

**DRAFT HAZARDOUS WASTE  
POST-CLOSURE PERMIT RENEWAL  
FOR  
FORMOSA PLASTICS CORPORATION  
BATON ROUGE FACILITY  
LAD041224932-PC-RN-1  
AGENCY INTEREST #288/PER 20050009**

**EDMS COPY**

# **FACT SHEET**

## **FACT SHEET**

### **DRAFT HAZARDOUS WASTE POST-CLOSURE RENEWAL PERMIT PREPARED FOR**

**Formosa Plastics Corporation  
Waste Water Stripper Pond and the Neutralization Pond**

**EPA ID# LAD041224932  
Agency Interest #288  
PER20050009**

**Baton Rouge, Louisiana  
East Baton Rouge Parish**

**Permit Number LAD041224932-PC-RN-1**

#### **I. INTRODUCTION**

This fact sheet has been developed in accordance with the Louisiana Administrative Code (LAC) 33:V.703.D and briefly sets forth principal and significant facts, legal, methodological and policy requirements of the proposed draft hazardous waste post-closure permit for Formosa Plastics Corporation, EPA ID Number LAD041224932, Agency Interest Number 288, for the Waste Water Stripper Pond and the Neutralization Pond located in Baton Rouge, East Baton Rouge Parish, Louisiana.

The Louisiana Department of Environmental Quality (LDEQ) has prepared this proposed draft hazardous waste permit for post-closure which addresses the requirements of LAC Title 33, Part V, Subpart 1 and the Federal Resource Conservation and Recovery Act (RCRA) as amended by the 1984 Hazardous and Solid Waste Amendments (HSWA).

Formosa Plastics Corporation is seeking to renew a hazardous waste permit governing the post-closure care requirements for the Waste Water Stripper Pond and the Neutralization Pond.

#### **II. THE PERMITTING PROCESS**

The purpose of this fact sheet is to initiate the permitting decision process. The LDEQ's Waste Permits Division is required to prepare this draft hazardous waste permit. The draft hazardous waste permit sets forth all the applicable conditions, which the Permittee is required to comply with during the life of the permit. Formosa Plastics Corporation submitted its RCRA Post-Closure Permit Renewal Application dated July 1, 1999. Formosa Plastics Corporation submitted a revised application dated August 31, 2006, to the LDEQ.

The permitting process will afford the LDEQ, interested citizens, and other agencies the opportunity to evaluate the ability of the Permittee to comply with the requirements of the LAC 33:V. Subpart 1 and the Hazardous and Solid Waste Amendments (HSWA) portion.

The public is given a minimum of forty-five (45) days to review and comment on the draft post-closure permit. The Administrative Authority, prior to making a decision or taking any final action on the draft permit, will consider all significant comments. The decision of the Administrative Authority shall be to issue, deny, modify, or revoke the draft post-closure permit in accordance with LAC 33:V.705.

**A. DRAFT HAZARDOUS WASTE PERMIT**

The Waste Permits Division reviewed the permit application and other pertinent technical information, and prepared a draft permit that contains the language that pertains to the post-closure care of the listed facilities.

This draft hazardous waste permit is a tentative determination and is not the final decision of the Administrative Authority.

**B. PUBLIC COMMENT PERIOD**

LAC 33:V.715 requires that the public be given at least forty-five (45) days to comment on a draft permit decision.

The specific dates for the public comment period are contained in the public notice that was issued for this particular permitting action. Comments from the public must be received by LDEQ by the end of the public comment period in order for them to be considered by LDEQ.

A public hearing for the draft permit will be held on the date, and at the location and time provided in the public notice (See the attached notice in the Public Participation Section of the Draft Permit). LDEQ will hold the hearing at least forty-five (45) days after the date on which the public notice is given.

Public notice of the proposed permitting action shall be published in specified newspapers, announced on the designated radio station, and mailed to those persons contained on the facility's mailing list.

**C. LOCATIONS OF AVAILABLE INFORMATION**

The administrative record, including all supporting documents is on file at the LDEQ Public Records Center, Room 127, 602 North 5th Street, Baton Rouge, Louisiana. These documents may be inspected and copied (at \$0.25 per copy page) at any time between the hours of 8:00 a.m. to 4:30 p.m., Monday through Friday (except holidays).

