are smoking and open flames confined to specifically designated locations?

Yes No NA

c. Are "No Smoking" signs posted in hazardous areas?

Yes No NA

d. Are precautions documented (Part 264 only)?

Yes No NA

9. Check containers

a. Are containers leaking or corroding?

Yes No NA

b. Is there evidence of heat generation from incompatible wastes?

Yes No NA

Section B - Preparedness and Prevention

1. Is there evidence of fire, explosion, or contamination of the environment? (264.31) (265.31)

Yes No NA

If yes, use narrative explanation sheet to explain.

2. Is the facility equipped with: (264.32) (265.32)

a. Internal communication or alarm system?

Yes No NA

1. Is it easily accessible in case of emergency?

Yes No NA

b. Telephone or two-way radio to call emergency response personnel?

Yes No NA

c. Portable fire extinguishers, fire control equipment, spill control equipment, and decontamination equipment?

Yes No NA

d. Water of adequate volume of hoses, sprinklers, or water spray system?

Yes No NA

1. Describe source of water well & city

3. Is there sufficient aisle space to allow unobstructed movement of personnel and equipment? (264.35) (265.35)

Yes No NA

4. Has the owner/operator made arrangements with the local authorities to familiarize them with characteristics of the facility? (Layout of facility, properties of hazardous waste handled and associated hazards, places where facility personnel would normally be working, entrances to roads inside facility, possible evacuation routes.) (264.37) (265.37) Yes No NA
5. In the case that more than one police or fire department might respond, is there a designated primary authority? (264.37) (265.37) Yes No NA
- a. If yes, name primary authority Vicksburg Fire Dept
6. Does the owner/operator have phone numbers of and agreements with State emergency response teams, emergency response contractors, and equipment suppliers? (264.37) (265.37) Yes No NA
- a. Are they readily available to all personnel? Yes No NA
7. Has the owner/operator arranged to familiarize local hospitals with the properties of hazardous waste handled and types of injuries that could result from fires, explosions, or releases at the facility? (264.37) (265.37) Yes No NA
8. If State or local authorities declined to enter into agreements, is this entered in the operating record? (264.37) (265.37) Yes No NA

Section C - Contingency Plan and Emergency Procedures

1. Is a contingency plan maintained at the facility? (264.53) (265.53) Yes No NA
- a. If yes, is it a revised SPCC Plan? Yes No NA
- b. Does contingency plan include: (264.52) (265.52)
1. Arrangements with local emergency response organizations? Yes No NA
 2. Emergency coordinator's names, phone numbers and addresses? Yes No NA
 3. List of all emergency equipment at facility and descriptions of equipment? Yes No NA
 4. Evacuation plan for facility personnel? Yes No NA
2. Is there an emergency coordinator on site or on call at all times? (264.55) (265.55) Yes No NA

Section D - Manifest System, Recordkeeping, and Reporting

1. Does facility receive waste from offsite? (264.71) (265.71) Yes No NA
- a. If yes, does the owner/operator retain copies of all manifests? Yes No NA

1. Are the manifests signed and dated and returned to the generator? Yes No NA
2. Is a signed copy given to the transporter? Yes No NA
2. Does the facility receive any waste from a rail or water (bulk shipment) transporter? (264.71) (265.71) Yes No NA
- a. If yes, is it accompanied by a shipping paper? Yes No NA
1. Does the owner/operator sign and date the shipping paper and return a copy to the generator? Yes No NA
2. Is a signed copy given to the transporter? Yes No NA
3. Has the owner/operator received any shipments of waste that were inconsistent with the manifest (manifest discrepancies)? (264.72) (265.72) Yes No NA
- a. If yes, has he attempted to reconcile the discrepancy with the generator and transporter? Yes No NA
1. If no, has Regional Administrator been notified? Yes No NA
4. Does the owner/operator keep a written operating record at the facility? (264.73) (265.73) Yes No NA
- a. If yes, does it include:
1. Description and quantity of each hazardous waste received? Yes No NA
2. Methods and dates of treatment, storage, and disposal? Yes No NA
3. Location and quantity of each hazardous waste at each location? Yes No NA
4. Cross-references to manifests/shipping papers? Yes No NA
5. Records and results of waste analyses? Yes No NA
6. Report of incidents involving implementation of the contingency plan? Yes No NA
7. Records and results of required inspections? Yes No NA
8. Monitoring, testing, and analytical data, for groundwater required by Subpart F? Yes No NA
9. Closure cost estimates and, for disposal facilities, post-closure cost estimates (Part 264)? Yes No NA
10. Notices of generators as specified in MHWMMR 264.12(b) (Part 264)? Yes No NA
- b. Does facility have copy of permit on site? Yes No NA
5. Does the facility submit a biennial report by March 1 every even-numbered year? (264.75) (265.75) Yes No NA
- a. If yes, do reports contain the following information:
1. EPA I.D. number? Yes No NA
2. Date and year covered by report? Yes No NA

3. Description/quantity of hazardous waste?
4. Treatment, storage, and disposal methods?
5. Monitoring data under MHWMR 265.94(a)(2) and (b)(2) (Part 265)?
6. Most recent closure and post-closure cost estimates?

Yes No NA
 Yes No NA
 Yes No NA
 Yes No NA

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7. For TSD generators, description of efforts to reduce volume/toxicity of waste generated, and actual comparisons with previous year? Yes No NA
8. Certification signed by owner/operator? Yes No NA
6. Has the facility received any waste (that does not come under the small generator exclusion) not accompanied by a manifest? (264.76) (265.76) Yes No NA
- a. If yes, has he submitted an unmanifested waste report to the Executive Director? Yes No NA
7. Does the facility submit to the Executive Director reports on releases, fires, and explosions; contamination and monitoring data; and facility closure? Yes No NA

Section B - Generator Compliance

1. Waste Identification

a. Does the generator handle the following wastes:

1. Solvent wastes

- (i) F001, F002, F004, or F005 Yes No NA
(ii) F003 Yes No NA

If an F003 wastestream (listed solely for ignitability) has been mixed with a non-restricted solid or hazardous waste, does the resultant mixture exhibit the ignitability characteristic? Yes No NA

Note: Appendix A is intended to assist the inspector and enforcement official in determining whether the facility is generating F-solvent wastes, if such wastes were not identified by the facility previously. If you are concerned that F-solvent wastes may be misclassified or mislabeled, turn to Appendix A-1. To assist in identifying potentially misclassified F-solvents, Appendix A-2 presents a list of corresponding F and U wastes.

2. Dioxin wastes (F020-F023, F026-F028) Yes No NA
3. Potential California List Wastes (see Appendix C) Yes No NA
(i) D002 Yes No NA
(ii) D004-D011 Yes No NA
(iii) Any other waste characterized by high concentrations of halogenated organic constituents (HOCs), metals, or cyanides? Yes No NA
(iv) Any F, K, P, or U wastes subject to "soft hammer" requirements that may qualify as California wastes due to HOCs, metals, or cyanide content? (See Appendix F) Yes No NA
4. First Third Wastes (See MHWMR 268.10) Yes No NA
5. Second Third Wastes (See MHWMR 268.11) Yes No NA
6. (Reserved)
(i) Are any of the above "soft hammer" wastes? (See Appendices D & E) Yes No NA

2. BDAT Treatability Group - Treatment Standards Identification

- a. Does the generator mix restricted wastes with different treatment standards for constituents of concern? Yes No NA

2. TCLP

Yes No NA

(i) List wastes for which "TCLP" was used:

(ii) MHWMR 268.41 lists wastes for which treatment standards are expressed as concentrations in waste extract. Were any wastes handled by the generator subject to waste extract standards not tested using the TCLP?

Yes No NA

If yes, list: _____

3. Total waste analysis

Yes No NA

4. If files were retained, describe content and basis of applied knowledge determination:

If determined by TCLP or total constituent analysis, provide date of last test, frequency of testing, and attach test results.

Dates/frequency: _____

Note which wastes were subjected to which tests:

Note any problems (e.g., inadequate analysis, variation of waste composition/generation for applied knowledge) _____

5. Were wastes tested using TCLP or total constituent analysis when a process or wastestream changed [Section 264.13(a)(3)(i) or Section 265.13(a)(3)(i)]?

Yes No NA

b. Did the restricted wastes exceed applicable treatability group treatment standards upon generation [Section 268.7(a)(1)]?

List those that exceeded standards: _____

List those that did not exceed standards: _____

c. Did the generator dilute the waste or the treatment residual so as to substitute for adequate treatment [Section 268.3] Yes No NA

6. Has the generator conducted any testing of those hazardous wastes to determine whether the concentrations qualify the hazardous wastes as California wastes? Yes No NA

If no, has the generator retained records documenting his "applied knowledge" that the hazardous waste is not a California waste? Yes No NA

4. Management

a. Onsite management

1. Were restricted wastes managed onsite? Yes No NA

2. For wastes that exceed treatment standards, was treatment in regulated units, storage for greater than 90 days, and/or disposal conducted? Yes No NA

If yes, TSDF checklist must be completed.

b. Offsite Management

1. If restricted wastes exceed treatment standards, did generator provide treatment facility notification with each shipment? [268.7(a)(1)]:

(i) EPA Hazardous Waste Number? Yes No NA
(ii) Corresponding treatment standard? Yes No NA
(iii) Manifest number? Yes No NA
(iv) Waste analysis, if available? Yes No NA

Identify offsite treatment facilities _____

~~Chem Waste Management Entities~~

2. If restricted wastes do not exceed treatment standards, did generator provide the disposal facility with a notice and certification including:

(i) EPA hazardous waste I.D. number? Yes No NA
(ii) Corresponding treatment standard? Yes No NA

b. If yes, did the generator select the most stringent treatment standard for the constituent of concern [Section 268.41(b)]?

Yes No NA

c. F Solvents

Did the generator correctly determine the appropriate treatability group [Section 268.41] of the waste (e.g., wastewaters containing solvents, nonwastewater (i.e., < 1% TOC), pharmaceutical wastewaters containing spent methylene chloride, all other spent solvent wastes)?

Yes No NA

d. California Wastes

Did the generator correctly determine the distinction between liquid hazardous wastes and non-liquid hazardous wastes that contain HOCs in concentrations greater than 1,000 mg/kg [Section 268.32(a)(3)]?

Yes No NA

e. First and Second Third Waste

1. Did the generator ascertain whether restricted wastes were appropriately assigned wastewater or nonwastewater designations (nonwastewaters are > 1% TOC and > 1% suspended solids) [Section 268.7(a)]?

Yes No NA

2. Is there any reason to believe that the generator may have diluted the waste to change the applicable treatment standard (based on review of process operation, pipe routing, point of sampling)?

Yes No NA

3. Waste Analysis

a. Did the generator determine whether the waste exceeds treatment standards based on Section 268.7(a):

1. Knowledge of wastes

Yes No NA

(i) List wastes for which "applied knowledge" was used:

(iii) Manifest number

Yes No NA

(iv) Certification regarding waste and that it meets treatment standards?

Yes No NA

Identify land disposal facilities receiving the BDAT certified wastes _____

3. If the generator's waste is subject to a Section 268.5 case by case exemption, a Section 268.6 "no migration" exemption, or a nationwide variance does the generator's records indicate that he or she submits with each waste shipment [Section 268.7(a)(3)]:

(i) EPA Hazardous Waste Number?

Yes No NA

(ii) Corresponding Treatment Standards?

Yes No NA

(iii) All applicable prohibitions?

Yes No NA

(iv) The manifest number?

Yes No NA

(v) The date the wastes are subject to prohibitions?

Yes No NA

(vi) Does generator keep records of all notifications/certifications sent to offsite facilities?

Yes No NA

List all prohibited wastes for which records are not provided per above [Section 268.7(a)(b)]:

Identify TSDFs receiving any prohibited wastes subject to any exemptions and variances:

4. If handler generates a "soft hammer" waste, does the generator send with each "soft hammer" waste shipment to a TSDF and retain copies of, a notice that includes [268.7(a)(4)]:

The EPA Hazardous Waste Number?

Yes No NA

Applicable prohibitions?

Yes No NA

The manifest number?

Yes No NA

Waste analysis data, where available?

Yes No NA

(i) Do the generator's records indicate that any soft-hammer wastes are destined for disposal in a landfill or surface impoundment [Section 268.33(f)]?

Yes No NA

If yes, list facility of destination and waste of concern [Section 268.8(a)(2)]

- (ii) Has the generator submitted demonstrations and certifications for each "soft-hammered" waste destined to be disposed in landfill or surface impoundment to the Regional Administrator prior to the shipment of waste to the TSD [Section 268.7(a)(2)]? Yes No NA
- (iii) Has the generator retained a copy of the demonstration on site [Section 268.8(a)(3)-(a)(4)]? Yes No NA
- (iv) Has the generator retained copies of all Section 268.8 certifications sent to the TSD [Section 268.7(a)(6)]? Yes No NA
- (v) Did the generator submit the demonstration to the receiving facility upon the initial shipment of the waste [Section 268.8(a)(3)-(a)(4)]? Yes No NA
- (vi) If the Regional Administrator has invalidated the certification, has the generator ceased shipment of the waste and do records indicate that the generator has informed all receiving facilities of the invalidation [Section 268.8(b)(3)]? Yes No NA

5. Storage of Prohibited Waste

- a. Were prohibited wastes stored for greater than 90 days? Yes No NA

If yes, was facility operating as a TSD under interim status or final permit [Section 262.34(b)]? Yes No NA

If yes, TSD Checklist must be completed.

6. Treatment Using RCRA 264/265 Exempt Units or Processes (i.e., boilers, furnaces, distillation units, wastewater treatment tanks, etc.)

1. Were treatment residuals generated from RCRA 264/265 exempt units or processes? Yes No NA

If yes, list type of treatment unit and processes

N/A

If yes, TSDf checklist must be completed.

Section C - Treatment, Storage & Disposal Requirements

1. General

a. Does the facility conduct waste analysis (total and TCLP) on-site or through a commercial laboratory?

Commercial Lab

b. Describe the frequency of sampling conducted by the facility.

as needed

2. Treatment Facilities

a. Has the treatment facility revised its waste analysis plan [Section 268.7(b)] to meet the requirements of Section 264.13 or 265.13?

Yes No NA

(i) Is the treatment facility conducting TCLP tests for wastes subject to treatment standards expressed as waste extracts per 268.7(b)(i)?

Yes No NA

(ii) Is the treatment facility using the paint filter test for the California waste residues [Section 268.7(b)(ii)]?

Yes No NA

(iii) Is the treatment facility testing the pH of California waste residues?

Yes No NA

(iv) Is the treatment facility testing concentrations (not extracts) in the waste residues for prohibited wastes with established treatment standards expressed as waste concentrations [Section 268.7(b)(3)]?

Yes No NA

(v) Is the treatment facility testing extracts of the waste residues for prohibited wastes having established treatment standards expressed as extract concentrations [Section 268.7(b)(1)]?

Yes No NA

3. Land Disposal Facilities

- a. Has the facility retained all notices and certifications from generators, storage and treatment facilities [268.7(c)(1)]? Yes No NA
- b. Are wastes and waste residues tested for compliance with applicable treatment standards and prohibitions [Section 268.7(c)(2)]? Yes No NA
- c. Are they being tested in conformance with the frequency specified in the waste analysis plan [Section 268.7(c)(3)]? Yes No NA
- d. Are the appropriate tests (TCLP vs. total waste) being used [Section 268.7(c)(2)]? Yes No NA

4. Storage (Section 268.50)

- a. Are restricted wastes exceeding treatment standards stored (excepting wastes subject to no migration exemptions, nationwide variances, case by case extensions, soft-hammered wastes)? Yes No NA
- b. Are all containers clearly marked to identify content and date(s) entering storage [Section 268.50(a)(2)]? Yes No NA
- c. Do operating records track the location, quantity and dates that wastes exceeding treatment standards entered and were removed from storage [Section 264.73 or Section 265.73]? Yes No NA
- d. Do operating records agree with container labeling? [Section 268.50(a)(2) or Section 264.73 or Section 265.73] Yes No NA
- e. Is waste exceeding treatment standards stored for less than 1 year? Yes No NA
- If yes, can you show that such accumulation is not necessary to facilitate proper recovery, treatment, or disposal? Yes No NA
- If yes, state how: _____
- f. Was/is waste exceeding treatment standards stored for more than one year? Yes No NA

If yes, state the owner/operator's proof that such storage was solely for the purposes of accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal: N/A

5. Treatment in Surface Impoundments (Section 268.4)

- a. Are prohibited wastes placed in surface impoundments for treatment? Yes No NA
- b. Is the only recognizable "treatment" occurring in the impoundment either evaporation, dilution, or both [Section 268.4(b) and Section 268.3]? Yes No NA
- c. Did the facility submit a certification of compliance with minimum technology and groundwater monitoring requirements, and the waste analysis plan to the Agency [Section 268.4(a)(4)]? Yes No NA
- d. Have the minimum technology requirements been met [Section 268.4(a)(4)]?
1. If the minimum technology requirements have not been met, has a waiver been granted for that unit(s) [Section 268.4(a)(3)(iii)]? Yes No NA
- e. Have the Subpart F groundwater monitoring requirements been met [Section 268.4(a)(3)]? Yes No NA
- f. Have representative samples of the sludge and supernatant from the surface impoundment been tested separately, acceptably, and in accordance with the sampling frequency and analysis specified in the waste analysis plan and are the results in the operating record for all wastes with treatment standards or prohibition levels [Section 268.4(a)(2)]? Yes No NA
- g. Did the hazardous waste residue (sludge or liquid) exceed the treatment standards or prohibition levels? Yes No NA
- h. Provide the frequency of analyses conducted on treatment residues: _____

Does the frequency meet the requirements of the waste analysis plan [Section 264.13 or Section 265.13]?

Yes No NA

i. Does the operating record adequately document the results of waste analyses performed [Section 264.13 or Section 265.13]? Yes No NA

j. Have the hazardous waste residues that exceed the treatment standards and/or prohibition levels been removed adequately and on an annual basis [Section 268.4(a)(2)(ii)]? Yes No NA

1. If answer to f is no and supernatant is determined to exceed treatment concentrations, is annual throughput greater than impoundment volume? (note: sludge exceeding treatment standards must be removed) Yes No NA

k. If residues were removed annually, were adequate precautions taken to protect liners and do records indicate that inspections of liner integrity are performed? Yes No NA

l. When removed, were residues of restricted wastes managed subsequently in another surface impoundment? Yes No NA

1. Were these residues subject to a valid 268.8 certification? Yes No NA

m. When removed, were wastes treated prior to disposal? Yes No NA

1. If yes, are waste residues treated on or offsite? Yes No NA

2. Identify management method: _____

6. Other Treatment

a. Does the facility operate treatment units (regulated or exempt) (not including surface impoundments)? Yes No NA

b. Describe the treatment processes, including exempt processes: _____

N/A

c. Does the facility treat soft-hammered wastes? Yes No NA

1. If yes, is treatment occurring as described in the generator's certification/demonstration [Section 268.8(c)(1)]? Yes No NA
2. Did the treatment facility certify he treated the soft-hammered waste as per the generator's demonstration and maintain copies of all certifications [268.8(c)(1)]? Yes No NA
3. Did the treatment facility send a copy of the generator's demonstration and certification to the receiving treatment, recovery, or storage facility [Section 268.8(c)(2)]? Yes No NA
- d. Does the facility, in accordance with an acceptable waste analysis plan, verify that the residue extract from all treatment processes for the restricted wastes are less than treatment standards or prohibition levels [Section 268.7(c)(2)]? Yes No NA
- e. Describe frequency of testing of treatment residuals.
- _____
- _____
- _____
- f. Was dilution used as a substitute for treatment [Section 268.3]? Yes No NA
- g. Are all notifications, certifications, and results of waste analyses kept in the operating record [Section 264.73(b) or Section 265.73(b)]? Yes No NA
- h. Are notices provided to land disposal facilities complete with Waste Number, treatment standard, manifest number, and analytical data (where available) submitted for each shipment of waste or treatment residual that meets the treatment standard stating that waste has been treated to treatment performance standards [Section 268.7(b)(4) and (5) and Section 268.8(c)(1)]? Yes No NA
- i. If the waste or treatment residue will be further managed at another storage or treatment facility, has the treatment facility complied with the 268.7(a) notification and certification requirements applicable to generators [Section 268.7(b)(6)]? Yes No NA

7. Land Disposal

- a. Are restricted and/or prohibited wastes placed in land disposal units (landfills, surface impoundments*?

waste piles, wells, land treatment units, salt domes/beds, mines/caves, concrete vault or bunker?) Yes No NA

b. Did facility have the notice and certification from generators/treaters in its operating record that all prohibited wastes disposed met standards for generation or treatment [Section 268.7(c)(1) and 268.7(a),(b)]? Yes No NA

c. Did the facility obtain waste analysis data through testing of the waste to determine that the wastes are in compliance with the applicable treatment standards [Section 268.7(c)(2)]? Yes No NA

If yes, was the frequency of testing as required by the facility's waste analysis plan [Section 264.13 or 265.13]? Yes No NA

d. Were prohibited wastes exceeding the applicable treatment standards or prohibition levels placed in land disposal units [268.30] excluding national capacity variances [268.30(a)]? Yes No NA

If yes, did facility have an approved waiver based on no migration petition [268.6] or approved case-by-case or capacity extension [268.5] or treatment standard variance [268.44][Section 268.30(d), Section 268.31(d), Section 268.32(g), Section 268.33(e)]? Yes No NA

e. Were restricted wastes subject to a national capacity variance or case-by-case extension disposed? Yes No NA

If yes, have the minimum technology requirements been met for all units receiving such wastes [Section 268.30(c), 268.31(c), 268.32(d), 268.33(d)]? Yes No NA

f. Were adequate records of disposal maintained [Section 264.73(b) or 265.73(b)]? Yes No NA

g. If wastes subject to a nationwide variances, case-by-case extensions [268.5], or no migration petitions [268.6] were disposed, does facility have generator's notices [268.7(a)(3)] and records of disposal [Section 264.73(b) or Section 265.73(b)]? Yes No NA

h. If the facility has a case-by-case extension, can the inspector verify that the facility is making progress as described in progress reports? Yes No NA

i. If the owner/operator is disposing of a soft-hammer waste, is he maintaining the generators and treaters (if applicable) notices and certifications [Section 268.8(a)(2)-(a)(4)]?

Yes No NA

1. Is the facility disposing of any soft hammer wastes that may be classified as California wastes?

Yes No NA

2. Did the facility seek to verify whether these wastes may be subject to all restrictions, e.g., California ban?

Yes No NA



STATE OF MISSISSIPPI
DEPARTMENT OF ENVIRONMENTAL QUALITY
JAMES I. PALMER, JR.
EXECUTIVE DIRECTOR

August 19, 1997

Mr. Steven Boswell
Director of Environmental Affairs
Vicksburg Chemical Company
Vicksburg, Mississippi 39182

Dear Mr. Boswell

Re: Compliance Evaluation Inspection

Enclosed please find an inspection report that was completed as a result of a hazardous waste compliance inspection at Vicksburg Chemical Company on July 10, 1997. This inspection revealed that Vicksburg Chemical is in compliance with the applicable Mississippi Hazardous Waste Management Regulations (MHWMR).

If you have any questions, do not hesitate to contact me at (601) 961-5128.

Sincerely,

A handwritten signature in cursive script that reads "Kevin Posey".

Kevin Posey
RCRA TSD Section

Enclosures

cc: Ms. Mindy Gardner, EPA

RCRA INSPECTION REPORT

1. Inspector and Author of Report

Kevin Posey
Mississippi Department of Environmental Quality - MDEQ
Office of Pollution Control

2. Facility Information

Vicksburg Chemical Company
P.O. Box 821003
Vicksburg, MS 39182

3. Responsible Company Official

Mr. Steven T. Boswell
Director of Environmental Affairs

4. Inspection Participants

Kevin Posey - MDEQ
Steven Boswell - Vicksburg Chemical Company

5. Date and Time of Inspections

July 10, 1997 @ 8:07 a.m.

6. Applicable Regulations

Mississippi Hazardous Waste Management Regulations (MHWMR) 261,
262, 265.16, 265 subparts c, d and I and 268.

7. Purpose of Inspection

Compliance Evaluation Inspection (CEI) to determine facility's
compliance with the applicable MHWMR.

8. Facility Description

Vicksburg Chemical Company is located in Warren County,
Mississippi. The facility consists of a 650-acre plant that is
divided into two separate and distinct operations known as the
North Plant and the South Plant. About 130 acres of the plant
site is currently being used or has at one time been used.

The North Plant produces potassium nitrate, liquid chlorine, and
liquid nitrogen tetroxide. Raw materials for the North Plant
include potassium chloride and nitric acid.

The south Plant formerly manufactured chlorinated pesticides,
nitrogen-based herbicides, and other agricultural chemicals. The
only active operations at the South Plant are a nitric acid unit
constructed in 1986 and a potassium carbonate (k-carb) unit
constructed in 1994.

9. Findings

Vicksburg Chemical had sent one shipment of P123, P020 for
disposal since their previous RCRA inspection. The shipment

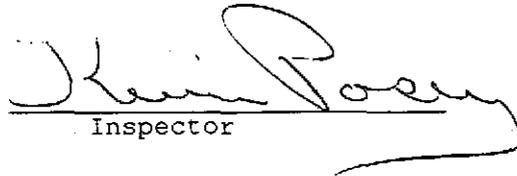
consisted of 12,500 lbs. of the material and was shipped on 8/01/96. The land ban form was attached.

At the time of the inspection, no containers were present at the container management area. Personnel training records which include job title, written job description, type of training and amount of training are kept on site. The facility is equipped with two-way radios and telephones that are available to contact emergency response personnel. Shipping manifests and the contingency plan were well organized and updated according to regulations.

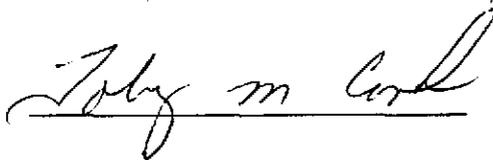
10. Conclusions

There were no apparent violations of the MHWMR at the time of the inspection.

11. Signed


Inspector

12. Approval



cc: Mindy Gardner, EPA

REGISTERED MAIL
RETURN RECEIPT REQUESTED
P 388 960 420

VICKSBURG
chemical company

RECEIVED
MAY 12 1995
Dept. of Environmental Quality
Office of Pollution Control

Mr. Kevin Posey
Env. Engineer
Office of Pollution Control
P.O. Box 10385
Jackson, MS 39289-0385

May 11, 1995

Re: Vicksburg Chemical Company
MSD990714081
Notice of Violation

Dear Mr. Posey:

As you have requested in your letter of April 27, 1995, regarding apparent violations of MSDEQ Hazardous Waste Regulations found during the January 17 and 18, 1995, multi-media inspection, Vicksburg Chemical responds as follows:

Item 1: Failure to list treatment standards for F003 on LDR notice for Manifest #00042, 6/29/92.

The underlying constituent was acetone. As a non-wastewater, the treatment standard would have been 0.59 mg/l. The omission of the required information was due to an oversight and should not have occurred.

Item 2: Failure to retain on-site copy of required LDR notice.

As noted in your letter, a copy of the notice in question was obtained and forwarded to your office almost immediately. A copy was replaced in Vicksburg's files simultaneously.

Item 3: Failure to obtain a permit for land disposal of approximately four cubic feet of potassium nitrate (D001, MHWMR 261.21(a)(4)) on railroad track.

Instructions to material handling personnel have been issued that all spillage of potassium nitrate occurring in areas that do not collect in Vicksburg's NPDES treatment system (which is permitted to discharge nitrates) is to be collected on a daily basis and is to be placed into storage for sale.

Please contact me with any questions there may be.

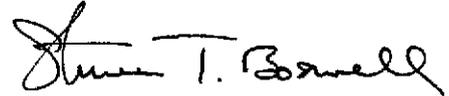
The Potassium People

P.O. Box 821003 • Vicksburg, MS 39182
Bus: (601) 636-1231 • Fax: (601) 636-5767

REGISTERED MAIL
RETURN RECEIPT REQUESTED
P 388 960 420

Please contact me with any questions there may be.

Sincerely,



Steven T. Boswell
Director of Env. Affairs

STB: pc

xc: Mr. Miles
Mr. Madsen



STATE OF MISSISSIPPI
DEPARTMENT OF ENVIRONMENTAL QUALITY
JAMES I. PALMER, JR.
EXECUTIVE DIRECTOR

April 27, 1995

FILE COPY

CERTIFIED MAIL NO. Z 765 989 362

Mr. Steven T. Boswell
Director of Environmental Affairs
Vicksburg Chemical Company
Post Office Box 821003
Vicksburg, Mississippi 39182

SUBJ: RCRA Compliance Evaluation Inspection of
Vicksburg Chemical Company
MSD 990 714 081

Dear Mr. Boswell:

An inspection report was completed by Judy Sophianopoulos of the U.S. Environmental Protection Agency as a result of a compliance evaluation inspection at Vicksburg Chemical Company on January 17 and 18 of 1995. Vicksburg Chemical Company should have received a copy of this report in late March. The State of Mississippi is authorized to implement the base RCRA program, and in accordance with the Memorandum of Agreement between EPA and Mississippi, EPA has deferred to the Mississippi Department of Environmental Quality to address these violations. This inspection report revealed the following apparent violation(s) of the Mississippi Hazardous Waste Management Regulations (MHWMR):

- 1) [268.7(a)(1)(ii)] Failure to list treatment standards for F003 on LDR notice for Manifest #00042, 6/29/92. (As of 12/19/94, this requirement is no longer in effect.)
- 2) [268.7(a)(7)] Failure to retain on-site a copy of required LDR notice. (A copy of the missing notice was mailed to MSDEQ on 1/18/95.)

- 3) [270.1(c)] Failure to obtain a permit for land disposal of ~ 4 ft³ of Potassium Nitrate [DOO1, MHWMR 261.21(a)(4)], on railroad track.

We request that you respond to these apparent violation(s) within 10 days of receipt of this letter. This response should contain: (1) actions that have been taken to correct the violation(s), (2) schedule for correction the violations(s), or (3) reasons that you believe the alleged violation(s) did not exist. The alleged violations may require a penalty, including a multi-day penalty, under the RCRA Penalty Policy and should be corrected immediately; however, The Office of Pollution Control will review this information before determining if further action including a penalty is warranted. Section 17-17-29 of the Mississippi Code Annotated (Supp. 1991) allows assessments of penalties not more than \$25,000 per day per violation. Failure to submit this information may result in enforcement action.

If you have any questions, do not hesitate to contact me at (601) 961-5171.

Sincerely,



Kevin Posey

Enclosures

cc: Mr. James S. Kutzman, EPA (w/enclosures)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

MAR 10 1995

RECEIVED
MAR 27 1995
Dept. of Environmental Quality
Office of Pollution Control

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

4WD-RCRA

Mr. Steven T. Boswell
Director of Environmental Affairs
Vicksburg Chemical Company
Post Office Box 821003
Vicksburg, Mississippi 39182

SUBJ: RCRA Compliance Evaluation Inspection of
Vicksburg Chemical Company
MSD 990 714 081

Dear Mr. Boswell:

Enclosed is the U.S. Environmental Protection Agency (EPA), Region 4, inspection report for the inspection referenced above. The inspection was a Compliance Evaluation Inspection (CEI) of Vicksburg Chemical Company (VCC), conducted by EPA pursuant to Section 3007 of the Resource Conservation and Recovery Act (RCRA), on January 17-18, 1995. The inspection was also conducted as part of a multi-media inspection of VCC, for which EPA's Air Enforcement Branch was the lead.

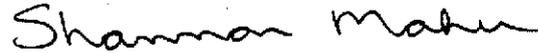
EPA commends and appreciates the courtesy and cooperation shown by all VCC personnel who were involved with inspection activities.

The majority of hazardous waste management activities at VCC were observed to be in compliance with applicable RCRA regulations on the days of the inspection. However, violations are noted in the enclosed inspection report. The State of Mississippi is authorized to implement the base RCRA program, and in accordance with the Memorandum of Agreement between EPA and Mississippi, EPA will defer to the Mississippi Department of Environmental Quality (MSDEQ) to address these violations.

A copy of the inspection report and its attachments is being forwarded to MSDEQ.

If you have any questions concerning the inspection report and its attachments, please contact Judy Sophianopoulos of my staff, at (404) 347-3555, x6408.

Sincerely yours,



Shannon E. Maher
Chief, AL/MS Unit
RCRA Compliance Section

Enclosure

cc: w/enclosure

Jerry Banks, MSDEQ
Kevin Posey, MSDEQ
Wendell Reed, Air Enforcement Branch, EPA, Region 4

RCRA INSPECTION REPORT

1) **Inspector and Author of Report**

Judy Sophianopoulos, Environmental Scientist
Alabama-Mississippi Unit, RCRA Compliance Section,
United States Environmental Protection Agency (EPA), Region 4

2) **Facility Information**

Vicksburg Chemical Company (VCC)
MSD 990 714 081

Location:

Rifle Range Road
Vicksburg, Mississippi 39182

Mailing Address:

Post Office Box 821003
Vicksburg, Mississippi 39182-1003

3) **Responsible Officials**

Steven T. Boswell
Director of Environmental Affairs
(601) 636-1231, x 219

John H. Miles
Vice President and
Plant Manager

4) **Inspection Participants**

VCC

Steven T. Boswell
Otto Logue, Retired
Health and Safety Officer

**Office of Pollution Control
Mississippi Department of Environmental Quality (MSDEQ)**

Kevin Posey, Hazardous Waste Division
J. Dewayne Headrick, Air Division
Leslie Allen, Air Division

RCRA Inspection Report
Vicksburg Chemical Company, MSD 990 714 081
Page 2

EPA

Judy Sophianopoulos, RCRA Compliance Section
Wendell Reed, Multi-media Lead Inspector, South Compliance Unit
Compliance Section, Air Enforcement Branch

5) Date and Time of Inspection

January 17, 1995, 9:00 AM - 4:00 PM (CST)
January 18, 1995, 8:15 AM - 1:30 PM (CST)

The most recent previous RCRA Compliance Evaluation Inspection (CEI) of VCC was conducted by MSDEQ on July 28, 1994. In October 1994, the Water Compliance Unit of the Environmental Services Division, Athens, Georgia, conducted the National Pollutant Discharge Elimination System (NPDES) sampling portion of the FY95 multi-media inspection of VCC. The FY95 multi-media inspection of VCC consists of the aforementioned NPDES evaluation, the RCRA CEI which is the subject of this report, and the Air Enforcement Branch inspection on January 17, 1995.

The most recent previous CEI by the RCRA Compliance Section, was an oversight inspection conducted on August 1, 1990.

6) Applicable Regulations

Applicable requirements in Mississippi Hazardous Waste Management Regulations (MHWMR) Parts 260 - 270, which are equivalent, respectively, to 40 CFR Parts 260 through 270.

7) Purpose of Inspection

The inspection was a CEI conducted to determine VCC's compliance with the applicable regulations cited in Section 6 of this report. This CEI, which was conducted pursuant to RCRA § 3007 and the Memorandum of Agreement (MOA) between EPA and the State of Mississippi, constituted the RCRA portion of a multi-media inspection of VCC, for which EPA's Air Enforcement Branch was the lead.

A second purpose of the inspection was to view, photograph, and determine the current status of site areas subject to Consent Decree, Civil Number W92-0008B.

RCRA Inspection Report
Vicksburg Chemical Company, MSD 990 714 081
Page 3

8) Facility Description

VCC is a wholly owned subsidiary of Cedar Chemical Corporation, which is owned by Trans Resources, Inc. The VCC facility occupies an approximately 600-acre site in Vicksburg, MS, and has 140 employees in shifts covering 24 hours per day, 7 days per week. The site contains two production facilities, the North Plant and the South Plant, and began operations in 1961. (See Attachments A and B for location and site maps.)

VCC currently manufactures only the following inorganic products:

Nitric Acid (production capacity of 250 tons per day) and Potassium Carbonate at the South Plant

Potassium Nitrate (production capacity of 250 tons per day), Nitrogen Tetroxide, Chlorine, and Bleach at the North Plant

Raw materials used include the following:

Nitric Acid Plant	Potassium Carbonate Plant	Potassium Nitrate, Chlorine, and Nitrogen Tetroxide Plant	Bleach Plant
Ammonia	Quicklime	Nitric Acid	Chlorine
	Ammonia	Potassium Chloride	Sodium Hydroxide
	Carbon Dioxide		
	Potassium Chloride		

Until about 1987, VCC manufactured pesticides, such as Dinoseb, Toxaphene, Atrazine, Methyl parathion, Bladex, and Monosodium methanearsonate (MSMA), in the South Plant. Inhibited Red Fuming Nitric Acid (IRFNA) was also produced; on the day of the inspection, VCC stated that the IRFNA process had not been in operation for about a year.

RCRA Inspection Report
Vicksburg Chemical Company, MSD 990 714 081
Page 4

The current RCRA status of VCC is that of a large quantity, fully regulated generator of hazardous waste (≥ 1000 kg of hazardous waste in a month). VCC does not operate any RCRA permitted or interim status hazardous waste management units, at the present time. A copy of VCC's 1993 Hazardous Waste Report is included as Attachment C.

Corrective action at VCC is subject to Consent Decree, Civil Number W92-0008B, between EPA and VCC, filed April 17, 1992. EPA's RCRA Facility Assessment (RFA) report, dated August 29, 1986, identified 34 solid waste management units (SWMUs) and 4 Areas of Concern (AOCs).

Detailed information on VCC's ownership, production, and regulatory history is available in Section 2 of the Preliminary RCRA Facility Investigation (RFI) Report, dated May 1992, prepared for VCC by Woodward-Clyde Consultants, Baton Rouge, LA, in accordance with Consent Decree, Civil Number W92-0008B.

9) Findings

- Note: all photos referred to below are included in Photodocumentation Attachment D of this inspection report.

Entrance Interview

The lead inspector explained that VCC had been selected for a multi-media inspection, because of Region 4's Mississippi River Initiative.

Following the entrance interview, VCC's Director of Environmental Affairs conducted the inspectors on a tour of the facility.

Waste Minimization/Pollution Prevention

- VCC does not generate hazardous waste from its current production processes. The hazardous waste manifested in the past three years consists primarily of debris contaminated by past production of pesticides, and generated during corrective action activities. VCC's 1993 Hazardous Waste Report indicates that a total of 966,600 lb of this debris was generated and shipped off-site. (See Attachment E of this inspection report, and the **Records Review** section below.)

RCRA Inspection Report
Vicksburg Chemical Company, MSD 990 714 081
Page 5

- VCC stated that the generation of chlorine waste is prevented by routing chlorine residues from loading and unloading, to the Bleach Plant. (Photos VCC 1.5 and VCC 1.6)
- VCC's current generation rate for spent carbon is one bed per year; in the past, the usual generation rate was 2 beds per year.

Generator Areas

SWMU #1, VCC's 90-day storage pad, was observed during a tour of the facility. (Photo VCC 1.25) No waste was stored there on the day of the inspection, and VCC stated, as noted above, that no process waste is currently generated by VCC.

VCC indicated that a satellite area drum for personnel protective equipment was located near the wheel wash area observed during the site tour.

RCRA Regulated Units

As noted in Section 8, there are no RCRA regulated units at VCC, at the present time. In 1980, VCC submitted Part A of the RCRA permit application, which included a container storage area. The application was subsequently withdrawn, and that part of the site now contains storage tanks for product Nitric Acid. (Photo VCC 1.21)

Records Review

Training records, contingency plan, hazardous waste manifests, and Land Disposal Restrictions (LDR) notices were reviewed.

Training Records: Review of training records revealed that VCC employees received training updates at least as often as required by MHWMR.

VCC stated that it has agreements with the local fire department and local environmental planning committee (LEPC), and that VCC and fire department staff train together. VCC stated that its Emergency Response Team provides escort for shipments of VCC Nitrogen Tetroxide for the Air Force.

No violations of MHWMR were observed on the day of the inspection.

RCRA Inspection Report
Vicksburg Chemical Company, MSD 990 714 081
Page 6

Contingency Plan: The contingency plan, which is currently being revised, was last revised in October 1993. The delay was due to the fact that the Health and Safety Officer also had responsibilities with the new Potassium Carbonate Plant, which began operation in October 1994.

VCC stated that the plan requires no substantive changes, and that VCC's safety operations are in compliance with the process safety management required by the Occupational Health and Safety Administration.

No violations of MHWMR were observed on the day of the inspection.

Hazardous Waste Manifests and LDR Notices: Hazardous waste manifests for 1992, 1993, and 1994, the annual report for 1993, and LDR notices were reviewed by EPA and MSDEQ.

In addition, inspectors reviewed Manifest #11795, State Manifest Number PAC4268154, for the shipment, on 1/17/95, of 41,910 lb of spent carbon from the wastewater treatment system to Calgon Carbon Corporation, EPA ID No. KYD 005 009 925. VCC stated that the most recent previous shipment of spent carbon was one year ago, and that the current generation rate for spent carbon is one bed per year, down from 2 beds per year in the past.

The waste codes indicated on the manifest were P020 and P123. These are the codes for the listed commercial chemical product wastes, dinoseb and toxaphene, respectively. See the discussion of these wastes in the **Exit Interview** section on page 8 and in **Recommendations** Section 10 of this report.

Two violations of MHWMR were observed on the day of the inspection:

- (1) Treatment standards were referenced, rather than specified for F003, in the LDR notice accompanying Manifest # 00042, signed by VCC on 6/29/92.
- (2) One of the required LDR notices for a manifest reviewed by MSDEQ was not available. A copy of this notice was mailed to MSDEQ on 1/18/95.

RCRA Inspection Report
Vicksburg Chemical Company, MSD 990 714 081
Page 7

SWMUs

(See Photos VCC 1.23 - VCC 1.25; VCC 2.1, VCC 2.3, VCC 2.12, VCC 2.13, VCC 2.16 - VCC 2.18, and VCC 2.20, VCC 2.24, VCC 2.25.)

SWMU #17, Returned Product Storage Building: The soil in front of this SWMU (Photo VCC 1.25) may be a candidate for an innovative bioremediation technology. VCC stated that information on this technology was obtained from EPA's VISITT (Vendor Information System for Innovative Treatment Technologies) database. VCC observed a demonstration of the technology at a nearby facility in Louisiana, where a vendor reported reduction of 90,000 ppm toxaphene to 40 ppm. VCC stated that certain studies indicated that cotton gin waste could degrade trichlorophenols and nitroaromatics. Therefore, VCC is interested in determining whether this technology can degrade dinoseb, which is both a nitroaromatic and a phenolic compound.

SWMU #3, Surface Impoundments A and C: These surface impoundments, which are part of VCC's wastewater treatment system, were observed on January 18, 1995. (See Attachment E, a block flow diagram of the wastewater treatment system.) VCC has completed the retrofitting of the impoundments, and the solidified waste containment area (SWCA), which contains solidified sediment from the impoundments, was observed. (Photos VCC 2.1 - VCC 2.3) Reports on this process were submitted to EPA and MSDEQ in 1992.

SWMU #4, Activated Carbon Wastewater Treatment Units: These are the final treatment units in VCC's wastewater treatment system. (See Attachment E and Photos VCC 2.12, VCC 2.13, and VCC 2.20; the nearest vessel in the photos is the receiver vessel for spent carbon.)

The National Pollutant Discharge Elimination System (NPDES) monitoring station for VCC's effluent wastewater was observed. (See Photo VCC 2.19, at left center of print, near yellow ladder; includes one monitoring box for outfall from Potassium Carbonate Plant, and one for combined outfall.)

Tour of the Facility

A pile, identified by VCC as spilled potassium nitrate (prilled form), was observed on the railroad track, on January 18, 1995. (Photos VCC 2.14 and

RCRA Inspection Report
Vicksburg Chemical Company, MSD 990 714 081
Page 8

VCC 2.15) The approximate dimensions of the pile were 2 ft x 2 ft x 1 ft. VCC stated that pile would be washed off by runoff to SWMU #3, the surface impoundments of VCC's wastewater treatment system.

Smaller amounts of potassium nitrate product also appeared to have been spilled outside the potassium nitrate (crystalline form) product storage area. (See Photo VCC 1.7 and note "snowing" in Photo VCC 1.8.) VCC stated that the amounts of "snowing" were larger than usual, on the day of the inspection. VCC's standard operating procedure was to collect all material outside the main pile, sell, or recycle into process as much as possible, and wash remainder to wastewater treatment system.

Stained areas on the railroad tracks east of the South Plant were observed. (Photos VCC 2.5 - VCC 2.11) The former Dinoseb and Toxaphene production buildings (SWMUs #7 and #14) are close to these areas.

A sewer lift was observed; the area appears to be less affected by past Dinoseb activities than other areas observed on the day of the inspection. VCC suggested the possibility that the sewer lift could contain some promising microbes. (Photos VCC 2.4 and VCC 2.5)

An old tank farm area, from which the tanks had been removed, was observed. (Photo VCC 2.11)

The quicklime silo and slaker grits were observed at the Potassium Carbonate Plant. (Photos VCC 2.22 and VCC 2.23) A roll-off container of waste Calcium Carbonate was also observed. See the discussion on these wastes in the **Exit Interview** section below.

Exit Interview

The lead inspector and MSDEQ Air Division completed their portion of the multi-media inspection at 4:00 PM on January 17, 1995, and stated their concerns to VCC.

The RCRA CEI was completed at 1:30 PM on January 18, 1995, and inspectors stated their findings to VCC during the tour of the facility and during an exit interview. The waste code classification of spent carbon as P020 and P123 was discussed. VCC stated that the classification was chosen to be the most conservative, to take into account that dinoseb and toxaphene from *de minimus* spills into wastewater would be adsorbed in the spent carbon.

RCRA Inspection Report
Vicksburg Chemical Company, MSD 990 714 081
Page 9

The two LDR notice violations described above were discussed. Following subsequent review of inspection notes, the violation resulting from the spilled pile of prilled potassium nitrate product was included in the inspection report.

The slaker grits at the Potassium Carbonate Plant were discussed. VCC stated that no caustic (Sodium Hydroxide) was used at the Potassium Carbonate Plant, and that VCC used quicklime only from suppliers who guaranteed no heavy metals were present in their product. A pH measurement by VCC of the slaker grits indicated pH 12.3. The inspector agreed with VCC that the pH of saturated Calcium Hydroxide is not as high as 12.5 at normal temperatures, but advised VCC to be sure no hazardous characteristic was exhibited before using slaker grits as roadbed material. The inspector agreed, based on the information presented, that the Calcium Carbonate in the roll-off container was a solid waste.

EPA, MSDEQ, and VCC discussed corrective action activities, and agreed to ensure good communication as issues arise, including the scheduling of meetings when appropriate. EPA agreed to evaluate VCC's request by letter of March 1, 1994, to delay the closure of SWMUs #1 and #17 required by Section IV of Consent Decree, Civil Number W92-0008B, in order to include these areas in the overall remediation of the facility. An amended report, dated February 1994, was submitted to EPA in support of this request.

10) Conclusions

VIOLATIONS OBSERVED	
REGULATORY CITE	DESCRIPTION OF VIOLATION
1. MHHWMR § 268.7(a)(1)(ii)	Failure to list treatment standards for F003 on LDR notice for Manifest # 00042, 6/29/92. (As of 12/19/94, this requirement is no longer in effect.)
2. MHHWMR § 268.7(a)(7)	Failure to retain on-site a copy of a required LDR notice. (A copy of the missing notice was mailed to MSDEQ on 1/18/95.)

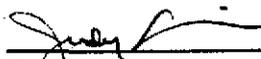
RCRA Inspection Report
Vicksburg Chemical Company, MSD 990 714 081
Page 10

VIOLATIONS OBSERVED	
REGULATORY CITE	DESCRIPTION OF VIOLATION
3. MHWMR § 270.1(c)	Failure to obtain a permit for land disposal of ~ 4 ft ³ of Potassium Nitrate [D001, MHWMR § 261.21(a)(4)], on railroad track. (VCC stated that runoff water would wash the material into VCC's wastewater treatment system.)

11) Recommendations

- One way to expedite corrective action is to facilitate communication between VCC, EPA, MSDEQ, area residents, and other concerned citizens.
- The State of Mississippi is authorized to implement the base RCRA program and certain LDR regulations, including those cited in Section 10 above. Therefore, in accordance with the Memorandum of Agreement between EPA and the State of Mississippi, EPA recommends that MSDEQ address the violations of MHWMR noted in Sections 9 and 10 of this inspection report.
- As advised in the Exit Interview, VCC should document the reason for the choice of waste codes, P020 and P123, for the spent carbon. Otherwise, one might conclude that VCC's wastewater treatment surface impoundments (SWMU #3) are RCRA regulated units.

12) Signed



Judy Sophianopoulos
Inspector

3/1/95
Date

RCRA Inspection Report
Vicksburg Chemical Company, MSD 990 714 081
Page 11

12) Concurrence

Approval

Shannon Maher
Shannon E. Maher
Chief, AL/MS Unit
RCRA Compliance Section

S. Maher for JMB
Jeaneanne M. Gettle
Acting Chief, RCRA
Compliance Section
Office of RCRA
and Federal Facilities

March 8/1995
Date

March 8/95
Date

Attachments A through E

1/17/95



VCC 1.1 NORTH PLANT CONCRETE TANK SCRUBBER, NOX EMISSION



VCC 1.2 NORTH PLANT CONCRETE SCRUBBER, NOX EMISSION

1/17/95

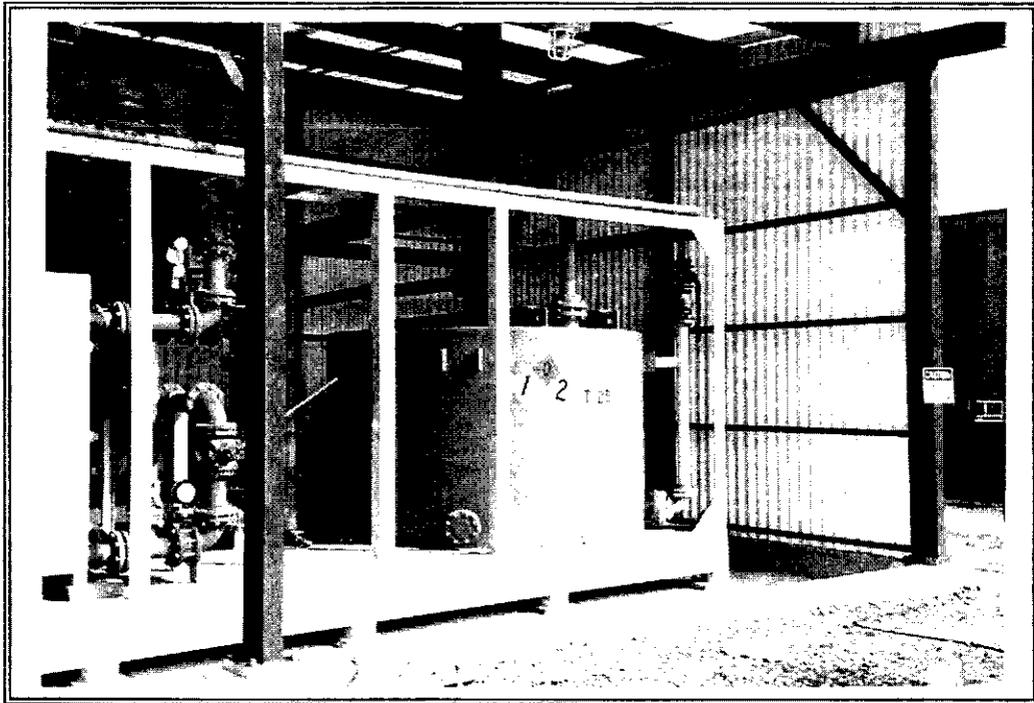


VCC 1.3 NORTH PLANT COOLING TOWER

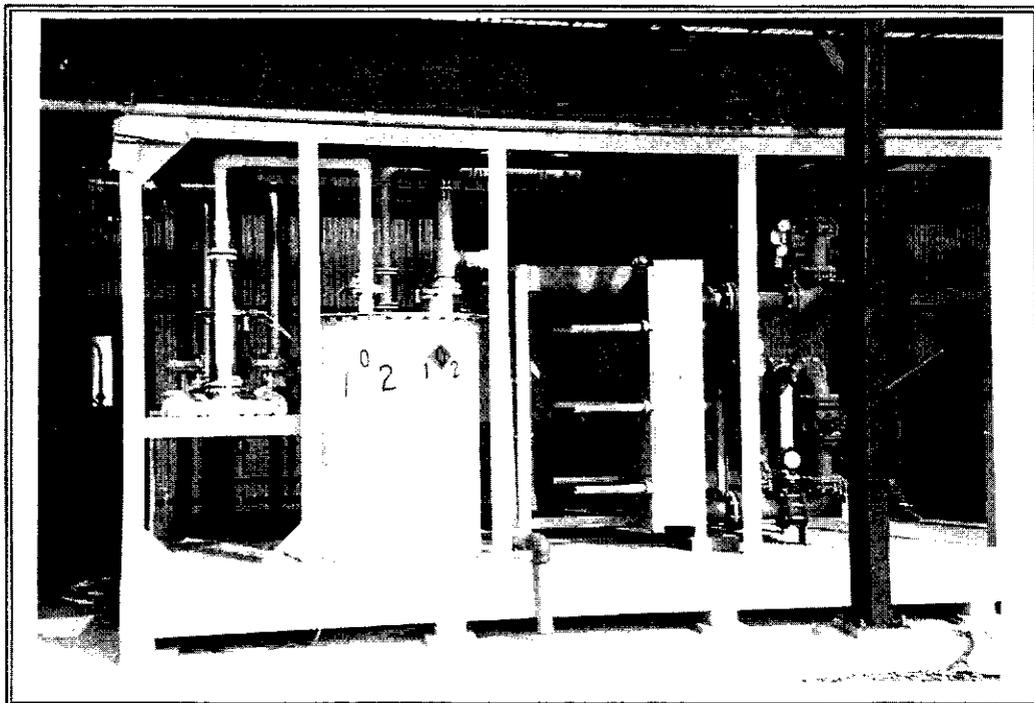


VCC 1.4 NORTH PLANT C15 AND COOLER SCRUBBER

1/17/95

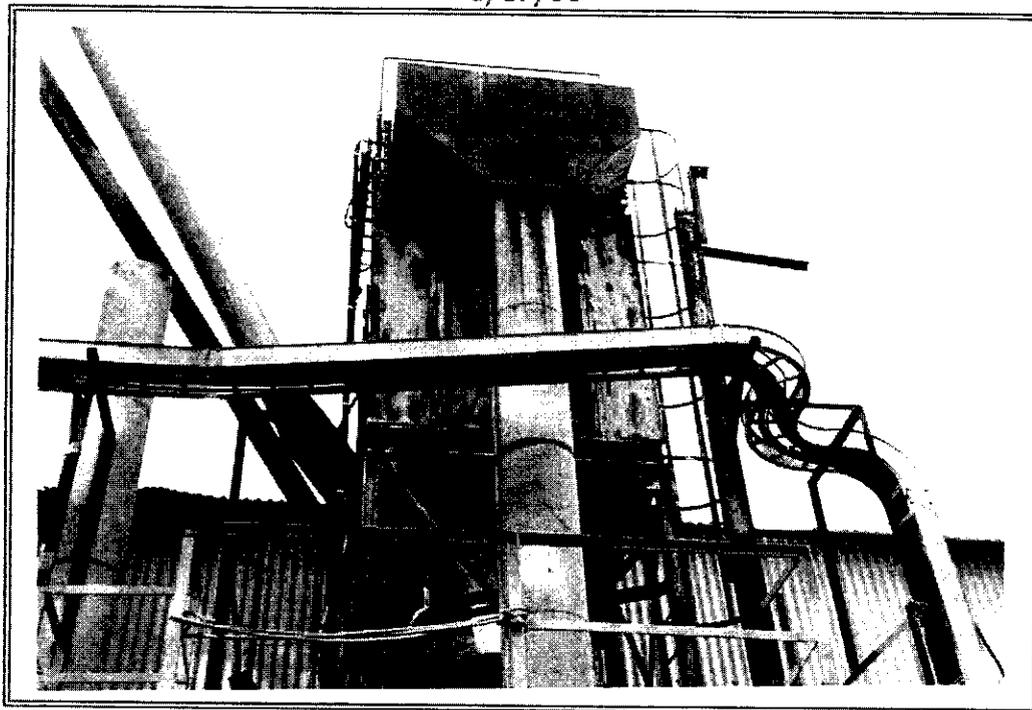


VCC 1.5 BLEACH PLANT

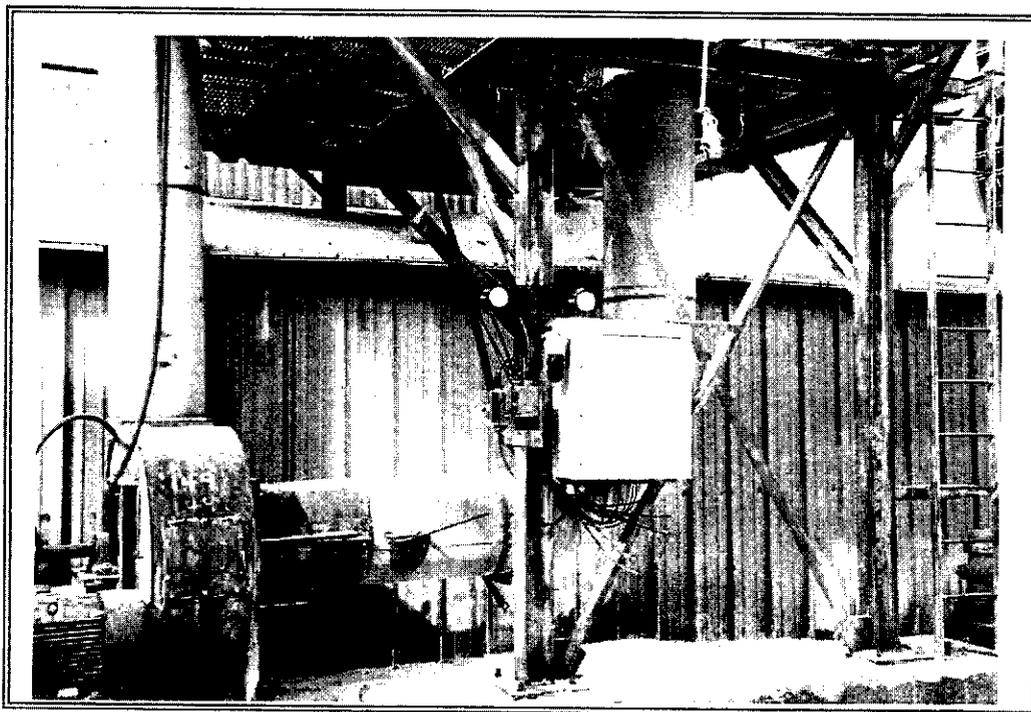


VCC 1.6 BLEACH PLANT

1/17/95



VCC 1.7 BAGHOUSE FOR KNO₃ STORAGE

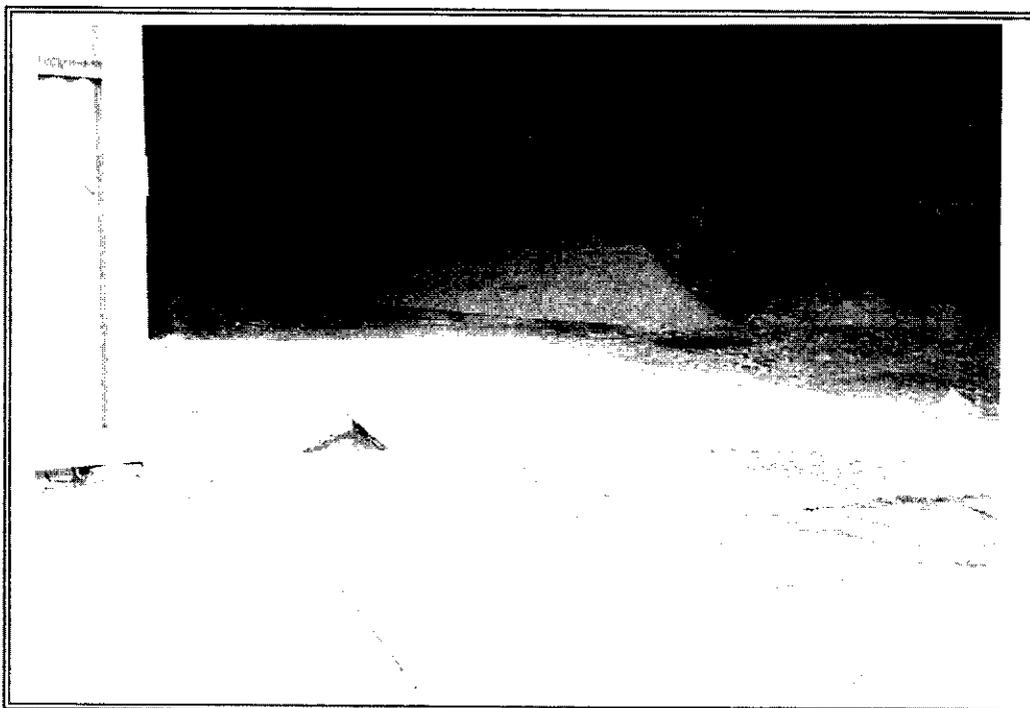


VCC 1.8 BAGHOUSE FOR KNO₃ STORAGE: NOTE "SNOWING"

1/17/95



VCC 1.9 KNO₃ CRYSTALLINE PRODUCT STORAGE PILE



VCC 1.10 KNO₃ CRYSTALLINE PRODUCT STORAGE PILE

1/17/95

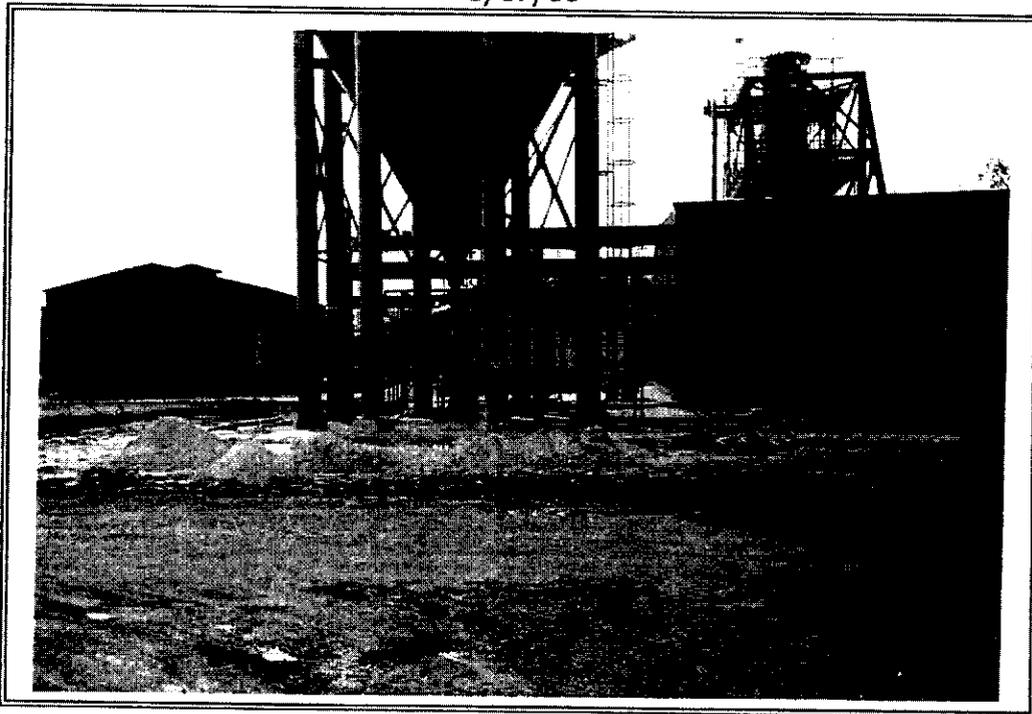


VCC 1.11 KNO₃ CRYSTALLINE PRODUCT STORAGE PILE



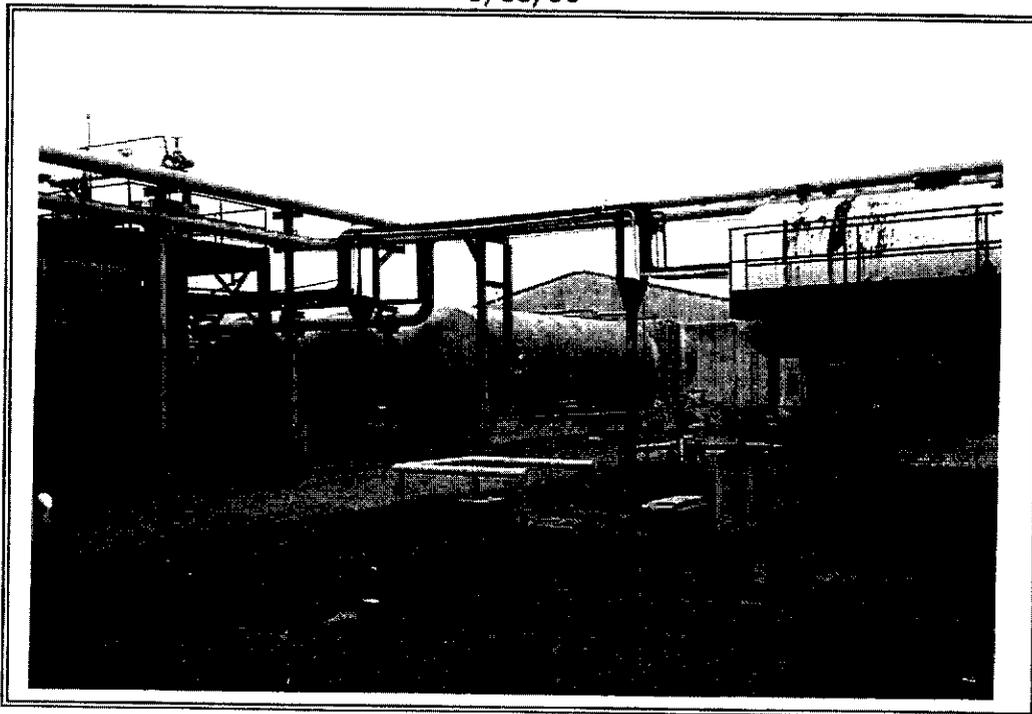
VCC 1.12 QUICKLIME SILO & SLAKER GRITS, K₂CO₃ PLANT

1/17/95



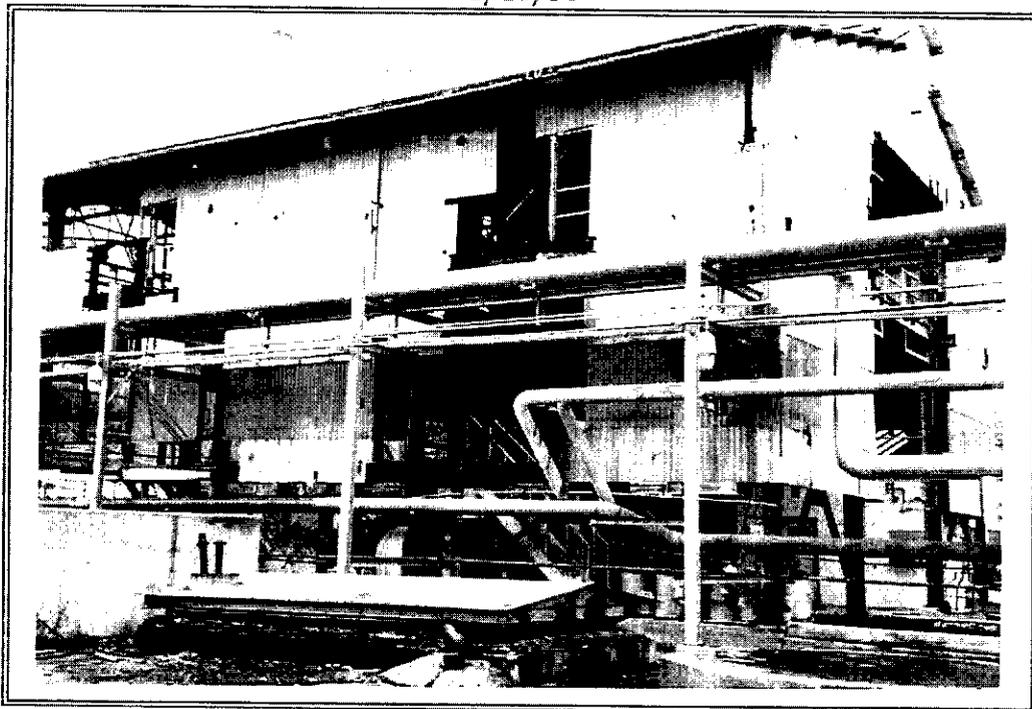
VCC 1.13 QUICKLIME SILO & SLAKER GRITS, K_2CO_3 PLANT

1/18/95

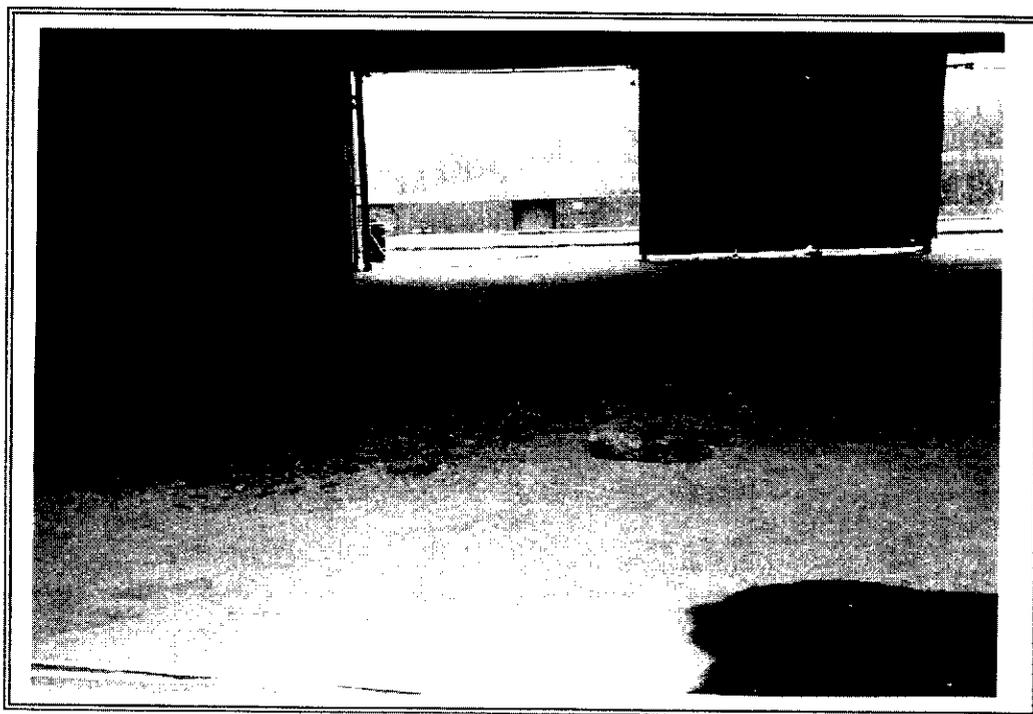


VCC 1.21 HNO_3 TANKS (FORMER PART A DRUM STORAGE)

