PUBLIC NOTICE
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY (LDEQ)
OLIN CORPORATION - WESTLAKE FACILITY
FINAL HAZARDOUS WASTE POST-CLOSURE RENEWAL PERMIT

The LDEQ, Office of Environmental Services, has made the decision to issue the a final hazardous waste post-closure renewal permit for Olin Corporation, P.O. Box 248 Charleston, Tennessee for the Westlake Facility-Interim Status Landfill. **The facility is located at 960 I-10 West, Westlake, Louisiana, 70602, Calcasieu Parish.**

Under this final hazardous waste post-closure renewal permit, Olin Corporation will conduct post-closure care of the Interim Status Landfill, groundwater monitoring, and implement site-wide corrective action. The Interim Status Landfill received on-site generated hazardous waste. The Interim Status Landfill was closed in March 1996, and requires a permit to govern the post-closure care of the unit.

The final permitting action and related documents are available for review and copying (all documents copied will be subject to a $0.25 charge per copied page) at the LDEQ, Public Records Center, Room 127, 602 North 5th Street, Baton Rouge, LA. Viewing hours are from 8:00 a.m. to 4:30 p.m., Monday through Friday (except holidays). **The available information can also be accessed electronically on the Electronic Document Management System (EDMS) on the DEQ public website at www.deq.louisiana.gov**.

An additional copy of this action may be reviewed at the Calcasieu Parish Public Library, Westlake Branch, 937 Mulberry Street, Westlake, LA 70669-4501 and the Calcasieu Parish Public Library, Sulphur Branch, 1160 Cypress Street, Sulphur, LA 70663-5111.

In accordance with Louisiana Revised Statutes (La R.S.) 30:2024, the Permittee may file with the secretary a request for a hearing no later than thirty (30) days after the notice of the action is served. Under La. R.S. 30:2050.21, any person aggrieved by a final permit action may appeal to the Nineteenth Judicial District Court within 30 days after the notice of the action has been given.

Previous notices have been published in the Lake Charles American Press and the Advocate on November 11, 2004 and July 12, 2007.

Inquiries or requests for additional information regarding this permit action, should be directed to Mr. Craig Easley, LDEQ, Waste Permits Division, P.O. Box 4313, Baton Rouge, LA 70821-4313, phone (225) 219-3050.

Persons wishing to be included on the LDEQ permit public notice mailing list or for other public participation related questions should contact the Public Participation Group in writing at LDEQ, P.O. Box 4313, Baton Rouge, LA 70821-4313, by email at deqmaillistrequest@la.gov or contact the LDEQ Customer Service Center at (225) 219-LDEQ (219-5337).

Permit public notices including electronic access to the issued permit and associated information can be viewed at the LDEQ permits public notice webpage at www.deq.louisiana.gov/apps/pubNotice/default.asp and general information related to the public participation in permitting activities can be viewed at www.deq.louisiana.gov/portal/tabid/2198/Default.aspx

Alternatively, individuals may elect to receive the permit public notices via email by subscribing to the LDEQ permits public notice List Server at www.doa.louisiana.gov/oes/listservpage/ldeq_pn_listserv.htm

All correspondence should specify AI Number 1254, Permit Number LAD008080681-PC-RN-1, and Activity Number PER20040001.

Scheduled Publication Date: Friday, September 21, 2007.

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04/30/07

FINAL
HAZARDOUS WASTE POST-CLOSURE PERMIT

OLIN CORPORATION
WESTLAKE, LOUISIANA
LAD 008080681-PC-RN-1
AI#1254 / PER20040001

RECORD CENTER COPY

DEPARTMENT OF ENVIRONMENTAL QUALITY

KATHLEEN BABINEAUX BLANCO
GOVERNOR

MIKE D. McDANIEL, Ph.D.
SECRETARY

Mr. Curt M. Richards
Vice President, Environment, Health, & Safety
Olin Corporation
P.O. Box 248
1186 Lower River Road
Charleston, TN 37310-0248

RE: Olin Corporation
LAD 008080681/AI#1254/PER20040001
Final Hazardous Waste Post-Closure Renewal Permit

Dear Mr. Richards:

Attached, is your copy of the Olin Corporation, final hazardous waste post-closure renewal permit, LAD 008080681-PC-RN-1, which contains language pertaining to the post-closure care of the Interim Status Landfill at the Olin Corporation, Westlake Facility.

In accordance with Louisiana Revised Statute (La. R.S.) 30:2024, the Permittee may file with the Secretary a request for hearing no later than thirty (30) days after the notice of the action is served. Under La. R.S. 30:2050.21, any person aggrieved by a final permit action may appeal to the Nineteenth Judicial Court within thirty (30) days after the notice of the action has been given.

Please reference your Agency Interest Number (1254), EPA ID Number (LAD008080681), and Permit Activity Number (PER 20040001) on all future correspondence pertaining to this matter. If you have any questions, please contact Mr. Craig Easley of the Waste Services Section at (225) 219-3050 or Ms. Soumaya Ghosn of the Public Participation Group at (225) 219-3276.

Sincerely,

Chuck Carr Brown, Ph.D.
Assistant Secretary

kce

Attachment

ENVIRONMENTAL **SERVICES**
: PO BOX 4313, BATON ROUGE, LA 70821-4313
P:225-219-3181 F:225-219-3309
WWW.DEQ.LOUISIANA.GOV

PUBLIC PARTICIPATION

PUBLIC NOTICE
LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY (LDEQ)
OLIN CORPORATION - WESTLAKE FACILITY
FINAL HAZARDOUS WASTE POST-CLOSURE RENEWAL PERMIT

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The final permitting action and related documents are available for review and copying (all documents copied will be subject to a $0.25 charge per copied page) at the LDEQ, Public Records Center, Room 127, 602 North 5th Street, Baton Rouge, LA. Viewing hours are from 8:00 a.m. to 4:30 p.m., Monday through Friday (except holidays). **The available information can also be accessed electronically on the Electronic Document Management System (EDMS) on the DEQ public website at www.deq.louisiana.gov.**

An additional copy of this action may be reviewed at the Calcasieu Parish Public Library, Westlake Branch, 937 Mulberry Street, Westlake, LA 70669-4501 and the Calcasieu Parish Public Library, Sulphur Branch, 1160 Cypress Street, Sulphur, LA 70663-5111.

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Previous notices have been published in the Lake Charles American Press and the Advocate on November 11, 2004 and July 12, 2007.

Inquiries or requests for additional information regarding this permit action, should be directed to Mr. Craig Easley, LDEQ, Waste Permits Division, P.O. Box 4313, Baton Rouge, LA 70821-4313, phone (225) 219-3050.

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Permit public notices including electronic access to the issued permit and associated information can be viewed at the LDEQ permits public notice webpage at www.deq.louisiana.gov/apps/pubNotice/default.asp and general information related to the public participation in permitting activities can be viewed at www.deq.louisiana.gov/portal/tabid/2198/Default.aspx

Alternatively, individuals may elect to receive the permit public notices via email by subscribing to the LDEQ permits public notice List Server at www.doa.louisiana.gov/oes/listservpage/ldeq_pn_listserv.htm

All correspondence should specify AI Number 1254, Permit Number LAD008080681-PC-RN-1, and Activity Number PER20040001.

Scheduled Publication Date: Friday, September 21, 2007.

DEPARTMENT OF ENVIRONMENTAL QUALITY

KATHLEEN BABINEAUX BLANCO
GOVERNOR

MIKE D. McDANIEL, Ph.D.
SECRETARY

September 18, 2007

Phone : (337) 721-3500
Fax : (337) 437-3399

Mr. S. Mark McMurry - Parish Administrator
Calcasieu Parish Police Jury
1015 Pithon Street
Lake Charles, LA 70602

Re: REQUEST FOR PUBLIC COMMENTS ON A FINAL HAZARDOUS WASTE POST-CLOSURE RENEWAL PERMIT
OLIN CORPORATION / WESTLAKE FACILITY
AI NUMBER 1254, PERMIT NUMBER LAD008080681-PC-RN-1, AND ACTIVITY NUMBER PER20040001
WESTLAKE, CALCASIEU PARISH, LOUIANA

Dear Mr. McMurry:

The Louisiana Department of Environmental Quality (LDEQ) is requesting public comments regarding permitting actions for the Olin Corporation / Westlake Facility, P.O. Box 248 Charleston, Tennessee 37310-0248.

For your reference, attached is a copy of the final hazardous waste post closure renewal permit and the legal notice is to be published in THE ADVOCATE and AMERICAN PRESS on Friday, September 21,2007. It is also posted on the LDEQ Website, found at www.deq.state.la.us. Written comments on the proposed air permits may be submitted to Ms. Soumaya Ghosn, LDEQ-OES, Environmental Assistance Division, P.O. Box 4313, Baton Rouge, LA 70821-4313. All comments regarding the technically complete permit renewal application should specify Agency Interest (AI) No. 1254

Should you have any questions additional permit information may be obtained from Mr. Craig Easley, LDEQ, Permits Division, P.O. Box 4313, Baton Rouge, LA 70821-4313, telephone (225) 219-3050. Should you have any questions regarding the final hazardous waste post closure renewal permit, please contact Ms. Dina Heidar, LDEQ, Environmental Assistance Division, Stakeholder Outreach Section, at (225) 219-3278.

Please complete the attached 'Verification of Receipt' and mail to Ms. Dina Heidar, LDEQ-OES, Environmental Assistance Division, PO Box 4313, Baton Rouge, LA 70821-4313, or Fax (225) 325-8149.

We appreciate your assistance in our efforts to serve the public. If you have any questions, please call Ms. Heidar at (225) 219-3278.

Sincerely,

Dina Heidar
Environmental Scientist, Public Participation Group

DH

Attachments/2

ENVIRONMENTAL **SERVICES**
: PO BOX 4313, BATON ROUGE, LA 70821-4313
P:225-219-3181 F:225-219-3309
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DEPARTMENT OF ENVIRONMENTAL QUALITY

KATHLEEN BABINEAUX BLANCO
GOVERNOR

MIKE D. McDANIEL, Ph.D.
SECRETARY

September 18, 2007

Tel: (214) 665-6750

Mr. Kishor Fruitwala, Ph.D., P.E.
U. S. EPA, Region VI
1445 Ross Avenue
Dallas, Texas 75202-2733

Re: **REQUEST FOR PUBLIC COMMENTS ON A FINAL HAZARDOUS WASTE POST-CLOSURE RENEWAL PERMIT**
OLIN CORPORATION / WESTLAKE FACILITY
AI NUMBER 1254, PERMIT NUMBER LAD008080681-PC-RN-1, AND ACTIVITY NUMBER PER20040001
WESTLAKE, CALCASIEU PARISH, LOUIANA

Dear Fruitwala:

The Louisiana Department of Environmental Quality (LDEQ) is enclosing for your reference, a copy of the draft hazardous waste post closure renewal permit and the legal notice for the public notice for public comments to be published in THE ADVOCATE and AMERICAN PRESS on Friday, September 21,2007. It is also posted on the LDEQ Website, found at www.deq.state.la.us. Written comments on the proposed air permits may be submitted to Ms. Soumaya Ghosn, LDEQ-OES, Environmental Assistance Division, P.O. Box 4313, Baton Rouge, LA 70821-4313. All comments regarding the technically complete permit renewal application should specify Agency Interest (AI) No. 1254

Should you have any questions additional permit information may be obtained from Mr. Craig Easley, LDEQ, Permits Division, P.O. Box 4313, Baton Rouge, LA 70821-4313, telephone (225) 219-3050. Should you have any questions regarding the final hazardous waste post closure renewal permit, please contact Ms. Dina Heidar, LDEQ, Environmental Assistance Division, Stakeholder Outreach Section, at (225) 219-3278.

Please complete the attached 'Verification of Receipt' and mail to Ms. Dina Heidar, LDEQ-OES, Environmental Assistance Division, PO Box 4313, Baton Rouge, LA 70821-4313, or Fax (225) 325-8149.

We appreciate your assistance in our efforts to serve the public. If you have any questions, please call Ms. Heidar at (225) 219-3278.

Sincerely,

Dina Heidar
Environmental Scientist, Public Participation Group

DH

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DEPARTMENT OF ENVIRONMENTAL QUALITY

KATHLEEN BABINEAUX BLANCO
GOVERNOR

MIKE D. McDANIEL, Ph.D.
SECRETARY

September 18, 2007

Phone: 337-437-3571
Fax : 337-437-3571

Ms. Danielle McGavock, Branch Manager
Calcasieu Parish Public Library, Westlake Branch,
937 Mulberry Street,
Westlake, LA 70669

Re: REQUEST FOR PUBLIC COMMENTS ON A FINAL HAZARDOUS WASTE POST-CLOSURE RENEWAL PERMIT
OLIN CORPORATION / WESTLAKE FACILITY
AI NUMBER 1254, PERMIT NUMBER LAD008080681-PC-RN-1, AND ACTIVITY NUMBER PER20040001
WESTLAKE, CALCASIEU PARISH, LOUIANA

Dear Mr. McGavock:

We request that the enclosed final hazardous waste post closure renewal permit and public notice associated with the referenced facility be made available for public review upon receipt in the **Calcasieu Parish Public Library, Westlake Branch, 937 Mulberry Street, Westlake, LA 70669.** It is imperative that these documents are available for review at all times; therefore, they cannot be checked out by anyone at any time.

The documents should be retained during the permitting process. At the close of the permitting period, the Louisiana Department of Environmental Quality, Office of Environmental Services (LDEQ-OES), Permits Division, will provide written notice to you requesting that the information be removed.

Please complete the attached 'Verification by Library' and mail to Ms. Dina Heidar, LDEQ-OES, Environmental Assistance Division, Post Office Box 4313, Baton Rouge, Louisiana 70821-4313, or Fax to (225) 325-8149.

We appreciate your assistance in our efforts to serve the public. If you have any questions, please callMs. Heidar at (225) 219-3278.

Sincerely,

Dina Heidar
Environmental Scientist, Public Participation Group

DH

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DEPARTMENT OF ENVIRONMENTAL QUALITY

KATHLEEN BABINEAUX BLANCO
GOVERNOR

MIKE D. McDANIEL, Ph.D.
SECRETARY

September 18, 2007

Phone: 337-527-7200
Fax : 337-527-8987

Ms. Ester Pennington, Branch Manager
Calcasieu Parish Library, Sulphur Branch,
1160 Cypress Street,
Sulphur, LA 70663

Re: REQUEST FOR PUBLIC COMMENTS ON A FINAL HAZARDOUS WASTE POST-CLOSURE RENEWAL PERMIT
OLIN CORPORATION / WESTLAKE FACILITY
AI NUMBER 1254, PERMIT NUMBER LAD008080681-PC-RN-1, AND ACTIVITY NUMBER PER20040001
WESTLAKE, CALCASIEU PARISH, LOUIANA

Dear Ms. Pennington:

We request that the enclosed final hazardous waste post closure renewal permit and public notice associated with the referenced facility be made available for public review upon receipt in the **Calcasieu Parish Library, Sulphur Branch, 1160 Cypress Street, Sulphur, LA 70663.** It is imperative that these documents are available for review at all times; therefore, they cannot be checked out by anyone at any time.

The documents should be retained during the permitting process. At the close of the permitting period, the Louisiana Department of Environmental Quality, Office of Environmental Services (LDEQ-OES), Permits Division, will provide written notice to you requesting that the information be removed.

Please complete the attached 'Verification by Library' and mail to Ms. Dina Heidar, LDEQ-OES, Environmental Assistance Division, Post Office Box 4313, Baton Rouge, Louisiana 70821-4313, or Fax to (225) 325-8149.

We appreciate your assistance in our efforts to serve the public. If you have any questions, please callMs. Heidar at (225) 219-3278.

Sincerely,

Dina Heidar
Environmental Scientist, Public Participation Group

DH

Attachments/2

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DEPARTMENT OF ENVIRONMENTAL QUALITY

KATHLEEN BABINEAUX BLANCO
GOVERNOR

MIKE D. McDANIEL, Ph.D.
SECRETARY

September 18, 2007

Phone: (337) 491-2667
Fax: (337) 491-2682

Billy Eakin, Regional Manager
LDEQ Regional Southwest Regional Office
1301 Gadwall Street
Lake Charles, LA 70615

Re: REQUEST FOR PUBLIC COMMENTS ON A FINAL HAZARDOUS WASTE POST-CLOSURE RENEWAL PERMIT
OLIN CORPORATION / WESTLAKE FACILITY
AI NUMBER 1254, PERMIT NUMBER LAD008080681-PC-RN-1, AND ACTIVITY NUMBER PER20040001
WESTLAKE, CALCASIEU PARISH, LOUIANA

Dear Mr. Eakin:

We are enclosing a copy of the final hazardous waste post closure renewal permit and public notice for the referenced facility for your use and for public review.

Please complete the attached 'Verification of Receipt' and mail to Ms. Dina Heidar, LDEQ-OES, Environmental Assistance Division, PO Box 4313, Baton Rouge, LA 70821-4313, or Fax (225) 325-8149.

We appreciate your assistance in our efforts to serve the public. If you have any questions, please call Ms. Heidar at (225) 219-3278.

Sincerely,

Dina Heidar
Environmental Scientist, Public Participation Group

DH

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SIGNATURE PAGE

FINAL PERMIT

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

POST-CLOSURE PERMIT
FOR THE INTRIM STATUS LANDFILL

PERMITTEE: Olin Coporation

PERMIT NUMBER: LAD 008080681-PC-RN-1
Agency Interest #1254/Activity # PER20040001

FACILITY LOCATION: 900 I-10 WEST
WESTLAKE, LOUISIANA, 70669

This permit is issued by the Louisiana Department of Environmental Quality (LDEQ) under the authority of the Louisiana Hazardous Waste Control Law R.S. 30:2171 et seq., and the regulations adopted thereunder and under the authority of the 1984 Hazardous and Solid Waste Amendments (HSWA) to the Resource Conservation and Recovery Act (RCRA) to Olin Corporation, (hereafter called the Permittee), for the post-closure care of closed unit located at Westlake, Louisiana, at latitude 30° 13' 55" and longitude 93° 15' 57."

For the purposes of this permit, the "Administrative Authority" shall be the Secretary of the Louisiana Department of Environmental Quality, or his/her designee.

The Permittee must comply with all terms and conditions of this permit. This permit consists of the conditions contained herein and the applicable regulations contained in the Louisiana Administrative Code, Title 33, Part V, Subpart 1, (LAC 33:V.Subpart 1). Applicable regulations are those that are in effect on the effective date of issuance of this permit.

This permit is based on the assumption that the information provided to LDEQ by the Permittee is accurate. Further, this permit is based in part on the provisions of Sections 206, 212, and 224 of the HSWA of 1984, which modify Section 3004 and 3005 of RCRA. In particular, Section 206 requires corrective action for all releases of hazardous waste or constituents from any solid waste management unit at a treatment, storage or disposal facility seeking a permit, regardless of the time at which waste was placed in such unit.

Section 212 provides authority to review and modify the permit at any time. Any inaccuracies found in the submitted information may be grounds for the termination, modification, revocation, and reissuance of this permit (see LAC 33:V.323) and potential enforcement action. The Permittee must inform the LDEQ of any deviation from or changes in the information in the application that would affect the Permittee's ability to comply with the applicable regulations or permit conditions.

This permit shall be effective as of October 21, 2007, and shall remain in effect until October 21, 2017, unless revoked, reissued, modified or terminated in accordance with LAC 33:V.323 and 705 of the Louisiana Hazardous Waste Regulations. The Administrative Authority may issue any permit for a duration that is less than the maximum term of ten (10) years and the term shall not be extended beyond the maximum duration by modification in accordance with LAC 33:V.315.

Post-closure requirements of LAC 33:V. Chapter 35, Subchapter B must continue for at least thirty (30) years after the date of closure for those units listed in Condition IV of this permit. Expiration of this permit does not relieve the permittee of the responsibility to reapply for a permit for the remainder of the thirty (30) year post-closure care period.

Provisions of this permit may be appealed in writing pursuant to La. R.S. 30:2024(A) within thirty (30) days from receipt of the permit. Only those provisions specifically appealed will be suspended by a request for hearing, unless the Secretary elects to suspend other provisions as well. A request for hearing must be sent to the following:

Louisiana Department of Environmental Quality
Office of the Secretary
Attention: Hearings Clerk, Legal Services Division
Post Office Box 4302
Baton Rouge, Louisiana 70821-4302

Chuck Carr Brown, Ph.D. Assistant Secretary
Louisiana Department of Environmental Quality

9/13/07
Date

PART A
APPLICATION

OMB #: 2050-0034 Expires 10/31/02

United States Environmental Protection Agency

HAZARDOUS WASTE PERMIT INFORMATION FORM

1. Facility Permit Contact (See instructions on page 35)	First Name: James	MI: C.	Last Name: Brown
	Phone Number: (423) 336-4308		Phone Number Extension: NA
2. Facility Permit Contact Mailing Address (See instructions on page 35)	Street or P.O. Box: P.O. Box 248		
	City, Town, or Village: Charleston		
	State: TN.		
	Country: USA		Zip Code: 37310
3. Legal Owner Mailing Address and Telephone Number (See instructions on page 36)	Street or P.O. Box: P.O. Box 4500		
	City, Town, or Village: Norwalk		
	State: CT		
	Country: USA	Zip Code: 06856-4500	Phone Number (203) 750-3000
4. Operator Mailing Address and Telephone Number (See instructions on page 36)	Street or P.O. Box: P.O. Box 248		
	City, Town, or Village: Charleston		
	State: TN		
	Country: USA	Zip Code: 37310	Phone Number (423) 336-4000
5. Facility Existence Date (See instructions on page 36)	Facility Existence Date (mm/dd/yyyy): Operation: 10/1/1979 - 6/30/1985 Closure: 2/28/1986		

6. Other Environmental Permits (See instructions on page 36)

A. Permit Type (Enter code)	B. Permit Number	C. Description
N	LA0102822	NPDES (LPDES) permit for 5 outfalls from Olin property.

7. Nature of Business (Provide a brief description; see instructions on page 37)

Operation and maintenance of closed solid waste management units and a groundwater treatment system.

Process Codes and Design Capacities (See instructions on page 37)

A. PROCESS CODE - *Enter the code from the list of process codes below that best describes each process to be used at the facility. Thirteen lines are provided for entering codes. If more lines are needed, attach a separate sheet of paper with the additional information. For "other" processes (i.e., D99, S99, T04 and X99), describe the process (including its design capacity) in the space provided in Item 9.*

B. PROCESS DESIGN CAPACITY- *For each code entered in column A, enter the capacity of the process.*

1. AMOUNT - *Enter the amount. In a case where design capacity is not applicable (such as in a closure/post-closure or enforcement action) enter the total amount of waste for that process.*
2. UNIT OF MEASURE - *For each amount entered in column B(1), enter the code in column B(2) from the list of unit of measure codes below that describes the unit of measure used. Select only from the units of measure in this list.*

C. PROCESS TOTAL NUMBER OF UNITS - *Enter the total number of units for each corresponding process code.*

PROCESS CODE	PROCESS	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
	Disposal:	
D79	Underground Injection Well Disposal	Gallons; Liters; Gallons Per Day; or Liters Per Day
D80	Landfill	Acre-feet; Hectare-meter; Acres; Cubic Meters; Hectares; Cubic Yards
D81	Land Treatment	Acres or Hectares
D82	Ocean Disposal	Gallons Per Day or Liters Per Day
D83	Surface Impoundment Disposal	Gallons; Liters; Cubic Meters; or Cubic Yards
D99	Other Disposal	Any Unit of Measure Listed Below
	Storage:	
S01	Container	Gallons; Liters; Cubic Meters; or Cubic Yards
S02	Tank Storage	Gallons; Liters; Cubic Meters; or Cubic Yards
S03	Waste Pile	Cubic Yards or Cubic Meters
S04	Surface Impoundment Storage	Gallons; Liters; Cubic Meters; or Cubic Yards
S05	Drip Pad	Gallons; Liters; Acres; Cubic Meters; Hectares; or Cubic Yards
S06	Containment Building Storage	Cubic Yards or Cubic Meters
S99	Other Storage	Any Unit of Measure Listed Below
	Treatment:	
T01	Tank Treatment	Gallons Per Day; Liters Per Day; Short Tons Per Hour; Gallons Per Hour; Liters Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Metric Tons Per Day; or Metric Tons Per Hour
T02	Surface Impoundment Treatment	Gallons Per Day; Liters Per Day; Short Tons Per Hour; Gallons Per Hour; Liters Per Hour; Pounds Per Hour; Short Tons per Day; Kilograms Per Hour; Metric Tons Per Day; or Metric Tons Per Hour
T03	Incinerator	Short Tons Per Hour; Metric Tons Per Hour; Gallons Per Hour; Liters Per Hour; Btu Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Gallons Per Day; Liters Per Day; Metric Tons Per Hour; or Million Btu Per Hour
T04	Other Treatment	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Btu Per Hour; Gallons Per Day; Liters Per Hour; or Million Btu Per Hour
T80	Boiler	Gallons; Liters; Gallons Per Hour; Liters Per Hour; Btu Per Hour; or Million Btu Per Hour
T81	Cement Kiln	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Btu Per Hour; Liters Per Hour; Kilograms Per Hour; or Million Btu Per Hour
T82	Lime Kiln	
T83	Aggregate Kiln	
T84	Phosphate Kiln	
T85	Coke Oven	
T86	Blast Furnace	
T87	Smelting, Melting, or Refining Furnace	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Btu Per Hour; Gallons Per Hour; Liters Per Hour; or Million Btu Per Hour
T88	Titanium Dioxide Chloride Oxidation Reactor	
T89	Methane Reforming Furnace	
T90	Pulping Liquor Recovery Furnace	
T91	Combustion Device Used In The Recovery Of Sulfur Values From Spent Sulfuric Acid	
T92	Halogen Acid Furnaces Other Industrial Furnaces Listed In 40 CFR §260.10	
T93		
T94	Containment Building - Treatment	Cubic Yards; Cubic Meters; Short Tons Per Hour; Gallons Per Hour; Liters Per Hour; Btu Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Metric Tons Per Day; Gallons Per Day; Liters Per Day; Metric Tons Per Hour; or Million Btu Per Hour
	Miscellaneous (Subpart X):	
X01	Open Burning/Open Detonation	Any Unit of Measure Listed Below
X02	Mechanical Processing	Short Tons Per Hour; Metric Tons Per Hour; Short Tons Per Day; Metric Tons Per Day; Pounds Per Hour; Kilograms Per Hour; Gallons Per Hour; Liters Per Hour; or Gallons Per Day
X03	Thermal Unit	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Btu Per Hour; or Million Btu Per Hour
X04	Geologic Repository	Cubic Yards; Cubic Meters; Acre-feet; Hectare-meter; Gallons; or Liters
X99	Other Subpart X	Any Unit of Measure Listed Below

UNIT OF MEASURE	UNIT OF MEASURE CODE
Gallons	G
Gallons Per Hour	E
Gallons Per Day	U
Liters	L
Liters Per Hour	H
Liters Per Day	V

UNIT OF MEASURE	UNIT OF MEASURE CODE
Short Tons Per Hour	D
Metric Tons Per Hour	W
Short Tons Per Day	N
Metric Tons Per Day	S
Pounds Per Hour	J
Kilograms Per Hour	R
Million Btu Per Hour	X

UNIT OF MEASURE	UNIT OF MEASURE CODE
Cubic Yards	Y
Cubic Meters	C
Acres	B
Acre-feet	A
Hectares	Q
Hectare-meter	F
Btu Per Hour	I

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Process Codes and Design Capacities (*Continued*)

EXAMPLE FOR COMPLETING Item 8 (shown in line number X-1 below): A facility has a storage tank, which can hold 533.788 gallons.