In addition, a copy of the draft post-closure permit, fact sheet, and supporting documents are available for review at the **East Baton Rouge Library, Delmont Gardens Branch, 3351 Lorraine St, Baton Rouge, LA 70805.**

**D. WRITTEN COMMENT SUBMISSION**

Interested persons may submit written comments on the draft post-closure permit to the Administrative Authority, at the address listed below, on or before the closing date of the comment period. All comments should include:

- (1) the name and address of the commenter,
- (2) a concise statement of the exact basis for any comment and supporting relevant facts, upon which the comment is based,
- (3) identification of the facility commented on (the EPA Identification Number and the AI number), and
- (4) supporting relevant facts upon which the comments are based.

All comments, further requests for information (including copies of this decision and fact sheet), and any requests by public interest groups or individuals who would like to be included in the mailing list, should be made in writing to

Ms. Soumaya Ghosn  
Louisiana Department of Environmental Quality  
Office of Environmental Services  
Post Office Box 4313  
Baton Rouge, Louisiana 70821-4313  
(225) 219-3276 or fax (225) 219-3309

Any technical questions regarding this draft permit should be addressed to:

Ms. Amy Exnicios  
Louisiana Department of Environmental Quality  
Office of Environmental Services  
Waste Permits Division  
P.O. Box 4313  
Baton Rouge, Louisiana 70821-4313  
(225) 219-3070 or fax (225) 219-3158

### III. DESCRIPTION OF OVERALL SITE

Formosa Plastics Corporation is the owner and operator of the Baton Rouge facility. FPC Baton Rouge facility currently operates three hazardous waste units: the utilities unit, the vinyl chloride monomer (VCM) unit, and the polyvinyl chloride (PVC) unit. The VCM unit produces vinyl chloride monomer using 1,2-dichloroethane feedstock. The VCM produced in the unit is either used as a feedstock for the PVC unit or sold. The PVC unit produces PVC using suspension polymerization.

### IV. HAZARDOUS WASTE FACILITIES

The Baton Rouge facility has two surface impoundments that are currently closed: the closed Waste Water Stripper Pond and Neutralization Pond. Prior to closure, the Neutralization Basin and the Waste Water Stripper Pond received waste waters from the production process containing hazardous waste. The waste was stored and treated in the impoundments before discharge.

The Neutralization Pond was closed in 1986. After the waste removal, the excavated hole was backfilled with compacted soil meeting criteria provided in the unit closure plan (contaminated subsoils were left in place). The compacted backfill was covered with 3 feet of compacted clay that had a hydraulic conductivity of  $1.0 \times 10^{-3}$  cm/sec or less. The clay cap was topped with 6 inches of crushed stone riprap. The limestone cover provides protection from weathering and minimizes erosion of the clay cap during periods when flood waters from the Mississippi River inundated the area. The cap is sloped from the center to prevent permeation of rainfall through the cover. The stone cap is protected from vehicle damage by a low barrier around the site.

The Waste Water Stripper Pond was closed in 1989. After the soil and waste removal stage of the closure (contaminated subsoils were left in place), the excavated hole was also backfilled with compacted backfill meeting criteria provided in the unit closure plan. The compacted backfill was covered with an 8 inch concrete cap. To provide additional protection against infiltration and erosion, polyethylene sheeting overlapped at least 3 feet at the joints was installed before the concrete cap was poured. The site of the Waste Water Stripper Pond is fenced. The concrete pad is used as a lay down area for spare light duty plant equipment, such as tanks, spare heat exchangers, etc.

## V. FINANCIAL AND LIABILITY REQUIREMENTS

Formosa Plastics Corporation has submitted documentation to satisfy the financial assurance requirements of LAC 33:V. Chapter 37.

## VI. SUMMARY OF ENVIRONMENTAL FACTORS CONSIDERED

In accordance with the requirements set forth by the Louisiana Supreme Court in Save Ourselves v. Louisiana Environmental Control Commission, 452 So. 2d 1152 (La. 1983), the LDEQ has considered certain factors in its draft decision on this renewal post-closure permit. This is a preliminary analysis based on information currently available to the LDEQ.

### A. **The potential and real adverse environmental effects of the proposed project have been avoided to the maximum extent possible.**

The units addressed by this application are closed and are undergoing post-closure care. All aspects of the closure of the units and the post-closure care are in compliance with state and federal regulations. As detailed below, the designs of the post-closure units and the post-closure care requirements for the units are adequate to avoid the potential and real adverse environmental impacts to the maximum extent possible.