1/18/95



VCC 1.22 SWMU #11: FORMER MSMA PROCESS BUILDING

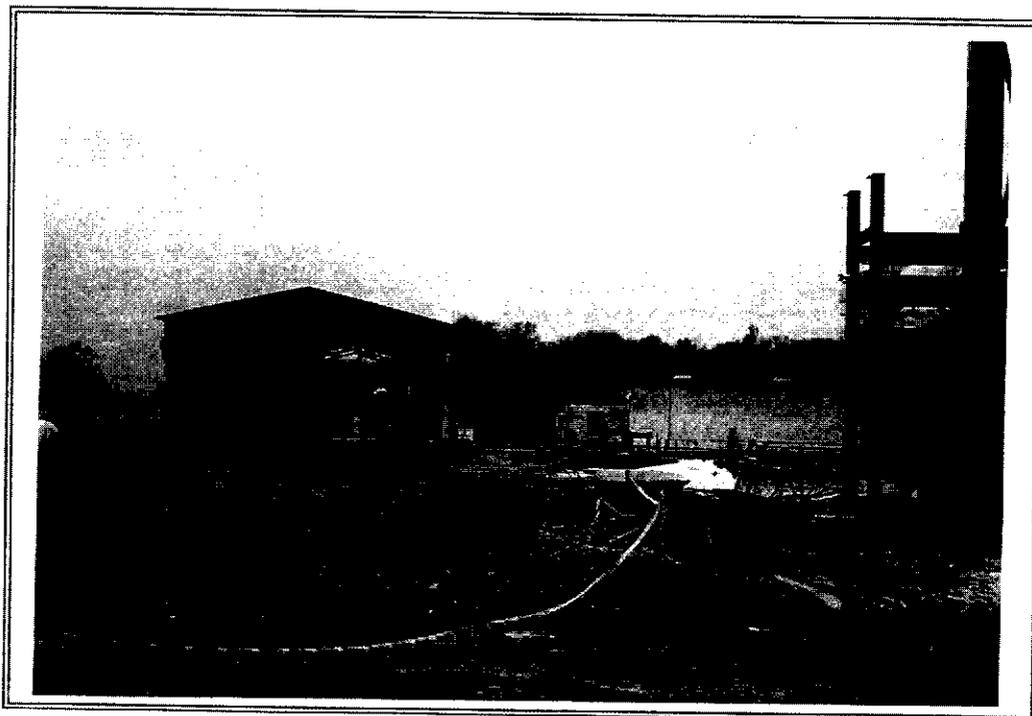


VCC 1.23 SWMU #9: FORMER DINOSEB DRUMMING BUILDING

1/18/95



VCC 1.24 SWMU #9

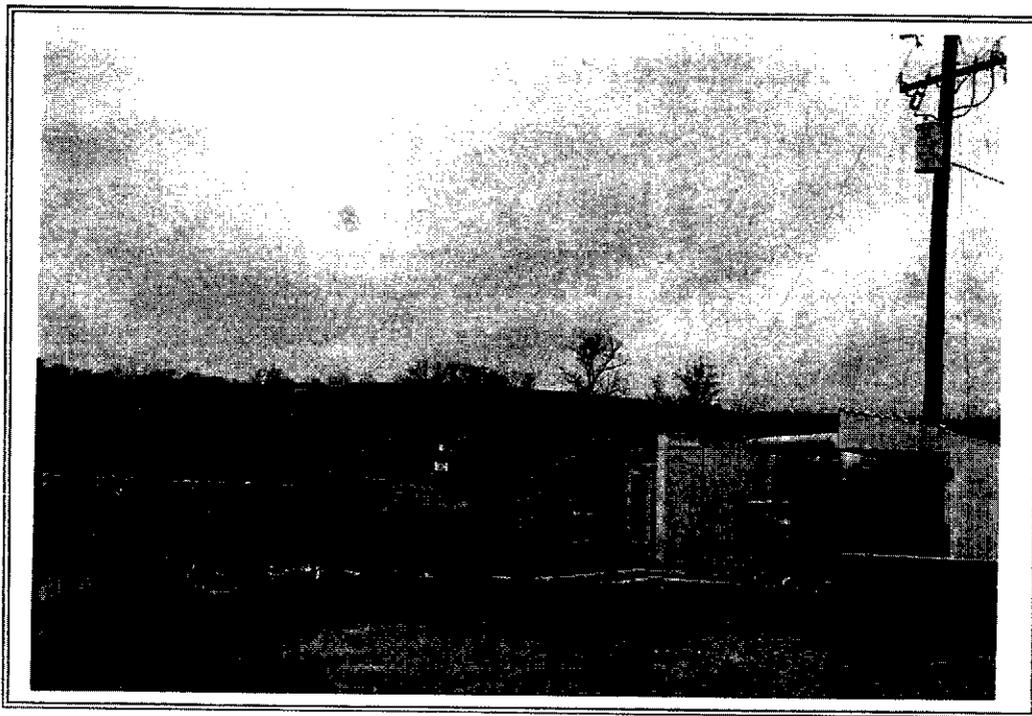


VCC 1.25 SWMU #17: FRONT SOIL CANDIDATE FOR BIOTREATMENT

1/18/95



VCC 2.1 SWMU #3: SURFACE IMPOUNDMENT C, RETROFITTED

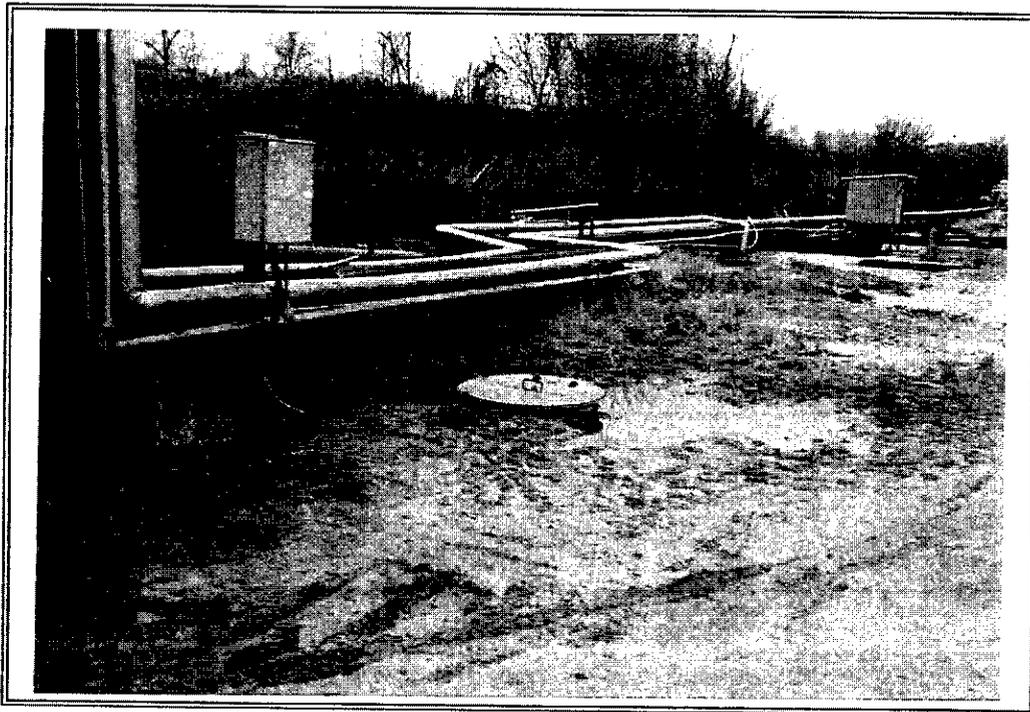


VCC 2.2 CAPPED SWCA: SOLIDIFIED SEDIMENT FROM SWMU #3

1/18/95

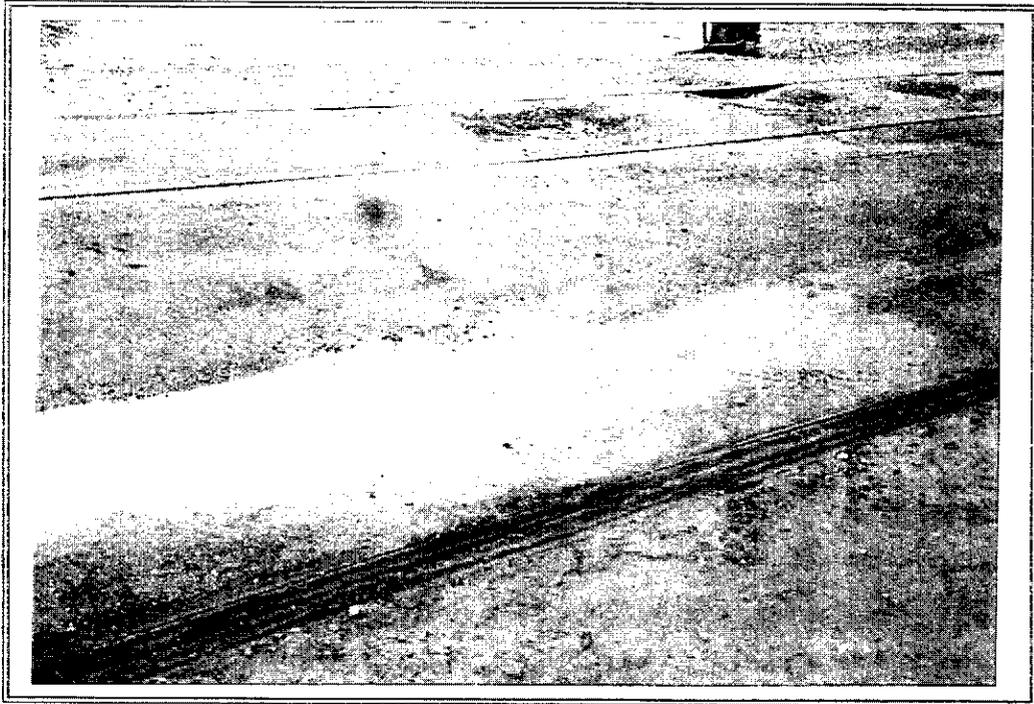


VCC 2.3 SWMU #3: SURFACE IMPOUNDMENT A, RETROFITTED

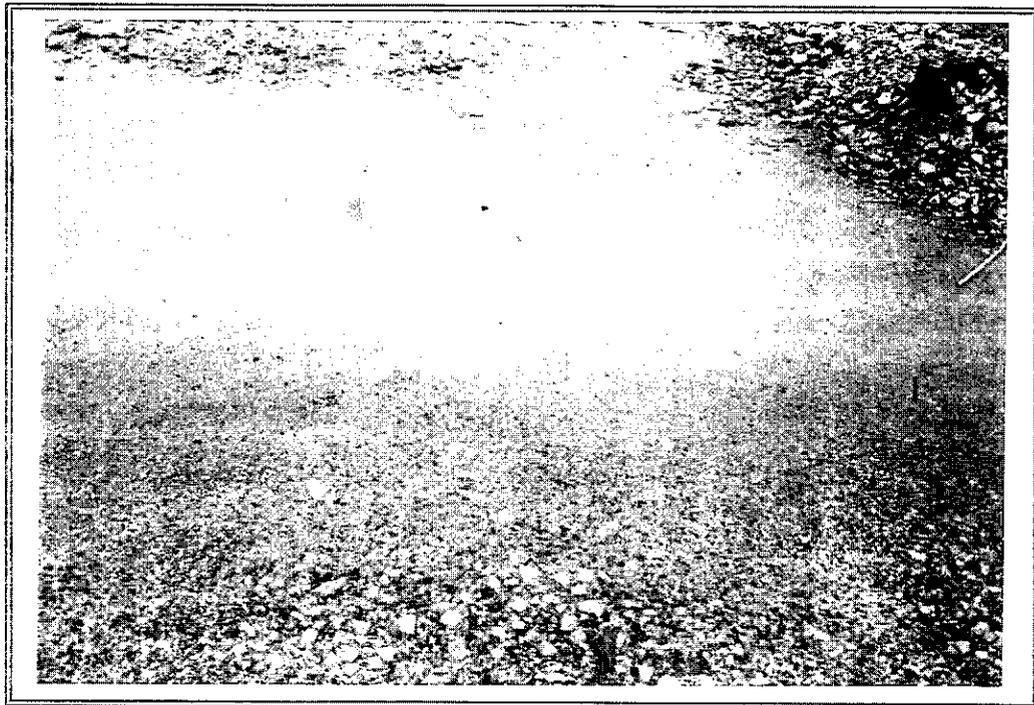


VCC 2.4 SEWER LIFT: AREA LESS STAINED; GOOD MICROBES?

1/18/95

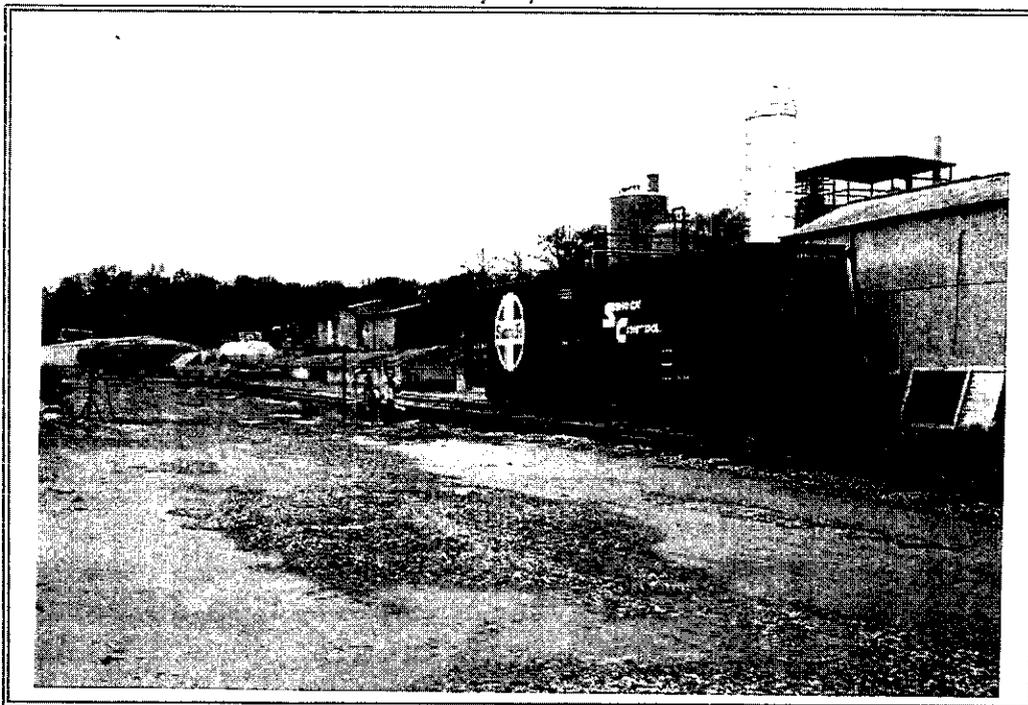


VCC 2.7 YELLOW STAINS NEAR RAILROAD TRACKS

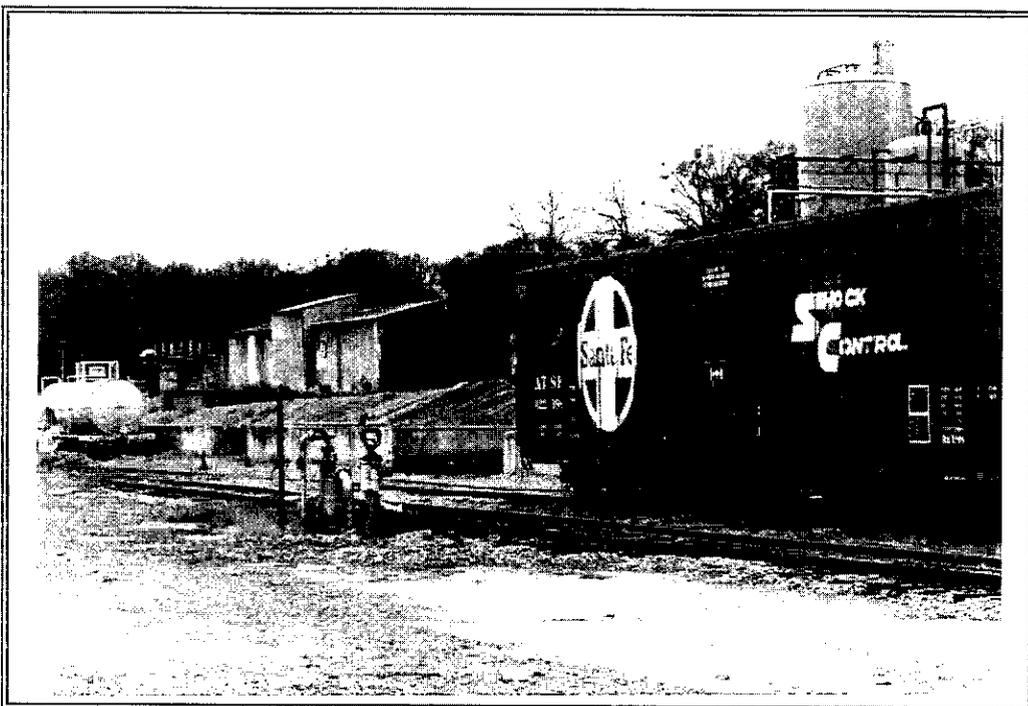


VCC 2.8 CLOSEUP VIEW OF AREA IN VCC 2.7

1/18/95



VCC 2.9 RR TRACKS: NEAR FORMER DINOSEB PRODUCTION AREA.



VCC 2.10 RR TRACKS: SWMU #17 IN NEAR RIGHT BACKGROUND

1/18/95



VCC 2.11 OLD TANK FARM AREA: TANKS HAVE BEEN REMOVED



VCC 2.12 SWMU #4: CARBON WASTEWATER TREATMENT UNITS

1/18/95



VCC 2.13 SWMU #4: CLOSER VIEW

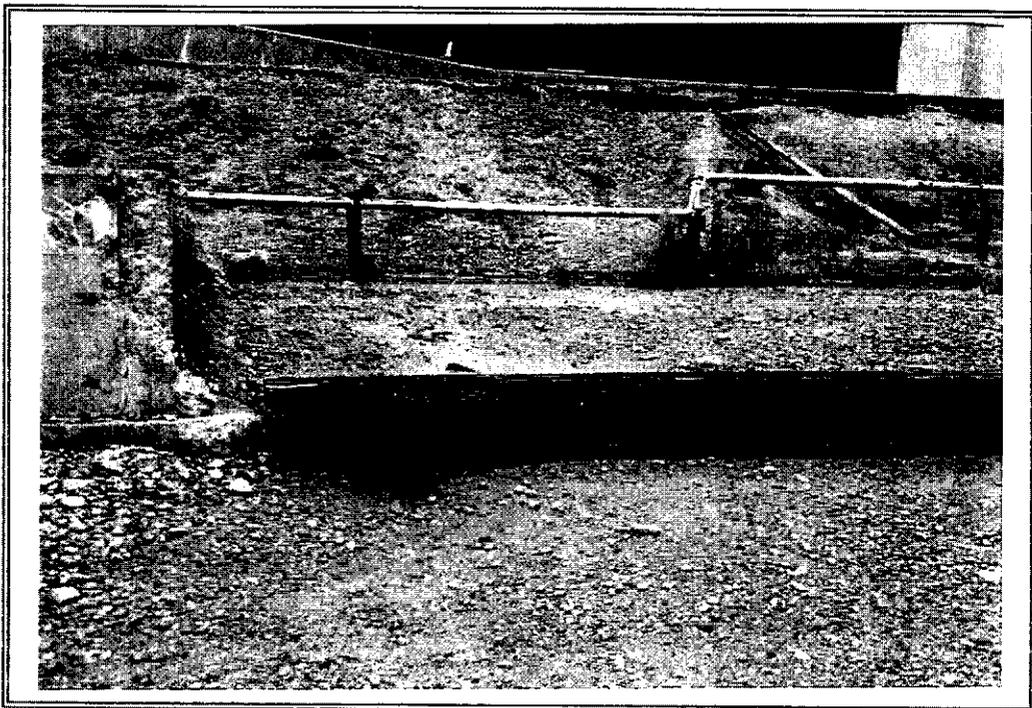


VCC 2.14 PILE (~4 FT³) OF KNO₃ ON RAILROAD TRACK

1/18/95

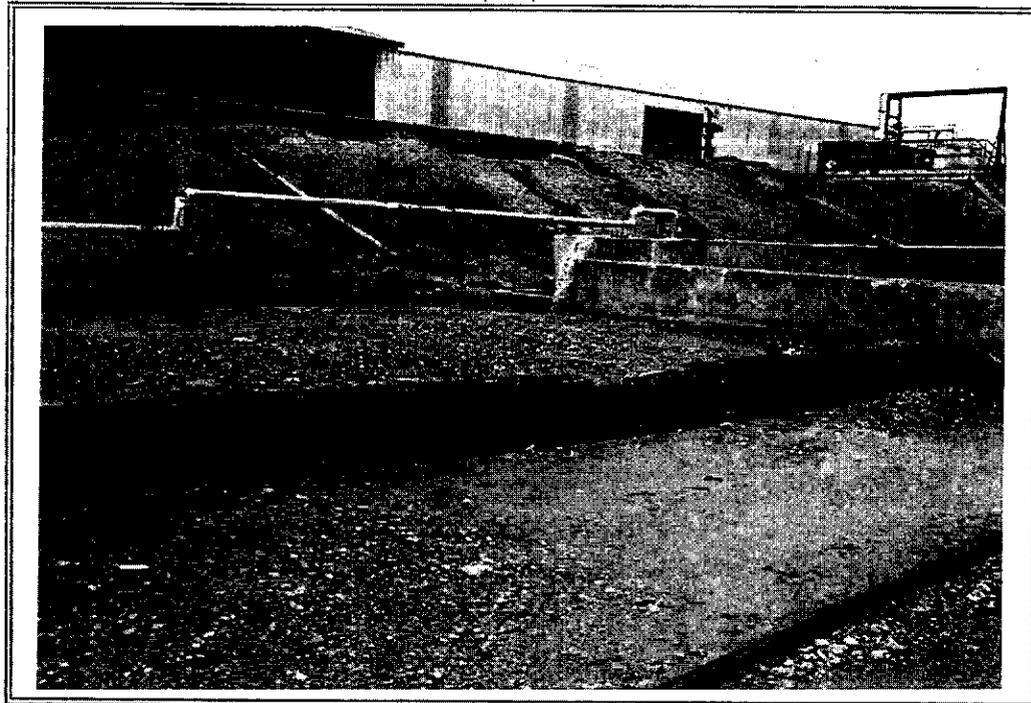


VCC 2.15 KNO₃ ON RR TRACK, PART NEAREST SOUTH PLANT

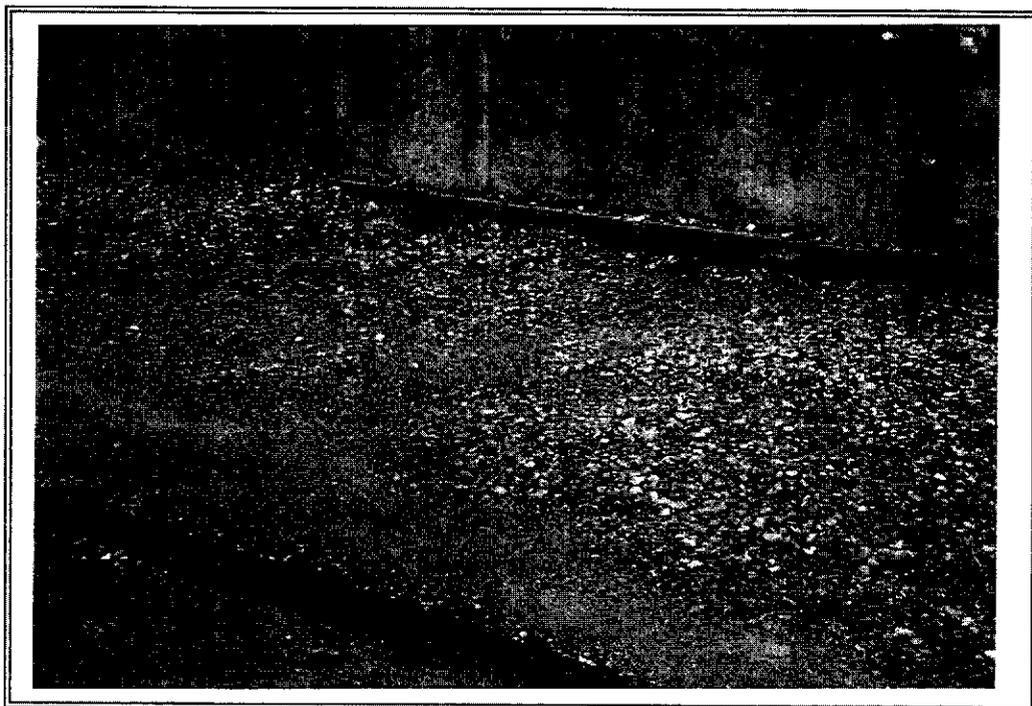


VCC 2.16 SWMU #7: FORMER DINOSEB PRODUCTION AREA

1/18/95

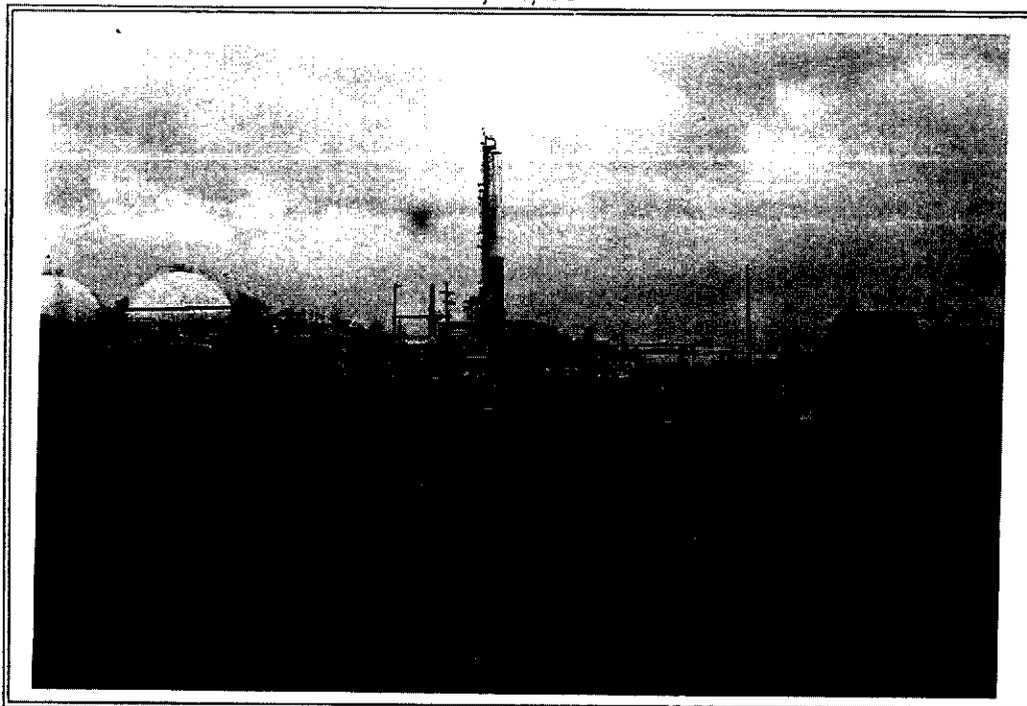


VCC 2.17 SWMU #7

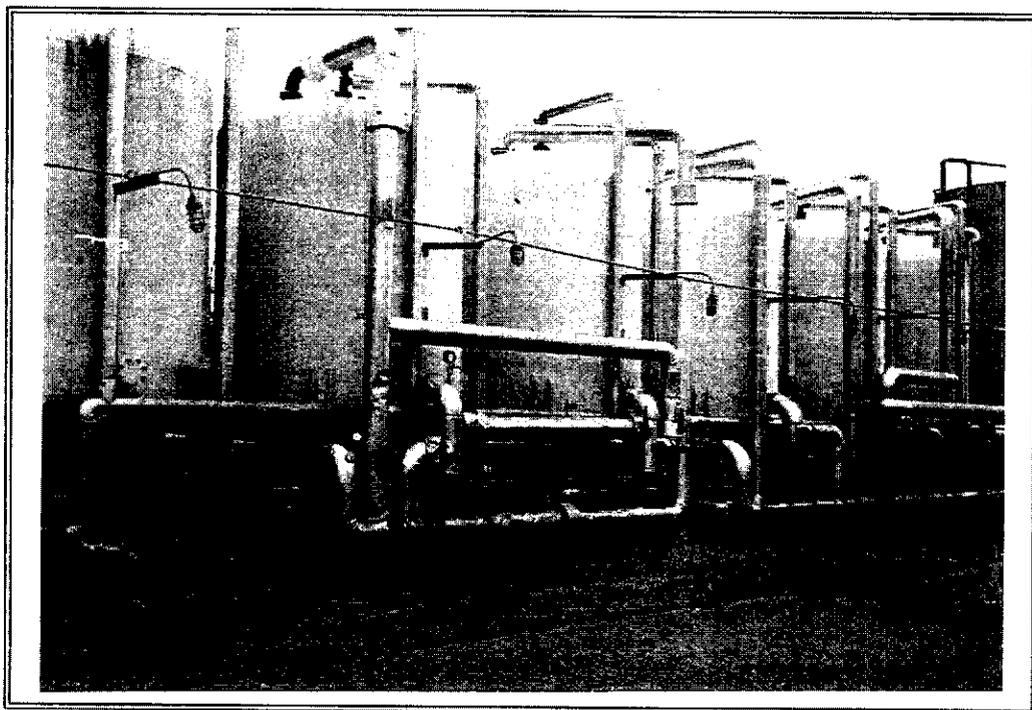


VCC 2.18 SWMU #7: CLOSEUP VIEW OF YELLOW STAINS

1/18/95



VCC 2.19 NPDES MONITORING STATION: LEFT CENTER

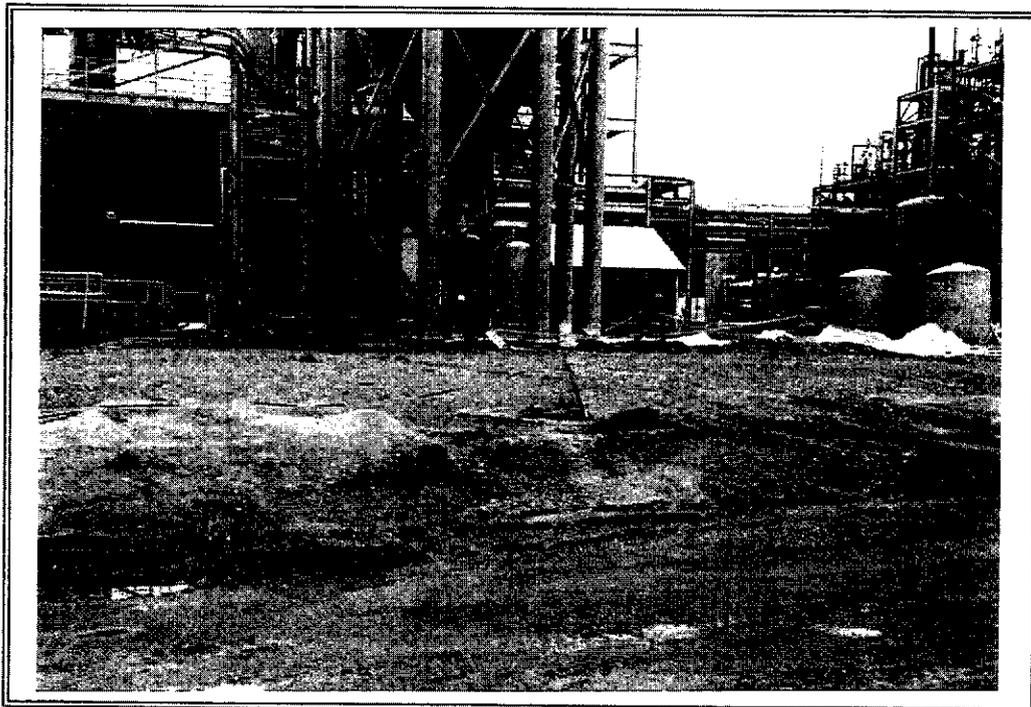


VCC 2.20 SWMU #4, CLOSEUP: 1ST TANK FOR SPENT CARBON

1/18/95



VCC 2.21 PROCESS WAREHOUSE

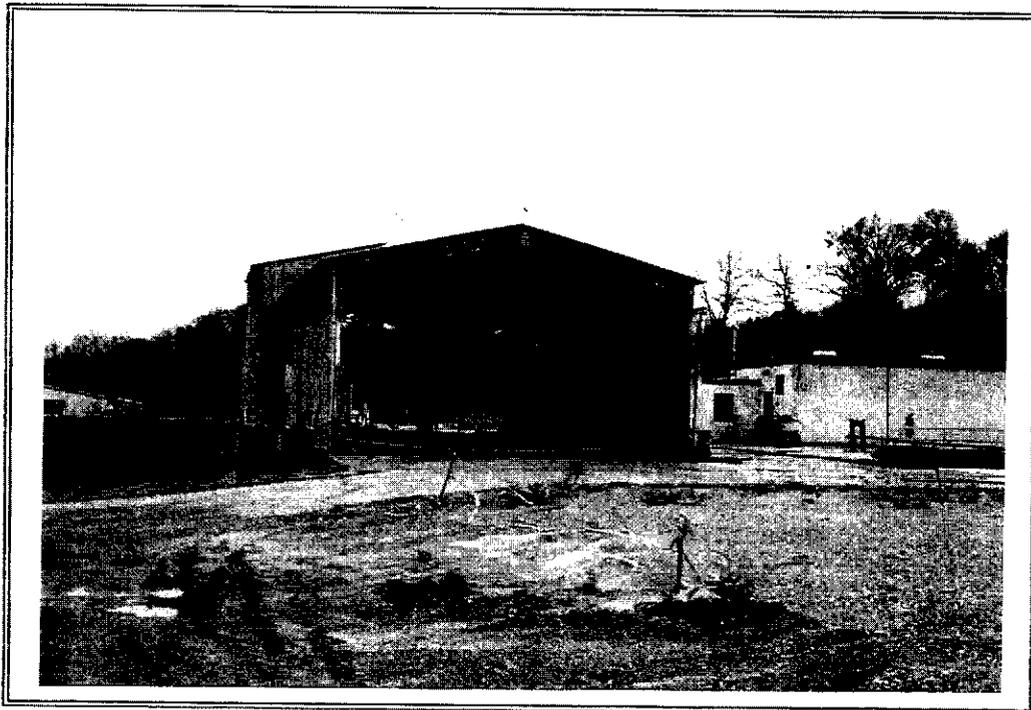


VCC 2.22 K₂CO₃ PLANT: QUICKLIME SILO AND SLAKER GRITS

1/18/95

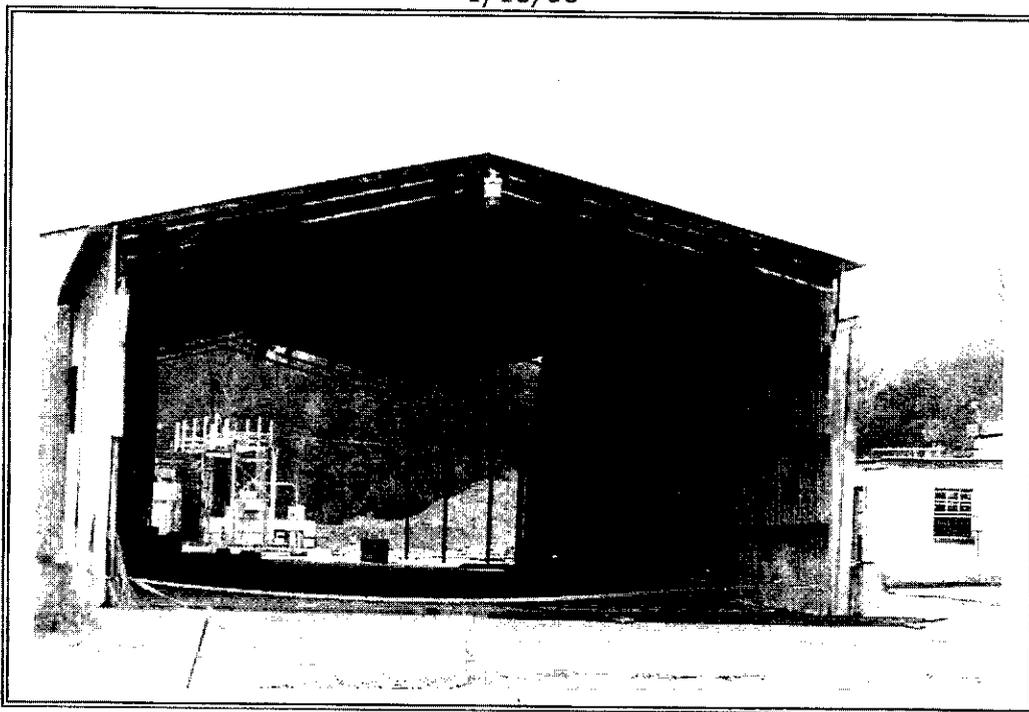


VCC 2.23 K₂CO₃ PLANT: CLOSEUP VIEW OF SLAKER GRITS



VCC 2.24 SWMU #17: RETURNED PRODUCT STORAGE

1/18/95



VCC 2.25 SWMU #17: SWMU #16, DISMANTLED FORMER ATRAZINE
PRODUCTION AREA, IS VISIBLE THROUGH BACK
ENTRANCE TO SWMU #17

RCRA INSPECTION REPORT

1. Inspector and Author of Report

Kevin Posey
Environmental Engineer
Mississippi Department of Environmental Quality (MSDEQ)

2. Facility Information

Vicksburg Chemical Company
Rifle Range Road
P.O. Box 821003
Vicksburg, MS 39182-1003
MSD 990 714 081

3. Responsible Company Official

Steve Boswell
Director of Environmental Affairs

4. Inspection Participants

Steve Boswell, Vicksburg Chemical Company
Kevin Posey, MSDEQ
Russ Twitty, MSDEQ

5. Date and Time of Inspection

July 28, 1994
9:30 a.m.

6. Applicable Regulations

Mississippi Hazardous Waste Management Regulations (MHWMR)
Parts 262, 268 and applicable sections of 265.

7. Purpose of Inspection

Compliance Evaluation Inspection (CEI) to determine Vicksburg Chemical Company's compliance status with the applicable regulations.

8. Facility Description

Vicksburg Chemical Company operates a chemical manufacturing facility south of Vicksburg, Mississippi. The plant is divided into two production facilities, the north plant and the south plant. The plants are on continuous property and are surrounded by a fence which makes access limited to authorized personnel.

The north plant produces potassium nitrate, nitrogen tetroxide, chlorine gas, Sodium hypochlorite and nitric acid. Nitric acid generated by the north plant is consumed internally in the production process.

The south plant produces 65% nitric acid and occasionally produces inhibited red fuming nitric acid. Until 1986 the south plant was primarily a manufacturer of specialty chemicals, such as dinoseb, atrazene, toxaphene and mono sodium methane arsenate (MSMA).

A surface impoundment located in the South plant is used for stormwater collection. Stormwater collected in the impoundment is treated through activated carbon filters before being discharged. The spent activated carbon is treated as PO2O waste and disposed of accordingly.

The Vicksburg Chemical container management area was designed to store drums of hazardous waste. The area is currently used as a less-than-ninety-day storage area. Hazardous waste such as spent activated carbon, personal protective equipment and contaminated soil and concrete debris are stored in this area.

9. Findings

The only hazardous waste material currently generated by Vicksburg Chemical is spent activated carbon containing absorbed waste (PO2O) and personnel protective equipment. Approximately 43,000 pounds of PO2O waste are generated at the facility biannually. During cleanup and maintenance operations, soil and concrete debris that may be contaminated are also managed as hazardous waste. At the time of the inspection, no containers were present at the container management area.

Signed copies of returned manifest are maintained at the facility for three years. Hazardous wastes are transported and disposed of by Chemical Waste Management, Inc. Manifest maintained at the facility were in compliance with MHWMR.

10. Conclusion

Vicksburg Chemical Company is in no apparent violation of the MHWMR.

11. Signed

Kevin Posey
Inspector

9/19/94
Date

12. Approval

David K. Leavelle
RCRA Supervisor

9/19/94
Date

- b. 1. Artificial or natural barrier around facility (e.g., fence or fence and cliff)? Yes No NA

Describe Fence Surrounding Facility

AND

2. Means to control entry through entrances (e.g., attendant, television monitors, locked entrance, controlled roadway access)? Yes No NA

Describe attendant

General Inspection Requirements (264.15) (265.15)

5. Does the owner/operator maintain a written schedule at the facility for inspecting:

- a. Monitoring equipment? Yes No NA
 b. Safety and emergency equipment? Yes No NA
 c. Security devices: Yes No NA
 d. Operating and structural equipment? Yes No NA
 e. Types of problems of equipment:

1. Malfunction Yes No NA
 2. Operator error Yes No NA
 3. Discharges Yes No NA

6. Does the owner/operator maintain an inspection log? Yes No NA

- a. If yes, does it include:

1. Date and time of inspection? Yes No NA
 2. Name of inspector? Yes No NA
 3. Notation of observations? Yes No NA
 4. Date and nature of repairs or remedial action? Yes No NA
 5. Identification of potential problems? Yes No NA

- b. Are there any malfunctions or other deficiencies not corrected? (Use narrative explanation sheet.) Yes No NA

- c. Are records kept a minimum of three years? Yes No NA

Personnel Training (264.16) (265.16)

7. Does the owner/operator maintain personnel training records at the facility? Yes No NA

Date of most recent training: Feb. 10, 94

How long are they kept? Duration of employment

(3 yrs.)

a. If yes, do they include:

- 1. Job title and written job description of each position? Yes No NA
- 2. Description of type and amount of training? Yes No NA
- 3. Records of training given to facility personnel? Yes No NA

Requirements for Ignitable, Reactive, or Incompatible Waste (264.17) (265.17)

8. Does facility handle ignitable or reactive wastes? Yes No NA

- a. If yes, is waste separated and confined from sources of ignition or reaction (open flames, smoking, cutting and welding, hot surfaces, frictional heat), sparks (static, electrical, or mechanical), spontaneous ignition (e.g., from heat-producing chemical reactions), and radiant heat?
 - 1. If yes, use narrative explanation sheet to describe separation and confinement procedures.
 - 2. If no, use narrative explanation sheet to describe sources of ignition or reaction.

- b. Are smoking and open flames confined to specifically designated locations? Yes No NA
- c. Are "No Smoking" signs posted in hazardous areas? Yes No NA
- d. Are precautions documented (Part 264 only)? Yes No NA

9. Check containers

- a. Are containers leaking or corroding? Yes No NA
- b. Is there evidence of heat generation from incompatible wastes? Yes No NA

Section B - Preparedness and Prevention

1. Is there evidence of fire, explosion, or contamination of the environment? (264.31) (265.31) Yes No NA

If yes, use narrative explanation sheet to explain.

Stains from previous Dinoseb & Toxaphene operations.

2. Is the facility equipped with: (264.32) (265.32)
- a. Internal communication or alarm system? Yes No NA
1. Is it easily accessible in case of emergency? Yes No NA
- b. Telephone or two-way radio to call emergency response personnel? Yes No NA
- c. Portable fire extinguishers, fire control equipment, spill control equipment, and decontamination equipment? Yes No NA
- d. Water of adequate volume of hoses, sprinklers, or water spray system? Yes No NA
1. Describe source of water City of Vicksburg
3. Is there sufficient aisle space to allow unobstructed movement of personnel and equipment? (264.35)(265.35) Yes No NA
4. Has the owner/operator made arrangements with the local authorities to familiarize them with characteristics of the facility? (Layout of facility, properties of hazardous waste handled and associated hazards, places where facility personnel would normally be working, entrances to roads inside facility, possible evacuation routes.) (264.37) (265.37) Yes No NA
5. In the case that more than one police or fire department might respond, is there a designated primary authority? (264.37) (265.37) Yes No NA
- a. If yes, name primary authority Vicksburg fire dept.
6. Does the owner/operator have phone numbers of and agreements with State emergency response teams, emergency response contractors, and equipment suppliers? (264.37) (265.37) Yes No NA
- a. Are they really available to all personnel? Yes No NA
7. Has the owner/operator arranged to familiarize local hospitals with the properties of hazardous waste handled and types of injuries that could result from fires, explosions, or releases at the facility? (264.37) (265.37) Yes No NA
8. If State or local authorities declined to enter into agreements, is this entered in the operating record? (264.37) (265.37) Yes No NA

Section C - Contingency Plan and Emergency Procedures

1. Is a contingency plan maintained at the facility?
(264.53) (265.53) Yes No NA
- a. If yes, is it a revised SPCC Plan? Yes No NA
- b. Does contingency plan include: (264.52) (265.52)
1. Arrangements with local emergency response organizations? Yes No NA
2. Emergency coordinator's names, phone numbers and addresses? Yes No NA
3. List of all emergency equipment at facility and descriptions of equipment? Yes No NA
4. Evacuation plan for facility personnel? Yes No NA
2. Is there an emergency coordinator on site or on call at all times? (264.55) (265.55) Yes No NA

Section D - Manifest System, Recordkeeping, and Reporting

1. Does facility receive waste from offsite? (264.71) (265.71) Yes No NA
- a. If yes, does the owner/operator retain copies of all manifests? Yes No NA
1. Are the manifests signed and dated and returned to the generator? Yes No NA
2. Is a signed copy given to the transporter? Yes No NA
2. Does the facility receive any waste from a rail or water (bulk shipment) transporter? (264.71) (265.71) Yes No NA
- a. If yes, is it accompanied by a shipping paper? Yes No NA
1. Does the owner/operator sign and date the shipping paper and return a copy to the generator? Yes No NA
2. Is a signed copy given to the transporter? Yes No NA
3. Has the owner/operator received any shipments of waste that were inconsistent with the manifest (manifest discrepancies)? (264.72) (265.72) Yes No NA
- a. If yes, has he attempted to reconcile the discrepancy with the generator and transporter? Yes No NA
1. If no, has Regional Administrator been notified? Yes No NA

4. Does the owner/operator keep a written operating record at the facility? (264.73) (265.73) Yes No NA
- a. If yes, does it include:
1. Description and quantity of each hazardous waste received? Yes No NA
 2. Methods and dates of treatment, storage, and disposal? Yes No NA
 3. Location and quantity of each hazardous waste at each location? Yes No NA
 4. Cross-references to manifests/shipping papers? Yes No NA
 5. Records and results of waste analyses? Yes No NA
 6. Report of incidents involving implementation of the contingency plan? Yes No NA
 7. Records and results of required inspections? Yes No NA
 8. Monitoring, testing, and analytical data, for groundwater required by Subpart F? Yes No NA
 9. Closure cost estimates and, for disposal facilities, post-closure cost estimates (Part 264)? Yes No NA
 10. Notices of generators as specified in Section 264.12(b) (Part 264)? Yes No NA
- b. Does facility have copy of permit on site? Yes No NA
5. Does the facility submit a biennial report by March 1 every even-numbered year? (264.75) (265.75) Yes No NA
- a. If yes, do reports contain the following information:
1. EPA I.D. number? Yes No NA
 2. Date and year covered by report? Yes No NA
 3. Description/quantity of hazardous waste? Yes No NA
 4. Treatment, storage, and disposal methods? Yes No NA
 5. Monitoring data under Section 265.94(a)(2) and (b)(2) (Part 265)? Yes No NA
 6. Most recent closure and post-closure cost estimates? Yes No NA
 7. For TSD generators, description of efforts to reduce volume/toxicity of waste generated, and actual comparisons with previous year? Yes No NA
 8. Certification signed by owner/operator? Yes No NA
6. Has the facility received any waste (that does not come under the small generator exclusion) not accompanied by a manifest? (264.76) (265.76) Yes No NA
- a. If yes, has he submitted an unmanifested waste report to the Executive Director? Yes No NA

7. Does the facility submit to the Executive Director reports on releases, fires, and explosions; contamination and monitoring data; and facility closure?

Yes No NA

Part _____

GENERATOR'S CHECKLIST

Section A - EPA Identification No.

1. Does generator have EPA I.D. No.? (262.12) Yes No NA
- a. If yes, EPA I.D. No. 990714081

Section B - Manifest

1. Does generator ship waste offsite? (262.20) Yes No NA
- a. If no, do not fill out Sections B and D.
- b. If yes, identify primary offsite facility(s).
Chemical Waste Management, Inc.
2. Does generator use manifest? (262.20) Yes No NA
- a. If no, is generator a small quantity generator (generating between 100 and 1000 kg/month)? Yes No NA
1. If yes, does generator indicate this when sending waste to a TSD facility? Yes No NA
- b. If yes, does manifest include the following information?
1. Manifest document No. Yes No NA
2. Generator's name, mailing address, telephone number Yes No NA
3. Generator EPA I.D. No. Yes No NA
4. Transporter Name(s) and EPA I.D. No.(s) Yes No NA
5. a. Facility name, address, and EPA I.D. No. Yes No NA
- b. Alternate facility name, address, and EPA I.D. No. Yes No NA
- c. Instructions to return to generator if undeliverable Yes No NA
6. Waste information required by DOE - shipping name, quantity (weight or vol.), containers (type and number) Yes No NA
7. Emergency information (optional) (special handling instructions, telephone No.) Yes No NA
8. Is the following certification on each manifest form? Yes No NA

This is to certify that the above named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation and the EPA.

9. Does generator retain copies of manifests? Yes No NA

If yes, complete a through e.

a. 1. Did generator sign and date all manifests? Yes No NA
2. Who signed for generator? Yes No NA

Name Steve Boswell Title Director, Environmental

b. 1. Did generator obtain handwritten signature and date of acceptance from initial transporter? Yes No NA
2. Who signed and dated for transporter? Yes No NA

Name _____ Title _____

c. Does generator retain one copy of manifest signed by generator and transporter? Yes No NA
d. Do returned copies of manifest include facility owner/operator signature and date of acceptance? Yes No NA
e. Does generator retain copies for 3 years? Yes No NA

Section C - Hazardous Waste Determination

1. Does generator generate solid waste(s) listed in Subpart D (List of Hazardous Waste)? (261.30) Yes No NA

a. If yes, list waste and quantities (include EPA Hazardous Waste No.) P020

2. Does generator solid waste(s) listed in Subpart C that exhibit hazardous characteristics? (corrosivity, ignitability, reactivity, EP toxicity) (261.20) Yes No NA

a. If yes, list wastes and quantities (include EPA Hazardous Waste No.) _____

b. Does generator determine characteristics by testing or by applying knowledge of processes? testing & knowledge

1. If determined by testing, did generator use test methods in Part 261, Subpart C (or equivalent)? Yes No NA

a. If equivalent test methods used, attach copy of equivalent methods used.

3. Are there any other solid wastes generated by generators? Yes No NA

a. If yes, did generator test all wastes to determine nonhazardous characteristics? Yes No NA

1. If no, list wastes and quantities deemed nonhazardous or processes from which non-hazardous waste was produced (use additional sheet if necessary).

Section D - Pretransport Requirements

1. Does generator package waste in accordance with 49 CFR 173, 178, and 179 (DOT requirements)? (262.30) Yes No NA

2. a. Are containers to be shipped leaking or corroding? Yes No NA

b. Use sheet to describe containers and condition.

c. Is there evidence of heat generation from incompatible wastes in the containers? (262.31) Yes No NA

3. Does generator follow DOT labeling requirements in accordance with 49 CFR 172? Yes No NA

4. Does generator mark each package in accordance with 49 CFR 172? Yes No NA

5. Is each container of 110 gallons or less marked with the following label? (262.32) Yes No NA

Label saying: HAZARDOUS WASTE - Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency.

Generator name(s) and address(es) _____

Manifest document No. _____

6. Does generator have placards to offer to transporters? (262.33) Yes No NA

7. Accumulation time: (262.34)

- a. Are containers used to temporarily store waste before transport? Yes No NA
1. If yes, is each container clearly dated: Yes No NA
Also, fill out rest of No. 7 (accum. time)
- b. 1. Does generator inspect containers for leakage or corrosion? (265.174 - Inspections) Yes No NA
2. If yes, with what frequency? Yes No NA
- c. Does generator locate containers holding ignitable or reactive waste at least 15 meters (50 feet) from the facility's property line? (265.176 - Special Requirements for Ignitable or Reactive Wastes) Yes No NA

NOTE: If tanks are used, fill out checklist for tanks.

- d. Are the containers labeled and marked in accordance with Section D-3, D-4, and D-5 of this form? Yes No NA

NOTE: If generator accumulates waste on site, fill out checklist for General Facilities, Subparts C and D.

- e. Does generator comply with requirements for personnel training? (Attach checklist for 265.16 - Personnel Training.) Yes No NA

8. Describe storage area. Use photos and narrative explanation sheet.

Section E - Recordkeeping and Records (262.40)

1. Does generator keep the following reports for 3 years?

- a. Manifests and signed copies from Yes No NA
- b. Biennial Reports Yes No NA
- c. Exception reports Yes No NA
- d. Test results Yes No NA

2. Where are the records kept (at facility or elsewhere)?

at facility

3. Who is in charge of keeping the records?

Name Steve Boswell Title Director, Environmental

Part ____

GROUNDWATER MONITORING CHECKLIST

Section A - Monitoring System

1. Does the facility have a groundwater monitoring system in operation? ✓Yes ___ No ___ NA
- a. If yes, does the system consist of: (265.91)(264.97)
1. At least one upgradient/background well? ✓Yes ___ No ___ NA
2. At least three downgradient wells? ✓Yes ___ No ___ NA
- b. Are wells identified in the field? ✓Yes ___ No ___ NA
- c. Are well heads in good condition (i.e. free of cracks)? ✓Yes ___ No ___ NA
- d. Are well heads locked? ✓Yes ___ No ___ NA
- e. Do well heads have bumper guards or are otherwise protected? ✓Yes ___ No ___ NA

Section B - Sampling and Analysis (Part 264)

1. Does the facility obtain and analyze samples from the groundwater monitoring system? ✓Yes ___ No ___ NA
2. Has facility developed and followed a groundwater sampling and analysis plan? (264.97(d)) ✓Yes ___ No ___ NA
- a. If yes, does this plan include procedures and techniques for:
1. Sample collection? ✓Yes ___ No ___ NA
2. Sample preservation? ✓Yes ___ No ___ NA
3. Analytical procedures? ✓Yes ___ No ___ NA
4. Chain-of-custody control? ✓Yes ___ No ___ NA
5. Determining the groundwater surface elevation? ✓Yes ___ No ___ NA
3. Has facility specified a statistical method to be used in evaluating groundwater monitoring data? ___ Yes ✓NO ___ NA
4. Is all groundwater monitoring data recorded in the operating record? ✓Yes ___ No ___ NA

Section C - Detection Monitoring Program (264.98)

1. Has owner/operator established detection monitoring system to provide reliable indications for detection releases? Yes No NA
- a. If yes, are the following components included in the system:
1. Background values? Yes No NA
 2. Determination of groundwater flow rate and direction annually? (264.98(e)) Yes No NA
 3. Determination of statistically significant increases over background concentrations at each well? (264.98(f)) Yes No NA
 4. If there was a statistically significant increase indicated, did the facility notify the Executive Director per 264.98(g)(1)? Yes No NA
 5. Did facility attempt to demonstrate an apparent increase was not caused by a regulated unit per MHWMR 264.98(g)(6)? Yes No NA
 6. Is all information contained in the facility's operating record? Yes No NA

Section D - Compliance Monitoring Program (264.99)

1. Does the facility operate a compliance monitoring program? Yes No NA
- a. If yes, does the facility:
1. Determine the groundwater flow rate and direction in the uppermost aquifer annually? (264.99(e)) Yes No NA
 2. Collect at least four samples from each well at least semi-annually? (264.99(f)) Yes No NA
 3. Determine whether there is statistically significant evidence of increased contamination at each monitoring well? Yes No NA
 4. If an increase was indicated, did facility notify the Executive Director? Yes No NA
 5. Analyze samples for constituents listed in Appendix IX of Part 264 at least annually? Yes No NA
 6. Record all information in the operating record? Yes No NA

Section E - Corrective Action Program (Part 264 only) (264.100)

1. Does facility follow a corrective action program that meets the facility's permit requirements? Yes No NA

Section F - Sampling and Analysis (Part 265)

1. Has the facility developed and followed a groundwater sampling and analysis plan? Yes No NA
- a. If yes, does the plan include procedures and techniques for:
- 1. Sample collection? Yes No NA
 - 2. Sample preservation? Yes No NA
 - 3. Analytical procedure? Yes No NA
 - 4. Chain-of-custody control? Yes No NA
2. Has the owner/operator established initial background concentrations or values of all parameters specified in 265.92(b)? Yes No NA
- a. Samples collected to establish background quality (from above)? Yes No NA
 - b. Samples collected to indicate contamination (from above)? Yes No NA
 - c. Elevation of groundwater surface at each monitoring well at each sampling event? Yes No NA

Section G - Preparation, Evaluation, and Response (Part 265 only) (265.93)

1. Did owner/operator prepare an outline of a groundwater quality assessment program? Yes No NA
- a. If yes, did program determine the following:
- 1. Whether hazardous waste or hazardous waste constituents have entered the groundwater? Yes No NA
 - 2. Rate and extent of hazardous waste or hazardous waste constituent migration? Yes No NA
 - 3. Concentrations of hazardous waste or hazardous waste constituents in groundwater? Yes No NA
- b. For each well, has owner/operator calculated the arithmetic mean and variance, based on four replicate measurements for each sample, and compared the results with initial background mean? Yes No NA
- c. Has owner/operator submitted information documenting any significant increase in comparisons for up-gradient wells (or decrease in pH)? Yes No NA
- d. If the comparisons for downgradient wells show a significant increase (or pH decrease), has the owner/operator obtained additional groundwater samples from

those downgradient wells in which a significant decrease was detected? (Samples must be split in two, and analyses must be obtained of all additional samples to determine whether the significant difference was a result of lab error)

Yes No NA

1. If analyses (described above) were performed, and confirmed the significant increase (or pH decrease), did owner/operator notify Regional Administrator within 7 days? Yes No NA
2. If analyses confirmed significant increase (or pH decrease), did owner/operator submit to the Executive Director within 15 days after notification (discussed above) a certified groundwater quality assessment program? Yes No NA
3. Did owner/operator implement the groundwater quality assessment program and, at a minimum, did he determine the following:
 - a. Rate and extent of migration of the hazardous waste constituents in the groundwater? Yes No NA
 - b. Concentrations of the hazardous waste in the groundwater? Yes No NA
4. Did owner/operator submit a report to the Executive Director containing the requests of the assessment outlined in No. 3 above within 15 days? Yes No NA
5. Did owner/operator notify the Executive Director of reinstatement of indicator evaluation program upon finding that no hazardous waste or hazardous waste constituents had entered the groundwater? Yes No NA
6. If owner/operator determined that hazardous waste or hazardous waste constituents entered the groundwater, did he either continue to make the determinations listed in No. 3 above on a quarterly basis until final closure or groundwater quality assessment plan was implemented prior to post-closure care, or cease to make determinations required in No. 3 above if groundwater quality assessment plan was implemented during post-closure? Yes No NA
7. If any groundwater quality assessment program is implemented to satisfy No. 3 above prior to final closure, has owner/operator completed program and reported to the Executive Director, as outlined in No. 4 above? Yes No NA
8. If owner/operator does not monitor at least annually to satisfy No. 3 above, does owner/operator evaluate data on groundwater elevation

obtained under No. 3c in Section F above to determine whether the requirements for locating monitoring wells are satisfied?

Yes No ~~NA~~

a. If evaluation shows that the requirements for monitoring wells are not satisfied, has owner/operator modified the number, location, or depth of the monitoring wells to bring the system into compliance?

Yes No ~~NA~~

Section H - Recordkeeping and Reporting (Part 265 only) (265.94)

1. Unless owner/operator is monitoring to satisfy the requirements of Section 265.93(d)(4), does owner/operator:

a. Keep records of the analyses required in Section 265.92(c) and (d), groundwater surface elevations required in 265.93(b) throughout the active life of the facility and throughout post-closure?

Yes No ~~NA~~

b. Report the following information to the Executive Director:

1. Within 15 days of analysis for each quarterly sampling event, does owner/operator submit results of background concentrations?

Yes No ~~NA~~

2. Does owner/operator inform the Executive Director about any parameters that exceed maximum contaminant levels listed in Appendix III?

Yes No ~~NA~~

3. (Annually) does owner/operator report concentrations or values of parameters listed in Section 265.92(b)(3) for each well, including required evaluations for these parameters under Section 265.93(b)?

Yes No ~~NA~~

a. Does owner/operator also identify differences from initial background concentrations found in the upgradient wells no later than March 1 following each calendar year?

Yes No ~~NA~~

2. Does owner/operator submit results of the groundwater surface elevations under Section 265.93(f), along with a description of the response, if needed?

Yes No ~~NA~~

3. If groundwater is monitored to satisfy requirements of Section 265.93(d)(4), did owner/operator do the following:

a. Keep records of analyses and evaluations specified in the plan throughout active life and post-closure?

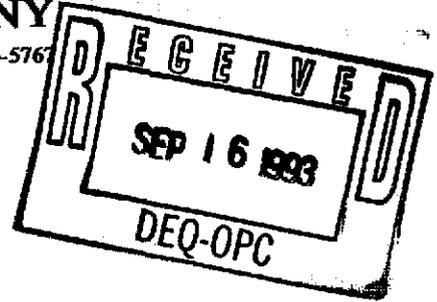
Yes No NA

b. (Annually, until final closure) submit to the Regional Administrator a report containing the results of the groundwater quality assessment program, including the calculated rate of migration of hazardous waste or hazardous waste constituents by March 1?

Yes No NA

VICKSBURG CHEMICAL COMPANY

P.O. Box 821003 • Vicksburg MS 39182 • 601-636-1231 • FAX 601-636-5767



CERTIFIED MAIL
RETURN RECEIPT REQUESTED
P 875 308 250

Mr. Taher Diab
TSD Facilities/Hazardous Waste Division
Office of Pollution Control
Mississippi Department of Environmental Quality
P.O. Box 10385
Jackson, MS 39289-0385

September 13, 1993

Re: Compliance Evaluation Inspection
Vicksburg Chemical Company
MSD990 714 081

Dear Mr. Diab:

As requested in your letter of September 10, 1993, and in response to the findings of your inspection on September 1, 1993, Vicksburg Chemical has performed the following actions:

1. Signs are posted at each entrance to the container management area with the legend, "Danger- Unauthorized Personnel Keep Out."
2. Drums at the satellite accumulation area are marked with the words, "Hazardous Waste."

Photographs of each area are included with this letter. Please contact me with any questions there may be.

Sincerely,

A handwritten signature in cursive script that reads "Steven T. Boswell".

Steven T. Boswell
Dir. of Env. Affairs

STB: pc

xc: Mr. Miles
Mr. Madsen
Mr. Gunn



FILE COPY

STATE OF MISSISSIPPI

DEPARTMENT OF ENVIRONMENTAL QUALITY

JAMES I. PALMER, JR.
EXECUTIVE DIRECTOR

September 10, 1993

Mr. Steve Boswell
Environmental Affairs Director
Vicksburg Chemical Company
P.O. Box 821003
Vicksburg, Mississippi 39182-1003

RE: Compliance Evaluation Inspection
Vicksburg Chemical Company
Vicksburg, Mississippi
MSD 990 714 081

Dear Mr. Boswell:

Enclosed please find an inspection report and checklist completed as a result of a compliance evaluation inspection conducted at Vicksburg Chemical Company on September 1, 1993. The following apparent violations were noted:

1. MHWMR 265.14(c) in that signs with the legend, " Danger- Unauthorized Personnel Keep Out", were not posted at each entrance of the container management area.
2. MHWMR 262.34(c)(ii) in that the two containers at the satellite accumulation area were not marked with the words, " Hazardous Waste", or with words that identify the contents of the containers.

Although no enforcement action will be taken at this time, we request your response within ten(10) days of receipt of this letter with actions that have been taken to correct these violations.

If you have any questions on this matter, please call me at 601-961-5389.

Sincerely,

A handwritten signature in cursive script, appearing to read "Taher F. Diab".

Taher F. Diab
TSD Facilities/ Hazardous Waste Division

cc: Mr. G. Alan Farmer, EPA IV(w\ enclosures)

RCRA INSPECTION REPORT

1. Inspector and Author of Report

Taher Diab, Environmental Engineer
Mississippi Department of Environmental Quality (MDEQ)

2. Facility Information

Vicksburg Chemical Company (VCC)
Rifle Range Rd.
P.O. Box 821003
Vicksburg, MS 39182-1003
MSD 990 714 081

3. Responsible Company Official

Steve Boswell, Director
Environmental Affairs

4. Inspection Participants

David Keen, Environmental Specialist, VCC
Otto Logue, Process Safety Coordinator, VCC
Taher Diab, MDEQ

5. Date and Time of Inspection

September 1, 1993 at 9:00 a.m.

6. Applicable Regulations

Mississippi Hazardous Waste Management Regulations (MHWMR)
Parts 262, 268 and applicable sections of 265.

7. Purpose of Inspection

A Compliance Evaluation Inspection (CEI) to determine VCC's compliance status with the applicable regulations.

8. Facility Description

Vicksburg Chemical Company (VCC) operates two Chemical plants on contiguous property south of Vicksburg, Mississippi. The North plant primarily produces potassium nitrate and nitrogen tetroxide with by-product production of chlorine gas. The South plant was primarily a manufacturer of specialty chemicals, such as dinoseb, atrazene, toxaphene and mono sodium methane arsenate (MSMA). The manufacture of these chemicals produced hazardous wastes. Specifically, the MSMA production generated K031, by-product salts generated in the production of MSMA; the toxaphene production generated two

RCRA wastes, K098, untreated process wastewater from the production of toxaphene, and K041, wastewater treatment sludge from the production of toxaphene; and the dinoseb production generated hazardous waste P020, Dinoseb. These wastes were managed in several units including: a container storage area, a pre-RCRA landfill, a surface impoundment, tanks and carbon adsorption units. The container storage area and the surface impoundment were considered to be RCRA regulated units. The south plant currently manufactures nitric acid.

The surface impoundment located in the South plant is primarily used for stormwater collection which contains low concentration of pesticides. This impoundment also receives, on occasions wastewater from the North plant. Numerous years of de minimis losses in the process area have contaminated the soil. The suspected source of groundwater contamination is stormwater infiltration contaminated from contact with these soils, leakage from the effluent line to the surface impoundment, and the surface impoundment prior to the retrofit with a double synthetic liner. An inactive landfill, adjacent to the surface impoundment, was closed in 1979. Improvement occurred in 1983 when grading and construction of the cap were approved by MDEQ.

The Vicksburg container management area was designed to contain drums of waste material which are classified as hazardous. In 1990, Vicksburg Chemical Corporation maintained that the container management area is a less-than-ninety-day storage area and therefore not subject to the interim status requirements of 40 C.F.R. Part 265. EPA asserted that the container management area did not meet the requirements for the less-than-ninety-day exemption and was therefore subject to interim status requirements. On April 17, 1992, the United States on behalf of EPA, issued a consent decree to Vicksburg Chemical requiring closure of the container management area. In May of 1992, VCC submitted a revised closure plan. The plan has been reviewed by the MDEQ. A decision for approval has not been taken yet. The container management area is currently used for storage of personal protective equipment contaminated with dinoseb (P020). Contaminated soil and concrete debris are sometimes generated during maintenance and cleanup and stored in this area.

9. Findings

The only hazardous waste material currently generated is personnel protective equipment contaminated with dinoseb (P020). During cleanup and maintenance, soil and concrete debris that may be contaminated are also managed as hazardous waste. At the time of inspection, no containers were present at the container management area. Warning signs (265.14(c)) and fire extinguisher were not available. The containers at the satellite accumulation area were not marked with words "Hazardous Waste" (262.34(c)(ii)). Personnel training

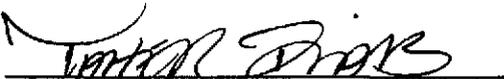
records, shipping manifests and contingency plan were well organized and updated according to regulations.

10. Conclusion

Vicksburg Chemical Company is in apparent violation of the following regulations:

- MHWMR 265.14(c) in that signs with the legend, "Danger - Unauthorized Personnel Keep Out", were not posted at each entrance of the Container Management area.
- MHWMR 262.34(c)(ii) in that the two containers at the Satellite accumulation area were not marked with the words, "Hazardous Waste" or with words that identify the contents of the containers.