Line Number	A. Process Code (From list above)	B. PROCESS DESIGN CAPACITY (1) Amount (Specify)	B. PROCESS DESIGN CAPACITY (2) Unit of Measure (Enter code)	C. Process Total Number of Units	For Official Use Only
X 1	S 0 2	5 3 3 . 7 8 8	G	0 0 1	
1		.			
2		.			
3		.			
4		.			
5		.			
6		.			
7		.			
8		.			
9		.			
1 0		.			
1 1		.			
1 2		.			
1 3		.			

NOTE: If you need to list more than 13 process codes, attach an additional sheet(s) with the information in the same format as above. Number the lines sequentially, taking into account any lines that will be used for "other" processes (i.e., D99, S99, T04 and X99) in Item 9.

Other Processes (*See Instructions on page 37 and follow instructions from Item 8 for D99, S99, T04 and X99 process codes*)

Line Number (Enter #s in sequence with Item 8)	A. Process Code (From list above)	B. PROCESS DESIGN CAPACITY (1) Amount (Specify)	B. PROCESS DESIGN CAPACITY (2) Unit of Measure (Enter code)	C. Process Total Number of Units	D. Description of Process
X 1	T 0 4	.			In-situ Vitrification
1		.			
2		.			
3		.			
4		.			

Description of Hazardous Wastes (See instructions on page 37)

A. EPA HAZARDOUS WASTE NUMBER - *Enter the four-digit number from 40 CFR, Part 261 Subpart D of each listed hazardous waste you will handle. For hazardous wastes which are not listed in 40 CFR, Part 261 Subpart D, enter the four-digit number(s) from 40 CFR Part 261, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.*

B. ESTIMATED ANNUAL QUANTITY - *For each listed waste entered in column A, estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in column A, estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.*

C. UNIT OF MEASURE - *For each quantity entered in column B, enter the unit of measure code. Units of measure which must be used and the appropriate codes are:*

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure, taking into account the appropriate density or specific gravity of the waste.

D. PROCESSES

1. PROCESS CODES:

For listed hazardous waste: For each listed hazardous waste entered in column A select the code(s) from the list of process codes contained in Items 8A and 9A on page 3 to indicate the waste will be stored, treated, and/or disposed at the facility.

For non-listed hazardous waste: For each characteristic or toxic contaminant entered in column A, select the code(s) from the list of process codes contained in Items 8A and 9A on page 3 to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that possess that characteristic or toxic contaminant.

NOTE: THREE SPACES ARE PROVIDED FOR ENTERING PROCESS CODES. IF MORE ARE NEEDED:

1. *Enter the first two as described above.*
2. *Enter "000" in the extreme right box of Item 10.D(1).*
3. *Use additional sheet, enter line number from previous sheet, and enter additional code(s) in Item 10.E.*

2. PROCESS DESCRIPTION: *If a code is not listed for a process that will be used, describe the process in Item 10.D(2) or in Item 10.E(2).*

NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER - Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

1. *Select one of the EPA Hazardous Waste Numbers and enter it in column A. On the same line complete columns B, C and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.*
2. *In column A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In column D(2) on that line enter "Included with above" and make no other entries on that line.*
3. *Repeat step 2 for each EPA Hazardous Waste Number that can be used to describe the hazardous waste.*

EXAMPLE FOR COMPLETING Item 10 (shown in line numbers X-1, X-2, X-3, and X-4 below) - A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operations. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

Line Number	A. EPA Hazardous Waste No. (Enter code)	B. Estimated Annual Quantity of Waste	C. Unit of Measure (Enter code)	D. PROCESSES (1) PROCESS CODES (Enter code)			D. PROCESSES (2) PROCESS DESCRIPTION (If a code is not entered in D(1))
X 1	K 0 5 4	900	P	T 0 3	D 8 0		
X 2	D 0 0 2	400	P	T 0 3	D 8 0		
X 3	D 0 0 1	100	P	T 0 3	D 8 0		
X 4	D 0 0 2						Included With Above

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Description of Hazardous Wastes (*Continued; use additional sheets as necessary*)

Line Number	A. EPA Hazardous Waste No. (Enter code)	B. Estimated Annual Quantity of Waste	C. Unit of Measure (Enter code)	D. PROCESSES (1) PROCESS CODES (Enter code)			(2) PROCESS DESCRIPTION (If a code is not entered in D(1))
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							

Map (See instructions on page 38)

Attach to this application a topographic map, or other equivalent map, of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in this map area. See instructions for precise requirements.

12. Facility Drawing (See instructions on page 39)

All existing facilities must include a scale drawing of the facility (see instructions for more detail).

13. Photographs (See instructions on page 39)

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas (see instructions for more detail).

14. Comments (See instructions on page 39)

Form submitted for post-closure permit renewal application for closed hazardous waste landfill. Other solid waste management units on the property are regulated under 1986 settlement agreement with LDEQ. Any wastes associated with activities at the property are disposed of or recycled offsite within 90 days of generation or are treated and discharged through the LPDES - permitted systems.

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ATTACHMENT 1 ..... LIST OF FACILITY DOCUMENTS INCOPORATED IN PERMIT BY REFERENCE

BODY OF PERMIT

FINAL
HAZARDOUS WASTE POST-CLOSURE RENEWAL PERMIT

OLIN CORPORATION – INTERIM STATUS LANDFILL
EPA ID# LAD 008080681
Agency Interest# 1254

Calcasieu Parish
Lake Charles, Louisiana
PER20040001
Permit Number LAD 008080681-PC-RN-1

I. PERMIT PREAMBLE

This permit is issued to Olin Corporation, hereinafter referred to as the Permittee, by the Louisiana Department of Environmental Quality (LDEQ) under authority of the Louisiana Hazardous Waste Control Law, R.S. 30:2171 et seq., and the regulations adopted thereunder.

This permit is based on information submitted in the permit application, and all subsequent amendments, and on the applicant's certification that such information is accurate and that all facilities were or will be maintained and operated as specified in the application.

This permit is conditioned upon full compliance with all applicable provisions of the Louisiana Hazardous Waste Control Law, R.S. 30:2171 et. seq., and the regulations adopted thereunder.

GLOSSARY OF TERMS

For the purpose of this permit, terms used herein shall have the same meaning as those in LAC 33:V.Subpart 1 unless the context of use in this permit clearly indicates otherwise. Where terms are not otherwise defined, the meaning otherwise associated with such terms shall be as defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term.

"Administrative Authority" means the Secretary of the Louisiana Department of Environmental Quality or his/her designee (including appropriate assistant secretary).

"Application" refers to the RCRA Part B Permit Application and subsequent amendments submitted by the Permittee for obtaining a permit.

"Area of Concern" (AOC) means any discernable unit or area which, in the opinion of the Administrative Authority, may have received solid or hazardous waste or waste containing hazardous constituents at any time. The Administrative Authority may require investigation of the unit to determine if it is a Solid Waste Management Unit (SWMU). If shown to be a SWMU by the investigation, the AOC must be reported by the Permittee as a newly-identified SWMU.

"Area of Investigation" (AOI) is a zone contiguous to and including impacted media defined vertically and horizontally by the presence of one or more constituents in concentrations exceeding the limiting SS, MO-1 RS, or MO-2 RS (depending on the option being implemented).

"Beneficial Resource" describes natural resources that are useful to human and ecological receptors. The state may establish statutes or regulations that identify certain environmental components, such as specific groundwater or surface water sources, as a "Special Beneficial Resource," or "Designated Beneficial Resource." The beneficial resources then may be entitled to greater protection from contamination.

"Constituents of Concern" (COC) means the COPC's that pose a significant risk.

"Constituents of Potential Concern" (COPC) means chemicals from hazardous waste and hazardous waste constituents that are potentially site related and have data of quality for use in the Screen or a site-specific risk assessment. The facility should compile a list of COPC's for each release site based on existing sampling data, waste analysis reports, etc.

"Conceptual Site Model" (CSM) is part of the Data Quality Objective (DQO) process that presents a three-dimensional picture of site conditions at a discrete point in time that conveys what is known about the facility, releases, release mechanisms, contaminant fate and transport, exposure pathways, potential receptors, and risks. The information for the CSM is documented into six profiles. The CSM evolves as data gaps in the profiles become more complete, and will be refined based upon results of site characterization data. The final CSM is documented in the Risk Management Plan (RMP).

"CWA" means Clean Water Act.

"Corrective Action" is an activity conducted to protect human health and the environment.

"Dense Nonaqueous Phase Liquid (DNAPL)" a dense liquid not dissolved in water, commonly referred to as "free product."

"Department" means the Louisiana Department of Environmental Quality (LDEQ).

"EPA" means the United States Environmental Protection Agency.

"Facility" means, for the purpose of conducting corrective action under LAC 33:V.3322, all the contiguous property under the control of the Permittee.

"HSWA" means the 1984 Hazardous and Solid Waste Amendments to RCRA.

"Hazardous Constituent" means any constituent identified in LAC 33:V.Chapter 31.Table 1, or any constituent identified in LAC 33:V.3325.Table 4.

"LDEQ" means the Louisiana Department of Environmental Quality.

"Light Nonaqueous Phase Liquid (LNAPL)" a light liquid not dissolved in water, commonly referred to as "free product."

"Newly-discovered Release" any release(s) of hazardous waste, including hazardous constituents, in which there is a statistically significant in crease over the background data for the media of concern, during the course of groundwater monitoring, field investigation, environmental auditing, or by other means.

"Operating Record" means written or electronic records of all maintenance, monitoring, inspection, calibration, or performance testing—or other data as may be required—to demonstrate compliance with this permit, document noncompliance with this permit, or document actions taken to remedy noncompliance with this permit. A minimum list of documents that must be included in the operating record are identified at LAC 33:V.1529.B.

"Permittee" means Olin Corporation, 960 I-10 West, Westlake, Louisiana 70602.

"RCRA Permit" means the full permit, with RCRA and HSWA portions.

"RFA" means RCRA Facility Assessment.

"RFI" means RCRA Facility Investigation.

"Release" means any spilling, leaking, pouring, emitting, emptying, discharging, injecting, pumping, escaping, leaching, dumping or disposing of hazardous wastes (including hazardous constituents) into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing hazardous wastes or hazardous constituents).

"SARA" means Superfund Amendments and Reauthorization Action of 1986.

"Solid Waste Management Unit" (SWMU) means any discernable unit at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of solid or hazardous waste. Such units include any area at a facility at which solid wastes have been routinely and systematically released.

"Stabilization" is an action taken for the purpose of controlling or abating threats to human health or the environment from releases or preventing or minimizing the further spread of contaminants while long-term remedies are pursued.

If, subsequent to the issuance of this permit, regulations are promulgated which redefine any of the above terms, the Administrative Authority may, at its discretion, apply the new definition to this permit.

All regulating citations are defined as being the regulations in effect on the date of issuance of this permit. New and/or amended regulations are not included as permit requirements until permit modification procedures as specified in Condition II.C of the permit and LAC 33:V.321 are completed.

II. GENERAL PERMIT CONDITIONS

II.A. DURATION OF PERMIT

This permit is effective as of the date indicated on the accompanying signature page and shall remain in effect for a maximum period of ten (10) years from the effective date, unless suspended, modified, revoked and reissued or terminated for just cause.

II.B. EFFECT OF PERMIT

This permit authorizes the Permittee to conduct post-closure care activities associated with the Interim Status Landfill in accordance with the conditions of this permit and LAC 33:V.2521.B. The Permittee is prohibited from any storage, treatment or disposal of hazardous waste not authorized by statute, regulation or this permit. Compliance with this permit, LAC 33:V.Subpart 1 and HSWA, constitutes compliance for purposes of enforcement, with Subtitle C of RCRA and Chapter 9 of the Louisiana Environmental Quality Act (Act). However, compliance with the terms of this permit does not constitute a defense to any order issued or any action brought under Section 3013 or Section 7003 of RCRA, or under Section 106 (a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) {42 U.S.C. 9606 (a)}.

In accordance with LAC 33:V.307.B and C, issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations.

II.C. PERMIT ACTIONS

Any inaccuracies found in the permit application may be cause for revocation or modification of this permit. The Permittee must inform the Administrative Authority of any deviation from, changes or inaccuracies in the information in the permit application.

The Administrative Authority may also suspend, modify, revoke and reissue, or terminate for cause when necessary to be protective of human health or the environment as specified in 40 CFR 270.41, 270.42, 270.43 or LAC 33:V.309.F, 311.A or 323. The Administrative Authority may modify the permit when the standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued. The filing of a request for permit modification, revocation and reissuance, or termination or the notification of planned changes or anticipated noncompliance on the part of Permittee does not stay the applicability or enforceability of any permit condition.

II.D. SEVERABILITY

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

II.E. DUTIES AND REQUIREMENTS

II.E.1. Duty to Comply

The Permittee shall comply with all conditions of this permit, except to the extent and for the duration such noncompliance may be authorized by an emergency permit. Any permit noncompliance, other than noncompliance authorized by an emergency permit (LAC 33:V.701), constitutes a violation of the LAC 33:V.Subpart 1 and the Environmental Quality Act and is grounds for enforcement action which may include permit termination, permit revocation and reissuance, permit modification, or denial of permit renewal application.

II.E.2. Duty to Reapply

If the Permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the Permittee must reapply for the permit as required by the LAC 33:V.303.N and 309.B. Notification shall be at least 180 calendar days before the permit expires.

II.E.3. Permit Extension

This permit and all conditions herein will remain in effect beyond the permit's expiration date until the Administrative Authority issues a final decision on the re-application, provided the Permittee has submitted a timely, complete new permit application as provided in LAC 33:V.309.B and 315.A.

II.E.4. Need to Halt or Reduce Activity Not a Defense

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

II.E.5. Duty to Mitigate

The Permittee shall immediately take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit as required by LAC 33:V.309.D.

II.E.6. Proper Operation and Maintenance

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related ancillary equipment) that are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator

staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

II.E.7. Duty to Provide Information

The Permittee shall furnish to the Administrative Authority, within a reasonable time, any information which the Administrative Authority may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Administrative Authority upon request, copies of records required by this permit and in accordance with LAC 33:V.309.H.

II.E.8. Inspection and Entry

The Permittee shall allow the Administrative Authority or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

II.E.8.a. enter upon the Permittee's premises where a regulated activity is located or conducted, or where records must be maintained under the conditions of this permit;

II.E.8.b. have access to and copy, at reasonable times, any records that must be maintained under the conditions of this permit;

II.E.8.c. inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operation regulated or required under this permit; and

II.E.8.d. sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Administrative Authority any substances or parameters at any location.

II.E.9. Sample Monitoring and Records

II.E.9.a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste to be analyzed must be the appropriate method from Appendix I of 40 CFR Part 261. Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, "SW-846", latest revision; Manual of Groundwater Quality Sampling Procedures, 1981, EPA-600/2-81-160, as revised; Procedures Manual for Groundwater Monitoring at Solid Waste Disposal Facilities, 1977, EPA-530/SW-611, as revised; or an equivalent method.

II.E.9.b. Records of monitoring information shall include:

II.E.9.b.(1) the date, exact place, and time of sampling or measurements;

II.E.9.b.(2) the name(s) and signature(s) of the individual(s) who performed the sampling or measurements;

II.E.9.b.(3) the date(s) analyses were performed;

II.E.9.b.(4) the name(s) and signature(s) of the individual(s) who performed the analyses;

II.E.9.b.(5) the analytical techniques or methods used;

II.E.9.b.(6) the results of such analyses; and

II.E.9.b.(7) associated quality assurance performance data.

II.E.9.c. Laboratory Quality Assurance/Quality Control

In order to ensure the accuracy, precision, and reliability of data generated for use, the Permittee shall submit a statement, certified as specified in LAC 33:V.513 and included in the annual report, indicating that:

II.E.9.c.(1) any commercial laboratory providing analytical results and test data to the LDEQ required by this permit is accredited by the Louisiana Environmental Laboratory Accreditation Program (LELAP) in accordance with LAC 33:I. Subpart 3, Chapter 45. Laboratory data generated by commercial laboratories not accredited under LELAP will not be accepted by the LDEQ.

LAC 33:I. Subpart 3 (Chapters 45-49) provides requirements for the accreditation program. Regulations and a list of labs that have applied for accreditation are available on the LDEQ website: http://www.deq.louisiana.gov/portal/tabid/2412/Default.aspx.

In accordance with LAC 33:I.4501, the requirements for LELAP accreditation applies whenever data is:

- submitted on behalf of a facility;
- required as part of a permit application;
- required by order of the LDEQ;
- required to be included in a monitoring report submitted to the LDEQ;
- required to be submitted by contract; or
- otherwise required by the LDEQ regulations.

This includes, but is not limited to data from RCRA Trial Burns, Risks Burns, Risk Assessments, MACT Comprehensive Performance Tests, and data used for continuing compliance demonstrations.

II.E.9.c.(2) If the Permittee decides to use their own in-house laboratory for test and analysis, the laboratory is not required to be accredited by LELAP. However, the laboratory must document and submit for approval, quality assurance/quality control procedures that are commensurate with requirements in LAC 33:I.Subpart 3 Laboratory Accreditation.

II.E.9.c.(3) For approval of equivalent testing or analytical methods, the Permittee may petition for a regulatory amendment under LAC 33:V.105.I and LAC 33:I.Chapter 9. In cases where an approved methodology for a parameter/analyte is not available or listed, a request to utilize an alternate method shall be submitted to the Administrative Authority for approval. Documentation must be submitted to the LDEQ that will verify that the results obtained from the alternate method are equal to or better than those obtained from EPA-accepted methods, as well as those deemed equivalent by the LDEQ.

II.E.10. Retention of Records

The Permittee shall maintain records from all groundwater monitoring wells and associated groundwater surface elevations for the active life of the facility and for the post-closure care period.

The Permittee shall maintain records through the active life of the facility (including operation, closure and post-closure periods) as required by LAC 33:V.309.J and LAC 33:V.1529.A, B, and C. All records, including plans, must be furnished upon request and made available at all reasonable times as required by LAC 33:V.1529.C.

File copies shall be kept for LDEQ inspection for a period of not less than three years as required by LAC 33:V.317.B.

The Permittee shall, for the life of the permit, maintain records of all data used to complete the application for this permit and any supplemental information submitted under the Louisiana Hazardous Waste Control Law (LA. R.S. 30:2171 et seq.).

II.E.11. Notices of Planned Physical Facility Changes

The Permittee shall give notice to the Administrative Authority, as soon as possible, of any planned physical alterations or additions to the permitted facility, in accordance with LAC 33:V.309.L.1.

II.E.12. Physical Facility after Modification

For a closed unit being modified, the Permittee may not manage hazardous waste in the modified portion of the closed unit until:

II.E.12.a. the Permittee has submitted to and received approval from the Administrative Authority, by certified mail or hand delivery, a letter signed by the Permittee and an independent registered professional engineer stating that the unit is complete and has been constructed or modified in compliance with the permit; and

II.E.12.b. the Administrative Authority has inspected the modified unit following a request to make final inspection by the Permittee and finds it is in compliance with the conditions of the permit and all applicable sections of LAC 33:V.Subpart 1, and has issued an Order to Proceed. The Permittee may then commence treatment, storage, or disposal of hazardous waste.

II.E.13. Anticipated Noncompliance

The Permittee shall give advance notice to the Administrative Authority of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.

II.E.14. Transfer of Permits

This permit may be transferred to a new owner or operator only if it is modified or revoked and reissued pursuant to LAC 33:V.309.L.4, 321.B, 321.C.4, and 1531.

II.E.15. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each schedule date (LAC 33:V.309.L.6).

II.E.16. Emergency Unauthorized Discharge Notification

In accordance with LAC 33:I.3915, in the event of an unauthorized discharge that results in an emergency condition (an emergency condition is any condition which could be reasonably expected to endanger the health and safety of the public, cause significant adverse impact to the land, water, or air environment, or cause severe damage to property), the Permittee shall notify the DPS (Department of Public Safety) 24-hour Louisiana Emergency Hazardous Materials Hotline by telephone at (225) 925-6595 immediately, but in no case later than one (1) hour after learning of the discharge. The DPS 24-hour Louisiana Emergency Hazardous Materials Hotline will subsequently notify the Department regarding the details of the discharge.

II.E.17. Non-Emergency Unauthorized Discharge Notification

In accordance with LAC 33:I.3917, in the event of an unauthorized discharge that exceeds a reportable quantity specified in LAC 33:I.Chapter 39.Subchapter E and/or results in contamination of the groundwaters of the state but does not result in an emergency condition, the Permittee shall promptly notify the Department within twenty-four (24) hours after learning of the discharge. Notification shall be made to the Office of Environmental Compliance, Emergency and Radiological Services Division, Single Point of Contact (SPOC) in accordance with the procedure and content requirements specified in LAC 33:I.3923.

II.E.18. Unauthorized Discharge to Groundwater Notification

In accordance with LAC 33:I.3919, in the event of an unauthorized discharge resulting in contamination of groundwaters of the state by moving in, into, within or on any saturated subsurface strata, the Permittee shall promptly notify the Department within twenty-four (24) hours after learning of the discharge. Notification shall be made to the Office of Environmental Compliance, Emergency and Radiological Services Division, SPOC in accordance with the procedure and content requirements specified in LAC 33:I.3923.

II.E.19. Written Notification Reports for Unauthorized Discharges

The Permittee shall submit written reports to the SPOC for any unauthorized discharges requiring notification under Conditions II.E.16, II.E.17 or II.E.18 of this permit. The written report shall be submitted in accordance with the procedure and content requirements specified in LAC 33:I.3925.

II.E.20. Noncompliance Reporting

The Permittee shall report orally within twenty-four (24) hours any noncompliance with the permit not reported under Condition II.E.16 or Condition II.E.17 of this permit that may endanger the human health or the environment. This report shall include at minimum the following information:

II.E.20.a. information concerning the release of any hazardous waste that may endanger public drinking water supplies; and

II.E.20.b. information concerning the release or discharge of any hazardous waste, or of a fire or explosion at the facility, that could threaten the environment or human health outside the facility. The description of the occurrence and its cause shall include:

II.E.20.b.(1) name, address, and telephone number of the owner or operator;

II.E.20.b.(2) name, address, and telephone number of the facility;

II.E.20.b.(3) date, time, and type of incident;

II.E.20.b.(4) name and quantity of materials involved;

II.E.20.b.(5) the extent of injuries, if any;

II.E.20.b.(6) an assessment of actual or potential hazard to the environment and human health outside the facility, where this is applicable; and

II.E.20.b.(7) estimated quantity and disposition of recovered material that resulted from the incident.

II.E.21. Follow-up Written Report of Noncompliance

The Permittee shall provide a written submission within five (5) days after the time the Permittee becomes aware of any noncompliance which may endanger human health or the environment not reported under Condition II.E.19 of this permit. The written submission shall contain a description of the noncompliance and its cause; the periods of noncompliance (including exact dates and times); whether the noncompliance has been corrected; and if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. If the Administrative Authority waives the requirement, then the Permittee submits a written report within fifteen (15) days after the time the Permittee becomes aware of the circumstances, as required by LAC 33:V.309.L.7.

II.E.22. Other Noncompliance

The Permittee shall report all other instances of noncompliance not otherwise required to be reported above, at the time required monitoring reports are submitted. The reports shall contain the information listed in Condition II.E.20 of this permit.

II.E.23. Other Information

Whenever the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or that it submitted incorrect information in a permit application, or in any report to the Administrative Authority, the Permittee shall promptly submit such facts or information.

II.E.24. Signatory Requirement

All applications, reports or other information submitted to the Administrative Authority shall be signed and certified according to LAC 33:V.507, 509, 511, and 513.

II.E.25. Schedule of Compliance

(RESERVED)

II.E.26. Additional Operating Standards

(RESERVED)

II.E.27. Updated Documents to Be Submitted Prior to Operation

(RESERVED)

II.E.28. Documents to Be Maintained at Facility Site

II.E.28.a. Until post-closure is completed and certified by an independent registered professional engineer, the Permittee shall maintain at the facility the following documents and any amendments, revisions, and modifications to these documents. Any revision or changes shall be submitted with the annual report unless previously submitted.

II.E.28.a.(1) (RESERVED). A waste analysis plan is not required for the unit in post-closure under this permit.

II.E.28.a.(2) (RESERVED). A personnel training plan is not required for the unit in post-closure under this permit.

II.E.28.a.(3) (RESERVED). A contingency plan is not required for the unit in post-closure under this permit.

II.E.28.a.(4) (RESERVED). Arrangements with the local authorities are not required for the unit in post-closure under this permit.

II.E.28.a.(5) Post-Closure Plan submitted in accordance with LAC 33:V.3523 and approved by the Administrative Authority, as well as any post-closure care requirements that may be required initially or through permit modifications in accordance with LAC 33:V.3523 (see Attachment 1).

II.E.28.a.(6) Cost estimate for facility post-closure care submitted in accordance with LAC 33:V.3709 and approved by the Administrative Authority, as well as any post-closure cost estimate that may be required initially or through permit modifications in accordance with LAC 33:V.3709 (see Attachment 1).

II.E.28.a.(7) (RESERVED). The maintenance of the operating record is not required for the unit in post-closure under this permit.

II.E.28.a.(8) Inspection plan developed in accordance with LAC 33:V.517.G and 1509.B and approved by the Administrative Authority. (see Attachment 1)

II.E.28.a.(9) Security plan developed in accordance with LAC 33:V.1507 (see Attachment 1)

II.E.28.b. All proposed amendments, revisions and modifications to any plan or cost estimates required by this permit shall be submitted to the Administrative Authority for approval.

II.E.29. Annual Report

An annual report shall be submitted covering all hazardous waste units and their activities during the previous calendar year as required by LAC 33:V.1529.D.

II.E.30. Manifest

The Permittee shall report manifest discrepancies and unmanifested waste as required by LAC 33:V.309.L.8 and 9.

II.E.31. Emissions

Emissions from any hazardous waste facility shall not violate the Louisiana Air Quality Regulations. If air quality standards are exceeded, the site will follow air regulation protocol.

II.E.32. Water Discharges

Water discharges from any hazardous waste facility shall not violate the Louisiana Water Quality Regulations. If water standards are exceeded, the site will follow water quality regulation protocol.

II.E.33. Non-Listed Hazardous Waste Facilities

This permit is issued for those hazardous waste facilities listed in Condition IV (Permitted Closed Facilities). If the Permittee determines that an unpermitted hazardous waste facility exists, the Permittee must immediately notify the Administrative Authority in accordance with Condition II.E.23 of the General Permit Conditions.

II.E.34. Compliance with Land Disposal Restrictions

The Permittee shall comply with those land disposal restrictions set forth in LA. R.S. 30:2193, all regulations promulgated thereunder, and the HSWA portion of this permit (Conditions VII and VIII).

II.E.35. Establishing Permit Conditions

Permits for facilities with pre-existing groundwater contamination are subject to all limits, conditions, remediation and corrective action programs designated under LAC 33:V.311.D and LAC 33:V.3303.

II.E.36. Obligation for Corrective Action

Owners or operators of hazardous waste management units must have all necessary permits during the active life of the unit and for any period necessary to comply with the corrective action requirements in Condition VIII of this permit. The facility is obligated to complete facility-wide corrective action regardless of the operational status of the facility.