Two units are addressed by this application. The units are no longer operational, having been closed according to a closure plan approved by the Administrative Authority, and are undergoing post-closure care. There will be no further hazardous waste management activities associated with the units. There is, however, waste closed in place in the units.

During the closure of the surface impoundments, the waste and some soil was removed from the unit and contaminated subsoil were left in place. The units are covered by an engineered cap and a stone cover that is regularly inspected and maintained. These controls minimize the possibility of release into the air or surface and subsurface waters.

The post-closure units are currently in a Corrective Action Program for groundwater contamination as a result of operations related to past or present hazardous waste management facilities. The Permittee must continue or expand the 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). Currently Formosa is removing the contaminated groundwater through a recovery well system and generally the contaminated water is being pumped to Formosa's wastewater treatment system.

- B. A cost benefit analysis of the environmental impact balanced against the social and economic benefits of the project demonstrates that the social and economic benefits outweigh environmental impacts.**

There is no immediate environmental impact cost associated with the post-closure units addressed in this permit. The post-closure care program would mitigate any potential environmental impact. Because this permit addresses existing closed units there will be neither positive nor negative economic effects associated with this application. Since there is no environmental impact costs associated with this application, there is no need to offset such costs.

- C. There are no alternative projects or alternative sites or mitigating measures which offer more protection to the environment than the proposed project without unduly curtailing non-environmental benefits to the extent applicable.**

This draft permit is for the post-closure of hazardous waste surface impoundments. The waste was removed during closure and there is contamination of the groundwater. This permit will provide a regulatory pathway to complete the cleanup of the contamination. There are no known alternative projects or sites that would offer more protection to the environment than issuing a post-closure permit for the closed units. Formosa Plastics Corporation has instituted post-closure care requirements for the closed units that are protective of human health and the environment. No mitigating measures would offer more protection to the environment than permitting the existing units without unduly curtailing non-environmental benefits.

# **PUBLIC PARTICIPATION**

**PUBLIC NOTICE**  
**LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY (LDEQ)**  
**FORMOSA PLASTICS CORPORATION, LOUISIANA**  
**BATON ROUGE FACILITY**

**PUBLIC HEARING AND REQUEST FOR PUBLIC COMMENT ON  
DRAFT HAZARDOUS WASTE POST-CLOSURE PERMIT RENEWAL**

The LDEQ, Office of Environmental Services, will conduct a public hearing to receive comments on the draft hazardous waste post-closure permit renewal for Formosa Plastics Corporation, Louisiana, P.O. Box 271, Baton Rouge, 70821 for the Baton Rouge Facility. **The facility is located on Gulf States Road, Baton Rouge, East Baton Rouge Parish.**

The hearing will be held on **Tuesday, September 1, 2009, beginning at 6:00 p.m., at the Louisiana Department of Environmental Quality, Galvez Building Conference Center, Pensacola Room, 602 North 5<sup>th</sup> Street, Baton Rouge, LA.** During the hearing, all interested persons will have an opportunity to comment on the draft hazardous waste post closure permit renewal.

Free parking will be available at the Galvez Parking Garage facing the Galvez building on north Street. Parking tickets for the public hearing attendees will be validated by DEQ for the free parking.

Formosa Plastics Corporation, Louisiana is the owner and operator of the Baton Rouge Facility. Formosa proposes to obtain a hazardous waste permit governing the post-closure care of the Waste Water Stripper Pond and the Neutralization Pond at the Baton Rouge facility. All wastes addressed in the draft permit were generated on site. The Neutralization Pond was closed in 1986, and the Waste Water Stripper Pond was closed in 1989. For both units, after the soil removal of the closure, the excavated hole was backfilled and compacted meeting criteria provided in the unit closure plan. Formosa is currently maintaining post-closure care and groundwater monitoring of the closed units.

Written comments or written requests for notification of the final permit decision regarding this permit may also be submitted to Ms. Soumaya Ghosn at LDEQ, Public Participation Group, P.O. Box 4313, Baton Rouge, LA 70821-4313. **Written comments and/or written requests for notification must be received by 12:30 p.m., Thursday, September 3, 2009.** Written comments will be considered prior to a final permit decision.