11. Signed


Inspector

Sept. 10, 93
Date

12. Approval


RCRA Supervisor

9/10/93
Date

Compliance Evaluation
Inspection
Checklists

Table of Contents

- ✓ General Site Inspection Form
- ✓ General Facility Checklist
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 - Tanks Checklist
 - Surface Impoundment Checklist
 - Waste Piles Checklist
 - Land Treatment Checklist
 - Landfills Checklist
 - Incinerators Checklist
- ✓ Groundwater Monitoring Checklist
 - Financial Requirements
- List of Appendices

Part 1

General Site Information

Facility Name: Vicksburg Chemical Company
Address: P.O. Box 821003
I.D. Number: MSD 990 714 081
Contact: Steve Boswell
Title: Director, Environmental Affairs
Phone Number: 601-636-1231

Type of Ownership:

Federal State County Municipal Private

Facility Status:

Generator Transporter Treatment Storage Disposal

Regulatory Status:

Interim Status Part B Submitted
 Permitted Part B in Preparation

Principal Inspector Name: TAHER DIAB Title: Envir. Engineer
Organization: MDEQ Phone Number: 961-5389

Inspection Participants:

<u>Name</u>	<u>Title</u>	<u>Representing</u>
<u>David Keen</u>	<u>Environm. Specialist</u>	<u>Vicksburg Chemical</u>
<u>Otto Loque</u>	<u>Safety Coordinator</u>	<u>" "</u>
<u>TAHER DIAB</u>	<u>Environm. Engineer</u>	<u>MDEQ</u>

Part _____

GENERAL FACILITY CHECKLIST

Section A - General Facility Standards

1. Does facility have EPA Identification No.? Yes No NA
- a. If yes, EPA I.D. No. MSD 990714081
If no, explain. _____
2. Has facility received hazardous waste from a foreign source? Yes No NA
- a. If yes, has it filed a notice with the Regional Administrator? Yes No NA

Waste Analysis

3. Does facility maintain a copy of the waste analysis plan at the facility? Yes No NA
- a. If yes, does it include: (264.13) (265.13)
1. Parameters for which each waste will be analyzed? Yes No NA
 2. Test methods used to test for these parameters? Yes No NA
 3. Sampling method used to obtain sample? Yes No NA
 4. Frequency with which the initial analyses will be reviewed or repeated? Yes No NA
 5. (For offsite facilities) waste analyses that generators have agreed to supply? Yes No NA
 6. (For offsite facilities) procedures which are used to inspect and analyze each movement of hazardous waste, including:
 - a. Procedures to be used to determine the identity of each movement of waste. Yes No NA
 - b. Sampling method to be used to obtain representative sample of the waste to be identified. Yes No NA
4. Does the facility provide adequate security through: (264.14) (265.14)
- a. 24-hour surveillance system (e.g., television monitoring or guards)? Guard Yes No NA

OR

- b. 1. Artificial or natural barrier around facility (e.g., fence or fence and cliff)? Yes No NA

Describe _____

AND

2. Means to control entry through entrances (e.g., attendant, television monitors, locked entrance, controlled roadway access)? Yes No NA

Describe Guard

General Inspection Requirements (264.15) (265.15)

5. Does the owner/operator maintain a written schedule at the facility for inspecting:

- a. Monitoring equipment? Yes No NA
b. Safety and emergency equipment? Yes No NA
c. Security devices: Yes No NA
d. Operating and structural equipment? Yes No NA
e. Types of problems of equipment:

1. Malfunction Yes No NA
2. Operator error Yes No NA
3. Discharges Yes No NA

6. Does the owner/operator maintain an inspection log? Yes No NA

- a. If yes, does it include:

1. Date and time of inspection? Yes No NA
2. Name of inspector? Yes No NA
3. Notation of observations? Yes No NA
4. Date and nature of repairs or remedial action? Yes No NA
5. Identification of potential problems? Yes No NA

- b. Are there any malfunctions or other deficiencies not corrected? (Use narrative explanation sheet.) Yes No NA

- c. Are records kept a minimum of three years? Yes No NA

Personnel Training (264.16) (265.16)

7. Does the owner/operator maintain personnel training records at the facility? Yes No NA

Date of most recent training: Feb. 10, 93

How long are they kept? 3 yrs.

a. If yes, do they include:

- | | | | |
|--|---|-----------------------------|-----------------------------|
| 1. Job title and written job description of each position? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> NA |
| 2. Description of type and amount of training? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> NA |
| 3. Records of training given to facility personnel? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> NA |

Requirements for Ignitable, Reactive, or Incompatible Waste
(264.17) (265.17)

8. Does facility handle ignitable or reactive wastes? Yes No NA

a. If yes, is waste separated and confined from sources of ignition or reaction (open flames, smoking, cutting and welding, hot surfaces, frictional heat), sparks (static, electrical, or mechanical), spontaneous ignition (e.g., from heat-producing chemical reactions), and radiant heat?

1. If yes, use narrative explanation sheet to describe separation and confinement procedures.
2. If no, use narrative explanation sheet to describe sources of ignition or reaction.

b. Are smoking and open flames confined to specifically designated locations? Yes No NA

c. Are "No Smoking" signs posted in hazardous areas? Yes No NA

d. Are precautions documented (Part 264 only)? Yes No NA

9. Check containers

a. Are containers leaking or corroding? Yes No NA

b. Is there evidence of heat generation from incompatible wastes? Yes No NA

Section B - Preparedness and Prevention

1. Is there evidence of fire, explosion, or contamination of the environment? (264.31) (265.31) Yes No NA

If yes, use narrative explanation sheet to explain.

Soil stains from previous Dioxin & Toxaphene operations

2. Is the facility equipped with: (264.32) (265.32)
- a. Internal communication or alarm system? Yes No NA
1. Is it easily accessible in case of emergency? Yes No NA
- b. Telephone or two-way radio to call emergency response personnel? Yes No NA
- c. Portable fire extinguishers, fire control equipment, spill control equipment, and decontamination equipment? Yes No NA
- d. Water of adequate volume of hoses, sprinklers, or water spray system? Yes No NA
1. Describe source of water City
3. Is there sufficient aisle space to allow unobstructed movement of personnel and equipment? (264.35)(265.35) Yes No NA
4. Has the owner/operator made arrangements with the local authorities to familiarize them with characteristics of the facility? (Layout of facility, properties of hazardous waste handled and associated hazards, places where facility personnel would normally be working, entrances to roads inside facility, possible evacuation routes.) (264.37) (265.37) Yes No NA
5. In the case that more than one police or fire department might respond, is there a designated primary authority? Yes No NA (264.37) (265.37)
- a. If yes, name primary authority _____
6. Does the owner/operator have phone numbers of and agreements with State emergency response teams, emergency response contractors, and equipment suppliers? (264.37) (265.37) Yes No NA
- a. Are they readily available to all personnel? Yes No NA
7. Has the owner/operator arranged to familiarize local hospitals with the properties of hazardous waste handled and types of injuries that could result from fires, explosions, or releases at the facility? (264.37) (265.37) Yes No NA
8. If State or local authorities declined to enter into agreements, is this entered in the operating record? (264.37) (265.37) Yes No NA

Section C - Contingency Plan and Emergency Procedures

1. Is a contingency plan maintained at the facility? (264.53) (265.53) Yes No NA
- a. If yes, is it a revised SPCC Plan? Yes No NA
- b. Does contingency plan include: (264.52) (265.52)
1. Arrangements with local emergency response organizations? Yes No NA
2. Emergency coordinator's names, phone numbers and addresses? Yes No NA
3. List of all emergency equipment at facility and descriptions of equipment? Yes No NA
4. Evacuation plan for facility personnel? Yes No NA
2. Is there an emergency coordinator on site or on call at all times? (264.55) (265.55) Yes No NA

Section D - Manifest System, Recordkeeping, and Reporting

1. Does facility receive waste from offsite? (264.71) (265.71) Yes No NA
- a. If yes, does the owner/operator retain copies of all manifests? Yes No NA
1. Are the manifests signed and dated and returned to the generator? Yes No NA
2. Is a signed copy given to the transporter? Yes No NA
2. Does the facility receive any waste from a rail or water (bulk shipment) transporter? (264.71) (265.71) Yes No NA
- a. If yes, is it accompanied by a shipping paper? Yes No NA
1. Does the owner/operator sign and date the shipping paper and return a copy to the generator? Yes No NA
2. Is a signed copy given to the transporter? Yes No NA
3. Has the owner/operator received any shipments of waste that were inconsistent with the manifest (manifest discrepancies)? (264.72) (265.72) Yes No NA
- a. If yes, has he attempted to reconcile the discrepancy with the generator and transporter? Yes No NA
1. If no, has Regional Administrator been notified? Yes No NA

4. Does the owner/operator keep a written operating record at the facility? (264.73) (265.73) Yes No NA
- a. If yes, does it include:
1. Description and quantity of each hazardous waste received? Yes No NA
 2. Methods and dates of treatment, storage, and disposal? Yes No NA
 3. Location and quantity of each hazardous waste at each location? Yes No NA
 4. Cross-references to manifests/shipping papers? Yes No NA
 5. Records and results of waste analyses? Yes No NA
 6. Report of incidents involving implementation of the contingency plan? Yes No NA
 7. Records and results of required inspections? Yes No NA
 8. Monitoring, testing, and analytical data, for groundwater required by Subpart F? Yes No NA
 9. Closure cost estimates and, for disposal facilities, post-closure cost estimates (Part 264)? Yes No NA
 10. Notices of generators as specified in Section 264.12(b) (Part 264)? Yes No NA
- b. Does facility have copy of permit on site? Yes No NA
5. Does the facility submit a biennial report by March 1 every even-numbered year? (264.75) (265.75) Yes No NA
- a. If yes, do reports contain the following information:
1. EPA I.D. number? Yes No NA
 2. Date and year covered by report? Yes No NA
 3. Description/quantity of hazardous waste? Yes No NA
 4. Treatment, storage, and disposal methods? Yes No NA
 5. Monitoring data under Section 265.94(a)(2) and (b)(2) (Part 265)? Yes No NA
 6. Most recent closure and post-closure cost estimates? Yes No NA
 7. For TSD generators, description of efforts to reduce volume/toxicity of waste generated, and actual comparisons with previous year? Yes No NA
 8. Certification signed by owner/operator? Yes No NA
6. Has the facility received any waste (that does not come under the small generator exclusion) not accompanied by a manifest? (264.76) (265.76) Yes No NA
- a. If yes, has he submitted an unmanifested waste report to the Executive Director? Yes No NA

7. Does the facility submit to the Executive Director reports on releases, fires, and explosions; contamination and monitoring data; and facility closure?

Yes No NA

Part _____

GENERATOR'S CHECKLIST

Section A - EPA Identification No.

1. Does generator have EPA I.D. No.? (262.12) Yes No NA
- a. If yes, EPA I.D. No. 9 9 0 7 1 4 0 8 1

Section B - Manifest

1. Does generator ship waste offsite? (262.20) Yes No NA
- a. If no, do not fill out Sections B and D.
- b. If yes, identify primary offsite facility(s).
Varies
2. Does generator use manifest? (262.20) Yes No NA
- a. If no, is generator a small quantity generator (generating between 100 and 1000 kg/month)? Yes No NA
1. If yes, does generator indicate this when sending waste to a TSD facility? Yes No NA
- b. If yes, does manifest include the following information? Yes No NA
1. Manifest document No. Yes No NA
2. Generator's name, mailing address, telephone number Yes No NA
3. Generator EPA I.D. No. Yes No NA
4. Transporter Name(s) and EPA I.D. No.(s) Yes No NA
5. a. Facility name, address, and EPA I.D. No. Yes No NA
- b. Alternate facility name, address, and EPA I.D. No. Yes No NA
- c. Instructions to return to generator if undeliverable Yes No NA
6. Waste information required by DOE - shipping name, quantity (weight or vol.), containers (type and number) Yes No NA
7. Emergency information (optional) (special handling instructions, telephone No.) Yes No NA
8. Is the following certification on each manifest form? Yes No NA

This is to certify that the above named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation and the EPA.

9. Does generator retain copies of manifests? Yes No NA

If yes, complete a through e.

a. 1. Did generator sign and date all manifests? Yes No NA
2. Who signed for generator? Yes No NA

Name Steve Boswell Title Director, Environmental

b. 1. Did generator obtain handwritten signature and date of acceptance from initial transporter? Yes No NA
2. Who signed and dated for transporter? Yes No NA

Name _____ Title _____

c. Does generator retain one copy of manifest signed by generator and transporter? Yes No NA
d. Do returned copies of manifest include facility owner/operator signature and date of acceptance? Yes No NA
e. Does generator retain copies for 3 years? Yes No NA

Section C - Hazardous Waste Determination

1. Does generator generate solid waste(s) listed in Subpart D (List of Hazardous Waste)? (261.30) Yes No NA

a. If yes, list waste and quantities (include EPA Hazardous Waste No.) P020

2. Does generator solid waste(s) listed in Subpart C that exhibit hazardous characteristics? (corrosivity, ignitability, reactivity, EP toxicity) (261.20) Yes No NA

a. If yes, list wastes and quantities (include EPA Hazardous Waste No.) _____

b. Does generator determine characteristics by testing or by applying knowledge of processes? Both

1. If determined by testing, did generator use test methods in Part 261, Subpart C (or equivalent)? Yes No NA

a. If equivalent test methods used, attach copy of equivalent methods used.

3. Are there any other solid wastes generated by generators? Yes No NA

a. If yes, did generator test all wastes to determine nonhazardous characteristics? Yes No NA

1. If no, list wastes and quantities deemed nonhazardous or processes from which nonhazardous waste was produced (use additional sheet if necessary).

Section D - Pretransport Requirements

1. Does generator package waste in accordance with 49 CFR 173, 178, and 179 (DOT requirements)? (262.30) Yes No NA

2. a. Are containers to be shipped leaking or corroding? Yes No NA

b. Use sheet to describe containers and condition.

c. Is there evidence of heat generation from incompatible wastes in the containers? (262.31) Yes No NA

3. Does generator follow DOT labeling requirements in accordance with 49 CFR 172? Yes No NA

4. Does generator mark each package in accordance with 49 CFR 172? Yes No NA

5. Is each container of 110 gallons or less marked with the following label? (262.32) Yes No NA

Label saying: HAZARDOUS WASTE - Federal Law Prohibits Improper Disposal. If found, contact the nearest policy or public safety authority or the U.S. Environmental Protection Agency.

Generator name(s) and address(es) _____

Manifest document No. _____

6. Does generator have placards to offer to transporters? (262.33) Yes No NA

7. Accumulation time: (262.34)

- a. Are containers used to temporarily store waste before transport? Yes No NA
1. If yes, is each container clearly dated: Also, fill out rest of No. 7 (accum. time) Yes No NA
- b. 1. Does generator inspect containers for leakage or corrosion? (265.174 - Inspections) Yes No NA
2. If yes, with what frequency? Yes No NA
- c. Does generator locate containers holding ignitable or reactive waste at least 15 meters (50 feet) from the facility's property line? (265.176 - Special Requirements for Ignitable or Reactive Wastes) Yes No NA

NOTE: If tanks are used, fill out checklist for tanks.

- d. Are the containers labeled and marked in accordance with Section D-3, D-4, and D-5 of this form? Yes No NA

NOTE: If generator accumulates waste on site, fill out checklist for General Facilities, Subparts C and D.

- e. Does generator comply with requirements for personnel training? (Attach checklist for 265.16 - Personnel Training.) Yes No NA

8. Describe storage area. Use photos and narrative explanation sheet.

Section E - Recordkeeping and Records (262.40)

1. Does generator keep the following reports for 3 years?

- a. Manifests and signed copies from Yes No NA
- b. Biennial Reports Yes No NA
- c. Exception reports Yes No NA
- d. Test results Yes No NA

2. Where are the records kept (at facility or elsewhere)?

at Facility

3. Who is in charge of keeping the records?

Name Steve Boswell Title Director, Environ. Affairs.

Section F - Special Conditions

1. Has generator received from or transported to a foreign Administrator? Yes No NA
- a. If yes, has he filed a notice with the Regional Administrator? Yes No NA
- b. Is this waste manifested and signed by a foreign cosignee? Yes No NA
- c. If generator transported wastes out of the country, has he received confirmation of delivered shipment? Yes No NA

Appendix I - Satellite Accumulation Area

1. Source/Area: Contaminated personal protective equipments.

2. Type waste: Gloves, Coveralls, Shoe cover.

3. Condition of Containers: Good

a. Containers closed?

Yes No NA

b. Containers properly labeled? *

Yes No NA

4. If > 55 gallons accumulated, has generator complied with 262.34(c)(2)?

Yes No NA

* Containers are not labeled with words: ^u Hazardous Waste

Part ____

GROUNDWATER MONITORING CHECKLIST

Section A - Monitoring System

1. Does the facility have a groundwater monitoring system in operation? Yes No NA
- a. If yes, does the system consist of: (265.91)(264.97)
1. At least one upgradient/background well? Yes No NA
2. At least three downgradient wells? Yes No NA
- b. Are wells identified in the field? Yes No NA
- c. Are well heads in good condition (i.e. free of cracks)? Yes No NA
- d. Are well heads locked? Yes No NA
- e. Do well heads have bumper guards or are otherwise protected? Yes No NA

Section B - Sampling and Analysis (Part 264)

1. Does the facility obtain and analyze samples from the groundwater monitoring system? Yes No NA
2. Has facility developed and followed a groundwater sampling and analysis plan? (264.97(d)) Yes No NA
- a. If yes, does this plan include procedures and techniques for:
1. Sample collection? Yes No NA
2. Sample preservation? Yes No NA
3. Analytical procedures? Yes No NA
4. Chain-of-custody control? Yes No NA
5. Determining the groundwater surface elevation? Yes No NA
3. Has facility specified a statistical method to be used in evaluating groundwater monitoring data? Yes No NA
4. Is all groundwater monitoring data recorded in the operating record? Yes No NA

Section C - Detection Monitoring Program (264.98)

1. Has owner/operator established detection monitoring system to provide reliable indications for detection releases? Yes No NA
- a. If yes, are the following components included in the system:
1. Background values? Yes No NA
 2. Determination of groundwater flow rate and direction annually? (264.98(e)) Yes No NA
 3. Determination of statistically significant increases over background concentrations at each well? (264.98(f)) Yes No NA
 4. If there was a statistically significant increase indicated, did the facility notify the Executive Director per 264.98(g)(1)? Yes No NA
 5. Did facility attempt to demonstrate an apparent increase was not caused by a regulated unit per MHWMR 264.98(g)(6)? Yes No NA
 6. Is all information contained in the facility's operating record? Yes No NA

Section D - Compliance Monitoring Program (264.99)

1. Does the facility operate a compliance monitoring program? Yes No NA
- a. If yes, does the facility:
1. Determine the groundwater flow rate and direction in the uppermost aquifer annually? (264.99(e)) Yes No NA
 2. Collect at least four samples from each well at least semi-annually? (264.99(f)) Yes No NA
 3. Determine whether there is statistically significant evidence of increased contamination at each monitoring well? Yes No NA
 4. If an increase was indicated, did facility notify the Executive Director? Yes No NA
 5. Analyze samples for constituents listed in Appendix IX of Part 264 at least annually? Yes No NA
 6. Record all information in the operating record? Yes No NA

Section E - Corrective Action Program (Part 264 only) (264.100)

1. Does facility follow a corrective action program that meets the facility's permit requirements? *To be determined.* Yes No NA

Section F - Sampling and Analysis (Part 265)

1. Has the facility developed and followed a groundwater sampling and analysis plan? Yes No NA
- a. If yes, does the plan include procedures and techniques for:
- 1. Sample collection? Yes No NA
 - 2. Sample preservation? Yes No NA
 - 3. Analytical procedure? Yes No NA
 - 4. Chain-of-custody control? Yes No NA
2. Has the owner/operator established initial background concentrations or values of all parameters specified in 265.92(b)? Yes No NA
- a. Samples collected to establish background quality (from above)? Yes No NA
- b. Samples collected to indicate contamination (from above)? Yes No NA
- c. Elevation of groundwater surface at each monitoring well at each sampling event? Yes No NA

Section G - Preparation, Evaluation, and Response (Part 265 only) (265.93)

1. Did owner/operator prepare an outline of a groundwater quality assessment program? Yes No NA
- a. If yes, did program determine the following:
- 1. Whether hazardous waste or hazardous waste constituents have entered the groundwater? Yes No NA
 - 2. Rate and extent of hazardous waste or hazardous waste constituent migration? Yes No NA
 - 3. Concentrations of hazardous waste or hazardous waste constituents in groundwater? Yes No NA
- b. For each well, has owner/operator calculated the arithmetic mean and variance, based on four replicate measurements for each sample, and compared the results with initial background mean? Yes No NA
- c. Has owner/operator submitted information documenting any significant increase in comparisons for up-gradient wells (or decrease in pH)? Yes No NA
- d. If the comparisons for downgradient wells show a significant increase (or pH decrease), has the owner/operator obtained additional groundwater samples from

those downgradient wells in which a significant decrease was detected? (Samples must be split in two, and analyses must be obtained of all additional samples to determine whether the significant difference was a result of lab error)

Yes No NA

1. If analyses (described above) were performed, and confirmed the significant increase (or pH decrease), did owner/operator notify Regional Administrator within 7 days? Yes No NA
2. If analyses confirmed significant increase (or pH decrease), did owner/operator submit to the Executive Director within 15 days after notification (discussed above) a certified groundwater quality assessment program? Yes No NA
3. Did owner/operator implement the groundwater quality assessment program and, at a minimum, did he determine the following:
 - a. Rate and extent of migration of the hazardous waste constituents in the groundwater? Yes No NA
 - b. Concentrations of the hazardous waste in the groundwater? Yes No NA
4. Did owner/operator submit a report to the Executive Director containing the requests of the assessment outlined in No. 3 above within 15 days? Yes No NA
5. Did owner/operator notify the Executive Director of reinstatement of indicator evaluation program upon finding that no hazardous waste or hazardous waste constituents had entered the groundwater? Yes No NA
6. If owner/operator determined that hazardous waste or hazardous waste constituents entered the groundwater, did he either continue to make the determinations listed in No. 3 above on a quarterly basis until final closure or groundwater quality assessment plan was implemented prior to post-closure care, or cease to make determinations required in No. 3 above if groundwater quality assessment plan was implemented during post-closure? Yes No NA
7. If any groundwater quality assessment program is implemented to satisfy No. 3 above prior to final closure, has owner/operator completed program and reported to the Executive Director, as outlined in No. 4 above? Yes No NA
8. If owner/operator does not monitor at least annually to satisfy No. 3 above, does owner/operator evaluate data on groundwater elevation

obtained under No. 3c in Section F above to determine whether the requirements for locating monitoring wells are satisfied? Yes No NA

a. If evaluation shows that the requirements for monitoring wells are not satisfied, has owner/operator modified the number, location, or depth of the monitoring wells to bring the system into compliance? Yes No NA

Section H - Recordkeeping and Reporting (Part 265 only) (265.94)

1. Unless owner/operator is monitoring to satisfy the requirements of Section 265.93(d)(4), does owner/operator:

a. Keep records of the analyses required in Section 265.92(c) and (d), groundwater surface elevations required in 265.93(b) throughout the active life of the facility and throughout post-closure? Yes No NA

b. Report the following information to the Executive Director:

1. Within 15 days of analysis for each quarterly sampling event, does owner/operator submit results of background concentrations? Yes No NA

2. Does owner/operator inform the Executive Director about any parameters that exceed maximum contaminant levels listed in Appendix III? Yes No NA

3. (Annually) does owner/operator report concentrations or values of parameters listed in Section 265.92(b)(3) for each well, including required evaluations for these parameters under Section 265.93(b)? Yes No NA

a. Does owner/operator also identify differences from initial background concentrations found in the upgradient wells no later than March 1 following each calendar year? Yes No NA

2. Does owner/operator submit results of the groundwater surface elevations under Section 265.93(f), along with a description of the response, if needed? Yes No NA

3. If groundwater is monitored to satisfy requirements of Section 265.93(d)(4), did owner/operator do the following:

a. Keep records of analyses and evaluations specified in the plan throughout active life and post-closure?

Yes No NA

b. (Annually, until final closure) submit to the Regional Administrator a report containing the results of the groundwater quality assessment program, including the calculated rate of migration of hazardous waste or hazardous waste constituents by March 1?

Yes No NA

Revision: 0

Date: July 18, 1989

INSPECTION HEALTH AND SAFETY CHECKLIST

FACILITY NAME: Vicksburg Chemical Co. EPA ID#: MSD 990 714 081
 ADDRESS: Rifle Range Rd. Vick'g. MS. 39182 PHONE: 601-636-1231

PERSONNEL LOG

* NAME/SIGNATURE	DATE OF LAST SAFETY TRAINING/ FIT TEST	DATE CHECKLIST PREPARED/ REVIEWED	** CHECKLIST MODIFIED?	SITE VISIT DATE(S)	INSPECTION TYPE (CME, CEI, RFA, ETC.)	SUPERVISOR'S SIGNATURE OF APPROVAL AND DATE
<u>YANER DIAZ</u>	<u>July, 92</u>	<u>Aug. 31, 93</u>	<u>NO</u>	<u>Sept. 2, 93</u>	<u>CEI</u>	<u>D. PERCOCK</u> <u>9/7/93</u>

Place an asterisk (*) before the name of the of the MDEQ person who will be responsible for protection and safety of all MDEQ personnel during the site visit

GENERAL INFORMATION

FACILITY NAME: Vicksburg Chemical Co. CONTACT: Steve Boswell

DIRECTIONS TO FACILITY: (Attach map if possible)

I-20 West, Exit on Hwy 61 South then turn R on Rifle Range Rd. Proceed to Main Gate.

SPECIAL ACCESS REQUIREMENTS: NONE

EMERGENCY INFORMATION

AMBULANCE: Vick's hospital TELEPHONE: _____
HOSPITAL: " " TELEPHONE: _____
POLICE: Vick's Police TELEPHONE: 911
FIRE DEPARTMENT: " Fire Dept. TELEPHONE: _____
SITE/FIRE EVACUATION SIGNALS: long lasting Alarm Signals.

INFORMATION SOURCES

PART B: N/A EPA: - CONTINGENCY PLAN: ✓
ESD: _____ RFA: - CLOSURE PLAN: ✓
SWMU QUESTIONNAIRE: - PART A: - OTHER: Consent Decree
By EPA

PERMITS

HAZARDOUS WASTE: NONE STATUS: -
WATER: MS0027995 AIR: 4200-00041 OTHER: _____

SUMMARY OF REGULATED UNITS AND SWMUS: (Indicate number of units)

LANDFILLS: - INCINERATORS: - STORAGE AREAS: 90 day
WASTE PILES: - OTHER TREATMENT: - OTHER: -
SURFACE IMPROVEMENTS: - TANK FARMS: - SWMUS: -

FACILITY PROCESS DESCRIPTION:

South Plant produces Nitric Acid.
North Plant produces Potassium nitrate, Nitrogen tetroxide.

PREVIOUS RELEASES/ACCIDENTS OR COMPLAINTS:

(Corrected? YES/NO)

AIR Most recent: Nitric Acid 200 lbs vapor, Aug. 92

Yes

SOIL From same above release: 200 Gal. nitric Acid

Yes

SURFACE WATER In 1983, Dike of surface impoundment breached into

INDUSTRIAL ACCIDENTS Stonke Bayou.

Yes

COMPLAINTS -

HEALTH AND SAFETY HAZARDS

Briefly indicate hazard type. Attach additional pages if necessary.

EXPLOSION/OXYGEN DEFICIENCY HAZARDS:

NONE (Circle if applicable)

RADIATION HAZARDS:

NONE (Circle if applicable)

TOXIC HAZARDS:

NONE (Circle if applicable)

Briefly summarize chemicals handled on site: Add attachment if necessary. Indicate if these exist in a controlled state. Refer to Part A Application if list is extensive.

UNUSUAL PHYSICAL HAZARDS:

NONE (Circle if applicable)

UNUSUAL BIOLOGICAL HAZARDS:

NONE (Circle if applicable)

CHECK IF PROBLEM EXPECTED: NOISE _____ HEAT STRESS _____ COLD STRESS _____

OVERALL HAZARD RATING: (CIRCLE ONE)

VERY HIGH
(LEVEL A)
(ASSISTANCE NECESSARY)

HIGH
(LEVEL B)
(ASSISTANCE NECESSARY)

MEDIUM
(LEVEL C)
(MONITORING REQUIRED)

LOW
(LEVEL D)

PERSONNEL PROTECTIVE EQUIPMENT

(List equipment needed in addition to safety glasses, hard hat, and steel toed boots)

	Check if Needed		Needed throughout entire facility? (If no, list area(s) or task(s) where needed)
<u>HEAD AND EYE:</u>			
FACE SHIELD	_____		_____
GOGGLES	_____		_____
NOISE PROTECTION	_____	✓	_____
OTHER	_____		_____

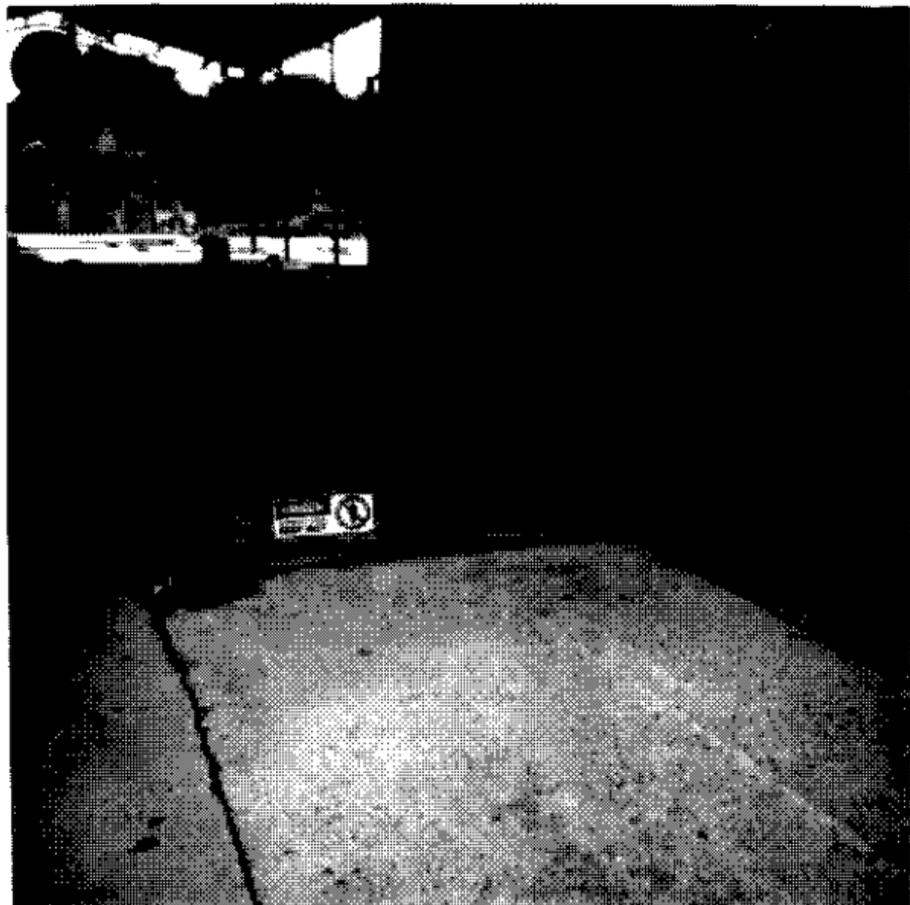
<u>RESPIRATORY:</u>		<u>TYPE</u>	
APR	_____	_____	_____
APR CARTRIDGE	_____	_____	_____
ESCAPE MASK	_____	_____	_____
OTHER	_____	_____	_____

<u>CLOTHING:</u>			
TYVEK COVERALL	_____		_____
SARANEX COVERALL	_____		_____
COTTON COVERALL	_____		_____
SPLASH SUIT	_____		_____
OVERBOOTS	_____		_____
RAIN GEAR	_____		_____
OTHER	_____		_____

<u>MISCELLANEOUS:</u>			
_____	_____		_____
_____	_____		_____
_____	_____		_____

<u>LEVEL A OR B NEEDED?</u>	<u>Contractor or EPA ?</u>	<u>Areas/tasks where needed</u>
LEVEL A <u>NO</u>	_____	_____
LEVEL B <u>NO</u>	_____	_____

<u>AIR MONITORING TYPE</u>	<u>Conducted by:</u>	<u>Areas/tasks where needed</u>
TOXIC _____	FACILITY _____	_____
EXPLOSIVE/OXYGEN _____	ESD _____	_____
RADIATION _____	CONTRACTOR _____	_____
NONE _____	OTHER _____	_____



News of the police

... of the ...

...



1980, the company's sales were \$1.2 billion, a 10% increase over 1979. The company's sales are expected to reach \$1.5 billion in 1981. The company's sales are expected to reach \$1.5 billion in 1981.



SATELLITE

NO. 100

100

100

100



1. The first step in the process is to identify the problem area.

2. The next step is to gather all the necessary information.

3. The third step is to analyze the data.

4. The final step is to implement the solution.

CEDAR CHEMICAL CORPORATION

24th Floor • 5100 Poplar Avenue • Memphis, TN 38137 • 901-685-5348

REPLY TO: P.O. BOX 821003
VICKSBURG, MS 39182
(601) 636-1231

October 7, 1992

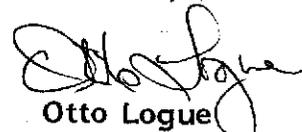
CERTIFIED MAIL NO. P 961 293 712

Mr. Taber F. Diab
TSD Facilities
Hazardous Waste Division
Office of Pollution Control
P. O. Box 10385
Jackson, MS 39289-0385

Dear Mr. Diab:

As we discussed by telephone today, October 6, 1992, the apparent violation described in your report dated September 15, 1992, was due to a misunderstanding as to what records you needed to review. The titles and job descriptions including all elements required by the federal and MHWMR regulation 265.16 (d) (1,2) have been on file since April, 1991, for each employee who's position is related to hazardous waste management. You will find a typical copy of one employee Title and Job Description. We will, however, do as you suggested and have created a form that will list type of training, date, employee, title, signature and a brief job description on one sheet for future use. See enclosed form.

Sincerely,



Otto Logue
Health, Safety and
Training Officer

OL:dc

Enclosure

cc: John Miles
Dave Madsen
File



Training Hazardous Waste

This document must be retained in the employee's file as a permanent record to conform with existing EPA Hazardous Waste Regulations

Name of Employee: Ed Puckett

Job Title: Construction Welder

Prior Trainings: Maintenance Welder and Pipefitter
Trained in Forklift and Backhoe operating procedures.
Forty hour (40) HazMat emergency response and Waste Management course. Includes site specific hazards.
Special courses in Emergency Response and fire fighting.

Date: 04-25-91

Introductory Training: Three plus years service in the Vicksburg facility as Construction Welder and Pipefitter is considered "on the job training" to comply with RECRA regulations.

Job Title and Duties:

Title: Construction Welder

Duties: 1. Function as a pipefitter and/or welder in the installation, maintenance and demolition of plant equipment.
2. Assist in general clean-up and spill recovery. (irregular intervals) 3. Perform contingency plan duties in case of an emergency. 4. Operate Backhoe and Forklift.

Training Content, Frequencies and Techniques

- A. Waste Site and Storage Areas
1. Description of waste and associated hazards.
 2. Location of site or sites.
 3. Explanation of work to be performed in area
 4. Proper and safe operation of any equipment to be used
 5. Review safety and health plan
 6. Safety and health monitoring
 7. Decontamination procedures
 8. Record keeping -hazardous waste

Critical

1. Conditions that may lead to employee exposure
2. Conditions that may permit release of hazardous waste into air-ground or local water streams
3. Conditions which might lead to fire or explosion

Review of Emergency Response Contingency Plan Includes Where Applicable

1. Supervisor to whom to report
2. General duties, an overall view of the plan
3. Specific duties for prevention of leaks or rupture
4. Specific duties in the event of a release
5. Emergency equipment, care and use
6. Specific duties in the event of a fire or explosion, communications, fire alarms
7. Emergency shutdown operation

In Addition, the Employee Will Participate In the Following Continuing Training Program

1. Eight hour annual hazmat emergency response and waste management review
2. Attend weekly safety; meetings
3. Attend review sessions

Cedar Chemical Corporation-Vicksburg
Employee Training Record

Type of Training MSDS-EMERGENCY CONTINGENCY PLAN
Location of Training CEDAR CHEMICAL COMPANY-VICKSBURG
Instructor ROGER HOLDINESS
Date JULY 1990
Edward Puckett
Employee Signature

Type of Training HAZARDOUS MATERIAL COURSE
Location of Training CEDAR CHEMICAL COMPANY-VICKSBURG
Instructor ROGER HOLDINESS-CEDAR CHEMICAL COMPANY
Date JULY 1990
Edward Puckett
Employee Signature

Type of Training RIGHT TO KNOW-HEARING CONSERVATION
Location of Training CEDAR CHEMICAL CORP-VICKSBURG
Instructor ROGER HOLDINESS
Date JULY 1990
Edward Puckett
Employee Signature

Type of Training HAZMAT RESPONSE AND WASTE MANAGEMENT 40HR
Location of Training CEDAR CHEMICAL-VICKSBURG
Instructor ROGER HOLDINESS-STEVE BOSWELL
Date JULY 1990
Edward Puckett
Employee Signature

Type of Training RESPIRATOR FIT TEST-RIGHT TO KNOW
Location of Training CEDAR CHEMICAL COMPANY-VICKSBURG
Instructor ROGER HOLDINESS
Date JULY 1990
Edward Puckett
Employee Signature

Type of Training LOCKOUT-TAGOUT-CRANE SAFETY SHORT COURSE
Location of Training CEDAR CHEMICAL COMPANY-VICKSBURG
Instructor ROGER HOLDINESS
Date FEBURARY 1991
Edward Puckett
Employee Signature

Cedar Chemical Corporation - Vicksburg
Employee Training Record

Type of Training HAZWOPER 8 hr. Refresher
Location of Training Cedar Chemical Corp.- Vicksburg
Instructor Otto A. Logue
Date 12 November 1991


Employee Signature

Type of Training _____
Location of Training Cedar Chemical Corp.- Vicksburg
Instructor _____
Date _____

Employee Signature

Type of Training _____
Location of Training Cedar Chemical Corp.- Vicksburg
Instructor _____
Date _____

Employee Signature

Type of Training _____
Location of Training Cedar Chemical Corp.- Vicksburg
Instructor _____
Date _____

Employee Signature

Type of Training _____
Location of Training Cedar Chemical Corp.- Vicksburg
Instructor _____
Date _____

Employee Signature

Type of Training _____
Location of Training Cedar Chemical Corp.- Vicksburg
Instructor _____
Date _____

Employee Signature

T. D.

UNITED STATES POSTAL SERVICE
OFFICIAL BUSINESS

SENDER INSTRUCTIONS

Print your name, address and ZIP Code in the space below.

- Complete items 1, 2, 3, and 4 on the reverse.
- Attach to front of article if space permits, otherwise affix to back of article.
- Endorse article "Return Receipt Requested" adjacent to number.



PENALTY FOR PRIVATE USE, \$300

RETURN TO



Print Sender's name, address, and ZIP Code in the space below.

DEPT. OF ENVIRONMENTAL QUALITY
 OFFICE OF POLLUTION CONTROL
 P. O. BOX 10385
 JACKSON

MS 39287-0385

● **SENDER:** Complete items 1 and 2 when additional services are desired, and items 3 and 4 when items 3 and 4.

Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent the return of the item from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult post office for rates and check boxes for additional service(s) requested.

1. Show to whom delivered, date, and addressee's address. (Extra charge)
2. Restricted Delivery (Extra charge)

3. Article Addressed to:

MR JOHN MILES
CEDAR CHEMICAL CORPORATION
P O BOX 821003
VICKSBURG MS 39182

4. Article Number

P 046 601 347

Type of Service:

- Registered Insured
 Certified COD
 Express Mail Return Receipt for Merchandise

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature - Addressee

X

6. Signature - Agent

X

7. Date of Delivery

10/1/82

8. Addressee's Address (P.O.)

requested and fee paid



FILE COPY

STATE OF MISSISSIPPI
DEPARTMENT OF ENVIRONMENTAL QUALITY
JAMES I. PALMER, JR.
EXECUTIVE DIRECTOR

September 29, 1992

CERTIFIED MAIL NO. P 046 601 347

Mr. John Miles
Cedar Chemical Corporation
P. O. Box 821003
Vicksburg, MS 39182

Dear Mr. Miles:

Re: Cedar Chemical Corporation
Vicksburg, MS
EPA I.D. No. MSD 990 714 081

Enclosed please find an inspection report and checklist that was completed as a result of a Compliance Evaluation inspection at Cedar Chemical on September 15, 1992. This inspection revealed the following apparent violation(s) of the Mississippi Hazardous Waste Management Regulations: (MHWMR) 265.16(d)(1,2), in that personnel training records did not include job title and written job description for each position related to hazardous waste management.

We request that you respond to these apparent violation(s) within 10 days of receipt of this letter. This response should contain: (1) actions that have been taken to correct the violation(s), or (2) schedule for correcting the violation(s), or (3) reasons that you believe the alleged violation(s) did not exist. The Office of Pollution Control will review this information before determining if further action including a penalty is warranted. Section 17-17-29 of the Mississippi Code Annotated (Supp. 1991) allows assessments of penalties not more than \$25,000 per day per violation. Failure to submit this information may result in enforcement action.

Mr. John Miles
Page 2
September 29, 1992

If you have any questions, do not hesitate to contact me at (601)
961-5171.

Sincerely,



Taher F. Diab
TSD Facilities
Hazardous Waste Division

TFD:gd
Enclosures

cc: Mr. Alan Farmer, EPA (w/enclosures)

RCRA INSPECTION REPORT

FILE COPY

1. Inspector and Author of Report

Taher Diab
Mississippi Department of Environmental Quality - MSDEQ
Office of Pollution Control

2. Facility Information

Cedar Chemical Corporation
Rifle Range Road
Vicksburg, MS
EPA I.D. No. MSD990714081

3. Responsible Company Official

Steve Boswell, Director
Environmental Affairs

4. Inspection Participants

Steve Boswell, Cedar Chemical
Taher Diab, MSDEQ

5. Date and Time of Inspection

September 15, 1992 @ 10:00 a.m.

6. Applicable Regulations

Mississippi Hazardous Waste Management
Regulations (MHWMR) Parts 262, 268 and
applicable sections of 265.

7. Purpose of Inspection

Compliance Evaluation Inspection to determine the
facility's compliance status with the applicable
regulations.

8. Facility Description

Cedar Chemical Corporation (CCC) operates two chemical plants
on contiguous property south of Vicksburg, Mississippi. The
north plant primarily produces potassium nitrate and nitrogen
tetroxide with by-product production of chlorine gas.

The south plant was primarily a manufacturer of specialty
chemicals, such as dinoseb, atrazene, toxaphene, and
monosodium methane arsenate (MSMA). The manufacture of

these chemicals produced hazardous wastes. Specifically, the MSMA production generated K031, by-product salts generated in the production of MSMA; the toxaphene production generated two RCRA wastes, K098, untreated process wastewater from the production of toxaphene, and K041, wastewater treatment sludge from the production of toxaphene; and the dinoseb production generated hazardous waste P020, Dinoseb. These wastes were managed in several units including: a container storage area, a pre-RCRA landfill, a surface impoundment, tanks and carbon adsorption units. The container storage area and the surface impoundment were considered to be RCRA regulated units. The south plant currently manufactures nitric acid.

In 1987 the Mississippi Department of Natural Resources Commission (predecessor to MSDEQ) determined that CCC's surface impoundment was not subject to regulation under the interim status standards and Mississippi's equivalent requirements. Therefore the focus of this inspection was on the container management area.

The container management area was designed to contain drums of waste material which are classified as hazardous. In 1990, Cedar Chemical Corporation maintained that the container management area is a less-than-ninety-day storage area and therefore not subject to the interim status requirements of 40 C.F.R. Part 265. EPA asserted that the container management area did not meet the requirements for the less-than-ninety-day exemption and was therefore subject to interim status requirements. On April 17, 1992, the United States on behalf of EPA, issued a consent decree to Cedar Chemical requiring closure of the container management area. In May of 1992, CCC submitted a revised closure plan. The plan has been reviewed by EPA and the MDEQ. A decision for approval has not been taken yet.

9. Findings

The only hazardous waste material currently generated is personal protective equipment contaminated with Dinoseb (P020). There were 3 containers at the storage management area. They were closed and properly labeled. The Accumulation date was September 1, 1992. The concrete floor had cracks and visible staining. The container management area had signs posted warning of danger. The facility has a guard posted at the main gate. However no fence surrounds the entire facility.

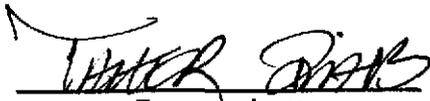
The Contingency Plan, waste analysis, manifests and personnel training records were reviewed. Personnel training records did not include job description for each one of trainees which is a violation of regulations 265.16 (d) (1,2)

Four monitoring wells (MW10, MW1, MW1A, MW16) were not locked. Monitoring wells should be locked at all times except when collecting samples.

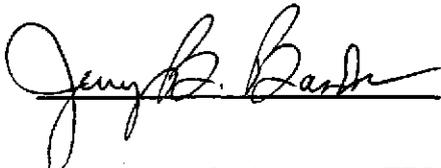
10. Conclusion

Cedar Chemical is in apparent violation of Mississippi Hazardous Waste Management Regulations 265.16 (d) (1,2), in that personnel training records did not include job title and written job description for each position related to hazardous waste management.

11. Signed


Inspector

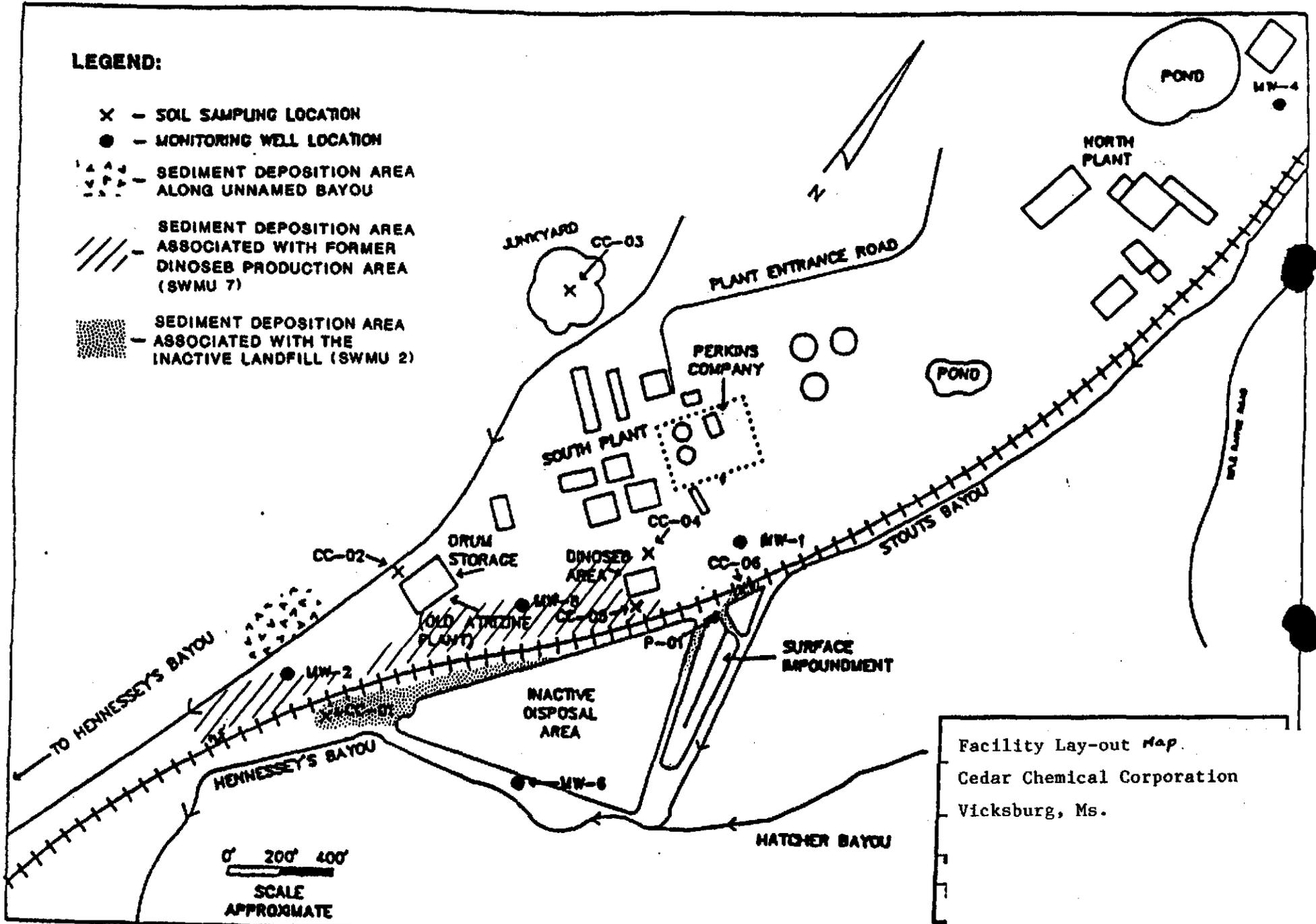
12. Approval



cc: James S. Kutzman, EPA

LEGEND:

- X - SOIL SAMPLING LOCATION
- - MONITORING WELL LOCATION
- ▲ ▲ ▲ - SEDIMENT DEPOSITION AREA ALONG UNNAMED BAYOU
- /// - SEDIMENT DEPOSITION AREA ASSOCIATED WITH FORMER DINOSEB PRODUCTION AREA (SWMU 7)
- ■ ■ - SEDIMENT DEPOSITION AREA ASSOCIATED WITH THE INACTIVE LANDFILL (SWMU 2)

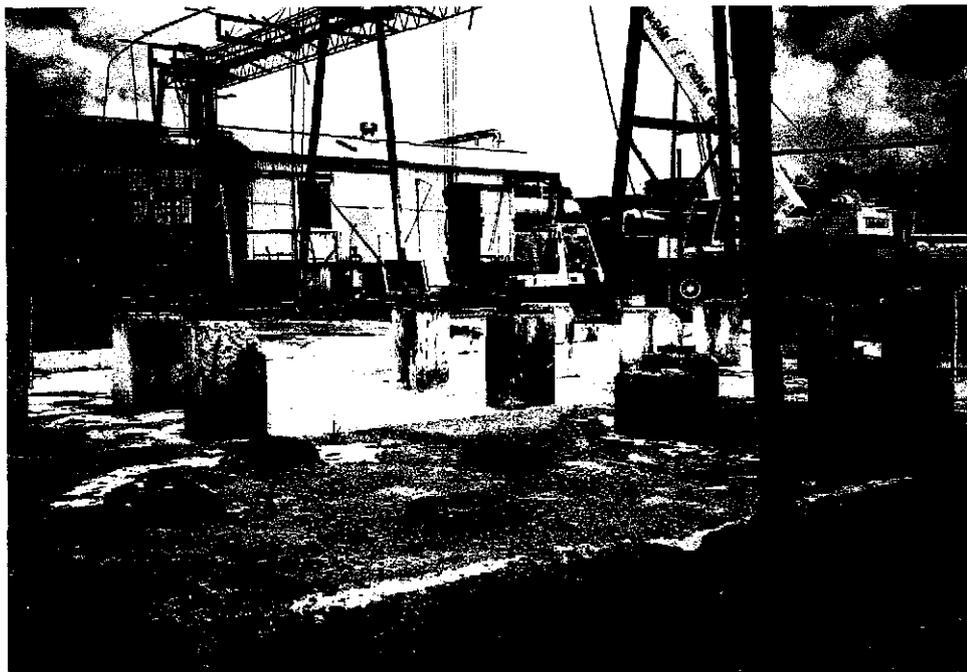


Facility Lay-out Map
 Cedar Chemical Corporation
 Vicksburg, Ms.

Cedar Chemical
September 15, 1992
CEI



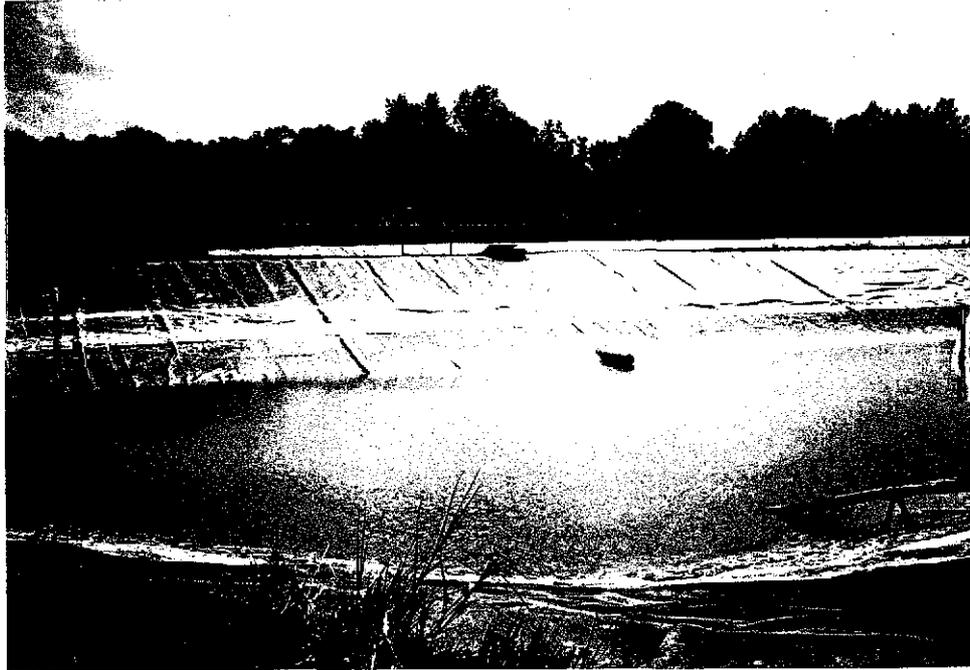
1. Diked area where tanks used to be located. Discoloration of rain water is due to dinoseb.



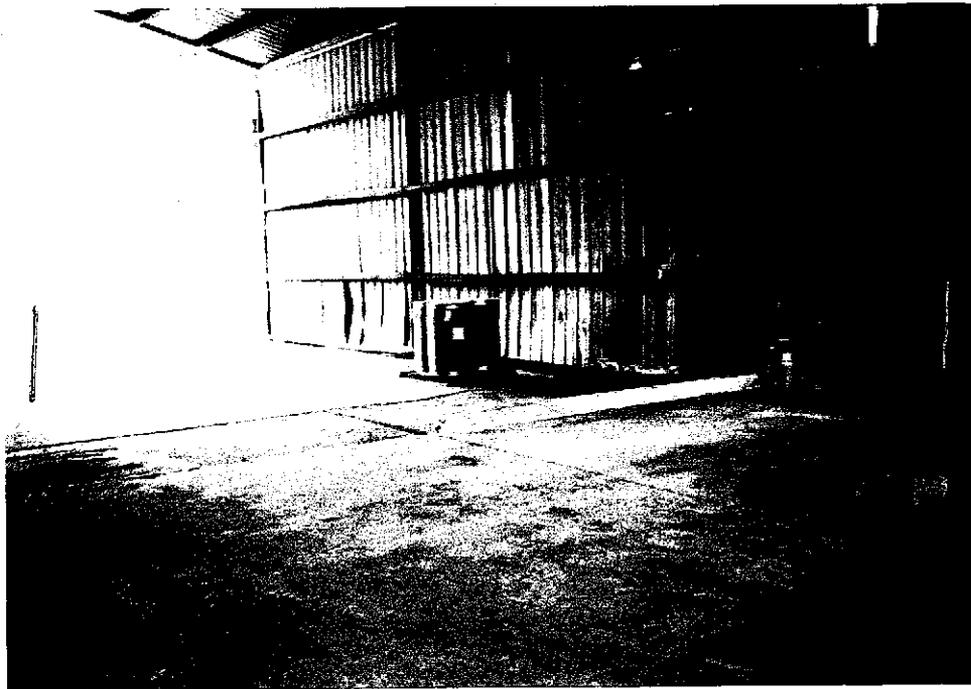
2. This is where Toxaphene production area used to be. tanks have been removed.



3. Dinoseb stains can be seen at several locations of the facility.



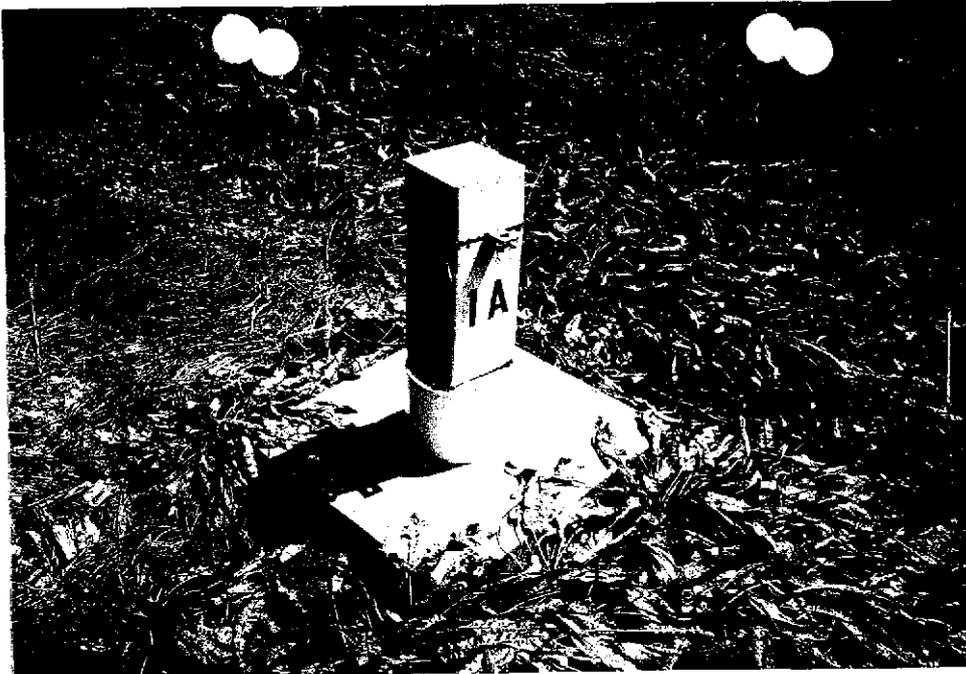
4. Surface impoundment located on the eastern portion of the south plant.



5. Container storage area at south plant.
3 drums contain contaminated protective equipments



6. Stains can be seen on concrete floor of
container storage area.



7. 4 Monitoring wells were not securely locked. (3 wells are shown)



Part 1

General Site Information

Facility Name: Cedar Chemical Corporation
Address: P. O. Box 3
Vicksburg, Ms. 39180
I.D. Number: MSD990714081
Contact: Steve Boswell
Title: Environmental Affairs Director
Phone Number: 601-636-1231

Type of Ownership:

Federal State County Municipal Private

Facility Status:

Generator Transporter Treatment Storage Disposal

Regulatory Status:

Interim Status Part B Submitted
 Permitted Part B in Preparation

Principal Inspector Name: TAMER DIAB Title: Environ. Engineer
Organization: Miss. DEQ Phone Number: 961-5389

Inspection Participants:

<u>Name</u>	<u>Title</u>	<u>Representing</u>
<u>Steve Boswell</u>	<u>Envir. Director</u>	<u>Cedar Chemical</u>
<u>TAMER DIAB</u>	<u>Envir. Engineer</u>	<u>Miss. DEQ</u>

Part II

GENERAL FACILITY CHECKLIST

Section A - General Facility Standards

1. Does facility have EPA Identification No.? Yes No NA

a. If yes, EPA I.D. No. MSP 990714081
If no, explain. _____

2. Has facility received hazardous waste from a foreign source? Yes No NA

a. If yes, has it filed a notice with the Regional Administrator? Yes No NA

Waste Analysis

3. Does facility maintain a copy of the waste analysis plan at the facility? Yes No NA

a. If yes, does it include: (264.13) (265.13)

1. Parameters for which each waste will be analyzed? Yes No NA

2. Test methods used to test for these parameters? Yes No NA

3. Sampling method used to obtain sample? Yes No NA

4. Frequency with which the initial analyses will be reviewed or repeated? Yes No NA

5. (For offsite facilities) waste analyses that generators have agreed to supply? Yes No NA

6. (For offsite facilities) procedures which are used to inspect and analyze each movement of hazardous waste, including:

a. Procedures to be used to determine the identity of each movement of waste. Yes No NA

b. Sampling method to be used to obtain representative sample of the waste to be identified. Yes No NA

4. Does the facility provide adequate security through: (264.14) (265.14)

a. 24-hour surveillance system (e.g., television monitoring or guards)? Yes No NA

OR

- b. 1. Artificial or natural barrier around facility (e.g., fence or fence and cliff)? Yes No NA

Describe _____

AND

2. Means to control entry through entrances (e.g., attendant, television monitors, locked entrance, controlled roadway access)? Yes No NA

Describe Attendant At Gate

General Inspection Requirements (264.15) (265.15)

5. Does the owner/operator maintain a written schedule at the facility for inspecting:

- a. Monitoring equipment? Yes No NA
b. Safety and emergency equipment? Yes No NA
c. Security devices: Yes No NA
d. Operating and structural equipment? Yes No NA
e. Types of problems of equipment:
1. Malfunction Yes No NA
2. Operator error Yes No NA
3. Discharges Yes No NA

6. Does the owner/operator maintain an inspection log? Yes No NA

- a. If yes, does it include:

1. Date and time of inspection? Yes No NA
2. Name of inspector? Yes No NA
3. Notation of observations? Yes No NA
4. Date and nature of repairs or remedial action? Yes No NA
5. Identification of potential problems? Yes No NA

- b. Are there any malfunctions or other deficiencies not corrected? (Use narrative explanation sheet.) Yes No NA

- c. Are records kept a minimum of three years? Yes No NA

Personnel Training (264.16) (265.16)

7. Does the owner/operator maintain personnel training records at the facility? Yes No NA

Date of most recent training: April, 1992

How long are they kept? Indefinitely

a. If yes, do they include:

1. Job title and written job description of each position? Yes No NA
2. Description of type and amount of training? Yes No NA
3. Records of training given to facility personnel? Yes No NA

Requirements for Ignitable, Reactive, or Incompatible Waste
(264.17) (265.17)

8. Does facility handle ignitable or reactive wastes? Yes No NA

a. If yes, is waste separated and confined from sources of ignition or reaction (open flames, smoking, cutting and welding, hot surfaces, frictional heat), sparks (static, electrical, or mechanical), spontaneous ignition (e.g., from heat-producing chemical reactions), and radiant heat?

1. If yes, use narrative explanation sheet to describe separation and confinement procedures.
2. If no, use narrative explanation sheet to describe sources of ignition or reaction.

b. Are smoking and open flames confined to specifically designated locations? Yes No NA

c. Are "No Smoking" signs posted in hazardous areas? Yes No NA

d. Are precautions documented (Part 264 only)? Yes No NA

9. Check containers

a. Are containers leaking or corroding? Yes No NA

b. Is there evidence of heat generation from incompatible wastes? Yes No NA

Section B - Preparedness and Prevention

1. Is there evidence of fire, explosion, or contamination of the environment? (264.31) (265.31) Yes No NA

If yes, use narrative explanation sheet to explain.

2. Is the facility equipped with: (264.32) (265.32)
- a. Internal communication or alarm system? Yes No NA
1. Is it easily accessible in case of emergency? Yes No NA
- b. Telephone or two-way radio to call emergency response personnel? Yes No NA
- c. Portable fire extinguishers, fire control equipment, spill control equipment, and decontamination equipment? Yes No NA
- d. Water of adequate volume of hoses, sprinklers, or water spray system? Yes No NA
1. Describe source of water Well
3. Is there sufficient aisle space to allow unobstructed movement of personnel and equipment? (264.35)(265.35) Yes No NA
4. Has the owner/operator made arrangements with the local authorities to familiarize them with characteristics of the facility? (Layout of facility, properties of hazardous waste handled and associated hazards, places where facility personnel would normally be working, entrances to roads inside facility, possible evacuation routes.) (264.37) (265.37) Yes No NA
5. In the case that more than one police or fire department might respond, is there a designated primary authority? Yes No NA (264.37) (265.37)
- a. If yes, name primary authority Vicksburg
6. Does the owner/operator have phone numbers of and agreements with State emergency response teams, emergency response contractors, and equipment suppliers? (264.37) (265.37) Yes No NA
- a. Are they really available to all personnel? Yes No NA
7. Has the owner/operator arranged to familiarize local hospitals with the properties of hazardous waste handled and types of injuries that could result from fires, explosions, or releases at the facility? (264.37) (265.37) Yes No NA
8. If State or local authorities declined to enter into agreements, is this entered in the operating record? (264.37) (265.37) Yes No NA

Section C - Contingency Plan and Emergency Procedures

1. Is a contingency plan maintained at the facility? Yes No NA
(264.53) (265.53)
- a. If yes, is it a revised SPCC Plan? Yes No NA
- b. Does contingency plan include: (264.52) (265.52)
1. Arrangements with local emergency response organizations? Yes No NA
 2. Emergency coordinator's names, phone numbers and addresses? Yes No NA
 3. List of all emergency equipment at facility and descriptions of equipment? Yes No NA
 4. Evacuation plan for facility personnel? Yes No NA
2. Is there an emergency coordinator on site or on call at all times? (264.55) (265.55) Yes No NA

Section D - Manifest System, Recordkeeping, and Reporting

1. Does facility receive waste from offsite? (264.71) (265.71) Yes No NA
- a. If yes, does the owner/operator retain copies of all manifests? Yes No NA
1. Are the manifests signed and dated and returned to the generator? Yes No NA
 2. Is a signed copy given to the transporter? Yes No NA
2. Does the facility receive any waste from a rail or water (bulk shipment) transporter? (264.71) (265.71) Yes No NA
- a. If yes, is it accompanied by a shipping paper? Yes No NA
1. Does the owner/operator sign and date the shipping paper and return a copy to the generator? Yes No NA
 2. Is a signed copy given to the transporter? Yes No NA
3. Has the owner/operator received any shipments of waste that were inconsistent with the manifest (manifest discrepancies)? (264.72) (265.72) Yes No NA
- a. If yes, has he attempted to reconcile the discrepancy with the generator and transporter? Yes No NA
1. If no, has Regional Administrator been notified? Yes No NA

4. Does the owner/operator keep a written operating record at the facility? (264.73) (265.73) Yes No NA

a. If yes, does it include:

1. Description and quantity of each hazardous waste received? *Contaminated Personnel Protective equipment* Yes No NA
2. Methods and dates of treatment, storage, and disposal? Yes No NA
3. Location and quantity of each hazardous waste at each location? Yes No NA
4. Cross-references to manifests/shipping papers? Yes No NA
5. Records and results of waste analyses? Yes No NA
6. Report of incidents involving implementation of the contingency plan? Yes No NA
7. Records and results of required inspections? Yes No NA
8. Monitoring, testing, and analytical data, for groundwater required by Subpart F? Yes No NA
9. Closure cost estimates and, for disposal facilities, post-closure cost estimates (Part 264)? Yes No NA
10. Notices of generators as specified in Section 264.12(b) (Part 264)? Yes No NA

b. Does facility have copy of permit on site? Yes No NA

5. Does the facility submit a biennial report by March 1 every even-numbered year? (264.75) (265.75) Yes No NA

a. If yes, do reports contain the following information:

1. EPA I.D. number? Yes No NA
2. Date and year covered by report? Yes No NA
3. Description/quantity of hazardous waste? Yes No NA
4. Treatment, storage, and disposal methods? Yes No NA
5. Monitoring data under Section 265.94(a)(2) and (b)(2) (Part 265)? Yes No NA
6. Most recent closure and post-closure cost estimates? Yes No NA
7. For TSD generators, description of efforts to reduce volume/toxicity of waste generated, and actual comparisons with previous year? Yes No NA
8. Certification signed by owner/operator? Yes No NA

6. Has the facility received any waste (that does not come under the small generator exclusion) not accompanied by a manifest? (264.76) (265.76) Yes No NA

a. If yes, has he submitted an unmanifested waste report to the Executive Director? Yes No NA

7. Does the facility submit to the Executive Director reports on releases, fires, and explosions; contamination and monitoring data; and facility closure?

 Yes No NA

Part III

LAND DISPOSAL RESTRICTIONS CHECKLIST

Section A - General

1. Are hazardous wastes land-disposed on site? Yes No NA
- a. If yes, are one or more of the following circumstances true:
1. Granted extension from effective date pursuant to Section 268.5? Yes No NA
 2. Granted exemption from a prohibition pursuant to a petition under Section 268.6? Yes No NA
 3. Disposing of soil or debris resulting from a CERCLA response action or a RCRA corrective action, which will not be prohibited until November 8, 1988? Yes No NA
 4. Facility is a small quantity generator of less than 100 kg of hazardous waste per month? Yes No NA
 5. Wastes not yet prohibited by Part 268? Yes No NA
2. Are restricted wastes or residuals from treatment of a restricted waste diluted in any way prior to disposal? Yes No NA
3. Are there active surface impoundments used for treatment of hazardous wastes? Yes No NA
- a. If yes, does the unit's design and operation meet the requirements set forth in Section 268.4? Yes No NA
4. Has the facility sought exemption from any prohibition under Subpart C of Section 268 for the disposal of a restricted hazardous waste? Yes No NA
- a. If yes, has the facility's demonstration included the required components (waste I.D., waste analysis, comprehensive environmental characterization of unit site, QA/QC plan, sampling, testing, modeling)? Yes No NA
5. Has the facility determined whether it generates a restricted waste through waste analysis? (268.7) Yes No NA
- a. If yes, is the facility, in fact, handling a restricted waste(s)? Yes No NA
- b. If yes, does the restricted waste required treatment? Yes No NA

- c. If yes, has the generator notified the treatment facility in writing, and does the notification include all required components (EPA hazardous waste number, corresponding treatment standard, manifest number of shipment)? Yes No NA
6. Does the facility handle EPA Hazardous Waste Nos. F001 through F005 (solvent wastes)? (268.10) Yes No NA
- a. If yes, do any of the following conditions apply:
1. The generator of the solvent waste is a small quantity generator (not more than 1000 kg/month)? Yes No NA
 2. The solvent waste is generated from a CERCLA response corrective action? Yes No NA
 3. The solvent waste is a solvent-water mixture, solvent-containing sludge, or solvent-contaminated soil (non-CERCLA or RCRA corrective action) containing less than 1 percent total F001 through F005 solvent constituents. Yes No NA
- b. If no, have any of these restricted wastes been land-disposed (except in an injection well) since November 8, 1986? Yes No NA
7. Does the facility handle EPA Hazardous Waste Nos. F020, F021, F023, F026, F027, or F028 (dioxin-containing wastes)? Yes No NA
- a. If yes, do any of the following conditions apply:
1. Wastes are treated to meet standards of Subpart D of Section 268? Yes No NA
 2. Wastes are disposed of at a facility that has been granted a petition? Yes No NA
 3. An extension has been granted? Yes No NA
- b. If no, were these restricted wastes land disposed after November 8, 1988? Yes No NA
8. Are restricted wastes being treated? Yes No NA
- a. If yes, have any of their associated hazardous constituents exceeded the "Constituent in Waste Extract" (CWE) levels? Yes No NA

Section B - Generator Compliance

1. Waste Identification

a. Does the generator handle the following wastes:

1. Solvent wastes

- (i) F001, F002, F004, or F005 Yes No NA
(ii) F003 Yes No NA

If an F003 wastestream (listed solely for ignitability) has been mixed with a non-restricted solid or hazardous waste, does the resultant mixture exhibit the ignitability characteristic? Yes No NA

Note: Appendix A is intended to assist the inspector and enforcement official in determining whether the facility is generating F-solvent wastes, if such wastes were not identified by the facility previously. If you are concerned that F-solvent wastes may be misclassified or mislabeled, turn to Appendix A-1. To assist in identifying potentially misclassified F-solvents, Appendix A-2 presents a list of corresponding F and U wastes.