II.E.37. Attachments and Documents Incorporated by Reference

All attachments and documents required by this permit, including all plans and schedules, are incorporated, upon approval by the Administrative Authority, into this permit by reference and become an enforceable part of this permit. When applicable, the Permittee must modify the permit according to LAC 33:V.Chapter 3. Since required items are essential elements of this permit, failure to submit any of the required items or submission of inadequate or insufficient information may subject the Permittee to enforcement action, which may include fines, suspension, or revocation of the permit.

Any noncompliance with approved plans and schedules shall be termed noncompliance with this permit. Written requests for extension of due dates for submittals may be granted by the Administrative Authority.

If the Administrative Authority determines that actions beyond those provided for, or changes to what is stated herein, are warranted, the Administrative Authority may modify this permit according to procedures in LAC 33:V.321.

III. GENERAL POST-CLOSURE CONDITIONS

III.A. DESIGN AND OPERATION OF THE POST-CLOSURE UNIT

III.A.1. The Permittee must maintain all facilities included in Condition IV, Table 1 to minimize the possibility of a fire, explosion, or any unauthorized sudden or nonsudden release of hazardous waste or hazardous waste constituents to air, soil, or water that could threaten human health or the environment.

III.A.2. The Permittee must not manage any new wastes.

III.B. REQUIRED NOTICE

(RESERVED)

III.C. GENERAL WASTE ANALYSIS

Reserved as per Condition II.E.28.a.(1).

III.D. SECURITY The Permittee must comply with the security provisions of LAC 33:V.1507, as referenced in Attachment 1.

III.E. GENERAL INSPECTION REQUIREMENTS

The Permittee must follow the Inspection Plan referenced in Condition II.E.28.a.(8) and Attachment 1. The Permittee must remedy any deterioration or malfunction discovered by an inspection as required by LAC 33:V.1509.C. Records of inspections must be kept as required by LAC 33:V.1509.D. The inspection schedule must include the regulatory requirements of LAC 33:V.517.G, 1509.A and B, and 3523.B.

III.F. PERSONNEL TRAINING

Reserved as per Condition II.E.28.a.(2).

III.G. GENERAL REQUIREMENTS FOR IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTE

The Permittee must take precautions as required by LAC 33:V.1517 to prevent accidental ignition or reaction of ignitable or reactive wastes.

III.H. LOCATION STANDARDS

III.H.1. The Permittee has furnished evidence that it is in compliance with seismic standards as required by LAC 33:V.517.T.

III.H.2. The Permittee must not manage any hazardous waste on any portion of the property that lies within the 100 year flood plain (as identified in the Flood Insurance Rating Map) unless such areas are raised above this flood level or other means (e.g., levees) are provided to protect such areas from washouts, overtopping by wave action, soil erosion or other effects of such a flood as required by LAC 33:V.1503.B.3. Such site improvements must be certified by independent licensed professional engineers and approved by LDEQ prior to any hazardous waste and/or hazardous waste units being placed thereon.

III.I. PRECIPITATION RUN-ON AND RUN-OFF

The Permittee must provide for the control by diversion or treatment of run-on and run-off resulting from a rainfall of at least twelve (12) inches, occurring during a period of twenty-four (24) hours in conformity with locally available records of a twenty-four (24) hour rainfall as per LAC 33:V.1503.B.2. The Permittee shall comply with the requirements of LAC 33:V.2911.

III.J. HURRICANE EVENTS

(Reserved). As per Condition II.E.28.a.(3).

III.K. PREPAREDNESS AND PREVENTION

(Reserved). As per Condition II.E.28.a.(3).

III.L. CONTINGENCY PLAN

(Reserved). As per Condition II.E.28.a.(3).

III.M. MANIFEST SYSTEM

The Permittee shall comply with the manifest requirements of LAC 33:V.Chapter 9 and 11.

III.N. RECORD KEEPING AND REPORTING

III.N.1. Operating Record

(Reserved). As per Condition II.E.28.a.(7).

III.N.2. Annual Report

The Permittee must comply with the annual report requirements of LAC 33:V.1529.D.

III.N.3. Operations Manual

(Reserved). As per Condition II.E.28.a.(7).

III.O. POST-CLOSURE

III.O.1. Post-Closure Care

The Permittee must manage the Interim Status Landfill in accordance with this permit, LAC 33:V. Chapter 35, Subchapter B and LAC 33:V.2521.

III.O.2. Amendment to Post-Closure Permit

The Permittee must request modification to this post-closure permit when necessary, in accordance with LAC 33:V.3523.D. and LAC 33:V.321.

III.O.3. Post-Closure Maintenance

After final closure, the Permittee must comply with all post-closure requirements contained in LAC 33:V.3519 through 3527, including maintenance and monitoring throughout the post-closure care period specified in LAC 33:V.3521.A.1. The Permittee must maintain all units in post-closure according to the requirements in Condition V.B.

III.O.4. Post-Closure Restrictions

The Administrative Authority may require, at partial and final closure, continuation of any of the security requirements of LAC 33:V.1507, during part or all of the post-closure care period when access by the public or domestic livestock may pose a hazard to human health.

III.O.5. Post-Closure Property or Site Use

III.O.5.a. Post-closure use of property on or in which hazardous wastes remain after partial or final closure must never be allowed to disturb the integrity of the final cover, liner(s), or any other components of the containment system, or the function of the permitted closed unit's monitoring systems, unless the Administrative Authority finds that the disturbance:

III.O.5.a.(1) is necessary to the proposed use of the property, and will not increase the potential hazard to human health or the environment; or

III.O.5.a.(2) is necessary to reduce a threat to human health or the environment.

III.O.5.b. Any post-closure activity other than that specified in this permit must have prior approval of the Administrative Authority.

III.O.6. Post-Closure Contact

The Permittee must provide the name, address, and phone number of the person or office to contact about the permitted post-closure units during the post-closure care period.

III.O.7. Certification of Completion of Post-Closure Care

No later than sixty (60) days after completion of the established post-closure care period for the specified unit, the Permittee must submit to the Administrative Authority, by registered mail, a certification that the post-closure care period for the hazardous waste disposal unit(s) was performed in accordance with the specifications in the approved post-closure plan. The certification must be signed by the Permittee and an independent registered professional engineer. Within sixty (60) days after receipt of the certification the Administrative Authority will notify the owner or operator that he is no longer required to maintain financial assurance for post-closure care of that unit, unless the Administrative Authority has reason to believe that post-closure care was not conducted in accordance with the approved post-closure plan.

The certification of post-closure care shall include the certification statement found in the LAC 33:V.513.A or the current certification statement in the Louisiana hazardous waste regulations at the time of completion of post-closure care.

III.P. COST ESTIMATE FOR CARE OF THE POST-CLOSURE UNIT

III.P.1. The Permittee must maintain a cost estimate for the permitted and associated structures as required by LAC 33:V.3709.

III.P.2. The Permittee must maintain and adjust the post-closure cost estimate for inflation, as specified in LAC 33:V.3709.B, C, D, and for other circumstances that increase the cost of post-closure.

III.P.3. The Permittee must base all post-closure cost estimates on the assumption that a third party contractor performs post-closure monitoring and maintenance in accordance with LAC 33:V.3709.A.

III.P.4. The Permittee must consider the inventory and process conditions and their impact on the post-closure cost estimate for any re-submittal.

III.P.5. During the life of the facility, the Permittee must keep, at the facility, its latest post-closure cost estimates, as necessary, to comply with LAC 33:V.3709.D.

III.Q. FINANCIAL ASSURANCE FOR THE POST-CLOSURE UNIT

Throughout the post-closure care period, the Permittee must provide updates for its financial assurance mechanisms, as necessary, to comply with the provisions of LAC 33:V.3711.

III.R. LIABILITY REQUIREMENTS

(RESERVED)

III.S. INCAPACITY OF THE PERMITTEE

The Permittee must comply with LAC 33:V.3717 whenever bankruptcy is initiated for the Permittee or its institutions providing financial assurance. If insurance is used for compliance with LAC 33:V.3715, the Permittee must immediately notify the Administrative Authority if the insurance company is placed in receivership. The Permittee must establish other financial assurance or liability coverage within sixty (60) days after such an event.

III.T. POST-CLOSURE NOTICES

If the Permittee or any subsequent Permittee of the land upon which this hazardous waste disposal unit is located wishes to remove hazardous wastes and hazardous waste residues, the liner or contaminated soils, he must request a modification to the post-closure permit in accordance with the applicable requirements in LAC 33:V, Chapters 3 and 7. The Permittee must demonstrate that the removal of hazardous wastes will satisfy the criteria of LAC 33:V.3521. By removing hazardous waste, the Permittee may become a generator of hazardous waste and must manage it in accordance with all applicable requirements of LAC 33:V, Subpart 1. If he is granted a permit modification or otherwise granted approval to conduct such removal activities, the Permittee may request that the Administrative Authority approve either:

III.T.1. the removal of the notation on the deed to the facility property or other instrument normally examined during title search; or

III.T.2. the addition of a notation to the deed or instrument indicating the removal of the hazardous waste.

IV. PERMITTED CLOSED UNITS

This permit is applicable only to the unit known as the Interim Status Landfill located on the property of Olin Corporation, Calcasieu Parish, Louisiana. This permit also applies to any appurtenances associated with these units. The appurtenances are defined as any run-on/run-off control systems, leachate collection/leak detection systems, tanks, and/or piping and instrumentation associated with these regulated units. If any additional appurtenances are added in the future, they would be addressed through a permit modification as required by regulation and this permit.

TABLE 1
INVENTORY AT CLOSURE

UNIT NAME	UNIT TYPE	CAPACITY
Interim Status Landfill	Landfill	6 acre-feet

V. PERMIT CONDITIONS APPLICABLE TO PERMITTED CLOSED UNITS

V.A. POST-CLOSURE CARE PERIOD

The post-closure care period will be in effect for the period of thirty (30) years, unless extended or shortened by the Administrative Authority, as specified in LAC 33:V.3521.A.1 and 2, Length of Post-Closure.

V.A.1 Interim Status Landfill: Certified and verified closed on 04/17/86. Post-closure monitoring commenced on 10/31/86.

V.B. POST-CLOSURE MAINTENANCE

After final closure, the owner or operator must comply with all post-closure requirements contained in LAC 33:V.3519 through 3527 and Condition III.O of this permit, including maintenance and monitoring throughout the post-closure care period specified in the permit under Condition V.A and LAC 33:V.3521.A.1. The owner or operator must:

V.B.1. for all permitted units, maintain the integrity and effectiveness of the final cover, including making repairs as necessary to correct the effects of settling, subsidence, erosion, or other events;

V.B.2. for all permitted units, maintain and monitor the groundwater monitoring system and comply with all other applicable requirements of LAC 33:V.Chapter 33;

V.B.3. for all permitted units, manage a run-on and run-off control system to prevent erosion at and other damage to the final cover;

V.B.4. for all permitted units, maintain the cover with a final cover designed, constructed and maintained to:

V.B.4.a. provide long-term minimization of migration of liquids through the landfill;

V.B.4.b. function with minimal maintenance at all permitted units;

V.B.4.c. promote drainage and minimize erosion or abrasion of the final cover at all permitted units;

V.B.4.d. accommodate settling and subsidence, as necessary, so that the cover's integrity is maintained for all permitted units; and

V.B.4.e. have a permeability less than or equal to the permeability of any bottom liner system or natural subsoils present at the landfill.

V.B.5. The annual report shall include a Post-Closure activity report for the Interim Status Landfill.

V.C. POST-CLOSURE RESTRICTIONS

The Administrative Authority may require, at partial and final closure, continuation of any of the security requirements of LAC 33:V.1507, during part or all of the post-closure period when access by the public or domestic livestock may pose a hazard to human health.

V.D. POST-CLOSURE USE OF PROPERTY

V.D.1. Post-closure use of property on or in which hazardous wastes remain after partial or final closure must never be allowed to disturb the final cover, liner(s), or any other components of the containment system, or the function of the permitted closed unit's monitoring systems, unless the Administrative Authority find that the disturbance:

V.D.1.a. is necessary to the proposed use of the property and will not increase the potential hazard to human health or the environment; or

V.D.1.b. is necessary to reduce a threat to human health of the environment.

V.D.2. Any post-closure activity other than that specified in this permit must have prior approval of the Administrative Authority.

VI. GROUNDWATER PROTECTION

VI.A. APPLICABILITY

The regulations of LAC 33:V, Chapters 3, 5, 15, 29, 33, 35, and 37, and Louisiana Hazardous Waste Control Law Revised Statute R.S., 30:2171 of the Environmental Quality Act, R.S., 30:2001 et seq., and the provisions of this condition shall apply to groundwater protection programs at the units identified in Condition IV, Table 1 of this permit. All requirements of this condition must be satisfied and shall apply until the Administrative Authority has accepted the certification of completion of post-closure care required by regulation and under Condition III.O.7 of this permit. This includes compliance, closure, and post-closure care periods. The units referenced in Condition IV, Table 1 of the permit are subject to post-closure groundwater monitoring. If groundwater contamination is confirmed as a result of operations related to past or present hazardous waste management facilities associated with this site, the Permittee shall establish, expand or continue, assessment and corrective action programs in accordance with the requirements of LAC 33:V.Chapter 33 and as subsequently directed by the Administrative Authority.

VI.B. REQUIRED PROGRAMS

The Permittee must continue to conduct a compliance monitoring program per Condition VI.I using all existing systems necessary to comply with monitoring programs specified herein and as stated in the most current approved Sampling and Analysis Plan. In the event statistically significant evidence that the concentration limits defined in Condition VI.D and Table 3 of this permit have been exceeded in any groundwater monitoring wells in Table 2 of this permit, the Permittee shall modify the permit in accordance with LAC 33:V.321 and Condition VI.J of this permit in order to establish a corrective action program to remediate the contamination. Corrective actions must continue uninterrupted to the fullest extent until groundwater problems are abated per the requirements of LAC 33:V.3321 and this requirement is terminated through permit modifications in accordance with LAC 33:V.321 and 322, as applicable.

All wells and any associated piezometers described in Table 2 of this permit must be maintained, protected from moving equipment, and cannot be abandoned unless exempted from the program at a later date by the Administrative Authority, or unless the integrity of the well or piezometer is threatened. In such a case, it must be replaced with a new well, in conformance with a work plan approved by the Administrative Authority (see Condition VI.K – Construction and Abandonment of Monitoring Wells and Geotechnical Boreholes). The Permittee must include revised facility maps in the Annual Report, depicting all monitoring, assessment, compliance, and corrective action wells.

VI.C. GROUNDWATER PROTECTION STANDARD

VI.C.1. The Permittee must comply with conditions specified in this permit that are designed to insure that hazardous waste and hazardous waste constituents do not exceed the concentration limits (see Condition VI.D) in the uppermost permeable zones underlying the waste management areas, beyond or below the points of compliance (see

Condition VI.E) during the compliance period (see Condition VI.F). The protection standard does not exempt the Permittee from required corrective action regarding contamination detected by wells not assigned as groundwater compliance points.

VI.C.2. The Permittee must utilize and maintain the present groundwater monitoring system described in this permit.

VI.C.3. The Permittee must adhere to the Sampling and Analysis Plan referenced in Attachment 1.

VI.D. HAZARDOUS CONSTITUENTS, PARAMETERS, ANALYTICAL FREQUENCY AND CONCENTRATION LIMITS

The wells, hazardous constituents and concentration limits to which the protection standards of LAC 33:V.3305 apply are shown herein in Tables 2 through 4. The sampling frequency for constituents is noted in Table 2. The Maximum Concentration Limits (MCLs) for each hazardous waste constituent specified in Table 3 shall serve as the groundwater protection standard.

The Permittee must institute corrective action in all areas associated with the permitted post-closure units and appurtenances where groundwater has been affected by hazardous wastes, hazardous constituents, or parameters exceeding the assigned MCLs, and implement corrective measures in other areas which may be discovered to exceed these limits in the future.

VI.E. POINT OF COMPLIANCE

The point of compliance (POC) at which the groundwater protection standard of LAC 33:V.3305.A applies, and at which monitoring must be conducted, are the vertical intervals intercepted by the wells identified in Table 2 and required by Condition VI.C.2. The horizontal limit of compliance must be the surface following an imaginary line connecting the risers of monitoring wells listed as Point of Compliance wells in Table 2 unless amended through permit modifications by the Administrative Authority in the future. The vertical limit of compliance must be the upper permeable zone.

When contamination is detected in the upper permeable zone underlying the waste management area, the next vertical aquifer or permeable zone must also be monitored. In the event that hazardous constituents are detected at the point of compliance above the groundwater protection standard, the Permittee shall institute a corrective action program. During the corrective action program (i.e., until such time as hazardous constituents are no longer detected above the groundwater protection standard at the point of compliance and beyond), the groundwater quality at each monitoring well (including point of compliance wells, plume defining wells and recovery wells) identified in Table 2 must be monitored in order to determine the effectiveness of the corrective action. Additional monitoring wells may be installed, as required.

Condition VI, Table 2. RCRA Units, Point of Compliance and Monitoring Wells, Sampling Frequencies, and Analytical Parameters

Unit Monitored	Well	Zone	Type	Sampling Frequency	Parameters
Interim Status Landfill	MW-68	UPZ-S[6]	PD[1]	Quarterly	Site-Specific Monitoring Parameters Benzene Chlorobenzene Toluenediamine 2,4-Dinitrotoluene 2,6-Dinitrotoluene 1,2-Dichloroethane Aniline Toluene diisocyanate LAC 33:V.3325 Table 4 Parameters[4] (annually only) Groundwater Quality Parameters pH Specific Conductance Phenols Turbidity Antimony[5] Arsenic[5] Barium[5] Beryllium[5] Cadmium[5] Chromium[5] Cobalt[5] Copper[5] Lead[5] Nickel[5] Selenium[5] Thallium[5] Zinc[5]
	MW-69	UPZ-D[7]	PD[1]		
	MW-70	LPZ[8]	PD[1]		
	MW-71	UPZ[9]	PD[1]		
	MW-72	LPZ[8]	PD[1]		
	MW-73	LPZ[8]	PD[1]		
	MW-74	UPZ[9]	PD[1]		
	MW-75	LPZ[8]	PD[1]		
	MW-76	UPZ[9]	PD[1]		
	MW-77	LPZ[8]	PD[1]		
	MW-78	UPZ[9]	PD[1]		
	MW-79	UPZ[9]	PD[1]		
	MW-80	LPZ[8]	PD[1]		
	MW-81	UPZ[9]	PD[1]		
	MW-82	LPZ[8]	POC[3]		
	MW-83	UPZ-S[6]	POC[3]		
	MW-84	UPZ-D[7]	POC[3]		
	MW-85	LPZ[8]	POC[3]		
	MW-86	UPZ-S[6]	POC[3]		
	MW-87	UPZ-D[7]	POC[3]		
	MW-88	LPZ[8]	POC[3]		
	MW-89	UPZ-D[7]	UG[2]		
	MW-90	UPZ-D[7]	UG[2]		
	MW-91	LPZ[8]	UG[2]		
	MW-106	UPZ-S[6]	POC[3]		
	MW-107	UPZ-D[7]	POC[3]		
	MW-108	LPZ[8]	POC[3]		
	MW-109	UPZ[9]	POC[3]		
	MW-110	LPZ[8]	POC[3]		

[1] PD – Plume Defining Monitoring Well
[2] UG– Up-Gradient Monitoring Well
[3] POC – Point of Compliance Monitoring Well
[4] Point of Compliance wells in the upper permeable zone shall be sampled and analyzed annually for constituents listed in LAC 33:V.3325, Table 4
[5] Both total and soluble metals
[6] UPZ-S – Shallow Upper Permeable Zone Monitoring Well
[7] UPZ-D – Deep Upper Permeable Zone Monitoring Well
[8] LPZ – Lower Permeable Zone Monitoring Well
[9] UPZ-S – Upper Permeable Zone Monitoring Well

Condition VI, Table 3. Groundwater Monitoring Methods and Requirements.

Parameters		Analytical Method[1]	Method Detection Limit (MDL)[2]	Maximum Concentration Limit (MCL)[3]
Groundwater Quality Parameters	pH	Field Measurement	Note[4]	Note[4]
	Specific Conductance	Field Measurement	Note[4]	Note[4]
	Turbidity	Field Measurement	Note[4]	Note[4]
	Antimony[6]	6010B	11.09 µg/l	6 µg/l
	Arsenic[6]	6010B	6.052 µg/l	10 µg/l
	Barium[6]	6010B	7.055 µg/l	2000 µg/l
	Beryllium[6]	6010B	0.380 µg/l	4 µg/l
	Cadmium[6]	6010B	0.374 µg/l	5 µg/l
	Chromium[6]	6010B	1.307 µg/l	100 µg/l
	Cobalt[6]	6010B	1.952 µg/l	220 µg/l
	Copper[6]	6010B	3.182 µg/l	1300 µg/l
	Lead[6]	6010B	2.90 µg/l	15 µg/l
	Nickel[6]	6010B	28.55 µg/l	73 µg/l
	Selenium[6]	6010B	5.913 µg/l	50 µg/l
	Thallium[6]	6010B	4.314 µg/l	2 µg/l
	Zinc[6]	6010B	2.624 µg/l	1100 µg/l
	Total Phenols	9066	5.33 µg/l	180 µg/l
Site-Specific Monitoring Parameters	Benzene	8260B	0.117 µg/l	5 µg/l
	Chlorobenzene	8260B	0.119 µg/l	100 µg/l
	Toluenediamine	8270C	10 µg/l	10 µg/l
	2,4-Dinitrotoluene	8270C	0.880 µg/l	10 µg/l
	2,6-Dinitrotoluene	8270C	1.01 µg/l	10 µg/l
	1,2-Dichloroethane	8260B	0.212 µg/l	10 µg/l
	Aniline	8260C	1.725 µg/l	12 µg/l
	Toluene diisocyanate[5]	See footnote	See footnote	See footnote
	LAC 33:V.3325 Table 4[7]	See footnote	See footnote	See footnote

[1] Test Methods for Evaluating Solid Waste Physical/Chemical Methods, Third Edition (EPA Publication Number SW-846, 1986 as amended): must be in accordance with the latest edition of SW-846.

[2] Method Detection Limit (MDL) denotes the minimum concentration of an analyte that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix (groundwater) containing the analyte. The MDL is a laboratory-specific number and may change with time and, therefore, is included for reference purposes only. The Permittee shall provide the latest laboratory MDL for each analyte in each groundwater monitoring report submitted to the Administrative Authority.

[3] The Maximum Concentration Limits (MCL) shall be the groundwater protection standard unless changed through permit modification by the Administrative Authority. The Permittee must report to the Administrative Authority, any detectable level of compounds on Table 2, even if lower than the MCL. Maximum concentrations shall not exceed Drinking Water Standards unless the Permittee can demonstrate that the natural background levels unaffected by the facility are higher than the standards set and the Administrative Authority approves such limits. Whenever technically feasible, the MDL shall be less than the risk-based MCLs.

[4] These parameters are only being used for qualitative groundwater evaluation with no statistical evaluation. As such, no specific PQL is required other than method consistency.

[5] The direct analysis of toluene diisocyanate will not be required by this permit due to the fact that the compound undergoes hydrolysis in aqueous conditions. Concentrations of toluene diisocyanate will be inferred from concentrations of toluene diamine (the product of the hydrolysis of toluene diisocyanate).

[6] For dissolved metals, filter through a 0.45 micron filter and acidize with HNO_3 to pH < 2, then cool to 4° C. For total metals, acidize but do not filter.
(See "US EPA RCRA Ground Water Monitoring Technical Enforcement Guidance Document, EPA 530/SW-86-005.")

[7] Point of Compliance wells in the upper permeable zone shall be sampled annually for constituents listed in LAC 33:V.3325, Table 4.

Condition VI, Table 4. Sample Bottle and Preservation Specifications

Parameters	Container Type	Preservation Method
pH	n/a	Analyze immediately
Specific Conductance	n/a	Analyze immediately
Turbidity	n/a	Analyze immediately
Antimony[1]	Glass/plastic	HNO_3 to pH <2, Cool to 4° C
Arsenic[1]	Glass/plastic	HNO_3 to pH <2, Cool to 4° C

Barium[1]	Glass/plastic	HNO_3 to pH <2, Cool to 4° C
Beryllium[1]	Glass/plastic	HNO_3 to pH <2, Cool to 4° C
Cadmium[1]	Glass/plastic	HNO_3 to pH <2, Cool to 4° C
Chromium[1]	Glass/plastic	HNO_3 to pH <2, Cool to 4° C
Cobalt[1]	Glass/plastic	HNO_3 to pH <2, Cool to 4° C
Copper[1]	Glass/plastic	HNO_3 to pH <2, Cool to 4° C
Lead[1]	Glass/plastic	HNO_3 to pH <2, Cool to 4° C
Nickel[1]	Glass/plastic	HNO_3 to pH <2, Cool to 4° C
Selenium[1]	Glass/plastic	HNO_3 to pH <2, Cool to 4° C
Thallium[1]	Glass/plastic	HNO_3 to pH <2, Cool to 4° C
Zinc[1]	Glass/plastic	HNO_3 to pH <2, Cool to 4° C
Phenols	Glass	H_2SO_4 to pH < 2, Cool to 4° C
Benzene	Glass, Teflon-lined septum	HCl to pH < 2, Cool to 4° C
Chlorobenzene	Glass, Teflon-lined septum	HCl to pH < 2, Cool to 4° C
Toluenediamine	Glass, Teflon-lined cap	Cool to 4° C
2,4-Dinitrotoluene	Glass, Teflon-lined cap	Cool to 4° C
2,6-Dinitrotoluene	Glass, Teflon-lined cap	Cool to 4° C
1,2-Dichloroethane	Glass, Teflon-lined cap	Cool to 4° C
Aniline	Glass, Teflon-lined cap	Cool to 4° C
Toluene diisocyanate	See Table 3, Footnote 5	See Table 3, Footnote 5

[1] For dissolved metals, filter through a 0.45 micron filter and acidize with HNO_3 to pH < 2, then cool to 4° C. For total metals, acidize but do not filter.
(See "US EPA RCRA Ground Water Monitoring Technical Enforcement Guidance Document, EPA 530/SW-86-005.")

VI.F. COMPLIANCE PERIOD

The compliance period during which the groundwater protection standard of LAC 33:V.3305.A applies is until the Administrative Authority has accepted the certification of completion of post-closure care required by regulation and under Condition III.O.7 of this permit. However, if a corrective action program has been implemented, the compliance period can not end until after the Permittee has demonstrated that the corrective action has been effectively implemented and the groundwater protection standard of LAC 33:V.3305.A has not been exceeded for a period of three (3) consecutive years.

VI.G. GENERAL REQUIREMENTS

VI.G.1. The Permittee's groundwater monitoring system for the previously identified hazardous waste management facilities must consist of all wells as listed in Table 2, unless changed in the future by the Administrative Authority through permit modification.

VI.G.2. The Permittee must maintain the structural and mechanical integrity of all wells and provide protection from accidental damage and surface infiltration, as well as implement a monitoring well inspection schedule. A written report on damage to any well must be submitted to the Administrative Authority in accordance with Condition II.E.22 of this permit.

VI.G.3. Upgradient wells must always yield groundwater samples from the uppermost water-bearing zone that are representative of groundwater that has not been affected by possible leakage from the waste management units. Downgradient and vertical point of compliance wells must yield groundwater samples from the water-bearing zones that represent the quality of groundwater beneath the facilities that flows to the points of compliance.

VI.G.4. The Permittee must conform to the sampling and analysis requirements listed in Conditions VI.C and as required by LAC 33:V.3315.