LDEQ will send notification of the final permit decision to the applicant and to each person who has submitted written comments or a written request for notification of the final decision.

The draft hazardous waste permit post-closure permit renewal is available for review at the LDEQ, Public Records Center, Room 127, 602 North 5<sup>th</sup> 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](http://www.deq.louisiana.gov).**

An additional copy may be reviewed at East Baton Rouge Library, Delmont Gardens Branch, 3351 Lorraine St, Baton Rouge, LA.

Individuals with a disability, who need an accommodation in order to participate in the public hearing, should contact Ms. Barbara Mason at the above address or by phone at (225) 219-3280.

Inquiries or requests for additional information regarding this permit action should be directed to Amy Exnicios, LDEQ, Waste Permits Division, P.O. Box 4313, Baton Rouge, LA 70821-4313, phone (225) 219-3070.

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 [deqmailrequest@la.gov](mailto:deqmailrequest@la.gov) or contact the LDEQ Customer Service Center at (225) 219-LDEQ (219-5337).

**Permit public notices including electronic access to the draft permit and associated information** can be viewed at the LDEQ permits public notice webpage at [www.deq.louisiana.gov/apps/pubNotice/default.asp](http://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](http://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](http://www.doa.louisiana.gov/oes/listservpage/ldeq_pn_listserv.htm)

**All correspondence should specify AI Number 288, Permit Number LAD041224932-PC-RN-1, and Activity Number PER20050009.**

**Publication date: July 16, 2009**

BOBBY JINDAL  
GOVERNOR



HAROLD LEGGETT, PH.D.  
SECRETARY

State of Louisiana  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL SERVICES

7/8/2009

Telephone: (225) 388-1111  
Fax: (225) 388-0164  
Email: [legal.ads@theadvocate.com](mailto:legal.ads@theadvocate.com)

Ms. Susan Bush  
Legal Advertising  
Advocate  
P.O. Box 588  
Baton Rouge, LA 70821-0588

RE: Public Hearing and Request For Public Comments  
Formosa Plastics Corp Louisiana  
AI288, PER20050009, Permit Number LAD 041224932-PC-RN-1  
Baton Rouge, East Baton Rouge Parish, Louisiana

Dear Ms. Bush:

Please publish the attached legal notice regarding the above referenced facility as a regular legal ad in the Advocate once only on Thursday, July 16, 2009. You will also receive a copy of the legal notice itself via email. Immediately after publication, please fax a copy of the ad to Ms. Barbara Mason at (225) 325-8163.

State regulations require that we provide notification to the public and allow sufficient time for public comments. For this department to be assured that adequate notification is provided, we are requesting that you sign and date the enclosed 'Verification by Newspaper', and fax it to the attention of Ms. Barbara Mason at (225) 325-8163 immediately upon publication. If the notice cannot be published on the date requested, please call me at (225) 219-3280 or email: [barbara.masson@la.gov](mailto:barbara.masson@la.gov).

Charges for this service should be billed to:

Mr. Omer Wolff, Environmental/Safety Manager  
Formosa Plastics Corp Louisiana  
PO Box 271  
Baton Rouge, LA 70821-0271  
Telephone: (225) 358-8511

The official proof of publication in the form of a tear sheet and invoice should be mailed to the attention of Ms. Barbara Mason, LDEQ, Permits Support Services Division, P.O. Box 4313, Baton Rouge, LA 70821-4313. We appreciate your assistance in our efforts to serve the public.

Sincerely,

*Barbara Mason*

Barbara Mason  
Environmental Project Specialist, Public Participation Group

BM  
Attachments

BOBBY JINDAL  
GOVERNOR



HAROLD LEGGETT, PH.D.  
SECRETARY

## State of Louisiana

### DEPARTMENT OF ENVIRONMENTAL QUALITY ENVIRONMENTAL SERVICES

July 13, 2009

Telephone: (225) 929-6361, Cell (225) 266-1052  
Via Fax: (225) 922-7049

Mr. Aaron Sutton  
Citadel Broadcasting, 103.3  
650 Wooddale Boulevard  
Baton Rouge, LA 70806

**RE: Request For Public Comments On a Public Hearing  
Formosa Plastics Corporation, Louisiana  
Baton Rouge Facility  
East Baton Rouge Parish, Louisiana  
AI288 / LAD 041224932-PC-RN-1 / PER20050009**