2. Dioxin wates (F020-F023, F026-F028) Yes No NA
3. Potential California List Wastes (see Appendix C) Yes No NA
(i) D002 Yes No NA
(ii) D004-D011 Yes No NA
(iii) Any other waste characterized by high concentrations of halogenated organic constituents (HOCs), metals, or cyanides? Yes No NA
(iv) Any F, K, P, or U wastes subject to "soft hammer" requirements that may qualify as California wastes due to HOCs, metals, or cyanide content? (See Appendix F) Yes No NA
4. First Third Wastes (See MHWMR 268.10) Yes No NA
5. Second Third Wastes (See MHWMR 268.11) Yes No NA
6. (Reserved)
(i) Are any of the above "soft hammer" wastes? (See Appendices D & E) Yes No NA

2. BDAT Treatability Group - Treatment Standards Identification

a. Does the generator mix restricted wastes with different treatment standards for constituents of concern? Yes No NA

b. If yes, did the generator select the most stringent treatment standard for the constituent of concern [Section 268.41(b)]? Yes No NA

c. F Solvents

Did the generator correctly determine the appropriate treatability group [Section 268.41] of the waste (e.g., wastewaters containing solvents, nonwastewater (i.e., < 1% TOC), pharmaceutical wastewaters containing spent methylene chloride, all other spent solvent wastes)? Yes No NA

d. California Wastes

Did the generator correctly determine the distinction between liquid hazardous wastes and non-liquid hazardous wastes that contain HOCs in concentrations greater than 1,000 mg/kg [Section 268.32(a)(3)]? Yes No NA

e. First and Second Third Waste

1. Did the generator ascertain whether restricted wastes were appropriately assigned wastewater or nonwastewater designations (nonwastewaters are > 1% TOC and > 1% suspended solids) [Section 268.7(a)]? Yes No NA

2. Is there any reason to believe that the generator may have diluted the waste to change the applicable treatment standard (based on review of process operation, pipe routing, point of sampling)? Yes No NA

3. Waste Analysis

a. Did the generator determine whether the waste exceeds treatment standards based on Section 268.7(a):

1. Knowledge of wastes Yes No NA

(i) List wastes for which "applied knowledge" was used:

2. TCLP

Yes No NA

(i) List wastes for which "TCLP" was used:

(ii) MHWMP 268.41 lists wastes for which treatment standards are expressed as concentrations in waste extract. Were any wastes handled by the generator subject to waste extract standards not tested using the TCLP?

Yes No NA

If yes, list: _____

3. Total waste analysis

Yes No NA

4. If files were retained, describe content and basis of applied knowledge determination:

If determined by TCLP or total constituent analysis, provide date of last test, frequency of testing, and attach test results.

Dates/frequency: _____

Note which wastes were subjected to which tests:

Note any problems (e.g., inadequate analysis, variation of waste composition/generation for applied knowledge) _____

5. Were wastes tested using TCLP or total constituent analysis when a process or wastestream changed [Section 264.13(a)(3)(i) or Section 265.13(a)(3)(i)]?

Yes No NA

b. Did the restricted wastes exceed applicable treatability group treatment standards upon generation [Section 268.7(a)(1)]?

List those that exceeded standards: _____

List those that did not exceed standards: _____

c. Did the generator dilute the waste or the treatment residual so as to substitute for adequate treatment [Section 268.3] Yes No NA

6. Has the generator conducted any testing of those hazardous wastes to determine whether the concentrations qualify the hazardous wastes as California wastes? Yes No NA

If no, has the generator retained records documenting his "applied knowledge" that the hazardous waste is not a California waste? Yes No NA

4. Management

a. Onsite management

1. Were restricted wastes managed onsite? Yes No NA

2. For wastes that exceed treatment standards, was treatment in regulated units, storage for greater than 90 days, and/or disposal conducted? Yes No NA

If yes, TSDF checklist must be completed.

b. Offsite Management

1. If restricted wastes exceed treatment standards, did generator provide treatment facility notification with each shipment? [268.7(a)(1)]:

(i) EPA Hazardous Waste Number? Yes No NA
(ii) Corresponding treatment standard? Yes No NA
(iii) Manifest number? Yes No NA
(iv) Waste analysis, if available? Yes No NA

Identify offsite treatment facilities _____
Chem. Waste Management, Illinois

2. If restricted wastes do not exceed treatment standards, did generator provide the disposal facility with a notice and certification including:

(i) EPA hazardous waste I.D. number? Yes No NA
(ii) Corresponding treatment standard? Yes No NA

- (iii) Manifest number Yes No NA
 (iv) Certification regarding waste and that it meets treatment standards? Yes No NA

Identify land disposal facilities receiving the BDAT certified wastes _____

3. If the generator's waste is subject to a Section 268.5 case by case exemption, a Section 268.6 "no migration" exemption, or a nationwide variance does the generator's records indicate that he or she submits with each waste shipment [Section 268.7(a)(3)]:

- (i) EPA Hazardous Waste Number? Yes No NA
 (ii) Corresponding Treatment Standards? Yes No NA
 (iii) All applicable prohibitions? Yes No NA
 (iv) The manifest number? Yes No NA
 (v) The date the wastes are subject to prohibitions? Yes No NA
 (vi) Does generator keep records of all notifications/certifications send to offsite facilities? Yes No NA

List all prohibited wastes for which records are not provided per above [Section 268.7(a)(b)]:

Identify TSDFs receiving any prohibited wastes subject to any exemptions and variances:

4. If handler generates a "soft hammer" waste, does the generator send with each "soft hammer" waste shipment to a TSDF and retain copies of, a notice that includes [268.7(a)(4)]:

- The EPA Hazardous Waste Number? Yes No NA
 Applicable prohibitions? Yes No NA
 The manifest number? Yes No NA
 Waste analysis data, where available? Yes No NA

- (i) Do the generator's records indicate that any soft-hammer wastes are destined for disposed in a landfill or surface impoundment [Section 268.33(f)]? Yes No NA

If yes, list facility of destination and waste of concern [Section 268.8(a)(2)]

- (ii) Has the generator submitted demonstrations and certifications for each "soft-hammered" waste destined to be disposed in landfill or surface impoundment to the Regional Administrator prior to the shipment of waste to the TSDF [Section 268.7(a)(2)]? Yes No NA
- (iii) Has the generator retained a copy of the demonstration on site [Section 268.8(a)(3)-(a)(4)]? Yes No NA
- (iv) Has the generator retained copies of all Section 268.8 certifications sent to the TSDF [Section 268.7(a)(6)] Yes No NA
- (v) Did the generator submit the demonstration to the receiving facility upon the initial shipment of the waste [Section 268.8(a)(3)-(a)(4)]? Yes No NA
- (vi) If the Regional Administrator has invalidated the certification, has the generator ceased shipment of the waste and do records indicate that the generator has informed all receiving facilities of the invalidation [Section 268.8(b)(3)]? Yes No NA

5. Storage of Prohibited Waste

- a. Were prohibited wastes stored for greater than 90 days? Yes No NA

If yes, was facility operating as a TSD under interim status or final permit [Section 262.34(b)]? Yes No NA

If yes, TSDF Checklist must be completed.

6. Treatment Using RCRA 264/265 Exempt Units or Processes (i.e., boilers, furnaces, distillation units, wastewater treatment tanks, etc.)

1. Were treatment residuals generated from RCRA 264/265 exempt units or processes? Yes No NA

If yes, list type of treatment unit and processes

N/A

If yes, TSDF checklist must be completed.

Section C - Treatment, Storage & Disposal Requirements

1. General

a. Does the facility conduct waste analysis (total and TCLP) on-site or through a commercial laboratory?

Yes

b. Describe the frequency of sampling conducted by the facility.

As needed

2. Treatment Facilities

a. Has the treatment facility revised its waste analysis plan [Section 268.7(b)] to meet the requirements of Section 264.13 or 265.13?

Yes No NA

(i) Is the treatment facility conducting TCLP tests for wastes subject to treatment standards expressed as waste extracts per 268.7(b)(i)?

Yes No NA

(ii) Is the treatment facility using the paint filter test for the California waste residues [Section 268.7(b)(ii)]?

Yes No NA

(iii) Is the treatment facility testing the pH of California waste residues?

Yes No NA

(iv) Is the treatment facility testing concentrations (not extracts) in the waste residues for prohibited wastes with established treatment standards expressed as waste concentrations? [Section 268.7(b)(3)]?

Yes No NA

(v) Is the treatment facility testing extracts of the waste residues for prohibited wastes having established treatment standards expressed as extract concentrations [Section 268.7(b)(1)]?

Yes No NA

3. Land Disposal Facilities

- a. Has the facility retained all notices and certifications from generators, storage and treatment facilities [268.7(c)(1)]? Yes No NA
- b. Are wastes and waste residues tested for compliance with applicable treatment standards and prohibitions [Section 268.7(c)(2)]? Yes No NA
- c. Are they being tested in conformance with the frequency specified in the waste analysis plan [Section 268.7(c)(3)]? Yes No NA
- d. Are the appropriate tests (TCLP vs. total waste) being used [Section 268.7(c)(2)]? Yes No NA

4. Storage (Section 268.50)

- a. Are restricted wastes exceeding treatment standards stored (excepting wastes subject to no migration exemptions, nationwide variances, case by case extensions, soft-hammered wastes)? Yes No NA
- b. Are all containers clearly marked to identify content and date(s) entering storage [Section 268.50(a)(2)]? Yes No NA
- c. Do operating records track the location, quantity and dates that wastes exceeding treatment standards entered and were removed from storage [Section 264.73 or Section 265.73]? Yes No NA
- d. Do operating records agree with container labeling? [Section 268.50(a)(2) or Section 264.73 or Section 265.73] Yes No NA
- e. Is waste exceeding treatment standards stored for less than 1 year? Yes No NA
- If yes, can you show that such accumulation is not necessary to facilitate proper recovery, treatment, or disposal? Yes No NA
- If yes, state how: _____
- f. Was/is waste exceeding treatment standards stored for more than one year? Yes No NA

If yes, state the owner/operator's proof that such storage was solely for the purposes of accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal:

N/A

5. Treatment in Surface Impoundments (Section 268.4)

- a. Are prohibited wastes placed in surface impoundments for treatment? Yes No NA
- b. Is the only recognizable "treatment" occurring in the impoundment either evaporation, dilution, or both [Section 268.4(b) and Section 268.3]? Yes No NA
- c. Did the facility submit a certification of compliance with minimum technology and groundwater monitoring requirements, and the waste analysis plan to the Agency [Section 268.4(a)(4)]? Yes No NA
- d. Have the minimum technology requirements been met [Section 268.4(a)(4)]? Yes No NA
1. If the minimum technology requirements have not been met, has a waiver been granted for that unit(s) [Section 268.4(a)(3)(iii)]? Yes No NA
- e. Have the Subpart F groundwater monitoring requirements been met [Section 268.4(a)(3)]? Yes No NA
- f. Have representative samples of the sludge and supernatant from the surface impoundment been tested separately, acceptably, and in accordance with the sampling frequency and analysis specified in the waste analysis plan and are the results in the operating record for all wastes with treatment standards or prohibition levels [Section 268.4(a)(2)]? Yes No NA
- g. Did the hazardous waste residue (sludge or liquid) exceed the treatment standards or prohibition levels? Yes No NA
- h. Provide the frequency of analyses conducted on treatment residues: _____

Does the frequency meet the requirements of the waste analysis plan [Section 264.13 or Section 265.13]?

Yes No NA

- i. Does the operating record adequately document the results of waste analyses performed [Section 264.13 or Section 265.13]? Yes No NA
- j. Have the hazardous waste residues that exceed the treatment standards and/or prohibition levels been removed adequately and on an annual basis [Section 268.4(a)(2)(ii)]? Yes No NA
1. If answer to f is no and supernatant is determined to exceed treatment concentrations, is annual throughput greater than impoundment volume? (note: sludge exceeding treatment standards must be removed) Yes No NA
- k. If residues were removed annually, were adequate precautions taken to protect liners and do records indicate that inspections of liner integrity are performed? Yes No NA
- l. When removed, were residues of restricted wastes managed subsequently in another surface impoundment? Yes No NA
1. Were these residues subject to a valid 268.8 certification? Yes No NA
- m. When removed, were wastes treated prior to disposal? Yes No NA
1. If yes, are waste residues treated on or offsite? Yes No NA
2. Identify management method: _____

6. Other Treatment

- a. Does the facility operate treatment units (regulated or exempt) (not including surface impoundments)? Yes No NA
- b. Describe the treatment processes, including exempt processes: N/A

- c. Does the facility treat soft-hammered wastes? Yes No NA

1. If yes, is treatment occurring as described in the generator's certification/demonstration [Section 268.8(c)(1)]? Yes No NA
2. Did the treatment facility certify he treated the soft-hammered waste as per the generator's demonstration and maintain copies of all certifications [268.8(c)(1)]? Yes No NA
3. Did the treatment facility send a copy of the generator's demonstration and certification to the receiving treatment, recovery, or storage facility [Section 268.8(c)(2)]? Yes No NA
- d. Does the facility, in accordance with an acceptable waste analysis plan, verify that the residue extract from all treatment processes for the restricted wastes are less than treatment standards or prohibition levels [Section 268.7(c)(2)]? Yes No NA
- e. Describe frequency of testing of treatment residuals.
- _____
- _____
- _____
- f. Was dilution used as a substitute for treatment [Section 268.3]? Yes No NA
- g. Are all notifications, certifications, and results of waste analyses kept in the operating record [Section 264.73(b) or Section 265.73(b)]? Yes No NA
- h. Are notices provided to land disposal facilities complete with Waste Number, treatment standard, manifest number, and analytical data (where available) submitted for each shipment of waste or treatment residual that meets the treatment standard stating that waste has been treated to treatment performance standards [Section 268.7(b)(4) and (5) and Section 268.8(c)(1)]? Yes No NA
- i. If the waste or treatment residue will be further managed at another storage or treatment facility, has the treatment facility complied with the 268.7(a) notification and certification requirements applicable to generators [Section 268.7(b)(6)]? Yes No NA

7. Land Disposal

- a. Are restricted and/or prohibited wastes placed in land disposal units (landfills, surface impoundments*)

waste piles, wells, land treatment units, salt domes/beds, mines/caves, concrete vault or bunker?) Yes No NA

b. Did facility have the notice and certification from generators/treaters in its operating record that all prohibited wastes disposed met standards for generation or treatment [Section 268.7(c)(1) and 268.7(a),(b)]? Yes No NA

c. Did the facility obtain waste analysis data through testing of the waste to determine that the wastes are in compliance with the applicable treatment standards [Section 268.7(c)(2)]? Yes No NA

If yes, was the frequency of testing as required by the facility's waste analysis plan [Section 264.13 or 265.13]? Yes No NA

d. Were prohibited wastes exceeding the applicable treatment standards or prohibition levels placed in land disposal units [268.30] excluding national capacity variances [268.30(a)]? Yes No NA

If yes, did facility have an approved waiver based on no migration petition [268.6] or approved case-by-case or capacity extension [268.5] or treatment standard variance [268.44][Section 268.30(d), Section 268.31(d), Section 268.32(g), Section 268.33(e)]? Yes No NA

e. Were restricted wastes subject to a national capacity variance or case-by-case extension disposed? Yes No NA

If yes, have the minimum technology requirements been met for all units receiving such wastes [Section 268.30(c), 268.31(c), 268.32(d), 268.33(d)]? Yes No NA

f. Were adequate records of disposal maintained [Section 264.73(b) or 265.73(b)]? Yes No NA

g. If wastes subject to a nationwide variances, case-by-case extensions [268.5], or no migration petitions [268.6] were disposed, does facility have generator's notices [268.7(a)(3)] and records of disposal? [Section 264.73(b) or Section 265.73(b)] Yes No NA

h. If the facility has a case-by-case extension, can the inspector verify that the facility is making progress as described in progress reports? Yes No NA

- i. If the owner/operator is disposing of a soft-hammer waste, is he maintaining the generators and treaters (if applicable) notices and certifications [Section 268.8(a)(2)-(a)(4)]? Yes No NA
1. Is the facility disposing of any soft hammer wastes that may be classified as California wastes? Yes No NA
2. Did the facility seek to verify whether these wastes may be subject to all restrictions, e.g., California ban? Yes No NA

Part IV

GENERATOR'S CHECKLIST

Section A - EPA Identification No.

1. Does generator have EPA I.D. No.? (262.12) Yes No NA
- a. If yes, EPA I.D. No. M 5 P 9 9 0 7 1 4 0 8 1

Section B - Manifest

1. Does generator ship waste offsite? (262.20) Yes No NA
- a. If no, do not fill out Sections B and D.
- b. If yes, identify primary offsite facility(s).
Chem Waste Management, IL.
2. Does generator use manifest? (262.20) Yes No NA
- a. If no, is generator a small quantity generator (generating between 100 and 1000 kg/month)? Yes No NA
1. If yes, does generator indicate this when sending waste to a TSD facility? Yes No NA
- b. If yes, does manifest include the following information? Yes No NA
1. Manifest document No. Yes No NA
2. Generator's name, mailing address, telephone number Yes No NA
3. Generator EPA I.D. No. Yes No NA
4. Transporter Name(s) and EPA I.D. No.(s) Yes No NA
5. a. Facility name, address, and EPA I.D. No. Yes No NA
- b. Alternate facility name, address, and EPA I.D. No. Yes No NA
- c. Instructions to return to generator if undeliverable Yes No NA
6. Waste information required by DOE - shipping name, quantity (weight or vol.), containers (type and number) Yes No NA
7. Emergency information (optional) (special handling instructions, telephone No.) Yes No NA
8. Is the following certification on each manifest form? Yes No NA

This is to certify that the above named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation and the EPA.

9. Does generator retain copies of manifests? Yes No NA

If yes, complete a through e.

a. 1. Did generator sign and date all manifests? Yes No NA
2. Who signed for generator? Yes No NA

Name Steve Boswell Title Env. Director

b. 1. Did generator obtain handwritten signature and date of acceptance from initial transporter? Yes No NA
2. Who signed and dated for transporter? Yes No NA

Name Various Title Driver

c. Does generator retain one copy of manifest signed by generator and transporter? Yes No NA
d. Do returned copies of manifest include facility owner/operator signature and date of acceptance? Yes No NA
e. Does generator retain copies for 3 years? Yes No NA

Section C - Hazardous Waste Determination

1. Does generator generate solid waste(s) listed in Subpart D (List of Hazardous Waste)? (261.30) Yes No NA

a. If yes, list waste and quantities (include EPA Hazardous Waste No.) _____

2. Does generator solid waste(s) listed in Subpart C that exhibit hazardous characteristics? (corrosivity, ignitability, reactivity, EP toxicity) (261.20) Yes No NA

a. If yes, list wastes and quantities (include EPA Hazardous Waste No.) _____

b. Does generator determine characteristics by testing or by applying knowledge of processes? Both

1. If determined by testing, did generator use test methods in Part 261, Subpart C (or equivalent)? Yes No NA

a. If equivalent test methods used, attach copy of equivalent methods used.

3. Are there any other solid wastes generated by generators? Yes No NA

a. If yes, did generator test all wastes to determine nonhazardous characteristics? Yes No NA

1. If no, list wastes and quantities deemed nonhazardous or processes from which nonhazardous waste was produced (use additional sheet if necessary).

Section D - Pretransport Requirements

1. Does generator package waste in accordance with 49 CFR 173, 178, and 179 (DOT requirements)? (262.30) Yes No NA

2. a. Are containers to be shipped leaking or corroding? Yes No NA
b. Use sheet to describe containers and condition.
c. Is there evidence of heat generation from incompatible wastes in the containers? (262.31) Yes No NA

3. Does generator follow DOT labeling requirements in accordance with 49 CFR 172? Yes No NA

4. Does generator mark each package in accordance with 49 CFR 172? Yes No NA

5. Is each container of 110 gallons or less marked with the following label? (262.32) Yes No NA

Label saying: HAZARDOUS WASTE - Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency.

Generator name(s) and address(es) _____

Manifest document No. _____

6. Does generator have placards to offer to transporters? (262.33) Yes No NA

7. Accumulation time: (262.34)

- a. Are containers used to temporarily store waste before transport? Yes No NA
1. If yes, is each container clearly dated:
Also, fill out rest of No. 7 (accum. time) Yes No NA
- b. 1. Does generator inspect containers for leakage or corrosion? (265.174 - Inspections) Yes No NA
2. If yes, with what frequency? *Weekly* Yes No NA
- c. Does generator locate containers holding ignitable or reactive waste at least 15 meters (50 feet) from the facility's property line? (265.176 - Special Requirements for Ignitable or Reactive Wastes) Yes No NA

NOTE: If tanks are used, fill out checklist for tanks.

- d. Are the containers labeled and marked in accordance with Section D-3, D-4, and D-5 of this form? Yes No NA

NOTE: If generator accumulates waste on site, fill out checklist for General Facilities, Subparts C and D.

- e. Does generator comply with requirements for personnel training? (Attach checklist for 265.16 - Personnel Training.) Yes No NA

8. Describe storage area. Use photos and narrative explanation sheet.

Section E - Recordkeeping and Records (262.40)

1. Does generator keep the following reports for 3 years?

- a. Manifests and signed copies from Yes No NA
- b. Biennial Reports Yes No NA
- c. Exception reports Yes No NA
- d. Test results Yes No NA

2. Where are the records kept (at facility or elsewhere)?

MAIN OFFICE ON-SITE

3. Who is in charge of keeping the records?

Name Steve Boswell Title Envir. Director

Section F - Special Conditions

1. Has generator received from or transported to a foreign Administrator? Yes No NA
- a. If yes, has he filed a notice with the Regional Administrator? Yes No NA
- b. Is this waste manifested and signed by a foreign cosignee? Yes No NA
- c. If generator transported wastes out of the country, has he received confirmation of delivered shipment? Yes No NA

Appendix II - Less-than-Ninety Day Storage

1. Source/Data: Contaminated Personnel Protective Equipments.

2. Type(s) of waste: Dinoseb PO20, 3 Containers.

3. Condition of containers: Good

a. Containers closed?

Yes No NA

b. Containers properly labelled?

Yes No NA

c. Accumulation dates?

Yes No NA

d. Area inspected?

Yes No NA

Part V

CONTAINERS CHECKLIST

Section A - Use and Management (264.171) (265.171)

1. Are containers in good condition? Yes No NA

Section B - Compatibility of Waste With Container (264.172)

1. Is container made of a material that will not react with the waste which it stores? Yes No NA

Section C - Management of Containers (264.173) (265.173)

1. Is container always closed while holding hazardous waste? Yes No NA
2. Is container handled so that it will not be opened, handled, or stored in a manner which may rupture it or cause it to leak? Yes No NA

Section D - Inspections (264.174) (265.174)

1. Does owner/operator inspect containers at least weekly for leaks and deterioration? Yes No NA

Section E - Containment (Part 264) (264.175)

1. Do container storage areas have a containment system? Yes No NA
- a. Is the base free of cracks or gaps? Yes No NA
- b. Is the base sloped or otherwise designed to drain and remove liquids? Yes No NA
- c. Does the containment system have sufficient capacity to contain 10% of the volume of containers or the volume of the largest container? Yes No NA
- d. Is any method available to prevent run-on into the containment system? Yes No NA
- e. Is spilled or leaked material or accumulated precipitation removed from the containment area in a timely manner? Yes No NA

Section F - Ignitable and Reactive Waste (264.176) (265.176)

1. Are containers holding ignitable and reactive waste located at least 15 m (50 ft) from facility property lines? Yes No NA

Section G - Incompatible Waste (264.177) (265.177)

1. Are incompatible wastes or materials placed in the same containers? Yes No NA
2. Are hazardous wastes placed in washed, clean containers when they previously held incompatible waste? Yes No NA
3. Are incompatible wastes separated from each other by a berm, dike, wall, or other device? Yes No NA

Section H - Closure (Part 264) (264.178)

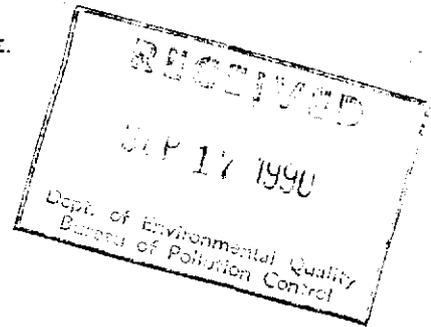
1. At closure, were all hazardous wastes and associated residues removed from the containment system? Yes No NA



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365



4WD-RCRA&FFB

SEP 12 1990

Mr. Sam Mabry, Chief
Hazardous Waste Division
Mississippi Department of Environmental Quality
P.O. Box 10385
Jackson, Mississippi 39289-0385

Re: Cedar Chemical Corporation - MSD-990-714-081

Dear Mr. Mabry:

Enclosed is the inspection report for the Compliance Evaluation Inspection (CEI) which was conducted at the above referenced facility on August 1, 1990, by Brian Donaldson and Jeaneanne Gettle. Mr. Donaldson and Ms. Gettle were accompanied by Toby Cook of your staff.

Per the Memorandum of Agreement between our two agencies, the State of Mississippi has the primary responsibility for addressing the violations noted in the enclosed report (see Section 10). If the State of Mississippi is unable to address these violations, please inform and/or refer the enforcement action to EPA.

If you should have any questions concerning this report, please contact Mr. Donaldson at (404) 347-7603.

Sincerely yours,

A handwritten signature in cursive script that reads "John E. Dickinson".

John Dickinson, P.E., Chief
Waste Compliance Section
RCRA and Federal Facilities Branch

Enclosure

RCRA SITE INSPECTION

1. Inspector and Author of Report

Jeaneanne M. Gettle
Environmental Engineer

2. Facility Information

Cedar Chemical Corporation (CCC)
Rifle Range Road
Vicksburg, Mississippi

EPA ID No.: MSD 990 714 081

3. Responsible Official

Steve Boswell, Director
Environmental Affairs

4. Inspection Participants

Jeaneanne M. Gettle, USEPA
Brian Donaldson, USEPA
Toby Cook, MSDEQ
Steve Boswell, CCC

5. Date and Time of Inspection

August 1, 1990

6. Applicable Regulations

Mississippi Hazardous Waste Management Regulations (MHWMR) Parts 262 and 265 and 40 C.F.R. Part 268. All cites within this report will be to 40 C.F.R. which MHWMR adopted by reference.

7. Purpose of Survey

To perform a Compliance Evaluation Inspection for the purpose of determining CCC's compliance with applicable standards as cited above.

8. Facility Description

Cedar Chemical Corporation (CCC) owns and operates a chemical manufacturing facility at the above location. The plant is physically divided into two functional units, the north plant and the south plant. The focus of this inspection is the south plant.

The manufacturing operations began at the facility on May 15, 1954. In 1986 CCC acquired the plant and has owned and operated it since that time.

Pursuant to Section 3010 of the Resource Conservation and Recovery Act (RCRA), a notification of hazardous waste activity was submitted to EPA.

CCC also submitted, in a timely manner, a Part A Hazardous Waste Permit Application. Thus CCC fulfilled the requirements to achieve interim status.

The south plant was primarily a manufacturer of specialty chemicals, such as dinoseb, atrazene, toxaphene, and monosodium methane arsenate (MSMA). The manufacture of these chemicals produced hazardous wastes. Specifically, the MSMA production generated K031, by-product salts generated in the production of MSMA; the toxaphene production generated two RCRA wastes, K098, untreated process wastewater from the production of toxaphene, and K041, wastewater treatment sludge from the production of toxaphene; and the dinoseb production generated hazardous waste P020, Dinoseb. These wastes were managed in several units including: a container storage area, a pre-RCRA landfill, a surface impoundment, tanks and carbon adsorption units. The container storage area and the surface impoundment were considered to be RCRA regulated units.

In 1987 the Mississippi Department of Natural Resources Commission (predecessor to MSDEQ) determined that CCC's surface impoundment was not subject to regulation under the interim status standards and Mississippi's equivalent requirements. Therefore the focus of this inspection was on the container management area.

The container management area has a concrete floor and previously had a roof. The area was designed to contain drums of waste material which are classified as hazardous. The storage area has a design capacity of approximately 1000 55-gallon drums. CCC maintains that the container management area is a less-than-ninety-day storage area and is therefore not subject to the interim status requirements of 40 C.F.R. Part 265. EPA asserts that the container management area does not meet the requirements for the less-than-ninety day exemption and is therefore subject to the interim status requirements for container management areas found in 40 C.F.R. Part 265. This issue is currently the subject of negotiations between CCC and EPA.

9. Findings

Prior to the site visit high winds had torn the roof off of the container storage area. CCC does not intend to replace the roof; rather, they propose closure of the entire area pursuant to an agreement with EPA and MSDEQ.

No hazardous waste was being managed in the container management area at the time of the inspection.

The container management area had cracks in the concrete and visible staining.

The container management area had signs posted warning of danger. The facility has a guard posted at the main gate and there are people onsite twenty-four hours a day. However no fence surrounds the entire facility and deer and other animals have been known to enter the premises.

CCC maintained inspection logs for the container management area. The 1989 inspection report cited CCC for failure to annotate the inspection reports when remedial actions were necessary/taken at the unit. CCC has been making these annotations since that inspection.

Personnel Training must be conducted prior to December 18, 1990.

The Environmental Coordinator and Safety Supervisor conduct personnel training, but have had no formal training in hazardous waste management.

CCC's contingency plan has been updated since the previous inspection to comply with the regulations.

The facility does not have a closure plan for the container management area. A closure plan will be required if it is determined that the area is subject to the interim status requirements of 40 C.F.R. Part 265.

The facility is currently undertaking closure and retrofitting of the surface impoundment.

Manifest number 4122401 did not have the treatment standards attached.

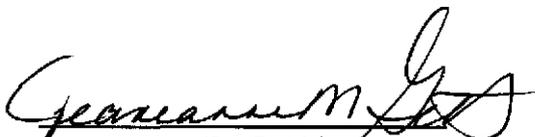
10. Conclusions

CCC is in violation of the following regulations:

40 C.F.R. 265.16 (a)(2), in that personnel training is not being conducted by persons trained in hazardous waste management.

40 C.F.R. 268.7, in that CCC failed to attach treatment standards to manifest number 4122401, which manifested land disposal restricted waste dinoseb, P020.

11. Signed

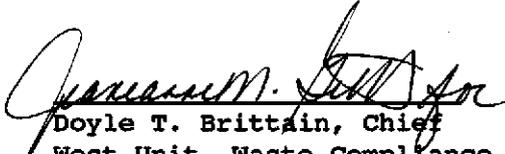


Geanne M. Gettle
Environmental Engineer

Sept 10, 1990
Date

12. Concurrence

Approval



Doyle T. Brittain, Chief
West Unit, Waste Compliance Section
RCRA&FF Branch

Sept 10, 1990
Date



John Dickinson, P.E., Chief
Waste Compliance Section
RCRA&FF Branch

9-12-90
Date

CEDAR CHEMICAL CORPORATION

24th Floor • 5100 Poplar Avenue • Memphis, TN 38137 • 901-685-5348

REPLY TO: P.O. BOX 23
RECEIVED
VICKSBURG, MS 39181
(601) 636-1231
SEP 16 1990
Dept. of Environmental Quality
Bureau of Pollution Control

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
P 850 518 349

Mr. Toby Cook
Environmental Engineer
Mississippi Department of Environmental Quality
Bureau of Pollution Control
2380 Highway 80 West
Jackson, MS 39204

September 12, 1990

Re: Cedar Chemical Corporation
Compliance Evaluation Inspection of August 1, 1990

Dear Mr. Cook:

As we discussed by telephone today, September 12, 1990, the apparent violation described in your report dated September 8, 1990, has been corrected. A copy of the land disposal restriction notice in question has been obtained from the disposal facility and placed in our files. Filing procedures are being reviewed to prevent a recurrence of this error.

If there are any questions concerning this matter, please contact me.

Sincerely,

Steven T. Boswell

Steven T. Boswell
Director of Env. Affairs

STB: pc

xc: Mr. Ahlers
Mr. Madsen

DIVISION OF SOLID WASTE
REVIEWED BY TC
DATE 9/17/90
COMMENTS Copy Sent to EPA

CEDAR CHEMICAL CORPORATION

24th Floor • 5100 Poplar Avenue • Memphis, TN 38137 • 901-685-5348

REPLY TO: P.O. BOX 3
VICKSBURG, MS 39181
(601) 636-1231

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
P 850 518 303

Mr. Toby Cook
Environmental Engineer
Mississippi Department of Environmental Quality
Bureau of Pollution Control
2380 Highway 80 West
Jackson, MS 39204



August 28, 1990

Re: Cedar Chemical Corporation
Inspection of August 1, 1990

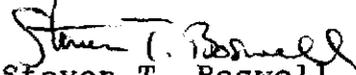
Dear Mr. Cook:

Please find enclosed a copy of the Restricted Waste Notifications that accompanied Illinois Manifest No. IL4122401. At the time, the material was both soft-hammer and California List. Both notifications were sent. These are items you requested during your inspection on August 1, 1990.

Attached is a Certificate of Attendance from the Georgia Tech Research Institute and a record of attendance at a seminar on hazardous waste management held by thhe Warren County LEPC as documentation of my ability to train others in hazardous waste management. This was also requested during your inspection.

If there are any questions concerning this matter, please contact me.

Sincerely,


Steven T. Boswell
Director of Env. Affairs

STB: pc

xc: Mr. Ahlers
Mr. Madsen

"SOFT-HAMMER" WASTES *

9-2828

LAND DISPOSAL RESTRICTION NOTIFICATION AND CERTIFICATION FORM

Generator Name: CEGAR CHEMICAL CORP. Manifest Number: 1L4122401
EPA Hazardous Waste Number: P123 OWM Profile Number: MAEJ 92524

This form is submitted to TRADE WASTE INCINERATION in accordance with 40 CFR Part 268, which restricts the land disposal of certain hazardous wastes. I have marked the appropriate box below to indicate whether alternative treatment has been found for my waste. (See reverse side for the list of "soft-hammer" wastes and instructions on using this form.)

I. SOFT-HAMMER WASTE FOR WHICH ALTERNATIVE TREATMENT OR RECOVERY HAS BEEN LOCATED

The soft-hammer waste I generate is (are) P123. I have identified a practically available treatment technology that yields the greatest environmental benefit. Together with the initial shipment of waste represented by this form, I submitted a demonstration to the Regional Administrator in accordance with 40 CFR 268.8(a)(1), including a list of facilities and facility officials contacted, complete with addresses, telephone numbers, and contact dates, and a justification that I have chosen the best treatment that is practically available.

"I certify under penalty of law that the requirements of 40 CFR 268.8(a) have been met and I have contracted to treat my waste (or will otherwise provide treatment) by the practically available technology which yields the greatest environmental benefit, as indicated in my demonstration. I believe that the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

II. SOFT-HAMMER WASTE FOR WHICH DISPOSAL IN LANDFILL OR SURFACE IMPOUNDMENT IS THE ONLY PRACTICAL ALTERNATIVE TO TREATMENT CURRENTLY AVAILABLE

The soft-hammer waste(s) I generate or have treated is (are) P123. I have made a good-faith effort to locate and contract with treatment and recovery facilities practically available which can meaningfully reduce the toxicity or mobility of hazardous constituents in the waste, as an alternative to land disposal. I have found no such alternative facility. Together with the initial shipment of waste represented by this form, I submitted a demonstration in accordance with 40 CFR 268.8(a), including a list of facilities and facility officials contacted, addresses, telephone numbers, contact dates, and an explanation of why no treatment is practically available. This soft-hammer waste must be disposed of in a landfill or surface impoundment meeting the minimum technological standards until treatment standards are set for the waste or May 8, 1990, whichever occurs first.

"I certify under penalty of law that the requirements of 40 CFR 268.8(a)(1) have been met and that disposal in a landfill or surface impoundment is the only practical alternative to treatment currently available. I believe that the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment."

III. TREATMENT OR RECOVERY FACILITY HAS TREATED THE WASTE

The following soft-hammer waste(s) was treated in accordance with the generator's demonstration: _____

"I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with treatment as specified in the generator's demonstration. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

IV. SOFT-HAMMER WASTE DESTINED FOR LAND DISPOSAL OTHER THAN IN LANDFILL OR SURFACE IMPOUNDMENT (e.g. DEEP INJECTION WELL)

The soft-hammer waste(s) I generate is (are) _____ . This waste is being disposed of in a land disposal unit other than a landfill or surface impoundment and therefore is not subject to the certification and demonstration requirements described above.

Signature John T. Roswell Title DIRECTOR OF ENV. AFFAIRS Date 6/4/89



DEHU Dignity copy VVUW VVUWVUW



DATE: 6/4/89

TO: Regional Administrator, REGION III

ADDRESS: 345 COURTLAND ST, N.E.
ATLANTA, GA 30365

RE: SOFT HAMMER DEMONSTRATION/CERTIFICATION FOR MATERIALS
DESTINED FOR TRADE WASTE INCINERATION

In accordance with the Environmental Protection Agency's land disposal restrictions governing the first third scheduled wastes,

CEDAZ CHEMICAL CORP has enclosed a soft hammer
(Generator name)
demonstration and certification as per 40 CFR 268.8(a)(1) for
CWM Profile MARJ4252A bearing EPA waste code(s) P123

This demonstration (see reverse) has been prepared following communication with Chemical Waste Management and reflects our efforts to locate practically available treatment which affords the greatest environmental benefit. We believe that the information submitted is true, accurate, and complete. Based on this information we have determined that incineration is the best practically available treatment.

If any further information is required, please contact us at
(601)-636-1231
(Phone Number)

Sincerely,

James T. Boswell, DIRECTOR OF ENV. AFFAIRS
(Signature)

Through discussion with Chemical Waste Management and in accordance with 40 CFR 258.6(a)(1) I have developed this demonstration which is applicable to the following EPA waste codes:

K011	P030	P081	U012	U051	U108	U171	U226
K013	P035	P082	U015	U053	U115	U177	U227
K014	P037	P084	U018	U061	U122	U180	U228
K017	P039	P089	U019	U063	U124	U185	U237
K035	P041	P094	U022	U064	U129	U188	U238
K073	P048	P097	U029	U066	U130	U192	U248
K085	P050	P102	U031	U067	U133	U200	
	P058	P105	U036	U074	U134	U209	
P001	P059	P108	U037	U077	U137	U210	
P004	P063	P123	U041	U078	U164	U211	
P005	P068		U043	U086	U165	U219	
P016	P069	U007	U044	U089	U167	U220	
P018	P070	U009	U046	U103	U158	U221	
P020	P071	U010	U050	U105	U159	U223	

FACILITIES CONTACTED:

FACILITY: Solvent Resource & Recovery Inc.
4301 Infirmary Road, West Carrollton, OH 45449

PHONE: (513) 859-6101

CONTACT: Carol Moody, Laboratory Manager

DATE: September 22, 1988

TREATMENT: Solvent recovery, Fuels blending

RESPONSE: Facility unable to treat EPA listed wastes currently subject to the soft hammer; facility does not accept lab packs for solvent recovery or fuels blending.

FACILITY: Trade Waste Incineration
7 Mobile Avenue, Sauget, IL 62201

PHONE: (618) 271-2804

CONTACT: Dennis Warchol, Environmental Manager

DATE: September 22, 1988

TREATMENT: Incineration

RESPONSE: Incineration is the practically available technology which yields the greatest environmental benefit. The waste is principally organic residues which are best destroyed by incineration.

FACILITY: Adams Center Landfill
4635 Adams Center Road, Fort Wayne, IN 46806

PHONE: (219) 447-5555

CONTACT: Dennis Romankowski, Environmental Manager

DATE: September 22, 1988

TREATMENT: Land Disposal/Stabilization

RESPONSE: Facility has the capability to meaningfully reduce the toxicity and/or mobility of inorganic constituents however lab packs are not accepted for stabilization.



FILE COPY

STATE OF MISSISSIPPI

DEPARTMENT OF ENVIRONMENTAL QUALITY

RAY MABUS
GOVERNOR

September 6, 1990

CERTIFIED MAIL NO. P 443 383 192

Mr. Steve Boswell
Director of Environmental Affairs
Cedar Chemical Company
P.O. Box 3
Vicksburg, Mississippi 39180

Dear Mr. Boswell:

Re: Compliance Evaluation Inspection
August 1, 1990

Enclosed please find an inspection report and checklist that was completed as a result of a Compliance Evaluation Inspection at Cedar Chemical on August 1, 1990. This inspection revealed the following apparent violation of the Mississippi Hazardous Waste Management regulations (MHWMR):

268.7(a)(6), in that a copy of a land ban notice sent to a disposal facility was not retained on site.

We request that you respond to this apparent violation within 10 days of receipt of this letter. This response should contain: (1) actions that have been taken to correct the violation, (2) schedule for correcting the violation, or (3) reasons that you believe the alleged violation did not exist. The Bureau will review this information before determining if further action including a penalty is warranted. Section 17-17-29 of the Mississippi Code Annotated (Supp. 1989) allows assessments of penalties not more than \$25,000 per day per violation. Failure to submit this information may result in enforcement action.

If you have any questions, do not hesitate to contact me at (601) 961-5171.

Sincerely,

A handwritten signature in cursive script that reads "Toby M. Cook".

Toby M. Cook, P.E.
Hazardous Waste Division

TMC-32:lr
Enclosures

pc: Mr. James H. Scarbrough, EPA (w/enclosures)
BUREAU OF POLLUTION CONTROL, P.O. BOX 10385, JACKSON, MS 39289-0385, (601) 961-5171

RCRA Inspection Report

1. Inspector and Author of Report

Toby M. Cook
Environmental Engineer
Mississippi Department of Environmental Quality

2. Facility Information

Cedar Chemical Corporation (CCC)
Rifle Range Road
Vicksburg, Mississippi
EPA ID No. MSD990714081

3. Responsible Company Official

Steve Boswell, Director
Environmental Affairs

4. Inspection Participants

Toby Cook, MSDEQ
Steve Boswell, CCC
Jeaneanne M. Gettle, USEPA
Brian Donaldson, USEPA

5. Date and Time of Inspections

August 1, 1990; 8:30 a.m. CDT

6. Applicable Requirements

Mississippi Hazardous Waste Management Regulations (MHWMR) Parts 262, 268, and applicable Sections of 265.

7. Purpose of Inspection

Compliance Evaluation Inspection to determine the facility's compliance status with the applicable regulations.

8. Facility Description

Cedar Chemical operates two chemical plants on contiguous property south of Vicksburg, Mississippi. The north plant primarily produces potassium nitrate and nitrogen tetroxide with by-product production of chlorine gas.

In the past the south plant produced a variety of pesticides and herbicides including atrazine, toxaphene, dinoseb, monosodium methanearsonate (MSMA), diethylhexyl phosphoric acid (DEHPA),

1-hydroxy, ethylidene-1,1-diphosphoric acid (UNIHIB). They also produced the intermediates: Sulfonated ortho secondary butyl phenol (OSBP), disodium methanearsonate (DSMA), and diethylhexyl phosphochloridate. Muriatic acid was previously produced as a by-product of the toxaphene process. At the time of the inspection, nitric acid was the only product being produced at the south plant.

A three-quarter acre surface impoundment is located on the eastern portion of the south plant site. This impoundment currently receives wastewater from the north plant and storm water runoff from the south plant. Although this impoundment is not regulated by the State, Cedar is in the process of removing, solidifying and capping the sludge from the impoundment. A double liner system is being installed in the impoundment for its continued use.

A less than 90 day hazardous waste storage area is located at the south plant adjacent to the old atrazine production area. It has a concrete floor, with a design capacity of approximately 1,000 drums. In recent years the facility has primarily stored waste dinoseb or dinoseb contaminated rags, soil, etc., classified as P020 wastes.

9. Findings

One section of the wastewater impoundment had been retrofitted with a double liner, but the system leaked when water was placed in it. At the time of the inspection, Cedar was waiting for the arrival of technical advisors from the liner company, Gundle.

At the time of the inspection, the container storage area did not contain any waste. It was reported that the roof over the container storage area was destroyed by a windstorm several weeks prior to the inspection. Since the unit will undergo closure in the near future, the facility has no plans to replace the roof.

The facility had prepared and distributed an updated and revised contingency plan which was reviewed during the inspection.

All personnel training had not been completed for 1990. However, as long as the training takes place by December, 1990, no violation will occur. It was agreed that Cedar will furnish the State and EPA documentation to verify that the training coordinator has been trained in hazardous waste management procedures. Inspection logs for the weekly inspections of the container storage area were reviewed.

It was noted that certain wastes generated during the dismantling of the MSMA plant were being manifested as K031 waste. A question was raised as to whether or not the material in question is actually a by-product salt or MSMA product. Additional testing is recommended if future activities generate wastes which cannot be readily identified.

One manifest, Illinois Manifest 4122401, for Toxaphene (P123), did not have the appropriate land ban notification attached. Cedar

subsequently obtained a copy of the notification, which had been sent to Chemical Waste Management.

10. Conclusions

Cedar Chemical is in apparent violation of Mississippi Hazardous Waste Management Regulations (MHWMR) 268.7(a)(6), in that a copy of a Land Ban notice sent to a disposal facility was not retained on site.

11. Signed

Toby M. Cook

8/8/90

Date

12. Approval

Wm Stephen Spitzer

8/9/90

Date

TC-16:lr

cc: Mr. James H. Scarbrough, EPA

Part 1

General Site Information

Facility Name: Cedar Chemical Co.
Address: Rifle Range Rd.
Vicksburg, Ms.

I.D. Number: MSD 990714081
Contact: Steve Boswell
Title: Environmental Director
Phone Number: (601) 636-3210

Type of Ownership:

Federal State County Municipal Private

Facility Status:

Generator Transporter Treatment Storage Disposal

Regulatory Status:

Interim Status Part B Submitted
 Permitted Part B in Preparation

Principal Inspector Name: Toby Cook Title: Env. Eng
Organization: MDEQ Phone Number: (601) 961-5177

Inspection Participants:

<u>Name</u>	<u>Title</u>	<u>Representing</u>
<u>Steve Boswell</u>	<u>Env. Director</u>	<u>Cedar</u>
<u>Jeanene Gettle</u>	<u>Env. Eng</u>	<u>USEPA</u>
<u>Brian Donaldson</u>	<u>Env. Eng</u>	<u>USEPA</u>

Part ____

GENERAL FACILITY CHECKLIST

Section A - General Facility Standards

1. Does facility have EPA Identification No.?
 Yes No NA

a. If yes, EPA I.D. No. MSD 990 714 081
If no, explain. _____

2. Has facility received hazardous waste from a foreign source?
 Yes No NA

a. If yes, has it filed a notice with the Regional Administrator?
 Yes No NA

Waste Analysis

3. Does facility maintain a copy of the waste analysis plan at the facility?
 Yes No NA

a. If yes, does it include: (264.13) (265.13)

1. Parameters for which each waste will be analyzed?
 Yes No NA

2. Test methods used to test for these parameters?
 Yes No NA

3. Sampling method used to obtain sample?
 Yes No NA

4. Frequency with which the initial analyses will be reviewed or repeated?
 Yes No NA

5. (For offsite facilities) waste analyses that generators have agreed to supply?
 Yes No NA

6. (For offsite facilities) procedures which are used to inspect and analyze each movement of hazardous waste, including:

a. Procedures to be used to determine the identity of each movement of waste.
 Yes No NA

b. Sampling method to be used to obtain representative sample of the waste to be identified.
 Yes No NA

4. Does the facility provide adequate security through: (264.14) (265.14)

a. 24-hour surveillance system (e.g., television monitoring or guards)?
 Yes No NA

OR

- b. 1. Artificial or natural barrier around facility (e.g., fence or fence and cliff)? Yes No NA

Describe _____

AND

2. Means to control entry through entrances (e.g., attendant, television monitors, locked entrance, controlled roadway access)? Yes No NA

Describe attendant at main gate

General Inspection Requirements (264.15) (265.15)

5. Does the owner/operator maintain a written schedule at the facility for inspecting:

- a. Monitoring equipment? Yes No NA
b. Safety and emergency equipment? Yes No NA
c. Security devices: Yes No NA
d. Operating and structural equipment? Yes No NA
e. Types of problems of equipment:

1. Malfunction Yes No NA
2. Operator error Yes No NA
3. Discharges Yes No NA

6. Does the owner/operator maintain an inspection log? Yes No NA

- a. If yes, does it include:

1. Date and time of inspection? Yes No NA
2. Name of inspector? Yes No NA
3. Notation of observations? Yes No NA
4. Date and nature of repairs or remedial action? Yes No NA
5. Identification of potential problems? Yes No NA

- b. Are there any malfunctions or other deficiencies not corrected? (Use narrative explanation sheet.) Yes No NA

- c. Are records kept a minimum of three years? Yes No NA

Personnel Training (264.16) (265.16)

7. Does the owner/operator maintain personnel training records at the facility? Yes No NA

Date of most recent training: Dec. 1989

How long are they kept? indefinitely

a. If yes, do they include:

- 1. Job title and written job description of each position? Yes No NA
- 2. Description of type and amount of training? Yes No NA
- 3. Records of training given to facility personnel? Yes No NA

Requirements for Ignitable, Reactive, or Incompatible Waste
(264.17) (265.17)

8. Does facility handle ignitable or reactive wastes? Yes No NA

- a. If yes, is waste separated and confined from sources of ignition or reaction (open flames, smoking, cutting and welding, hot surfaces, frictional heat), sparks (static, electrical, or mechanical), spontaneous ignition (e.g., from heat-producing chemical reactions), and radiant heat?
 - 1. If yes, use narrative explanation sheet to describe separation and confinement procedures.
 - 2. If no, use narrative explanation sheet to describe sources of ignition or reaction.

b. Are smoking and open flames confined to specifically designated locations? Yes No NA

c. Are "No Smoking" signs posted in hazardous areas? Yes No NA

d. Are precautions documented (Part 264 only)? Yes No NA

9. Check containers

a. Are containers leaking or corroding? Yes No NA

b. Is there evidence of heat generation from incompatible wastes? Yes No NA

Section B - Preparedness and Prevention

1. Is there evidence of fire, explosion, or contamination of the environment? (264.31) (265.31) Yes No NA

If yes, use narrative explanation sheet to explain.

2. Is the facility equipped with: (264.32) (265.32)
- a. Internal communication or alarm system? Yes No NA
1. Is it easily accessible in case of emergency? Yes No NA
- b. Telephone or two-way radio to call emergency response personnel? Yes No NA
- c. Portable fire extinguishers, fire control equipment, spill control equipment, and decontamination equipment? Yes No NA
- d. Water of adequate volume of hoses, sprinklers, or water spray system? Yes No NA
1. Describe source of water well
3. Is there sufficient aisle space to allow unobstructed movement of personnel and equipment? (264.35)(265.35) Yes No NA
4. Has the owner/operator made arrangements with the local authorities to familiarize them with characteristics of the facility? (Layout of facility, properties of hazardous waste handled and associated hazards, places where facility personnel would normally be working, entrances to roads inside facility, possible evacuation routes.) (264.37) (265.37) Yes No NA
5. In the case that more than one police or fire department might respond, is there a designated primary authority? (264.37) (265.37) Yes No NA
- a. If yes, name primary authority Vicksburg
6. Does the owner/operator have phone numbers of and agreements with State emergency response teams, emergency response contractors, and equipment suppliers? (264.37) (265.37) Yes No NA
- a. Are they really available to all personnel? Yes No NA
7. Has the owner/operator arranged to familiarize local hospitals with the properties of hazardous waste handled and types of injuries that could result from fires, explosions, or releases at the facility? (264.37) (265.37) Yes No NA
8. If State or local authorities declined to enter into agreements, is this entered in the operating record? (264.37) (265.37) Yes No NA

Section C - Contingency Plan and Emergency Procedures

1. Is a contingency plan maintained at the facility? Yes No NA
(264.53) (265.53)
- a. If yes, is it a revised SPCC Plan? Yes No NA
- b. Does contingency plan include: (264.52) (265.52)
1. Arrangements with local emergency response organizations? Yes No NA
2. Emergency coordinator's names, phone numbers and addresses? Yes No NA
3. List of all emergency equipment at facility and descriptions of equipment? Yes No NA
4. Evacuation plan for facility personnel? Yes No NA
2. Is there an emergency coordinator on site or on call at all times? (264.55) (265.55) Yes No NA

Section D - Manifest System, Recordkeeping, and Reporting

1. Does facility receive waste from offsite? (264.71) (265.71) Yes No NA
- a. If yes, does the owner/operator retain copies of all manifests? Yes No NA
1. Are the manifests signed and dated and returned to the generator? Yes No NA
2. Is a signed copy given to the transporter? Yes No NA
2. Does the facility receive any waste from a rail or water (bulk shipment) transporter? (264.71) (265.71) Yes No NA
- a. If yes, is it accompanied by a shipping paper? Yes No NA
1. Does the owner/operator sign and date the shipping paper and return a copy to the generator? Yes No NA
2. Is a signed copy given to the transporter? Yes No NA
3. Has the owner/operator received any shipments of waste that were inconsistent with the manifest (manifest discrepancies)? (264.72) (265.72) Yes No NA
- a. If yes, has he attempted to reconcile the discrepancy with the generator and transporter? Yes No NA
1. If no, has Regional Administrator been notified? Yes No NA

4. Does the owner/operator keep a written operating record at the facility? (264.73) (265.73) Yes No NA

a. If yes, does it include:

1. Description and quantity of each hazardous waste received? Yes No NA
2. Methods and dates of treatment, storage, and disposal? Yes No NA
3. Location and quantity of each hazardous waste at each location? Yes No NA
4. Cross-references to manifests/shipping papers? Yes No NA
5. Records and results of waste analyses? Yes No NA
6. Report of incidents involving implementation of the contingency plan? Yes No NA
7. Records and results of required inspections? Yes No NA
8. Monitoring, testing, and analytical data, for groundwater required by Subpart F? Yes No NA
9. Closure cost estimates and, for disposal facilities, post-closure cost estimates (Part 264)? Yes No NA
10. Notices of generators as specified in Section 264.12(b) (Part 264)? Yes No NA

b. Does facility have copy of permit on site? Yes No NA

5. Does the facility submit a biennial report by March 1 every even-numbered year? (264.75) (265.75) Yes No NA

a. If yes, do reports contain the following information:

1. EPA I.D. number? Yes No NA
2. Date and year covered by report? Yes No NA
3. Description/quantity of hazardous waste? Yes No NA
4. Treatment, storage, and disposal methods? Yes No NA
5. Monitoring data under Section 265.94(a)(2) and (b)(2) (Part 265)? Yes No NA
6. Most recent closure and post-closure cost estimates? Yes No NA
7. For TSD generators, description of efforts to reduce volume/toxicity of waste generated, and actual comparisons with previous year? Yes No NA
8. Certification signed by owner/operator? Yes No NA

6. Has the facility received any waste (that does not come under the small generator exclusion) not accompanied by a manifest? (264.76) (265.76) Yes No NA

a. If yes, has he submitted an unmanifested waste report to the Executive Director? Yes No NA

7. Does the facility submit to the Executive Director reports on releases, fires, and explosions; contamination and monitoring data; and facility closure?

Yes No NA

Part ____

LAND DISPOSAL RESTRICTIONS CHECKLIST

Section A - General

1. Are hazardous wastes land-disposed on site? Yes No NA
- a. If yes, are one or more of the following circumstances true:
1. Granted extension from effective date pursuant to Section 268.5? Yes No NA
 2. Granted exemption from a prohibition pursuant to a petition under Section 268.6? Yes No NA
 3. Disposing of soil or debris resulting from a CERCLA response action or a RCRA corrective action, which will not be prohibited until November 8, 1988? Yes No NA
 4. Facility is a small quantity generator of less than 100 kg of hazardous waste per month? Yes No NA
 5. Wastes not yet prohibited by Part 268? Yes No NA
2. Are restricted wastes or residuals from treatment of a restricted waste diluted in any way prior to disposal? Yes No NA
3. Are there active surface impoundments used for treatment of hazardous wastes? Yes No NA
- a. If yes, does the unit's design and operation meet the requirements set forth in Section 268.4? Yes No NA
4. Has the facility sought exemption from any prohibition under Subpart C of Section 268 for the disposal of a restricted hazardous waste? Yes No NA
- a. If yes, has the facility's demonstration included the required components (waste I.D., waste analysis, comprehensive environmental characterization of unit site, QA/QC plan, sampling, testing, modeling)? Yes No NA
5. Has the facility determined whether it generates a restricted waste through waste analysis? (268.7) Yes No NA
- a. If yes, is the facility, in fact, handling a restricted waste(s)? Yes No NA
- b. If yes, does the restricted waste required treatment? Yes No NA

- c. If yes, has the generator notified the treatment facility in writing, and does the notification include all required components (EPA hazardous waste number, corresponding treatment standard, manifest number of shipment)? Yes No NA
6. Does the facility handle EPA Hazardous Waste Nos. F001 through F005 (solvent wastes)? (268.10) Yes No NA
- a. If yes, do any of the following conditions apply:
1. The generator of the solvent waste is a small quantity generator (not more than 1000 kg/month)? Yes No NA
 2. The solvent waste is generated from a CERCLA response corrective action? Yes No NA
 3. The solvent waste is a solvent-water mixture, solvent-containing sludge, or solvent-contaminated soil (non-CERCLA or RCRA corrective action) containing less than 1 percent total F001 through F005 solvent constituents. Yes No NA
- b. If no, have any of these restricted wastes began land-disposed (except in an injection well) since November 8, 1986? Yes No NA
7. Does the facility handle EPA Hazardous Waste Nos. F020, F021, F023, F026, F027, or F028 (dioxin-containing wastes)? Yes No NA
- a. If yes, do any of the following conditions apply:
1. Wastes are treated to meet standards of Subpart D of Section 268? Yes No NA
 2. Wastes are disposed of at a facility that has been granted a petition? Yes No NA
 3. An extension has been granted? Yes No NA
- b. If no, were these restricted wastes land disposed after November 8, 1988? Yes No NA
8. Are restricted wastes being treated? Yes No NA
- a. If yes, have any of their associated hazardous constituents exceeded the "Constituent in Waste Extract" (CWE) levels? Yes No NA

Section B - Generator Compliance

1. Waste Identification

a. Does the generator handle the following wastes:

1. Solvent wastes

- (i) F001, F002, F004, or F005 Yes No NA
(ii) F003 Yes No NA

If an F003 wastestream (listed solely for ignitability) has been mixed with a non-restricted solid or hazardous waste, does the resultant mixture exhibit the ignitability characteristic? Yes No NA

Note: Appendix A is intended to assist the inspector and enforcement official in determining whether the facility is generating F-solvent wastes, if such wastes were not identified by the facility previously. If you are concerned that F-solvent wastes may be misclassified or mislabeled, turn to Appendix A-1. To assist in identifying potentially misclassified F-solvents, Appendix A-2 presents a list of corresponding F and U wastes.

2. Dioxin wates (F020-F023, F026-F028) Yes No NA
3. Potential California List Wastes Yes No NA
 (see Appendix C)
 (i) D002 Yes No NA
 (ii) D004-D011 Yes No NA
 (iii) Any other waste characterized by high concentrations of halogenated organic constituents (HOCs), metals, or cyanides? Yes No NA
 (iv) Any F, K, P, or U wastes subject to "soft hammer" requirements that may qualify as California wastes due to HOCs, metals, or cyanide content? (See Appendix F) Yes No NA
4. First Third Wastes (See MHWMR 268.10) Yes No NA
5. Second Third Wastes (See MHWMR 268.11) Yes No NA
6. (Reserved)
 (i) Are any of the above "soft hammer" wastes? (See Appendices D & E) Yes No NA

2. BDAT Treatability Group - Treatment Standards Identification

a. Does the generator mix restricted wastes with different treatment standards for constituents of concern? Yes No NA

b. If yes, did the generator select the most stringent treatment standard for the constituent of concern [Section 268.41(b)]? Yes No NA

c. F Solvents

Did the generator correctly determine the appropriate treatability group [Section 268.41] of the waste (e.g., wastewaters containing solvents, nonwastewater (i.e., < 1% TOC), pharmaceutical wastewaters containing spent methylene chloride, all other spent solvent wastes)?

Yes No NA

d. California Wastes

Did the generator correctly determine the distinction between liquid hazardous wastes and non-liquid hazardous wastes that contain HOCs in concentrations greater than 1,000 mg/kg [Section 268.32(a)(3)]?

Yes No NA

e. First and Second Third Waste

1. Did the generator ascertain whether restricted wastes were appropriately assigned wastewater or nonwastewater designations (nonwastewaters are > 1% TOC and > 1% suspended solids) [Section 268.7(a)]?

Yes No NA

2. Is there any reason to believe that the generator may have diluted the waste to change the applicable treatment standard (based on review of process operation, pipe routing, point of sampling)?

Yes No NA

3. Waste Analysis

a. Did the generator determine whether the waste exceeds treatment standards based on Section 268.7(a):

1. Knowledge of wastes Yes No NA

(i) List wastes for which "applied knowledge" was used:

2. TCLP

Yes No NA

(i) List wastes for which "TCLP" was used:

(ii) MHWMR 268.41 lists wastes for which treatment standards are expressed as concentrations in waste extract. Were any wastes handled by the generator subject to waste extract standards not tested using the TCLP?

Yes No NA

If yes, list: _____

3. Total waste analysis

Yes No NA

4. If files were retained, describe content and basis of applied knowledge determination:

If determined by TCLP or total constituent analysis, provide date of last test, frequency of testing, and attach test results.

Dates/frequency: _____

Note which wastes were subjected to which tests:

Note any problems (e.g., inadequate analysis, variation of waste composition/generation for applied knowledge) _____

5. Were wastes tested using TCLP or total constituent analysis when a process or wastestream changed [Section 264.13(a)(3)(i) or Section 265.13(a)(3)(i)]?

Yes No NA

b. Did the restricted wastes exceed applicable treatability group treatment standards upon generation [Section 268.7(a)(1)]?

List those that exceeded standards: _____

List those that did not exceed standards: _____

- c. Did the generator dilute the waste or the treatment residual so as to substitute for adequate treatment [Section 268.3] Yes No NA
6. Has the generator conducted any testing of those hazardous wastes to determine whether the concentrations qualify the hazardous wastes as California wastes? Yes No NA
- If no, has the generator retained records documenting his "applied knowledge" that the hazardous waste is not a California waste? Yes No NA

4. Management

a. Onsite management

1. Were restricted wastes managed onsite? Yes No NA
2. For wastes that exceed treatment standards, was treatment in regulated units, storage for greater than 90 days, and/or disposal conducted? Yes No NA

If yes, TSDF checklist must be completed.

b. Offsite Management

1. If restricted wastes exceed treatment standards, did generator provide treatment facility notification with each shipment? [268.7(a)(1)]:
- (i) EPA Hazardous Waste Number? Yes No NA
 - (ii) Corresponding treatment standard? Yes No NA
 - (iii) Manifest number? Yes No NA
 - (iv) Waste analysis, if available? Yes No NA

Identify offsite treatment facilities
Chem Waste Management Illinois

2. If restricted wastes do not exceed treatment standards, did generator provide the disposal facility with a notice and certification including:
- (i) EPA hazardous waste I.D. number? Yes No NA
 - (ii) Corresponding treatment standard? Yes No NA

- (iii) Manifest number Yes No NA
 (iv) Certification regarding waste and that it meets treatment standards? Yes No NA

Identify land disposal facilities receiving the BDAT certified wastes _____

3. If the generator's waste is subject to a Section 268.5 case by case exemption, a Section 268.6 "no migration" exemption, or a nationwide variance does the generator's records indicate that he or she submits with each waste shipment [Section 268.7(a)(3)]:

- (i) EPA Hazardous Waste Number? Yes No NA
 (ii) Corresponding Treatment Standards? Yes No NA
 (iii) All applicable prohibitions? Yes No NA
 (iv) The manifest number? Yes No NA
 (v) The date the wastes are subject to prohibitions? Yes No NA
 (vi) Does generator keep records of all notifications/certifications send to offsite facilities? Yes No NA

List all prohibited wastes for which records are not provided per above [Section 268.7(a)(b)]:

Identify TSDFs receiving any prohibited wastes subject to any exemptions and variances:

4. If handler generates a "soft hammer" waste, does the generator send with each "soft hammer" waste shipment to a TSDF and retain copies of, a notice that includes [268.7(a)(4)]:

- The EPA Hazardous Waste Number? Yes No NA
 Applicable prohibitions? Yes No NA
 The manifest number? Yes No NA
 Waste analysis data, where available? Yes No NA

- (i) Do the generator's records indicate that any soft-hammer wastes are destined for disposed in a landfill or surface impoundment [Section 268.33(f)]? Yes No NA

* note: copy of one notice not retained

If yes, list facility of destination and waste of concern [Section 268.8(a)(2)]

- (ii) Has the generator submitted demonstrations and certifications for each "soft-hammered" waste destined to be disposed in landfill or surface impoundment to the Regional Administrator prior to the shipment of waste to the TSDF [Section 268.7(a)(2)]? Yes No NA
- (iii) Has the generator retained a copy of the demonstration on site [Section 268.8(a)(3)-(a)(4)]? Yes No NA
- (iv) Has the generator retained copies of all Section 268.8 certifications sent to the TSDF [Section 268.7(a)(6)] Yes No NA
- (v) Did the generator submit the demonstration to the receiving facility upon the initial shipment of the waste [Section 268.8(a)(3)-(a)(4)]? Yes No NA
- (vi) If the Regional Administrator has invalidated the certification, has the generator ceased shipment of the waste and do records indicate that the generator has informed all receiving facilities of the invalidation [Section 268.8(b)(3)]? Yes No NA

5. Storage of Prohibited Waste

- a. Were prohibited wastes stored for greater than 90 days? Yes No NA

If yes, was facility operating as a TSD under interim status or final permit [Section 262.34(b)]?

Yes No NA

If yes, TSDF Checklist must be completed.

6. Treatment Using RCRA 264/265 Exempt Units or Processes (i.e., boilers, furnaces, distillation units, wastewater treatment tanks, etc.)

1. Were treatment residuals generated from RCRA 264/265 exempt units or processes? Yes No NA

If yes, list type of treatment unit and processes

N/A

If yes, TSDF checklist must be completed.

Section C - Treatment, Storage & Disposal Requirements

1. General

a. Does the facility conduct waste analysis (total and TCLP) on-site or through a commercial laboratory?

Commercial Lab

b. Describe the frequency of sampling conducted by the facility.

as needed

2. Treatment Facilities

a. Has the treatment facility revised its waste analysis plan [Section 268.7(b)] to meet the requirements of Section 264.13 or 265.13?

Yes No NA

(i) Is the treatment facility conducting TCLP tests for wastes subject to treatment standards expressed as waste extracts per 268.7(b)(i)?

Yes No NA

(ii) Is the treatment facility using the paint filter test for the California waste residues [Section 268.7(b)(ii)]?

Yes No NA

(iii) Is the treatment facility testing the pH of California waste residues?

Yes No NA

(iv) Is the treatment facility testing concentrations (not extracts) in the waste residues for prohibited wastes with established treatment standards expressed as waste concentrations [Section 268.7(b)(3)]?

Yes No NA

(v) Is the treatment facility testing extracts of the waste residues for prohibited wastes having established treatment standards expressed as extract concentrations [Section 268.7(b)(1)]?

Yes No NA

3. Land Disposal Facilities

- a. Has the facility retained all notices and certifications from generators, storage and treatment facilities [268.7(c)(1)]? Yes No NA
- b. Are wastes and waste residues tested for compliance with applicable treatment standards and prohibitions [Section 268.7(c)(2)]? Yes No NA
- c. Are they being tested in conformance with the frequency specified in the waste analysis plan [Section 268.7(c)(3)]? Yes No NA
- d. Are the appropriate tests (TCLP vs. total waste) being used [Section 268.7(c)(2)]? Yes No NA

4. Storage (Section 268.50)

- a. Are restricted wastes exceeding treatment standards stored (excepting wastes subject to no migration exemptions, nationwide variances, case by case extensions, soft-hammered wastes)? Yes No NA
- b. Are all containers clearly marked to identify content and date(s) entering storage [Section 268.50(a)(2)]? Yes No NA
- c. Do operating records track the location, quantity and dates that wastes exceeding treatment standards entered and were removed from storage [Section 264.73 or Section 265.73]? Yes No NA
- d. Do operating records agree with container labeling? [Section 268.50(a)(2) or Section 264.73 or Section 265.73] Yes No NA
- e. Is waste exceeding treatment standards stored for less than 1 year? Yes No NA
- If yes, can you show that such accumulation is not necessary to facilitate proper recovery, treatment, or disposal? Yes No NA
- If yes, state how: _____
- f. Was/is waste exceeding treatment standards stored for more than one year? Yes No NA

If yes, state the owner/operator's proof that such storage was solely for the purposes of accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal:

N/A

5. Treatment in Surface Impoundments (Section 268.4)

- a. Are prohibited wastes placed in surface impoundments for treatment? Yes No NA
- b. Is the only recognizable "treatment" occurring in the impoundment either evaporation, dilution, or both [Section 268.4(b) and Section 268.3]? Yes No NA
- c. Did the facility submit a certification of compliance with minimum technology and groundwater monitoring requirements, and the waste analysis plan to the Agency [Section 268.4(a)(4)]? Yes No NA
- d. Have the minimum technology requirements been met [Section 268.4(a)(4)]?
 - 1. If the minimum technology requirements have not been met, has a waiver been granted for that unit(s) [Section 268.4(a)(3)(iii)]? Yes No NA
- e. Have the Subpart F groundwater monitoring requirements been met [Section 268.4(a)(3)]? Yes No NA
- f. Have representative samples of the sludge and supernatant from the surface impoundment been tested separately, acceptably, and in accordance with the sampling frequency and analysis specified in the waste analysis plan and are the results in the operating record for all wastes with treatment standards or prohibition levels [Section 268.4(a)(2)]? Yes No NA
- g. Did the hazardous waste residue (sludge or liquid) exceed the treatment standards or prohibition levels? Yes No NA
- h. Provide the frequency of analyses conducted on treatment residues: _____

Does the frequency meet the requirements of the waste analysis plan [Section 264.13 or Section 265.13]?