VI.G.5. Each well must be measured for total depth and depth to water on the same day and prior to purging. Measurements must be to the nearest 0.1 foot, and the values must be recorded in the field notebook and reproduced and submitted in the Groundwater Annual Report. If 10% of the screened interval is blocked by sediments, the well must be redeveloped prior to the next required sampling event.

VI.G.6. Each well must be purged by evacuation to dryness or by removing a minimum of three casing volumes. The wells must be sampled immediately upon purging and/or when sufficient water for sampling has recharged the well. Other techniques (e.g., micro-purging) must be approved by the Administrative Authority prior to use in monitoring or corrective action programs. Purging methods must be consistent throughout the life of the permitted closed unit.

VI.G.7. Samples must be withdrawn using dedicated or adequately cleaned equipment for each well. No equipment or method may be used that will chemically alter or influence the sample. Sampling devices other than bailers must be approved by the Administrative Authority prior to use in monitoring or corrective action programs. Care must be taken to avoid placing clean sampling equipment on the ground or on any contaminated surface. Sampling methods and equipment must be compatible throughout the life of the permitted closed unit.

VI.G.8. Groundwater samples shall be monitored and analyzed for turbidity. Samples containing less than five (5) NTU (nephelometric turbidity unit) are acceptable for analysis when the analytical method is sensitive to turbidity (such as the analysis of metals). Samples containing greater than five (5) NTU are only acceptable when well development is certified by a qualified geologist as "the best obtainable". An evaluation of turbidity must accompany all potentially affected analytical values.

VI.G.9. The Permittee must measure pH and specific conductance as standard indicators of groundwater contamination, which will be used to indicate well integrity and possible groundwater contamination. The results of these analyses must be recorded in the field log book and interpreted.

VI.G.10. A chain of custody protocol must be employed that will allow for tracking possession and handling of samples from the time of collection through laboratory analysis. All sample containers must be labeled to prevent misidentification, have proper seals, and indicate the test parameters required.

VI.G.11. Sample preservation, handling and analysis must meet the specifications of LAC 33:V.3315.D and E and Test Methods for Evaluating Solid Waste Physical/Chemical Methods 3rd. Edition (EPA Publication Number SW-846, as amended) or an equivalent substitute (approved by the Administrative Authority prior to implementation). Containers, preservation methods and analytical limits are listed in Table 4 and Table 3 of this permit, respectively.

VI.G.12. The Permittee must use one of the statistical procedures outlined in the most current approved facility Sampling and Analysis Plan or LAC 33:V.3315.H in determining whether background values or concentrations have been exceeded for the hazardous constituents specified in Table 3.

VI.G.13. Records of all sampling and analytical work must be maintained at the site during the life of the facilities, including post-closure care periods. An up-to-date field log book (or compilation of field sheets) must be kept at the site which documents (for each sample) the well identification number, total well depth, elevation of top of casing, water level, water color (visual), well evacuation procedures and equipment, sample withdrawal procedures and equipment, date, time sample identification numbers, field measurements (pH, specific conductance, etc.) and methods, name of collector, field observations, calculations of the standing water volume in the well, and the total volume evacuated.

VI.H. DETECTION MONITORING PROGRAM

(RESERVED). Permittee currently in the Compliance Monitoring Program as per Condition VI.I.

VI.I. COMPLIANCE MONITORING

The Permittee must conduct a Compliance Monitoring Program in accordance with LAC 33:V.3319.

VI.I.1. The Permittee shall determine the concentration of each Site-Specific Monitoring Parameter listed in Table 3 of this permit at least quarterly (from groundwater in the wells listed in Table 2 of this permit).

VI.I.2. The Permittee shall determine whether the concentrations of Site-Specific Monitoring Parameters determined under Condition VI.I.1 of this permit exhibit statistically significant evidence of increased contamination. The Permittee shall complete the statistical analysis included in the approved Sampling and Analysis Plan within sixty (60) days of the groundwater monitoring event.

VI.I.3. The Permittee shall annually analyze samples from all point of compliance wells screened in the upper permeable zone (see Table 2 of this permit) for all constituents listed in LAC 33:V.3325, Table 4, in order to determine whether additional hazardous constituents are present in the upper permeable zone (and, if so, at what concentration), pursuant to the conditions of this permit.

VI.I.4. In the event additional LAC 33:V.3325, Table 4, constituents (not already identified in the permit as monitoring constituents) are detected, the Permittee may resample within one month and repeat the LAC 33:V.3325, Table 4 analysis. If the second analysis confirms the presence of new constituents, the Permittee must report the concentrations of these additional constituents to the Administrative Authority within seven (7) days after completion of the second analysis. In addition, the Permittee must submit a permit modification application to add the additional constituents to Table 2 and Table 3 of this permit in accordance with LAC 33:V.321 and Condition II.C of this permit.

VI.I.5. In the event the Permittee determines concentration limits, as defined in LAC 33:V.3309 and Condition VI.D of this permit, have been exceeded at any monitoring wells at the point of compliance, the Permittee must:

VI.I.5.a. notify the Administrative Authority in writing within seven (7) days of this finding. The notification must indicate the constituent(s) and concentration(s) for those constituents which have exceeded there respective concentration limits; and

VI.I.5.b. submit an application for a permit modification to establish a corrective action program meeting the requirements of LAC 33:V.3321 within 180 days (or

ninety (90) days if the Permittee has previously submitted a certified engineering feasibility study under LAC 33:V.3317.G.5.b). The application must include the following information:

VI.I.5.b.(1). a detailed description and schedule for assessment and corrective actions that will achieve compliance with the groundwater protection standard specified in Conditions VI.C and D of this permit;

VI.I.5.b.(2). a geotechnical plan (certified by a qualified geologist or a geotechnical engineer) to demonstrate the effectiveness of the planned corrective actions. This plan may incorporate the Compliance Monitoring Program developed to meet the requirements of this permit, except that the Permittee will be required to monitor as frequently as necessary to demonstrate the effectiveness of the corrective action.

VI.I.6. If the Permittee determines, pursuant to Condition VI.I.1, that there is statistically significant evidence of contamination for indicator parameters or hazardous constituents at any point of compliance well, the Permittee may demonstrate that a source other than a regulated unit caused the contamination, or that the detection is an artifact caused by an error in sampling, analysis, or statistical evaluation, or natural variation in the groundwater. In making a demonstration under this Condition, the Permittee, must:

VI.I.6.a. Notify the Administrative Authority in writing within seven (7) days that the Permittee intends to make a demonstration under this Condition;

VI.I.6.b. Within ninety (90) days, submit a report to the Administrative Authority which demonstrates that a source other than a regulated unit caused the standard to be exceeded or that the apparent noncompliance with the standard resulted from an error in sampling, analysis or evaluation;

VI.I.6.c. Within ninety (90) days, submit to the Administrative Authority an application for a permit modification to make any appropriate changes to the Compliance Monitoring Program; and

VI.I.6.d. Continue to monitor in accordance with the Compliance Monitoring Program established under this permit.

VI.I.7. If the Permittee determines that the Compliance Monitoring Program no longer satisfies the requirements of this permit, he or she must, within ninety (90) days submit an application for a permit modification to make any appropriate changes to the program.

Any time the Administrative Authority determines that the Compliance Monitoring Program does not satisfy the requirements of this permit, the Permittee shall, within ninety (90) days of notification of such determination, submit an application for a permit modification to make any appropriate changes to the program.

VI.J. CORRECTIVE ACTION PROGRAM

(RESERVED) Permittee currently in the Compliance Monitoring Program as per Condition VI.I.

The conditions of VI.J (in italics) are included for informational purposes only and are meant to provide a course of action in the event a Corrective Action Program is required. In the event a Corrective Action Program is required, the permit will be modified in accordance with LAC 33:V.321 and Condition VI.I.5.b of this permit and the conditions of VI.J will become enforceable.

The Permittee shall institute a Corrective Action Program in accordance with the requirements of LAC 33:V.3321 and as subsequently directed by the Administrative Authority. Water quality sampling, water level measurements and the general compilation of data to demonstrate the effectiveness of existing and new corrective action programs must be made until compliance with groundwater protection standards is achieved for at least three (3) years or until this requirement is terminated in writing by the Administrative Authority (after the data indicates adequate control of contaminant migration and concentration increases).

VI.J.1. *The Permittee must evaluate and report the effectiveness and progress of the corrective action semi-annually to the Administrative Authority as required by LAC 33:V.3321.G. The evaluation shall include the following:*

VI.J.1.a. *general discussion on the effectiveness of the corrective action in controlling the source of release and protecting human health and the environment, and progress being made toward completion;*

VI.J.1.b. *trend analysis and updated schedule for completion of the corrective action;*

VI.J.1.c. *evaluation of performance reliability, ease of implementation and any encountered concerns or problems;*

VI.J.1.d. *any changes to surrounding land use or environmental receptors that may impact effectiveness;*

VI.J.1.e. *recommendations for improvement;*

VI.J.1.f. *recovered amounts for each component of a recovery system (e.g., recovery wells, French drain systems, etc.) and the entire system; recovered amounts for both contaminants and all liquids; recovered amounts for both the reporting period and since recovery implementation; and*

VI.J.1.g. *graphical and statistical analyses, as necessary, to demonstrate the effectiveness and progress (the Administrative Authority may also require predictive computer modeling, as per LAC 33:V.3303.D.).*

VI.J.2. Plume defining wells are wells present or proposed for installation along the perimeter of the plume and serve the purpose of insuring detection of any enlargement of the plume.

VI.J.2.a. The plume defining wells as listed in Table 2 must be sampled according to a frequency approved by the Administrative Authority, as part of the on-going evaluation of the corrective action program, for constituents specified in Table 3 to satisfy LAC 33:V.3315.A.3.

VI.J.2.b. If the Permittee determines that there is statistically significant evidence of contamination for chemical parameters or hazardous constituents at any plume defining wells previously reported as non-detect, the Permittee must notify the Administrative Authority of the finding in writing within seven (7) days. This notification must indicate what chemical parameters or hazardous constituents have shown statistically significant evidence of contamination. Further, the Permittee must do one of the following:

VI.J.2.b.(1) Submit a workplan to the Administrative Authority within ninety (90) days from the date of the confirmation of contamination. The workplan must detail the specific additional assessment procedures the Permittee will conduct to identify the full extent of the plume and propose any changes necessary to the corrective action to achieve the groundwater protection standard. The workplan shall include any proposed changes to the groundwater monitoring system, monitoring frequency, sampling and analysis procedures and methods, and/or statistical methods; or

VI.J.2.b.(2) Demonstrate that a source other than a regulated unit caused the contamination or that the detection is an artifact caused by an error in sampling, analysis, or statistical evaluation or natural variation in the groundwater. The Permittee may make a demonstration under this Paragraph in addition to, or in lieu of, submitting a permit modification application; however, the Permittee is not relieved of the requirement to submit a permit modification application within the time specified unless the demonstration made under this Paragraph successfully shows that a

source other than a regulated unit caused the increase, or that the increase resulted from error in sampling, analysis, or evaluation. In making a demonstration under this Paragraph the Permittee must:

VI.J.2.b.(2).a. *Specify the Permittee's intention to make a demonstration under this Paragraph when notifying the Administrative Authority of the statistically significant evidence of contamination;*

VI.J.2.b.(2).b. *Within ninety (90) days, submit a report to the Administrative Authority that demonstrates that a source other than a regulated unit caused the contamination or that the contamination resulted from error in sampling, analysis, or evaluation. Further, the Permittee must submit an application for a permit modification to make any appropriate changes to the monitoring program; and*

VI.J.2.b.(2).c. *Continue to monitor in accordance with the monitoring program established under this permit.*

VI.J.3. *If the Permittee determines that the corrective action program (including monitoring) no longer satisfies the requirements of this permit, the Permittee, within ninety (90) days, shall submit an application for a permit modification to make any appropriate changes to the program.*

VI.K. CONSTRUCTION AND ABANDONMENT OF MONITORING WELLS AND GEOTECHNICAL BOREHOLES

The construction and abandonment of groundwater monitoring wells must conform to the standards and guidelines specified in **"CONSTRUCTION OF GEOTECHNICAL BOREHOLES AND GROUNDWATER MONITORING SYSTEMS HANDBOOK"**, dated December 2000. This document is printed by and available from the Louisiana Department of Transportation and Development (DOTD), Water Resources Section, P.O. Box 94245, Baton Rouge, Louisiana 70804-9245. The document is also available online at http://www.dotd.state.la.us/intermodal/wells/wellhandbook.com.

A work plan for the construction of a new well must be submitted to the Administrative Authority for approval as the entire groundwater monitoring system must be approved. Any required new well should be installed within thirty (30) days of approval of the work plan by the Administrative Authority. Upon completion of new or replacement well, a copy of DOTD-GW-1 S. DOTD Well Registration Short Form, is to be provided to the Administrative Authority.

The Permittee must provide for the sealing of any vertical migration path resulting from exploratory boring, leachate collection or detection systems and/or groundwater monitoring programs as provided in LAC 33:V.3323. A work plan for the plugging and abandonment of a

well must be submitted for approval by the Administrative Authority, whenever such migration pathways are discovered. Upon completion of well abandonment, a copy of DOTD-GW-2, DOTD Well Plugging and Abandonment Form, is to be provide to the Administrative Authority.

VI.L. REPORTING AND NOTIFICATION REQUIRMENTS

VI.L.1. Annual Groundwater Report

An annual groundwater report must be submitted each year no later than March 1, as required by LAC 33:V.1529.D.8. This report must summarize all groundwater activities for the preceding calendar year including an evaluation of the monitoring strategy in relation to the direction of groundwater flow and locations of wells associated with the facilities. Applicable calculations must also include groundwater flow contaminant migration rates (as applicable), statistical comparisons, and any other information as it regards corrective action required by this permit. The report shall include the following:

VI.L.1.a. a table showing well number, well depth, interval screened, zone monitored, well diameter, screen and casing material (and the type of pump, if applicable) for all wells;

VI.L.1.b. a facility map showing all wells (up-gradient, point of compliance, assessment, plume defining and recovery) and identifying zones in which wells are screened;

VI.L.1.c. a scaled potentiometric surface showing well locations, groundwater elevations with respect to mean sea level for each monitored zone;

VI.L.1.d. <u>all</u> analytical data, including QA/QC;

VI.L.1.e. a summary of all analytical data;

VI.L.1.f. a statistical method shall be used in evaluating data for each hazardous constituent, as approved by the Administrative Authority;

VI.L.1.g. graphical representation of those parameters with MCLs specified in Table 3 for each sampling event. The graphical representation must include a:

VI.L.1.g.(1) contaminant concentration isopleth maps;

VI.L.1.g.(2) contaminant concentration versus time graphs;

VI.L.1.h. a discussion of any significant changes in the data from the last reporting period;

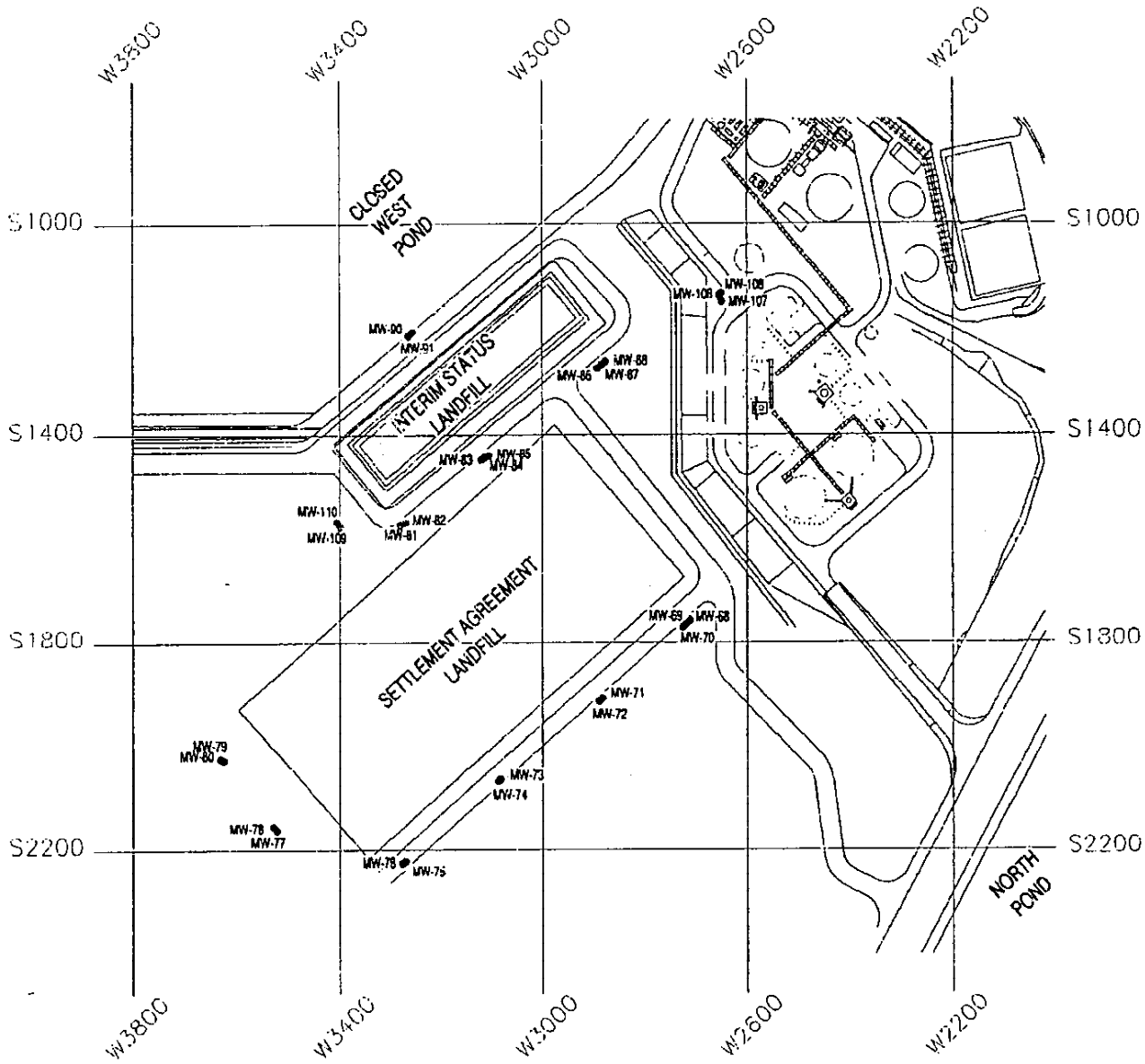
VI.L.1.i. a discussion of the down time for any well or part of the system and actions taken to return the system to normal operations and maximum efficiency.

VI.L.2. Notification of Statistically Significant Evidence of Contamination

The Permittee must notify the Administrative Authority in accordance with Conditions VI.H, VI.I or VI.J when there is statistically significant evidence of contamination for chemical parameters or hazardous constituents.

VI.L.3. Notification of Release to SPOC

In the event of a release in, into, within, or on any groundwaters of the state, (i.e., any confirmation of contamination in any previously uncontaminated saturated subsurface strata) the Permittee must notify the Department within twenty-four (24) hours of confirming statistically significant evidence of a release. Notification shall be made to the Office of Environmental Compliance, Emergency and Radiological Services Division, Single Point of Contact (SPOC) in accordance with LAC 33:309.L.7 and Condition II.E.18 of this permit. This requirement is in addition to notification requirements to the Administrative Authority discussed in Conditions VI.H, VI.I or VI.J.



LEGEND:

● MW-68 MONITOR WELL LOCATION

0 300 600

SCALE IN FEET

P:\Olin\mon_well_loc.dwg

DRAWN BY lb DATE 2/04	NORTH	PROJECT NO. 6300-03-0003 PHASE TASK 02.404	
CHECKED BY R.D PRINCIPAL/DATE		REV. NO. REV. DATE SCALE 1"=300'	

Olin CHEMICALS GROUP LAKE CHARLES, LA.

MONITOR WELL LOCATION MAP

OLIN – LAKE CHARLES
INTERIM STATUS LANDFILL
LAKE CHARLES, LOUISIANA

FIGURE 1

HAZARDOUS AND SOLID WASTE AMENDMENTS

VII. GENERAL CONDITIONS PURSUANT TO THE HAZARDOUS AND SOLID WASTE AMENDMENTS

VII.A. STANDARD CONDITIONS

VII.A.1. Waste Minimization

(RESERVED)

VII.A.2. Dust Suppression

Pursuant to LAC 33:V.4139.B.4, and the Toxic Substances Control Act, the Permittee shall not use waste or used oil or any other material which is contaminated with dioxin, polychlorinated biphenyls (PCBs), or any other hazardous waste (other than a waste identified solely on the basis of ignitability), for dust suppression or road treatment.

VII.A.3. Failure to Disclose

The Permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts at any time may be cause for termination or modification of this Permit in accordance with LAC 33:323.B.2 and 3.

VII.A.4. Suspension, Modification, or Revocation and Reissuance, and Termination of Permit

This Permit may be modified, revoked and reissued, or terminated for cause as specified in LAC 33:V.323. The filing of a request by the Permittee for a permit modification, revocation and reissuance, termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee, does not stay the applicability or enforceability of any permit condition.

VII.A.4.a. If the Administrative Authority tentatively decides to modify or revoke and reissue a permit under LAC 33:V.321.C. or 323, a draft permit shall be prepared incorporating the proposed changes. The Administrative Authority may request additional information and, in the case of a modified permit, may require the submission of an updated permit application.

VII.A.4.b. The Permittee may initiate permit modification proceedings under LAC 33:V.321.C. All applicable requirements and procedures as specified in LAC 33:V.321.C shall be followed.

VII.A.4.c. Modifications of this Permit do not constitute a reissuance of the Permit.

VII.A.5. Permit Review

This Permit may be reviewed by the Administrative Authority five years after the date of permit issuance and may be modified as necessary as provided for in LAC 33:V.321.C. Nothing in this section shall preclude the Administrative Authority from reviewing and modifying the Permit at any time during its term.

VII.A.6. Compliance with Permit

Compliance with a RCRA permit during its term constitutes compliance, for purposes of enforcement, with subtitle C of RCRA except for those requirements not included in the permit which:

VII.A.6.a. Become effective by statute;

VII.A.6.b. Are promulgated under LAC 33:V.Chapter 22 restricting the placement of hazardous wastes in or on the land; or

VII.A.6.c. Are promulgated under LAC 33:V.Chapters 23, 25 and 29 regarding leak detection systems for new and replacement surface impoundment, waste pile, and landfill units, and lateral expansions of surface impoundment, waste pile, and landfill units. The leak detection system requirements include double liners, construction quality assurance (CQA) programs, monitoring action leakage rates, and response action plans, and will be implemented through the procedures of LAC 33:V.321.C Class 1 permit modifications.

VII.A.7. Specific Waste Ban

(RESERVED)

VII.A.8. Information Submittal for the Corrective Action Strategy

Failure to comply with any condition of the Permit, including information submittals, constitutes a violation of the Permit and is grounds for enforcement action, permit amendment, termination, revocation, suspension, or denial of permit renewal application. Falsification of any submitted information is grounds for termination of this Permit (LAC 33:V.323.B.3).

The Permittee shall ensure that all plans, reports, notifications, and other submissions to the Administrative Authority required by this Permit using the Corrective Action Strategy are signed and certified in accordance with LAC 33:V.Chapter 5, Subchapter B. All submittals required under the corrective action strategy must conform to those requirements outlined in the RECAP (see Condition VIII of this permit). Variance from content and/or formatting guidelines provided under the RECAP shall be requested by the Permittee prior to submittal to the Administrative Authority, as deemed necessary. Approval or disapproval of such a request with further guidance

on content and formatting will be provided by the Administrative Authority, as deemed necessary. Five (5) copies each of these plans, reports, notifications or other submissions and one (1) electronic copy (3.5" IBM compatible disk or CD-ROM) of all portions thereof which are in word processing format shall be submitted to the Administrative Authority by Certified Mail or hand delivered to:

Louisiana Department of Environmental Quality
Office of Environmental Assessment
Environmental Technology Division
P.O. Box 4314
Baton Rouge, LA 70821-4314

A summary of the planned reporting milestones pursuant to the corrective action requirements of this Permit is found in Condition VIII, Table 1.

VII.A.9. Data Retention

All raw data, such as laboratory reports, drilling logs, bench-scale or pilot-scale data, and other supporting information gathered or generated during activities undertaken pursuant to this Permit shall be maintained at the facility during the term of this Permit, including any reissued Permits.

VII.A.10. Management of Wastes

All solid wastes which are managed pursuant to a remedial measure taken under the corrective action process or as an interim measure addressing a release or the threat of a release from a solid waste management unit shall be managed in a manner protective of human health and the environment and in compliance with all applicable Federal, State and local requirements. As a response to the Louisiana legislature mandate La. R.S. 30:2272 (Act 1092 of the 1995 Regular Session) to develop minimum remediation standards, the LDEQ promulgated the Risk Evaluation Corrective Action Program (RECAP). RECAP's tiered approach to risk evaluation and corrective action establishes not only across the board numerical standards for most media, but also allows for the development of more site-specific numerical standards, as warranted. The Permittee is required to comply with all applicable requirements of RECAP. Approval of units for managing wastes and conditions for operating the units shall be granted through the permitting process.

VII.B. EMISSION STANDARDS - PROCESS VENTS, EQUIPMENT LEAKS, TANKS, SURFACE IMPOUNDMENTS, AND CONTAINERS (AA-BB-CC AIR REGULATIONS)

(RESERVED)

VII.C. SPECIFIC CONDITION - CLOSURE

(RESERVED)

VIII. SPECIAL CONDITIONS PURSUANT TO HAZARDOUS AND SOLID WASTE AMENDMENTS--CORRECTIVE ACTION STRATEGY

Corrective Action for Releases: Section 3004(u) of RCRA, as amended by the Hazardous and Solid Waste Amendments (HSWA), and LAC 33:V.3322 require that permits issued after November 8, 1984, address corrective action for releases of hazardous waste or hazardous constituents from any solid waste management unit at the facility, regardless of when the waste was placed in the unit.

EPA's traditional RCRA corrective action approach is structured around several elements common to most activities. In the first phase, RCRA facility assessment (RFA), EPA or the authorized state assesses the facility to identify releases and determine the need for corrective action. In the second phase, RCRA facility investigation (RFI), the facility conducts a more detailed investigation to determine the nature and extent of contaminants released to groundwater, surface water, air, and soil. If remedial action is needed, a third phase, corrective measures study (CMS), is started. During this phase, the facility conducts a study, which when completed, describes the advantages, disadvantages, and costs of various cleanup options. After selection of a final remedy, the fourth phase, corrective measures implementation (CMI), is initiated. The facility is required to design, construct, operate, maintain, and monitor the final remedy(s).

The Corrective Action Strategy (CAS) is an alternate corrective action approach that can be implemented during any phase of corrective action for a release area. The Permittee shall use the CAS approach as the framework for corrective action to clarify, facilitate and expedite the process, and shall use the **Louisiana Department of Environmental Quality Risk Evaluation/Corrective Action Program (RECAP)** for screening and media-specific cleanup standards. EPA has interpreted the term "release" to mean, "any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment." (50 FR 2873, July 15, 1985). The CAS refers to "release areas" as solid waste management units (SWMUs) and areas of concern (AOCs) while the RECAP refers to release areas as areas of investigation (AOIs). SWMUs and AOCs may also be referred to as "AOIs" when investigated and managed under the RECAP.