Dear Mr. Sutton:

Please broadcast the enclosed public announcement regarding the above referenced facility at the best possible time at the least cost once only on **Thursday, July 16, 2009.**

**Charges for this announcement should be billed to:**

Mr. Omer Wolff, Environmental/Safety Manager  
Formosa Plastics Corporation, Louisiana-Baton Rouge Facility  
Post Office Box 271  
Baton Rouge, LA 70821-0271  
Telephone: (225) 358-8511  
FAX: (225) 356-8611

**For this department to be assured that adequate notification is provided, we are requesting that you sign and date the enclosed 'Verification by Radio' form and fax it my attention at (225) 325-8163 as soon as the announcement has been made.**

If there is any problem with broadcasting this announcement in its entirety, or if you have any questions, please call me immediately at (225) 219-3280.

Thank you for assisting in our effort to serve the public.

Sincerely,

*Barbara Mason*

Barbara Mason  
Environmental Project Specialist  
Public Participation Group

/bm  
Attachment

# LDEQ RADIO ANNOUNCEMENT

## DRAFT HAZARDOUS WASTE POST CLOSURE PERMIT RENEWAL

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The Louisiana Department of Environmental Quality is accepting written comments on a draft hazardous waste post closure permit renewal for Formosa Plastics Corporation, Louisiana, Baton Rouge Facility, located on Gulf States Road, Baton Rouge, East Baton Rouge Parish.

The public comment period will end on Thursday, September 3, 2009 at 12:30 p.m.

A copy of the draft hazardous waste post closure permit renewal and related documents are available for review at the East Baton Rouge Parish Library – Delmont Gardens Branch, 3351 Lorraine St., Baton Rouge, LA and the Louisiana Department of Environmental Quality Public Records Center in Baton Rouge, LA.

The detailed public notice is scheduled for publication in The Advocate on July 16, 2009.

For any inquiries contact LDEQ Customer Service Center at (225) 219-LDEQ, that is (225) 219-5337.

BOBBY JINDAL  
GOVERNOR



HAROLD LEGGETT, PH.D.  
SECRETARY

State of Louisiana  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL SERVICES

CERTIFIED MAIL 7005 0390 0006 1027 3256  
RETURN RECEIPT REQUESTED

Mr. Kelly Serio, Plant Manager  
Formosa Plastics Corporation  
P.O. Box 271  
Baton Rouge, Louisiana 70821-0271

RE: Formosa Plastics Corporation  
AI# 288/ PER20050009/ Permit# LAD 041224932-PC-RN-1/ EPA ID# LAD 041 224 932  
Draft Hazardous Waste Post-Closure Permit Renewal Permit for Wastewater Stripper Pond and  
Neutralization Pond

Dear Mr. Serio:

Enclosed is a copy of the Formosa Plastics Corporation, Draft Hazardous Waste Post-Closure Permit Renewal, LAD041224932-PC-RN-1, that addresses the regulations pertaining to the post-closure care and maintenance activities for the Wastewater Stripper Pond and Neutralization Pond.

A comment period of forty-five (45) days will be allowed in order for the public to review and comment on this draft hazardous waste operating permit. A public hearing will also be scheduled at least forth-five (45) days after the date on which the public notice is given. The date, time and location of the public hearing and specific dates for the beginning and ending of the comment period are contained in the public notice.

Prior to taking a final action on the final post-closure permit, the Administrative Authority will consider all significant comments submitted on this action. Written comments must be submitted no later than 12:30 p.m. on the final day of the comment period. The issuance of the final permit decision will be in accordance with LAC 33:V.705.

Please reference your Agency Interest Number 288, EPA Identification Number LAD041224932, and Permit Activity Number PER20050009 on all future correspondence pertaining to this issue. If you have any questions, please contact Ms. Amy Exnicios of the Waste Permits Division at (225) 219-3070.

Sincerely,

A handwritten signature in black ink, appearing to read "T. F. Harris".