Yes No NA

- i. Does the operating record adequately document the results of waste analyses performed [Section 264.13 or Section 265.13]? __Yes __No NA

- j. Have the hazardous waste residues that exceed the treatment standards and/or prohibition levels been removed adequately and on an annual basis [Section 268.4(a)(2)(ii)]? __Yes __No NA
 - 1. If answer to f is no and supernatant is determined to exceed treatment concentrations, is annual throughput greater than impoundment volume? (note: sludge exceeding treatment standards must be removed) __Yes __No NA

- k. If residues were removed annually, were adequate precautions taken to protect liners and do records indicate that inspections of liner integrity are performed? __Yes __No NA

- l. When removed, were residues of restricted wastes managed subsequently in another surface impoundment? __Yes __No NA
 - 1. Were these residues subject to a valid 268.8 certification? __Yes __No NA

- m. When removed, were wastes treated prior to disposal? __Yes __No NA
 - 1. If yes, are waste residues treated on or offsite? __Yes __No NA
 - 2. Identify management method: _____

6. Other Treatment

- a. Does the facility operate treatment units (regulated or exempt) (not including surface impoundments)? __Yes __No __NA

- b. Describe the treatment processes, including exempt processes: _____

 _____ N/A

- c. Does the facility treat soft-hammered wastes? __Yes __No __NA

1. If yes, is treatment occurring as described in the generator's certification/demonstration [Section 268.8(c)(1)]? Yes No NA
2. Did the treatment facility certify he treated the soft-hammered waste as per the generator's demonstration and maintain copies of all certifications [268.8(c)(1)]? Yes No NA
3. Did the treatment facility send a copy of the generator's demonstration and certification to the receiving treatment, recovery, or storage facility [Section 268.8(c)(2)]? Yes No NA
- d. Does the facility, in accordance with an acceptable waste analysis plan, verify that the residue extract from all treatment processes for the restricted wastes are less than treatment standards or prohibition levels [Section 268.7(c)(2)]? Yes No NA
- e. Describe frequency of testing of treatment residuals.
- _____
- _____
- _____
- f. Was dilution used as a substitute for treatment [Section 268.3]? Yes No NA
- g. Are all notifications, certifications, and results of waste analyses kept in the operating record [Section 264.73(b) or Section 265.73(b)]? Yes No NA
- h. Are notices provided to land disposal facilities complete with Waste Number, treatment standard, manifest number, and analytical data (where available) submitted for each shipment of waste or treatment residual that meets the treatment standard stating that waste has been treated to treatment performance standards [Section 268.7(b)(4) and (5) and Section 268.8(c)(1)]? Yes No NA
- i. If the waste or treatment residue will be further managed at another storage or treatment facility, has the treatment facility complied with the 268.7(a) notification and certification requirements applicable to generators [Section 268.7(b)(6)]? Yes No NA

7. Land Disposal

- a. Are restricted and/or prohibited wastes placed in land disposal units (landfills, surface impoundments*)

waste piles, wells, land treatment units, salt domes/beds, mines/caves, concrete vault or bunker?) Yes No NA

b. Did facility have the notice and certification from generators/treaters in its operating record that all prohibited wastes disposed met standards for generation or treatment [Section 268.7(c)(1) and 268.7(a),(b)]? Yes No NA

c. Did the facility obtain waste analysis data through testing of the waste to determine that the wastes are in compliance with the applicable treatment standards [Section 268.7(c)(2)]? Yes No NA

If yes, was the frequency of testing as required by the facility's waste analysis plan [Section 264.13 or 265.13]? Yes No NA

d. Were prohibited wastes exceeding the applicable treatment standards or prohibition levels placed in land disposal units [268.30] excluding national capacity variances [268.30(a)]? Yes No NA

If yes, did facility have an approved waiver based on no migration petition [268.6] or approved case-by-case or capacity extension [268.5] or treatment standard variance [268.44][Section 268.30(d), Section 268.31(d), Section 268.32(g), Section 268.33(e)]? Yes No NA

e. Were restricted wastes subject to a national capacity variance or case-by-case extension disposed? Yes No NA

If yes, have the minimum technology requirements been met for all units receiving such wastes [Section 268.30(c), 268.31(c), 268.32(d), 268.33(d)]? Yes No NA

f. Were adequate records of disposal maintained [Section 264.73(b) or 265.73(b)]? Yes No NA

g. If wastes subject to a nationwide variances, case-by-case extensions [268.5], or no migration petitions [268.6] were disposed, does facility have generator's notices [268.7(a)(3)] and records of disposal? [Section 264.73(b) or Section 265.73(b)] Yes No NA

h. If the facility has a case-by-case extension, can the inspector verify that the facility is making progress as described in progress reports? Yes No NA

- i. If the owner/operator is disposing of a soft-hammer waste, is he maintaining the generators and treaters (if applicable) notices and certifications [Section 268.8(a)(2)-(a)(4)]? Yes No NA
1. Is the facility disposing of any soft hammer wastes that may be classified as California wastes? Yes No NA
2. Did the facility seek to verify whether these wastes may be subject to all restrictions, e.g., California ban? Yes No NA

Part _____

GENERATOR'S CHECKLIST

Section A - EPA Identification No.

1. Does generator have EPA I.D. No.? (262.12) Yes No NA
a. If yes, EPA I.D. No. MSD 990714081

Section B - Manifest

1. Does generator ship waste offsite? (262.20) Yes No NA
a. If no, do not fill out Sections B and D.
b. If yes, identify primary offsite facility(s).
Chem Waste Management Illinois
2. Does generator use manifest? (262.20) Yes No NA
a. If no, is generator a small quantity generator (generating between 100 and 1000 kg/month)? Yes No NA
1. If yes, does generator indicate this when sending waste to a TSD facility? Yes No NA
b. If yes, does manifest include the following information?
 Yes No NA
1. Manifest document No. Yes No NA
2. Generator's name, mailing address, telephone number Yes No NA
3. Generator EPA I.D. No. Yes No NA
4. Transporter Name(s) and EPA I.D. No.(s) Yes No NA
5. a. Facility name, address, and EPA I.D. No. Yes No NA
b. Alternate facility name, address, and EPA I.D. No. Yes No NA
c. Instructions to return to generator if undeliverable Yes No NA
6. Waste information required by DOE - shipping name, quantity (weight or vol.), containers (type and number) Yes No NA
7. Emergency information (optional) (special handling instructions, telephone No.) Yes No NA
8. Is the following certification on each manifest form? Yes No NA

This is to certify that the above named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation and the EPA.

9. Does generator retain copies of manifests? Yes No NA

If yes, complete a through e.

a. 1. Did generator sign and date all manifests? Yes No NA
2. Who signed for generator? Yes No NA

Name Steve Boswell Title Env. Dir.

b. 1. Did generator obtain handwritten signature and date of acceptance from initial transporter? Yes No NA
2. Who signed and dated for transporter? Yes No NA

Name Various Title Driver

c. Does generator retain one copy of manifest signed by generator and transporter? Yes No NA
d. Do returned copies of manifest include facility owner/operator signature and date of acceptance? Yes No NA
e. Does generator retain copies for 3 years? Yes No NA

Section C - Hazardous Waste Determination

1. Does generator generate solid waste(s) listed in Subpart D (List of Hazardous Waste)? (261.30) Yes No NA

a. If yes, list waste and quantities (include EPA Hazardous Waste No.) _____

2. Does generator solid waste(s) listed in Subpart C that exhibit hazardous characteristics? (corrosivity, ignitability, reactivity, EP toxicity) (261.20) Yes No NA

a. If yes, list wastes and quantities (include EPA Hazardous Waste No.) _____

b. Does generator determine characteristics by testing or by applying knowledge of processes? both

1. If determined by testing, did generator use test methods in Part 261, Subpart C (or equivalent)? Yes No NA

a. If equivalent test methods used, attach copy of equivalent methods used.

3. Are there any other solid wastes generated by generators? Yes No NA

a. If yes, did generator test all wastes to determine nonhazardous characteristics? Yes No NA

1. If no, list wastes and quantities deemed nonhazardous or processes from which nonhazardous waste was produced (use additional sheet if necessary).

Section D - Pretransport Requirements

1. Does generator package waste in accordance with 49 CFR 173, 178, and 179 (DOT requirements)? (262.30) Yes No NA

2. a. Are containers to be shipped leaking or corroding? Yes No NA

b. Use sheet to describe containers and condition.

c. Is there evidence of heat generation from incompatible wastes in the containers? (262.31) Yes No NA

3. Does generator follow DOT labeling requirements in accordance with 49 CFR 172? Yes No NA

4. Does generator mark each package in accordance with 49 CFR 172? Yes No NA

5. Is each container of 110 gallons or less marked with the following label? (262.32) Yes No NA

Label saying: HAZARDOUS WASTE - Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency.

Generator name(s) and address(es) _____

Manifest document No. _____

6. Does generator have placards to offer to transporters? (262.33) Yes No NA

7. Accumulation time: (262.34)

- a. Are containers used to temporarily store waste before transport? Yes No NA
1. If yes, is each container clearly dated: Yes No NA
Also, fill out rest of No. 7 (accum. time)
- b. 1. Does generator inspect containers for leakage or corrosion? (265.174 - Inspections) Yes No NA
2. If yes, with what frequency? weekly Yes No NA
- c. Does generator locate containers holding ignitable or reactive waste at least 15 meters (50 feet) from the facility's property line? (265.176 - Special Requirements for Ignitable or Reactive Wastes) Yes No NA

NOTE: If tanks are used, fill out checklist for tanks.

- d. Are the containers labeled and marked in accordance with Section D-3, D-4, and D-5 of this form? Yes No NA

NOTE: If generator accumulates waste on site, fill out checklist for General Facilities, Subparts C and D.

- e. Does generator comply with requirements for personnel training? (Attach checklist for 265.16 - Personnel Training.) Yes No NA

8. Describe storage area. Use photos and narrative explanation sheet. concrete base, no roof, curbed.

Section E - Recordkeeping and Records (262.40)

1. Does generator keep the following reports for 3 years?
- a. Manifests and signed copies from Yes No NA
- b. Biennial Reports Yes No NA
- c. Exception reports Yes No NA
- d. Test results Yes No NA

2. Where are the records kept (at facility or elsewhere)?

3. Who is in charge of keeping the records?

Name Steve Boswell Title Env. Director

Section F - Special Conditions

1. Has generator received from or transported to a foreign Administrator? Yes No NA
- a. If yes, has he filed a notice with the Regional Administrator? Yes No NA
- b. Is this waste manifested and signed by a foreign cosignee? Yes No NA
- c. If generator transported wastes out of the country, has he received confirmation of delivered shipment? Yes No NA

RCRA INSPECTION REPORT

1. Inspector and Author of Report

Toby M. Cook Environmental Engineer, MSDNR

2. Facility Information

Cedar Chemical Corporation (CCC)
Rifle Range Road
Vicksburg, Mississippi
EPA ID No. MSD990714081

3. Responsible Company Official

Steve Boswell, Director
Environmental Affairs

4. Inspection Participants

Toby Cook, MSDNR
Steve Bosewll, CCC
Jeaneanne M. Gettle, USEPA
Judy Sophianopoulos, USEPA

5. Date and Time of Inspections

February 1, 1989 - 9:00 a.m. CST

6. Applicable Regulations

Mississippi Hazardous Waste Management Regulations (MHWMR) Parts 262, 268, and applicable Sections of 265.

7. Purpose of Inspection

Compliance Evaluation Inspection to determine the facility's compliance status with the applicable regulations.

8. Facility Description

Cedar Chemical operates two chemical plants on contiguous property south of Vicksburg, Mississippi. The north plant primarily produces potassium nitrate and nitrogen tetroxide with by-product production of chlorine gas.

In the past the south plant produced a variety of pesticides and herbicides including atrazine, toxaphene, dinoseb, monosodium methanearsonate (MSMA), diethylhexyl phosphoric acid (DEHPA),

1-hydroxy, ethylidene-1,1-diphosphoric acid (UNIHIB). They also produced the intermediates: Sulfonated ortho secondary butyl phenol (OSBP), disodium methanearsonate (DSMA), and diethylhexyl phosphochloridate. Muriatic acid was previously produced as a by-product of the toxaphene process. At the time of the inspection, nitric acid was the only product being produced at the south plant.

A three-quarter acre surface impoundment is located on the eastern portion of the south plant site. This impoundment currently receives wastewater from the north plant and storm water runoff from the south plant. Although this impoundment is not regulated by the State, Cedar is in the process of removing, solidifying and capping the sludge from the impoundment. A double liner system is being installed in the impoundment for its continued use.

A less than 90 day hazardous waste storage area is located at the south plant adjacent to the old atrazine production area. It is under roof and has a concrete floor, with a design capacity of approximately 1,000 drums. In recent years the facility has primarily stored waste dinoseb or dinoseb contaminated rags, soil, etc, classified as P020 wastes.

9. Findings

The container storage area had one drum in it at the time of inspection. The drum contained dinoseb wastes (P020) and was properly labelled and closed.

Inspection logs were maintained, however, the logs did not contain notations of remedial action, although remedial actions were taken. The logs did not contain a report of leaking drums which were reported to the Bureau by letter dated July 1, 1988, and the remedial actions which were taken.

The facility does not have a current contingency plan. However, the contingency plan is being updated by an outside consultant.

10. Conclusions

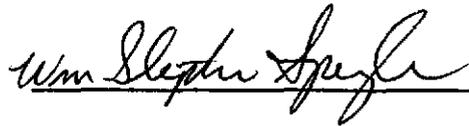
Cedar Chemical is in apparent violation of the following regulations:

1. MHWMR Part 265.15, in that the facility failed to note leaking drums and remedial measures in their inspection log.
2. MHWMR Part 265.52, in that the facility does not have a current contingency plan designed to minimize hazards to human health and the environment in the event of fires, explosions or other type releases.

11. Signed


Inspector

12. Approval



cc: Mr. James H. Scarbrough, EPA

TMC:cm

EXHIBIT IV-4

GENERATOR'S CHECKLIST

Section A - EPA Identification No.

- i. Does generator have EPA I.D. No? Yes No
- a. If yes, EPA I.D. No. M S D 9 9 0 7 1 4 0 8 1

Section B - Manifest

1. Does generator ship waste offsite? Yes No
- a. If no, do not fill out Sections B and D.
- b. If yes, identify primary offsite facility(s). Use narrative explanation sheet.
2. Does generator use manifest? Yes No
- a. If no, is generator a small quantity generator (generating between 100 and 1000 kg/month)? Yes No
1. If yes, does generator indicate this when sending waste to a TSD facility? Yes No
- b. If yes, does manifest include the following information?
1. Manifest document No. Yes No
2. Generator's name, mailing address, telephone No. Yes No
3. Generator EPA I.D. No. Yes No
4. Transporter Name(s) and EPA I.D. No.(s) Yes No
5. a. Facility name, address, and EPA I.D. No. Yes No
- b. Alternate facility name, address, and EPA I.D. No. Yes No
- c. Instructions to return to generator if undeliverable Yes No
6. Waste information required by DOE - shipping name, quantity (weight or vol.), containers (type and number) Yes No

(continued)

EXHIBIT IV-4 (continued)

7. Emergency information (optional) Yes No
(special handling instructions, telephone No.)

8. Is the following certification on each manifest form? Yes No

This is to certify that the above named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation and the EPA.

9. Does generator retain copies of manifests? Yes No

If yes, complete a through e.

a. 1. Did generator sign and date all manifests? Yes No
2. Who signed for generator?

Name Steve Boswell Title Env. Affairs Director

b. 1. Did generator obtain handwritten signature and date of acceptance from initial transporter? Yes No
2. Who signed and dated for transporter?

Name Various Title Driver

c. Does generator retain one copy of manifest signed by generator and transporter? Yes No

d. Do returned copies of manifest include facility owner/operator signature and date of acceptance? Yes No

e. Does generator retain copies for 3 years? Yes No

Section C - Hazardous Waste Determination

1. Does generator generate solid waste(s) listed in Subpart D (List of Hazardous Waste)? Yes No

a. If yes, list waste and quantities (include EPA Hazardous Waste No.) P020

(continued)

EXHIBIT IV-4 (continued)

2. Does generator generate solid waste(s) listed in Subpart C that exhibit hazardous characteristics? (corrosivity, ignitability, reactivity, EP toxicity) Yes No
- a. If yes, list wastes and quantities (include EPA Hazardous Waste No.) _____
- b. Does generator determine characteristics by testing or by applying knowledge of processes? N/A
1. If determined by testing, did generator use test methods in Part 261, Subpart C (or equivalent)? Yes No
- a. If equivalent test methods used, attach copy of equivalent methods used.
3. Are there any other solid wastes generated by generators? Yes No
- a. If yes, did generator test all wastes to determine nonhazardous characteristics? Yes No
1. If no, list wastes and quantities deemed nonhazardous or processes from which nonhazardous waste was produced (use additional sheet if necessary).
-
-
-

Section D - Pretransport Requirements

1. Does generator package waste in accordance with 49 CFR 173, 178, and 179 (DOT requirements)? Yes No
2. a. Are containers to be shipped leaking or corroding? Yes No
- b. Use sheet to describe containers and condition.
- c. Is there evidence of heat generation from incompatible wastes in the containers? Yes No
3. Does generator follow DOT labeling requirements in accordance with 49 CFR 172? Yes No
4. Does generator mark each package in accordance with 49 CFR 172? Yes No
- (continued)

EXHIBIT IV-4 (continued)

5. Is each container of 110 gallons or less marked with the following label?

Yes No

Label saying: HAZARDOUS WASTE - Federal Law Prohibits Improper Disposal. If found, contact the nearest policy or public safety authority or the U.S. Environmental Protection Agency.

Generator name(s) and address(es) _____

Manifest document No. _____

6. Does generator have placards to offer to transporters?

Yes No

7. Accumulation time

- a. Are containers used to temporarily store waste before transport?

Yes No

1. If yes, is each container clearly dated: Also, fill out rest of No. 7 (accum. time)

Yes No

- b. 1. Does generator inspect containers for leakage or corrosion? (265.174 - Inspections)

Yes No

2. If yes, with what frequency?

weekly

- c. Does generator locate containers holding ignitable or reactive waste at least 15 meters (50 feet) from the facility's property line? (265.176 - Special Requirements for Ignitable or Reactive Wastes)

Yes No

NOTE: If tanks are used, fill out checklist for tanks.

N/A

- d. Are the containers labeled and marked in accordance with Section D-3, -4, and -5 of this form?

Yes No

NOTE: If generator accumulates waste on site, fill out checklist for General Facilities, Subparts C and D.

- e. Does generator comply with requirements for personnel training? (Attach checklist for 265.16 - Personnel Training.)

Yes No

8. Describe storage area. Use photos and narrative explanation sheet.

EXHIBIT IV-4 (continued)

Section E - Recordkeeping and Records

1. Does generator keep the following reports for 3 years?
- | | | |
|---|---|-----------------------------|
| a. Manifests and signed copies from designated facilities | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| b. Annual reports | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| c. Exception reports | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| d. Test results | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
2. Where are the records kept (at facility or elsewhere)? At Facility
3. Who is in charge of keeping the records?
Name Steve Boswell Title Env. Affairs Director

Section F - Special Conditions

1. Has generator received from or transported to a foreign source any hazardous waste? Yes No
- a. If yes, has he filed a notice with the Regional Administrator? Yes No
- b. Is this waste manifested and signed by a foreign cosignee? Yes No
- c. If generator transported wastes out of the country, has he received confirmation of delivered shipment? Yes No

EXHIBIT IV-2 (continued)

- b. 1. Artificial or natural barrier around facility (e.g., fence or fence and cliff)? Yes No

Describe _____

AND

2. Means to control entry through entrances (e.g., attendant, television monitors, locked entrance, controlled roadway access)? Yes No

Describe _____

General Inspection Requirements

5. Does the owner/operator maintain a written schedule at the facility for inspecting:

- a. Monitoring equipment? Yes No
b. Safety and emergency equipment? Yes No
c. Security devices: Yes No
d. Operating and structural equipment? Yes No
e. Types of problems of equipment:

1. Malfunction Yes No
2. Operator error Yes No
3. Discharges Yes No

6. Does the owner/operator maintain an inspection log? Yes No

- a. If yes, does it include:

1. Date and time of inspection? Yes No
2. Name of inspector? Yes No
3. Notation of observations? Yes No
4. Date and nature of repairs or remedial action? Yes No

- no record of leaking drum in inspection log*
b. Are there any malfunctions or other deficiencies not corrected? (Use narrative explanation sheet.) Yes No

Personnel Training

7. Does the owner/operator maintain personnel training records at the facility? Yes No

(continued)

EXHIBIT IV-2 (continued)

How long are they kept? Min. of 3 yrs

a. If yes, do they include:

- | | | |
|--|---|-----------------------------|
| 1. Job title and written job description of each position? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| 2. Description of type and amount of training? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |
| 3. Records of training given to facility personnel? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No |

Requirements for Ignitable, Reactive, or Incompatible Waste

8. Does facility handle ignitable or reactive wastes? N/A
 Yes No

a. If yes, is waste separated and confined from sources of ignition or reaction (open flames, smoking, cutting and welding, hot surfaces, frictional heat), sparks (static, electrical, or mechanical), spontaneous ignition (e.g., from heat-producing chemical reactions), and radiant heat?

1. If yes, use narrative explanation sheet to describe separation and confinement procedures.
2. If no, use narrative explanation sheet to describe sources of ignition or reaction.

b. Are smoking and open flame confined to specifically designated locations? Yes No

c. Are "No Smoking" signs posted in hazardous areas? Yes No

d. Are precautions documented (Part 264 only)? Yes No

9. Check containers

a. Are containers leaking or corroding? Yes No

b. Is there evidence of heat generation from incompatible wastes? Yes No

Section B - Preparedness and Prevention

1. Is there evidence of fire, explosion, or contamination of the environment? Yes No

If yes, use narrative explanation sheet to explain.

(continued) Soil staining

EXHIBIT IV-2 (continued)

2. Is the facility equipped with:

- a. Internal communication or alarm system? Yes No
 - 1. Is it easily accessible in case of emergency? Yes No
- b. Telephone or two-way radio to call emergency response personnel? Yes No
- c. Portable fire extinguishers, fire control equipment, spill control equipment, and decontamination equipment? Yes No
- d. Water of adequate volume for hoses, sprinklers, or water spray system? Yes No

1. Describe source of water _____

- 3. Is there sufficient aisle space to allow unobstructed movement of personnel and equipment? Yes No
- 4. Has the owner/operator made arrangements with the local authorities to familiarize them with characteristics of the facility? (Layout of facility, properties of hazardous waste handled and associated hazards, places where facility personnel would normally be working, entrances to roads inside facility, possible evacuation routes.) Yes No
- 5. In the case that more than one police or fire department might respond, is there a designated primary authority? Yes No
 - a. If yes, name primary authority Vicksburg
- 6. Does the owner/operator have phone numbers of and agreements with State emergency response teams, emergency response contractors, and equipment suppliers? Yes No
 - a. Are they readily available to all personnel? Yes No
- 7. Has the owner/operator arranged to familiarize local hospitals with the properties of hazardous waste handled and types of injuries that could result from fires, explosions, or releases at the facility? Yes No
- 8. If State or local authorities decline to enter, is this entered in the operating record? Yes No

N/A

(continued)

EXHIBIT IV-2 (continued)

Section C - Contingency Plan and Emergency Procedures

- 1. Is a contingency plan maintained at the facility? Yes No
 - a. If yes, is it a revised SPCC Plan? Yes No
 - b. Does contingency plan include:
 - 1. Arrangements with local emergency response organizations? Yes No
 - 2. Emergency coordinators' names, phone numbers, and addresses? Yes No
 - 3. List of all emergency equipment at facility and descriptions of equipment? Yes No
 - 4. Evacuation plan for facility personnel? Yes No
- 2. Is there an emergency coordinator on site or on call at all times? Yes No

Plan being revised and updated.

Section D - Manifest System, Recordkeeping, and Reporting

- 1. Does facility receive waste from offsite? Yes No
 - a. If yes, does the owner/operator retain copies of all manifests? Yes No
 - 1. Are the manifests signed and dated and returned to the generator? Yes No
 - 2. Is a signed copy given to the transporter? Yes No
- 2. Does the facility receive any waste from a rail or water (bulk shipment) transporter? Yes No
 - a. If yes, is it accompanied by a shipping paper? Yes No
 - 1. Does the owner/operator sign and date the shipping paper and return a copy to the generator? Yes No
 - 2. Is a signed copy given to the transporter? Yes No
- 3. Has the owner/operator received any shipments of waste that were inconsistent with the manifest (manifest discrepancies)? Yes No
 - a. If yes, has he attempted to reconcile the discrepancy with the generator and transporter? Yes No
 - 1. If no, has Regional Administrator been notified? Yes No

N/A

(continued)

Inspector: _____
Address: _____
Telephone No: _____

RCRA LAND DISPOSAL RESTRICTION
GENERATOR CHECKLIST

I. HANDLER IDENTIFICATION

A. Handler Name Cedar Chemical - Vicksburg B. Street (or other identifier) _____
C. City Vicksburg D. State Ms E. Zip Code _____ F. County Name _____

G. Nature of Business; Identification of Operations: SIC Code(s) _____

H. EPA ID # MSD 990 714 081

I. Handler Contact (Name and Phone Number) Steve Boswell (601) 636-1231

II. GENERATOR COMPLIANCE

Comments

A. Waste Identification

1. F-Solvents

a. Does the handler generate the following wastes?

- (i) F001, F002, F004, or F005 Yes No
- (ii) F003 Yes No

If an F003 wastestream (listed solely for ignitability) has been mixed with a non-restricted solid or hazardous waste, does the resultant mixture exhibit the ignitability characteristic? Yes No

N/A

b. Source of the above: Form 8700-12 ; Part A _____; Part B _____; Biennial/Annual Reports _____ other (specify) _____

Appendix A is intended to assist the inspector and enforcement official in determining whether the facility is generating F-solvent wastes, if such wastes were not identified by the facility previously. If you are concerned that F-solvent wastes may be misclassified or mislabeled, turn to Appendix A-1. To assist in identifying potentially

misclassified F-solvents, Appendix A-2 presents a list of corresponding F and U wastes. Note concerns below: _____

2. Dioxin wastes

a. Does the handler report the generation of the following wastes? (The following industries may generate listed dioxin wastes: organic chemicals, pesticide or formulator.)

- (i) F020 - F023, F026 - F027 Yes No
- (ii) F028 Yes No

[F-solvent BDAT standards are presented as Appendix B]

3. California Waste Identification

a. Does the facility handle any of the following wastes?

- (i) D002 Yes No
- (ii) D004 - D011 Yes No

b. Does the generator handle any hazardous wastes characterized by high concentrations of halogenated organic constituents (HOCs), metals, or cyanides?

- Yes No

[California waste standards are presented as Appendix C]

c. Is the generator handling any of the F, K, P, or U wastes subject to the "soft hammer" that may qualify as California wastes due to HOC, metals, or cyanide content? See Appendix D for a listing of California constituents likely to be found by waste code.

- Yes No

d. Has the generator conducted the paint filter test (Method 9095) [§268.32(i)]?

- Yes No*

e. Has the generator conducted any testing of these hazardous wastes to determine whether the concentrations qualify the hazardous wastes as California wastes?

- Yes No

If no, has the generator retained records documenting his "applied knowledge" that the hazardous waste is not a California waste?

- Yes No

~ A potential violation is indicated

Comments

If "no" is answered to both parts of this question, a violation is indicated. [§268.7(a)]

Describe the nature of the records:

MSDS

- f. Source of the above: Form 8700-12 _____; Part A _____; Part B _____; Biennial/Annual Report _____; other (specify) Records.

4. First Third Waste Identification

- a. Does the generator handle any of the wastes listed as First Third Wastes in §268.10? See Appendix E for listing. List First Third Wastes handled by the generator here:

P020

- b. Does the generator handle any soft-hammer wastes (Appendices D-1, D-2, and F)? If so, list those wastes:

P020

- c. Are any of the soft-hammered wastes California wastes (see Appendix G)? Yes No

If yes, the wastes must meet BDAT standards prior to disposal.

- d. Has the Regional Administrator received demonstrations/certifications for all soft hammered wastes to be land disposed [§268.8(a)(2)]? Yes No*

- e. Source of the above: Form 8700-12 _____; Part A _____; Part B _____; Biennial/Annual Report _____; other (specify) records

B. BDAT Treatability Group - Treatment Standards Identification

N/A

1. Does the generator mix restricted wastes with different treatment standards for constituents of concern? Yes No
2. If yes, did the generator select the most stringent treatment standard for the constituent of concern [§268.41(b)]? Yes No*

2/ A potential violation is indicated

Comments

3. F Solvents - -

a. Did the generator correctly determine the appropriate treatability group [§268.41] of the waste (e.g., wastewaters containing solvents, nonwastewater (i.e., < 1% TOC), pharmaceutical wastewaters containing spent methylene chloride, all other spent solvent wastes)?
 Yes No*

4. California Wastes

a. Did the generator correctly determine the distinction between liquid hazardous wastes and non-liquid hazardous wastes that contain HOCs in concentrations greater than 1,000 mg/kg [§268.32(h)]?
 Yes No*

5. First Third Wastes

a. Did the generator ascertain whether restricted wastes were appropriately assigned wastewater or nonwastewater designations (nonwastewaters are > 1% TOC and > 1% suspended solids) [§268.7(a)]?
 Yes No*

b. Does the facility handle K061 wastes?
 Yes No

If yes, were nonwastewaters appropriately classified in either the high or low zinc subcategories (>15% Zn) [§268.7(a)] [§268.41(a)]?
 Yes No*

c. Does the facility handle K101 or K102 wastes?
 Yes No

If yes, were nonwastewaters appropriately classified in either the high or low arsenic subcategories [§268.7(a)] [§268.41(a)]?
 Yes No*

d. Is there any reason to believe that the generator may have diluted the waste to change the applicable treatment standard (based on review of process operation, pipe routing, point of sampling)?
 Yes No

2/ A potential violation is indicated

Comments

C. Waste Analysis

1. Did the generator determine whether the waste exceeds treatment standards based on §268.7(a):

a. Knowledge of wastes Yes No

(i) List wastes for which "applied knowledge" was used:

b. TCLP Yes No

(i) List wastes for which "TCLP" was used:

(ii) Appendix D lists wastes for which treatment standards are expressed as concentrations in waste extract. Were any wastes handled by the generator subject to waste extract standards not tested using the TCLP? Yes No

If yes, list: _____

c. Total waste analysis Yes No

d. If files were retained, describe content and basis of applied knowledge determination:

If determined by TCLP or total constituent analysis, provide date of last test, frequency of testing, and attach test results.

Dates/frequency: _____

Note which wastes were subjected to which tests:

P020

Note any problems (e.g., inadequate analysis, variation of waste composition/generation for applied knowledge) _____

N/A

⚠ A potential violation is indicated

Comments

e. Were wastes tested using TCLP or total constituent analysis when a process or wastestream changed [§264.13(a)(3)(i) or §265.13(a)(3)(i)]? *N/A*
 Yes No*

2. Did the restricted wastes exceed applicable treatment-ability group treatment standards upon generation [§268.7(a)(1)]? *N/A*

List those that exceeded standards: _____

List those that did not exceed standards: _____

3. Did the generator dilute the waste or the treatment residual so as to substitute for adequate treatment [§268.3] *N/A*
 Yes* No

D. Management

1. Onsite management

a. Were restricted wastes managed onsite? Yes No

If no, go to "2".

b. For wastes that exceed treatment standards, was treatment in regulated units, storage for greater than 90 days, and/or disposal conducted? Yes No

If yes, TSDf checklist must be completed.

2. Offsite Management

a. If restricted wastes exceed treatment standards, did generator provide treatment facility notification with each shipment? [268.7(a)(1)]:

(i) EPA Hazardous Waste Number? Yes No*

(ii) Corresponding treatment standard? Yes No*

(iii) Manifest number? Yes No*

(iv) Waste analysis, if available? Yes No

*/ A potential violation is indicated

Comments

Identify offsite treatment facilities _____
EnSCO - Eldorado, Ark

- b. If restricted wastes do not exceed treatment standards, did generator provide the disposal facility with a notice and certification including: N/A
- (i) EPA hazardous waste I.D. number? Yes No*
 - (ii) Corresponding treatment standard? Yes No*
 - (iii) Manifest number Yes No*
 - (iii) Certification regarding waste and that it meets treatment standards? Yes No*

Identify land disposal facilities receiving the BDAT certified wastes _____

- c. If the generator's waste is subject to a §268.5 case by case exemption, a §268.6 "no migration" exemption, or a nationwide variance (see Appendix E for restricted wastes subject to nationwide variances), does the generator's records indicate that he or she submits with each waste shipment [§268.7(a)(3)]: N/A
- (i) EPA Hazardous Waste Number? Yes No*
 - (ii) Corresponding Treatment Standards? Yes No*
 - (iii) All applicable prohibitions? Yes No*
 - (iv) The manifest number? Yes No*
 - (v) The date the wastes are subject to prohibitions? Yes No*
 - (vi) Does generator keep records of all notifications/certifications send to offsite facilities? Yes No*

⚡ A potential violation is indicated

Comments

List all prohibited wastes for which records are not provided per above [§268.7(a)(b):

Identify TSDFs receiving any prohibited wastes subject to any exemptions and variances:

d. If handler generates a "soft hammer" waste, does the generator send with each "soft hammer" waste shipment to a TSDF and retain copies of, a notice that includes [268.7(a)(4)]:

The EPA Hazardous Waste Number? Yes No*

Applicable prohibitions? Yes No*

The manifest number? Yes No*

Waste analysis data, where available? Yes No

(i) Do the generator's records indicate that any soft-hammer wastes are destined for disposed in a landfill or surface impoundment [§268.33(f)]? Yes No

If yes, list facility of destination and waste of concern [§268.8(a)(2)]

(ii) Has the generator submitted demonstrations and certifications for each "soft-hammered" waste destined to be disposed in landfill or surface impoundment to the Regional Administrator prior to the shipment of waste to the TSDF [§268.7(a)(2)]? Yes No*

(iii) Has the generator retained a copy of the demonstration on site [§268.8(a)(3)-(a)(4)]? Yes No*

(iv) Has the generator retained copies of all §268.8 certifications sent to the TSDF [§268.7(a)(6)]? Yes No*

2/ A potential violation is indicated

Comments

(v) Did the generator submit the demonstration to the receiving facility upon the initial shipment of the waste [§268.8(a)(3)-(a)(4)]? Yes No*

(vi) If the Regional Administrator has invalidated the certification, has the generator ceased shipment of the waste and do records indicate that the generator has informed all receiving facilities of the invalidation [§268.8(b)(3)]? Yes No* N/A

E. Storage of Prohibited Waste

1. Were prohibited wastes stored for greater than 90 days? Yes No

If yes, was facility operating as a TSD under interim status or final permit [§262.34(b)]? Yes No*

If yes, TSDF Checklist must be completed.

(. Treatment Using RCRA 264/265 Exempt Units or Processes (i.e., boilers, furnaces, distillation units, wastewater treatment tanks, etc.) N/A

1. Were treatment residuals generated from RCRA 264/265 exempt units or processes? Yes No

If yes, list type of treatment unit and processes

If yes, TSDF checklist must be completed.

2/ A potential violation is indicated

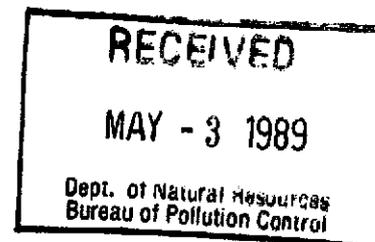
CEDAR CHEMICAL CORPORATION

24th Floor • 5100 Poplar Avenue • Memphis, TN 38137 • 901-685-5348

REPLY TO: P. O. BOX 3
VICKSBURG, MS 39180
(601) 636-1231

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
P 677 981 815

Mr. Toby M. Cook, P.E.
Hazardous Waste Division
Bureau of Pollution Control
2380 Highway 80 West
Jackson, MS 39204



April 27, 1989

Re: Compliance Evaluation Inspection of February 1, 1989

Dear Mr. Cook:

In your letter of April 18, 1989, and the RCRA Inspection Report which accompanied it, two conclusions were stated.

The first that Cedar was in apparent violation of MHWMR 265.15 for failing to note leaking drums and remedial measures in the inspection log. The conclusion must be considered correct. Although Cedar did notify the Bureau of the condition and did properly dispose of the drums, it is not so noted in the log. Inspection reporting and recording procedures have been re-iterated to operating personnel.

The second conclusion that Cedar did not have a current contingency plan must be considered technically correct. Cedar has ceased to manufacture organic chemicals at the Vicksburg facility. Cedar was and is in the process of revising the contingency plan to make it current. Further revisions will occur as existing stocks of chemicals are removed from the site. The firm, International Technology, has been retained to expedite the revision.

If there are further questions concerning this matter, please contact me.

Sincerely,

A handwritten signature in dark ink, appearing to read "Steven T. Boswell".

Steven T. Boswell
Director of Env. Affairs

STB: pc

xc: Mr. Ahlers
Mr. Madsen

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4.

Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

1. Show to whom delivered, date, and addressee's address. 2. Restricted Delivery
†(Extra charge)†

3. Article Addressed to:

Mr. Steven T. Boswell
Cedar Chemical Corporation
P. O. Box 2
Vicksburg, Mississippi 39130

JR

4. Article Number

P 879 759 048

Type of Service:

- Registered Insured
 Certified COD
 Express Mail

Always obtain signature of addressee or agent and **DATE DELIVERED**.

8. Addressee's Address (**ONLY** if requested and fee paid)

5. Signature — Addressee

X

6. Signature — Agent

X

7. Date of Delivery

8-20-89

UNITED STATES POSTAL SERVICE

OFFICIAL BUSINESS

SENDER INSTRUCTIONS

- Print your name, address, and ZIP Code in the space below.
- Complete items 1, 2, 3, and 4 on the reverse.
 - Attach to front of article if space permits, otherwise affix to back of article.
 - Endorse article "Return Receipt Requested" adjacent to number.



PENALTY FOR PRIVATE
USE, \$300

Print Sender's name, address, and ZIP Code in the space below.

RETURN
TO 

DEPT. OF NATURAL RESOURCES
BUREAU OF POLLUTION CONTROL
P. O. BOX 10385
JACKSON MS 39209



MISSISSIPPI DEPARTMENT OF NATURAL RESOURCES
Bureau of Pollution Control
P. O. Box 10385
Jackson, Mississippi 39209
(601) 961-5171



April 18, 1989

CERTIFIED MAIL NO. P 879 759 048

FILE COPY

Mr. Steven T. Boswell
Director of Environmental Affairs
Cedar Chemical Corporation
P. O. Box 3
Vicksburg, Mississippi 39180

Dear Mr. Boswell:

Re: Compliance Evaluation
Inspection
Cedar Chemical Corp.
MSD990714081

Enclosed for your review are copies of the inspection report and inspection checklists generated as a result of the February 1, 1989, Compliance Evaluation Inspection of your facility.

Please note the apparent violations of the Mississippi Hazardous Waste Management Regulations listed under item 10 of the inspection report. Cedar Chemical must submit a written response to this office regarding the apparent violations within ten (10) days of receipt of this letter.

If you have any questions, please contact me at (601) 961-5171.

Sincerely,

A handwritten signature in cursive script that reads "Toby M. Cook".

Toby M. Cook, P.E.
Hazardous Waste Division

TMC:lr
Enclosures
cc: Mr. James H. Scarbrough, EPA

CLEAR CHEMICAL CORPORATION

SUITE 2414 • 5100 POPLAR • MEMPHIS, TN 38137

CHECK NUMBER 02078

87-6047642
FIRST TENNESSEE BANK, N.A.

February 16 19 88

THE SUM **750.00**

PAY _____ DOLLARS \$750.00

TO THE ORDER OF

Mississippi Dept. of Natural Resources
Bureau of Pollution Control
P.O. Box 10385 - Southport Mall
Jackson, MS 39209

John [Signature]

⑆002629⑆ ⑆064208042⑆

⑆006626⑆

March 1, 1988

Re: Consent Order No. 1316 88

Dear Mr. Chisolm:

Please find enclosed with this letter a check in the amount of \$750.00 payable to the Mississippi Dept. of Natural Resources as required by the above referenced Order.

If there are any questions concerning this matter, please contact me.

Sincerely,

Steven T. Boswell

Steven T. Boswell
Director of Env. Affairs

STB: pc

FILE COPY

January 15, 1988

Mr. Fred Ahlers, Plant Manager
Vicksburg Chemical Corporation
P. O. Box 3
Vicksburg, Mississippi 39180

Dear Mr. Ahlers:

Re: Proposed Penalty
Vicksburg Chemical Corporation
MSD990714081

Enclosed are copies of the proposed penalty computations resulting from the Bureau's November 17, 1987, hazardous waste generator inspection of your facility. Also enclosed is a copy of the Hazardous Waste Program Enforcement Policy document including the penalty assessment matrix used to calculate the proposed penalty.

If you have any questions, please contact me at 961-5171.

Sincerely,

Jack McCord
Hazardous Waste Division

JEM:sae
Enclosures
cc: Steven Boswell, Vicksburg Chemical (w/enclosures)

PENALTY COMPUTATION WORKSHEET

Company Name: Vicksburg Chemical Corporation

Regulation Violated MFRMR 262.34(a)(2)

Assessments for each violation should be determined on separate worksheets and totalled.

(If more space is needed, attach separate sheet.)

Part I - Seriousness of Violation Penalty

1. Potential for Harm: Minor

2. Extent of Deviation: Minor

3. Matrix Cell Range: \$100 - \$499

Penalty Amount Chosen: \$300

Justification for Penalty Amount Chosen: SEE ATTACHMENT

4. Per-Day Assessment: NA

Part II - Penalty Adjustments

	<u>Percentage Change*</u>	<u>Dollar Amount</u>
1. Good faith efforts to comply/lack of good faith:	<u>NA</u>	<u>-0-</u>
2. Degree of willfulness and/or negligence:	<u>NA</u>	<u>-0-</u>
3. History of noncompliance:	<u>+25%</u>	<u>\$75</u>
4. Other unique factors:	<u>NA</u>	<u>-0-</u>
5. Justification for Adjustments:		

* Percentage adjustments are applied to the dollar amount calculated on line 4, Part I.

PENALTY COMPUTATION WORKSHEET (cont.)

6. Adjusted Per-day Penalty (Line 4, Part I + Lines 1-4, Part II):	<u>NA</u>
7. Number of Days of Violation:	<u>NA</u>
8. Multi-day Penalty (Number of days x Line 6, Part II):	<u>NA</u>
9. Economic Benefit of Noncompliance:	<u>NA</u>
Justification: NA	
10. Total (Lines 8 + 9, Part II):	<u>375</u>
11. Ability to Pay Adjustment:	
Justification for Adjustment:	<u>NA</u>
12. Total Penalty Amount (must not exceed \$25,000 per day of violation):	<u>\$375</u>

PROPOSED PENALTY
VICKSBURG CHEMICAL CORPORATION
MSD990714081

<u>Violation</u>	<u>Potential for Harm/Extent of Deviation</u>		<u>Amount</u>
262.34(a)(2)	Minor	/ Minor	\$375.00

Part I - Justification:

Potential for Harm - Minor

The two drums lacking accumulation dates were in good condition and showed no evidence of leaking. If leaks did occur they would be contained by dikes and sumps.

Extent of Deviation - Minor

All but two drums had accumulation dates. The violation was corrected immediately. The facility contends that the drums were dated but the dates had washed off in the major storm that occurred the previous day.

Part II - Justification:

History of Noncompliance -

The facility has a history of violations in their drum storage area. On January 28, 1987, the Mississippi Commission on Natural Resources levied a monetary penalty of \$1,000.00 for failure to mark hazardous waste drums with the beginning accumulation dates and the words "hazardous waste". On April 22, 1987, the Commission levied a monetary penalty of \$750.00 for storing hazardous waste in improper containers and in containers not properly closed.

PENALTY COMPUTATION WORKSHEET

Company Name: Vicksburg Chemical Corporation

Regulation Violated MREWR 262.34(a)(3)

Assessments for each violation should be determined on separate worksheets and totalled.

(If more space is needed, attach separate sheet.)

Part I - Seriousness of Violation Penalty

1. Potential for Harm: Minor

2. Extent of Deviation: Minor

3. Matrix Cell Range: \$100 - \$499

Penalty Amount Chosen: \$300

Justification for Penalty Amount Chosen: SEE ATTACHMENT

4. Per-Day Assessment: NA

Part II - Penalty Adjustments

	<u>Percentage Change*</u>	<u>Dollar Amount</u>
1. Good faith efforts to comply/lack of good faith:	<u>NA</u>	<u>0</u>
2. Degree of willfulness and/or negligence:	<u>NA</u>	<u>0</u>
3. History of noncompliance:	<u>+ 25%</u>	<u>\$75</u>
4. Other unique factors:	<u>NA</u>	<u>0</u>
5. Justification for Adjustments:		

* Percentage adjustments are applied to the dollar amount calculated on line 4, Part I.

PENALTY COMPUTATION WORKSHEET (cont.)

6. Adjusted Per-day
Penalty (Line 4,
Part I + Lines
1-4, Part II):

NA

7. Number of Days of
Violation:

NA

8. Multi-day Penalty
(Number of days x
Line 6, Part II):

NA

9. Economic Benefit of
Noncompliance:

NA

Justification: NA

10. Total (Lines 8 + 9, Part II):

\$ 375

11. Ability to Pay Adjustment:

Justification for
Adjustment:

NA

12. Total Penalty Amount
(must not exceed \$25,000
per day of violation):

\$ 375

PROPOSED PENALTY
VICKSBURG CHEMICAL CORPORATION
MSD990714081

<u>Violation</u>	<u>Potential for Harm/Extent of Deviation</u>		<u>Amount</u>
262.34(a) (3)	Minor	/ Minor	\$375.00

Part I - Justification:

Potential for Harm - Minor

The drums did not contain any free liquids. The waste is not shipped in containers. The contents of the drums are emptied into bulk containers and then shipped off site for disposal.

Extent of Deviation - Minor

All but two of the drums were labeled with the words "hazardous waste". One of those two drums was marked as containing "dinitro waste".

Part II - Justification:

History of Noncompliance -

The facility has a history of violations in their drum storage area. On January 28, 1987, the Mississippi Commission on Natural Resources levied a monetary penalty of \$1,000.00 for failure to mark hazardous waste drums with the beginning accumulation dates and the words "hazardous waste". On April 27, 1987, the Commission levied a monetary penalty of \$750.00 for storing hazardous waste in improper containers and in containers not properly closed.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30365

4WD-RCRA

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Steven Boswell
Director of Environmental Affairs
Cedar Chemical Corporation, Vicksburg Facility
Post Office Box 3
Rifle Range Road
Vicksburg, Mississippi 39180

Re: Compliance Monitoring Evaluation (CME)
EPA ID No.: MSD990714081

Dear Mr. Boswell:

Enclosed please find a copy of the report generated following EPA's CME conducted during the week of November 16, 1987. This document is provided to you per the requirements of Section 3007 of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. §6927.

If you have any questions regarding the report, please contact Jeaneanne M. Gettle of my staff at (404) 347-7603.

Sincerely yours,

A handwritten signature in blue ink, appearing to read "Allan E. Antley".

Allan E. Antley, Chief
Waste Compliance Section
RCRA Branch

cc: w/enclosure

Sam Mabry - MSDNR

U. S. ENVIRONMENTAL PROTECTION AGENCY
REGION IV, ATHENS, GEORGIA

DOT IR

DATE: FEB 10 1988

SUBJECT: Transmittal of CME Report, Vicksburg Chemical,
Vicksburg, Mississippi, EPA ID No. MSD990714081,
ESD Project No. 88-054

FROM: S. E. Matthews, Hydrogeologist
Hazardous Waste Section
Environmental Compliance Branch
Environmental Services Division

*SEM
2/10/88*

TO: Allan Antley, Chief
Waste Compliance Section
RCRA Branch
Waste Management Division

M. D. Lair

THRU: M. D. Lair, Chief
Hazardous Waste Section
Environmental Compliance Branch
Environmental Services Division

Please find attached the subject report. A copy of the report has been requested by:

Mr. Steven Boswell
Director of Environmental Affairs
Cedar Chemical Corp., Vicksburg Facility
P. O. Box 3
Rifle Range Road
Vicksburg, Mississippi 39180

Mr. Jack McCord
Mississippi Department of Natural Resources
Bureau of Pollution Control
P. O. Box 10385
Jackson, Mississippi 39209

Attachment

cc: Finger/Guinyard
Lair/Hall
Knight

RECEIVED
EPA/REGION IV
FEB 12 1 05 PM '88
HASH
COMPLIANCE SECTION

COMPREHENSIVE GROUND WATER MONITORING EVALUATION (CME)
INTERIM STATUS INSPECTION (ISS)
VICKSBURG CHEMICAL
VICKSBURG, MISSISSIPPI
EPA ID No. MSD990714081
ESD PROJECT No. 88-054
FEBURARY 1988

AUTHOR: S. E. MATTHEWS

INTRODUCTION

Ms. Celeste Franta, Mr. John Schoolfield and Ms. Sharon Matthews, U. S. Environmental Protection Agency, Region IV, Environmental Services Division, Environmental Compliance Branch, Hazardous Waste Section, conducted a comprehensive ground water monitoring evaluation (CME) and an interim status inspection (ISS) at the Vicksburg Chemical Corporation in Vicksburg, Mississippi during the week of November 16, 1987. Mr. Steve Boswell represented the facility during the inspection. Mr. Jack McCord of the Mississippi Department of Natural Resources was also present during the first day of the inspection.

The CME/ISS was requested by the EPA Region IV Waste Compliance Section to evaluate the compliance and adequacy of the present ground water monitoring system at the site. The system was evaluated with respect to the 40 CFR Part 265, Subpart F requirements and to determine the water quality of ground water samples collected at selected RCRA monitoring wells. The interim status inspection was performed by Mr. Schoolfield and consisted of an office file review and a walk-through of the facility.

BACKGROUND

Facility/Locale

The facility is located on Business Route 61 south of Vicksburg, Mississippi (see Figure 1). The facility is separated into two plants referred to as the South Plant and the North Plant. The North Plant produces nitrogen tetroxide, chlorine and potassium nitrate. The South Plant produces (or has produced) nitric acid and a wide variety of organic chemicals including: 2-sec-butyl-4, 6-dinitrophenol (DNBP/dinoseb), methyl parathion, atrazine, dimethyl urea, toxaphene, isopropyl amine, monosodium methanearsonate (MSMA) and cyanuric chloride.

There is a surface impoundment at the North Plant that is not regulated at the present time. The facility maintains this unit is a surge pond and is slightly acidic.

The South Plant's dinitrobutyl phenol (DNBP)(dinoseb) process produces manufacturing process wastewater. The wastewater is stored in a 3 million gallon surface impoundment that is about 1/2 acre in size. The impoundment ranges from 10 to 15 feet deep and is divided into 3 subsections by finger dikes. This impoundment receives a portion of the run-off from the South Plant as well as a wastewater stream from the North Plant. At one time, spills and leaks from the DNBP and toxaphene area were routed to the impoundment, as well as a wastewater stream from the toxaphene production area.

The facility has submitted a Part B application to receive a final permit to operate the impoundment. Several closure plans have been submitted to the State regarding the surface impoundment. Both the Part B applications and the closure plans have been inadequate or incomplete.

Geology/Hydrology

The following section is a synopsis of the geologic/hydrologic information contained in the IT Corporation Groundwater Assessment Program reports prepared for the Vicksburg Chemical facility.

Boring logs indicate the facility is underlain by:

- o A silty clay (fill) extending from the surface to a depth of less than 10 feet
- o a Pleistocene loess, characterized as silty clay extending from 10 to 50 feet below the surface
- o a marl (Bryam member of the Vicksburg formation) underlying the loess. This marl constitutes the bottom of the shallow aquifer. A thin layer (1-2 feet) of sandy clay - clayey sand overlies the marl in most locations.

IT contends that the aquifer is about 40 feet thick and consists almost exclusively of Pleistocene loess (silt). The aquifer exhibits a slight artesian property which indicates the clayey fill material overlying the loess acts as a cap inhibiting the vertical migration of ground water. IT states that since the loess is bounded below by an impermeable marl layer, that zone could be characterized as a confined aquifer.

Ground water flow velocities have been estimated to range from 0.01 to 0.18 ft/d. Transmissivities are on the order of 40 to 200 gal/d/ft. Hydraulic conductivities range from 1.93 to 5.52 gal/d/ft².

Ground water flow is generally toward either Stouts or Hennesseys Bayou. The ground water gradients are relatively low in the general plant area and increase in areas adjacent to the bayous. Water level measurements measured during the CME confirmed this flow direction. Figure 2 is a potentiometric map derived from the water level measurements made during the evaluation.

EVALUATION OF THE GROUND WATER MONITORING PROGRAM

The following is an evaluation of the ground water monitoring program implemented at the Vicksburg facility and is based on the CME checklist completed during the inspection. The checklist is included as Appendix B to this report.

The evaluation is presented systematically, addressing each of the standards found at 40 CFR Part 265, Subpart F. Deficiencies or inadequacies are numbered for future reference. If recommendations are appropriate, they are included.

40 CFR Part 265.90 - Applicability/Deadline

Vicksburg Chemical was required to install a ground water monitoring system around the surface impoundment. A detection monitoring system was installed in September - October, 1981.

40 CFR Part 265.91 - Ground Water Monitoring System

In 1981, monitoring wells 1, 2, 3 and 4 were installed at the facility (See Figure 3 for well locations). The wells were constructed of 4-inch PVC casing and ranged in depth from 20 to 40 feet. A 10-foot 0.010-inch slotted screen was placed in the bottom of each well. None of the wells had a concrete pad or protective casing. Mississippi DNR deemed these wells inadequate and four more wells (5, 6, 7 and 8) were installed in 1983.

These wells were constructed of 2-inch PVC casing and ranged in depth from 19 to 29 feet. A 5-foot 0.010-inch slotted screen was placed in the bottom of each well. None of the wells had a concrete pad or protective casing except MW-8.

As part of the assessment program, wells 9, 10, 11 and 12 were installed in 1985. These wells were constructed of 4-inch PVC with a 10-foot 0.010-inch slotted screen in the bottom of the well. Well depths ranged from 48 to 58 feet. All wells had some type of protective casing and a concrete pad, with the exception of well 12 which had no pad.

Well 1A was installed in 1986 to replace the upgradient well, which had shown contamination. Well 1A was 30 feet in depth and constructed of 4-inch PVC with 10 feet of 0.010-inch slotted screen in the bottom of the well. The well had a protective outer casing but no concrete pad.

Wells 13, 14 and 15 were also installed in 1986 as part of the assessment program. These wells ranged from 48 to 56 feet in depth and were constructed of 4-inch PVC with 10 feet of 0.010-inch slotted screen in the bottom of each well. All wells had a protective outer casing. Wells 13 and 15 had a concrete pad; well 14 did not. The surface completion details of all wells are shown in photographs found in Appendix E of this report. Table 1 summarizes the monitoring well data.

1. As noted previously, many of the wells had no protective casing. Concrete pads, when present, were minimal.

Recommendation - Concrete pads, sloped away from the well casing should be installed around all wells to prevent infiltration of surface water into the annulus. Protective outer casing should be installed around all wells. Wells in the low-lying flood-plain areas should have higher riser pipes. It was obvious that well 5 (casing stick-up 0.5 foot) had been under water. Well 3 was under water at the time of the inspection and could not be sampled. However, the casing stick-up of 4 feet for well 9 was too high to allow for easy access. Facility personnel stated that their sampling crew stood on a ladder while raising and lowering a 4-inch bailer to purge and sample the well. The casing stick-up should be reduced to allow for easier and safer access to well 9.

2. None of the wells were locked at the time of the CME. Some wells were mislabeled, while others had no well number at all.

Recommendation - Wells should be correctly numbered and kept locked when not in use.

3. It was not clear from information contained in the files how the wells were developed or for how long. The turbidity in some wells and the soft, muddy bottoms in most of the wells may indicate that the wells were not developed for an adequate amount of time.

Recommendation - Wells should be redeveloped until turbidity is removed and pH, specific conductivity and temperature stabilize.

4. According to well construction details, the bentonite pellets placed into the hole above the sand filter in the wells were allowed to swell for about 45 minutes before the annulus above the pellets was grouted with a cement-bentonite grout. Most manufacturers of bentonite recommend letting the pellets swell 12 to 24 hours before any material is placed on top of the pellets - otherwise, the pellets may not be stable enough to withstand any weight placed on top of them.
5. Drilling mud was used to flush cuttings from the wells. Composition of the mud is not given. It is also unknown if the wells were sufficiently developed to remove the drilling mud from the wells.
6. According to the January 1986 Assessment Report, glue was used to affix an additional 2 foot section of PVC pipe to monitoring wells 6 and 7. Glue should not be used in the construction of monitoring wells because of the organic compounds contained in the glue. Also, PVC is not recommended for well construction. Stainless steel or teflon may be more appropriate for future well installation.
7. Well Location - Wells 3, 5, 6 and 7 are downgradient of the surface impoundment. All other wells appear to be upgradient. As stated previously, well 3 had either been destroyed or covered by debris from flood waters at the time of the inspection. Wells 5, 6 and 7 are also located in the flood plain of Hennesseys Bayou. It was obvious that well 5 had been underwater because of the heavy rains on November 16, 1987, causing the Bayou to over-top its banks.

Wells 1, 1A, 2, 8, 9, 12, 13 and 14 are in close proximity to either the Vertac or Illinois Central railroad tracks - in some cases less than 20 feet away. Any spills, leaks, etc., from the railroad cars could be a possible source of contamination to the wells via surface water. Also, several of the wells are very close to the extensive piping system at the facility. Steam and chemical vapors such as ammonia were continually venting into the atmosphere near these wells. Some pipes leaked and/or drained into sumps very close to several of the wells. Surface water infiltration into the monitoring wells may cause contamination.

Wells 10, 11, and 15 appear to be upgradient of the surface impoundment, but directly downgradient of the railroad tracks. If

contamination is detected in these wells, it would be difficult to determine if the cause was from railroad leaks or spills, solid waste management units or other sources.

Background well, MW4, is located very close to the entrance of the North Plant. The well's proximity to the road leading into the facility may make it susceptible to contamination from leaks or spills of the tanker trucks entering and leaving the North Plant.

40 CFR Part 265.92 - Sampling and Analysis

8. According to facility personnel, there is no written sampling and analysis plan (SAP) delineating the procedures used in the field or the lab. The questions on the CME checklist (Appendix B) pertaining to the SAP were based on facility personnel's observations in the field. The facility is under an order from Mississippi to sample only for methylene chloride, dinitrobutyl phenol, toxaphene, and total arsenic. A 4-inch PVC bailer is used to purge and sample the wells. The same bailer is used for all wells and rinsed three times with deionized water between wells.

Recommendation - A more thorough cleaning procedure should be used on the bailer to prevent cross-contamination. A teflon bailer, dedicated for each well, would be the optimum choice but would be expensive considering that there are sixteen wells on-site. The facility is required to develop and follow a ground water sampling and analysis plan. This plan should be kept on-site at all times and must include procedures and techniques for:

- sample collection;
- sample preservation and shipment;
- analytical procedures; and
- chain-of-custody control.

40 CFR Part 265.93 - Preparation, evaluation and response

9. The facility has submitted several ground water assessment plans to Mississippi for review. These plans have been inadequate or incomplete to meet the requirement of 40 CFR Part 265.93. To date, the facility has not adequately addressed the rate or extent of contamination at the site.

40 CFR Part 265.94 - Recordkeeping and Reporting

10. As stated previously, information pertaining to the ground water monitoring system should be kept on-site. This would include the sampling and analysis plan, field notes made by the sampling team and copies of the chain-of-custody records.

INTERIM STATUS INSPECTION

The primary area of non-compliance was the drum storage area and the return product area. Some of the drums had no labels listing the contents or

the accumulation dates. Drums containing hazardous waste should be conspicuously marked. A berm should be installed around the drum storage area to prevent spills or leaks from leaving the area.

DATA EVALUATION

The following is a discussion of the results of analyses of samples collected from wells 9 and 5 during the CME. The complete data is included as Appendix A to the report. An analytical data summary is provided as Table 2.

Metals

Eleven metals, as indicated in Table 2, were detected in the samples collected from the wells. Most of the metals detected are normally associated with the mineralogy of the site. The National Secondary Drinking Water Regulation (NSDWR) of 50 ug/l for manganese was exceeded in wells 9 and 5 with 410 ug/l and 580 ug/l, respectively. The NSDWR of 0.3 mg/l for iron was exceeded in wells 9 and 5 with 0.59 mg/l and 7.8 mg/l, respectively.

Nitrate - Nitrite Nitrogen

Nitrate - Nitrite Nitrogen was detected in both wells 9 and 5. Well 9 had a concentration of 59 mg/l and well 5 had a concentration of 13 mg/l.

Extractable Organic Compounds

The only extractable organic compound detected was petroleum product. There was presumptive evidence of this material in both wells 9 and 5.

Pesticides/PCB's

No pesticide or PCB compound was detected in any of the samples.

Purgeable Organic Compounds

No purgeable organic compounds were detected in wells 9 or 5.

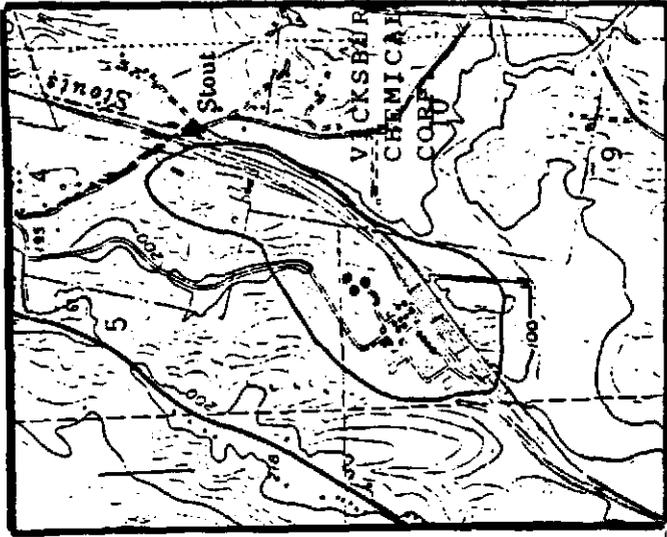
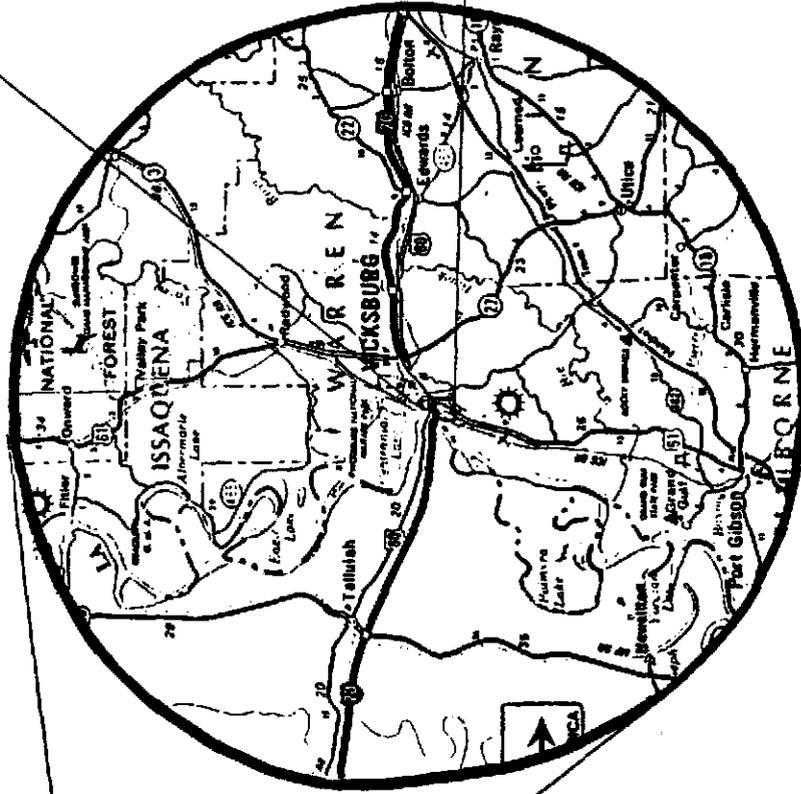
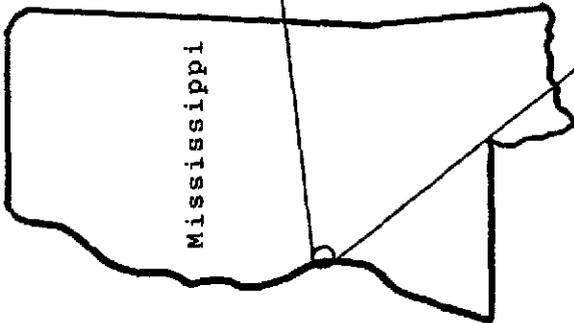
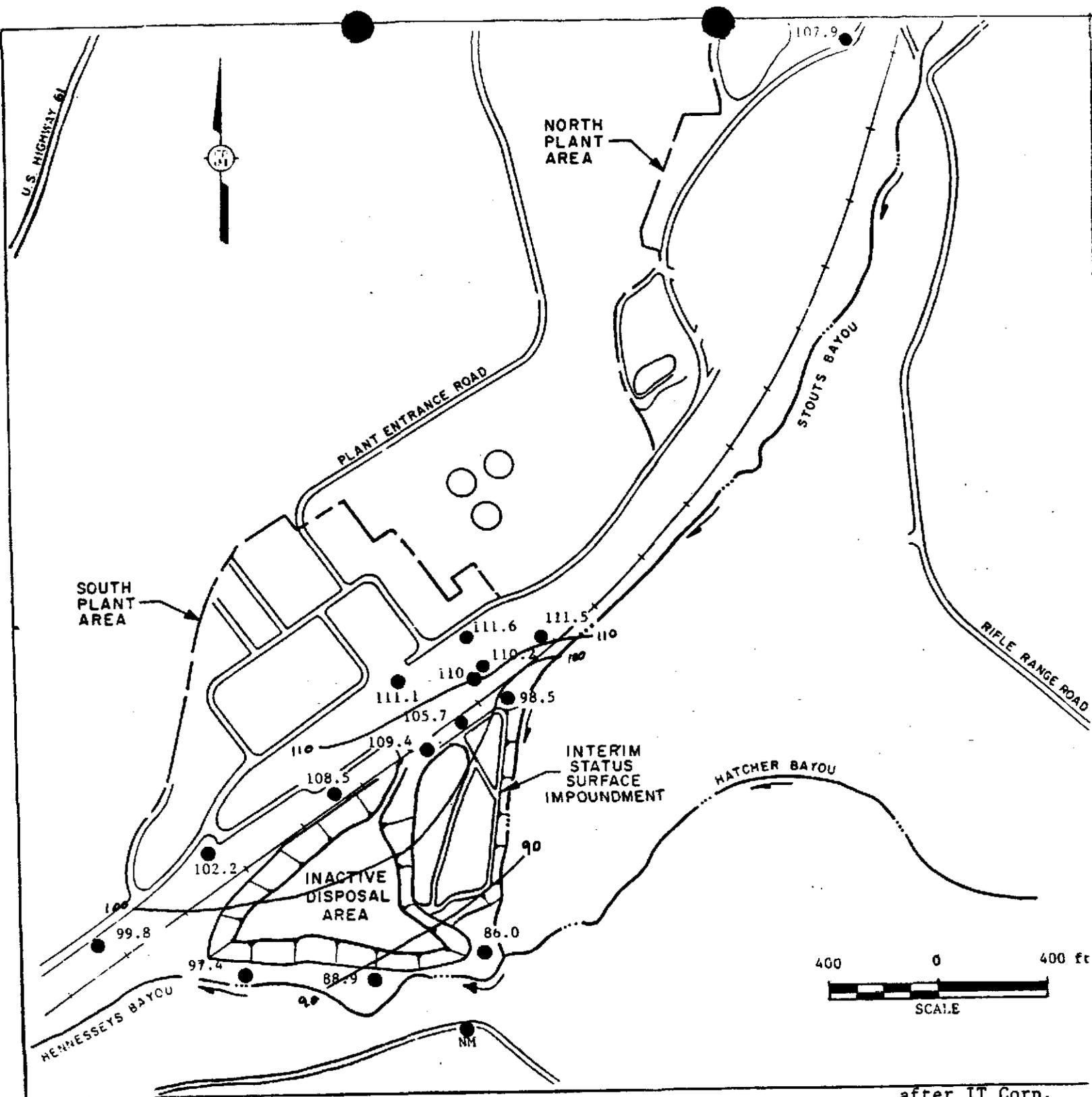
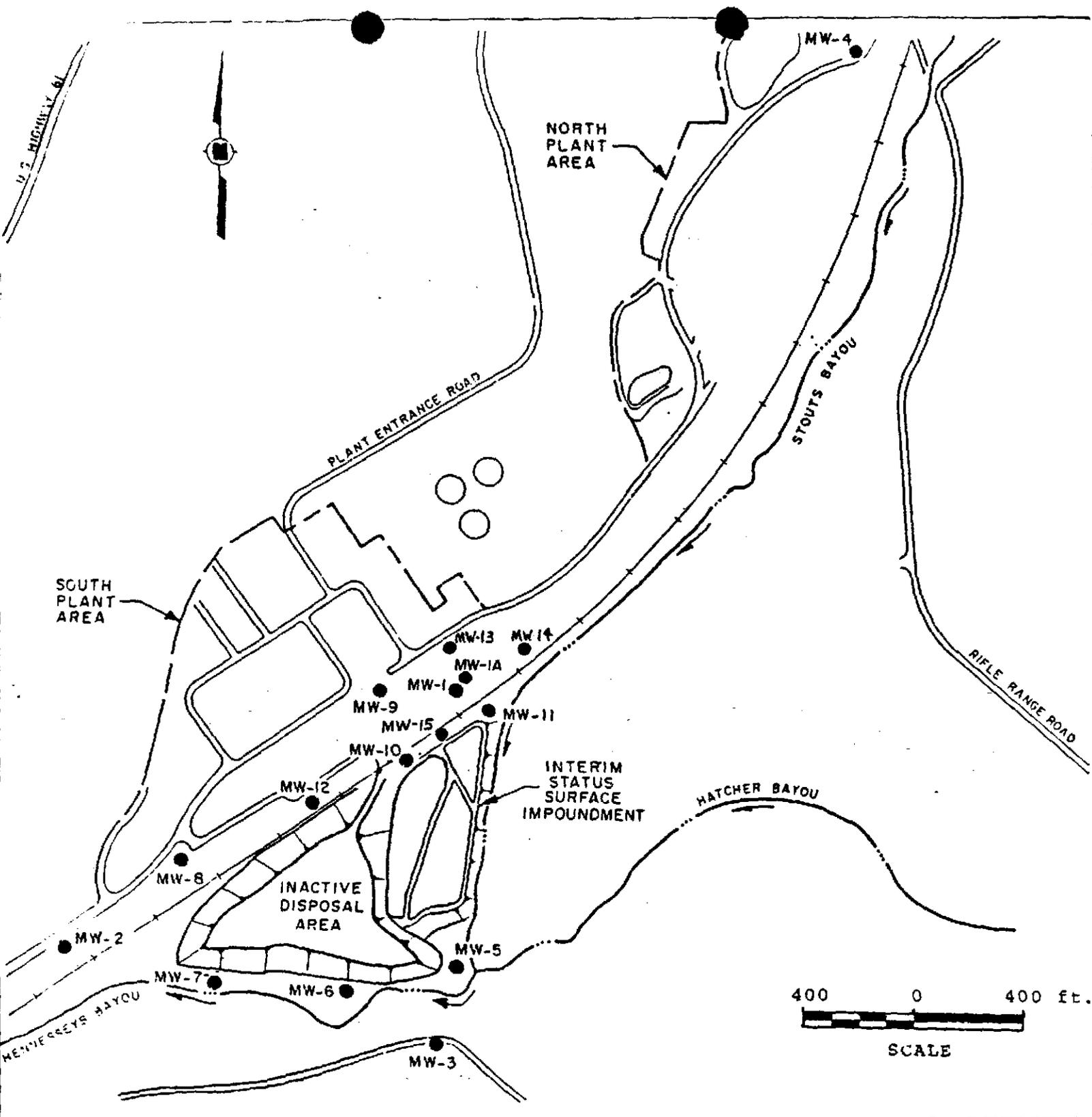


FIGURE 1
FACILITY LOCATION MAP
VICKSBURG CHEMICAL CORP.
VICKSBURG, MISSISSIPPI



after IT Corp.