VIII.A. ALTERNATE CORRECTIVE ACTION

VIII.A.1. Introduction to CAS

This Permit will utilize the CAS Guidance Document (www.epa.gov/Arkansas/6pd/rcra_c/pd-o/riskman.htm) developed by the U.S. Environmental Protection Agency (EPA) Region 6 whenever the Administrative Authority determines that it will serve to facilitate the corrective action. The CAS Guidance Document shall be utilized to the fullest extent practicable for planning and implementation of the corrective action. The CAS in this Permit shall not supersede existing Federal, State, and local regulations. The two primary objectives are to prioritize corrective action at the facility, and streamline corrective action administrative procedures, resulting in the protection of human health and the environment.

The CAS is a performance-based approach; using data quality objectives, investigations begin with the endpoint in mind. The CAS is a risk management strategy that can be implemented during any phase of corrective action. However, the CAS need not be applied to work that has already been completed to the satisfaction of the Administrative Authority. Performance standards are established at the beginning of the corrective action process, allowing earlier and more focused implementation. Releases are screened using RECAP screening numbers to determine the priority of corrective action, and remedial alternatives are selected on the basis of their ability to achieve and maintain the established performance standards.

There is no one specific path through the CAS process. The CAS is a facility-wide approach, focusing corrective action on releases that pose the greatest risk first. Screening releases will also enable some areas of interest to qualify for no further action at this time (Condition VIII.A.3.a.), thus resources can be used to best benefit the protection of human health and the environment. The CAS process also considers activities previously conducted under the traditional RCRA corrective action process. Appendix 1 of this permit contains a summary of corrective action activities completed to date and also describes where the Permittee is in the CAS process at the time of issuance of this permit. The applicability of various provisions of the CAS will depend on where the Permittee is in the CAS process as detailed in Appendix 1.

The traditional RCRA corrective action process and reports (i.e., RFIs, CMSs, CMIs, etc.) are not elements of the CAS. However, the use of information and reports from the traditional corrective action process, if available, is encouraged, in addition to new site-specific information.

The Administrative Authority, through an agency-initiated permit modification, may remove the CAS as the means of facility-wide corrective action in the case of the failure of the Permittee to disclose information, abide by the terms and conditions of this permit, adhere to agreed schedules, or show adequate progress; or should an impasse occur between the Permittee and the Administrative Authority. The Administrative Authority will institute other means of corrective action (such as traditional corrective action) at the facility through modification of this permit.

VIII.A.2. Performance Standards

Expectations for the outcome of corrective action at a facility are established in the CAS by three performance standards as defined in Conditions VIII.A.2.a through c. The Permittee's proposed performance standards shall be presented during the scoping meeting. The Permittee must justify the proposed performance standards through evaluation and documentation of land use, groundwater designation (current and reasonably expected future use), types of receptors present, exposure pathways, etc.; as described in RECAP, Chapter 2. Through the application of the performance standards and RECAP, the Permittee and Administrative Authority shall determine whether a release must be addressed through corrective action, and whether implemented corrective actions are protective of human health and the environment.

The Permittee shall submit the performance standards in writing along with the Conceptual Site Model (Condition VIII.D) within one-hundred and twenty (120) days after the scoping meeting. The Administrative Authority may either approve the performance standards proposed by the Permittee or establish performance standards that the Administrative Authority deems necessary to protect human health and the environment.

The three CAS performance standards are defined below. The order in which the performance standards are listed does not indicate that one performance standard takes priority over another. All applicable performance standards must be achieved by the Permittee.

VIII.A.2.a. Source Control Performance Standard

Source control refers to the control of materials that include or contain hazardous wastes or hazardous constituents that act as a reservoir for migration of contamination to soil, sediment, groundwater, surface water, or air, or as a source for direct exposure.

The facility must determine if source material is present. Removal, containment, treatment, or a combination of the three, must be evaluated on a case-by-case basis. Controlling source material is a predominating issue in the CAS, and must be addressed to ensure protectiveness over time. Prioritization of the SWMUs and AOCs does not mean avoidance of controlling source materials.

VIII.A.2.b. Statutory and Regulatory Performance Standard

Applicable statutory and regulatory requirements (Federal, State, and local) must be identified. These requirements may dictate media-specific contaminant levels (e.g., maximum contaminant levels (MCLs) in drinking water) that must be achieved and may become a performance standard for the Permittee.

VIII.A.2.c. Final Risk Goal Performance Standard

The final risk goal is the level of protection to be achieved and maintained by the Permittee. The final risk goal shall be based on site-specific issues including land use, special subpopulations, contaminant concentrations based on acceptable risk, location at which the levels are measured, and the remediation time frame, as specified by RECAP.

One final risk goal may apply to the entire facility, but it is more likely that different releases will require different final risk goals due to variations in location of releases, land use, proximity of receptors, etc. The final risk goal will be based on sound risk assessment methodologies (Condition VIII.A.3).

VIII.A.3. Use of RECAP

The latest edition of the RECAP document shall be used by the Permittee to determine the need for further corrective actions under this permit. The RECAP consists of a tiered framework comprised of a Screening Option (SO), and three Management Options (MO). The tiered management options allow site evaluation and corrective action efforts to be tailored to site conditions and risks. As the MO level increases, the approach becomes more site-specific and hence, the level of effort required to meet the objectives of the Option increases.

The RECAP shall be used by the Permittee to evaluate data quality and data usability (RECAP Section 2.4 and 2.5), to determine the identity of an AOI as described in RECAP Section 2.6, and for estimations of Area of Investigation Concentrations and Groundwater Compliance Concentrations for each media as defined in RECAP Section 2.8.

The RECAP shall be used by the Permittee to evaluate land use as described in RECAP Section 2.9, and groundwater/aquifer use as described in RECAP Section 2.10.

The RECAP shall be used by the Permittee to prioritize AOCs, SWMUs, and AOIs that require remediation so site investigations are focused on the release areas that pose the greatest risk. As the CSM is compiled, the Permittee shall assess historical data (RECAP Section 2.5) and use the following management options, as appropriate, to address each release site.

VIII.A.3.a. Screening Option

The Permittee shall use the Screening Standards (SS) which are LDEQ-derived screening numbers for soil and groundwater for non-industrial and industrial land use scenarios. The SS shall be used to demonstrate that an AOI does not pose a threat to human health and the environment and, hence does not require further action at this time (NFA-ATT) or that further evaluation is warranted under a higher Management Option.

VIII.A.3.b. Management Option 1

The Permittee shall use Management Option 1 (MO-1) which provides a RECAP standard (RS) derived for non-industrial and industrial exposure scenarios using currently recommended default exposure parameters and toxicity values. Under MO-1, an AOI may warrant a NFA-ATT determination, or if an exposure, source, or compliance concentration detected at the AOI exceeds a MO-1 limiting RS, then the Permittee may; (1) remediate to the MO-1 limiting RS (and comply with closure/post closure requirements for MO-1), or (2) proceed with a MO-2 or MO-3 evaluation.

VIII.A.3.c. Management Option 2

The Permittee shall use Management Option 2 (MO-2) which provides for the development of soil and groundwater RS using site-specific data with specified analytical models to evaluate constituent fate and transport at the AOI. The results of this evaluation shall be used in conjunction with standard reasonable maximum exposure (RME) assumptions to identify site-specific MO-2 RS. Under MO-2, an AOI may warrant a NFA-ATT determination, or if an exposure, source, or compliance concentration detected at the AOI exceeds a MO-2 limiting RS, then the Permittee may; (1) remediate to the MO-2 limiting RS (and comply with closure/post closure requirements for MO-2), or (2) proceed with a MO-3 evaluation.

VIII.A.3.d. Management Option 3

The Permittee shall use Management Option 3 (MO-3) which provides the option of using site-specific data for the evaluation of exposure and the evaluation of environmental fate and transport at the AOI. The results of the site-specific evaluation may be to develop site-specific MO-3 RS. Under MO-3, an AOI may warrant a NFA-ATT determination, or if an exposure, source, or compliance concentration detected at the AOI exceeds a MO-3 limiting RS, then the Permittee shall; (1) remediate to the MO-3 RS, (2) conduct confirmatory sampling, and (3) comply with closure/post closure requirements for MO-3.

VIII.A.4. Corrective Action for Releases Beyond Facility Boundary

Section 3004(v) of RCRA as amended by HSWA, and State regulations promulgated as LAC 33:V.3322.C require corrective actions beyond the facility property boundary, where necessary to protect human health and the environment, unless the Permittee demonstrates that, despite the Permittee's best efforts, the Permittee was unable to obtain the necessary permission to undertake such actions. The Permittee is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where offsite access is denied.

VIII.A.5. Financial Responsibility

Assurances of financial responsibility for corrective action shall be provided by the Permittee as specified in the Permit following major modification for remedy selection. The Administrative Authority reserves the right to require financial assurance prior to remedy selection based upon facility compliance history, the extent and degree of contamination, financial health of the Permittee, and input from the public.

VIII.A.6. Summary of Corrective Action Activities

A summary of the corrective action activities associated with the facility is provided in Condition VIII, Appendix 1 of this permit. AOCs and SWMUs that are currently being managed or proposed for management under a prescribed corrective action program (e.g., groundwater order, corrective action order, CERCLA) are identified in Condition VIII, Appendix 1, Table 1 of this permit.

VIII.A.7. Approval of Alternate Schedule

The Permittee may submit a written request for an alternate schedule for a submittal deadline as presented in Condition VIII, Table 1. The request should propose a specific alternate schedule and include an explanation as to why the alternate schedule is necessary. The Administrative Authority will consider site-specific criteria in either approving or disapproving the request for an alternate schedule.

VIII.B. PROJECT DEVELOPMENT AND SCOPING MEETING

VIII.B.1. Notice of Intent

The Permittee must submit to the Administrative Authority a Notice of Intent to conduct corrective action using the CAS within sixty (60) days of the effective date of this permit. The notice of intent should state the following in a concise manner:

VIII.B.1.a. General information regarding facility location;

VIII.B.1.b. General information regarding the facility's operational history;

VIII.B.1.c. General discussion on how the Permittee will proceed through the CAS;

VIII.B.1.d. Brief description of proposed performance standards for corrective action; and

VIII.B.1.e. Propose a date for a scoping meeting between the Permittee and the Administrative Authority to be held within sixty (60) days of the date of the Notice of Intent.

VIII.B.2. Scoping Meeting

The scoping meeting will serve as the first CAS milestone where the Permittee and the Administrative Authority identify expectations concerning CAS implementation. The length and extent of the meeting will depend on the complexity of the site. Agreements on land use, groundwater classification, the level of detail required in the conceptual site model (see Condition VIII.D) and expectations for remediation goals will be discussed during the scoping meeting(s). During the scoping meeting the Permittee will present the following information to the Administrative Authority:

VIII.B.2.a. A conceptual site model (if one already has been developed);

VIII.B.2.b. Discussions on history of corrective action at the facility, including facility investigations, risk evaluations or risk assessments, interim measure/stabilizations and final remedies implemented;

VIII.B.2.c. Proposed performance standards for the facility with justification, and potential risk management approaches;

VIII.B.2.d. Discussions on how the Permittee plans to use the CAS to meet its corrective action obligations, including permitting and compliance issues;

VIII.B.2.e. A Communication Strategy Plan that specifies where in the CAS process the Permittee is currently and how the Permittee will provide information about future progress at the facility to the Administrative Authority (i.e., progress reports, conference calls, routine meetings, etc.);

VIII.B.2.f. Site-specific concerns (i.e., sensitive environments or special subpopulations);

VIII.B.2.g. Need for interim measures or stabilization activities, if necessary; and

VIII.B.2.h. Schedule for submittal of the CAS Investigation Workplan and proposed schedule for conducting and completing CAS requirements, including public participation.

Information plans and reports that have already been developed by the Permittee during the corrective action process can be referenced during the scoping meeting. The Permittee must coordinate with the Administrative Authority in order to determine the date, time, and location of the scoping meeting.

VIII.C. REPORTING REQUIREMENTS

VIII.C.1. The Permittee shall submit, in accordance with Condition VII.A.8, signed reports of all activities conducted pursuant to the provisions of this Permit as required by the Administrative Authority. The reporting schedule shall be determined on a case-by-case basis by the Administrative Authority. These reports shall contain, as applicable to the stage of corrective action, the information required by CAS, as well as the following:

VIII.C.1.a. A description of the work completed and an estimate of the percentage of work completed;

VIII.C.1.b. Summaries of all findings, including summaries of laboratory data;

VIII.C.1.c. Summaries of all problems or potential problems encountered during the reporting period and actions taken to rectify problems;

VIII.C.1.d. Projected work for the next reporting period;

VIII.C.1.e. Summaries of contacts pertaining to corrective action or environmental matters with representatives of the local community, public interest groups or State government during the reporting period;

VIII.C.1.f. Changes in key project personnel during the reporting period; and

VIII.C.1.g. Summaries of all changes made in implementation during the reporting period.

VIII.C.2. Copies of other reports relating to or having bearing upon the corrective action work (e.g., inspection reports, drilling logs and laboratory data) shall be made available to the Administrative Authority upon request.

VIII.C.3. In addition to the written reports as required in Condition VIII.C.1 and VIII.C.2 above, at the request of the Administrative Authority, the Permittee shall provide status review through briefings with the Administrative Authority.

VIII.C.4. The determination and approval of remedy selections, schedules of submittals and minor changes to any corrective action workplans may be made by the Administrative Authority during the scoping meeting or status review briefings as described in Condition VIII.C.3.

VIII.D. SPECIFIC CONDITION – CONCEPTUAL SITE MODEL (CSM)

No later than 120 days after the scoping meeting, the Permittee shall submit to the Administrative Authority a CSM (along with the Performance Standards detailed in Condition VIII.A.2) or an update of any CSM submitted at the scoping meeting providing background information and the current conditions at the facility. The level of detail required for the CSM will be discussed during the scoping meeting. At a minimum, the CSM must address current site conditions, land use, known and/or potential constituent source(s), routes of constituent migration, exposure media (i.e., soil, surface waters, groundwater), exposure points, points of compliance and pathways, receptors and source media to be evaluated under the RECAP. The CSM must include a completed Figure 8 (LAC 33:I.Chapter 13). The Permittee may include completed investigations, existing data, or previously submitted documents in the CSM by reference. References must include the names, dates, and brief summaries of the documents.

If a CSM has been previously developed, the scoping meeting will also provide the opportunity for the Permittee and Administrative Authority to consider and identify all data gaps in the CSM. The initial CSM shall be considered the "base document" to be prepared

and updated by the facility as new information is gathered during investigations. The CSM shall be used by the facility to make decisions regarding risk management options, ecological risk, and monitored natural attenuation determinations (RECAP Section 2.16), or technical impracticability (TI) waiver determinations, when appropriate.

The Administrative Authority reserves the right to require revisions to the CSM based upon data resulting from ongoing investigations and activities. Revisions to the CSM may also be required for newly identified SWMUs or AOCs according to Condition VIII.L of this permit (See Appendix 1, Ongoing Corrective Action) and based on new information and information not previously considered by the Administrative Authority.

The CSM shall be divided into Profiles as detailed in Conditions VIII.D.1 through 6. If the Permittee chooses to use existing data and documents in the CSM, it may not be necessary to prepare the Profiles as detailed in Conditions VIII.D.1 through 6. However, the existing documents and data must provide sufficient information and detail which corresponds to the information required by the Facility, Land Use and Exposure, Physical, Release, Ecological, and Risk Management Profiles.

VIII.D.1. Facility Profile

The Permittee shall include in the CSM a Facility Profile which shall summarize the regional location, pertinent boundary features, general facility structures, process areas, and locations of solid waste management units or other potential sources of contaminant migration from the routine and systematic releases of hazardous constituents to the environment (e.g., truck or railcar loading/unloading areas). The Permittee shall also include historical features that may be potential release areas because of past management practices. The Facility Profile shall include:

VIII.D.1.a. Map(s) and other documents depicting the following information (all maps shall be consistent with the requirements set forth in LAC 33:V Chapter 5 and be of sufficient detail and accuracy to locate and report all current site conditions):

VIII.D.1.a.(1) General geographic location;

VIII.D.1.a.(2) Property lines with the owners of all adjacent property clearly indicated;

VIII.D.1.a.(3) Facility structures, process areas and maintenance areas;

VIII.D.1.a.(4) Any other potential release areas shall be delineated, such as railcar loading/unloading areas or any other AOI as described in RECAP Section 2.6; and

VIII.D.1.a.(5) Locations of historical features that may be potential release areas or any areas of past solid and hazardous waste generation, treatment, storage or disposal activities.

VIII.D.1.b. The Facility Profile shall also include a description of ownership and operation of the facility.

VIII.D.1.c. The Permittee shall provide pertinent information for those spills that have not been assessed and reported to the Administrative Authority during facility investigations, addressed by facility spill contingency plans, or previously remediated or deemed for no further action. The information must include at minimum, approximate dates or periods of past waste spills, identification of the materials spilled, the amount spilled, the location where spilled, and a description of the response actions conducted (local, state, federal, or private party response units), including any inspection reports or technical reports generated as a result of the response.

VIII.D.2. Land Use and Exposure Profile

The Permittee shall include in the CSM a Land Use and Exposure Profile which includes surrounding land uses (industrial and non-industrial, as described in RECAP Sections 2.9.1 and 2.9.2), resource use locations (water supply wells, surface water intakes, etc.), beneficial resource determinations (groundwater classifications as described in RECAP Section 2.10), natural resources (wetlands, etc.), sensitive subpopulation types and locations (schools, hospitals, nursing homes, day care centers, etc.), applicable exposure scenarios, and applicable exposure pathways identifying the specific sources, releases, migration mechanisms, exposure media, exposure routes and receptors. The Land Use and Exposure Profile shall include:

VIII.D.2.a. Map(s) and other documents depicting the following information (all maps shall be consistent with the requirements set forth in LAC 33:V Chapter 5 and be of sufficient detail and accuracy to locate and report all current site conditions):

VIII.D.2.a.(1) Surrounding land uses, resource use locations, and natural resources/wetlands;

VIII.D.2.a.(2) Locations of sensitive subpopulations; and

VIII.D.2.a.(3) An exposure pathway flowchart which outlines sources, migration pathways, exposure media and potential receptors as depicted in Figure 8 (CMS example) of the RECAP.

VIII.D.3. Physical Profile

The Permittee shall include in the CSM a Physical Profile which shall describe the factors that may affect releases, fate and transport, and receptors, including; topography, surface water features, geology, and hydrogeology. The Physical Profile shall include:

VIII.D.3.a. Map(s) and other documents depicting the following information (all maps shall be consistent with the requirements set forth in LAC 33:V.Chapter 5 and be of sufficient detail and accuracy to locate and report all current site conditions):

VIII.D.3.a.(1) Topographic maps with a contour interval of five (5) or ten (10) feet, a scale of one inch to 100 feet (1:100), including hills, gradients, and surface vegetation or pavement;

VIII.D.3.a.(2) Surface water features including routes of all drainage ditches, waterways, direction of flow, and how they migrate to other surface water bodies such as canals and lakes;

VIII.D.3.a.(3) Regional geology including faulting and recharge areas, as well as local geology depicting surface features such as soil types, outcrops, faulting, and other surface features;

VIII.D.3.a.(4) Subsurface geology including stratigraphy, continuity (locations of facies changes, if known), faulting and other characteristics;

VIII.D.3.a.(5) Maps with hydrogeologic information identifying water-bearing zones, hydrologic parameters such as transmissivity, and conductivity. Also locations and thicknesses of aquitards or impermeable strata; and

VIII.D.3.a.(6) Locations of soil borings and production and groundwater monitoring wells, including well log information, and construction of cross-sections which correlate substrata. Wells shall be clearly labeled with ground and top of casing elevations (can be applied as an attachment).

VIII.D.4. Release Profile

The Permittee shall include in the CSM a Release Profile which shall describe the known extent of contaminants in the environment, including sources, contaminants of concern (COC), areas of investigations, distribution and magnitude of known COCs with corresponding sampling locations, and results of fate and transport modeling depicting potential future extent/magnitude of COCs. The Release Profile shall include:

VIII.D.4.a. Map(s) and other documents depicting the following information (all maps shall be consistent with the requirements set forth in LAC 33:V. Chapter 5 and be of sufficient detail and accuracy to locate and report all current site conditions):

VIII.D.4.a.(1) Estimations of source concentrations, exposure concentrations and compliance concentrations for each affected media as defined in Section 2.8 of RECAP;

VIII.D.4.a.(2) Isopleth maps depicting lateral extent and concentrations of COCs;

VIII.D.4.a.(3) Results of fate and transport modeling showing potential exposure concentrations and locations; and

VIII.D.4.a.(4) Locations of potential sources including past or present waste units or disposal areas and all SWMUs/AOCs.

VIII.D.4.b. Table(s) depicting the following information for each SWMU/AOC, including but not limited to: location; type of unit/disposal/release area; design features; operating practices (past and present); period of operation; age of unit/disposal/release area; general physical condition; and method of closure.

VIII.D.4.c. Table(s) depicting the following waste/contaminant characteristics for those areas referenced in Condition VIII.D.4.b, including but not limited to: type of waste placed in the unit (hazardous classification, quantity, chemical composition), physical and chemical characteristics (physical form, description, temperature, pH, general chemical class, molecular weight, density, boiling point, viscosity, solubility in water, solubility in solvents, cohesiveness, vapor pressure); and migration and dispersal characteristics of the waste (sorption coefficients, biodegradability, photodegradation rates, hydrolysis rates, chemical transformations).

VIII.D.5. Ecological Profile

The Permittee shall include in the CSM an Ecological Profile that shall describe the physical relationship between the developed and undeveloped portions of the facility, the use and level of disturbance of the undeveloped property, and the type of ecological receptors present in relation to completed exposure pathways. When compiling data for the Ecological Profile, current, as well as, future impacts to receptors and/or their habitats shall be considered. The Ecological Profile shall include:

VIII.D.5.a. A history and description of the developed property on the facility, including structures, process areas, waste management units, and property boundaries;

VIII.D.5.b. A history and description of the undeveloped property, including habitat type (wetland, grassy area, forest, ponds, etc.). Include a description of the primary use, degree and nature of any disturbance, along with proximity to drainage ditches, waterways and landfill areas;

VIII.D.5.c. A description of the site receptors in relation to habitat type, including endangered or protected species, mammals, birds, fish, etc.;

VIII.D.5.d. A description of the relationship between release areas and habitat areas, specifically relating chemicals of potential ecological concern (COEC) to ecological receptors;

VIII.D.5.e. An ecological checklist as described in Section 7.0 of RECAP. An ecological checklist (presented in Appendix C, Form 18 of the RECAP) shall be used to determine if a tier 1 (screening level) Ecological Risk Assessment (ERA) is warranted.

VIII.D.6. Risk Management Profile

The Permittee shall include in the CSM a Risk Management Profile that shall describe how each AOI at the facility will be managed for the protection of human health and the environment. The Risk Management Profile will serve as documentation of the results of the site ranking system (described in Section 2.2 of RECAP). The Risk Management Profile will also document the criteria and verify that the SO, MO-1, MO-2 or MO-3 is appropriate for application at each AOI. The Risk Management Profile shall include:

VIII.D.6.a. A table for tracking the management options for each AOI, and the determination made, whether an AOI is deemed for no further action at this time (NFA-ATT) or is going to use either the SO, MO-1, MO-2 or MO-3 management option.

VIII.D.6.b. A list of identified site-wide data gaps for further investigation.

VIII.D.6.c. Documentation of all interim measures which have been or are being undertaken at the facility, including under State or Federal compliance orders, other than those specified in the Permit. This documentation shall include the objectives of the interim measures and how the measure is mitigating a potential threat to human health or the environment and/or is consistent with and integrated into requirements for a long term remedial solution.

VIII.E. INTERIM MEASURES

VIII.E.1. If at any time during the term of this Permit, the Administrative Authority determines that a release or potential release of hazardous constituents from a SWMU/AOC poses a threat to human health and the environment, the Administrative

Authority may require interim measures. The Administrative Authority shall determine the specific measure(s) or require the Permittee to propose a measure(s). The interim measure(s) may include a permit modification, a schedule for implementation, and an Interim Measures Workplan. The Administrative Authority may modify this Permit according to LAC 33:V.321 to incorporate interim measures into the Permit. However, depending upon the nature of the interim measures, a permit modification may not be required.

VIII.E.2. The Permittee may propose interim measures at any time by submittal of an Interim Measures Workplan subject to the approval of the Administrative Authority.

VIII.E.3. The Administrative Authority shall notify the Permittee in writing of the requirement to perform interim measures and may require the submittal of an Interim Measures Workplan. The following factors will be considered by the Administrative Authority in determining the need for interim measures and the need for permit modification:

VIII.E.3.a. Time required to develop and implement a final remedy;

VIII.E.3.b. Actual and potential exposure to human and environmental receptors;

VIII.E.3.c. Actual and potential contamination of drinking water supplies and sensitive ecosystems;

VIII.E.3.d. The potential for further degradation of the medium in the absence of interim measures;

VIII.E.3.e. Presence of hazardous wastes in containers that may pose a threat of release;

VIII.E.3.f. Presence and concentration of hazardous waste including hazardous constituents in soil that has the potential to migrate to groundwater or surface water;

VIII.E.3.g. Weather conditions that may affect the current levels of contamination;

VIII.E.3.h. Risks of fire, explosion, or accident; and

VIII.E.3.i. Other situations that may pose threats to human health and the environment.

VIII.E.5. Upon approval of the Interim Measures Workplan and completion of the interim measure(s) implementation, the Permittee will submit a report to the Administrative Authority describing the completed work.

VIII.E.6. At anytime during or after the interim measure(s), including the issuance of an NFA-ATT, the Administrative Authority may require the Permittee to submit the SWMUs/AOCs for further corrective action.

VIII.F. CAS (CORRECTIVE ACTION STRATEGY) INVESTIGATION WORKPLAN

VIII.F.1. The CAS Investigation Workplan that describes site investigation activities for corrective action shall be submitted to the Administrative Authority within 180 days after the scoping meeting between the Permittee and the Administrative Authority. The CAS Investigation Workplan must address releases of hazardous waste or hazardous constituents to all media, unless otherwise indicated, for those SWMUs/AOCs listed in Appendix 1, Table 1. The focus of the site investigation phase for corrective action is to collect data to fill in data gaps identified in the CSM. The corrective action investigations may be conducted in phases if warranted by site conditions, contingent upon approval by the Administrative Authority.

VIII.F.1.a. The CAS Investigation Workplan shall describe the management options (MO) for each AOI/release area, data quality objectives for achieving each management option, and proposals for release characterizations (sampling and analysis/quality assurance plans) to support the data quality objectives (DQOs). (DQOs are determined based on the end use of the data to be collected, and the DQO development process should be integrated into project planning and refined throughout the CAS implementation. DQOs shall be used to 1) ensure that environmental data are scientifically valid, defensible, and of an appropriate level of quality given the intended use, and 2) expedite site investigations. The CAS Investigation Workplan is required to have DQOs that are developed to support the performance standard for each release.) The CAS Investigation Workplan shall detail all proposed activities and procedures to be conducted at the facility, the schedule for implementing and completing such investigations, the qualifications of personnel performing or directing the investigations, including contractor personnel, and the overall management of the site investigations. The scope of work for the site investigation can be found in RECAP Appendix B.

VIII.F.1.b. The CAS Investigation Workplan shall describe sampling, data collection quality assurance, data management procedures (including formats for documenting and tracking data and other results of investigations) and health and safety procedures.