Thomas F. Harris  
Administrator

ae

Enclosure

BOBBY JINDAL  
GOVERNOR



HAROLD LEGGETT, PH.D.  
SECRETARY

## State of Louisiana

### DEPARTMENT OF ENVIRONMENTAL QUALITY ENVIRONMENTAL SERVICES

July 10, 2009

Telephone: (214) 665-6669

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

Re: Public Hearing and Request for Comment  
Formosa Plastics Corporation, Louisiana  
Baton Rouge Facility  
Baton Rouge, East Baton Rouge Parish, Louisiana  
Agency Interest No. 288 / PER20050009 / LAD 041224932-PC-RN-1

Dear Mr. Fruitwala:

The Louisiana Department of Environmental Quality (LDEQ) is enclosing for your reference, a copy of the draft hazardous waste post closure permit renewal and the legal notice schedule to publish in The Advocate on July 16, 2009.

Should you have any questions regarding the facility, additional permit information may be obtained from Mr. Mike Hahn, LDEQ, Waste Permits Division, P.O. Box 4313, Baton Rouge, LA 70821-4313, telephone (225) 219-3457.

Sincerely,

*Barbara Mason*

Barbara Mason  
Environmental Project Specialist  
Public Participation Group

/bm  
Enclosures

BOBBY JINDAL  
GOVERNOR



HAROLD LEGGETT, PH.D.  
SECRETARY

## State of Louisiana

### DEPARTMENT OF ENVIRONMENTAL QUALITY ENVIRONMENTAL SERVICES

7/10/2009

Telephone: 225-354-7050

Ms. Charlotte Pringle  
Branch Manager  
East Baton Rouge Parish Library - Delmont Gardens  
3351 Lorraine Street  
Baton Rouge, LA 70805

**RE: Public Hearing and Request for Comment  
Formosa Plastics Corporation, Louisiana  
Baton Rouge Facility  
Baton Rouge, East Baton Rouge Parish, Louisiana  
Agency Interest No. 288 / PER20050009 / LAD 041224932-PC-RN-1**

Dear Ms. Pringle:

We request that the enclosed documents for the permitting action for referenced company/facility be made available for public review upon receipt in the East Baton Rouge Parish Library - Delmont Gardens. 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), Hazardous Waste Permits Division will provide written notice to you requesting that the information be removed.

Please complete the attached 'Verification by Library' and mail to me at LDEQ-OES, Permit Support Services Division, PO Box 4313, Baton Rouge, LA 70821-4313, or Fax (225) 325-8163. We appreciate your assistance in our efforts to serve the public. If you have any questions, please call me at (225) 219-3280.

Sincerely,

*Barbara Mason*

Barbara Mason  
Environmental Project Specialist, Public Participation Group

BM

Attachments/

BOBBY JINDAL  
GOVERNOR



HAROLD LEGGETT, PH.D.  
SECRETARY

## State of Louisiana

### DEPARTMENT OF ENVIRONMENTAL QUALITY ENVIRONMENTAL SERVICES

July 10, 2009

Telephone: (225) 389-5100

Mayor President Melvin "Kip" Holden  
City of Baton Rouge-EBRP  
222 St. Louis Street, 3<sup>rd</sup> Floor  
Baton Rouge, LA 70802

Re: **Public Hearing and Request for Comment**  
**Formosa Plastics Corporation, Louisiana**  
**Baton Rouge Facility**  
**Baton Rouge, East Baton Rouge Parish, Louisiana**  
**Agency Interest No. 288 / PER20050009 / LAD 041224932-PC-RN-1**

Dear Mayor Holden:

The Louisiana Department of Environmental Quality (LDEQ) is enclosing for your reference, a copy of the draft hazardous waste post closure permit renewal and the legal notice schedule to publish in The Advocate on July 16, 2009.

Should you have any questions regarding the facility, additional permit information may be obtained from Mr. Mike Hahn, LDEQ, Waste Permits Division, P.O. Box 4313, Baton Rouge, LA 70821-4313, telephone (225) 219-3457.

Sincerely,

*Barbara Mason*

Barbara Mason  
Environmental Project Specialist  
Public Participation Group

/bm  
Enclosures

BOBBY JINDAL  
GOVERNOR



HAROLD LEGGETT, PH.D.  
SECRETARY

**State of Louisiana**  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
ENVIRONMENTAL SERVICES

July 13, 2009

Mr. Bobby Mayweather, Regional Manager  
Capital Regional Office  
Headquarters-Room 137  
Baton Rouge, LA 70802

**Re: Public Hearing and Request for Comment  
Formosa Plastics Corporation, Louisiana  
Baton Rouge Facility  
Baton Rouge, East Baton Rouge Parish, Louisiana  
Agency Interest No. 288 / PER20050009 / LAD 041224932-PC-RN-1**

Dear Mr. Mayweather:

We request that the enclosed copy of the permit action and a copy of the request for public notice for the referenced facility be made available for public review upon receipt. It is imperative that these documents are available for review at all times; therefore, it cannot be checked out at any time by anyone.