FIGURE 2
 POTENTIOMETRIC MAP
 VICKSBURG CHEMICAL CORP.
 VICKSBURG, MISSISSIPPI



after IT Corp.

FIGURE 3
 WELL LOCATIONS
 VICKSBURG CHEMICAL CORP.
 VICKSBURG, MISSISSIPPI

TABLE 1
MONITORING WELL DATA
VICKSBURG CHEMICAL CORP.
VICKSBURG, MISSISSIPPI

Well Number	Year Drilled	Ground Elevation (ft. MSL)	Reported Depth in ft.	Measured Depth in ft. from top of casing	Casing Stick-up from ground surface in ft.	Water Level in ft. from top of casing	Water Level (relative to MSL)	Well Diameter and material	Screened Interval in ft. and material	Locked	Concrete Pad	Protective Casing	Remarks
MW 1	1981	111.55	30	32.1	1.4	2.91	110.04	4" PVC	20-30 PVC	no	no	no	soft bottom
MW 1A	1986	111.78	30	32.8	1.95	3.55	110.18	4" PVC	20-30 PVC	no	no	yes	soft bottom
MW 2	1981	107.57	40	39.82	0.7	8.5	99.77	4" PVC	30-40 PVC	no	no	no	soft bottom
MW 3	1981	98.44	30	--	---	---	---	4" PVC	20-30 PVC	no	--	--	(?) destroyed (?)
MW 4	1981	112.28	20	21.5	2.4	6.74	107.94	4" PVC	10-20 PVC	no	no	no	on North Plant
MW 5	1983	99.70	19	19.5	0.5	14.2	86.0	2" PVC	14-19 PVC	no	no	no	sampled
MW 6	1983	98.68	24.4	24.1	1.03	10.8	88.9	2" PVC	19-24 PVC	no	no	no	soft bottom
MW 7	1983	99.13	29.2	31.5	2.75	4.45	97.43	2" PVC	24-29 PVC	no	no	no	soft bottom
MW 8	1983	109.83	28.9	29.45	0.92	8.6	102.15	2" PVC	24-29 PVC	no	yes	yes	soft bottom
MW 9	1985	112.02	58.5	58.4	4.1	5.0	111.12	4" PVC	43-53 PVC	no	yes	yes	sampled
MW 10	1985	112.23	53.5	55.2	2.93	5.8	109.36	4" PVC	40-50 PVC	no	yes	yes	un-numbered
MW 11	1985	101.12	48.5	51.4	3.7	6.35	98.47	4" PVC	35-45 PVC	no	yes	yes	soft bottom
MW 12	1985	109.06	48.0	50.25	1.83	2.44	108.45	4" PVC	32-42 PVC	no	no	yes	standing water in annulus
MW 13	1986	113.78	50.0	52.8	2.7	4.9	111.58	4" PVC	40-50 PVC	no	yes	yes	soft bottom
MW 14	1986	114.25	56.0	59.4	3.9	6.7	111.45	4" PVC	38-48 PVC	no	no	yes	soft bottom
MW 15	1986	112.16	48.0	49.67	1.3	7.72	105.74	4" PVC	38-48 PVC	no	yes	yes	un-numbered

TABLE 2
ANALYTICAL DATA SUMMARY
VICKSBURG CHEMICAL
VICKSBURG, MISSISSIPPI

	WELL 9 11/17/87 2000	WELL 9 DUP. 11/17/87 2000	FIELD BLANK 11/18/87 1136	WELL 5 11/18/87 1205	TRIP BLANK 11/13/87
INORGANIC ELEMENT/COMPOUND	UG/L	UG/L	UG/L	UG/L	UG/L
BARIUM	140	140	--	440	NA
STRONTIUM	480	480	--	410	NA
TITANIUM	NA	NA	--	130	NA
VANADIUM	--	--	--	26	NA
ZINC	--	--	--	40	NA
ALUMINUM	650	630	--	6200	NA
MANGANESE	410	400	--	580	NA
	MG/L	MG/L	MG/L	MG/L	MG/L
CALCIUM	250	250	--	160	NA
MAGNESIUM	110	100	--	86	NA
IRON	0.59	0.58	--	7.8	NA
SODIUM	16	16	--	23	NA
SELECTED CHLORINATED COMPOUNDS	UG/L	UG/L	UG/L	UG/L	UG/L
DINOSEB (DNBP)	--	--	--	--	--
EXTRACTABLE ORGANIC COMPOUNDS	UG/L	UG/L	UG/L	UG/L	UG/L
PETROLEUM PRODUCT	N	N	--	N	--
PURGEABLE ORGANIC COMPOUNDS	UG/L	UG/L	UG/L	UG/L	UG/L
TOLUENE	--	--	0.6J	--	1.5J
ISOPROPANOL	--	--	300JN	--	--
CONVENTIONAL PARAMETERS	MG/L	MG/L	MG/L	MG/L	MG/L
NITRATE-NITRITE NITROGEN	59	60	--	13	NA

FOOTNOTES

- NA - NOT ANALYZED
- J - ESTIMATED VALUE
- N - PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
- - MATERIAL WAS ANALYZED FOR BUT NOT DETECTED

APPENDIX B
CME CHECKLIST
VICKSBURG CHEMICAL CORP.
VICKSBURG, MISSISSIPPI

CHECKLIST
FOR
COMPREHENSIVE GROUND WATER
MONITORING EVALUATION (CME)
AT
RCRA FACILITIES

FACILITY NAME Vicksburg Chemical ; Cedar Chemical ; Vertac
 EPA ID# MSD PD 914 091
 FACILITY ADDRESS P. 110 Prairie Road PO Box 3, Vicksburg, MS. 39180
 FACILITY CONTACT/TITLE Steve ... (601) 636-1231
 INSPECTORS NAME J. Matthews, C. ... J. ...
 DATE 11-17-87
 TYPE OF FACILITY (TSD) _____
 REGULATED UNIT(S): surface impoundment

State - MSDNR - Jack McCord (601) 961-5067

Draft - Final Report GW Assessment Program 12-19-85
 IT for Vertac

* Final report Groundwater Assessment Program 1-8-86
 prepared by IT for Vertac Chemical Co.

* Response to Agency Comments 8-1-86
 prepared by IT for Cedar Chemical Co.

* Part E - 6-18-85 prepared by IT for Vertac

Groundwater Monitor Well Installation
 Ware Lind Engineers 10-85
 mw 9
 mw 10
 mw 11
 mw 12

Groundwater Monitor Well Installation
 Ware Lind Engineers 12-86
 mw 13
 14
 15

APPENDIX A

COMPREHENSIVE GROUND-WATER MONITORING EVALUATION WORKSHEET

The following worksheets have been designed to assist the enforcement officer/technical reviewer in evaluating the ground-water monitoring system an owner/operator uses to collect and analyze samples of ground water. The focus of the worksheets is technical adequacy as it relates to obtaining and analyzing representative samples of ground water. The basis of the worksheets is the final RCRA Ground Water Monitoring Technical Enforcement Guidance Document which describes in detail the aspects of ground-water monitoring which EPA deems essential to meet the goals of RCRA.

Appendix A is not a regulatory checklist. Specific technical deficiencies in the monitoring system can, however, be related to the regulations as illustrated in Figure 4.3 taken from the RCRA Ground-Water Monitoring Compliance Order Guide (COG) (included at the end of the appendix). The enforcement officer, in developing an enforcement order, should relate the technical assessment from the worksheets to the regulations using figure 4.3 from the COG as a guide.

I. Office Evaluation - Technical Evaluation of the Design of the Ground-water Monitoring System

A. Review of relevant documents:

1. What documents were obtained prior to conducting the inspection:

- a. RCRA Part A permit application? (Y/N)
- b. RCRA Part B permit application? (Y/N)
- c. Correspondence between the owner/operator and appropriate agencies or citizen's groups? (Y/N)
- d. Previously conducted facility inspection reports? (Y/N)
- e. Facility's contractor reports? (Y/N)
- f. Regional hydrogeologic, geologic, or soil reports? (Y/N)
- g. The facility's Sampling and Analysis Plan? (Y/N)
- h. Ground-water Assessment Program Outline (or Plan, if the facility is in assessment monitoring)? (Y/N)
- i. Other (specify) ESD reports

B. Evaluation of the Owner/Operator's Hydrogeologic Assessment:

1. Did the owner/operator use the following direct techniques in the hydrogeologic assessment:

- a. Logs of the soil borings/rock corings (documented by a professional geologist, soil scientist, or geotechnical engineer)? (Y/N) Ware-Lind
- b. Materials tests (e.g., grain size analyses, standard penetration tests, etc.)? (Y/N) IT Corp
- c. Piezometer installation for water level measurements at different depths? (Y/N)
- d. Slug tests? (Y/N)

- e. Pump tests? (Y/N)
- f. Geochemical analyses of soil samples? (Y/N)
- g. Other (specify) (e.g., hydrochemical diagrams and wash analysis) _____

2. Did the owner/operator use the following indirect techniques to supplement direct techniques data: no evidence in files

- a. Geophysical well logs? (Y/N) _____
- b. Tracer studies? (Y/N) _____
- c. Resistivity and/or electromagnetic conductance? (Y/N) _____
- d. Seismic Survey? (Y/N) _____
- e. Hydraulic conductivity measurements of cores? (Y/N) _____
- f. Aerial photography? (Y/N) _____
- g. Ground penetrating radar? (Y/N) _____
- h. Other (specify) _____

3. Did the owner/operator document and present the raw data from the site hydrogeologic assessment? (Y/N)

4. Did the owner/operator document methods (criteria) used to correlate and analyze the information? (Y/N)

5. Did the owner/operator prepare the following:

- a. Narrative description of geology? (Y/N)
- b. Geologic cross sections? (Y/N)
- c. Geologic and soil maps? (Y/N)
- d. Boring/coring logs? (Y/N)
- e. Structure contour maps of the differing water bearing zones and confining layer? (Y/N)
- f. Narrative description and calculation of ground-water flows? (Y/N)
- g. Water table/potentiometric map? (Y/N)
- h. Hydrologic cross sections? (Y/N)

6. Did the owner/operator obtain a regional map of the area and delineate the facility? (Y/N) not in files

If yes, does this map illustrate:

- a. Surficial geology features? (Y/N)
- b. Streams, rivers, lakes, or wetlands near the facility? (Y/N)
- c. Discharging or recharging wells near the facility? (Y/N) _____

7. Did the owner/operator obtain a regional hydro-geologic map?

(Y/N) att. in files

If yes, does this hydrogeologic map indicate:

- a. Major areas of recharge/discharge?
- b. Regional ground-water flow direction?
- c. Potentiometric contours which are consistent with observed water level elevations?

(Y/N)
(Y/N)
(Y/N)

8. Did the owner/operator prepare a facility site map?

(Y/N) X

If yes, does the site map show:

- a. Regulated units of the facility (e.g., landfill areas, impoundments)?
- b. Any seeps, springs, streams, ponds, or wetlands?
- c. Location of monitoring wells, soil borings, or test pits?
- d. How many regulated units does the facility have? If more than one regulated unit then,
 - o Does the waste management area encompass all regulated units?
 - Or
 - o Is a waste management area delineated for each regulated unit?

(Y/N)
(Y/N)
(Y/N)
Surface impoundment
(Y/N)
(Y/N) NA

C. Characterization of Subsurface Geology of Site

1. Soil boring/test pit program:

- a. Were the soil borings/test pits performed under the supervision of a qualified professional?
- b. Did the owner/operator provide documentation for selecting the spacing for borings?
- c. Were the borings drilled to the depth of the first confining unit below the uppermost zone of saturation or ten feet into bedrock?
- d. Indicate the method(s) of drilling:
 - o Auger (hollow or solid stem) ✓
 - o Mud rotary
 - o Reverse rotary
 - o Cable tool
 - o Jetting
 - o Other (specify)
- e. Were continuous sample corings taken?

(Y/N) IT Corp.
(Y/N)
(Y/N)
(Y/N) X

f. How were the samples obtained (checked method[s])

- Split spoon
- Shelby tube, or similar
- Rock coring
- Ditch sampling
- Other (explain)

g. Were the continuous sample corings logged by a qualified professional in geology?

(Y/N) Y Core

h. Does the field boring log include the following information:

- Hole name/number? (Y/N) ✓
- Date started and finished? (Y/N) ✓
- Driller's name? (Y/N) ✓
- Hole location (i.e., map and elevation)? (Y/N) ✓
- Drill rig type and bit/auger size? (Y/N) ✓
- Gross petrography (e.g., rock type) of each geologic unit? (Y/N) ✓
- Gross mineralogy of each geologic unit? (Y/N) N
- Gross structural interpretation of each geologic unit and structural features (e.g., fractures, gouge material, solution channels, buried streams or valleys, identification of depositional material)? (Y/N) N
- Development of soil zones and vertical extent and description of soil type? (Y/N) N
- Depth of water bearing unit(s) and vertical extent of each? (Y/N) ✓
- Depth and reason for termination of borehole? (Y/N) N
- Depth and location of any contaminant encountered in borehole? (Y/N) N
- Sample location/number? (Y/N) ✓
- Percent sample recovery? (Y/N) N
- Narrative descriptions of:
 - Geologic observations? (Y/N) N
 - Drilling observations? (Y/N) N

i. Were the following analytical tests performed on the core samples:

- Mineralogy (e.g., microscopic tests and x-ray diffraction)? (Y/N) N
- Petrographic analysis:
 - degree of crystallinity and cementation of matrix? (Y/N) ✓
 - degree of sorting, size fraction (i.e., sieving), textural variations? (Y/N) N

- rock type(s)? (Y/N) /
- soil type? (Y/N) /
- approximate bulk geochemistry? (Y/N) /
- existence of microstructures that may effect or indicate fluid flow? (Y/N) /

- o Falling head tests? (Y/N) /
- o Static head tests? (Y/N) /
- o Settling measurements? (Y/N) /
- o Centrifuge tests? (Y/N) /
- o Column drawings? (Y/N) /

D. Verification of subsurface geological data

1. Has the owner/operator used indirect geophysical methods to supplement geological conditions between borehole locations? (Y/N) /
2. Do the number of borings and analytical data indicate that the confining layer displays a low enough permeability to impede the migration of contaminants to any stratigraphically lower water-bearing units? (Y/N) /
3. Is the confining layer laterally continuous across the entire site? (Y/N) /
4. Did the owner/operator consider the chemical compatibility of the site-specific waste types and the geologic materials of the confining layer? (Y/N) /
5. Did the geologic assessment address or provide means for resolution of any information gaps of geologic data? (Y/N) /
6. Do the laboratory data corroborate the field data for petrography? (Y/N) /
7. Do the laboratory data corroborate the field data for mineralogy and subsurface geochemistry? (Y/N) /

E. Presentation of geologic data

1. Did the owner/operator present geologic cross sections of the site? (Y/N) /
2. Do cross sections:
 - a. identify the types and characteristics of the geologic materials present? (Y/N) /
 - b. define the contact zones between different geologic materials?
 - c. note the zones of high permeability or fracture? (Y/N) /
 - d. give detailed borehole information including:
 - o location of borehole? (Y/N) /
 - o depth of termination? (Y/N) /
 - o location of screen (if applicable)? (Y/N) /
 - o depth of zone(s) of saturation? (Y/N) /
 - o backfill procedure?

- 3. Did the owner/operator provide a topographic map which was constructed by a licensed surveyor?
- 4. Does the topographic map provide:
 - a. contours at a maximum interval of two-feet?
 - b. locations and illustrations of man-made features (e.g., parking lots, factory buildings, drainage ditches, storm drains, pipelines, etc.)?
 - c. descriptions of nearby water bodies?
 - d. descriptions of off-site wells?
 - e. site boundaries?
 - f. individual RCRA units?
 - g. delineation of the waste management area(s)?
 - h. well and boring locations?
- 5. Did the owner/operator provide an aerial photograph depicting the site and adjacent off-site features?
- 6. Does the photograph clearly show surface water bodies, adjacent municipalities, and residences and are these clearly labelled?

(Y/N) not in file

(Y/N) 1

(Y/N) not in file

(Y/N) 1

F. Identification of Ground-Water Flowpaths

1. Ground-water flow direction

- a. Was the well casing height measured by a licensed surveyor to the nearest 0.01 feet?
- b. Were the well water level measurements taken within a 24 hour period?
- c. Were the well water level measurements taken to the nearest 0.01 feet?
- d. Were the well water levels allowed to stabilize after construction and development for a minimum of 24 hours prior to measurements?
- e. Was the water level information obtained from (check appropriate one):
 - o multiple piezometers placed in single borehole?
 - o vertically nested piezometers in closely spaced separate boreholes?
 - o monitoring wells

(Y/N) 1

(Y/N) unknown

(Y/N) N (6.1)

(Y/N) unknown

- f. Did the owner/operator provide construction details for the piezometers? (Y/N) N
- g. How were the static water levels measured (check method(s)).
 - o Electric water sounder
 - o Wetted tape
 - o Air line
 - o Other (explain)

- h. Was the well water level measured in wells with equivalent screened intervals at an equivalent depth below the saturated zone? *Screened intervals vary across the site* (Y/N) —
- i. Has the owner/operator provided a site water table (potentiometric) contour map? If yes,
 - o Do the potentiometric contours appear logical and accurate based on topography and presented data? (Consult water level data) (Y/N) Y
 - o Are ground-water flow-lines indicated? (Y/N) Y
 - o Are static water levels shown? (Y/N) Y
 - o Can hydraulic gradients be estimated? (Y/N) Y
- j. Did the owner/operator develop hydrologic cross sections of the vertical flow component across the site using measurements from all wells? (Y/N) N
- k. Do the owner/operator's flow nets include:
 - o piezometer locations? (Y/N) NA
 - o depth of screening? (Y/N) —
 - o width of screening? (Y/N) —
 - o measurements of water levels from all wells and piezometers? (Y/N) —

2. Seasonal and temporal fluctuations in ground-water level

- a. Do fluctuations in static water levels occur? (Y/N) Y
 - o If yes, are the fluctuations caused by any of the following:
 - Off-site well pumping (Y/N) —
 - Tidal processes or other intermittent natural variations (e.g., river stage, etc.) (Y/N) Y
 - On-site well pumping (Y/N) —
 - Off-site, on-site construction or changing land use patterns (Y/N) —
 - Deep well injection (Y/N) —
 - Seasonal variations (Y/N) —
 - Other (specify) _____

- b. Has the owner/operator documented sources and patterns that contribute to or affect the ground-water patterns below the waste management? (Y/N) ✓
- c. Do water level fluctuations alter the general ground-water gradients and flow directions? (Y/N) ✓
- d. Based on water level data, do any head differentials occur that may indicate a vertical flow component in the saturated zone? (Y/N) ✓
- e. Did the owner/operator implement means for gauging long term effects on water movement that may result from on-site or off-site construction or changes in land-use patterns? (Y/N) N

*Discard
13a*

3. Hydraulic conductivity

- a. How were hydraulic conductivities of the subsurface materials determined? (Y/N) ✓
 - o Single-well tests (slug tests) (Y/N) ✓
 - o Multiple-well tests (pump tests)
 - o Other (specify)
- b. If single-well tests were conducted, was it done by: (Y/N) ✓
 - o Adding or removing a known volume of water, or (Y/N) N
 - o Pressurizing well casing
- c. If single well tests were conducted in a highly permeable formation, were pressure transducers and high-speed recording equipment used to record the rapidly changing water levels? (Y/N) N
- d. Since single well tests only measure hydraulic conductivity in a limited area, were enough tests run to ensure a representative measure of conductivity in each hydrogeologic unit? (Y/N) N
- e. Is the owner/operator's slug test data (if applicable) consistent with existing geologic information (e.g., boring logs)? (Y/N) ✓
- f. Were other hydraulic conductivity properties determined? (Y/N) ✓
- g. If yes, provide any of the following data, if available:
 - o Transmissivity _____
 - o Storage coefficient _____
 - o Leakage _____
 - o Permeability _____
 - o Porosity _____
 - o Specific capacity _____
 - o Other (specify) _____

*Discard
13a*

- c. Was the cutting fluid, or additive, identified? (Y/N) N
- d. Was the drilling equipment steam-cleaned prior to drilling the well? (Y/N) with water
Other methods _____
- e. Was compressed air used during drilling? (Y/N) unknown
o If yes, was the air filtered to remove oil? (Y/N) unknown
- f. Did the owner/operator document procedure for establishing the potentiometric surface? (Y/N) ✓
o If yes, how was the location established?

- g. Formation samples
 - o Were formation samples collected initially during drilling? (Y/N) ✓
 - o Were any cores taken continuous? (Y/N) ✓
If not, at what interval were samples taken? _____
 - o How were the samples obtained?
 - Split spoon _____
 - Shelby tube _____
 - Core drill _____
 - Other (specify) _____
 - o Identify if any physical and/or chemical tests were performed on the formation samples (specify) _____

2. Monitoring Well Construction Materials

a. Identify construction materials (by number) and diameters (ID/OD)

	Material	Diameter (ID/OD)
o Primary Casing	<u>PVC</u>	<u>2" - 4"</u>
o Secondary or outside casing (double construction)	<u>PS</u>	<u>1"</u>
o Screen	<u>PVC</u>	<u>10' - 30.010 in. 5'</u>

b. How are the sections of casing and screen connected?

- o Pipe sections threaded _____
- o Couplings (friction) with adhesive or solvent _____
- o Couplings (friction) with retainer screws _____
- o Other (specify) _____

NOTE on wells that some glue was used in attaching the PVC
1000

- c. Were the materials steam-cleaned prior to installation? (Y/N) unknown
 If no, how were the materials cleaned? _____

3. Well Intake Design and Well Development

- a. Was a well intake screen installed? (Y/N) ✓
 o What is the length of the screen for the well? 10' 0.010 in. dia
 o Is the screen manufactured? (Y/N) ✓
 b. Was a filter pack installed? (Y/N) ✓
 o What kind of filter pack was employed? bbstingsand (No. 3)
 o Is the filter pack compatible with formation materials? (Y/N) ✓
 o How was the filter pack installed? tremie
 o What are the dimensions of the filter pack? varies from 1' to 2'
 o Has a turbidity measurement of the well water ever been made? (Y/N) ✓
 o Have the filter pack and screen been designed for the in situ materials? (Y/N) ✓
 c. Well development
 Was the well developed? (Y/N) ✓
 o What technique was used for well development?
 - Surge block _____
 - Bailer _____
 - Air surging _____
 - Water pumping _____
 - Other (specify) _____

4. Annular Space Seals

- a. What is the annular space in the saturated zone directly above the filter pack filled with?
 - Sodium bentonite (specify type and grit) bentonite pellets
 - Cement (specify neat or concrete) _____
 - Other (specify) _____
 o Was the seal installed by?
 - Dropping material down the hole and tamping _____
 - Dropping material down the inside of hollow-stem auger _____
 - Tremie pipe method ✓
 - Other (specify) _____
 b. Was a different seal used in the unsaturated zone? (Y/N) ✓
 If yes,
 o Was this seal made with?
 - Sodium bentonite (specify type and grit) _____
 - Cement (specify neat or concrete) _____
 - Other (specify) cement bentonite grit

*Note - collect only
at 10' or more*

o Was this seal installed by?

- Dropping material down the hole and tamping
- Dropping material down the inside of hollow stem auger _____
- Other (specify) _____

- c. Is the upper portion of the borehole sealed with a concrete cap to prevent infiltration from the surface? (Y/N) on some wells
- d. Is the well fitted with an above-ground protective device and bumper guards? (Y/N) on some wells
- e. Has the protective cover been installed with locks to prevent tampering (Y/N) on wells that were locked

H. Evaluation of the Facility's Detection Monitoring Program

1. Placement of Downgradient Detection Monitoring Wells

- a. Are the ground-water monitoring wells or clusters located immediately adjacent to the waste management area? (Y/N) NA
- b. How far apart are the detection monitoring wells? (Y/N) ?

- c. Does the owner/operator provide a rationale for the location of each monitoring well or cluster? (Y/N) _____
- d. Has the owner/operator identified the well screen lengths of each monitoring well or clusters? (Y/N) _____
- e. Does the owner/operator provide an explanation for the well screen lengths of each monitoring well or cluster? (Y/N) _____
- f. Do the actual locations of monitoring wells or clusters correspond to those identified by the owner/operator? (Y/N) _____

2. Placement of Upgradient Monitoring Wells

- a. Has the owner/operator documented the location of each upgradient monitoring well or cluster? (Y/N) _____
- b. Does the owner/operator provide an explanation for the location(s) of the upgradient monitoring wells? (Y/N) _____
- c. What length screen has the owner/operator employed in the background monitoring well(s)?

- d. Does the owner/operator provide an explanation for the screen length(s) chosen? (Y/N) _____
- e. Does the actual location of each background monitoring well or cluster correspond to that identified by the owner/operator? (Y/N) _____

I. Office Evaluation of the Facility's Assessment Monitoring Program

1. Does the assessment plan specify:
 - a. The number, location, and depth of wells? (Y/N) Y
 - b. The rationale for their placement and identify the basis that will be used to select subsequent sampling locations and depths in later assessment phases? (Y/N) Y
2. Does the list of monitoring parameters include all hazardous waste constituents from the facility? (Y/N) *
 - a. Does the water quality parameter list include other important indicators not classified as hazardous waste constituents? (Y/N) *
 - b. Does the owner/operator provide documentation for the listed wastes which are not included? (Y/N) *
3. Does the owner/operator's assessment plan specify the procedures to be used to determine the rate of constituent migration in the ground-water? (Y/N) Y
4. Has the owner/operator specified a schedule of implementation in the assessment plan? (Y/N) Y
5. Have the assessment monitoring objectives been clearly defined in the assessment plan? (Y/N) Y
 - a. Does the plan include analysis and/or re-evaluation to determine if significant contamination has occurred in any of the detection monitoring wells? (Y/N) Y
 - b. Does the plan provide for a comprehensive program of investigation to fully characterize the rate and extent of contaminant migration from the facility? (Y/N) Y
 - c. Does the plan call for determining the concentrations of hazardous wastes and hazardous waste constituents in the ground water? (Y/N) Y
 - d. Does the plan employ a quarterly monitoring program? (Y/N) Y
6. Does the assessment plan identify the investigatory methods that will be used in the assessment phase? (Y/N) Y
 - a. Is the role of each method in the evaluation fully described? (Y/N) Y
 - b. Does the plan provide sufficient descriptions of the direct methods to be used? (Y/N) Y
 - c. Does the plan provide sufficient descriptions of the indirect methods to be used? (Y/N) Y
 - d. Will the method contribute to the further characterization of the contaminant movement? (Y/N) Y
7. Are the investigatory techniques utilized in the assessment program based on direct methods? (Y/N) Y
 - a. Does the assessment approach incorporate indirect methods to further support direct methods? (Y/N) N
 - b. Will the planned methods called for in the assessment approach ultimately meet performance standards for assessment monitoring? (Y/N) N

* State rule requires comprehensive methods for detection, distribution, butyl blend, toxaphene & other chemicals only

- c. Are the procedures well defined? (Y/N) no
- d. Does the approach provide for monitoring wells similar in design and construction as the detection monitoring wells? (Y/N) Y
- e. Does the approach employ taking samples during drilling or collecting core samples for further analysis? (Y/N) Y
- 8. Are the indirect methods to be used based on reliable and accepted geophysical techniques? (Y/N) Y
 - a. Are they capable of detecting subsurface changes resulting from contaminant migration at the site? (Y/N) Y
 - b. Is the measurement at an appropriate level of sensitivity to detect ground-water quality changes at the site? (Y/N) Y
 - c. Is the method appropriate considering the nature of the subsurface materials? (Y/N) Y
 - d. Does the approach consider the limitations of these methods? (Y/N) Y
 - e. Will the extent of contamination and constituent concentration be based on direct methods and sound engineering judgment? (Using indirect methods to further substantiate the findings) (Y/N) Y
- 9. Does the assessment approach incorporate any mathematical modeling to predict contaminant movement? (Y/N) N
 - a. Will site specific measurements be utilized to accurately portray the subsurface? (Y/N) Y
 - b. Will the derived data be reliable? (Y/N) Y
 - c. Have the assumptions been identified? (Y/N) Y
 - d. Have the physical and chemical properties of the site-specific wastes and hazardous waste constituents been identified? (Y/N) Y

J. Conclusions

1. Subsurface geology

- a. Has sufficient data been collected to adequately define petrography and petrographic variation? (Y/N) N
- b. Has the subsurface geochemistry been adequately defined? (Y/N) N
- c. Was the boring/coring program adequate to define subsurface geologic variation? (Y/N) N
- d. Was the owner/operator's narrative description complete and accurate in its interpretation of the data? (Y/N) N
- e. Does the geologic assessment address or provide means to resolve any information gaps? (Y/N) N

more work is needed - in order to be
 satisfied with the data collected
 considered and to indicate the
 presence of DNBP - the facility will
 provide...
 to determine...
 level of... plane(s).

2. Ground-water flowpaths

- a. Did the owner/operator adequately establish the horizontal and vertical components of ground-water flow? (Y/N) Y
- b. Were appropriate methods used to establish ground-water flowpaths? (Y/N) Y
- c. Did the owner/operator provide accurate documentation? (Y/N) Y
- d. Are the potentiometric surface measurements valid? (Y/N) Y
- e. Did the owner/operator adequately consider the seasonal and temporal effects on the ground-water? (Y/N) Y
- f. Were sufficient hydraulic conductivity tests performed to document lateral and vertical variation in hydraulic conductivity in the entire hydrogeologic subsurface below the site? (Y/N) N

3. Uppermost aquifer

- a. Did the owner/operator adequately define the uppermost aquifer? (Y/N) N

4. Monitoring Well Construction and Design

- a. Do the design and construction of the owner/operator's ground-water monitoring wells permit depth discrete ground-water samples to be taken? (Y/N) Y
- b. Are the samples representative of ground-water quality? (Y/N) Y
- c. Are the ground-water monitoring wells structurally stable? (Y/N) N
- d. Does the ground-water monitoring well's design and construction permit an accurate assessment of aquifer characteristics? (Y/N) N

5. Detection Monitoring

a. Downgradient Wells

Do the location, and screen lengths of the ground-water monitoring wells or clusters in the detection monitoring system allow the immediate detection of a release of hazardous waste or constituents from the hazardous waste management area to the uppermost aquifer? (Y/N) NP

b. Upgradient Wells

Do the location and screen lengths of the upgradient (background) ground-water monitoring wells ensure the capability of collecting ground-water samples representative of upgradient (background) ground-water quality including any ambient heterogeneous chemical characteristics? (Y/N) Y

6. Assessment Monitoring

- a. Has the owner/operator adequately characterized site hydrogeology to determine contaminant migration? (Y/N) N
- b. Is the detection monitoring system adequately designed and constructed to immediately detect any contaminant release? (Y/N) N
- c. Are the procedures used to make a first determination of contamination adequate? (Y/N) Y
- d. Is the assessment plan adequate to detect, characterize, and track contaminant migration? (Y/N) N
- e. Will the assessment monitoring wells, given site hydrogeologic conditions, define the extent and concentration of contamination in the horizontal and vertical planes? (Y/N) Y
- f. Are the assessment monitoring wells adequately designed and constructed? (Y/N) N
- g. Are the sampling and analysis procedures adequate to provide true measures of contamination? (Y/N) N
- h. Do the procedures used for evaluation of assessment monitoring data result in determinations of the rate of migration, extent of migration, and hazardous constituent composition of the contaminant plume? (Y/N) Some
- i. Are the data collected at sufficient frequency and duration to adequately determine the rate of migration? (Y/N) Y
- j. Is the schedule of implementation adequate? (Y/N) Y
- k. Is the owner/operator's assessment monitoring plan adequate? (Y/N) N
 - o If the owner/operator had to implement his assessment monitoring plan, was it implemented satisfactorily? (Y/N) Y

II. Field Evaluation

- A. Ground-water monitoring system:
Are the numbers, depths, and locations of monitoring wells in agreement with those reported in the facility's monitoring plan? (See Section 3.2.3) *Some discrepancies in well depths & well number 2* (Y/N) N
- B. Monitoring well construction:
 - 1. Identify construction material

	<u>Material</u>	<u>Diameter</u>
a. Primary Casing	<u>PVC</u>	<u>2" or 4"</u>
b. Secondary or outside casing	<u>SS</u>	<u>6"</u>

- 2. Is the upper portion of the borehole sealed with concrete to prevent infiltration from the surface? (Y/N) Y
- 3. Is the well fitted with an above-ground protective device? (Y/N) not applicable
- 4. Is the protective cover fitted with locks to prevent tampering? (Y/N) no

If a facility utilizes more than a single well design, answer the above questions for each well design.

III. Review of Sample Collection Procedures

NO SAP - Following instructions from Steve Boswell

A. Measurement of well depths elevation:

- 1. Are measurements of both depth to standing water and depth to the bottom of the well made? (Y/N) ---
- 2. Are measurements taken to the 0.01 feet? (Y/N) N
- 3. What device is used?
electronic sensor
- 4. Is there a reference point established by a licensed surveyor? (Y/N) Y
- 5. Is the measuring equipment properly cleaned between well locations to prevent cross contamination?
deionized water (Y/N) Y

B. Detection of immiscible layers:

- 1. Are procedures used which will detect light phase immiscible layers? (Y/N) N
- 2. Are procedures used which will detect heavy phase immiscible layers? (Y/N) N

C. Sampling of immiscible layers:

- 1. Are the immiscible layers sampled separately prior to well evacuation? (Y/N) N
- 2. Do the procedures used minimize mixing with water soluble phases? (Y/N) N

D. Well evacuation:

- 1. Are low yielding wells evacuated to dryness? (Y/N) Y
- 2. Are high yielding wells evacuated so that at least three casing volumes are removed? (Y/N) Y

3. What device is used to evacuate the wells?

hand bailer - PVC

4. If any problems are encountered (e.g., equipment malfunction) are they noted in a field logbook?

(Y/N) Y

E. Sample withdrawal:

1. For low yielding wells, are samples for volatiles, pH, and oxidation/reduction potential drawn first after the well recovers?

(Y/N) Y

2. Are samples withdrawn with either fluoro-carbon/resins or stainless steel (316, 304 or 2205) sampling devices?

(Y/N) PVC bailer

3. Are sampling devices either bottom valve bailers or positive gas displacement bladder pumps?

(Y/N) NA

4. If bailers are used, is fluorocarbon/resin coated wire, single strand stainless steel wire, or monofilament used to raise and lower the bailer?

(Y/N) nylon

5. If bladder pumps are used, are they operated in a continuous manner to prevent aeration of the sample?

(Y/N) NA

6. If bailers are used, are they lowered slowly to prevent degassing of the water?

(Y/N) Y

7. If bailers are used, are the contents transferred to the sample container in a way that minimizes agitation and aeration?

(Y/N) Y

8. Is care taken to avoid placing clean sampling equipment on the ground or other contaminated surfaces prior to insertion into the well?

(Y/N) N

9. If dedicated sampling equipment is not used, is equipment disassembled and thoroughly cleaned between samples? 3 times w/ deionized water

(Y/N) Y

10. If samples are for inorganic analysis, does the cleaning procedure include the following sequential steps:
a. Dilute acid rinse (HNO₃ or HCl)?

(Y/N) N

11. If samples are for organic analysis, does the cleaning procedure include the following sequential steps:
a. Nonphosphate detergent wash?
b. Tap water rinse?

(Y/N) N

(Y/N) N

methylene chloride
di nitro butyl phenol
toxaphene
total arsenic

- c. Distilled/deionized water rinse? (Y/N) Y
- d. Acetone rinse? (Y/N) Y
- e. Pesticide-grade hexane rinse? (Y/N) Y

12. Is sampling equipment thoroughly dry before use? (Y/N) Y

13. Are equipment blanks taken to ensure that sample cross-contamination has not occurred? (Y/N) N

14. If volatile samples are taken with a positive gas displacement bladder pump, are pumping rates below 100 ml/min? (Y/N) NA

F. In-situ or field analyses:

1. Are the following labile (chemically unstable) parameters determined in the field:
- a. pH? (Y/N) Y
 - b. Temperature? (Y/N) Y
 - c. Specific conductivity? (Y/N) Y
 - d. Redox potential? (Y/N) Y
 - e. Chlorine? (Y/N) Y
 - f. Dissolved oxygen? (Y/N) Y
 - g. Turbidity? (Y/N) Y
 - h. Other (specify) _____ (Y/N) Y

not done in field - brought back to lab

2. For in-situ determinations, are they made after well evacuation and sample removal? (Y/N) NA

3. If sample is withdrawn from the well, is parameter measured from a split portion? (Y/N) N

4. Is monitoring equipment calibrated according to manufacturers' specifications and consistent with SW-846? (Y/N) NA

5. Is the date, procedure, and maintenance for equipment calibration documented in the field logbook? (Y/N) NA

IV. Review of Sample Preservation and Handling Procedures

A. Sample containers:

1. Are samples transferred from the sampling device directly to their compatible containers? (Y/N) Y

2. Are sample containers for metals (inorganics) analyses polyethylene with polypropylene caps? *glass w/ nitric acid* (Y/N) N

3. Are sample containers for organics analysis glass bottles with fluorocarbonresin-lined caps? *glass* (Y/N) Y

4. If glass bottles are used for metals samples are the caps fluorocarbonresin-lined? (Y/N)
5. Are the sample containers for metal analyses cleaned using these sequential steps?
 a. Nonphosphate detergent wash? (Y/N) NA
 b. 1:1 nitric acid rinse? (Y/N) —
 c. Tap water rinse? (Y/N) —
 d. 1:1 hydrochloric acid rinse? (Y/N) —
 e. Tap water rinse? (Y/N) —
 f. Distilled/deionized water rinse? (Y/N) —
6. Are the sample containers for organic analyses cleaned using these sequential steps?
 a. Nonphosphate detergent/hot water wash? (Y/N) —
 b. Tap water rinse? (Y/N) —
 c. Distilled/deionized water rinse? (Y/N) —
 d. Acetone rinse? (Y/N) —
 e. Pesticide-grade hexane rinse? (Y/N) —
7. Are trip blanks used for each sample container type to verify cleanliness? - Contract lab sends field blanks (Y/N)
- B. Sample preservation procedures:
1. Are samples for the following analyses cooled to 4°C:
 a. TOC? (Y/N) NA
 b. TOX? (Y/N) —
 c. Chloride? (Y/N) —
 d. Phenols? (Y/N) —
 e. Sulfate? (Y/N) —
 f. Nitrate? (Y/N) —
 g. Coliform bacteria? (Y/N) —
 h. Cyanide? (Y/N) —
 i. Oil and grease? (Y/N) —
 j. Hazardous constituents (§261, Appendix VIII)? (Y/N)
2. Are samples for the following analyses field acidified to pH <2 with HNO₃:
 a. Iron? (Y/N) NA
 b. Manganese? (Y/N) —
 c. Sodium? (Y/N) —
 d. Total metals? (Y/N) —
 e. Dissolved metals? (Y/N) —
 f. Fluoride? (Y/N) —
 g. Endrin? (Y/N) —
 h. Lindane? (Y/N) —
 i. Methoxychlor? (Y/N) —
 j. Toxaphene? (Y/N) —

*Times Cinn
Contract Lab
EPS - J. J. J.
En. Lab. (Burman)*

- k. 2,4, D7
 l. 2,4,5, TP Silvex?
 m. Radium?
 n. Gross alpha?
 o. Gross beta?

(Y/N) NA
 (Y/N) I
 (Y/N) I
 (Y/N) I
 (Y/N) I

3. Are samples for the following analyses field acidified to pH <2 with H₂SO₄:

- a. Phenols?
 b. Oil and grease?

(Y/N) NA
 (Y/N) I
 (Y/N) I

4. Is the sample for TOC analyses field acidified to pH <2 with HCl?

(Y/N) NA

5. Is the sample for TOX analysis preserved with 1 ml of 1.1 M sodium sulfite?

(Y/N) NA

6. Is the sample for cyanide analysis preserved with NaOH to pH >12?

(Y/N) NA

C. Special handling considerations:

1. Are organic samples handled without filtering?

(Y/N) Y

2. Are samples for volatile organics transferred to the appropriate vials to eliminate headspace over the sample?

(Y/N) Y

3. Are samples for metal analysis split into two portions?

(Y/N) N

4. Is the sample for dissolved metals filtered through a 0.45 micron filter?

(Y/N) N

5. Is the second portion not filtered and analyzed for total metals?

(Y/N) NA

6. Is one equipment blank prepared each day of ground-water sampling?

(Y/N) N

V. Review of Chain-of-Custody Procedures

A. Sample labels

1. Are sample labels used?

(Y/N) X

2. Do they provide the following information:

a. Sample identification number?

(Y/N) Y

b. Name of collector?

(Y/N) Y

c. Date and time of collection?

(Y/N) Y

d. Place of collection?

(Y/N) Y

e. Parameter(s) requested and preservatives used?

(Y/N) Y

3. Do they remain legible even if wet?

(Y/N)

B. Sample seals:

1. Are sample seals placed on those containers to ensure the samples are not altered?

use electric tape

(Y/N)

C. Field logbook:

1. Is a field logbook maintained?

do take records of field samplings

(Y/N)

2. Does it document the following:

a. Purpose of sampling (e.g., detection or assessment)?

(Y/N)

b. Location of well(s)?

(Y/N)

c. Total depth of each well?

(Y/N)

d. Static water level depth and measurement technique?

(Y/N)

e. Presence of immiscible layers and detection method?

(Y/N)

f. Collection method for immiscible layers and sample identification numbers?

(Y/N)

g. Well evacuation procedures?

(Y/N)

h. Sample withdrawal procedure?

(Y/N)

i. Date and time of collection?

(Y/N)

j. Well sampling sequence?

(Y/N)

k. Types of sample containers and sample identification number(s)?

(Y/N)

l. Preservative(s) used?

(Y/N)

m. Parameters requested?

(Y/N)

n. Field analysis data and method(s)?

(Y/N)

o. Sample distribution and transporter?

(Y/N)

p. Field observations?

(Y/N)

o Unusual well recharge rates?

(Y/N)

o Equipment malfunction(s)?

(Y/N)

o Possible sample contamination?

(Y/N)

o Sampling rate?

(Y/N)

D. Chain-of-custody record:

1. Is a chain-of-custody record included with each sample?

(Y/N)

2. Does it document the following:

a. Sample number?

(Y/N)

b. Signature of collector?

(Y/N)

c. Date and time of collection?

(Y/N)

d. Sample type?

(Y/N)

e. Station location?

(Y/N)

f. Number of containers?

(Y/N)

g. Parameters requested?

(Y/N)

h. Signatures of persons involved in the chain-of-possession?

(Y/N)

i. Inclusive dates of possession?

(Y/N)

Contract lab keeps this info

(Y/N)

- is included w/gram of custody

- E. Sample analysis request sheet:
 - 1. Does a sample analysis request sheet accompany each sample? (Y/N) N
 - 2. Does the request sheet document the following:
 - a. Name of person receiving the sample? (Y/N) NA
 - b. Date of sample receipt? (Y/N) ---
 - c. Laboratory sample number (if different than field number)? (Y/N) ---
 - d. Analyses to be performed? (Y/N) ---

VI. Review of Quality Assurance/Quality Control

- A. Is the validity and reliability of the laboratory and field generated data ensured by a QA/QC program? (Y/N) X
- B. Does the QA/QC program include:
 - 1. Documentation of any deviations from approved procedures? (Y/N) X
 - 2. Documentation of analytical results for:
 - a. Blanks? (Y/N) X
 - b. Standards? (Y/N) X
 - c. Duplicates? (Y/N) X
 - d. Spiked samples? (Y/N) X
 - e. Detectable limits for each parameter being analyzed? (Y/N) X
- C. Are approved statistical methods used? (Y/N) X
- D. Are QC samples used to correct data? (Y/N) X
- E. Are all data critically examined to ensure it has been properly calculated and reported? (Y/N) X

VII. Surficial Well Inspection and Field Observation

- A. Are the wells adequately maintained? (Y/N) N
- B. Are the monitoring wells protected and secure? (Y/N) N
- C. Do the wells have surveyed casing elevations? (Y/N) V
- D. Are the ground-water samples turbid? (Y/N) ---
- E. Have all physical characteristics of the site been noted in the inspector's field notes (i.e., surface waters, topography, surface features)? (Y/N) X

F. Has a site sketch been prepared by the field inspector with a scale, north arrow, location(s) of buildings, location(s) of regulated units, location of monitoring wells, and a rough depiction of the site drainage pattern?

(Y/N) X

VIII. Conclusions

A. Is the facility currently operating under the correct monitoring program according to the statistical analyses performed by the current operator?

assessment

(Y/N) X

B. Does the ground-water monitoring system, as designed and operated, allow for detection or assessment of any possible ground-water contamination caused by the facility?

(Y/N) N

C. Does the sampling and analysis procedures permit the owner/operator to detect and, where possible, assess the nature and extent of a release of hazardous constituents to ground water from the monitored hazardous waste management facility?

(Y/N) N



*The facility is under order to
sample only for 4 parameters*

APPENDIX C
INTERIM STATUS CHECKLIST
VICKSBURG CHEMICAL CORP.
VICKSBURG, MISSISSIPPI

MSD 990 714 031

Vertac
Cedar Chemical

MISSISSIPPI

INTERIM STATUS COMPLIANCE CHECKLIST

FACILITY Vicksburg Chemical
LOCATION Vicksburg, Mississippi
DATE 11-17-87
INSPECTORS SF Matthews
EPA { C Eranta
J Schofield

In compliance - Yes
 Not in compliance - No
 Not applicable - NA

COMMENTS

REQUIREMENT

SUBPART B - GENERAL FACILITY STANDARDS

265.12 Required Notices

a) The facility owner or operator must notify the Director at least four weeks in advance of receipt of wastes from a foreign source.

b) Before transferring ownership or operation of a facility, the facility's owner or operator must notify the new owner or operator of the requirements of 40 CFR 265 and 122.

265.13 General Waste Analysis

Before treating, storing, or disposing of hazardous waste, the facility owner or operator must obtain a detailed chemical and physical analysis of wastes. The analysis must contain all the information which must be known to treat, store, or dispose the waste in accordance with the federal requirements.

265.14 Security to Prevent Unknowing and Unauthorized Access to the Facility

a) The owner or operator must prevent the unknowing entry and minimize the possibility for unauthorized entry unless:

1) physical contact with the waste, structures, or equipment will not be injurious

2) disturbance of the waste or equipment will not violate the requirements of

Yes	No	N/A
		✓
✓		
✓		
✓		

2

In compliance - Yes
Not in compliance - No
Not applicable - NA

COMMENTS

REQUIREMENT

265.14 - Continued

- b) Unless exempt under 265.14 (a)(1) or 402.7-14(a)(2), a facility must have:
 - 1) a 24-hour surveillance system
 - 2) (i) an artificial or natural barrier which completely surrounds the active portion of the facility
 - (ii) a means to control entry
- c) A sign warning of the danger of intruding into the facility.

265.15 Inspection and Monitoring

- a) The owner or operator must inspect the facility for malfunctions and deterioration, operator errors, or discharges which may be causing or lead to release of hazardous waste constituents to the environment or a threat to human health.
- b) The owner or operator must develop and follow a schedule and plan for inspections.
- c) The owner or operator must take remedial action upon the detection of malfunction or the deterioration of equipment and structures when a hazard is imminent.
- d) The owner or operator must record inspections in an inspection log and must keep the records for at least three years from the date of inspection.

Yes	No	N/A
✓		
✓		
✓		
✓		
✓		
✓		
✓		

Fences & Guardhouse with 24 hr Surveillance

3

In compliance - Yes
Not in compliance - No
Not applicable - NA

COMMENTS

REQUIREMENT

265.16 Facility Personnel Training

- a) Facility personnel must successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of Part 265.
- b) The training program must be completed within six months of the effective date of Part 265.
- c) There must be an annual review of the initial training in (a) above.
- d) The owner or operator must maintain records of training.
- e) Training records on current personnel must be kept until closure of the facility.

Yes	No	N/A
✓		
✓		
✓		
✓		
✓		

265.17 General Requirements for Ignitable, Reactive or Incompatible Wastes

- a) The owner or operator must take precautions to prevent accidental ignition or reaction of ignitable or reactive waste.
- b) Treatment, storage, or disposal of ignitable or reactive waste and the mixture or commingling of incompatible wastes must be conducted so that it does not:
 - 1) Generate extreme heat or pressure, fire or explosion, or violent reaction;
 - 2) Produce uncontrolled toxic mists, sufficient

✓
✓
✓
✓

4

in compliance
Not in compliance - No
Not applicable - NA

COMMENTS

REQUIREMENT.

265.17 - Continued--

- quantities to threaten human health;
- 3) Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions;
- 4) Damage the structural integrity of the device or facility containing waste; or
- 5) Through other like means threaten human health or the environment.

Yes	No	N/A
		✓
		✓
		✓
		✓
✓		
✓		
		✓
		✓

SUBPART C - PREPAREDNESS AND PREVENTION

Pursuant to 265.30 through 265.37, facilities must be maintained and operated for and prevention of releases of hazardous waste controlled by the State.

SUBPART D - CONTINGENCY PLANS

Pursuant to 265.56, facilities must have contingency plans and emergency procedures to be followed in the event of a release of hazardous waste.

SUBPART E - MANIFEST SYSTEM, RECORDKEEPING, AND REPORTING

265.71(a)(1-5) If a facility receives hazardous waste accompanied by a manifest, the owner or operator must meet the requirements of 265.71(a)(1-5).

265.71(b)(1-5) If a facility receives, from a rail or water transporter, hazardous waste which is accompanied by a shipping paper, the owner or operator must meet the requirements of

5

REQUIREMENT

In compliance - Yes
Not in compliance - No
Not applicable - NA

COMMENTS

265.72(a) Upon discovery of significant manifest discrepancy, the owner or operator must attempt to reconcile the discrepancy with the waste generator or transporter.

(b) If a significant manifest discrepancy is not resolved, the owner or operator must notify the Director.

265.73(b) The owner or operator must keep a written operating record at the facility which meets the requirements of 265.73(b).

265.74(a) All records must be furnished upon request and available at all times for inspection by the Director or EPA.

(c) A copy of records of waste disposal locations and quantities must be submitted to the Director and the local land authority upon closure of the facility.

265.75 The owner or operator must submit an annual report to the Director in compliance with the requirements of 265.75.

265.76 The receipt of any unmanifested waste must be reported to the Director.

265.77 The owner or operator must submit a report to the Director if any of the following occur:

- a) releases, fires, explosions
- b) groundwater contamination
- c) facility closure.

Yes	No	N/A
		✓
		✓
✓		
✓		
		✓
✓		
		✓
✓		

In compliance - Yes
 Not in compliance - No
 Not applicable - NA

COMMENTS

REQUIREMENT

Yes	No	N/A
✓		
✓		
		✓
✓		
✓		

SUBPART F - GROUNDWATER MONITORING

265.90 Owner or operator must implement a groundwater monitoring program capable of determining the facility's impact on the quality of the upper aquifer within one year of the effective date of 265.90.

265.91 - 265.94 The owner and operator must install, operate, and maintain a groundwater monitoring system which meets the requirements of 265.91 - 265.94.

265.90(c) All of the groundwater monitoring requirements may be waived if the owner or operator can demonstrate that there is a low potential for migration of hazardous waste constituents from the facility via the uppermost aquifer below the facility to water supply wells or to surface water.

SUBPART G - CLOSURE AND POST-CLOSURE

265.111 The owner or operator must close his facility in a manner that:

- 1) minimizes the need for future maintenance, and
- 2) controls, minimizes, or eliminates post-closure escape of hazardous waste.

265.112(a) The owner or operator must have a written closure plan on the effective date of Part 265.

Closure plan submitted and is presently being reviewed.

In compliance - Yes
 Not in compliance - No
 Not applicable - NA

COMMENTS

REQUIREMENT

265:112(a) Continued--

The closure plan must include:

1) A description of how and when the facility will be partially closed, if applicable, and ultimately closed.

2) An estimate of the maximum inventory of wastes in storage or treatment at any given time.

3) Steps to decontaminate facility equipment.

4) A schedule for final closure which must include, as a minimum, anticipated dates when wastes will no longer be received, anticipated date for completion of final closure, and intervening milestone dates.

265.113(a) Closure must be initiated within 90 days after receiving the final volume of hazardous wastes.

(b) The owner or operator must complete closure activities within six months after receiving the final volume of wastes.

265.114 Upon completion of closure, all equipment and structures must be properly disposed of or decontaminated.

265.115 The owner or operator and an independent registered professional engineer must certify that the facility has been closed in accordance with the approved closure plan.

Yes	No	N/A
✓		
✓		
✓		
✓		
	✓	
	✓	
✓		

Facility does not have an approved closure plan, The Regulatory status of the surface impoundment has not yet been determined

called for in closure plan

In compliance - Yes
 Not in compliance - No
 Not applicable - NA

COMMENTS

REQUIREMENT

265.117(a) Post closure care must consist of at least:

- 1) Groundwater monitoring
- 2) Maintenance of the contaminant system.

The owner or operator must have a post-closure plan on the effective date of Part 265 and it must include:

- 1) Groundwater monitoring activities and frequency.
- 2) Maintenance activities and frequencies to ensure the integrity of the cap, final cover, or other containment structures, and functions of the facilities monitoring equipment.

265.119 Within 90 days after closure, the owner or operator must submit a survey plat of the facility.

265.120 The owner or operator must record a notice on the deed that the land has been used to manage hazardous waste.

SUBPART H - FINANCIAL REQUIREMENTS

265.142(a) The owner or operator must develop and maintain a current estimate of closure and post-closure costs.

SUBPART I - OTHER FACILITY STANDARDS

265.170 - 265.172 The container must be compatible with the waste to be stored.

Yes	No	N/A
✓		
✓		
✓		
✓		
✓		
✓		
✓		
✓		
✓		

Post closure plan addresses these requirements. The Facility has not yet closed

Requirements were ^{reportedly} stayed until regulatory status is determined

REQUIREMENT

Not in compliance - No
Not applicable - NA

COMMENTS

265.229 Ignitable or reactive waste must not be placed in a surface impoundment unless 265.229 is complied with.

265.230 Incompatible wastes must not be placed in the same surface impoundment unless 265.17(b) is complied with.

SUBPART L - WASTE PILES

265.251 A waste pile must be protected and managed to control wind dispersal.

265.252 An owner or operator must conduct waste analyses unless the facility meets the exemptions of 265.252.

265.253 Within one year after the effective date of the regulations, leachate or run-off from a pile must be controlled pursuant to 265.253.

265.256 Ignitable or reactive waste must not be placed in a waste site unless 265.256 is complied with.

265.257 The requirements of 265.257 for incompatible wastes must be complied with.

SUBPART M - LAND TREATMENT

265.272(a) Hazardous waste must not be placed at a land treatment facility unless it can be made less hazardous or non-hazardous.

(b) Run-on must be diverted away from other active portions as of one year after the effective date of Part 265.

Yes	No	N/A
		✓
		✓
		NA
		NA

REQUIREMENT

NOT RECORDED		
Yes	No	N/A

265.272 -- Continued

(c) Run-off from active portions must be collected as of one year after the effective date of Part 265...

265.273 Waste analyses must be conducted pursuant to 265.273.

265.276(a) An owner or operator must notify the State Director within 60 days after the effective date of Part 265 if food chain crops are grown on the land treatment facility.

(b) Food chain crops must not be grown on the treated area of a hazardous waste land treatment facility unless 265.276(b) is complied with.

(c) Food chain crops must not be grown on a land treatment facility receiving waste that contains cadmium unless 265.276(c) is complied with.

265.278 The owner or operator must have in writing and must implement an unsaturated zone monitoring plan pursuant to 265.278.

265.279 The owner or operator must keep records of the application dates, application rates, quantities, and location of each hazardous waste placed in a facility.

265.280 A land treatment facility must meet the closure and post-closure requirements of 265.280.

Not in compliance - No
Not applicable - NA

COMMENTS

14
REQUIREMENT

265.315 (1) Empty containers must be reduced in volume as of one year after the effective date of Part 265.

SUBPART O - INCINERATORS

265.343 Must be at steady state conditions before adding hazardous waste.

265.345 Waste analyses must be conducted pursuant to 265.345.

265.347 Monitoring and inspections must be conducted as delineated in 265.347.

265.351 At closure, the owner or operator must remove all hazardous waste and hazardous waste residues.

SUBPART P - THERMAL TREATMENT

265.373 Must be at steady state conditions before adding hazardous wastes.

265.375 Waste analyses must be conducted pursuant to 265.375.

265.377 Monitoring and inspections must be conducted as delineated in 265.377.

265.301 At closure, the owner or operator must remove all hazardous waste residues.

265.382 Open burning of hazardous waste is prohibited except for the open burning and detonation of waste explosives.

Yes	No	N/A

Not in compliance - No
Not applicable - NA

COMMENTS

5
REQUIREMENT

Yes No N/A

SUBPART Q - CHEMICAL, PHYSICAL, AND BIOLOGICAL TREATMENT

265.401(a) Must comply with 265.17(b)

(b) Hazardous waste must not be placed in the treatment process or equipment if any failure of equipment or the process would occur.

(c) A continuously-fed process must be equipped with a means to stop the inflow.

265.402 Waste analyses and trial tests must be conducted pursuant to 265.402.

265.403 Inspections must be made pursuant to 265.403.

265.404 At closure, all hazardous waste and hazardous waste residues must be removed.

265.405 Ignitable or reactive waste must not be placed in a treatment process unless 265.405 is complied with.

265.406 Incompatible wastes must not be placed in the same treatment process unless 265.17(b) is complied with.

SUBPART R - UNDERGROUND INJECTION

265.430(a) underground injection of hazardous waste is not subject to the closure and post-closure or financial requirements of Part 265. . . Underground injection is subject to the other requirements of Part 265. . .

In compliance - Yes
Not in compliance - No
Not applicable - NA

COMMENTS

16
REQUIREMENT

Yes	No	N/A

Other questions or standards.

Are there any other generators transporting their waste to this hazardous waste management facility?

December 28, 1987

FILE COPY

Mr. Fred Ahlers, Plant Manager
Vicksburg Chemical Corporation
P. O. Box 3
Vicksburg, Mississippi 39180

Dear Mr. Ahlers:

Re: November 17, 1987, RCRA Compliance Inspection
Vicksburg Chemical Corporation
MSD990714081

On November 17, 1987, Jack McCord of this office conducted a hazardous waste generator inspection of your hazardous waste drum storage area to determine if the facility was complying with the requirements of Part 262 of the Mississippi Hazardous Waste Management Regulations (MHWMR). Enclosed is a copy of the resulting inspection report.

Several Class I violations were discovered during the inspection. Because of the nature and the continued frequency of violations found in the drum storage area, the Bureau intends to recommend that an appropriate enforcement action be taken, including the assessment of a monetary penalty. You will be contacted in the near future regarding the exact nature of the Bureau's action.

If you have any questions regarding this matter, please contact me at 961-5171.

Sincerely,

Charles Estes, P. E., Coordinator
Hazardous Waste Division

CE:JMc:hdb
Enclosure

cc: Mr. James H. Scarbrough, Environmental Protection Agency
Mr. Steven Boswell, Vicksburg Chemical

RCRA INSPECTION REPORT

1. Inspector and Author of Report

Jack B. McCord

2. Facility Information

Vicksburg Chemical Corporation
MSD990714081
P. O. Box 3
Vicksburg, Mississippi 39180

3. Responsible Company Official

Steven T. Boswell
Director of Environmental Affairs

4. Inspection Participants

Jack B. McCord - MSDNR
Steven Boswell - Vicksburg Chemical
Sharon Matthews - U.S. EPA, Environmental Services Division

5. Date and Time of Inspections

November 17, 1987, 9:30 a.m.

6. Applicable Regulations

Mississippi Hazardous Waste Management Regulations (MHWMR)
Part 262 and applicable sections of Part 265.

7. Purpose of Inspection

To determine if the facility is in compliance with the
generator requirements set forth in MHWMR Part 262.

8. Facility Description

Vicksburg Chemical operates two chemical plants on
contiguous property south of Vicksburg, Mississippi. The
North Plant primarily produces potassium nitrate and
nitrogen tetroxide with by-product production of chlorine
gas. A slightly acidic surge pond is located at the North
Plant site, but it is not currently regulated as a RCRA
unit.

In the past the South Plant produced a variety of pesticides and herbicides including atrazine, toxaphene, dinitro butyl phenol (DNBP), monosodium methanearsonate (MSMA), diethylhexyl-phosphoric acid (DEHPA), 1-hydroxy-ethylidene-1,1-diphosphoric acid (UNIHB). They also produced the intermediates: sulfonated ortho secondary butyl phenol (OSBP), disodium methanearsonate (DSMA), and diethylhexyl-phosphochloridate. Muriatic acid was previously produced as a by-product of the toxaphene process. Nitric acid was the only product being produced at the South Plant at the time of the inspection.

A three-quarter acre surface impoundment is located on the eastern portion of the South Plant site. This impoundment currently receives wastewater from the North Plant and stormwater runoff from the South Plant. In the past, the impoundment received spills from the production areas, dinoseb wash water, and scrubber water from the toxaphene process. Although the State does not regulate the impoundment as a hazardous waste unit, the impoundment does contain a wide variety of agricultural chemicals.

A less than 90 day hazardous waste drum storage area is located at the South Plant adjacent to the old atrazine production area. This area is used to temporarily store dinoseb contaminated material such as rags, crushed drums, and pallets prior to disposal. No drums containing free liquids are stored in this area. At the time of the inspection all the drums were sealed and in good condition. This area is roofed, and diked. Spills are collected in a sump common to both this area and the returned product storage area. Two of the drums in the hazardous waste storage area lacked both hazardous waste labels and accumulation dates. One of these two drums was marked as containing "dinitro waste". While conducting the inspection hazardous waste labels, including accumulation dates, were placed on these drums. The accumulation dates placed on these drums corresponded to the earliest date on the perviously labeled drums.

Across a walkway from the drum storage area is the returned product storage area. Product formulations returned by consumers are stored here until they can be re-containerized and sold, or they are solidified and disposed of as a hazardous waste. At the time of the inspection there were ten drums and one 1-gallon plastic jug of dinoseb formulations in the returned product area. During previous inspections the floor of this area was littered with yellow stained absorbent that was apparently used to clean up dinoseb spills, and also with concrete that had spilled in the process of solidifying returned dinoseb formulations. The facility has since attempted to clean the floor by sweeping, scraping, chipping, and reacting the dinoseb with hydrogen peroxide and a ferrous ion catalyst (Fenton's reaction). The appearance of the floor has improved significantly, but it is doubtful that the yellow staining can ever be completely removed. The dinoseb currently in the returned product area will be re-drummed when the facility converts from 5-gallon to 30-gallon containers.

9. Findings

In reviewing the facility's records it was noted that due to a recent change in personnel the list of emergency coordinators needed to be updated. Personnel training had not yet been updated, but would not be overdue until the end of December.

10. Conclusions

There were several violations of the Mississippi Hazardous Waste Management Regulations Part 262 concerning the Hazardous Waste drum storage area. The violations were as follows:

MHWMR Section 262.34(a) (2) - Two drums containing hazardous waste were not clearly marked with accumulation dates.

MHWMR Section 262.34(a) (3) - Two drums were not clearly marked with the words, "Hazardous Waste".

MHWMR Section 262.34(a) (4) as it refers to MHWMR Part 265 Subpart D - The facility had not updated its list of emergency coordinators as required by MHWMR Section 265.52(d).

11. Signed

Inspector

12. Approval

cc: Mr. James H. Scarbrough, EPA

FILE COPY

April 14, 1987

Mr. Fred Ahlers, Plant Manager
Vicksburg Chemical Corporation
P. O. Box 3
Vicksburg, Mississippi 39180

Dear Mr. Ahlers:

Re: Interim Status Compliance
Inspection Checklist

On March 26, 1987, the Bureau of Pollution Control sent to you a notice of violation resulting from the Bureau's inspection conducted on February 19, 1987. Enclosed with that letter was a copy of the Interim Status Compliance Checklist used during the inspection. All but the second item of Subpart I of the checklist was completed in Vicksburg Chemical's conference room while reviewing the inspection records. The second item, concerning management of containers, was to be completed in the field. This item, however, was not completed when the drum storage area was inspected. I am enclosing a corrected copy of the checklist for your records.

If you have any questions, please contact me at 961-5171.

Sincerely,

Jack B. McCord
Hazardous Waste Division

JBM:hdb

Enclosure

cc: Mr. Jim Scarbrough, Environmental Protection Agency

FILE COPY

March 26, 1987

Mr. Fred Ahlers, Plant Manager
Vicksburg Chemical Corporation
P. O. Box 3
Vicksburg, Mississippi 39180

Dear Mr. Ahlers:

Re: Interim Status Compliance Inspection
February 19, 1987
MSD990714081

On February 19, 1987, Paul Peronard, U. S. EPA Region IV, and Jack McCord of the Bureau of Pollution Control were accompanied by John Hill, Vicksburg Chemical, while conducting an Interim Status Compliance Inspection of your facility. During the inspection, the 90-day Hazardous Waste Drum Storage Area was found to be in violation of the Mississippi Hazardous Waste Management Regulations (MHWMR) Part 265, Subpart I (as referenced by MHWMR 262.34(a)(1)).

The violations observed were as follows:

1. MHWMR 265.171 (Condition of Containers) - Several drums were corroded and one drum had the top cut off and was incapable of being sealed.
2. MHWMR 265.173 (Management of Containers) - None of the drums containing hazardous waste were sealed, and several drums had oversized lids resting on the top of the drum (easily dislodged by wind).

There were additional problems observed at the site during the inspection. Of principal concern is a water cut on the southwest side of the impoundment adjacent to the old solid waste landfill.

There was a discernable flow of liquid discharging from the cut into the impoundment. Vicksburg Chemical should act immediately to determine the source of this flow into the impoundment. It was also observed that piezometer No. 3 had been broken off near ground level. This piezometer could act as an avenue for contamination to the groundwater and should be adequately repaired or plugged in an expeditious manner. A copy of the inspection checklist is enclosed for your information.

Because of the non-compliance history in the drum storage area, the Bureau intends to bring this matter before the Mississippi Commission on Natural Resources in the near future for appropriate enforcement action including a penalty.

Mr. Fred Ahlers, Plant Manager
Vicksburg Chemical Corporation
Page -2-

If you have any questions, please call me at 961-5171.