VIII.F.1.c. Development of the CAS Investigation Workplan and reporting of data shall be consistent with the latest version of the following EPA and State guidance documents or the equivalent thereof:

VIII.F.1.c.(1) Guidance for the Data Quality Assessment, Practical Methods for Data Analysis. QA97 Version EPA QA/G-9. January 1998;

VIII.F.1.c.(2) Guidance for the Data Quality Objectives Process. EPA QA/G-4. September 1994;

VIII.F.1.c.(3) Data Quality Objectives Remedial Response Activities. EPA/540/G87-003. March 1987;

VIII.F.1.c.(4) Guidance on Quality Assurance Project Plans. EPA QA/G-5. February 1998;

VIII.F.1.c.(5) Interim EPA Data Requirements for Quality Assurance Project Plans. EPA Region 6, Office of Quality Assurance. May 1994;

VIII.F.1.c.(6) 29 CFR 1910.120 (b) for the elements to Health and Safety plans;

VIII.F.1.c.(7) RCRA Groundwater Monitoring: Draft Technical Guidance EPA/530-R-93-001 November 1992;

VIII.F.1.c.(8) Test Methods for Evaluating Solid Waste, Physical/Chemical Methods; SW-846, 3rd Edition. November 1992, with revisions;

VIII.F.1.c.(9) The LDEQ Handbook - **Construction of Geotechnical Boreholes and Groundwater Monitoring Systems," prepared by the LDEQ and the Louisiana Department of Transportation and Development.** This document is printed by and available from the Louisiana Department of Transportation and Development, Water Resources Section, P. O. Box 94245, Baton Rouge, Louisiana 70804-9245; and

VIII.F.1.c.(10) The LAC 33:I.Chapter 13 and Louisiana Department of Environmental Quality Risk Evaluation/Corrective Action Program (RECAP).

VIII.F.2. After the Permittee submits the CAS Investigation Workplan; the Administrative Authority will approve, disapprove, or otherwise modify the CAS Investigation Workplan in writing. All approved workplans become enforceable components of this Permit.

In event of disapproval (in whole or in part) of the workplan, the Administrative Authority shall specify deficiencies in writing. The Permittee shall modify the CAS Investigation Workplan to correct these within the time frame specified in the notification of disapproval by the Administrative Authority. The modified workplan shall be submitted in writing to the Administrative Authority for review. Should the Permittee take exception to all or part of the disapproval, the Permittee shall submit a written statement of the ground for the exception within fourteen (14) days of receipt of the disapproval.

VIII.F.3. The Administrative Authority shall review for approval, as part of the CAS Investigation Workplan or as a new workplan, any plans developed pursuant to Condition VIII.L addressing further investigations of newly-identified SWMUs/AOCs, or Condition VIII.M addressing new releases from previously-identified SWMUs/AOCs.

VIII.G. IMPLEMENTATION OF SITE INVESTIGATION ACTIVITIES UNDER CAS

No later than fourteen (14) days after the Permittee has received written approval from the Administrative Authority for the CAS Investigation Workplan, the Permittee shall implement the site investigation activities according to the schedules and in accordance with the approved CAS Investigation Workplan and the following:

VIII.G.1. The Permittee shall notify the Administrative Authority at least 10 working days prior to any field sampling, field-testing, or field monitoring activity required by this Permit to give LDEQ personnel the opportunity to observe investigation procedures and/or split samples.

VIII.G.2. Deviations from the approved CAS Investigation Workplan, which are necessary during implementation, must be approved by the Administrative Authority and fully documented and described in the progress reports (Condition VIII.C), RECAP Report (Condition VIII.H) and the final Risk Management Plan (Condition VIII.J).

VIII.H. RECAP REPORT

Within ninety (90) days after completion of the site investigation the Permittee shall submit a RECAP Report to the Administrative Authority for approval. The RECAP Report shall document the results of the site investigation activities, and the evaluation of the impacts from releases. The Administrative Authority will review and evaluate the report and provide the Permittee with written notification of the report's approval or a notice of deficiency. If the Administrative Authority determines the RECAP Report does not fully meet the objectives stated in the CAS Investigation Workplan (Permit Condition VIII.F), the Administrative Authority shall notify the Permittee in writing of the report's deficiencies, and specify a due date for submittal of a revised Final Report to the Administrative Authority.

VIII.H.1. The Permittee shall screen site-specific data using the appropriate RECAP standard (RS) for each AOI (depending on the MO), evaluate impacts from releases with exposure scenario evaluations, and update the Risk Management Profile of the CSM.

VIII.H.2. The report shall include, but not be limited to, the following:

VIII.H.2.a. Documentation of site investigation activities and results;

VIII.H.2.b. Evaluation of exposure scenarios to document impacts from releases;

VIII.H.2.c. Deviations from the CAS Investigation Workplan;

VIII.H.2.d. Results of screening activities using RECAP standards (RS), including SO, MO-1, MO-2, or MO-3 RS for each media;

VIII.H.2.e. The revised CSM with updated profiles which incorporate investigation and screening results; and

VIII.H.2.f. Proposed revisions to performance standards based on new information (e.g., change in land use, difference in expected receptors and/or exposure, or other differences in site conditions), if warranted.

VIII.I. REMEDIAL ALTERNATIVES STUDY

Upon completion and approval of the RECAP Report, the Permittee shall proceed with the evaluation of remedial alternatives to complete corrective action for each AOI according to the performance standards described in Condition VIII.A.2. The remedial alternatives shall be submitted to the Administrative Authority in the Remedial Alternatives Study (RAS) within ninety (90) days of the Administrative Authority's approval of the RECAP Report. In the Remedial Alternatives Study, the Permittee shall identify and evaluate various potential remedies that would meet the performance-based corrective action objectives and propose one or more specific remedies based on an evaluation of applicable data and available corrective action technologies. The RAS shall be prepared in a manner that addresses the extent and nature of the contamination at the facility.

VIII.I.1. The Permittee shall evaluate remedies for each AOI that shall:

VIII.I.1.a. attain compliance with corrective action objectives for releases of hazardous waste and/or hazardous constituents, as established in the Conceptual Site Model or in later investigations approved by the Administrative Authority;

VIII.I.1.b. control sources of releases;

VIII.I.1.c. meet acceptable waste management requirements;

VIII.I.1.d. protect human health and the environment; and

VIII.I.1.e. meet applicable statutory and regulatory requirements (as noted in Condition VIII.A.2.b).

VIII.I.2. The Permittee shall evaluate the use of presumptive remedies and innovative technologies to achieve the appropriate remedial performance standards for each AOI.

VIII.I.3. The Permittee shall review the current interim measures/ stabilization activities to evaluate if these measures meet all the criteria for final remedy.

VIII.I.4. If under certain site-specific conditions, or when it is not technically or economically feasible to attain the corrective action objectives, the Permittee may propose to use institutional controls to supplement treatment or containment-based remedial actions upon approval of the Administrative Authority (Section 2.15 of RECAP).

VIII.I.5. The RAS shall at a minimum include:

VIII.I.5.a. An evaluation of the performance reliability, ease of implementation, and the potential impacts of the potential remedies;

VIII.I.5.b. An assessment of the effectiveness of potential remedies in achieving adequate control of sources and meeting remedial performance standards;

VIII.I.5.d. An assessment of the costs of implementation for potential remedies;

VIII.I.5.e. An assessment of the time required to begin and complete the remedy;

VIII.I.5.f. An explanation of the rationale for the remedy proposed for each AOI or group of AOIs; and

VIII.I.5.g. An assessment of institutional requirements (e.g., state permit requirements that may impact remedy implementation).

VIII.I.6. The Administrative Authority will review and evaluate the RAS and provide the Permittee with written notification of the study's approval or a notice of deficiency. If the Administrative Authority determines the RAS does not fully meet the requirements detailed in Conditions VIII.I.1 through VIII.I.5, the Administrative Authority shall notify the Permittee in writing of the RAS's deficiencies, and specify a due date for submittal of a revised RAS to the Administrative Authority. In addition, the Administrative Authority may require the Permittee to evaluate additional remedies or particular elements of one or more proposed remedies.

VIII.J. RISK MANAGEMENT PLAN

Within ninety (90) days of the Administrative Authority's approval of the RAS, the remedy/remedies proposed for selection shall be documented and submitted in the Risk Management Plan. The Permittee shall propose corrective action remedies in accordance with Chapter IV of the RCRA Corrective Action Plan (Final), May 1994, OSWER Directive 9902.3-2A or as directed by the Administrative Authority.

VIII.J.1. The Risk Management Plan shall at a minimum include:

VIII.J.1.a. A summary of the remedial alternatives for each AOI and the rationale used for remedy selection;

VIII.J.1.b. The final CSM with proposed remedies, including locations of AOIs addressed by a risk management activity, COC concentrations that represent the long-term fate and transport of residual COCs and the exposure pathways affected by the risk management activity;

VIII.J.1.c. Cost estimates and implementation schedules for proposed final remedies;

VIII.J.1.d. Proposed remedy design and implementation precautions, including special technical problems, additional engineering data required, permits and regulatory requirements, property access, easements and right-of-way requirements, special health and safety requirements, and community relations activities;

VIII.J.1.e. Remedy performance criteria and monitoring:

The Permittee shall identify specific criteria (such as land use changes, fate and transport model verification and constructed remedy performance) that will be evaluated to demonstrate that the risk management activity implemented will remain protective. A schedule for periodic performance review (such as monitoring data summaries, including graphical and statistical analyses) shall be established to demonstrate that the implemented activities are consistently achieving and maintaining desired results. Further, a mechanism shall be established to re-evaluate risk management activities in the event the implemented action does not achieve and maintain the performance standards;

VIII.J.1.f. Contingency plans; and

VIII.J.1.g. Description and schedules for performance reviews.

VIII.J.2. After the Permittee submits the Risk Management Plan, the Administrative Authority will review and evaluate the plan and subsequently either inform the Permittee in writing that the plan is acceptable for public review or issue a notice of deficiency.

VIII.J.3. If the Administrative Authority determines the Risk Management Plan does not fully meet the remedial objectives, the Administrative Authority shall notify the Permittee in writing of the plan's deficiencies and specify a due date for submittal of a revised Final Risk Management Plan. In addition, the Administrative Authority may require the Permittee to evaluate additional remedies or particular elements of one or more proposed remedies.

VIII.J.4. After the Administrative Authority has determined the Risk Management Plan is acceptable for public review, the Administrative Authority shall inform the Permittee in writing and instruct the Permittee to submit the plan as a Class 3 permit modification request in accordance with the requirements of LAC 33:V.321.C.3.

VIII.J.5. After conclusion of a sixty (60) day comment period, the Administrative Authority will either grant or deny the Class 3 permit modification request. In addition the Administrative Authority must consider and respond to all significant comments received during the sixty (60) day comment period.

VIII.J.6. If the Class 3 Modification request is granted, the Administrative Authority shall prepare a draft permit incorporating the proposed changes in accordance with LAC 33:V.703.C and solicit public comment on the draft permit modification according to Condition VIII.N.3 of this permit.

VIII.J.7. If, after considering all public comments, the Administrative Authority determines that the Risk Management Plan is adequate and complete, the Administrative Authority will issue a public notice for final approval the Class 3 permit modification. The resultant modified permit will include schedules for remedy implementation as well as financial assurance provisions as required by Condition VIII.A.5 of this permit.

VIII.K. DETERMINATION OF NO FURTHER ACTION

VIII.K.1. NFA-ATT DETERMINATIONS FOR SPECIFIC SWMUs/AOCs

VIII.K.1.a. Based on the results of the site investigations, screening, risk evaluations and risk management activities, the Permittee may request a NFA-ATT determination for a specific SWMU/AOC by submittal of a Class 1[1] permit modification ([1] requiring Administrative Authority approval) request under LAC 33:V.321.C.1. The NFA-ATT request must contain information demonstrating that there are no releases of hazardous constituents from a particular SWMU/AOC that pose a threat to human health and/or the environment.

The basis for the determination of NFA-ATT shall follow the guidelines as described in the RECAP (Section 1.2.1 of RECAP) for each AOI, depending on the MO used.

VIII.K.1.b. If, based upon review of the Permittee's request for a permit modification, the results of the site investigations, and other information the Administrative Authority determines that releases or suspected releases from an individual SWMU/AOC which were investigated either are non-existent or do not pose a threat to human health and/or the environment, the Administrative Authority may grant the requested modification.

VIII.K.1.c. In accordance with LAC 33:V.321.C.1.a.ii, the Permittee must notify the facility mailing list within ninety (90) days of the Administrative Authority's approval of the Class 1[1] permit modification request.

VIII.K.2. FACILITY-WIDE NFA-ATT DETERMINATION

VIII.K.2.a. Upon the completion of all activities specified in the Risk Management Plan and after all SWMUs and AOCs at the facility have been remediated according to the standards dictated by the selected RECAP MO, the Permittee shall submit a summary report supporting a determination of NFA-ATT on a facility-wide basis.

VIII.K.2.b. The summary report must include a historical narrative for each SWMU/AOC at the site that includes a summary of the investigation, sampling & analysis, remedial, and confirmatory sampling activities leading to the NFA-ATT request. The basis for the determination of NFA-ATT shall follow the guidelines as described in the RECAP (Section 1.2.1 of RECAP) for each AOI, depending on the MO used. The facility-wide NFA-ATT determination must consider any newly-identified SWMUs/AOCs discovered after submittal of the Risk Management Plan.

VIII.K.2.c. The Administrative Authority will review and evaluate the summary report and subsequently either inform the Permittee in writing that the report is acceptable for public review or issue a notice of deficiency.

VIII.K.2.d. If the Administrative Authority determines the summary report does not fully demonstrate that all remedial objectives have been satisfied, the Administrative Authority shall notify the Permittee in writing of the summary report's deficiencies and specify a due date for submittal of a revised summary report.

VIII.K.2.e. After the Administrative Authority has determined the facility-wide NFA-ATT summary report is acceptable for public review, the Administrative Authority shall inform the Permittee in writing and instruct the Permittee to submit the summary report as a Class 3 permit modification request in accordance with the requirements of LAC 33:V.321.C.3.

VIII.K.2.f. After conclusion of a sixty (60) day comment period, the Administrative Authority will either grant or deny the Class 3 permit modification request. In addition the Administrative Authority must consider and respond to all significant comments received during the sixty (60) day comment period.

VIII.K.2.g. If, based upon review of the Permittee's Class 3 permit modification request, the results of the site investigations, confirmatory sampling, and other pertinent information, the Administrative Authority determines that all SWMUs and AOCs have been remediated to the selected MO and no further action at the facility is warranted, the Administrative Authority will grant the modification request.

VIII.K.2.h. If the Class 3 Modification request is granted, the Administrative Authority shall prepare a draft permit incorporating the proposed changes in accordance with LAC 33:V.703.C and solicit public comment on the draft permit modification according to Condition VIII.N.4 of this permit.

VIII.K.2.i. If, after considering all public comments, the Administrative Authority determines that all activities specified in the Risk Management Plan have been completed and that all SWMUs and AOCs have been remediated to the selected MO, the Class 3 permit modification for facility-wide NFA-ATT will receive final approval. The CAS permit conditions will remain a part of the modified permit in the event that the remedial actions taken fail to maintain the established performance standard and to address any SWMUs/AOCs discovered at a later date.

VIII.K.3. CONTINUED MONITORING

If necessary to protect human health and/or the environment, a determination of NFA-ATT shall not preclude the Administrative Authority from requiring continued monitoring of air, soil, groundwater, or surface water, when site-specific circumstances indicate that releases of hazardous waste or hazardous constituents are likely to occur.

VIII.K.4. ADDITIONAL INVESTIGATIONS

A determination of NFA-ATT shall not preclude the Administrative Authority from requiring further investigations, studies, or remediation at a later date, if new information or subsequent analysis indicates a release or likelihood of a release from a SWMU/AOC at the facility that is likely to pose a threat to human health and/or the environment. In such a case, the Administrative Authority shall initiate a modification to the Permit according to LAC 33:V.321.

VIII.L. NOTIFICATION REQUIREMENTS FOR AND ASSESSMENT OF NEWLY-IDENTIFIED SWMUs AND POTENTIAL AOCs

VIII.L.1. The Permittee shall notify the Administrative Authority, in writing, of any newly-identified SWMUs and potential AOCs (i.e., a unit or area not specifically identified during previous corrective action assessments, RFA, etc.), discovered in the course of groundwater monitoring, field investigations, environmental audits, or other means, no later than thirty (30) days after discovery. The Permittee shall also notify the Administrative Authority of any newly-constructed land-based SWMUs

(including but not limited to, surface impoundments, waste piles, landfills, land treatment units) and newly-constructed SWMUs where any release of hazardous constituents may be difficult to identify (e.g., underground storage tanks) no later than thirty (30) days after construction. The notification shall include the following items, to the extent available:

VIII.L.1.a. The location of the newly-identified SWMU or potential AOC on the topographic map required under LAC 33:V.517.B. Indicate all existing units (in relation to other SWMUs/AOCs);

VIII.L.1.b. The type and function of the unit;

VIII.L.1.c. The general dimensions, capacities, and structural description of the unit (supply any available drawings);

VIII.L.1.d. The period during which the unit was operated;

VIII.L.1.e. The specifics, to the extent available, on all wastes that have been or are being managed at the SWMU or potential AOC; and

VIII.L.1.f. Results of any sampling and analysis required for the purpose of determining whether releases of hazardous waste including hazardous constituents have occurred, are occurring, or are likely to occur from the SWMU/AOC.

VIII.L.2. Based on the information provided in the notification, the Administrative Authority will determine whether or not the area is a newly-identified SWMU or AOC. If the area is determined to be a newly-identified SWMU or AOC, the Administrative Authority will inform the Permittee in writing and request that the Permittee submit a Class 1[1] permit modification request under LAC 33:V.321.C.1 to add the newly-identified SWMU/AOC to Appendix 1, Table 1 of this permit.

Further, the Administrative Authority will determine the need for further investigations or corrective measures at any newly identified SWMU or AOC. If the Administrative Authority determines that such investigations are needed, the Administrative Authority may require the Permittee to prepare a plan for such investigations. The plan for investigation of SWMU or AOC will be reviewed for approval as part of the current CAS Investigation Workplan or a new CAS Investigation Workplan. The results of the investigation of any newly-discovered SWMU/AOC shall be incorporated into the CSM.

VIII.M. NOTIFICATION REQUIREMENTS FOR NEWLY-DISCOVERED RELEASES AT A SWMU OR AOC

The Permittee shall notify the Administrative Authority of any release(s) from a SWMU or AOC of hazardous waste or hazardous constituents discovered during the course of groundwater monitoring, field investigation, environmental auditing, or other means. The notification must be in accordance with the procedures specified in Conditions II.E.16 through II.E.20 of this permit and based upon the nature, extent, and severity of the release. Such newly-discovered releases may be from newly-identified SWMUs or AOCs, newly-constructed SWMUs, or from SWMUs or AOCs for which, based on the findings of the CSM, completed RECAP Report, or investigation of an AOC, the Administrative Authority had previously determined no further investigation was necessary. The notification shall include information concerning actual and/or potential impacts beyond the facility boundary and on human health and the environment, if available at the time of the notification.

The Administrative Authority may require further investigation and/or interim measures for the newly-identified release(s), and may require the Permittee to prepare a plan for the investigation and/or interim measure. The plan will be reviewed for approval as part of the CAS Investigation Workplan or a new CAS Investigation Workplan. The Permit will be modified to incorporate the investigation, according to the Class 1[1] permit modification ([1] requiring Administrative Authority approval) procedures under LAC 33:V.321. The results of the investigation of any newly-identified release(s) shall be incorporated into the CSM.

VIII.N. PUBLIC PARTICIPATION REQUIREMENTS

Public participation is an essential element in the implementation of any corrective action program at the facility. The CAS promotes the early and continued involvement of stakeholders in site remediation activity during permit issuance, renewal, or modification. The public is invited to review and comment on the corrective action requirements contained in any draft permitting decisions or draft permit modification documents and the associated plans and reports submitted by the Permittee. The Administrative Authority reserves the right to require more extensive public participation requirements based upon site-specific conditions and other relevant factors (e.g., compliance history, potential offsite impact, community interest, etc.). At a minimum, the public participation requirements shall include the following.

VIII.N.1. NFA-ATT Determinations for Specific SWMUs/AOCs

Based on the results of the site investigations, screening, risk evaluations and risk management activities, the Permittee may request a NFA-ATT determination for a specific SWMU/AOC by submittal of a Class 1[1] permit modification request ([1] requiring Administrative Authority approval) under LAC 33:V.321.C.1. The Permittee must notify the facility mailing list within 90 days of the Administrative Authority's approval of the Class 1[1] permit modification request, in accordance with LAC 33:V.321.C.1.a.ii and Condition VIII.K.1.c of this permit.

VIII.N.2. Draft Permitting Decision

The public may review and comment on the terms and conditions of the CAS during the public notice and comment period of the draft permitting decision. The Administrative Authority shall issue public notice upon preparation of the draft permitting decision in accordance with LAC 33:V.715. During the forty-five (45) day public comment period, the Administrative Authority will accept public comments on the draft permitting decision. At the end of the public comment period, the Administrative Authority will consider and address all public comments and make any necessary revisions to the draft permitting decision. After addressing all public comments, the Administrative Authority will issue a public notice for issuance of the final permitting decision. The final permitting decision will include a "Responsiveness Summary" detailing all comments received on the draft permitting decision and the actions taken (if necessary) to correct the draft before issuance of the final permitting decision.

VIII.N.3. Final Remedy Selection

The public may review and comment on the terms and conditions of the Risk Management Plan as described in Conditions VIII.J.4 through VIII.J.7 of this permit. If after addressing all public comments the Administrative Authority determines that the Risk Management Plan is satisfactory, the Administrative Authority will prepare a draft permit modification document in accordance with LAC 33:V.703.C.

The draft permit modification document will include a "Basis of Decision". The "Basis of Decision" will identify the proposed remedy for corrective action at the site and the reasons for its selection, describe all other remedies that were considered, and solicit for public review and comments on the Risk Management Plan included in the draft permit modification document.

After addressing all public comments, the Administrative Authority will issue a public notice for issuance of the final permit modification. The final permit modification will include a "Responsiveness Summary" detailing all comments received on the draft permit modification and the actions taken (if necessary) to correct the draft before issuance of the final permit modification.

VIII.N.4. Facility-Wide NFA-ATT

Upon the completion of all activities specified in the Risk Management Plan and after all facility remedial objectives have been met, the Permittee may submit a summary report for a determination of NFA-ATT on a facility-wide basis in accordance with Condition VIII.K.2 of this permit. The public may review and comment on the summary report as described in Condition VIII.K.2.b. If after addressing all public comments the Administrative Authority determines that all SWMUs and AOCs have been remediated to the selected MO and no further action at the facility is warranted, the Administrative Authority will prepare a draft permit modification document in accordance with LAC 33:V.703.C.

The draft permit modification document will include a "Basis of Decision". The "Basis of Decision" will provide a summary detailing contamination sources, site investigations, the MO selected for the facility, facility remedial standards, remedial actions, and sampling results demonstrating that the facility remedial standards have been achieved.

After addressing all public comments, the Administrative Authority will issue a public notice for issuance of the final permit modification. The final permit modification will include a "Responsiveness Summary" detailing all comments received on the draft permit modification and the actions taken (if necessary) to correct the draft before issuance of the final permit modification.

Table 1: Corrective Action Strategy Notification and Reporting Requirements

Below is a summary of the major notifications and reports that may be required by the Administrative Authority under the Corrective Action Strategy of this Permit in the event of releases requiring RCRA corrective action. The Administrative Authority will notify the Permittee of the notification and reporting requirements during the scoping meeting or another applicable stage of the corrective action process.

ACTION	DUE DATE
Submit Notice of Intent to request use of the CAS to the Administrative Authority for review and comment (Condition VIII.B.1)	Within sixty (60) days of the effective date of this permit (if facility corrective action is required)
CAS Scoping Meeting held between facility and Administrative Authority (Condition VIII.B.2)	Within sixty (60) days of submittal of the Notice of Intent
Submit Progress Reports on all activities to the Administrative Authority (Condition VIII.C.1)	Schedule to be determined by the Administrative Authority on a case-by-case basis
Make available other reports relating to corrective action to the Administrative Authority (Condition VIII.C.2)	Upon request of the Administrative Authority
Provide briefings to the Administrative Authority (Condition VIII.C.3)	As necessary and upon request by the Administrative Authority
Submit Conceptual Site Model (CSM) (Condition VIII.D) and facility Performance Standards (Condition VIII.A.2) to the Administrative Authority	Within one-hundred and twenty (120) days after the scoping meeting
Perform Interim Measures (Condition VIII.E)	As determined by the Administrative Authority on a case by case basis
Submit Corrective Action Strategy (CAS) Workplan for the facility investigation to the Administrative Authority (Condition VIII.F)	Within one-hundred and eighty (180) days after the CAS Scoping Meeting
Implement site investigation activities under CAS Investigation Workplan according to approved schedule (Condition VIII.G)	Within fourteen (14) days of receipt of approval by the Administrative Authority

Submit RECAP Report to the Administrative Authority (Condition VIII.H)	Within ninety (90) days of completion of the site investigation
Submittal of Remedial Alternatives Study (RAS) to the Administrative Authority (Condition VIII.I)	Within ninety (90) days of completion of approval of the RECAP Report by the Administrative Authority
Submit Risk Management Plan to the Administrative Authority (Condition VIII.J)	Within ninety (90) days of approval of the RAS by the Administrative Authority
Submit requests for unit specific and facility-wide NFA-ATT determinations to the Administrative Authority (Condition VIII.K)	As necessary
Notification of newly-identified SWMUs and potential AOCs (Condition VIII.L)	Thirty (30) days after discovery
Notification of newly-discovered releases (Condition VIII.M)	According to the requirements of Conditions II.E.16 through II.E.20 of this permit

APPENDIX 1: SUMMARY OF CORRECTIVE ACTION ACTIVITIES

The intent of Appendix 1 is to provide an overview of the history and current status of the corrective action process at the site at the time of issuance of the final permit and may not necessarily provide a definitive regulatory determination for a particular SWMU or AOC. The classification of an individual SWMU or AOC is subject to change by the Administrative Authority based on future geological/hydrogeological conditions and future available information available to the Administrative Authority.

A RCRA Facility Assessment (RFA), dated August 1997, was prepared for EPA Region VI by A.T. Kearney, Inc. The RFA identified 42 SWMUs and 4 AOCs. The following SWMUs required investigation under the RCRA Facility Investigation (RFI) Workplan approved by EPA in correspondence dated April 15, 1994:

- SWMU #1 – Inactive Landfill (now Remediated Landfill and Drum Storage area)
- SWMU #3 – West Pond
- SWMU #4 – Ketazine Holding Pond
- SWMU #5 – Emergency Holding Pond
- SWMU #6 – Equalization Basin
- SWMU #7 – Aeration Basin A
- SWMU #8 – Aeration Basin B
- SWMU #11 – North Pond
- SWMU #13 – South Pond
- SWMU# 17 – Lime Ditch
- SWMU #18 – TDI Plant Incinerator
- SWMU #22 – PACE Drum Storage Area
- SWMU #27 – TDI/Phos Drum Storage Area
- SWMU #30 – Waste Oil Drum Storage Area
- SWMU #32 – Fire Training Area
- SWMU#39 – Decontamination Pad
- SWMU #41 – Facility Process Sewers
- SWMU A – Low pH Area*
- SWMU B – Aniline Area*

*EPA designated SWMU A and B to be added to the RFI subsequent to Olin's submittal of the RFI Preliminary Report.