Sincerely,

Charles Estes, P. E., Coordinator
Hazardous Waste Division

CE:JM:hdb

Enclosure

cc: Mr. Jim Searbrough, Environmental Protection Agency

RCRA INSPECTION REPORT

MSD 990714081

RECEIVED
MAR - 9 1987

DEPT. OF NATURAL RESOURCE
BUREAU OF POLLUTION CONTROL

1) Inspector and Author of Report

Paul R. Peronard
Environmental Engineer

2) Facility Information

Vicksburg Chemical Company (VCC)
Vicksburg, MS - MSD990714081

3) Responsible Official

John Hill - Environmental Engineer

4) Inspection Participants

Paul Peronard - USEPA, Atlanta
John Hill - Vicksburg Chemical
Jack McCord - MSDNR

5) Date and Time of Inspection

February 19, 1987
8:00 a.m.

6) Applicable Regulations

40 CFR 261, 262 and 265

7) Purpose of Survey

Reconnaissance for upcoming Case Development and Evaluation Inspection to be conducted in February 1986.

8) Facility Description

Vicksburg Chemical operates two chemical plants on contiguous property located just south of Vicksburg, Mississippi. The North Plant produces potassium nitrate with by-product production of chlorine gas and nitrogen tetroxide. There is a surface impoundment at the plant that is not regulated at the present time. The facility maintains this unit is a surge pond for the North Plant's operation and that it is slightly acidic.

At one time the South Plant manufactured a variety of pesticides, including atrazine, toxaphene, methyl parathion, dinitro butyl phenol (DNBP), and monosodium methane arsenate (MSMA). Although the DNBP and MSMA are still operative none of the pesticides manufacturing areas were running at the time of the inspection. In addition to the pesticide operations the South Plant has produced a wide variety of specialty chemicals, and presently manufactures nitric acid (HNO₃).

Below is an outline of the areas of regulatory concern at VCC at the present time.

South Surface Impoundment - This surface impoundment occupies approximately one-half acre on the eastern portion of the South Plant. Its overall depth (including sludge deposits) ranges from 10-15 feet, and it is divided into three subsections by finger dikes. The impoundment presently receives a portion of the run-off from south plant as well as a waste water stream from the north plant. At one time, spills in the DNBP and toxaphene areas were routed to the impoundment, as well as a waste water stream from the toxaphene production area.

Unneutralized Tank - When the DNBP plant is operating, an acidic waste water stream (D002 with ppm DNBP) is stored in a 1.6 million gallon tank prior to deep-well injection off-site.

Drum Storage Area - Is located in an old production area, having a concrete floor with small containment berms, and is covered by a metal roof. There is a small floor drain located adjacent to the drum storage area used for spill collection. John Hill (Environmental Engineer - VCC) indicated that at some time in the past the floor drain was plugged, and that there is no net flow from the drain. Spilt material in the drum storage area is either collected in the drain or solidified with kitty-litter, then removed by a suck pump, drummed, and shipped off-site for disposal. Mr. Hill did not know when the floor drain was plugged, nor where the flow was routed prior to plugging. At the time of inspection there were ten (10) drums in the drum storage area, although previous inspection reports indicate that up to 200 drums have been stored in the area at one time.

Returned Product Area - Across a walk-way from the drum storage area is the returned product storage area. Off-spec product that has been returned to the plant from commercial outlets is stored here. Some of the off-spec product is given to employees, some regenerated and the rest becomes hazardous waste. Approximately 50 55-gallon drums of this returned product was stored along with many overpacks and other drums containing unknown wastes.

None of the containers in the returned product storage area were labelled as to their contents, nor the accumulation date. Mr. Hill had no knowledge as to what was in any of the drums, how long materials had been there, or when and how determinations were made that the material is hazardous. (MSDNR is taking action to establish procedures for handling this material via a warning letter).

The returned product area shares the floor drain with the drum storage area and is similar in construction.

Dinoseb/Toxaphene Production Areas - Of regulatory concern in these areas are the sump and drain collection systems. Spills and material overflow from the production areas were at one time collected in sumps outside of the bermed production areas and routed to the south surface impoundment. At the time of the inspection there was two (2) inches of standing yellowish liquid in dinoseb production area. At two locations the liquid over-topped

the berm and was running into a catch basin outside the production area. These basins were plugged prior to November 8, 1985, and apparently the material was to be removed by the facilities mobile suck pump.

9) Findings

There were several violations of 40 CFR §262 in the drum storage area as §262.34(a)(1) references the container storage standards in §265 Subpart I:

§265.171 (Condition of Containers) - All of the containers were either corroded, had the top portion cut-off, and/or showed evidence of leaking.

§265.173 (Management of Containers) -

- (a) Several containers were left open.
- (b) Several containers merely had oversized lids laying over the top of the drum (not sealed in any fashion). This is inadequate handling as to prevent leaks.

§265.174 (Inspections) - None of the previously cited container conditions was reported on any inspection log.

There were also some problems associated with the facility's surface impoundment:

- 1) Two (2) monitoring wells and one (1) piezometer were drilled through the berm of the surface impoundment.
- 2) One (1) piezometer was broken-off at ground level and inadequately covered.
- 3) None of the monitoring wells on-site had locks or protective casings.
- 4) One (1) well had a PVC sleeve around the well casing and had filled within six (6) inches of the top of the well casing.
- 5) There was evidence of erosion on various locations of the impoundment berm.
- 6) Standing water adjacent to the surface impoundment in two locations indicate possible seepage from the impoundment.
- 7) There was a water cut on the southwest side of the surface impoundment with an unknown source of liquid flowing into the impoundment. VCC's old solid waste landfill showed evidence of both erosion and ponding on its surfaces.

VCC appeared to be in compliance with most of the facility standards set forth in 40 CFR §265 Subparts A-E, however, the number of warning signs posted approaching both the surface impoundment and the drum storage area were inadequate as set forth in §265.14(c).

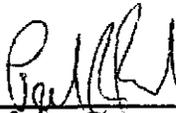
10) Recommendations

An Administrative Order (with civil penalty) should be issued to VCC as soon as possible. The drum storage area has historically been mismanaged (refer to EPA and MSDNR Inspection Reports from: September 1981, July 1982, November 1984, November 1985 and August 1986) and any A.O. should reflect this history of non-compliance.

MSDNR must move forward to regulate VCC's surface impoundment. If such a decision is not reached by the Bureau of Pollution Control Commission, EPA must step in and take action to ensure that the unit is properly operated, maintained and monitored.

In addition, VCC must be ordered to find out the source and content of the liquid flowing into the surface impoundment. This possibly via a 3013 order or a state equivalent.

11) Signed



Paul R. Peronard
Inspector

12) Concurrence

Approval



Doyle J. Brittain, Chief
West Compliance Unit

Allan E. Antley, Chief
Waste Compliance Section

3/3/87
Date

3/9/87
Date

cc: Sam Mabry, MSDNR

CEDAR CHEMICAL CORPORATION

24th Floor • 5100 Poplar Avenue • Memphis, TN 38137 • 901-685-5348

REPLY TO: P. O. BOX 3
VICKSBURG, MS 39180
(601) 636-1231

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
P 113 213 035

March 10, 1987

RECEIVED

MAR 11 1987

Mr. Jack McCord
Mississippi Department of Natural Resources
Bureau of Pollution Control
Industrial Wastewater Control Section
2380 Highway 80 West
Jackson, MS 39204

DEPT. OF NATURAL RESOURCE
BUREAU OF POLLUTION CONTROL

Re: Your Letter of February 9, 1987

Dear Mr. McCord:

Before detailing the plan for managing the Returned Product Storage Area requested in your letter, we wish to make a few comments about some items in the letter which we consider nebulous.

Firstly, paragraph one stated, "...a great deal of spillage was observed...". Minor spillage can and does occur at this (or any) returned product handling facility and minor spillage is what was observed by you in the Returned Product Storage Area. The material analyzed by the Bureau was an adsorbing material which had been placed on a minor dinoseb spill and, of course, dinoseb was found in the sample. The adsorbent was placed there in a neat pile to perform its function. The observation of your staff should be complimentary as it shows that when a spill occurs it is, in fact, cleaned up. The area in question is under roof, on a concrete pad and, except for fork truck entrances, totally surrounded by walls.

Paragraph three indicates that spillage occurs at an "unacceptable frequency...". This assertion is not factual and consequently is an unfair assessment. Spillage of materials is expensive, in both the loss of valuable product and cost of clean-up, and we strive to minimize the frequency of such occurrences.

Mr. Jack McCord
Bureau of Pollution Control
Page 2

March 10, 1987

Over the years we have strived for a good working relationship with the Bureau and have been responsive to environmental needs and requirements. You, personally, are aware of our improvements in reducing air emissions. Our NPDES compliance has been exemplary with only one brief excursion in over a year and a half. In hazardous waste, any defect found or valid recommendation by inspectors (or other staff members) has been corrected and/or promptly addressed. We feel the letter of February 9, 1987 is, for the most part, subjective and an unfair portrayal of Cedar's environmental program.

The Returned Product Storage Area Management Plan follows:

- 1) We will continue to impress upon all employees involved the need to take care and minimize the frequency and volume of any spills.
- 2) We will include, as a separate line item, a weekly inspection of the Returned Product Storage Area on the effluent operators' Hazardous Waste Inspection Sheet.
- 3) Corrective action is initiated immediately whenever a spill is detected. When such action is to apply adsorbing material, that material will be swept/shoveled up within two working days of application.
- 4) Waste material removed in accordance with item 3 above will be placed in the Hazardous Waste Storage Area adjacent to the Returned Product Storage Area. Management of this area is documented in the Part B Application.

Sincerely,



G. D. Madsen

GDM/ld
cc - Fred Ahlers

INTERIM STATUS COMPLIANCE CHECKLIST

FACILITY Vicksburg Chemical MSD 990714081
LOCATION Vicksburg
DATE 2-19-80
INSPECTORS Jack McCord MBPC
Paul Peronard EPA
John Hill Vicksburg Chemical

REQUIREMENT

Not in compliance - No
Not applicable - NA

COMMENTS

SUBPART B - GENERAL FACILITY STANDARDS

265.12 Required Notices

- a) The facility owner or operator must notify the Director at least four weeks in advance of receipt of wastes from a foreign source.
- b) Before transferring ownership or operation of a facility, the facility's owner or operator must notify the new owner or operator of the requirements of 40 CFR 265 and 122.

265.13 General Waste Analysis

Before treating, storing, or disposing of hazardous waste, the facility owner or operator must obtain a detailed chemical and physical analysis of wastes. The analysis must contain all the information which must be known to treat, store, or dispose the waste in accordance with the federal requirements.

265.14 Security to Prevent Unknowing and Unauthorized Access to the Facility

- a) The owner or operator must prevent the unknowing entry and minimize the possibility for unauthorized entry unless:
 - 1) physical contact with the waste, structures, or equipment will not be injurious
 - 2) disturbance of the waste or equipment will not violate the requirements of Part 265

Yes	No	N/A
		✓
✓		
✓		
✓		

ACQUISITION

Not applicable - NA
 Yes No N/A

COMMENTS

265.14 - Continued

b) Unless exempt under 265.14 (a)(1) or 402.7-14(a)(2), a facility must have:

1) a 24-hour surveillance system

2) (i) an artificial or natural barrier which completely surrounds the active portion of the facility

(ii) a means to control entry

c) A sign warning of the danger of intruders into the facility.

265.15 Inspection and Monitoring

a) The owner or operator must inspect the facility for malfunctions and deterioration, operator errors, or discharges which may be causing or lead to release of hazardous waste constituents to the environment or a threat to human health.

b) The owner or operator must develop and follow a schedule and plan for inspections.

c) The owner or operator must take remedial action upon the detection of malfunction or the deterioration of equipment and structures when a hazard is imminent.

d) The owner or operator must record inspections in an inspection log and must keep the records for at least three years from the date of inspection.

✓

✓

✓

Entry is controlled by steep banked bays, cliffs, fences, and guard house

There are warning signs at the main approaches to the surface impoundment and drum storage area. However, the drum storage area is easily accessible from the south side where no signs are present

No inspections were conducted on 1-16-87 or 12-11-86

265.16 Facility Personnel Training

- a) Facility personnel must successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of Part 265.
- b) The training program must be completed within six months of the effective date of Part 265.
- c) There must be an annual review of the initial training in (a) above.
- d) The owner or operator must maintain records of training.
- e) Training records on current personnel must be kept until closure of the facility.

Yes	No	N/A
✓		
✓		
✓		
✓		
✓		

265.17 General Requirements for Ignitable, Reactive or Incompatible Wastes

- a) The owner or operator must take precautions to prevent accidental ignition or reaction of ignitable or reactive waste.
- b) Treatment, storage, or disposal of ignitable or reactive waste and the mixture or commingling of incompatible wastes must be conducted so that it does not:
 - 1) Generate extreme heat or pressure, fire or explosion, or violent reaction;
 - 2) Produce uncontrolled toxic mist, fumes, dusts, or gases in sufficient

Yes	No	N/A
		✓
		✓
		✓

265.17 - Continued--

quantities to threaten human health;

3) Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions;

4) Damage the structural integrity of the device or facility containing waste; or

5) Through other like means threaten human health or the environment.

SUBPART C - PREPAREDNESS AND PREVENTION

Pursuant to 265.30 through 265.37, facilities must be maintained and operated for and prevention of releases of hazardous waste controlled by the State.

SUBPART D - CONTINGENCY PLANS

Pursuant to 265.56, facilities must have contingency plans and emergency procedures to be followed in the event of a release of hazardous waste.

SUBPART E - MANIFEST SYSTEM, RECORDKEEPING, AND REPORTING

265.71(a)(1-5) If a facility receives hazardous waste accompanied by a manifest, the owner or operator must meet the requirements of 265.71(a)(1-5)

265.71(b)(1-5) If a facility receives, from a rail or water transporter, hazardous waste which is accompanied by a shipping paper, the owner or operator must meet the requirements of 265.71.

Yes	No	N/A
		✓
		✓
		✓
		✓
✓		
✓		
		✓
		✓

Not in compliance - No

Not applicable - NA

COMMENTS

REQUIREMENT

Yes	No	N/A
		✓
		✓
✓		
✓		
		✓
✓		
		✓
✓		

265.72(a) Upon discovery of significant manifest discrepancy, the owner or operator must attempt to reconcile the discrepancy with the waste generator or transporter.

(b) If a significant manifest discrepancy is not resolved, the owner or operator must notify the Director.

265.73(b) The owner or operator must keep a written operating record at the facility which meets the requirements of 265.73(b).

265.74(a) All records must be furnished upon request and available at all times for inspection by the Director or EPA.

(c) A copy of records of waste disposal locations and quantities must be submitted to the Director and the local land authority upon closure of the facility.

265.75 The owner or operator must submit an ~~annual~~ ^{biennial} report to the Director in compliance with the requirements of 265.75.

265.76 The receipt of any unmanifested waste must be reported to the Director.

265.77 The owner or operator must submit a report to the Director if any of the following occur:

- a) releases, fires, explosions
- b) groundwater contamination
- c) facility closure.

REQUIREMENT

Not in compliance - No
 Not applicable - N/A
 Yes No N/A

COMMENTS

SUBPART F - GROUNDWATER MONITORING

265.90 Owner or operator must implement a groundwater monitoring program capable of determining the facility's impact on the quality of the upper aquifer within one year of the effective date of 265.90.

✓

265.91 - 265.94 The owner and operator must install, operate, and maintain a groundwater monitoring system which meets the requirements of 265.91 - 265.94.

✓

265.90(c) All of the groundwater monitoring requirements may be waived if the owner or operator can demonstrate that there is a low potential for migration of hazardous waste constituents from the facility via the uppermost aquifer below the facility to water supply wells or to surface water.

✓

SUBPART G - CLOSURE AND POST-CLOSURE

265.111 The owner or operator must close his facility in a manner that:

✓

1) minimizes the need for future maintenance, and

2) controls, minimizes, or eliminates post-closure escape of hazardous waste.

Closure Plan submitted not yet approved

265.112(a) The owner or operator must have a written closure plan on the effective date of Part 265.

✓

Yes No N/A

EQUIPMENT

265.112(a) Continued--

The closure plan must include:

1) A description of how and when the facility will be partially closed, if applicable, and ultimately closed.

2) An estimate of the maximum inventory of wastes in storage or treatment at any given time.

3) Steps to decontaminate facility equipment.

4) A schedule for final closure which must include, as a minimum, anticipated dates when wastes will no longer be received, anticipated date for completion of final closure, and intervening milestone dates.

265.113(a) Closure must be initiated within 90 days after receiving the final volume of hazardous wastes.

(b) The owner or operator must complete closure activities within six months after receiving the final volume of wastes.

265.114 Upon completion of closure, all equipment and structures must be properly disposed of or decontaminated.

265.115 The owner or operator and an independent registered professional engineer must certify that the facility has been closed in accordance with the approved closure plan.

✓
✓
✓
✓

✓
✓

✓

✓

Hazardous waste was last placed in the impoundment in November 1985 (Information supplied by Valdeburg Chem.) Facility does not have an approved closure plan. Regulatory status of surface impoundment has not been determined

closure plan provides for decontamination

called for in closure plan

Not in compliance - No
Not applicable - NA

COMMENTS

REQUIREMENTS

265.117(a) Post closure care must consist of at least:

- 1) Groundwater monitoring
- 2) Maintenance of the contaminant system.

The owner or operator must have a post-closure plan on the effective date of Part 265 and it must include:

- 1) Groundwater monitoring activities and frequency.
- 2) Maintenance activities and frequencies to ensure the integrity of the cap, final cover, or other containment structures, and functions of the facilities monitoring equipment.

265.119 Within 90 days after closure, the owner or operator must submit a survey plat of the facility.

265.120 The owner or operator must record a notice on the deed that the land has been used to manage hazardous waste.

Yes	No	N/A
✓		
✓		
✓		
✓		
✓		
✓		
✓		

Post-closure plan addresses these requirements. The facility has not yet closed

SUBPART II - FINANCIAL REQUIREMENTS

265.142(a) The owner or operator must develop and maintain a current estimate of closure and post-closure costs.

SUBPART I - OTHER FACILITY STANDARDS

265.170 - 265.172 The container must be compatible with the waste to be stored.

Facility is under a commission order to fund closure/post closure trust fund. Requirements were stayed until regulatory status is determined. No sudden or non sudden liability insurance

Yes	No	N/A
✓		
		✓
		✓
		✓

265.173 Containers holding hazardous waste must be kept closed and must not be opened, handled, or stored in a manner which may cause a rupture or leak.

265.174 Areas where containers are stored must be inspected weekly.

265.176 Containers holding ignitable or reactive waste must be located at least 15 meters from the facility's property line.

265.177(a) Incompatible wastes must not be placed in the same container.

(b) A storage container holding a hazardous waste that is incompatible with any waste or other materials stored nearby must be separated or protected from the other materials.

SUBPART J - TANKS

265.192(b) Hazardous waste must be placed in a tank if they could cause the tank or its liner to leak.

(c) Uncovered tanks must have a least two feet of freeboard unless other containment structures, a drainage control system, or other diversion structures with a capacity that equals or exceeds the volume of the top two feet of the tank.

(d) Tanks which have a continuous feed system must be equipped with a means to stop the inflow.

265.193 Waste analysis must be conducted pursuant to 265.13, and 265.193(a)

265.194 Tanks must be inspected in accordance with 265.194.

265.197 At closure, all hazardous waste and hazardous waste residues must be removed from the tanks.

265.198 Ignitable or reactive waste should not be placed in a tank unless 265.198 is complied with.

265.199 Incompatible wastes must not be placed in the same tank unless 265.176 is complied with.

SUBPART K - SURFACE IMPOUNDMENTS

265.222 Must maintain at least two feet of freeboard. ✓

265.223 Earthen dikes must have protective cover. ✓

265.225 Must conduct waste analyses and trial tests in accordance with 265.225. ✓

265.226(1) Must inspect the freeboard level at least once each operating day. ✓

(2) Must inspect the surface impoundment at least once a week to detect any leaks, deterioration, or failure. ✓

265.228 The surface impoundment must close in accordance with 265.228. ✓

closure plan not yet approved
• waiting on determination of regulatory
State

265.229 Ignitable or reactive waste must not be placed in a surface impoundment unless 265.229 is complied with.

265.230 Incompatible wastes must not be placed in the same surface impoundment unless 265.17(b) is complied with.

SUBPART L - WASTE PILES

265.251 A waste pile must be protected and managed to control wind dispersal.

265.252 An owner or operator must conduct waste analyses unless the facility meets the exemptions of 265.252.

265.253 Within one year after the effective date of the regulations, leachate or run-off from a pile must be controlled pursuant to 265.253.

265.256 Ignitable or reactive waste must not be placed in a waste site unless 265.256 is complied with.

265.257 The requirements of 265.257 for incompatible wastes must be complied with.

SUBPART M - LAND TREATMENT

265.272(a) Hazardous waste must not be placed at a land treatment facility unless it can be made less hazardous or non-hazardous.

(b) Run-on must be diverted away from other active portions as of one year after the effective date of Part 265.

100	200	300
		3/A
		✓
		✓

265.272 -- Continued

(c) Run-off from active portions must be collected as of one year after the effective date of Part 265

265.273 Waste analyses must be conducted pursuant to 265.273.

265.276(a) An owner or operator must notify the State Director within 60 days after the effective date of Part 265 if food chain crops are grown on the land treatment facility.

(b) Food chain crops must not be grown on the treated area of a hazardous waste land treatment facility unless 265.276(b) is complied with.

(c) Food chain crops must not be grown on a land treatment facility receiving waste that contains cadmium unless 265.276(c) is complied with.

265.278 The owner or operator must have in writing and must implement an unsaturated zone monitoring plan pursuant to 265.278.

265.279 The owner or operator must keep records of the application dates, application rates, quantities, and location of each hazardous waste placed in a facility.

265.280 A land treatment facility must meet the closure and post-closure requirements of 265.280.

265.315 (1) Empty containers must be reduced in volume as of one year after the effective date of Part 265.

SUBPART O - INCINERATORS

265.343 Must be at steady state conditions before adding hazardous waste.

265.345 Waste analyses must be conducted pursuant to 265.345.

265.347 Monitoring and inspections must be conducted as delineated in 265.347.

265.351 At closure, the owner or operator must remove all hazardous waste and hazardous waste residues.

SUBPART P - THERMAL TREATMENT

265.373 Must be at steady state conditions before adding hazardous wastes.

265.375 Waste analyses must be conducted pursuant to 265.375.

265.377 Monitoring and inspections must be conducted as delineated in 265.377.

265.301 At closure, the owner or operator must remove all hazardous waste residues.

265.382 Open burning of hazardous waste is prohibited except for the open burning and detonation of waste explosives.

Other questions or standards.

Are there any other generators transporting their waste to this hazardous waste management facility?

Yes	No	N/A

Mr. Fred Ahlers, Plant Manager
Vicksburg Chemical
Page -2-

If you have any questions or comments, please contact me at 961-5171.

Sincerely,



Jack B. McGord
Hazardous Waste Division

JBM:om
cc: Mr. James Scarborough, EPA Region IV
cc: John Hill, Vicksburg Chemical



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30365

OCT 8 1986

4WD-WC

RECEIVED

OCT - 8 1986

DEPT. OF NATURAL RESOURCE
BUREAU OF POLLUTION CONTROL

Mr. Chuck Estes
Mississippi Department of
Natural Resources
P.O. Box 10385
2380 Highway 80 West
Jackson, Mississippi 39209

Dear Mr. Estes:

Per your phone conversation with Jeaneanne Gettle of my staff on October 1, 1986, find enclosed copies of the draft and final RCRA Site Inspection Reports for Vicksburg Chemical, Vicksburg, Mississippi.

If you have any questions, please call Jeaneanne or Paul Peronard at (404) 347-7603.

Sincerely yours,

A handwritten signature in cursive script that reads "Doyle T. Brittain".

Doyle T. Brittain, Chief
West Compliance Unit

OCT 6 1986

RECEIVED

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Doyle T. Brittain, Chief
West Compliance Unit

OCT 1 1986

RCRA SITE INSPECTION

1) Inspector and Author of Report

Jane E. Stone
Environmental Engineer

2) Facility Information

VERTAC MSD 990 714 081
(Now known as Vicksburg Chemical, a division of Cedar Chemical)
Vicksburg, MS

3) Responsible Official

John Hill - Environmental Engineer

4) Inspection Participants

Jane Stone - USEPA
Bill Steiner - USEPA
John Hill - Vicksburg Chemical

5) Date and Time of Inspection

August 7, 1986
10:00 a.m.

6) Applicable Regulations

40 CFR 262 & 265

7) Purpose of Survey

RCRA Generator Inspection and Closure Inspection. The status of the groundwater monitoring program will be determined by file review.

8) Facility Description

Vertac Chemical operates two chemical plants on contiguous property located just south of Vicksburg Mississippi. The North Plant produces potassium nitrate with by-product production of chlorine gas and nitrogen tetroxide. There is a surface impoundment at the plant that is not regulated at the present time. The facility maintains that it is a surge pond from the North Plant's operation and that it is slightly acidic.

The South Plant presently produces dinitro-butyl phenol (Dinoseb) and used to produce monosodium methane arsenate (MSMA). They also produce a variety of specialty chemicals on a batch contract basis. The production of Dinoseb generates an acidic wastewater (D002) and spills from the process area (P020). During the inspection, freeboard was adequate, but the area adjacent to the drive had eroded into the impoundment. Mr. Hill stated that the impoundment would be replaced with a large tank as soon as the closure plan is approved.

The South Plant also has a drum storage area and a returned product area which receives drums and overpacks of pesticides and herbicides that are rejected by commercial outlets. Products may be returned because they are off-spec, the containers may be leaking or for commercial reasons.

9) Findings

South Plant

Vertac maintains that they are no longer discharging hazardous waste into their surface impoundment at the south plant. While inspecting this facility liquids were being discharged into the impoundment. Mr. Hill stated that the liquid consisted of charcoal filter backwash from the wastewater treatment plant and storm run-off and was not hazardous waste. The present hazardous wastewater storage for the Dinoseb plant is a 1.6 million gallon tank. Waters from this tank (D002 with ppm Dinoseb) are shipped to an injection well.

Drum storage at the plant takes place in two areas.

- 1) The Drum storage area is in an old production area and is covered by a metal roof but has no walls or berms of any kind. At least 28 30 gallon drums of solid MSMA, 60-200 other drums of various sizes (55-75 gallon) containing Dinoseb, MSMA, and other wastes were present. Some were empty, so the exact number is not known. Many of the Dinoseb drums were actively leaking during the inspection. Mr. Hill did not know what many of the drums contained. These drummed wastes have no accumulation dates or labels on them. It was obvious from casual inspection that the drums had been stored there more than 90 days and that their condition was unacceptable. Several containers were stored on broken pallets. In this same area the facility had a drum crusher and was crushing drums to be shipped off-site as hazardous waste.
- 2) Adjacent to and indistinguishable from the drum storage area is the returned product storage area. Off-spec product that has been returned to the plant from commercial outlets is stored here. Some of the off-spec product is given to employees, some is regenerated and the rest becomes hazardous waste. Approximately 30 55 gallon drums of this product are stored along with many overpacks and other drums containing unknown wastes.

Both drum storage areas had large spills on the ground. Kitty Litter has been layed down to absorb the spills and the mixture is very thick in some areas. Present practice is to cut the drums open and to place them and the waste into a dumpster to be hauled off-site. No lables with accumulation dates or the words Hazardous Waste were found on any drums at the site. The floor drains and sumps in the drum storage area were overflowing with waste-contaminated rain water.

Product spills were made apparent by the visibility of yellow and black stained areas on the ground. These areas were found throughout the facility grounds.

10) Conclusions

The facility is in violation of 40 CFR 265.171 by failing to manage storage containers properly.

The facility is in violation of 40 CFR 265.173(b) by storing several containers on broken pallets which had caused several to leak.

The facility is in violation of 40 CFR 262.34(a) which requires accumulation dates and labels to be placed on all drums.

The facility is in violation of 40 CFR 265.31 by failing to maintain and operate the facility to minimize the possibility of any release of hazardous waste or hazardous waste constituent to the soil or surface water.

11) Recommendations

North Impoundment - Should be sampled over time to prove that incoming wastewaters are not acidic. Bottom sludges should be analyzed for EP toxicity.

South Impoundment - Should be closed immediately. The proposed wastewater treatment tank should be built now, not when the closure plan is approved. The influent wastewater should be tested for hazardous constituents. A dye-tracer study might be advisable to determine which waters go where.

Drum Storage Area - This should undergo a formal 265 closure. It is too dirty, disorganized and unsafe to be remedied by a simple change in management practices. The corrective measures must be made in accordance with an approved closure plan, and should include total removal of wastes before the area is used again.

Product Storage Area - This is a hazardous waste generation area. As long as there is a reasonable expectation that the material can be regenerated, it must be regarded as product. However the numerous and massive spills must be cleaned up quickly and removed to the hazardous waste storage area. There must be a clear border between the two areas.

Enforcement Actions - 3013 Order on North Impoundment and South impoundment. 3008(a) Order on Drum Storage area and on Groundwater monitoring.

12) Signed

Jane E Stone
Jane E. Stone
Inspector

9/9/86
Date

13) Concurrence

Doyle T. Brittain
Doyle T. Brittain, Chief
West Unit

9/10/86
Date

Approval

Allan E. Antley
Allan E. Antley, Chief
Waste Compliance Section

9/10/86
Date

RCRA SITE INSPECTION

DRAFT

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Jane E. Stone
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DRAFT

12) Signed

Jane E. Stone
Inspector

Date

13) Concurrence

Doyle T. Brittain, Chief
West Unit

Date

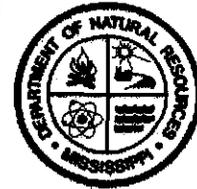
Approval

Allan E. Antley, Chief
Waste Compliance Section

Date



MISSISSIPPI DEPARTMENT OF NATURAL RESOURCES
Bureau of Pollution Control
P. O. Box 10385
Jackson, Mississippi 39209
(601) 961-5171



MEMORANDUM

TO: File

FROM: Michael Bradshaw

SUBJECT: Inspection 8/12/86

DATE: August 18, 1986

On August 12, 1986, a generator inspection was made at the Vicksburg Chemical Plant in Vicksburg. Formerly, this facility was known as VERTAC Chemical.

I found the drum storage area to be in poor shape. A number of drums were not labeled, many were in very poor shape, and much unnecessary equipment cluttered the storage area. Also, I found much evidence of frequent spills in the storage area and the "returned material" storage area. Specific RCRA violations can be found on the generator checklist.

MB:ls

July 9, 1986

FILE COPY

CERTIFIED MAIL NO. P 283 765 622

Vertac Chemical Corporation
24th Floor, 5100 Poplar
Memphis, Tennessee 38137

CERTIFIED MAIL NO. P 283 765 623

Mr. Fred Ahlers
Vertac Chemical Corporation
P. O. Box 3
Vicksburg, Mississippi 29180

CERTIFIED MAIL NO. P 283 765 624

Mr. Fred Ahlers
Cedar Chemical Corporation
P. O. Box 3
Vicksburg, Mississippi 29180

Gentlemen:

Under the authority of Section 49-17-31 of the Mississippi Code, the Mississippi Commission on Natural Resources hereby causes this written complaint to be served on Vertac Chemical Corporation and/or Cedar Chemical Corporation (hereinafter referred to as respondents) for apparent violations which include the following:

Investigations by the Bureau of Pollution Control have revealed that respondents are in apparent violation of an Order of the Mississippi Commission on Natural Resources. Specifically, respondents failed to submit a report including the groundwater data and closure/post-closure information that satisfies the requirements of the Bureau of Pollution Control's letter of November 14, 1985, and MHWNR Part 264 Subparts G and K on or before January 10, 1986; failed to submit a draft Groundwater Corrective Action Plan to the Bureau of Pollution Control in accordance with MHWNR Section 264.100 on or before May 16, 1986; failed to submit the finalized Groundwater Corrective Action Plan and begin implementation in accordance with the Bureau of Pollution Control's letter of November 14, 1985 and MHWNR Section 264.100 on or before June 16, 1986, as required by Commission Order No. 948-85 issued November 20, 1985; and also failed to obtain sudden and non-sudden liability insurance as required by MHWNR Section 265.147.

July 9, 1986

Page -2-

Respondents are therefore notified to appear before the Mississippi Commission on Natural Resources on the 22nd day of July, 1986, at 3:30 p.m., in the conference room of the Commission in the Southport Center Building, 2380 Highway 80 West, Jackson, Mississippi, where the matter will be heard by the Commission.

You have the right to be accompanied by your legal counsel and such witnesses as you deem necessary in presenting your defense. This will be a formal hearing, and all testimony will be taken under oath as in a courtroom trial. The Commission is empowered to levy penalties of up to \$25,000.00 per day per violation, and any appeal of the Commission's decision will be to the Chancery Court.

Attached you will find a copy of the Commission's hearing procedures and also a copy of frequently asked questions regarding hearings. We urge you to review these documents carefully.

If you have any questions regarding this matter, please contact us.

Yours very truly,

Charlie L. Blalock
Executive Director

CLB:cm
Attachment

INTERIM STATUS COMPLIANCE CHECKLIST

FACILITY VERTAC CHEMICAL CORP.
LOCATION VICKSBURG, MS.
DATE 11/22/85
INSPECTORS MICHAEL BRADSHAW - DNR
JIM COOK - EPA
JOHN HILL - VERTAC

REQUIREMENT

In compliance - Yes
 Not in compliance - No
 Not applicable - NA

COMMENTS

SUBPART B - GENERAL FACILITY STANDARDS

265.12 Required Notices

- a) The facility owner or operator must notify the Director at least four weeks in advance of receipt of wastes from a foreign source.
- b) Before transferring ownership or operation of a facility, the facility's owner or operator must notify the new owner or operator of the requirements of 40 CFR 265 and 122.

Yes	No	N/A
		✓
		✓
✓		
✓		

265.13 General Waste Analysis

Before treating, storing, or disposing of hazardous waste, the facility owner or operator must obtain a detailed chemical and physical analysis of wastes. The analysis must contain all the information which must be known to treat, store, or dispose the waste in accordance with the federal requirements.

✓

265.14 Security to Prevent Unknowing and Unauthorized Access to the Facility

- a) The owner or operator must prevent the unknowing entry and minimize the possibility for unauthorized entry unless:
 - 1) physical contact with the waste, structures, or equipment will not be injurious
 - 2) disturbance of the waste or equipment will not violate the requirements of Part 265.

✓

In compliance - Yes
 Not in compliance - No
 Not applicable - NA

REQUIREMENT

COMMENTS

Yes	No	N/A
✓		
✓		
✓		
	✓	
	✓	
✓		
	✓	
✓		

265.14 - Continued

b) Unless exempt under 265.14 (a)(1) or 402.7-14(a)(2), a facility must have:

1) a 24-hour surveillance system

2) (i) an artificial or natural barrier which completely surrounds the active portion of the facility

(ii) a means to control entry

c) A sign warning of the danger of intruding into the facility.

265.15 Inspection and Monitoring

a) The owner or operator must inspect the facility for malfunctions and deterioration, operator errors, or discharges which may be causing or lead to release of hazardous waste constituents to the environment or a threat to human health.

b) The owner or operator must develop and follow a schedule and plan for inspections.

c) The owner or operator must take remedial action upon the detection of malfunction or the deterioration of equipment and structures when a hazard is imminent.

d) The owner or operator must record inspections in an inspection log and must keep the records for at least three years from the date of inspection.

Inspection logs made no comments about release from eastern corner of impoundment.

Eastern corner of impoundment has had a recent release. Yellow herbicide stains on dike and dead vegetation along natural drainage into creek.

In compliance - Yes
 Not in compliance - No
 Not applicable - NA

REQUIREMENT

COMMENTS

Yes	No	N/A
✓		
✓		
✓		
✓		
✓		

265.16 Facility Personnel Training

- a) Facility personnel must successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of Part 265.
- b) The training program must be completed within six months of the effective date of Part 265.
- c) There must be an annual review of the initial training in (a) above.
- d) The owner or operator must maintain records of training.
- e) Training records on current personnel must be kept until closure of the facility.

265.17 General Requirements for Ignitable, Reactive or Incompatible Wastes

- a) The owner or operator must take precautions to prevent accidental ignition or reaction of ignitable or reactive waste.
- b) Treatment, storage, or disposal of ignitable or reactive waste and the mixture or commingling of incompatible wastes must be conducted so that it does not:
 - 1) Generate extreme heat or pressure, fire or explosion, or violent reaction;
 - 2) Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient

In compliance - Yes
 Not in compliance - No
 Not applicable - NA

REQUIREMENT

COMMENTS

Yes	No	N/A
		✓
		✓
✓		
		✓
		✓
✓		
		✓
✓	✓	✓

265.72(a) Upon discovery of significant manifest discrepancy, the owner or operator must attempt to reconcile the discrepancy with the waste generator or transporter.

(b) If a significant manifest discrepancy is not resolved, the owner or operator must notify the Director.

265.73(b) The owner or operator must keep a written operating record at the facility which meets the requirements of 265.73(b).

265.74(a) All records must be furnished upon request and available at all times for inspection by the Director or EPA.

(c) A copy of records of waste disposal locations and quantities must be submitted to the Director and the local land authority upon closure of the facility.

265.75 The owner or operator must submit an annual report to the Director in compliance with the requirements of 265.75.

265.76 The receipt of any unmanifested waste must be reported to the Director.

265.77 The owner or operator must submit a report to the Director if any of the following occur:

- a) releases; fires, explosions
- b) groundwater contamination
- c) facility closure.

release not reported

In compliance - Yes
 Not in compliance - No
 Not applicable - NA

REQUIREMENT.

COMMENTS

Yes	No	N/A
✓		
✓		
		✓
		✓
✓		

SUBPART F - GROUNDWATER MONITORING

265.90 Owner or operator must implement a groundwater monitoring program capable of determining the facility's impact on the quality of the upper aquifer within one year of the effective date of 265.90.

265.91 - 265.94 The owner and operator must install, operate, and maintain a groundwater monitoring system which meets the requirements of 265.91 - 265.94.

265.90(c) All of the groundwater monitoring requirements may be waived if the owner or operator can demonstrate that there is a low potential for migration of hazardous waste constituents from the facility via the uppermost aquifer below the facility to water supply wells or to surface water.

SUBPART G - CLOSURE AND POST-CLOSURE

265.111 The owner or operator must close his facility in a manner that:

- 1) minimizes the need for future maintenance, and
- 2) controls, minimizes, or eliminates post-closure escape of hazardous waste.

265.112(a) The owner or operator must have a written closure plan on the effective date of Part 265.

In compliance - Yes
 Not in compliance - No
 Not applicable - NA

REQUIREMENT

COMMENTS

Yes	No	N/A
✓		
✓		
✓		
✓		
		✓
		✓
✓		
✓		

Wells are in place.

265.117(a) Post closure care must consist of at least:

- 1) Groundwater monitoring
- 2) Maintenance of the contaminant system.

The owner or operator must have a post-closure plan on the effective date of Part 265 and it must include:

- 1) Groundwater monitoring activities and frequency.
- 2) Maintenance activities and frequencies to ensure the integrity of the cap, final cover, or other containment structures, and functions of the facilities monitoring equipment.

265.119 Within 90 days after closure, the owner or operator must submit a survey plat of the facility.

265.120 The owner or operator must record a notice on the deed that the land has been used to manage hazardous waste.

SUBPART H - FINANCIAL REQUIREMENTS

265.142(a) The owner or operator must develop and maintain a current estimate of closure and post-closure costs.

SUBPART I - OTHER FACILITY STANDARDS

265.170 - 265.172 The container must be compatible with the waste to be stored.

In compliance - Yes
 Not in compliance - No
 Not applicable - NA

REQUIREMENT

COMMENTS

Yes	No	N/A
✓		
✓		
✓		
✓		
✓		
<u>SUBPART J - TANKS</u>		
✓		
✓		
✓		

265.173 Containers holding hazardous waste must be kept closed and must not be opened, handled, or stored in a manner which may cause a rupture or leak.

265.174 Areas where containers are stored must be inspected weekly.

265.176 Containers holding ignitable or reactive waste must be located at least 15 meters from the facility's property line.

265.177(a) Incompatible wastes must not be placed in the same container.

(b) A storage container holding a hazardous waste that is incompatible with any waste or other materials stored nearby must be separated or protected from the other materials.

SUBPART J - TANKS

265.192(b) Hazardous waste must be placed in a tank if they could cause the tank or its liner to leak.

(c) Uncovered tanks must have a least two feet of freeboard unless other containment structures, a drainage control system, or other diversion structures with a capacity that equals or exceeds the volume of the top two feet of the tank.

(d) Tanks which have a continuous feed system must be equipped with a means to stop the inflow.

drum storage area untidy. No warning signs posted

In compliance - Yes
Not in compliance - No
Not applicable - NA

REQUIREMENT

COMMENTS

Yes	No	N/A
✓		
✓		
✓		✓
		✓
		✓
✓		
✓		
✓		
✓		
		✓

265.193 Waste analysis must be conducted pursuant to 265.13, and 265.193(a)

265.194 Tanks must be inspected in accordance with 265.194.

265.197 At closure, all hazardous waste and hazardous waste residues must be removed from the tanks.

265.198 Ignitable or reactive waste should not be placed in a tank unless 265.198 is complied with.

265.199 Incompatible wastes must not be placed in the same tank unless 265.176 is complied with.

SUBPART K - SURFACE IMPOUNDMENTS

265.222 Must maintain at least two feet of freeboard.

265.223 Earthen dikes must have protective cover.

265.225 Must conduct waste analyses and trial tests in accordance with 265.225.

265.226(1) Must inspect the freeboard level at least once each operating day.

(2) Must inspect the surface impoundment at least once a week to detect any leaks, deterioration, or failure.

265.228 The surface impoundment must close in accordance with 265.228.

dikes in good shape generally except for release area, planted in ryegrass.

In compliance - Yes
Not in compliance - No
Not applicable - NA

COMMENTS

REQUIREMENT

Yes No N/A

265.281 Ignitable or reactive waste must not be placed in a land treatment facility unless 265.281 is complied with.

265.282 Incompatible wastes must not be placed in the same land treatment area unless 265.17(b) is complied with.

SUBPART N - LANDFILLS

265.302(a) Run-on must be diverted away from the active portions within one year after the effective date of Part 265.

(b) Run-off from active portions must be collected within one year after the effective date of Part 265.

(d) Must control wind dispersal.

265.309 The owner or operator must meet the surveying and recordkeeping requirements of 265.309.

265.310 A landfill must comply with closure and post-closure requirements of 265.310.

265.312 Ignitable or reactive waste must not be placed in a landfill unless 265.312 is complied with.

265.313 Incompatible wastes must not be placed in a landfill unless 265.17(b) is complied with.

265.314 Bulk or non-containerized liquid waste, waste containing free-liquids, or containers holding liquid waste should not be placed in a landfill unless the requirements of 265.314

REQUIREMENT

In compliance - Yes
 Not in compliance - No
 Not applicable - NA

COMMENTS

Other questions or standards.

Are there any other generators transporting their waste to this hazardous waste management facility?

Yes	No	N/A
		✓

The plant itself had numerous small spills on ground. Drainage is supposed to carry all spills to surface impoundment. Noticed deteriorated asbestos pipe insulation in many areas.

chuck

BLUEPRINT

For Documenting Compliance
with the
RCRA Amendments of 1984
February 1, 1985

Facility Name: Vertac Chemical I.D. # MSD 990714081

Mailing Address (Facility and Corporate): P.O. Box 3, Vicksburg, MS 39180

(Corporate) 24th Floor, 5100 Poplar,
Memphis, TN 38137

Facility Contact: (Vicksburg) John Hill, (Memphis) Dick Kirkkainen

I. Effect of RCRA Amendments on Facility

A. Due to the change in the definition of "regulated unit," is the facility subject to corrective action for groundwater contamination?

Yes ~~✓~~ No Don't Know _____

Comments _____

B. Is facility "seeking a permit?"

Yes No _____

If no, is it permitted? Yes _____ No _____
Has it closed? Yes _____ No _____
Is closure plan approved? Yes _____ No _____
Seeking "clean" closure? Yes _____ No _____

Comments _____

C. Does the corrective action requirement for inclusion into the permit apply?

Yes No _____ Don't Know _____

Comments Groundwater contamination has been detected
in two wells. It may, there were several releases, one a
dike failure in 1982, another is ^{runoff} associated with the old abandoned

D. Is there any evidence that clean-up beyond the property boundary may be necessary?

Yes _____ No _____ Don't Know

Comments _____

E. Is the facility subject to the health/exposure assessment requirements?

Yes No _____ Don't Know _____

If yes, is the due date August 8, 1985?

Yes _____ No _____

If no, when? _____

F. Other effects of amendments on facility:

Most close impoundment in 4 years

II. Current Facility Status, as of February 1, 1985

A. Date of last RCRA inspection: *December 14, 1984*

B. Violations found: *No documented ^{Annual} review*

of training for personnel

C. Has facility corrected above violations?

Yes No _____ Don't Know _____

Comments _____

- D. If facility has not corrected above violations, as of February 1, 1985, what enforcement action has been taken?

Describe nature of action, and dates.

- E. Is facility subject to g.w. monitoring requirements?

Yes No

If yes:

- a) Date of last g.w. inspection: December 14, 1984
b) Compliance status of g.w. system (see attachment for information requested).

wells installed and located correctly.
Facility has detected groundwater
contamination and is in an
assessment Assessment with information
due in July. Needs to do Appendix VIII scan.

- F. Has facility's Part B been called?

Yes No

If yes, describe efforts for obtaining complete Part B.

Part B was received in August of 1983.
The application has had two NOD letters.
The latest submitted is still insufficient as far
as the closure plan. Needs an engineering feasibility
plan for corrective action required by 270.14(c)(7)

H. Have any other activities occurred, or currently underway, which could affect the compliance status of this facility between now and November 8, 1985?

Yes _____ No Don't Know _____

Comments _____

III. Based on (I) and (II) above, what are the current and projected problems at the site with respect to being in compliance on November 8, 1985?

- 1) Must have an adequate compliance monitoring program with proposed concentration limits.
- 2) Must do Appendix VIII scan.
- 3) Must submit engineering feasibility plan for corrective action.
- 4) Must submit a complete closure plan.
- 5) Must have coverage for ~~sudden~~ new-sudden insurance.
- 6) May need to address corrective action for previous or current releases.
- 7) Must have health/exposure assessment by August 8.

IV. Based on (I), (II), and (III), what actions (e.g., follow-up inspections, enforcement actions, etc.) should be taken in order to bring the facility into compliance by November 8, 1985? [Be sure to factor in those projected dates set forth in the Implementation Plan, where appropriate.]

- 1) Issue commission order in March requiring ^{a)} completion of closure plan by mid April, 1985; b) complete Appendix VIII scan by end of May, 1985; c) ~~an~~ adequate coverage for new-sudden insurance or submit information about attempts to obtain insurance; d) an engineering feasibility plan for corrective action by the end of May, 1985; e) submission of a compliance monitoring program with proposed concentration limits by July, 1985.
- 2) Address corrective action for previous or current releases by ~~July~~ August, 1985.
- 3) Complete health/exposure assessment by August 8, 1985.

If facility has submitted intent to close, describe efforts toward obtaining complete closure plan.

Has not notified any wish to close.

If closing, will post closure permit be required?

Yes No Don't Know

Comments Groundwater contamination will require it.

G. Is facility currently in compliance with the financial requirements for

(a) closure assurance: Yes No

Comments _____

If yes, when does coverage expire? trust fund will be updated by June, 1985.

(b) sudden insurance? Yes No

Comments _____

If yes, when does coverage expire? no notification of expiration

(c) non-sudden insurance? Yes No N/A

Comments Facility believes that it will be able to cover the non-sudden insurance under the financial test in March.

If yes, when does coverage expire? _____

**INFORMATION REGARDING POTENTIAL RELEASES FROM
SOLID WASTE MANAGEMENT UNITS**

FACILITY NAME: Vertac Chemical Corporation

EPA I. D. NUMBER: MSD 990714081

LOCATION **City** Vicksburg

State Mississippi

1. Are there any of the following solid waste management units (existing or closed) at your facility? NOTE - DO NOT INCLUDE HAZARDOUS WASTES UNITS CURRENTLY SHOWN IN YOUR PART B APPLICATION

	<u>YES</u>	<u>NO</u>
• Landfill	<u>X</u>	<u> </u>
• Surface Impoundment	<u>X</u>	<u> </u>
• Land Farm	<u> </u>	<u>X</u>
• Waste Pile	<u> </u>	<u>X</u>
• Incinerator	<u> </u>	<u>X</u>
• Storage Tank (Above Ground)	<u>X</u>	<u> </u>
• Storage Tank (Underground)	<u> </u>	<u>X</u>
• Container Storage Area	<u>X</u>	<u> </u>
• Injection Wells	<u> </u>	<u>X</u>
• Wastewater Treatment Units	<u>X</u>	<u> </u>
• Transfer Stations	<u>X</u>	<u> </u>
• Waste Recycling Operations	<u> </u>	<u>X</u>

2. If there are "Yes" answers to any of the items in Number 1 above, please provide a description of the wastes that were stored, treated or disposed of in each unit. In particular please focus on whether or not the wastes would be considered as hazardous wastes or hazardous constituents under RCRA. Also include any available data on quantities or volumes of wastes disposed of and the dates of disposal. Please also provide a description of each unit and include capacity, dimensions, location at facility, provide a site plan if available.

See attached Table.

NOTE: Hazardous waste are those identified in 40 CFR 261. Hazardous constituents are those listed in Appendix VIII of 40 CFR Part 261.

3. For the units noted in Number 1 above and also those hazardous waste units in your Part B application, please describe for each unit any data available on any prior or current releases of hazardous wastes or constituents to the environment that may have occurred in the past or still be occurring.

Please provide the following information

- a. Date of release
- b. Type of waste released
- c. Quantity or volume of waste released
- d. Describe nature of release (i.e., spill, overflow, ruptured pipe or tank, etc)

See attached Table.

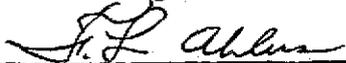
4. In regard to the prior releases described in Number 3 above, please provide (for each unit) any analytical data that may be available which would describe the nature and extent of environmental contamination that exists as a result of such releases. Please focus on concentrations of hazardous wastes or constituents present in contaminated soil or groundwater.

See attached Table.

Signature and Certification

As with reports in RCRA Permit Applications, submittal of this information must contain the following certification and signature by a principal executive officer of at least the level of Vice President or by a duly authorized representative of that person:

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.


Signature

Fred L. Ahlers, General Manager
Name and Title (Typed)

ITEM	Present at Facility ①	DESCRIPTION OF WASTE	QUANTITY of WASTE	DATES OF OPERATION	DESCRIPTION OF UNIT	Site Location ②	PRIOR/CURRENT RELEASE or COMMENTS
<u>Landfill</u> Inactive Landfill	Yes	Cyanuric chloride, Dimethyl urea and Isopropyl amine, PCl_3 , $PSCl_3$, $PS(CH_3)_2Cl$, Sodium Nitrophenylate, Spent Activated Carbon	172 drums 30 " 80 " 31 " 17 "	From approx. 1975 until early 1980.	Size unknown. Dug earth.	A	None
<u>Surface Impoundment</u> North Plant	Yes	Process water, rain water, boiler & cooling tower blow-downs from KNO_3 plant.	0.36MGD (1984 avg.)	≈ 1962 to present	Surge-pond for NPDES treatment/pH control. Dug earth.	B	Continuous release to surface water via NPDES Permit.
South Plant Pond	No	-	-	-	-	C	Listed in Part B Application. Release to surface water due to dike failure 2/5/83. All information available currently in MS DNR file.

1) Excludes items shown in part "B" application.

ITEM	Present at Facility ①	DESCRIPTION OF WASTE	QUANTITY of WASTE	DATES OF OPERATION	DESCRIPTION OF UNIT	Site Location ②	PRIOR/CURRENT RELEASE or COMMENTS
South Plant Hill <u>Land Farm</u> <u>Waste Pile</u> <u>Incinerator</u> <u>Storage Tank (above ground)</u>	Yes No No No	DNBP Wash Water	Unknown	Approx. 1975 until 1980	Size Unknown Dug Earth	D	Intermittent release to surface water via NPDES Permit
Hill Tank	Yes	DNBP Waste Water	2.5mmgal yr.	1980 to present	1.6mm gallons carbon steel tank	E	Continuous release to surface waters via NPDES Permit and off-site deep-well disposal.

1) Excludes units shown in part "B" application.

2) See attached Figure 1.

ITEM	Present at Facility ①	DESCRIPTION OF WASTE	QUANTITY of WASTE	DATES OF OPERATION	DESCRIPTION OF UNIT	Site Location ②	PRIOR/CURRENT RELEASE or COMMENTS
Blue Tank	Yes	DNBP Waste Water	Unknown	Early 1983 to present	16 m gallon Fiberglass Tank	F	Infrequent small leaks to south plant drainage/spill collection system. Continuous release to off-site deep-well.
North River Tank	Yes	} DNBP Waste Water	1.1mm gal yr (1984)	Jan/84 to Present	24m gal steel tank	G	Continuous release to surface water via NPDES Permit.
South River Tank	Yes	} DNBP Waste Water			16m gal steel tank		
MSMA Drain Water	Yes	Rainwater and floor Drains	Unknown	Jan./83 to July/84	10m gal carbon steel tank	H	No releases
CMU 4-2000 Waste tk #1	Yes	} DEHPA Wastewater	0.4mm gal (1 time)	Aug./84 to Feb./85	27m gal } 14m gal } 11m gal }	I	Material released to off-site deepwell.
Waste tk #2	Yes	} DEHPA Wastewater					
Waste tk #3	Yes	} DEHPA Wastewater					
Atrazine Waste Tank #1	Yes	} Atrazine Waste	Unknown	Mar./75 to Dec./79	14m gal } carbon steel tanks	J	Continuous release to surface waters via NPDES Permit.
Tank #2	Yes	} Atrazine Waste Water					

1) Excludes units shown in part "B" application.

2) See attached Figure 1.

ITEM	Present at Facility ①	DESCRIPTION OF WASTE	QUANTITY of WASTE	DATES OF OPERATION	DESCRIPTION OF UNIT	Site Location ②	PRIOR/CURRENT RELEASE or COMMENTS
Storage Tank (below ground)	No						
<u>Container Storage Area</u>							
Behind Atrazine	Yes	Misc. drummed waste	533 drums for 1983 and 1984	Dec./79 to Present	Roofed, curbed, concrete floor	K	Drummed material sent to approved landfill as necessary.
Beside UDMH	No	-	-	-	-	L	Described in Part B application
Behind Auto Shop	Yes	Waste Oil	4000gal yr.	Current	Concrete pad with drums	M	Removed regularly for recycle. Drums returned for credit.
South End of North Plant	Yes	Waste Oil	4000gal yr.	Current	Concrete pad with drums	N	- as above -
East of Large Cooling Tower	Yes	Misc. Drummed Waste	Unknown	Unknown-not current	Gravel pad with drums	O	Removed to approved landfills.
<u>Injection Wells</u>	No						

1) Excludes units shown in part "B" application.

2) See attached Figure 1.

ITEM	Present at Facility ①	DESCRIPTION OF WASTE	QUANTITY of WASTE	DATES OF OPERATION	DESCRIPTION OF UNIT	Site Location ②	PRIOR/CURRENT RELEASE or COMMENTS
<u>Wastewater Treatment Units</u>	No						
pH Control @ North Plant	Yes	Process water, rainwater, boiler & cooling water blowdown from KNO ₃ plant	0.36MGD (1984 avg)	≈ 1962 to present	Caustic addition to in-line mixer on pH control	P	Continuous release to surface waters via NPDES Permit
pH Control @ South Plant	No	-	-	-	-	Q	Listed in Part "B" Application
Calgon Columns	No	-	-	-	-	R	-as above-
MSMA Flash Pot	Yes	Rainwater & floor drains from MSMA plant	Unknown	Jan./83 to July/84	6m gal carbon steel tank with 2mm BTU/hr. heater	S	Intermittent release of underflow material drummed and sent to approved landfill.
M. Parathion Resin System	Yes		Approx. 20 gpm	Sept.77 to Mar./78	Two 75 ft ³ resin bed adsorbers	T	Continuous release to surface water via NPDES Permit
pH Control @ Atrazine	Yes	Atrazine Wastewater	≈0.07MGD	Mar./75 to Dec./79	Caustic addition to 12m gal tank	U	Continuous release to surface water via NPDES Permit
Atrazine Wastewater Filter	Yes	Atrazine Wastewater	≈0.07MGD	Mar./75 to Dec./79	3'x5' pressure leaf filter	V	As above. Solids returned to process

1) Excludes units shown in part "B" application.

2) See attached Figure 1.

ITEM	① Present at Facility	DESCRIPTION OF WASTE	QUANTITY of WASTE	DATES OF OPERATION	DESCRIPTION OF UNIT	② Site Location	PRIOR/CURRENT RELEASE or COMMENTS
<u>Transfer Station</u>							
MSMA salt cake	Yes	MSMA salt cake	6.2mm 1b	Jan/83 to July/84	Roll-off dumpster	W	Material sent to approved landfill.
Waste Recycling Operation	No						

1) Excludes units shown in part "B" application.

REQUIREMENT

In compliance - Yes
 Not in compliance - No
 Not applicable - NA

COMMENTS

SUBPART B - GENERAL FACILITY STANDARDS

265.12 Required Notices

- a) The facility owner or operator must notify the Director at least four weeks in advance of receipt of wastes from a foreign source.
- b) Before transferring ownership or operation of a facility, the facility's owner or operator must notify the new owner or operator of the requirements of 40 CFR 265 and 122.

Yes	No	N/A
		X
		X
X		
X		X

Facility does not receive foreign wastes

Facility has not changed owners

265.13 General Waste Analysis

Before treating, storing, or disposing of hazardous waste, the facility owner or operator must obtain a detailed chemical and physical analysis of wastes. The analysis must contain all the information which must be known to treat, store, or dispose the waste in accordance with the federal requirements.

Waste water stored in impoundment contains from ~ 7 - 17 ppm DNBP. Waste water is analyzed on a routine basis.

265.14 Security to Prevent Unknowing and Unauthorized Access to the Facility

- a) The owner or operator must prevent the unknowing entry and minimize the possibility for unauthorized entry unless:
 - 1) physical contact with the waste, structures, or equipment will not be injurious
 - 2) disturbance of the waste or equipment will not violate the requirements of Part 265.

Physical contact may be injurious

Disturbance of waste would not

In compliance - Yes
 Not in compliance - No
 Not applicable - NA

REQUIREMENT

COMMENTS

Yes	No	N/A
X		
X		
X		
X		
X		
X		

265.14 - Continued

b) Unless exempt under 265.14 (a)(1) or 402.7-14(a)(2), a facility must have:

- 1) a 24-hour surveillance system
- 2) (i) an artificial or natural barrier which completely surrounds the active portion of the facility
- (ii) a means to control entry

c) A sign warning of the danger of intruding into the facility.

265.15 Inspection and Monitoring

a) The owner or operator must inspect the facility for malfunctions and deterioration, operator errors, or discharges which may be causing or lead to release of hazardous waste constituents to the environment or a threat to human health.

b) The owner or operator must develop and follow a schedule and plan for inspections.

c) The owner or operator must take remedial action upon the detection of malfunction or the deterioration of equipment and structures when a hazard is imminent.

d) The owner or operator must record inspections in an inspection log and must keep the records for at least three years from the date of inspection.

A guard is on duty 24 hours

A creek borders the impoundment on the east side south. A fence and high bluffs restrict access on the north and west.

Signs are posted at the gate. The warning signs for the impoundment will be replaced now that the dike has been repaired.

The impoundment is inspected daily for freeboard and dike integrity.

"

The dike failed during Feb, 1993. The dike has been repaired according to plans reviewed by BPC.

Inspections are recorded and logged.

In compliance - Yes
 Not in compliance - No
 Not applicable - NA

REQUIREMENT

COMMENTS

Yes	No	N/A
X		
X		
X		
X		
X		
		X
		X

265.16 Facility Personnel Training

- a) Facility personnel must successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of Part 265.
- b) The training program must be completed within six months of the effective date of Part 265.
- c) There must be an annual review of the initial training in (a) above.
- d) The owner or operator must maintain records of training.
- e) Training records on current personnel must be kept until closure of the facility.

Personnel involved in operating the effluent pumps and environmental coordinators have been trained in emergency & contingency ~~plan~~ procedures.

There is documentation of annual review for 1984.

Records are being stored.

265.17 General Requirements for Ignitable, Reactive or Incompatible Wastes

- a) The owner or operator must take precautions to prevent accidental ignition or reaction of ignitable or reactive waste.
- b) Treatment, storage, or disposal of ignitable or reactive waste and the mixture or commingling of incompatible wastes must be conducted so that it does not:
 - 1) Generate extreme heat or pressure, fire or explosion, or violent reaction;
 - 2) Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient

The waste is not reactive or ignitable.

11

In compliance - Yes
 Not in compliance - No
 Not applicable - NA

REQUIREMENT.

COMMENTS

REQUIREMENT.	In compliance - Yes / Not in compliance - No / Not applicable - NA			COMMENTS	
	Yes	No	N/A		
265.17 - Continued--					
quantities to threaten human health;					
3) Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions;			X	See Above	
4) Damage the structural integrity of the device or facility containing waste; or			X	"	
5) Through other like means threaten human health or the environment.			X	"	
<u>SUBPART C - PREPAREDNESS AND PREVENTION</u>					
Pursuant to 265.30 through 265.37, facilities must be maintained and operated for and prevention of releases of hazardous wastes controlled by the State.	X			The preparedness and prevention plans as well as the contingency plans are being reviewed and modified as a result of submittal of a Part B for the facility. Any need modifications will be addressed in a letter containing a list of deficiencies.	
<u>SUBPART D - CONTINGENCY PLANS</u>					
Pursuant to 265.56, facilities must have contingency plans and emergency procedures to be followed in the event of a release of hazardous waste.	X				
<u>SUBPART E - MANIFEST SYSTEM, RECORDKEEPING, AND REPORTING</u>					
265.71(a)(1-5) If a facility receives hazardous waste accompanied by a manifest, the owner or operator must meet the requirements of 265.71(a)(1-5).			X	Facility does not receive wastes.	
265.71(b)(1-5) If a facility receives, from a rail or water transporter, hazardous waste which is accompanied by a shipping paper, the owner or operator must meet the requirements of 265.71.			X	"	

In compliance - Yes
 Not in compliance - No
 Not applicable - NA

REQUIREMENT

COMMENTS

Yes	No	N/A
	X	
X		
X		
X		
X		
X		
		X
X		

265.72(a) Upon discovery of significant manifest discrepancy, the owner or operator must attempt to reconcile the discrepancy with the waste generator or transporter.

(b) If a significant manifest discrepancy is not resolved, the owner or operator must notify the Director.

265.73(b) The owner or operator must keep a written operating record at the facility which meets the requirements of 265.73(b).

265.74(a) All records must be furnished upon request and available at all times for inspection by the Director or EPA.

(c) A copy of records of waste disposal locations and quantities must be submitted to the Director and the local land authority upon closure of the facility.

265.75 The owner or operator must submit an annual report to the Director in compliance with the requirements of 265.75.

265.76 The receipt of any unmanifested waste must be reported to the Director.

265.77 The owner or operator must submit a report to the Director if any of the following occur:

- a) releases, fires, explosions
- b) groundwater contamination
- c) facility closure.

The facility did not have copies signed by the disposer for the MSMA salts during the first 3-4 months of its generation. They will try to find the copies at the plant ~~rather than~~ or obtain copies from the disposer.

A record of all waste stored ^{on-site} and shipped off-site is kept.

Facility has submitted annual reports

A spill caused by the failure of the surface impoundment dike was reported by the Facility in Feb. 1983.

In compliance - Yes
 Not in compliance - No
 Not applicable - NA

REQUIREMENT

COMMENTS

Yes	No	N/A
X		
X		
		X
X		
X		
X		

SUBPART F - GROUNDWATER MONITORING

265.90 Owner or operator must implement a groundwater monitoring program capable of determining the facility's impact on the quality of the upper aquifer within one year of the effective date of 265.90.

265.91 - 265.94 The owner and operator must install, operate, and maintain a groundwater monitoring system which meets the requirements of 265.91 - 265.94.

265.90(c) All of the groundwater monitoring requirements may be waived if the owner or operator can demonstrate that there is a low potential for migration of hazardous waste constituents from the facility via the uppermost aquifer below the facility to water supply wells or to surface water.

SUBPART G - CLOSURE AND POST-CLOSURE

265.111 The owner or operator must close his facility in a manner that:

- 1) minimizes the need for future maintenance, and
- 2) controls, minimizes, or eliminates post-closure escape of hazardous waste.

265.112(a) The owner or operator must have a written closure plan on the effective date of Part 265.

A groundwater monitoring system and program has been established and is working.

"

Closure plan calls for removal of contaminated waste water and soils beneath the impoundment.

"

detailed
 A closure plan is in the facility file as well as in the Part B application. The closure plan will be required to be modified by a list of items included in a future letter to Vertac.

REQUIREMENT.

In compliance - Yes
 Not in compliance - No
 Not applicable - NA

COMMENTS

265.112(a) Continued--

The closure plan must include:

- 1) A description of how and when the facility will be partially closed, if applicable, and ultimately closed.
- 2) An estimate of the maximum inventory of wastes in storage or treatment at any given time.
- 3) Steps to decontaminate facility equipment.
- 4) A schedule for final closure which must include, as a minimum, anticipated dates when wastes will no longer be received, anticipated date for completion of final closure, and intervening milestone dates.

265.113(a) Closure must be initiated within 90 days after receiving the final volume of hazardous wastes.

(b) The owner or operator must complete closure activities within six months after receiving the final volume of wastes.

265.114 Upon completion of closure, all equipment and structures must be properly disposed of or decontaminated.

265.115 The owner or operator and an independent registered professional engineer must certify that the facility has been closed in accordance with the approved closure plan.

Yes	No	N/A
X		
X		
X		
X		
X		
X		
X		
X		

The closure plan details the closure activities.

A maximum amount of wastewater and soil is estimated.

Decontamination of equipment ~~is~~ will be required by Part B Application.

A schedule is included for the steps to complete closure.

Included in the closure plan.

REQUIREMENT

In compliance - Yes
Not in compliance - No
Not applicable - NA

COMMENTS

265.117(a) Post closure care must consist of at least:

- 1) Groundwater monitoring
- 2) Maintenance of the contaminant system.

The owner or operator must have a post-closure plan on the effective date of Part 265 and it must include:

- 1) Groundwater monitoring activities and frequency.
- 2) Maintenance activities and frequencies to ensure the integrity of the cap, final cover, or other containment structures, and functions of the facilities monitoring equipment.

265.119 Within 90 days after closure, the owner or operator must submit a survey plat of the facility.

265.120 The owner or operator must record a notice on the deed that the land has been used to manage hazardous waste.

SUBPART H - FINANCIAL REQUIREMENTS

265.142(a) The owner or operator must develop and maintain a current estimate of closure and post-closure costs.

SUBPART I - OTHER FACILITY STANDARDS

265.170 - 265.172 The container must be compatible with the waste to be stored.

Yes	No	N/A
X		
X		
X		
X		
X		
X		
	X	
		X

Groundwater monitoring is scheduled for 30 years after closure. Provisions are ~~not~~ discussed to maintain the cap over the impoundment.

See above.

~~It~~ It appears that the non-sudden insurance may have expired. This will be investigated by Dick Kartkainen. A letter will be sent to the facility concerning this. The trust fund is current.

No containers

In compliance - Yes
 Not in compliance - No
 Not applicable - NA

REQUIREMENT

COMMENTS

Yes	No	N/A
		X
X		
X		
X		
X		
X		
X		

265.193 Waste analysis must be conducted pursuant to 265.13, and 265.193(a).

265.194 Tanks must be inspected in accordance with 265.194.

265.197 At closure, all hazardous waste and hazardous waste residues must be removed from the tanks.

265.198 Ignitable or reactive waste should not be placed in a tank unless 265.198 is complied with.

265.199 Incompatible wastes must not be placed in the same tank unless 265.176 is complied with.

SUBPART K - SURFACE IMPOUNDMENTS

265.222 Must maintain at least two feet of freeboard.

265.223 Earthen dikes must have protective cover.

265.225 Must conduct waste analyses and trial tests in accordance with 265.225.

265.226(1) Must inspect the freeboard level at least once each operating day.

(2) Must inspect the surface impoundment at least once a week to detect any leaks, deterioration, or failure.

265.228 The surface impoundment must close in accordance with 265.228.

Much more than 2 feet is provided probably 2 5 feet.
 Grass and hay mulch were provided for the new dike.
 Analysis of wastewater is completed on a routine basis.
 Recorded daily.

REQUIREMENT

In compliance - Yes
 Not in compliance - No
 Not applicable - NA

COMMENTS

265.272 -- Continued

(c) Run-off from active portions must be collected as of one year after the effective date of Part 265...

265.273 Waste analyses must be conducted pursuant to 265.273.

265.276(a) An owner or operator must notify the State Director within 60 days after the effective date of Part 265 if food chain crops are grown on the land treatment facility.

(b) Food chain crops must not be grown on the treated area of a hazardous waste land treatment facility unless 265.276(b) is complied with.

(c) Food chain crops must not be grown on a land treatment facility receiving waste that contains cadmium unless 265.276(c) is complied with.

265.278 The owner or operator must have in writing and must implement an unsaturated zone monitoring plan pursuant to 265.278.

265.279 The owner or operator must keep records of the application dates, application rates, quantities, and location of each hazardous waste placed in a facility.

265.280 A land treatment facility must meet the closure and post-closure requirements of 265.280.

Yes	No	N/A

In compliance - Yes
Not in compliance - No
Not applicable - NA

REQUIREMENT

COMMENTS

Yes No N/A

265.315 (1) Empty containers must be reduced in volume as of one year after the effective date of Part 265.