Prior to the RFI, a July 31, 1986 Settlement Agreement between LDEQ and Olin required Olin to conduct assessments to evaluate the impacts of the following:

- North and South Ponds
- Lime Ditch
- Inactive Landfill and Drum Storage Area
- Wastewater Treatment Area
- Low pH Area

The Settlement Agreement required the excavation of the Inactive Landfill site and disposal of the excavated material into a secure landfill constructed in accordance with RCRA guidelines. Closure of the Inactive Landfill was completed in July 1990 with the installation of eight (8) post-closure monitoring wells. This area is now referred to as the "Remediated Landfill and Drum Storage Area", while the landfill receiving the excavated material is referred to as the "Settlement Agreement Landfill". The post-closure monitoring of the "Remediated Landfill and Drum Storage Area" and the "Settlement Agreement Landfill" are governed by the Settlement Agreement, which serves as the enforceable document.

In November 1994, Olin submitted a RFI Phase I Interim Report designating the following SWMUs as warranting further assessment: SWMU #30 – Waste Oil Drum Storage Area and SWMU #41 – Facility Process Sewer (for the TDI Plant, TDA Plant, and the T-101/RF-230 Plant). The RFI Phase I Interim Report designated the rest of the SWMUs requiring investigation under the RFI as requiring no further action. In a letter dated September 30, 1996, LDEQ approved Olin's RFI Phase I Report.

The following SWMUs have been either deemed NFA-ATT, were transferred to another owner/operator, or completed post-closure monitoring associated with their respective solid waste permit:

- SWMU #3 West Pond (4/18/06 LDEQ approval to plug and abandon monitoring wells)
- SWMU #4 Ketazine Holding Pond (4/18/06 LDEQ approval to plug and abandon monitoring wells)
- SWMU #5 Emergency Holding Pond (4/18/90 verified closed under solid waste order to close OC-0072)
- SWMU #6 Equalization Basin (5/1/91 verified closed under solid waste permit P-0230)
- SWMU #7 Aeration Basin A (8/8/96 verified closed under solid waste permit P-0230)
- SWMU #8 Aeration Basin B (8/8/96 verified closed under solid waste permit P-0230)
- SWMU #11 North Pond (10/13/95 verified closed under solid waste permit P-0229)
- SWMU #13 South Pond (10/13/95 verified closed under solid waste permit P-0229)
- SWMU #18 TDI Plant Incinerator (01/30/96 LDEQ approval of RFI Phase I)
- SWMU #22 Pace Drum Storage Area (01/30/96 LDEQ approval of RFI Phase I)
- SWMU #27 TDI/Phos Drum Storage Area (transferred to Arco Chemical as an active RCRA unit in 1997; the unit was subsequently clean closed by Lyondell Chemical in April 2007)
- SWMU #39 Decontamination Pad (01/30/96 LDEQ approval of RFI Phase I)

The following SWMUs remain in the corrective action process:

- SWMU #17 Lime Ditch
- SWMU #30 Waste Oil Drum Storage Area
- SWMU #41 Facility Process Sewer (Sections)
- SWMU A Low pH Area
- SWMU B Aniline Area
- East End SWMU (this SWMU was added to the corrective action process by virtue of the December 1994 Preliminary Assessment Report)

SWMU #1 referred to in the RFI as the Inactive Landfill is now known as the Remediated Landfill and Drum Storage Area. This SWMU contains waste left in place and must complete thirty (30) years of post-closure care and monitoring in accordance with the 1986 Settlement Agreement between Olin and LDEQ. Material excavated from the Inactive Landfill (or Remediated Landfill and Drum Storage Area) was placed in the Settlement Agreement Landfill. The Settlement Agreement Landfill must also complete thirty (30) years of post-closure care and monitoring in accordance with the 1986 Settlement Agreement between Olin and LDEQ.

SWMU #32 (Fire Training Area), although not currently being addressed in the corrective action process, has never received a NFA-ATT determination form LDEQ. In correspondence dated September 30, 1996 (LDEQ approval of the RFI Phase I Report), LDEQ requested additional information regarding SWMU #32. Olin must include this SWMU in future submittals to LDEQ and provide the appropriate justification to warrant a NFA-ATT determination from LDEQ.

Olin submitted a RECAP Evaluation Report dated December 21, 2006, for the low pH Area (SWMU A) the Aniline Area (SWMU B), and the Lime Ditch (SWMU #17) requesting NFA-ATT determinations for the aforementioned units. This report is currently under evaluation by LDEQ. The RECAP Evaluation Report also requested NFA-ATT determinations for the Interim Status Landfill, the Settlement Agreement Landfill, and the Remediated Landfill and Drum Storage Area. In correspondence dated May 21, 2007, LDEQ notified that the three aforementioned landfills were not eligible for NFA-ATT determinations due to the fact that they were waste in place units. Olin submitted a RECAP Report for the Waste Oil Drum Storage Area (SWMU #30) dated April 24, 2007 which is under consideration by LDEQ. Olin's submittal of a RECAP Evaluation Report addressing various sections of the Facility Process Sewer (SWMU #41) and the East End SWMU is still pending.

Olin has completed significant corrective action investigations and submitted several reports to LDEQ regarding the SWMUs at its Westlake Facility under the previous RFA/RFI corrective action process. That progress has been translated into the new CAS corrective action as detailed below.

SWMUs in the CAS Investigation Workplan Phase (Condition VIII.G):

- SWMU #32 Fire Training Area

SWMUs in the RECAP Report Phase (Condition VIII.H):

- SWMU #17 Lime Ditch
- SWMU #30 Waste Oil Drum Storage Area
- SWMU #41 Facility Process Sewers
- SWMU A Low pH Area
- SWMU B Aniline Area
- East End SWMU

TABLE 1. SUMMARY OF CORRECTIVE ACTION ACTIVITIES*

AOC or SWMU Number/Area Name	*AOC/SWMU Description*	*Status of CA Activity*	*Corrective Action*	*EDMS[2] Document ID #/ Approval Date*
SWMU #3 West Pond	LDEQ approved the cessation of groundwater monitoring and the plugging and abandonment of the associated wells in correspondence dated 04/18/06.	Completed post-closure care as a permitted solid waste unit	n/a	34160069
SWMU #4 Ketazine Holding Pond	LDEQ approved the cessation of groundwater monitoring and the plugging and abandonment of the associated wells in correspondence dated 04/18/06.	Completed post-closure care as a permitted solid waste unit	n/a	9159954 (page 29)
SWMU #5 Emergency Holding Pond	SWMU was closed under solid waste permit P-0230 on 4/18/90 and completed three (3) years of post-closure groundwater monitoring.	Completed post-closure care as a permitted solid waste unit	n/a	9159954 (page 29)
SWMU #6 Equalization Basin	SWMU was closed under solid waste permit P-0230 on 5/1/91 and completed three (3) years of post-closure groundwater monitoring.	Completed post-closure care as a permitted solid waste unit	n/a	9284658 (page 24)
SWMU #7 Aeration Basin A	SWMU was closed under solid waste permit P-0230 on 8/8/96 and completed three (3) years of post-closure groundwater monitoring.	Completed post-closure care as a permitted solid waste unit	n/a	6414371 (page 24)
SWMU #8 Aeration Basin B	SWMU was closed under solid waste permit P-0230 on 8/8/96 and completed three (3) years of post-closure groundwater monitoring.	Completed post-closure care as a permitted solid waste unit	n/a	6414371 (page 24)
SWMU #11 North Pond	SWMU was closed under solid waste permit P-0229 on 10/13/95 and completed three (3) years of post-closure groundwater monitoring.	Completed post-closure care as a permitted solid waste unit	n/a	6414371 (page 22)
SWMU #13 South Pond	SWMU was closed under solid waste permit P-0229 on 10/13/95 and completed three (3) years of post-closure groundwater monitoring	Completed post-closure care as a permitted solid waste unit	n/a	6414371 (page 22)

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AOC or SWMU Number/Area Name	*AOC/SWMU Description*	*Status of CA Activity*	*Corrective Action*	*EDMS[2] Document ID #/ Approval Date*
SWMU #17 Lime Ditch	The Permittee provided a RECAP Report dated 12/21/2006 that is currently being evaluated by LDEQ.	RECAP Report	TBD[1]	35631788
SWMU #18 TDI Plant Incinerator	The NFA-ATT determination for this SWMU was confirmed in LDEQ's approval of the RFI Phase I Report dated 1/30/96.	NFA-ATT	n/a	1457117
SWMU #22 PACE Drum Storage Area	The NFA-ATT determination for this SWMU was confirmed in LDEQ's approval of the RFI Phase I Report dated 1/30/96.	NFA-ATT	n/a	1457117
SWMU #27 TDI/Phos Drum Area	SWMU was transferred to Arco Chemical as an active RCRA unit in 1997; the unit was subsequently clean closed by Lyondell Chemical in April 2007	No action necessary (ownership transferred)	n/a	8095186
SWMU #30 Waste Oil Drum Storage Area	The Permittee provided a RECAP Report dated for SWMU #30 dated 4/24/07 that is currently being evaluated by LDEQ.	RECAP Report submitted	TBD[1]	35917056
SWMU #32 Fire Training Area	This SWMU has not yet been designated NFA-ATT by LDEQ and the SWMU has not been addressed in recent submittals to LDEQ. The Permittee must provide a CAS Investigation Workplan for this SWMU or incorporate the investigation of this SWMU into an existing workplan.	Submittal of CAS Investigation Workplan pending	TBD[1]	1457117
SWMU#39 Decontamination Pad	The NFA-ATT determination for this SWMU was confirmed in LDEQ's approval of the RFI Phase I Report dated 1/30/96.	NFA-ATT	n/a	1457117
SWMU #41 – Facility Process Sewers	The Permittee is currently in the CAS Investigation Workplan phase of the CAS; submittal of the RECAP Report is pending.	Submittal of RECAP Report pending	TBD[1]	3928527

AOC or SWMU Number/Area Name	*AOC/SWMU Description*	*Status of CA Activity*	*Corrective Action*	*EDMS[2] Document ID #/ Approval Date*
SWMU A – Low pH Area	The Permittee provided a RECAP Report dated 12/21/2006 that is currently being evaluated by LDEQ.	RECAP Report submitted	TBD[1]	35631788
SWMU B – Aniline Area	The Permittee provided a RECAP Report dated 12/21/2006 that is currently being evaluated by LDEQ.	RECAP Report submitted	TBD[1]	35631788
East End SWMU	The Permittee is currently in the CAS Investigation Workplan phase of the CAS; submittal of the RECAP Report is pending.	Submittal of RECAP Report pending	TBD[1]	395827

[1] – "To be determined" – The need for corrective action will be determined subsequent to the completion of the CAS Investigation Workplan and the Administrative Authority's approval of the RECAP Report

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ATTACHMENT 1

ATTACHMENT 1
LIST OF FACILITY DOCUMENTS INCORPORATED IN THE PERMIT BY REFERENCE
LAD008080681-PC-RN-1
AI#1254

DOCUMENT TYPE	ELECTRONIC DATABASE MANAGEMENT SYSTEM (EDMS) DOCUMENT ID	APPLICATION /DOCUMENT DATE	COMMENTS
Post-Closure cost estimates	32500325	08/07/04	Post-Closure Permit Renewal Application, Appendix J, Pages 408-409 of the EDMS document
Post-Closure Plan	32500325	08/07/04	Post-Closure Permit Renewal Application, Appendix H, Pages 345-398 of the EDMS document
Sampling and Analysis Plan (Soil and Groundwater)	32500325 34577681	08/07/04 08/30/06	Post-Closure Permit Renewal Application, Appendix F, Pages 308-342 of EDMS document 32500325 Sampling and Analysis Plan Revisions (08/30/06), EDMS Document 34577681
Inspection Plan	32500325	08/07/04	Post-Closure Permit Renewal Application, Appendix D, Pages 301-305 of the EDMS document
Maintenance and Inspection Plan	36258089	05/02/2006	Revised Maintenance and Inspection Plan (including leachate contingency plan), Pages 1-3 of the EDMS document
Security Plan	32500325	08/07/04	Post-Closure Permit Renewal Application, Appendix C , Pages 297-300 of the EDMS document
Groundwater Statistical Evaluation Plan	32500325	08/07/04	Post-Closure Permit Renewal Application, Appendix Q, Pages 663-674 of the EDMS document

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RESPONSIVENESS SUMMARY

RESPONSIVENESS SUMMARY
OLIN CORPORATION (OLIN)
WESTLAKE FACILITY – INTERIM STATULS LANDFILL (ISL)
HAZARDOUS WASTE POST-CLOSURE PERMIT
PERMIT NUMBER LAD 008080681-PC-RN-1
AGENCY INTEREST #1254

ITEM 1

REFERENCE Olin, Westlake Facility.
Comments on the Draft Hazardous Waste Post-Closure Renewal Permit, August 10, 2007.

ISSUE General Comment

COMMENT Page 1, Comment 1

In Section V.A.1, the draft permit correctly states that the Interim Status Landfill (ISL) was certified and verified closed on April 17, 1986, but it states incorrectly that post-closure monitoring did not commence until March 1, 1996. Perhaps the intent of this statement was to point out that the first Post-Closure Groundwater Monitoring Report required by the Post-Closure Permit (effective March 6, 1995) was submitted on March 1, 1996. Post-closure groundwater monitoring had been in fact conducted during the interim.

RESPONSE The Department acknowledges and concurs with the comment. In the draft permit, the date of March 1, 1996, was used as the commencement of closure date due to the fact that the first Post-Closure Groundwater Monitoring Report was submitted on this date. Based on the aforementioned facility comment and a subsequent file review, the Department acknowledges that post closure care and monitoring conducted prior to issuance of the initial post-closure permit (March 6, 1995) should be considered as years completed for the thirty (30) year post-closure care period. During the file review, it was noted that a groundwater monitoring report was submitted to the Department on October 31, 1986. The groundwater monitoring report was from a May 1986 sampling event. Therefore, October 31, 1986, will serve as the commencement of post-closure care period for the ISL. Condition V.A.1 will be revised accordingly.

ACTION Condition V.A.1 will be revised as follows:

V.A.1 Interim Status Landfill: Certified and verified closed on 04/17/86. Post-closure monitoring commenced on ~~03/01/96~~ 10/31/86.

RESPONSIVENESS SUMMARY
OLIN CORPORATION (OLIN)
WESTLAKE FACILITY – INTERIM STATULS LANDFILL (ISL)
HAZARDOUS WASTE POST-CLOSURE PERMIT
PERMIT NUMBER LAD 008080681-PC-RN-1
AGENCY INTEREST #1254

ITEM 2 & 3

REFERENCE Olin, Westlake Facility.
Comments on the Draft Hazardous Waste Post-Closure Renewal Permit, August 10, 2007.

ISSUE General Comment

COMMENT Page 1, Comments 2 & 3

Both the terms "groundwater" and "ground water" are used in the language of the draft permit. Suggest global edit to "groundwater" as this seems to be most frequently used in the current draft permit. Also, suggest global edit that "water bearing" be changed to "water-bearing".

Table 2 refers to "soluble metals" while Table 4 refers to "dissolved metals". Suggest global edit for consistency with the terms "dissolved metals".

RESPONSE The Department acknowledges and concurs with your comments on the requested edits.

ACTION All instances of the terms "ground water" and "water bearing" have been revised to "groundwater" and "water-bearing" in the final permit.

The term "soluble metals" has been revised to "dissolved metals" in Table 2 of the final permit.

RESPONSIVENESS SUMMARY
OLIN CORPORATION (OLIN)
WESTLAKE FACILITY – INTERIM STATULS LANDFILL (ISL)
HAZARDOUS WASTE POST-CLOSURE PERMIT
PERMIT NUMBER LAD 008080681-PC-RN-1
AGENCY INTEREST #1254

ITEM 4

REFERENCE Olin, Westlake Facility.
Comments on the Draft Hazardous Waste Post-Closure Renewal Permit, August 10, 2007.

ISSUE Fact Sheet

COMMENT Page 2, Comment 4

Conditons V and VI.A of the Fact Sheet contain references to UOP. These references should be changed to Olin.

RESPONSE The Department acknowledges the erroneous references to UOP in the Fact Sheet. However, the purpose of the Fact Sheet is to initiate the permit decision process and is not viewed as operational provisions to be contained in the draft or final permit. The fact sheet and the information contained within will not be included in the final permit. Therefore, revisions to the Fact Sheet will not be necessary.

ACTION No action required.

RESPONSIVENESS SUMMARY
OLIN CORPORATION (OLIN)
WESTLAKE FACILITY – INTERIM STATULS LANDFILL (ISL)
HAZARDOUS WASTE POST-CLOSURE PERMIT
PERMIT NUMBER LAD 008080681-PC-RN-1
AGENCY INTEREST #1254

ITEM 5

REFERENCE Olin, Westlake Facility.
Comments on the Draft Hazardous Waste Post-Closure Renewal Permit, August 10, 2007.

ISSUE Signature Page

COMMENT Page 2, Comment 5

The Signature Page header references the unit permitted as the "Closed Hazardous Waste Pile." The header should reference the "Interim Status Landfill (ISL)."

The opening paragraph of the Signature Page states that the closed unit is located in Blanchard, Louisiana and follows with latitude and longitude coordinates. The coordinates appear to be correct for the ISL unit; however, the reference to Blanchard, Louisiana is a reference to a UOP unit. The permit should state that the ISL is located in Westlake, Louisiana.

RESPONSE The Department acknowledges the erroneous references to the "Closed Hazardous Waste Pile" and "Blanchard, Louisiana" in the Signature Page. The erroneous references will be corrected in the final permit.

ACTION The header of the Signature Page has been revised to reference the "Interim Status Landfill" as opposed to the "Closed Hazardous Waste Pile."

The opening paragraph of the Signature Page has been revised to reference Westlake, Louisiana as the location of the Interim Status Landfill as opposed to Blanchard, Louisiana.

RESPONSIVENESS SUMMARY
OLIN CORPORATION (OLIN)
WESTLAKE FACILITY – INTERIM STATULS LANDFILL (ISL)
HAZARDOUS WASTE POST-CLOSURE PERMIT
PERMIT NUMBER LAD 008080681-PC-RN-1
AGENCY INTEREST #1254

ITEM 6

REFERENCE Olin, Westlake Facility.
Comments on the Draft Hazardous Waste Post-Closure Renewal Permit, August 10, 2007.

ISSUE Table of Contents

COMMENT Page 2, Comment 6

Condition III.A (of the Table of Contents) contains the typographical error "Post-Closure9Unit" and should be revised.

Condition III.B (of the Table of Contents) contains the typographical error "REQUIRED NOTIC" and should be revised.

RESPONSE The Department acknowledges the typographical errors in Section III.A and III.B of the Table of Contents. The typographical errors will be corrected in the final permit.

ACTION The title heading for Condition III.A in the Table of Contents has been corrected to read "Post-Closure Unit".

The title heading for Condition III.B in the Table of Contents has been corrected to read "REQUIRED NOTICE".

RESPONSIVENESS SUMMARY
OLIN CORPORATION (OLIN)
WESTLAKE FACILITY – INTERIM STATULS LANDFILL (ISL)
HAZARDOUS WASTE POST-CLOSURE PERMIT
PERMIT NUMBER LAD 008080681-PC-RN-1
AGENCY INTEREST #1254

ITEM	7
REFERENCE	Olin, Westlake Facility. Comments on the Draft Hazardous Waste Post-Closure Renewal Permit, August 10, 2007.
ISSUE	Condition II.E.9.b.(4)
COMMENT	Page 2, Comment 7 The Department acknowledges but does not concur with the comment. Condition II.E.9.b.(4) states that records of monitoring information shall include "the names(s) and signature(s) of the individual(s) who performed the analysis." Laboratories do not provide this information. In our opinion, this would create an unreasonable burden to both Olin and the laboratory.
RESPONSE	Condition II.E.9.b.(4) is a regulatory requirement required by LAC 33:V.309.J.3.d and cannot be revised.
ACTION	The permit will not be revised.

RESPONSIVENESS SUMMARY
OLIN CORPORATION (OLIN)
WESTLAKE FACILITY – INTERIM STATULS LANDFILL (ISL)
HAZARDOUS WASTE POST-CLOSURE PERMIT
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ITEM 8

REFERENCE Olin, Westlake Facility.
Comments on the Draft Hazardous Waste Post-Closure Renewal Permit, August 10, 2007.

ISSUE Condition II.E.21

COMMENT Page 2, Comment 8

In Condition II.E.21, Olin requests five (5) working days [or fifteen (15) working days] to provide a follow-up written report of non-compliance. These working day periods are consistent with the existing permit.

RESPONSE The Department acknowledges but does not concur with the comment. Condition II.E.21 is a regulatory requirement required by LAC 33:V.309.L.7.d and cannot be revised.

ACTION The permit will not be revised.

RESPONSIVENESS SUMMARY
OLIN CORPORATION (OLIN)
WESTLAKE FACILITY – INTERIM STATULS LANDFILL (ISL)
HAZARDOUS WASTE POST-CLOSURE PERMIT
PERMIT NUMBER LAD 008080681-PC-RN-1
AGENCY INTEREST #1254

ITEM 9

REFERENCE Olin, Westlake Facility.
Comments on the Draft Hazardous Waste Post-Closure Renewal Permit, August 10, 2007.

ISSUE Condition II.E.28.a.(2)

COMMENT Page 2, Comment 9

In Condition II.E.28.a.(2), the reference to "personal training" should be revised to "personnel training".

RESPONSE The Department acknowledges the typographical error and will correct it in the final permit.

ACTION In Condition II.E.28.a.(2), the reference to "personal training" has been revised to "personnel training".

RESPONSIVENESS SUMMARY
OLIN CORPORATION (OLIN)
WESTLAKE FACILITY – INTERIM STATULS LANDFILL (ISL)
HAZARDOUS WASTE POST-CLOSURE PERMIT
PERMIT NUMBER LAD 008080681-PC-RN-1
AGENCY INTEREST #1254

ITEM 10

REFERENCE Olin, Westlake Facility.
Comments on the Draft Hazardous Waste Post-Closure Renewal Permit, August 10, 2007.

ISSUE Condition II.E.30

COMMENT Page 3, Comment 10

In Condition II.E.30, Olin requests that this section be reserved as it was in the existing permit. The requirement to report manifest discrepancies and un-manifested waste as required by LAC 33:V.309.L.8 and 9 is not applicable to the closed unit.

RESPONSE The Department acknowledges but does not concur with the comment. The Interim Status Landfill (ISL) is in post-closure care and that the Permittee is not actively managing hazardous waste. However, there remains the potential that either during the post-closure care period for the ISL or during site-wide corrective action, the Permittee may be required to actively manage hazardous wastes. In this event, the hazardous wastes generated may require offsite shipment and the manifest requirements would be applicable.

ACTION The permit will not be revised.

RESPONSIVENESS SUMMARY
OLIN CORPORATION (OLIN)
WESTLAKE FACILITY – INTERIM STATULS LANDFILL (ISL)
HAZARDOUS WASTE POST-CLOSURE PERMIT
PERMIT NUMBER LAD 008080681-PC-RN-1
AGENCY INTEREST #1254

ITEM 11

REFERENCE Olin, Westlake Facility.
Comments on the Draft Hazardous Waste Post-Closure Renewal Permit, August 10, 2007.

ISSUE Condition III.P.6

COMMENT Page 3, Comment 11

Condition III.P.6 seems to be a generalized statement of Condition III.P.2. Therefore, Condition III.P.2 appears redundant. LAC 33:V.3709 (Cost Estimate for Post-Closure Care) referenced in Condition III.P.6 includes the rules for inflation in subpart B.

RESPONSE The Department acknowledges and concurs with the comment. Condition III.P.2 sufficiently addresses the adjustment and revision of post-closure cost estimates. Therefore, Condition III.P.6 is a redundant requirement.

ACTION Condition III.P.6 has been removed from the final permit as noted below:

> ~~**III.P.6.** Throughout the active life of the facility, the Permittee must adjust and revise its post-closure cost estimates, as necessary, to comply with the provisions of LAC 33:V.3709.~~

RESPONSIVENESS SUMMARY
OLIN CORPORATION (OLIN)
WESTLAKE FACILITY – INTERIM STATULS LANDFILL (ISL)
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AGENCY INTEREST #1254

ITEM 12

REFERENCE Olin, Westlake Facility.
Comments on the Draft Hazardous Waste Post-Closure Renewal Permit.
August 10, 2007.

ISSUE Condition III.K.5

COMMENT Page 3, Comment 12

In Condition III.M, Olin requests that this section be reserved as it was in the existing permit. The requirement to report manifest discrepancies and un-manifested waste as required by LAC 33:V.Chpaters 9 & 11 is not applicable to the closed unit.

RESPONSE The Department acknowledges but does not concur with the comment. The Interim Status Landfill (ISL) is in post-closure care and that the Permittee is not actively managing hazardous waste. However, there remains the potential that either during the post-closure care period for the ISL or during site-wide corrective action, the Permittee may be required to actively manage hazardous wastes. In this event, the hazardous wastes generated may require offsite shipment and the manifest requirements would be applicable.

ACTION The permit will not be revised.

RESPONSIVENESS SUMMARY
OLIN CORPORATION (OLIN)
WESTLAKE FACILITY – INTERIM STATULS LANDFILL (ISL)
HAZARDOUS WASTE POST-CLOSURE PERMIT
PERMIT NUMBER LAD 008080681-PC-RN-1
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ITEM 13

REFERENCE Olin, Westlake Facility.
Comments on the Draft Hazardous Waste Post-Closure Renewal Permit, August 10, 2007.

ISSUE Condition V.A.1

COMMENT Page 3, Comment 13

Condition V.A.1 incorrectly states that post-closure monitoring commenced on March 1, 1996. Olin assumes the intended reference to the Post Closure Monitoring Report submitted on March 1, 1996 and request the text be modified appropriately.

RESPONSE The Department acknowledges and concurs with the comment. In the draft permit the date of March 1, 1996, was used as the commencement of closure date due to the fact that the first Post-Closure Groundwater Monitoring Report was submitted on this date. Based on the aforementioned facility comment and a subsequent file review, the Department acknowledges that post closure care and monitoring conducted prior to issuance of the initial post-closure permit (March 6, 1995) should be considered as years completed for the thirty (30) year post-closure care period. During the file review, it was noted that a groundwater monitoring report was submitted to the Department on October 31, 1986. The groundwater monitoring report was from a May 1986 sampling event. Therefore, October 31, 1986, will serve as the commencement of post-closure care period for the ISL. Condition V.A.1 will be revised accordingly.

ACTION Condition V.A.1 has been revised as follows:

V.A.1 Interim Status Landfill: Certified and verified closed on 04/17/86. Post-closure monitoring commenced on ~~03/01/96~~ 10/31/86.

RESPONSIVENESS SUMMARY
OLIN CORPORATION (OLIN)
WESTLAKE FACILITY – INTERIM STATULS LANDFILL (ISL)
HAZARDOUS WASTE POST-CLOSURE PERMIT
PERMIT NUMBER LAD 008080681-PC-RN-1
AGENCY INTEREST #1254

ITEM 14

REFERENCE Olin, Westlake Facility.
Comments on the Draft Hazardous Waste Post-Closure Renewal Permit, August 10, 2007.

ISSUE Condition VI.D

COMMENT Page 3, Comment 14

Condition VI.D defines the Groundwater Protection Standard (groundwater concentration limits) for the monitoring program. The first paragraph in this section of the draft permit references Table 3; however, the reference should be to the Maximum Concentration Limits (MCLs) presented in Table 3, not just "concentration limits". There are two (2) different columns of constituent concentrations provided in Table 3, and neither column contains the heading "concentration limits". Because the values in the MCL column of Table 3 are not promulgated MCLs, Olin requests that this column be better identified as Groundwater Protection Standards and the narrative in Section VI.D revised to agree with the suggested Table 3 revised column heading.