SUBPART O - INCINERATORS

265.343 Must be at steady state conditions before adding hazardous waste.

265.345 Waste analyses must be conducted pursuant to 265.345.

265.347 Monitoring and inspections must be conducted as delineated in 265.347.

265.351 At closure, the owner or operator must remove all hazardous waste and hazardous waste residues.

SUBPART P - THERMAL TREATMENT

265.373 Must be at steady state conditions before adding hazardous wastes.

265.375 Waste analyses must be conducted pursuant to 265.375.

265.377 Monitoring and inspections must be conducted as delineated in 265.377.

265.301 At closure, the owner or operator must remove all hazardous waste residues.

265.382 Open burning of hazardous waste is prohibited except for the open burning and detonation of waste explosives.

REQUIREMENT

In compliance - Yes
Not in compliance - No
Not applicable - NA

COMMENTS

Other questions or standards.

Are there any other generators transporting their waste to this hazardous waste management facility?

Yes	No	N/A

CLOSURE AND POST-CLOSURE COMPLIANCE REVIEW CHECKLIST

I. GENERAL FACILITY INFORMATION

EPA ID # _____

Address Vertac Chemical

Owner _____
(name and phone number)

Operator _____
(name and phone number)

Name of Facility _____

Date & Time of Inspection _____

Personnel Present _____

Notes:

Type of Facility (check all that apply/fill-in blanks)

Storage Treatment Disposal

- | | <u>Active</u> | <u>Inactive</u> | <u>Planned</u> |
|---|----------------------------------|-----------------|----------------|
| <input type="checkbox"/> Containers | _____ (number and volume) | | |
| <input type="checkbox"/> Tanks | _____ (number and volume) | | |
| <input type="checkbox"/> Piles | _____ (number and volume) | | |
| <input type="checkbox"/> Incinerator | _____ (gallons or tons per hour) | | |
| <input type="checkbox"/> Landfill | _____ (acres and volume) | | |
| <input type="checkbox"/> Land Treatment | _____ (acres and volume) | | |
| <input checked="" type="checkbox"/> Surface Impoundment | _____ (acres and volume) | | |
| <input type="checkbox"/> Chemical/Physical/Biological Treatment | _____ (gallons or tons per hour) | | |
| <input type="checkbox"/> Thermal Treatment | _____ (gallons or tons per hour) | | |
| <input type="checkbox"/> Underground Injection | _____ (nominal operating rate) | | |

Describe tank and container conditions (e.g., age, remaining surface life, etc.) in Comments section.

*Checkboxes indicate items to be reviewed during on-site visit.

II. WRITTEN PLAN

- ★ 1. Is there a WRITTEN CLOSURE PLAN kept at the facility? (40 CFR 265.112(a)) ~~YES~~ NO
- 2. Does the closure plan cover all areas and facilities that were ACTIVE as of 11/19/80? ~~YES~~ NO
- 3. Does the closure plan include general information about the facility which would be helpful in reviewing the plan, including:
 - a. facility size(s) YES ~~NO~~
 - b. facility type(s) YES ~~NO~~
 - c. descriptions of all on-site equipment YES ~~NO~~
 - d. topography YES ~~NO~~
 - e. waste characterization YES ~~NO~~
 - f. soil type YES ~~NO~~
 - g. description of surrounding land use YES ~~NO~~
 - h. surrounding population YES ~~NO~~
 - i. size of facility (acres) YES ~~NO~~
 - j. volume of impoundment YES ~~NO~~ N/A
 - k. type(s) of treatment/processing YES ~~NO~~ N/A
 - l. description of liner YES ~~NO~~ N/A
 - m. leachate collection system YES ~~NO~~ N/A
 - n. gas collection system YES ~~NO~~ N/A
 - o. dredging procedures/schedules, etc. YES ~~NO~~ N/A
 - p. incinerator specifications YES ~~NO~~ N/A
 - q. other (specify _____) YES ~~NO~~

III. MAXIMUM EXTENT OF OPERATION

- ★ 1. Does the plan identify the MAXIMUM EXTENT OF OPERATION which will be unclosed during the life of the facility? (40 CFR 265.112(a)(1)) ~~YES~~ NO
- 2. Is the MAXIMUM EXTENT OF OPERATION estimate exceeded by current operations? YES ~~NO~~
- 3. Does the MAXIMUM EXTENT OF OPERATION estimate include:
 - a. the maximum area of landfill or land treatment ever containing wastes? YES ~~NO~~ N/A
 - b. inactive areas open because of operating problems or contingencies? YES ~~NO~~ N/A
 - c. maximum area of land ever used for land spreading? YES ~~NO~~ N/A

- d. the most extensive treatment required for land spreading? YES NO ~~N/A~~
- e. the maximum area used for storage? YES ~~NO~~ N/A

Explain each "NO" answer in comment section.

IV. PARTIAL CLOSURE



1. Does the plan identify the steps for PARTIAL CLOSURE, at any time during the intended operating life, of

N/A

- a. surface impoundments? YES NO N/A
- b. landfills? YES NO N/A
- c. tanks? YES NO N/A
- d. other (specify: _____)
(40 CFR 265.112(a)) YES NO

IF NO PARTIAL CLOSURE PLAN, CIRCLE N/A AND SKIP TO SECTION V.

2. Does the PARTIAL CLOSURE plan identify

- a. the size of areas partially closed? YES NO N/A
- b. procedures for partial closure? YES NO
- c. maintenance program? YES NO
- d. frequency of partial closures? YES NO
- e. source of cover materials? YES NO N/A

3. Does the plan for PARTIAL CLOSURE demonstrate the adequacy of the cap, etc. to meet the closure requirements? YES NO

OR

Are these areas or activities otherwise included in the extent of operations of the closure plan? YES NO

4. Does the PARTIAL CLOSURE PLAN describe maintenance activities for partially closed areas, including:

- a. visual inspections? YES NO N/A
- b. ground-water monitoring? YES NO N/A
- c. maintaining cover? YES NO N/A
- d. maintaining diversion structures? YES NO N/A
- e. controlling erosion? YES NO N/A
- f. maintaining vegetation? YES NO N/A
- g. security requirements? YES NO N/A
- h. leachate collection? YES NO N/A
- i. gas collection? YES NO N/A

5. Does the PARTIAL CLOSURE PLAN describe maintenance frequencies for partially closed areas, including:

- a. visual inspections? YES NO N/A
- b. groundwater monitoring? YES NO N/A
- c. maintaining the cover? YES NO N/A
- d. maintaining diversion structures? YES NO N/A
- e. controlling erosion? YES NO N/A
- f. maintaining vegetation? YES NO N/A
- g. security requirements? YES NO N/A
- h. leachate collection? YES NO N/A
- i. gas collection? YES NO N/A

6. Is there a SCHEDULE FOR PARTIAL CLOSURE? YES NO
If "NO" SKIP TO SECTION V.

7. Does the SCHEDULE FOR PARTIAL CLOSURE include:

- ★ a. date(s) of partial closure(s)? YES NO
(40 CFR 265.112(a)(1))
- b. total time required for each partial closure? YES NO
- c. time required for key steps--
 - i. waste removal? YES NO N/A
 - ii. waste stabilization? YES NO N/A
 - iii. waste treatment? YES NO N/A
 - iv. waste disposal? YES NO N/A
 - v. placement of cover? YES NO N/A
 - vi. vegetation? YES NO N/A
 - vii. decontamination? YES NO N/A
 - viii. other (specify: _____) YES NO

V. MAXIMUM INVENTORY

★ 1. Is there an estimate of the MAXIMUM INVENTORY of wastes in storage or treatment at any time during the life of the facility? (40 CFR 265.112(a)(2)) ~~YES~~ NO N/A

□ 2. Does the MAXIMUM INVENTORY estimate include the maximum amount of on-site wastes:

- a. requiring pre-treatment? YES NO ~~N/A~~
- b. requiring treatment? YES NO ~~N/A~~
- c. requiring disposal? ~~YES~~ NO N/A

- 3. Does the MAXIMUM INVENTORY estimate include the maximum amount of on-site:
 - a. wastes in surface impoundments? ~~YES~~ NO N/A
 - b. wastes in partially-closed non-disposal surface impoundments? ~~YES~~ NO ~~N/A~~
 - c. wastes in tanks? *see comment* ~~YES~~ ~~NO~~ N/A
 - d. wastes in piles? ~~YES~~ NO ~~N/A~~
 - e. wastes in drainage pits? ~~YES~~ NO ~~N/A~~
 - f. wastes in containers? ~~YES~~ NO ~~N/A~~
 - g. standing liquids? ~~YES~~ NO N/A
 - h. sludge? ~~YES~~ NO N/A
 - i. contaminated soil from land treatment fields? ~~YES~~ NO ~~N/A~~
 - j. contaminated soil and liners from non-disposal impoundments? YES ~~NO~~ N/A
 - k. contaminated soil from around tanks, containers, piles? YES ~~NO~~ N/A
 - l. process residues? YES NO ~~N/A~~
 - m. decontamination residues? YES ~~NO~~ N/A

- 4. Does the plan discuss the type(s) of TESTING AND CRITERIA to be used to determine:
 - a. whether soil is contaminated? ~~YES~~ ~~NO~~ N/A
 - b. whether decontamination residues are hazardous? ~~YES~~ ~~NO~~ N/A
 - c. whether process residues are hazardous? YES NO ~~N/A~~

- 5. Are INCOMPATIBLE WASTES identified and provisions described for keeping them separate during closure? YES NO ~~N/A~~

VI. FINAL CLOSURE

- 1. Does the plan clearly identify the STEPS TO CLOSE
 - ★ a. at any point during the intended operating life? (40 CFR 265.112(a)) ~~YES~~ NO
 - ★ b. at the end of the intended operating life? (40 CFR 265.112(a)) ~~YES~~ NO

2. Do the STEPS TO CLOSE in the plan include:
- ★ a. removal of wastes? (40 CFR 265.113(a)) ~~YES~~ NO N/A
 - ★ b. treatment of wastes? (40 CFR 265.113(a)) YES: NO ~~N/A~~
 - ★ c. waste disposal? (40 CFR 265.113(a)) ~~YES~~ NO N/A
 - d. waste containment? ~~YES~~ NO N/A
 - ★ e. cover? (40 CFR 265.310(b)) ~~YES~~ NO N/A
 - ★ f. decontamination of equipment and structures? (40 CFR 265.112(a)(3)) YES ~~NO~~ N/A
 - ★ g. groundwater monitoring? ~~YES~~ NO N/A
 - ★ h. closure certification? (40 CFR 265.115) YES NO ~~N/A~~
 - i. maintenance of leachate program? YES NO ~~N/A~~
 - j. maintenance of gas collection program? YES NO ~~N/A~~
 - k. security requirements? YES ~~NO~~ N/A
- 3. With respect to the REMOVAL, TREATMENT, OR DISPOSAL of waste, does the plan identify:
- a. the source and type of materials and equipment needed? YES ~~NO~~
 - b. the amount of labor required? YES ~~NO~~
 - c. the capacity, number, and location of trenches or cells needed? ~~YES~~ NO N/A
 - d. the area required for landspreading? YES NO ~~N/A~~
- 4. Does the plan describe the CONTAINMENT of waste, including:
- ★ a. placement of final cover: (40 CFR 265.280(c)(2); 265.310(a))
 - ★ i. characteristics of cover? (40 CFR 265.280(c)(2)(ii); 265.310(a)(5)) YES ~~NO~~ N/A
 - ★ ii. design of cover including final surface contours? (40 CFR 265.280(c)(2)(ii); 265.310(a)(5)) ~~YES~~ NO N/A
 - iii. installation procedures? ~~YES~~ NO N/A
 - ★ b. drainage and diversion structures? (40 CFR 265.280(c)(3), (4)) ~~YES~~ NO N/A

- c. vegetation program:
- ★ i. characteristics of vegetation?
(40 CFR 265.280(c)(2)(ii);
265.310(a)(5)) ~~YES~~ NO N/A
 - ii. soil preparation? ~~YES~~ NO N/A
- ★ d. erosion control:
(40 CFR 265.310(b)(3))
- i. type of materials? ~~YES~~ NO N/A
 - ii. amount of materials? ~~YES~~ NO N/A
- ★ e. For landfills, does the closure plan address the following objectives and indicate how they will be achieved?
(40 CFR 265.310(b))
- (1) Control of pollution migration from the facility via ground water, surface water, and air. YES ~~NO~~ N/A
 - (2) Control of surface water infiltration, including prevention of pooling. YES ~~NO~~ N/A
 - (3) Prevention of erosion. YES ~~NO~~ N/A
- ★ f. For land treatment operations, does the closure plan address the following objectives and indicate how they will be achieved? (40 CFR 265.280(a))
- (1) Control of migration of hazardous wastes and constituents into ground water. YES NO ~~N/A~~
 - (2) Control of the release of contaminated run-off into surface water. YES NO ~~N/A~~
 - (3) Control of the release of airborne particulate contaminants caused by wind erosion. YES NO ~~N/A~~
 - (4) Protection of food chain crops. YES NO ~~N/A~~

★ 8. For landfills and land treatment operations, does the closure plan include at least a narrative statement indicating that the following factors were considered in addressing the closure objectives? (40 CFR 265.280(b), 310(b))

- | | | | |
|--|-----|---------------|-----|
| (1) Type and amount of waste. | YES | NO | N/A |
| (2) Mobility and rate of migration. | YES | NO | N/A |
| (3) Site location, topography, and surrounding land use. | YES | NO | N/A |
| (4) Climate, including precipitation. | YES | NO | N/A |
| (5) Characteristics of the cover, including material, final surface contour, thickness, porosity, permeability, slope, vegetation. | YES | NO | N/A |
| (6) Geological and soil profiles and surface and subsurface hydrology. | YES | NO | N/A |
| (7) Unsaturated zone monitoring. | YES | NO | N/A |
| (8) Type, concentration, and depth of hazardous constituent migration as compared to background concentrations. | YES | NO | N/A |

□ ★ 5. Does the plan describe the DECONTAMINATION (40 CFR 265.112(a)(3); 265.114) of facility equipment and structures, including:

- | | | | |
|---|-----|---------------|-----|
| a. a list of equipment, containers, and structures requiring disposal or decontamination? | YES | NO | N/A |
| b. decontamination procedures? | YES | NO | N/A |
| c. method of treatment or disposal of residues? | YES | NO | N/A |
| d. testing program? | YES | NO | N/A |

- 6. With respect to MONITORING, does the closure plan describe:
 - a. details of the groundwater monitoring program during closure? YES ~~NO~~ N/A
 - b. soil testing and monitoring YES ~~NO~~ N/A
 - c. maintenance of monitoring equipment during closure? YES ~~NO~~ N/A
 - d. other (specify: _____) YES NO

- ★ 7. With respect to CERTIFICATION of closure (40 CFR 265.115), does the closure plan describe scheduled or estimated number of inspections? ~~YES~~ NO

- 8. If a system for COLLECTING LEACHATE is present, does the closure plan:
 - a. describe leachate removal, treatment, and disposal during closure? YES NO ~~N/A~~
 - b. identify the approximate volume of leachate collected? YES NO ~~N/A~~
 - c. provide for maintenance of the leachate collection system during closure? YES NO ~~N/A~~

- 9. If a GAS COLLECTION SYSTEM is required during operation, does the closure plan:
 - a. describe procedures for collecting gas during closure? YES NO ~~N/A~~
 - b. describe monitoring samples and analysis during closure? YES NO ~~N/A~~
 - c. maintenance of gas collection system during closure? YES NO ~~N/A~~

- 10. If SECURITY (i.e., fencing) is required, does the closure plan:
 - a. describe the maintenance of security equipment during the closure period? YES ~~NO~~ N/A
 - b. describe the installation of appropriate equipment at closure? YES ~~NO~~ N/A
 - c. state the dimensions of the fence and the area to be enclosed? YES ~~NO~~ N/A

VII. FINAL CLOSURE: SCHEDULE

★ 1. Does the plan identify the YEAR when final closure is expected to occur?
(40 CFR 265.112(a)(4))

~~YES~~ NO

• What is the expected year of closure? 2014

★ 2. Is there a SCHEDULE for final closure activities? (40 CFR 265.112(a)(4))

YES ~~NO~~

IF "NO" SKIP TO COMMENTS SECTION.

3. Does the SCHEDULE for final closure include:

- | | | | | |
|-------|---|-----|----|-----|
| ★ a. | date closure is expected to begin?
(40 CFR 265.112(a)(1)) | YES | NO | |
| ★ b. | total time required to close?
(40 CFR 265.112(a)(4)) | YES | NO | |
| ★ c. | the time for intervening closure activities? (40 CFR 265.112(a)(4)) | YES | NO | |
| ★ d. | time required for key steps: | | | |
| ★ i. | waste inventory treatment?
(40 CFR 265.112(a)(4)) | YES | NO | N/A |
| ★ ii. | waste inventory disposal?
(40 CFR 265.112(a)(4)) | YES | NO | N/A |
| iii. | removal of waste inventory and residues? | YES | NO | N/A |
| iv. | decontamination of facility equipment and structures? | YES | NO | N/A |
| v. | install containment and diversion structures? | YES | NO | N/A |
| ★ vi. | placement of final cover?
(40 CFR 265.112(a)(4)) | YES | NO | N/A |
| vii. | planting vegetation? | YES | NO | N/A |
| viii. | closure certification? | YES | NO | |
| ix. | other (specify: _____) | YES | NO | |

4. Does the SCHEDULE for final closure:

★ a. encompass more than 90 days for treatment, removal, or disposal of hazardous wastes after receipt of final volume of wastes?
(40 CFR 265.113(a))

YES NO

- ★ b. encompass more than 180 days for completion of closure plan activities after receipt of final volume of wastes? (40 CFR 265.113(b)) YES NO

VIII. COMMENTS

III 3e. The area of the surface impoundment was not given, nor the areas of the sections of this impoundment.

IV 3 c, K Plan^{I+} mentions a 16,000 gallon tank. Is it classified as hazardous waste storage facility?

VI 2 g. GW wells are mentioned in past closure plans, but the details of GW wells not included in "this" plan.

The plan does not considered possible contamination of the soil below the sludge in Sections 1+2 which they plan to leave "clean". Plan doesn't include soil analysis and soil disposal. Plan does not consider decontamination of equipment used during closure. It does not give decontamination procedures, list equipment, ...

POST-CLOSURE PLAN CHECKLIST

I. WRITTEN PLAN

- ★ 1. Is there a written POST-CLOSURE PLAN at the facility? (40 CFR 265.118(a))
If answer is "N/A" skip to cost estimate checklists. ~~YES~~ NO N/A
- 2. Does the post-closure plan cover the MAXIMUM AREA EXPECTED TO CONTAIN HAZARDOUS WASTE after closure, including:
 - a. landfills? ~~YES~~ NO ~~N/A~~
 - b. disposal surface impoundments? ~~YES~~ NO N/A
 - c. land treatment facilities where hazardous waste will remain? ~~YES~~ NO ~~N/A~~
 - d. other remaining hazardous wastes? ~~YES~~ NO ~~N/A~~
- ★ 3. Does the post-closure plan provide for 30 years of post-closure care? (40 CFR 265.117(a)) ~~YES~~ NO
 - How many years of post-closure care? 30
- 4. Does the post-closure plan cover all areas where hazardous waste will remain that were active as of 11/19/80? ~~YES~~ NO

II. SPECIFIC POST-CLOSURE PLAN REQUIREMENTS

- ★ 1. Does the plan clearly identify the ACTIVITIES required in post-closure care? (40 CFR 265.118(a)) ~~YES~~ NO
- ★ 2. Does the plan clearly identify the FREQUENCIES for post-closure activities? See also Question 5. (40 CFR 265.118(a)) ~~YES~~ ~~NO~~
- ★ 3. Do the GROUNDWATER MONITORING plans (40 CFR 265.117(a)(1); 265.118(a)(1)) include:
 - a. number of wells? ~~YES~~ NO
 - b. sample collection activities? ~~YES~~ ~~NO~~
 - c. sample collection frequencies? ~~YES~~ NO
 - d. sample test activities? ~~YES~~ ~~NO~~
 - e. sample test frequencies? ~~YES~~ NO
 - f. replacement of failed wells? ~~YES~~ ~~NO~~ N/A

4. Is there a copy of the GROUNDWATER SAMPLING AND ANALYSIS PROGRAM attached to the plan? YES ~~NO~~
- ★ 5. Do the MAINTENANCE PLANS for waste containment structures (40 CFR 265.118(a)(2)) include:
- a. inspection activities? YES ~~NO~~
 - b. inspection frequencies? YES ~~NO~~
 - c. maintaining final cover (erosion damage repair) activities? ~~YES~~ NO
 - ★ d. maintaining final cover (erosion damage repair) frequencies? (40 CFR 265.310(d)(1)) YES ~~NO~~
 - e. vegetation and fertilizing activities? ~~YES~~ NO
 - ★ f. vegetation and fertilizing frequencies? (40 CFR 265.118(a)(2)(i)) YES ~~NO~~
 - g. mowing activities? ~~YES~~ NO
 - h. mowing frequencies? YES ~~NO~~
 - ★ i. collecting, removing, and treating leachate activities? (40 CFR 265.310(d)(2)) YES NO ~~N/A~~
 - ★ j. collecting, removing, and treating leachate frequencies? (40 CFR 265.310(d)(2)) YES NO ~~N/A~~
 - ★ k. gas collection activities? (40 CFR 265.310(d)(3)) YES NO ~~N/A~~
 - ★ l. gas collection frequencies? (40 CFR 265.310(d)(3)) YES NO ~~N/A~~
 - m. collection and treatment of runoff? YES ~~NO~~
 - n. frequencies of runoff collection and treatment? YES ~~NO~~
- ★ 6. Do MONITORING EQUIPMENT MAINTENANCE plans (40 CFR 265.118(a)(2)(ii)) include:
- ★ a. activities? (40 CFR 265.118(a)(2)(ii)) YES ~~NO~~
 - ★ b. frequencies? (40 CFR 265.118(a)(2)(ii)) YES ~~NO~~
7. Do SECURITY REQUIREMENT plans include:
- a. activities? YES ~~NO~~
 - b. frequencies? YES ~~NO~~
- ★ 8. Does the plan identify the name, address and phone number of the POST-CLOSURE PERIOD CONTACT? (40 CFR 265.118(a)(3)) YES ~~NO~~



9. For landfills, does the post-closure plan address the following objectives and indicate how they will be achieved?
(40 CFR 265.310(b))

- | | | | |
|--|-----|---------------|-----|
| (1) Control of pollution migration via ground water, surface water, and air. | YES | NO | N/A |
| (2) Control of surface water infiltration, including prevention of pooling. | YES | NO | N/A |
| (3) Prevention of erosion. | YES | NO | N/A |



10. For land treatment operations, does the post-closure plan address the following objectives and indicate how they will be achieved? (40 CFR 265.280(a))

- | | | | |
|---|-----|----|----------------|
| (1) Control of migration of hazardous wastes and constituents into the ground water. | YES | NO | N/A |
| (2) Control of the release of contaminated runoff into surface water. | YES | NO | N/A |
| (3) Control of the release of airborne particulate contaminants caused by wind erosion. | YES | NO | N/A |
| (4) Protection of food chain crops. | YES | NO | N/A |



11. For landfills and land treatment operations, does the post-closure plan include at least a narrative statement indicating that the following factors were considered in addressing the closure objectives?
(40 CFR 265.280(b), 310(b))

- | | | | |
|--|-----|---------------|-----|
| (1) Type and amount of waste. | YES | NO | N/A |
| (2) Mobility and rate of migration. | YES | NO | N/A |
| (3) Site location, topography, and surrounding land use. | YES | NO | N/A |
| (4) Climate, including precipitation. | YES | NO | N/A |

- | | | | |
|--|-----|---------------|-----|
| (5) Characteristics of the cover, including material, final surface contour, thickness, porosity, permeability, slope, vegetation. | YES | NO | N/A |
| (6) Geological and soil profiles and surface and subsurface hydrology. | YES | NO | N/A |
| (7) Unsaturated zone monitoring. | YES | NO | N/A |
| (8) Type, concentration, and depth of hazardous constituent migration as compared to background concentrations. | YES | NO | N/A |

III. OTHER REQUIREMENTS

- | | | | |
|---|----------------|---------------|----------------|
| ★ 1. Does the plan address the requirement for notice to the local land authority? (40 CFR 265.119) | YES | NO | |
| ★ 2. Does the plan address the requirement for notice in the deed? (40 CFR 265.120) | YES | NO | |
| 3. Does the plan address the protection and maintenance of surveyed benchmarks? | YES | NO | N/A |

IV. COMMENTS

II 3a. Plan has 3 wells. Shouldn't that be 4 (1 up - 3 down)?

III 2. The plan is unclear on this point. It is not clear that this is a requirements

WORKSHEET JA: FILL-IN QUANTITIES

HYPOTHETICAL MAXIMUM INVENTORY OF WASTES IN PLAN

Type of Waste	Grand	Facility Type #1 ^a	Facility Type #2 ^a	Facility Type #3
	Total (Indicate units)	(Specify) Total (Indicate units)	(Specify) Total (Indicate units)	(Specify) Total (Indicate units)
1. Maximum amount of undisposed waste requiring pre-treatment	_____	_____	_____	_____
2. Maximum amount of waste resulting from pre-treatment	_____	_____	_____	_____
3. Maximum amount of undisposed waste requiring treatment	_____	_____	_____	_____
4. Maximum amount of waste resulting from treatment	_____	_____	_____	_____
5. Maximum amount of undisposed waste in storage prior to disposal	_____	_____	_____	_____
-- in tanks	_____	_____	_____	_____
-- in surface impoundments	_____	_____	_____	_____
-- in waste piles	_____	_____	_____	_____
-- in drainage pits	_____	_____	_____	_____
-- in containers	_____	_____	_____	_____
-- standing liquids (not included in the estimates above)	_____	_____	_____	_____
-- sludge (not included in the estimates above)	_____	_____	_____	_____
-- liners	_____	_____	_____	_____
-- leachate	_____	_____	_____	_____
-- other (specify: _____)	_____	_____	_____	_____
6. Maximum amount of contaminated soil	_____	_____	_____	_____
-- in land treatment fields	_____	_____	_____	_____
-- in non-disposal surface impoundments	_____	_____	_____	_____
-- around tanks	_____	_____	_____	_____
-- around containers	_____	_____	_____	_____
-- around treatment facilities	_____	_____	_____	_____
-- from facility decontamination (list only if not included in estimates above)	_____	_____	_____	_____
7. Maximum amount of residues	_____	_____	_____	_____
-- from treatment/disposal processes	_____	_____	_____	_____
-- from facility decontamination	_____	_____	_____	_____
GRAND TOTAL	_____	_____	_____	_____

Use these columns to distinguish among different waste management operations. For example certain types of wastes may be stored in containers prior to incineration; other types may be stored in containers prior to being landfilled. To be sure that the closure plan has accounted for all containers, the columns may be used to collect subtotals. Where the plan omitted to count some category or the maximum inventory, please circle the line where the entry should go. Avoid double-counting.

WORKSHEET 1b

CLOSURE PLAN DESCRIPTION OF METHOD OF TREATMENT OR DISPOSAL OF MAXIMUM INVENTORY OF WASTES: CHECKLIST

<u>Type of Waste</u>	<u>On-Site</u>			<u>Off-Site</u>			
	<u>Pre-Treatment Method Described?</u>	<u>Treatment Method Described?</u>	<u>Disposal Method Described?</u>	<u>Removal Method Described?</u>	<u>Treatment Method Identified?</u>	<u>Disposal Method Identified?</u>	<u>TSDF Identified?</u>
1. Waste in storage	_____	_____	_____	_____	_____	_____	_____
-- in tanks	_____	_____	_____	_____	_____	_____	_____
-- in surface impoundments	_____	_____	_____	_____	_____	_____	_____
-- in waste piles	_____	_____	_____	_____	_____	_____	_____
-- in drainage pits	_____	_____	_____	_____	_____	_____	_____
-- in containers	_____	_____	_____	_____	_____	_____	_____
-- standing liquids (not included in estimates above)	_____	_____	_____	_____	_____	_____	_____
-- sludge (not included in estimates above)	_____	_____	_____	_____	_____	_____	_____
-- liner	_____	_____	_____	_____	_____	_____	_____
-- leachate	_____	_____	_____	_____	_____	_____	_____
-- other (specify: _____)	_____	_____	_____	_____	_____	_____	_____
2. Contaminated soil	_____	_____	_____	_____	_____	_____	_____
-- in land treatment fields	_____	_____	_____	_____	_____	_____	_____
-- in non-disposal surface impoundments	_____	_____	_____	_____	_____	_____	_____
-- around tanks	_____	_____	_____	_____	_____	_____	_____
-- around containers	_____	_____	_____	_____	_____	_____	_____
-- around treatment facilities	_____	_____	_____	_____	_____	_____	_____
-- from facility decontamination (list only if not included in estimates above)	_____	_____	_____	_____	_____	_____	_____
3. Residues	_____	_____	_____	_____	_____	_____	_____
-- from treatment/disposal processes	_____	_____	_____	_____	_____	_____	_____
-- from facility decontamination	_____	_____	_____	_____	_____	_____	_____

WORKSHEET IC: FILL IN QUANTITIES

PLAN FOR REMOVAL, TREATMENT, OR DISPOSAL OF MAXIMUM WASTE INVENTORY

Type of Waste	GRAND TOTAL				FROM FACILITY TYPE #1*				FROM FACILITY TYPE #2*			
	(Specify) (Indicate units)				(Specify) (Indicate units)				(Specify) (Indicate units)			
	On-Site		Off Site		On-Site		Off-Site		On-Site		Off-Site	
	Treatment	Disposal	Treatment	Disposal	Treatment	Disposal	Treatment	Disposal	Treatment	Disposal	Treatment	Disposal
6. Maximum amount of contaminated soil												
-- in land treatment fields												
-- in non-disposal surface impoundments												
-- around tanks												
-- around containers												
-- around treatment facilities												
-- from facility decontamination (list only if not included in estimates above)												
7. Maximum amount of residues												
-- from treatment/disposal processes												
-- from facility decontamination												
GRAND TOTAL												

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GENERAL COST ESTIMATE CHECKLIST

A. Closure Cost Estimate

- ★ 1. Is there a written closure cost estimate?
(40 CFR 265.142(a)) YES NO
- 2. What is the amount of the closure cost estimate? \$ 33,500
- 3. Is there documentation supporting the cost estimate? YES NO
 - a. Work-ups? YES NO
 - b. Contractor bids? YES NO
 - c. Operating history? YES NO
 - d. Other _____ YES NO
- ★ 4. ~~Has the cost estimate been adjusted by the 9% inflation factor?
(40 CFR 265.142(b))~~ YES NO N/A
- 5. Does the cost estimate cover all the activities in the closure plan including costs of labor? YES NO
- ★ 6. Does the closure cost estimate cover all required closure activities?
(40 CFR 265.142(a)) YES NO
If "NO" specify in comments below.

Comments: See comments p. 12. Cost estimate does not include the following Soil Analysis, soil disposal, decontamination, notice to land authority, deed, labor...

B. Post-Closure Cost Estimate

- ★ 1. Is there a written post-closure cost estimate? (40 CFR 265.144(a)) YES NO N/A
- 2. What is the amount of the estimate? \$ 15,000
- 3. Is there documentation supporting the post-closure cost estimate? YES NO
 - a. Work-ups? YES NO
 - b. Contractor bids? YES NO
 - c. Operating history? YES NO
 - d. Other _____ YES NO
- ★ 4. Is the annual estimate multiplied by 30 to cover to entire post-closure care period? (40 CFR 265.144(b)) YES NO
- ★ 5. Has the cost estimate been adjusted by the 9% inflation factor? (40 CFR 265.144(b)) YES NO N/A
- ★ 6. Does the cost estimate cover all the activities in the post-closure plan (40 CFR 265.118)? YES NO
 - Including labor costs? YES NO
 - As well as the requirements of notice to local land authorities and in deeds? (40 CFR 265.119, 265.120) YES NO
- ★ 7. Does the post-closure cost estimate cover all required post-closure activities? (40 CFR 265.144(a)) YES NO
If "NO" specify in comments below.

Comments: Overall cost estimates inadequate

CLOSURE COST ESTIMATE VERIFICATION

Overall Cost estimate inadequate

Does Not Apply	Applies	
	In-cluded	Not In-cluded
	X	
	X	

(40 CFR 265.112(a)(2))



1. TREATING, DISPOSING OR REMOVING INVENTORY

A. On Site

a. Amount of inventory and residues* to be disposed on site (yd³)

i. From cost estimate

ii. From closure plan

□ iii. From visual inspection

b. Unit cost for on site treatment or disposal (\$/yd³)

i. From cost estimate

c. Total cost of on site treatment or disposal (\$)

i. From cost estimate

B. Off Site

a. Amount of inventory and residues to be disposed off site (yd³)

i. From cost estimate

ii. From closure plan

□ iii. From visual inspection

b. Unit cost for off site treatment or disposal (\$/yd³)

i. From cost estimate

c. Total cost for off-site disposal excluding transportation

i. From cost estimate

X		
---	--	--

*Residues here refer to residues existing at initiation of closure.

Does Not Apply	Applies	
	Included	Not Included

d. Unit cost for transport of inventory (\$/yd³/mile)

i. From cost estimate

e. Transport distance (miles)

i. From cost estimate

ii. By map reference

f. Cost of transport (\$)

i. From cost estimate

g. Cost of off site treatment or disposal including transport (\$)

i. From cost estimate

ii. Inspector calculation

	X	
--	---	--

C. Total Cost of Treating, Disposing or Removing Inventory (\$)

a. From cost estimate

32,800

		X
		X

2. DECONTAMINATION

A. Soil Excavation

a. Volume of soil to be removed (yd³)

i. From cost estimate

ii. From closure plan

□ iii. Inspector's estimate

b. Unit cost for soil excavation (\$/yd³)

i. From cost estimate

c. Total cost of contaminated soil excavation (\$)

i. From cost estimate

(40 CFR 265.280(c)(1))



Does Not Apply	Applies	
	In-cluded	Not In-cluded

		X
--	--	---

B. Wastewater Removal

- a. Volume of wastewater to be removed (yd³)
 - i. From cost estimate _____
 - ii. From closure plan _____
 - iii. Inspector's estimate _____
- b. Unit cost for wastewater removal (\$/yd³)
 - i. From cost estimate _____
- c. Total cost of wastewater removal (\$)
 - i. From cost estimate _____

		X
--	--	---

C. On Site Treatment or Disposal of Contaminated Soil, Wastewater and Residues Generated During Decontamination

- a. Volume of soil, wastewater and residues to be treated/disposed on site (yd³)
 - i. From cost estimate _____
 - ii. From closure plan _____
 - iii. Inspector's estimate _____
- b. Unit cost for treatment/disposal (\$/yd³)
 - i. From cost estimate _____
- c. Cost of on site treatment/disposal (\$)
 - i. From cost estimate _____

		X
--	--	---

D. Off Site Treatment or Disposal of Contaminated Soil, Wastewater and Residues Generated During Decontamination

- a. Volume of soil, wastewater and residues to be treated/disposed off site (yd³)
 - i. From cost estimate _____
 - ii. From closure plan _____
 - iii. From visual inspection _____

Does Not Apply	Applies	
	In- cluded	Not In- cluded

- b. Unit cost for off site treatment/disposal (\$/yd³)
 - i. From cost estimate _____
- c. Cost of off site treatment/disposal (\$) excluding transportation
 - i. From cost estimate _____
- d. Unit cost for transport (\$/yd³/mile)
 - i. From cost estimate _____
- e. Transport distance (miles)
 - i. From cost estimate _____
 - ii. By map reference _____
- f. Cost of transport (\$)
 - i. From cost estimate _____
- g. Total cost of off site treatment or disposal including transport (\$)
 - i. From cost estimate _____

		X
--	--	---

(40 CFR 265.112(a)(3))



E. Equipment Decontamination

- a. Amount of equipment to be decontaminated (tons)
 - i. From cost estimate _____
 - ii. From closure plan _____
 - iii. Inspector's estimate _____
- b. Unit cost for equipment decontamination (\$/ton)
 - i. From cost estimate _____
- c. Cost of equipment decontamination (\$)
 - i. From cost estimate _____

F. Total Cost of Decontamination (\$)

- a. From cost estimate _____

		X
--	--	---

Does Not Apply	Applies	
	In-cluded	Not In-cluded

	X	
--	---	--

(40 CFR 265.115)



3. CERTIFICATION

A. Professional Engineer Hours (hrs)

- a. From cost estimate 10
- b. From closure plan
- c. Inspector's estimate

B. Unit Cost for Professional Engineer* (\$/hr.)

- a. From cost estimate \$ 50

C. Total Certification Cost (\$)

- a. From cost estimate 50.0

	X	
--	---	--

4. COVER

A. Cover Material**

No Cost fill & cover from on site material.

- a. Area to be covered (yd²)
 - i. From cost estimate
 - ii. From closure plan
 - iii. From visual inspection

- b. Depth of cover material (yd)
 - i. From cost estimate
 - ii. From closure plan
 - iii. Inspector's estimate

		X
		X

(40 CFR 265.112(a)(4);
265.280(c)(2))



*Loaded with costs for support personnel.

**Includes materials to be used for cover, for example gravel or clay, except for top-soil.

Does Not Apply	Applies	
	In-cluded	Not In-cluded

- c. Volume of material to be obtained on site (yd³)
 - i. From cost estimate _____
 - ii. From closure plan _____
 - iii. Inspector's estimate _____

- d. Volume of material to be obtained off site (yd³)
 - i. From cost estimate _____
 - ii. From closure plan _____
 - iii. Inspector's estimate _____

- e. Unit cost of excavating material on site (\$/yd³)
 - i. From cost estimate _____

- f. Unit cost of purchasing material off site (\$/yd³)
 - i. From cost estimate _____

- g. Unit cost of transporting material (\$/yd²/mile)
 - i. From cost estimate _____

- h. Transport distance (miles)
 - i. From cost estimate _____
 - ii. By map reference _____

- i. Transport cost (\$)
 - i. From cost estimate _____

- j. Total cost of acquiring material (\$)
 - i. From cost estimate _____

- k. Unit cost of spreading and compacting material (\$/yd³)
 - i. From cost estimate _____

- l. Cost of spreading and compacting material (\$)
 - i. From cost estimate _____

- m. Total cost of acquiring and placing material (\$)
 - i. From cost estimate _____

Does Not Apply	Applies	
	In- cluded	Not In- cluded

		X
--	--	---

B. Top-soil

- a. Area to be covered (yd²)
 - i. From cost estimate _____
 - ii. From closure plan _____
 - iii. From visual inspection _____

- b. Depth of top-soil, allowing for appropriate grading (yd)
 - i. From cost estimate _____
 - ii. From closure plan _____
 - iii. Inspector's estimate _____

- c. Volume of top-soil to be obtained on site (yd³)
 - i. From cost estimate _____
 - ii. From closure plan _____
 - iii. Inspector's estimate _____

- d. Volume of top-soil to be obtained off site (yd³)
 - i. From cost estimate _____
 - ii. From closure plan _____
 - iii. Inspector's estimate _____

- e. Unit cost of excavating top-soil on site (\$/yd³)
 - i. From cost estimate _____

- f. Unit cost of purchasing top-soil off site (\$/yd³)
 - i. From cost estimate _____

- g. Unit cost of transporting top-soil (\$/yd³/mile)
 - i. From cost estimate _____

- h. Transport distance (miles)
 - i. From cost estimate _____
 - ii. By map reference _____

Does Not Apply	Applies	
	In- cluded	Not In- cluded

- i. Transport cost (\$)
 - i. From cost estimate _____
- j. Total cost of acquiring top-soil (\$)
 - i. From cost estimate _____
- k. Unit cost of spreading and compacting top-soil (\$/yd³)
 - i. From cost estimate _____
- l. Cost of spreading and compacting top-soil (\$)
 - i. From cost estimate _____
- m. Total cost of acquiring and placing top-soil (\$)
 - i. From cost estimate _____

X		
---	--	--

C. Synthetic Liner and Buffer Material

- a. Area to be covered (yd²)
 - i. From cost estimate _____
 - ii. From closure plan _____
 - iii. From visual inspection _____
- b. Depth of sand* buffer (yd)
 - i. From cost estimate _____
 - ii. From closure plan _____
 - iii. Inspector's estimate _____
- c. Volume of sand to be obtained on site (yd³)
 - i. From cost estimate _____
 - ii. From closure plan _____
 - iii. Inspector's estimate _____

*Includes other materials (other than clay and top-soil) which may be used along with the synthetic liner.

Does Not Apply	Applies	
	Included	Not Included

- d. Volume of sand to be obtained off site (yd³)
 - i. From cost estimate _____
 - ii. From closure plan _____
 - iii. Inspector's estimate _____
- e. Unit cost of excavating sand on site (\$/yd³)
 - i. From cost estimate _____
- f. Unit cost of purchasing sand off site (\$/yd³)
 - i. From cost estimate _____
- g. Unit cost of transporting sand (\$/yd³/mile)
 - i. From cost estimate _____
- h. Transport distance (miles)
 - i. From cost estimate _____
 - ii. By map reference _____
- j. Total cost of acquiring sand (\$)
 - i. From cost estimate _____
- k. Unit cost of spreading and compacting sand (\$/yd³)
 - i. From cost estimate _____
- l. Cost of spreading and compacting sand (\$)
 - i. From cost estimate _____
- m. Total cost of acquiring and placing sand (\$)
 - i. From cost estimate _____
- n. Unit cost of acquiring and installing synthetic liner (\$/yd²)
 - i. From cost estimate _____
- o. Cost of acquiring and installing synthetic liner (\$)
 - i. From cost estimate _____
- p. Unit cost of acquiring and installing synthetic liner and buffer materials (\$/yd²)
 - i. From cost estimate _____

Does Not Apply	Applies	
	In- cluded	Not In- cluded

- q. Total cost of acquiring and installing synthetic liner and buffer materials (\$)
- i. From cost estimate _____

		
--	--	-------------

D. Total Cover Cost

- a. Unit cost of cover (\$/yd²)
- i. From cost estimate _____
- b. Total cost of cover (\$)
- i. From cost estimate _____

		
--	-------------	--

5. Vegetation

(40 CFR 265.280(c)
(2)(ii))



- A. Area in Need of Vegetation (yd²)
- a. From cost estimate _____
- b. From closure plan _____
- c. From visual inspection _____
- B. Unit Cost for Acquiring and Placing Seed, Fertilizer, Etc. (\$/yd²)
- a. From cost estimate _____
- C. Total cost of Acquiring and Placing Seed, Fertilizer, Etc. (\$)
- a. From cost estimate \$ 200

--	--	--

6. Other (from cost estimate) (\$)

(specify)

\$ _____

(specify)

\$ _____

7. Total Closure Costs (\$)

- A. From cost estimate _____

POST-CLOSURE COST ESTIMATE VERIFICATION

Does Not Apply	Applies	
	In-cluded	Not In-cluded
		X

1. INSPECTION/FACILITY VISITS

- A. Total hours of professional level personnel (hrs/year)
 - a. From cost estimate _____
 - b. From post-closure plan _____
 - c. Inspector's estimate _____
- B. Unit cost for professional level personnel*(\$/hr)
 - a. From cost estimate _____
- C. Total inspection/facility visit cost (\$/year)
 - a. From cost estimate _____

		X
--	--	---

2. REESTABLISHING FINAL COVER AND VEGETATION

(40 CFR 265.118(a)(2)(i);
265.310(d)(1))

- A. Area involved (yd²)
 - a. From cost estimate _____
 - b. From post-closure plan _____
 - c. From visual inspection _____
- B. Unit cost for reestablishing cover and vegetation (\$/yd²)
 - a. From cost estimate _____
- C. Reestablishing cover and vegetation cost (\$/year)
 - a. From cost estimate _____



*Loaded with costs for support personnel.

Does Not Apply	Applies	
	In-cluded	Not In-cluded

		X
--	--	---

3. FERTILIZING

- A. Area involved (yd²)
 - a. From cost estimate
 - b. From post-closure plan
 - c. From visual inspection
- B. Unit cost for fertilizing (\$/yd²)
 - a. From cost estimate
- C. Total fertilizing cost (\$/year)
 - a. From cost estimate

		X
--	--	---

4. MOWING

- A. Area involved (yd²)
 - a. From cost estimate
 - b. From post-closure plan
 - c. From visual inspection
- B. Unit cost for mowing (\$/yd²)
 - a. From cost estimate
- C. Mowing cost (\$/year)
 - a. From cost estimate

X		
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5. GROUNDWATER MONITORING AND WELL REPLACEMENT

- A. Groundwater Monitoring
 - a. Number of wells
 - i. From cost estimate
 - ii. From post-closure plan
 - iii. From visual inspection

(40 CFR 265.117(a)(1))



Does Not Apply	Applies	
	In- cluded	Not In- cluded

b. Unit cost for groundwater monitoring (\$/well/year)
 i. From cost estimate _____

c. Groundwater monitoring cost (\$/year)
 i. From cost estimate _____

		X
--	--	---

B. Well Replacement

a. Average annual number of well replacements
 i. From cost estimate _____
 ii. From post-closure plan _____
 iii. Inspector's estimate _____

b. Unit cost for well replacement (\$/replacement)
 i. From cost estimate _____

c. Cost for well replacement (\$/year)
 i. From cost estimate _____

		X
--	--	---

C. Total groundwater monitoring and well replacement cost (\$/year)*
 a. From cost estimate _____

		X
--	--	---

6. MAINTAINING AND REPLACING FENCES

A. Maintaining Fences

a. Length of fence required (yd)
 i. From cost estimate _____
 ii. From post-closure plan _____
 iii. From visual inspection _____

(40 CFR 265.117(b);
 265.14(b)(2)(i))



*Note in comment section whether well replacement component is on annual basis or not.

Does Not Apply	Applies	
	Included	Not Included

- b. Unit cost for maintaining fences (\$/yd)
 - i. From cost estimate _____
- c. Cost for maintaining fences (\$/year)
 - i. From cost estimate _____

		X
--	--	--------------

B. Replacing Fences

- a. Length of fence to be replaced annually* (yd)
 - i. From cost estimate _____
 - ii. From post-closure plan _____
 - iii. Inspector's estimate _____
- b. Unit cost for fence replacement (\$/yd)
 - i. From cost estimate _____
- c. Cost of fence replacement (\$/year)
 - i. From cost estimate _____

		X
--	--	--------------

C. Total Maintaining and Replacing Fences Cost (\$/year)**

- a. From cost estimate _____

X		
X		

7. COLLECTING, REMOVING AND TREATING LEACHATE

A. Amount of leachate collected (gal./year)

- a. From cost estimate _____
- b. From post-closure plan _____

(40 CFR 265.310(d)(2))



*Total length of fence to be replaced over the entire post-closure period divided by 30 to obtain an annual average.

**Note in comment section whether fence replacement component is on annual basis or not.

Does Not Apply	Applies	
	Included	Not Included

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

B. Off Site Disposal

a. Amount of leachate removed to off site disposal facility (gal./year)
 i. From cost estimate _____
 ii. From post-closure plan _____

b. Unit cost for off site leachate disposal (\$/gal.)
 i. From cost estimate _____

c. Unit cost for transport of leachate (\$/gal./mile)
 i. From cost estimate. _____

d. Transport distance (miles)
 i. From cost estimate _____
 ii. From post-closure plan _____
 iii. By map reference _____

e. Cost of transport (\$/year)
 i. From cost estimate _____

f. Total cost of off-site treatment/disposal of leachate (\$/year)
 i. From cost estimate _____

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
-------------------------------------	--------------------------	--------------------------

C. On Site Disposal

a. Amount of leachate disposed of on-site (gal.)
 i. From cost estimate _____
 ii. From post-closure plan _____

b. Unit cost of on site leachate disposal (\$/gal.)
 i. From cost estimate _____

c. Cost of on-site leachate disposal (\$/year)
 i. From cost estimate _____

Does Not Apply	Applies	
	Included	Not Included

X		
---	--	--

		X
--	--	---

D. Total Collecting, Removing, Treating and Disposal of Leachate Cost (\$)
 a. From cost estimate _____

8. Administrative

A. Hours of management time required to administer the post-closure plan (hrs/year)
 a. From cost estimate _____
 b. From post-closure plan _____
 c. Inspector's estimate _____

B. Unit cost for management time* (\$/hr)
 a. From cost estimate _____

C. Total administrative cost (\$/year)
 a. From cost estimate _____

9. Other (specify) (\$/year)

--	--	--

(40 CFR 265.119) ★
 (40 CFR 265.120) ★

A. Local land authority notice (\$/year) _____
 B. Notice in deed (\$/year) _____
 C. _____
 D. _____
 E. _____
 (Total Other) _____

10. Total Annual Post-Closure Costs (\$)

a. From cost estimate _____

--	--	--

*Loaded with costs for support personnel.

INTERIM STATUS COMPLIANCE CHECKLIST

FACILITY Vertac Chemical
LOCATION Vicksburg
DATE 2/24/83
INSPECTORS Chuck Estes

REQUIREMENT

In compliance - Yes
 Not in compliance - No
 Not applicable - NA

COMMENTS

SUBPART B - GENERAL FACILITY STANDARDS

265.12 Required Notices

- a) The facility owner or operator must notify the Director at least four weeks in advance of receipt of wastes from a foreign source.
- b) Before transferring ownership or operation of a facility, the facility's owner or operator must notify the new owner or operator of the requirements of 40 CFR 265 and 122.

X

Facility does not receive waste from any foreign source.

X

The facility has not sold or transferred ownership.

265.13 General Waste Analysis

Before treating, storing, or disposing of hazardous waste, the facility owner or operator must obtain a detailed chemical and physical analysis of wastes. The analysis must contain all the information which must be known to treat, store, or dispose the waste in accordance with the federal requirements.

X

Besides: the wastes sent to BFI from Calgary units other wastes consists of drums of off-spec. or waste chemicals. Also have new waste salts with arsenic from MSMA plant.

265.14 Security to Prevent Unknowing and Unauthorized Access to the Facility

a) The owner or operator must prevent the unknowing entry and minimize the possibility for unauthorized entry unless:

1) physical contact with the waste, structures, or equipment will not be injurious

X

Wastes could be very harmful

2) disturbance of the waste or equipment will not violate the requirements of Part 265.

X

11

REQUIREMENT

In compliance - Yes
 Not in compliance - No
 Not applicable - NA

COMMENTS

265.14 - Continued

b) Unless exempt under 265.14 (a) (1) or 402.7-14(a)(2), a facility must have:

1) a 24-hour surveillance system

2) (i) an artificial or natural barrier which completely surrounds the active portion of the facility

(ii) a means to control entry

c) A sign warning of the danger of intruding into the facility.

Yes	No	N/A
X		
X		
X		
X		
265.15 <u>Inspection and Monitoring</u>		
X		
X		
X		
X		

Have ~~to~~ a security guard at gate

The facility is fenced or bordered by a creek ^{which} limits access.

Signs are posted on impoundment levee and at gate.

265.15 Inspection and Monitoring

a) The owner or operator must inspect the facility for malfunctions and deterioration, operator errors, or discharges which may be causing or lead to release of hazardous waste constituents to the environment or a threat to human health.

b) The owner or operator must develop and follow a schedule and plan for inspections.

c) The owner or operator must take remedial action upon the detection of malfunction or the deterioration of equipment and structures when a hazard is imminent.

d) The owner or operator must record inspections in an inspection log and must keep the records for at least three years from the date of inspection.

Inspecting drum storage area weekly. Also inspecting pond daily. Need to insure that impoundment levee integrity is checked weekly.

"

Remedial action was taken when the impoundment had a breach from high water on Feb. 6, 1983. This was reported as required in 15 days by way of a report.

Inspections are recorded in a log book for ~~both~~ the drum storage, ~~and~~ tank and impoundment inspections.

IN COMPLIANCE - YES
 Not in compliance - No
 Not applicable - NA

REQUIREMENT

COMMENTS

Yes	No	N/A
X		
X		
X		
X		
X		
X		
X		
X		
X		
X		
X		
X		

265.16 Facility Personnel Training

- a) Facility personnel must successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that ensures the facility's compliance with the requirements of Part 265.
- b) The training program must be completed within six months of the effective date of Part 265.
- c) There must be an annual review of the initial training in (a) above.
- d) The owner or operator must maintain records of training.
- e) Training records on current personnel must be kept until closure of the facility.

Personnel are trained in classroom and on-the-job training. Training centers on the contingency plan.

Need to be sure that this is done.

265.17 General Requirements for Ignitable, Reactive or Incompatible Wastes

- a) The owner or operator must take precautions to prevent accidental ignition or reaction of ignitable or reactive waste.
- b) Treatment, storage, or disposal of ignitable or reactive waste and the mixture or commingling of incompatible wastes must be conducted so that it does not:
 - 1) Generate extreme heat or pressure, fire or explosion, or violent reaction;
 - 2) Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient

Waste stored in drums are segregated as to waste types within the storage area.

"

"

"

In compliance - Yes
 Not in compliance - No
 Not applicable - NA

REQUIREMENT

COMMENTS

265.17 - Continued--

quantities to threaten human health;

3) Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions;

4) Damage the structural integrity of the device or facility containing waste; or

5) Through other like means threaten human health or the environment.

Yes	No	N/A
X		
X		
X		
X		
X		
		X
		X

Same as above

"

"

SUBPART C - PREPAREDNESS AND PREVENTION

Pursuant to 265.30 through 265.37, facilities must be maintained and operated for and prevention of releases of hazardous wastes controlled by the State.

A written description of operational procedures to prevent releases is on file.

SUBPART D - CONTINGENCY PLANS

Pursuant to 265.56, facilities must have contingency plans and emergency procedures to be followed in the event of a release of hazardous waste.

The contingency plan is written but it needs further work and clarification on contacting emergency coordinators and a procedure to check the impairment integrity when large drops are noticed in impairment level.

SUBPART E - MANIFEST SYSTEM, RECORDKEEPING, AND REPORTING

265.71(a)(1-5) If a facility receives hazardous waste accompanied by a manifest, the owner or operator must meet the requirements of 265.71(a)(1-5)

X

Does not receive waste

265.71(b)(1-5) If a facility receives, from a rail or water transporter, hazardous waste which is accompanied by a shipping paper, the owner or operator must meet the requirements of 265.71.

X

"

In compliance - Yes
 Not in compliance - No
 Not applicable - NA

REQUIREMENT

COMMENTS

REQUIREMENT	In compliance - Yes Not in compliance - No Not applicable - NA			COMMENTS
	Yes	No	N/A	
265.72(a) Upon discovery of significant manifest discrepancy, the owner or operator must attempt to reconcile the discrepancy with the waste generator or transporter.			X	No manifest discrepancies
(b) If a significant manifest discrepancy is not resolved, the owner or operator must notify the Director.			X	"
265.73(b) The owner or operator must keep a written operating record at the facility which meets the requirements of 265.73(b).	X			An operating record was formed after our last inspection.
265.74(a) All records must be furnished upon request and available at all times for inspection by the Director or EPA.			X	
(c) A copy of records of waste disposal locations and quantities must be submitted to the Director and the local land authority upon closure of the facility.			X	
265.75 The owner or operator must submit an annual report to the Director in compliance with the requirements of 265.75.	X			Annual reports for 1981 and 82 have been sent.
265.76 The receipt of any unmanifested waste must be reported to the Director.			X	
265.77 The owner or operator must submit a report to the Director if any of the following occur:	X			We have received a report on the release from the breach of the impoundment. We have asked for further details on the facility operators contacts with emergency coordinators.
a) releases; fires, explosions				
b) groundwater contamination				
c) facility closure.				

REQUIREMENT.

In compliance - Yes
 Not in compliance - No
 Not applicable - NA

COMMENTS

SUBPART F - GROUNDWATER MONITORING

265.90 Owner or operator must implement a groundwater monitoring program capable of determining the facility's impact on the quality of the upper aquifer within one year of the effective date of 265.90.

X

A monitoring program has begun. There are shortcomings which a new drilling and installations program will rectify.

265.91 - 265.94 The owner and operator must install, operate, and maintain a groundwater monitoring system which meets the requirements of 265.91 - 265.94.

~~X~~

X

The facility has until March 1 to install additional wells to meet the requirements. 4 wells are planned.

265.90(c) All of the groundwater monitoring requirements may be waived if the owner or operator can demonstrate that there is a low potential for migration of hazardous waste constituents from the facility via the uppermost aquifer below the facility to water supply wells or to surface water.

X

SUBPART G - CLOSURE AND POST-CLOSURE

265.111 The owner or operator must close his facility in a manner that:

- 1) minimizes the need for future maintenance, and
- 2) controls, minimizes, or eliminates post-closure escape of hazardous waste.

X

Facility has not closed.

X

"

265.112(a) The owner or operator must have a written closure plan on the effective date of Part 265.

X

Closure plan deals with the closing of the impoundment and drum storage areas.

In compliance - Yes
 Not in compliance - No
 Not applicable - NA

REQUIREMENT

COMMENTS

265.112(a) Continued--

The closure plan must include:

1) A description of how and when the facility will be partially closed, if applicable, and ultimately closed.

X

See Above

2) An estimate of the maximum inventory of wastes in storage or treatment at any given time.

X

"

3) Steps to decontaminate facility equipment.

X

"

4) A schedule for final closure which must include, as a minimum, anticipated dates when wastes will no longer be received, anticipated date for completion of final closure, and intervening milestone dates.

X

"

265.113(a) Closure must be initiated within 90 days after receiving the final volume of hazardous wastes.

X

Facility has not closed.

(b) The owner or operator must complete closure activities within six months after receiving the final volume of wastes.

X

265.114 Upon completion of closure, all equipment and structures must be properly disposed of or decontaminated.

X

265.115 The owner or operator and an independent registered professional engineer must certify that the facility has been closed in accordance with the approved closure plan.

X

In compliance - Yes
 Not in compliance - No
 Not applicable - NA

REQUIREMENT

COMMENTS

Yes	No	N/A
X		
X		
X		
X		
X		
X		
X		

265.117(a) Post closure care must consist of at least:

- 1) Groundwater monitoring
- 2) Maintenance of the contaminant system.

The owner or operator must have a post-closure plan on the effective date of Part 265 and it must include:

- 1) Groundwater monitoring activities and frequency.
- 2) Maintenance activities and frequencies to ensure the integrity of the cap, final cover, or other containment structures, and functions of the facilities monitoring equipment.

265.119 Within 90 days after closure, the owner or operator must submit a survey plat of the facility.

265.120 The owner or operator must record a notice on the deed that the land has been used to manage hazardous waste.

SUBPART H - FINANCIAL REQUIREMENTS

265.142(a) The owner or operator must develop and maintain a current estimate of closure and post-closure costs.

SUBPART I - OTHER FACILITY STANDARDS

265.170 - 265.172 The container must be compatible with the waste to be stored.

These activities are planned ~~later~~ after closure. The monitoring wells are in place.

Facility using a Trust Fund.

Drums are segregated within the storage area.

In compliance - Yes
Not in compliance - No
Not applicable - NA

REQUIREMENT

COMMENTS

Yes	No	N/A
X		
X		
X		
X		
X		
X		
X		
X		

265.173 Containers holding hazardous waste must be kept closed and must not be opened, handled, or stored in a manner which may cause a rupture or leak.

265.174 Areas where containers are stored must be inspected weekly.

265.176 Containers holding ignitable or reactive waste must be located at least 15 meters from the facility's property line.

265.177(a) Incompatible wastes must not be placed in the same container.

(b) A storage container holding a hazardous waste that is incompatible with any waste or other materials stored nearby must be separated or protected from the other materials.

SUBPART J - TANKS

265.192(b) Hazardous waste must be placed in a tank if they could cause the tank or its liner to leak.

(c) Uncovered tanks must have a least two feet of freeboard unless other containment structures, a drainage control system, or other diversion structures with a capacity that equals or exceeds the volume of the top two feet of the tank.

(d) Tanks which have a continuous feed system must be equipped with a means to stop the inflow.

Drums were closed. Many drums were removed since last inspection. Inspections were made weekly.

Tanks were covered

Not in compliance - No
 Not applicable - NA

REQUIREMENT

COMMENTS

Yes	No	N/A
X		
X		
		X
		X
		X
<u>SUBPART K - SURFACE IMPOUNDMENTS</u>		
X		
	X	
X		
X		
	X	
		X

265.193 Waste analysis must be conducted pursuant to 265.13, and 265.193(a).

265.194 Tanks must be inspected in accordance with 265.194.

265.197 At closure, all hazardous waste and hazardous waste residues must be removed from the tanks.

265.198 Ignitable or reactive waste should not be placed in a tank unless 265.198 is complied with.

265.199 Incompatible wastes must not be placed in the same tank unless 265.176 is complied with.

SUBPART K - SURFACE IMPOUNDMENTS

265.222 Must maintain at least two feet of freeboard.

265.223 Earthen dikes must have protective cover.

265.225 Must conduct waste analyses and trial tests in accordance with 265.225.

265.226(1) Must inspect the freeboard level at least once each operating day.

(2) Must inspect the surface impoundment at least once a week to detect any leaks, deterioration, or failure.

265.228 The surface impoundment must close in accordance with 265.228.

Inspections conducted daily.

Facility has not closed

No ignitable or reactive waste were placed in a tank.

A two-foot freeboard was maintained.

Parts of the dikes were newly placed soil so that no vegetation was present. Waste analyses were available

Inspections recorded in log book.

There was no special line detailing the condition of the embankment. This must be added.

The facility has not closed.

Not in compliance - No
Not applicable - NA

REQUIREMENT

COMMENTS

Yes No N/A

265.229 Ignitable or reactive waste must not be placed in a surface impoundment unless 265.229 is complied with.

X

No ignitable or reactive waste is placed in the impoundment.

265.230 Incompatible wastes must not be placed in the same surface impoundment unless 265.17(b) is complied with.

X

11

SUBPART L - WASTE FILES

265.251 A waste pile must be protected and managed to control wind dispersal.

265.252 An owner or operator must conduct waste analyses unless the facility meets the exemptions of 265.252.

265.253 Within one year after the effective date of the regulations, leachate or run-off from a pile must be controlled pursuant to 265.253.

265.256 Ignitable or reactive waste must not be placed in a waste site unless 265.256 is complied with.

265.257 The requirements of 265.257 for incompatible wastes must be complied with.

SUBPART M - LAND TREATMENT

265.272(a) Hazardous waste must not be placed at a land treatment facility unless it can be made less hazardous or non-hazardous.

(b) Run-on must be diverted away from other active portions as of one year after the effective date of Part 265.

In compliance - Yes
Not in compliance - No
Not applicable - NA

COMMENTS

REQUIREMENT

265.272 -- Continued

(c) Run-off from active portions must be collected as of one year after the effective date of Part 265 . . .

265.273 Waste analyses must be conducted pursuant to 265.273.

265.276(a) An owner or operator must notify the State Director within 60 days after the effective date of Part 265 if food chain crops are grown on the land treatment facility.

(b) Food chain crops must not be grown on the treated area of a hazardous waste land treatment facility unless 265.276(b) is complied with.

(c) Food chain crops must not be grown on a land treatment facility receiving waste that contains cadmium unless 265.276(c) is complied with.

265.278 The owner or operator must have in writing and must implement an unsaturated zone monitoring plan pursuant to 265.278.

265.279 The owner or operator must keep records of the application dates, application rates, quantities, and location of each hazardous waste placed in a facility.

265.280 A land treatment facility must meet the closure and post-closure requirements of 265.280.

Yes	No	N/A
-----	----	-----

11

In compliance - Yes
Not in compliance - No
Not applicable - NA

COMMENTS

REQUIREMENT

265.281 Ignitable or reactive waste must not be placed in a land treatment facility unless 265.281 is complied with.

265.282 Incompatible wastes must not be placed in the same land treatment area unless 265.17(b) is complied with.

SUBPART N - LANDFILLS

265.302(a) Run-on must be diverted away from the active portions within one year after the effective date of Part 265.

(b) Run-off from active portions must be collected within one year after the effective date of Part 265.

(d) Must control wind dispersal.

265.309 The owner or operator must meet the surveying and recordkeeping requirements of 265.309.

265.310 A landfill must comply with closure and post-closure requirements of 265.310.

265.312 Ignitable or reactive waste must not be placed in a landfill unless 265.312 is complied with.

265.313 Incompatible wastes must not be placed in a landfill unless 265.17(b) is complied with.

265.314 Bulk or non-containerized liquid waste, waste containing free-liquids, or containers holding liquid waste should not be placed in a landfill unless the requirements of 265.314

Yes No N/A

Not in compliance - No

Not applicable - NA

COMMENTS

REQUIREMENT

Yes

No

N/A

SUBPART Q - CHEMICAL, PHYSICAL, AND BIOLOGICAL TREATMENT

265.401(a) Must comply with 265.17(b)

(b) Hazardous waste must not be placed in the treatment process or equipment if any failure of equipment or the process would occur.

(c) A continuously-fed process must be equipped with a means to stop the inflow.

265.402 Waste analyses and trial tests must be conducted pursuant to 265.402.

265.403 Inspections must be made pursuant to 265.403.

265.404 At closure, all hazardous waste and hazardous waste residues must be removed.

265.405 Ignitable or reactive waste must not be placed in a treatment process unless 265.405 is complied with.

265.406 Incompatible wastes must not be placed in the same treatment process unless 265.17(b) is complied with.

SUBPART R - UNDERGROUND INJECTION

265.430(a) underground injection of hazardous waste is not subject to the closure and post-closure or financial requirements of Part 265. Underground injection is subject to the other requirements of Part 265.

In compliance - Yes
Not in compliance - No
Not applicable - NA

REQUIREMENT

COMMENTS

Other questions or standards.

Are there any other generators transporting their waste to this hazardous waste management facility?

Yes	No	N/A



MISSISSIPPI DEPARTMENT OF NATURAL RESOURCES
Bureau of Pollution Control
P. O. Box 10385
Jackson, Mississippi 39209
(601) 961-5171



MEMO

October 12, 1981

TO: Sam Mabry

FROM: David E. Lee *DL*

SUBJECT: Follow-up Inspection At Vertac Chemical

On October 6, 1981, Jim Hardage and I conducted a follow-up inspection for the purpose of determining RCRA compliance at Vertac. Mr. Karkkainen and Mr. Bob Maraman of Vertac represented the firm. Items of non-compliance mentioned in our letter of August 10, as well as additional non-compliance items referred to us by Andy Kromis of EPA, were reviewed. Below is a list of each item and its status.

No Training Records	Have record of Calgon course; will begin records of company sponsored training; format suggested to Mr. Maraman; No training conducted since last inspection
No Documental Arrangements With Emergency Officials	Plant layout, product and waste type, and emergency procedures manuals have been distributed to hospital, fire & police departments
No Waste Analysis Plan	Plan submitted 8/11/81, deemed inadequate. Mr. Maraman indicated he would revise plan to reflect sampling parameters, frequency, etc.
No Fence Or Signs Around Impoundment	We walked around most of facility and concluded that sufficient natural barrier exists in the form of creeks, cliffs, and/or vegetation. Signs will be placed on both ends of railroad track; the only accessible entrance that cannot be fenced.
No Inspection Schedule	Schedule submitted 8/11/81 adequate
No Operating Record	Records of inspections begun 8/17/81; Records of inspections on impoundment, hill tank, and drum storage area; Adequate.

Follow-up Inspection At Vertac Chemical

Page 2

No Contingency Plan

Nature of waste requires only minimal contingencies. All spills, if not contained, flow to impoundment. Small spills are absorbed with clay absorbent. Contingency plan on hand refers to production facility. Arrangements with emergency officials should be adequate to cover contingencies.

No Closure Plan Or Cost Estimate

Plan and estimate submitted 8/11/81. Both are inadequate, however, to determine a total closure cost, both will be revised in more detail by Mr. Maraman and Mr. Karkkainen.

Leaking Drums

The two areas containing many leaking and deteriorated drums had been cleaned up. Old drums had been disposed by BFI and material still on hand which was previously in bad drums had been recontainerized. Drums were spaced about three feet apart so that all drums were visible. There was evidence of one small leak which had been absorbed with a clay absorbent. This drum had been recontainerized. One additional drum was slightly wet on the outside around a corroded area, indicating a deteriorated condition. Officials indicated it would be re-drummed. Drummed waste appeared to be contained well enough to avoid any hazards, provided inspections are maintained. Remainder of drums are scheduled to be removed in one to two months, according to Mr. Karkkainen.

A new item of non-compliance was found during this inspection. Of a total of fourteen or fifteen manifested shipments made off-site since January, only three or four manifests had been returned. There were eleven outstanding manifests, all of which were past the thirty five day turnaround time. Below is a list of the manifests by destination and date of shipment.

Spent Carbon
Calgon
Texas

1/3
1/21
2/23
2/27
3/12
5/26
6/30
8/5

Drummed Waste & Empty Drums
BFI
Livingston, LA

8/13
8/17
8/26

Follow-up Inspection At Vertac Chemical

Page 3

Mr. Maraman indicated he would send an exception report covering all manifests and would begin trying to locate the original copies.

The revised paperwork items will be sent to this office when completed. A follow-up inspection will be scheduled in the near future to review the items in question.

cc: Mr. Andy Kromis, EPA, Region IV



MISSISSIPPI DEPARTMENT OF NATURAL RESOURCES
Bureau of Pollution Control
P. O. Box 10385
Jackson, Mississippi 39209
(601) 961-5171



October 12, 1981

Mr. R. F. Maraman, Chief Chemist
Vertac Chemical Corporation
P. O. Box 3
Vicksburg, MS 39180

RE: Inspection of October 6, 1981

Dear Mr. Maraman:

The recent inspection of the Vertac facility by Jim Hardage and myself indicated most of the non-compliance items found on the July 27th inspection had been corrected. As we indicated, however, a few items are still in need of some attention.

The waste analysis plan should be revised to reflect frequency of sampling and sampling parameters. Signs should be posted adjacent to the railroad on both sides of the property boundary and around the old landfill area. The closure plan should be re-written to include enough detail to formulate an adequate closure cost and the cost should be calculated. Keep in mind that a requirement to place closure cost monies in a trust fund or other device will be imposed in the near future. Plans should be made to meet this requirement when it becomes effective.

A manifest exception report should be sent to this office listing the non-returned manifests and efforts being made to locate them. Items required for inclusion in the report can be found in Section 262.42 of the EPA regulations.

We will schedule a follow-up trip in the near future to discuss the aforementioned items. Please feel free to contact us if you have any questions.

Sincerely,

David E. Lee

David E. Lee, PE
Environmental Engineer
DSWM

DEL/sh

cc: Mr. Dick Karkkainen, Vertac, Memphis
Mr. Andy Kromis, EPA, Region IV