RESPONSE The Department acknowledges and concurs with the comment noting that Condition VI.D should reference the MCLs in Table 3 specifically, rather than just "concentration limits". Condition VI.D will be revised accordingly in the final permit. However, the title heading for the column containing the MCLs will not be revised to "Groundwater Protection Standards. The use of MCLs is consistent with the terminology historically used by the Department. Furthermore, both the aforementioned revision to Condition VI.D and Table 3, Footnote 3 clearly specify that the MCLs specified in Table 3 will serve as the groundwater protection standard.

ACTION Condition VI.D has been revised as follows in the final permit:

VI.D. HAZARDOUS CONSTITUENTS, PARAMETERS, ANALYTICAL FREQUENCY AND CONCENTRATION LIMITS

The wells, hazardous constituents, and concentration limits to which the protection standards of LAC 33:V.3305 apply are shown herein in Tables 2 through 4. The sampling frequency for constituents is noted in Table 2.

RESPONSIVENESS SUMMARY
OLIN CORPORATION (OLIN)
WESTLAKE FACILITY – INTERIM STATULS LANDFILL (ISL)
HAZARDOUS WASTE POST-CLOSURE PERMIT
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AGENCY INTEREST #1254

The ~~concentration limits~~ Maximum Concentration Limits (MCLs) for each hazardous waste constituent specified in Table 3 shall serve as the groundwater protection standard.

The Permittee must institute corrective action in all areas associated with the permitted post-closure units and appurtenances where groundwater has been affected by hazardous wastes, hazardous constituents, or parameters exceeding the assigned ~~concentration limits~~ MCLs, and implement corrective measures in other areas which may be discovered to exceed these limits in the future.

RESPONSIVENESS SUMMARY
OLIN CORPORATION (OLIN)
WESTLAKE FACILITY – INTERIM STATULS LANDFILL (ISL)
HAZARDOUS WASTE POST-CLOSURE PERMIT
PERMIT NUMBER LAD 008080681-PC-RN-1
AGENCY INTEREST #1254

ITEM 15

REFERENCE Olin, Westlake Facility.
Comments on the Draft Hazardous Waste Post-Closure Renewal Permit, August 10, 2007.

ISSUE Condition VI.E

COMMENT Page 4, Comment 15

Condition VI.E references an "Uppermost Aquifer" as a monitored groundwater unit for the ISL; the draft permit should be revised to reference the "Upper Permeable Zone".

RESPONSE The Department acknowledges and concurs with the comment. The use of the term "Upper Permeable Zone" is more appropriate than "Uppermost Aquifer" and is consistent with terminology used in the Permittee's permit renewal application. The final permit will be modified accordingly.

ACTION Condition VI.E has been revised as follows in the final permit:

VI.E. POINT OF COMPLIANCE

The point of compliance (POC) at which the groundwater protection standard of LAC 33:V.3305.A applies, and at which monitoring must be conducted, are the vertical intervals intercepted by the wells identified in Table 2 and required by Condition VI.C.2. The horizontal limit of compliance must be the surface following an imaginary line connecting the risers of monitoring wells listed as Point of Compliance wells in Table 2 unless amended through permit modifications by the Administrative Authority in the future. The vertical limit of compliance must be the ~~Uppermost Aquifer~~ upper permeable zone.

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ITEM 16

REFERENCE Olin, Westlake Facility.
Comments on the Draft Hazardous Waste Post-Closure Renewal Permit, August 10, 2007.

ISSUE Condition VI, Table 2

COMMENT Page 4, Comment 16

Olin requests the following edits to Condition VI, Table 2 RCRA Units, Point of Compliance and Monitoring Wells, Sampling Frequencies, and Analytical Parameters:

1. According to Table 2 of the draft permit, the ISL monitor wells are installed in permeable zones referred to as the UPZ and LPZ. These acronyms should be defined in the footnotes to Table 2 as the Upper Permeable Zone (UPZ) and the Lower Permeable Zone (LPZ) consistent with historical usage in the ISL groundwater monitoring program. Furthermore, UPZ-S and UPZ-D should be defined in the notes to Table 2 as shallow and deep portions of the UPZ, respectively.

2. The Groundwater Quality Parameters list in Condition VI, Table 2 should include turbidity to be consistent with the requirements in Condition VI.G.8.

3. To minimize confusion with Condition VI, Table 4 Sample Bottle and Preservation Specifications, please replace the term "Table 4" with LAC 33:V.3325 Table 4" in the Site-Specific Monitoring Parameter List.

4. Table 2 contains the typographical error "Toulenediamine" and should be revised to "Toluenediamine".

5. The UPZ has been classified as a GW3_NDW (Non-Drinking Water) unit in RECAP documents submitted to the LDEQ. The metal parameters in Table 2 are "Groundwater Quality Parameters" (see Table 3), not "Drinking Water Quality Parameters". Please remove the "Drinking Water Quality Parameters" heading from Table 2 and include the metals in the "Groundwater Quality Parameter" list.

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6. Olin requests Footnote 4 be revised to read "Point of Compliance wells in the Upper Permeable Zone shall be sampled and analyzed annually for constituents in LAC 33:V.3325 Table 4." Please edit Footnote 4 for consistency with Condition VI.I.3 reference to the Point of Compliance wells.

RESPONSE

The Department acknowledges and concurs with Condition VI, Table 2 comments 1 through 6. The Department will revise Condition VI, Table 2 accordingly. See below for the specific revisions to the final permit.

ACTION

1. UPZ, UPZ-S, UPZ-D, and LPZ are defined in the footnotes to Condition VI, Table 2.

2. Turbidity has been added to the list of Groundwater Quality Parameters in Condition VI, Table 2.

3. For clarification purposes, "Table 4 Parameters" was replaced with "LAC 33:V.3325 Table 4" in Condition VI, Table 2.

4. The typographical error in Condition VI, Table 2 was corrected. "Toulenediamine" was corrected to "Toluenediamine".

5. Due to the fact that the UPZ has been designated GW_NDW (Non-Drinking Water), the heading "Drinking Water Quality Parameters" has been removed form the final permit. The Condition VI, Table 2 metal parameters that had been listed under the "Drinking Water Quality Parameters" have been included under the Condition VI, Table 2 "Groundwater Quality Parameters Heading" in the final permit.

6. Due to the fact that only Point of Compliance wells screened in the upper permeable zone are required to be analyzed for LAC 33:V.3325 Table 4 parameters, Condition VI, Table 2, Footnote 4 has been revised to read "Point of Compliance wells in the upper permeable zone shall be sampled and analyzed annually for constituents in LAC 33:V.3325 Table 4."

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ITEM 17

REFERENCE Olin, Westlake Facility.
Comments on the Draft Hazardous Waste Post-Closure Renewal Permit, August 10, 2007.

ISSUE Condition VI, Table 3

COMMENT Page 4 & 5, Comment 17

Olin requests the following edits to Condition VI, Table 3 Groundwater Monitoring Methods and Requirements:

1. The parameters pH and Specific Conductance will be analyzed in the field. The analytical method column should be revised for these parameters to reference field measurements versus analytical laboratory methods. (Condition VI, Table 4 is consistent with field measurements of these parameters and requires no edit).

2. The parameter turbidity will be analyzed in the field consistent with Condition VI.G.8. Please add turbidity to Condition VI, Table 3 Groundwater Quality Parameters.

3. The heading "Volatiles & Semi-Volatiles" in Condition VI, Table 3 should be changed to "Site-Specific Monitoring Parameters" consistent with Condition VI, Table 2.

4. Per Olin's analytical laboratory vendor (Pace Analytical), 2,4-dinitrotoluene (DNT); 2,6-DNT; and aniline will be analyzed by SW 846 Method 8270C. Condition VI, Table 3 should be revised to reflect this analytical method for these three analytes.

5. The MCL listed for chlorobenzene in Condition VI, Table 3 is 2 µg/L; however, the actual MCL for this parameter is 100 µg/L. Condition VI, Table 3 should be revised.

6. The MCL (actually a Groundwater Protection Standard) listed for aniline in Condition VI, Table 3 is 10 µg/L; however, the calculated Louisiana RECAP GW_SS value for this parameter is 12 µg/L. Consistent with other parameters in Condition VI,

Table 3, the standard for aniline should be revised to the RECAP GW_SS value.

7. Consistent with permit requirements, the "Site-Specific Monitoring Parameter" list in Condition VI, Table 3 should include an entry for constituents in LAC 33:V.3325 Table 4.

8. Footnote 3 to Condition VI, Table 3 contains a typographical error. Currently, this footnote contains the phrase "higher that n the standards set" which should read "higher than the standards set."

9. A footnote should be added to Condition VI, Table 3 specifying that metals will be analyzed for both metals and dissolved metals. These analyses are referenced in Footnote 5 of Condition VI, Table 2 and Footnote 1 of Condition VI, Table 4 but should be explicitly identified in the Condition VI, Table 3 footnotes for consistency.

RESPONSE The Department acknowledges and concurs with Condition VI, Table 3 comments 1 through 9. The Department will revise Condition VI, Table 3 accordingly. See below for the specific revisions to the final permit.

ACTION

1. The "Analytical Method" column has been revised from "9040" to "Field Measurement" for pH and from "9050" to "Field Measurement" for Specific Conductance.

2. The parameter turbidity has been added as a field measurement to Table 3.

3. In order to be consistent with Condition VI, Table 2, the heading "Volatiles and Semi-Volatiles" has been revised to "Site-Specific Monitoring Parameters".

4. Based on information from Olin's laboratory vendor (Pace Analytical), the "Analytical Method" column has been revised from "8270B" to "8270C' for 2,4-dinitrotoluene (DNT); 2,6-DNT; and aniline in the final permit.

5. Based on the RECAP GW_SS for chlorobenzene, the MCL has been revised from 2 µg/L to 100 µg/L in the final permit.

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6. Based on the RECAP GW_SS for aniline, the MCL has been revised from 10 µg/L to 12 µg/L in the final permit.

7. An entry has been included under the "Site-Specific Monitoring Parameters" of Condition VI, Table 3 for LAC 33:V.3325 Table 4.

8. The typographical error in Condition VI, Table 3 was corrected. "Higher that n the standards set" was corrected to "higher than the standards set".

9. For consistency with Condition VI Tables 2 and 4, a footnote has been added to Condition VI, Table 3 specifying that metals will be analyzed for both metals and dissolved metals.

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ITEM 18

REFERENCE Olin, Westlake Facility.
Comments on the Draft Hazardous Waste Post-Closure Renewal Permit, August 10, 2007.

ISSUE Condition VI, Table 4

COMMENT Page 5 & 6, Comment 18

Olin requests the following edits to Condition VI, Table 4 Sample Bottle and Preservation Specifications:

1. Condition VI, Table 4 contains the parameter toluene diisocyanate (TDI); however, as discussed in Condition VI, Table 3, Footnote 5, direct analysis for this analyte will not be required. The container type and preservative method for TDI should be changed to read "See Table 3, Footnote 5."

2. The preservation method for copper and nickel is inconsistently worded compared to the other metal parameters. Please modify for consistency.

3. Turbidity should be added to Condition VI, Table 4 consistent with Condition VI.G.8. Field measurement should be referenced.

RESPONSE The Department acknowledges and concurs with Condition VI, Table 4 comments 1 through 3. The Department will revise Condition VI, Table 4 accordingly. See below for the specific revisions to the final permit.

ACTION

1. The "Container Type" and "Preservation Method" columns for the parameter toluene diisocyanate have been revised to read "See Table 3, Footnote 5."

2. The wording for the preservation methods for copper and nickel were revised to be consistent with the wording for preservation methods for the other metal parameters. The revised wording now reads "HNO_3 to pH <2, ~~and~~ Cool to 4° C".

3. Turbidity has been added to the list of parameters in Condition VI, Table 4.

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ITEM 19

REFERENCE Olin, Westlake Facility.
Comments on the Draft Hazardous Waste Post-Closure Renewal Permit, August 10, 2007.

ISSUE Condition VI.I.1-3

COMMENT Page 6, Comment 19

The term "hazardous constituent "is used in Condition VI.I.3 in reference to the list of constituents in LAC 33:V.3525 Table 4. The term "hazardous constituent" in the glossary also refers to LAC 33:V.3325 Table 4. Condition VI.I.1, however, uses the term "hazardous constituent" in reference to Table 3, but this term does not appear in Table 3. Condition VI.I.1 should be revised so it is clear which Table 3 constituents the term references, as Condition VI.I.2 requires statistical evaluation of the analytical results of the currently undefined hazardous constituents. Olin suggests LDEQ consider the use of a different term to apply to the constituents listed in Table 3 that are described in Conditions VI.I.1 and VI.I.2 of the draft permit. Olin requests the term "Site-Specific Monitoring Parameters" replace "hazardous constituents" in Conditions VI.I.1 and VI.I.2 of the permit to be consistent with Condition VI, Tables 2,3, and 4.

RESPONSE The Department acknowledges and concurs with the comment. The term "hazardous constituent" and "hazardous constituents" will be replaced by the term "Site-Specific Monitoring Parameters" in Conditions VI.I.1 and VI.I.2 in the final permit.

ACTION Conditions VI.I.1 and VI.I.2 have been revised as follows in the final permit:

VI.I.1. The Permittee shall determine the concentration of each ~~hazardous constituent~~ Site-Specific Monitoring Parameter listed in Table 3 of this permit at least quarterly (from groundwater in the wells listed in Table 2 of this permit).

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VI.I.2. The Permittee shall determine whether the concentrations of ~~hazardous constituents~~ Site-Specific Monitoring Parameters determined under Condition VI.I.1 of this permit exhibit statistically significant evidence of increased contamination. The Permittee shall complete the statistical analysis included in the approved Sampling and Analysis Plan within sixty (60) days of the groundwater monitoring event.

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ITEM 20

REFERENCE Olin, Westlake Facility.
Comments on the Draft Hazardous Waste Post-Closure Renewal Permit, August 10, 2007.

ISSUE Condition VI.H

COMMENT Page 6, Comment 20

Condition VI.H refers to Condition VI.I as the Corrective Action Program; however, Condition VI.I is the Compliance Monitoring Program.

RESPONSE The Department acknowledges the error and will correct the mistake in the final permit.

ACTION Condition VI.H has been revised as follows in the final permit:

VI.H. DETECTION MONITORING PROGRAM

(RESERVED). Permittee currently in the ~~Corrective Action~~ <u>Compliance Monitoring</u> Program as per Condition VI.I.

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ITEMS 21

REFERENCE Olin, Westlake Facility.
Comments on the Draft Hazardous Waste Post-Closure Renewal Permit, August 10, 2007.

ISSUE Condition VI.K
COMMENT Page 6, Comments 21

Condition VI.K references the LDOTD handbook "Construction of Geotechnical Boreholes and Groundwater Monitoring Systems Handbook". The Current version of the LDOTD handbook is dated December 2000 and is available online from LDOTD at http://www.dotd.state.la.us/intermodal/wells/wellhandbook.asp. The date of the handbook should be updated in the permit.

RESPONSE The Department acknowledges and concurs with the comment.

ACTION Condition VI.K has been revised as follows in the final permit:

VI.K. CONSTRUCTION AND ABANDONMENT OF MONITORING WELLS AND GEOTECHNICAL BOREHOLES

The construction and abandonment of groundwater monitoring wells must conform to the standards and guidelines specified in **"CONSTRUCTION OF GEOTECHNICAL BOREHOLES AND GROUNDWATER MONITORING SYSTEMS HANDBOOK"**, dated ~~May 1993~~ December 2000 ~~("Construction Handbook", May 1993~~). This document is printed by and available from the Louisiana Department of Transportation and Development (DOTD), Water Resources Section, P.O. Box 94245, Baton Rouge, Louisiana 70804-9245. The document is also available online at http://www.dotd.state.la.us/intermodal/wells/wellhandbook.com.

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ITEM 22

REFERENCE Olin, Westlake Facility.
Comments on the Draft Hazardous Waste Post-Closure Renewal Permit, August 10, 2007.

ISSUE Condition VI.I.3

COMMENT Page 6, Comment 22

Condition VI.I.3 states that all Point of Compliance (POC) wells in Table 2 shall be analyzed for constituents listed in LAC 33:V.3525 Table 4 annually to "determine whether additional hazardous constituents are present in the uppermost aquifer." As shown in Table 2, POC wells are completed in both the UPZ and the LPZ. Condition VI.I.3 should be revised to require only POC wells in the UPZ be sampled annually for LAC 33:V.3525 Table 4 constituents to satisfy the intent of the requirement – not POC wells in the LPZ.

RESPONSE The Department acknowledges and concurs with the comment. In the final permit, Condition VI.I.3 will be revised to specify that only POC wells in the UPZ are required conduct analysis for constituents listed in LAC 33:V.3525 Table 4.

ACTION Condition VI.I.3 has been revised as follows in the final permit:

VI.I.3. The Permittee shall annually analyze samples from all point of compliance wells screened in the upper permeable zone (see ~~in~~ Table 2 of this permit) for all constituents listed in LAC 33:V.3525, Table 4, in order to determine whether additional hazardous constituents are present in the upper permeable zone (and, if so, at what concentration), pursuant to the conditions of this permit.

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ITEM 23

REFERENCE Olin, Westlake Facility.
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ISSUE Condition VI.I.1 & Condition VI.L.1.g

COMMENT Page 7, Comment 23

Condition VI.I.1 Annual Groundwater Report contains a list of requirements for inclusion in each groundwater report. Olin requests that Condition VI.L.1.g be revised to require "graphical presentation of the values of any Site-Specific Monitoring Parameter for which a Point of Compliance (POC) well concentration exceeded the Groundwater Protection Standard values in Table 3 during a particular sampling event."

RESPONSE The Department acknowledges and concurs with the comment. The final permit will not require the graphical representation of the field analyzed Groundwater Quality Parameters: ph, specific conductance, and turbidity. As noted by Condition VI, Table 3, statistical evaluation of the values of these parameters will not be required. However, the text was not revised exactly as requested. Olin requested that Condition VI.L.1.g only require the graphical representation of Site-Specific Monitoring Parameters <u>exceeding</u> the Groundwater Protection Standard. However, due to the fact that the metal parameters for the ISL have historically had detections over background (but below the Groundwater Protection Standard), the graphical representation of these parameters as well as the other parameters with MCLs specified in Condition VI, Table 3 will be required to facilitate the evaluation of any trends in the concentrations of "MCL specified" parameters. Therefore, Condition VI.L.1.g was revised to require the graphical representation of those parameters for which MCLs have been specified in Condition VI, Table 3.

ACTION Condition VI.L.1.g has been revised as follows in the final permit:

> **VI.L.1.g.** graphical representation of the values of ~~pH, conductance and the hazardous constituents including~~ <u>those parameters with MCLs specified in Table 3 for each sampling event. The graphical representation must include a</u> :

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ITEM	24
REFERENCE	Olin, Westlake Facility. Comments on the Draft Hazardous Waste Post-Closure Renewal Permit, August 10, 2007.
ISSUE	Condition VII.A.1
COMMENT	Page 7, Comment 24 Condition VII.A.1 requires annual submittal of a Waste Minimization Plan. This is inappropriate for a landfill in post-closure. This section should be reserved.
RESPONSE	The Department acknowledges and concurs with the comment. Due to the fact that the Permittee does not actively manage hazardous waste at its Westlake facility, the requirement for the annual submittal of a Waste Minimization Plan has been reserved in the final permit.
ACTION	Condition VII.A.1 has been revised as follows in the final permit: **VII.A.1. Waste Minimization** **(RESERVED)**

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ITEM 25

REFERENCE Olin, Westlake Facility.
Comments on the Draft Hazardous Waste Post-Closure Renewal Permit, August 10, 2007.

ISSUE Condition VII.A.7

COMMENT Page 7, Comment 25

Condition VII.A.7 imposes a specific waste ban. The post-closure permit does not authorize the receipt of any hazardous waste. This section should be reserved.

RESPONSE The Department acknowledges and concurs with the comment. Due to the fact that the ISL is a closed unit and no longer receives hazardous waste, Condition VII.A.7 will be revised in the final permit.

ACTION Condition VII.A.7 has been revised as follows in the final permit:

VII.A.7. Specific Waste Ban

(RESERVED)

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ITEM 26

REFERENCE Olin, Westlake Facility.
Comments on the Draft Hazardous Waste Post-Closure Renewal Permit, August 10, 2007.

ISSUE Condition VII.A.8

COMMENT Page 7, Comment 26

Condition VII.A.8 requires that five (5) copies of each RECAP report and a CD-ROM of the document in word processing format be submitted to the LDEQ. The request for five copies is inconsistent with the LDEQ's RECAP policy to submit three (3) copies.

RESPONSE The Department acknowledges the discrepancy between the number of copies required by LDEQ's RECAP document and the draft permit. However, RECAP is applied to the corrective action at both permitted and non-permitted facilities. Due to the direct involvement of the LDEQ Waste Permits Division in the corrective action at Olin's Westlake facility, an extra copy will be required for the facility permit writer. Also, due to the public notice and participation requirements relating to the permit, another copy will be required in order that it may be placed on public review in the local parish library for public comment. Therefore, the requirement to provide five copies of the RECAP report shall not be revised.

ACTION The permit will not be revised.

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ITEM 27

REFERENCE Olin, Westlake Facility.
Comments on the Draft Hazardous Waste Post-Closure Renewal Permit, August 10, 2007.

ISSUE Condition VII.A.9

COMMENT Page 7, Comment 27

Condition VII.A.9 requires that raw data be maintained at the facility during the term of the permit. Because the facility is closed, Olin requests that the LDEQ change the required raw data depository for RECAP/CAS related files to the offices of the site contact person as shown in the Part A Application (Olin Corporation office in Charleston, TN).

RESPONSE The Department acknowledges that the facility is closed and that the site contact person is located in Charleston, TN. However, Condition II.E.10 and LAC 33:V.309.J.2 require the retention of records at the facility. Therefore, it is the Department's contention that copies of RECAP/CAS related files can be stored in the same depository as the facility records specified in Condition II.E.10 and LAC 33:V.309.J.2.

ACTION The permit will not be revised.

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ITEM 28

REFERENCE Olin, Westlake Facility.
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ISSUE Condition VIII.B.1

COMMENT Page 7 Comment 28

Condition VIII.B.1 requires that Olin submit a Notice of Intent (NOI) to conduct corrective action using U.S. EPA Region 6 Corrective Action Strategy within sixty (60) days of the effective date of the permit. This NOI will essentially be for the SWMU 32 Fire Training Area only, as the other SWMUs/AOIs are further along in the RECAP process. A path forward for this area can be discussed during the Scoping Meeting required in Condition VII.B.2 of the draft permit.

RESPONSE The Department acknowledges and concurs with the comment. During a file review of the site corrective action history, it was determined that a thorough assessment of SWMU 32 Fire Training Area had never been completed and subsequently reported to the Department. All other SWMUs are further along in the corrective action process (as noted in Appendix 1) and will not require the submittal of a NOI.

ACTION No action required.

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ITEM 29

REFERENCE Olin, Westlake Facility.
Comments on the Draft Hazardous Waste Post-Closure Renewal Permit, August 10, 2007.

ISSUE Condition VIII, Table 1

COMMENT Page 7, Comment 29

Olin understands that the schedule presented in Condition VIII, Table 1 will not strictly apply to SWMUs that are at various stages in the corrective action process.

RESPONSE The Department acknowledges and concurs with the comment. SWMUs/AOIs that are further along in the CAS process will not be required to meet the schedule presented in Condition VIII, Table 1 for previously completed activities. However, Olin must meet the schedule for subsequent requirements based on the current phase for each SWMU/AOI depicted in Appendix 1. For example, if a RECAP Report has been submitted for a SWMU/AOI (or set of SWMUs/AOIs), within ninety (90) days of Administrative Authority approval of the RECAP Report, the Permittee must submit the Remedial Alternatives Study (RAS). If circumstances preclude the Permittee from meeting the schedule presented in Condition VIII, Table 1, the Permittee may submit a written request for an alternate schedule in accordance with Condition VIII.A.7.

ACTION No action required.

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ITEM 30

REFERENCE Olin, Westlake Facility.
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ISSUE Condition VIII, Appendix 1 Summary of Corrective Action Activities

COMMENT Page 8, Comment 30

The East End SWMU and SWMU #41 Facility Process Sewers (Sections) should be included in the list of SWMUs in the RECAP Report Phase, not in the list of SWMUs at the workplan phase. RECAP evaluations of these units identified data gaps due to isolated detections of individual constituents at concentrations in media slightly above the respective RECAP standards. With field oversight from LDEQ, additional field work was conducted during the week of July 30, 2007, to fill East End SWMU and SWMU #41 data gaps. Olin expects to submit the RECAP Reports on these units before the end of 2007. Furthermore, the LDEQ indicates in Table 1 of Appendix 1 that RECAP Reports on these SWMUS are pending.

RESPONSE The Department acknowledges and concurs with the comment. In the final permit, Condition VIII Appendix 1 has been revised to state that the East End SWMU and SWMU #41 Facility Process Sewers are in the RECAP Report Phase as opposed to the CAS Investigation Workplan Phase as stated in the draft permit.

ACTION Condition VIII, Appendix 1 has been revised as follows in the final permit:

SWMUs in the CAS Investigation Workplan Phase (Condition VIII.G):

- SWMU #32 Fire Training Area
- ~~SWMU #41 Facility Process Sewers~~
- ~~East End SWMU~~

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SWMUs in the RECAP Report Phase (Condition VIII.H):

- SWMU #17 Lime Ditch
- SWMU #30 Waste Oil Drum Storage Area
- SWMU #41 Facility Process Sewers
- SWMU A Low pH Area
- SWMU B Aniline Area
- East End SWMU

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ITEM 31

REFERENCE Olin, Westlake Facility.
Comments on the Draft Hazardous Waste Post-Closure Renewal Permit, August 10, 2007.

ISSUE Permit Attachment 1 (List of Facility Documents Incorporated in the Permit by Reference)

COMMENT Page 8, Comment 31

The contents of the second and third columns in the Attachment 1 table need to be revised. The heading for the second column is for the contents of the third column; similarly, the heading for the third column is for the contents of the second column.

RESPONSE The Department acknowledges the error and will make the necessary corrections in the final permit.

ACTION The column heading "Electronic Database Management System (EDMS) Document ID" was moved from the third column to the second column.

The column heading "Application/Document Date" was moved from the second column to the third column.

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ITEM 32

REFERENCE Olin, Westlake Facility.
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ISSUE Permit Attachment 1 (List of Facility Documents Incorporated in the Permit by Reference)

COMMENT Page 8, Comment 32

In May 2006, Olin submitted a revised Post-Closure Maintenance and Inspection Plan (M&I Plan) for the ISL. The revised plan includes a Leachate Contingency Plan for the Interim Status Landfill requested by LDEQ. However, LDEQ has not referenced the revised M&I Plan in Attachment 1 of the draft permit. A copy of the revised plan is included as Attachment 1 to this letter report. Olin requests that LDEQ include this revised plan as part of the ISL Post-Closure Permit Renewal Application referenced in Attachment 1.

RESPONSE The Department acknowledges and concurs with the comment. The revised M&I plan that was requested and approved by the Department was mistakenly left of Permit Attachment 1. The revised M&I Plan will be included in Permit Attachment 1 in the final permit.

ACTION A row was added to Attachment 1 of the final permit containing the relevant table information for the approved M&I Plan.