The Louisiana Department of Environmental Quality, Office of Environmental Services, Permits Division, will provide written notice to you requesting that the information be removed.

Please complete the attached verification form and mail to me at LDEQ-OES, Environmental Assistance Division, Post Office Box 4313, Baton Rouge, Louisiana 70821-4313, or fax it to (225) 219-3309.

We appreciate your assistance in our efforts to serve the public. If you have any questions, please call me at (225) 219-3280.

Sincerely,

*Barbara Mason*

Barbara Mason  
Environmental Project Specialist  
Public Participation Group

bm  
Enclosure

**SIGNATURE  
PAGE**

**DRAFT PERMIT**

**LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY**

**HAZARDOUS WASTE POST-CLOSURE RENEWAL PERMIT**

**PERMITTEE:** Formosa Plastics Corporation

**PERMIT NUMBER:** LAD 041224932-PC-RN-1  
Waste Water Stripper Pond and the Neutralization Pond  
Agency Interest # 288/Activity # PER20050009

**FACILITY LOCATION:** Gulf Sates Rd, East Baton Rouge Parish  
Baton Rouge, Louisiana 70805

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 Formosa Plastics Corporation, (hereafter called the Permittee), for the Baton Rouge Facility located in Baton Rouge, Louisiana, at latitude 30° 29' 59" and longitude 091° 11' 32."

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 \_\_\_\_\_, and shall remain in effect until \_\_\_\_\_, 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. Subchapter B must continue for at least thirty (30) years after the date of closure for those units listed in Section III.O.1 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 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

DRAFT

\_\_\_\_\_  
Cheryl Sonnier Nolan, Assistant Secretary  
Louisiana Department of Environmental Quality

\_\_\_\_\_  
Date

# **PART A**

<p><b>SEND COMPLETED</b></p> <p><b>FORM TO:</b> The Appropriate State or EPA Regional Office.</p>	<p align="center">United States Environmental Protection Agency</p> <p align="center"><b>RCRA SUBTITLE C SITE IDENTIFICATION FORM</b></p>		
<p><b>1. Reason for Submittal</b> (See Instructions on page 14.)</p> <p>MARK ALL BOX(ES) THAT APPLY</p>	<p><b>Reason for Submittal:</b></p> <p><input type="checkbox"/> To provide Initial Notification of Regulated Waste Activity (to obtain an EPA ID Number for hazardous waste, universal waste, or used oil activities)</p> <p><input type="checkbox"/> To provide Subsequent Notification of Regulated Waste Activity (to update site identification information)</p> <p><input type="checkbox"/> As a component of a First RCRA Hazardous Waste Part A Permit Application</p> <p><input checked="" type="checkbox"/> As a component of a Revised RCRA Hazardous Waste Part A Permit Application (Renewal Application)</p> <p><input type="checkbox"/> As a component of the Hazardous Waste Report</p>		
<p><b>2. Site EPA ID Number</b> (page 15)</p>	<p>EPA ID Number</p> <p align="center">111A1D110141112121411913121</p>		
<p><b>3. Site Name</b> (page 15)</p>	<p>Name: Formosa Plastics Corporation Louisiana</p>		
<p><b>4. Site Location Information</b> (page 15)</p>	<p>Street Address: Gulf States Road</p>		
	<p>City, Town, or Village: Baton Rouge</p>	<p>State: LA</p>	
	<p>County Name: East Baton Rouge</p>	<p>Zip Code: 70805</p>	
<p><b>5. Site Land Type</b> (page 15)</p>	<p>Site Land Type: <input checked="" type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Indian <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other</p>		
<p><b>6. North American Industry Classification System (NAICS) Code(s) for the Site</b> (page 15)</p>	<p>A. 131215121111</p>	<p>B. _____</p>	
	<p>C. _____</p>	<p>D. _____</p>	
<p><b>7. Site Mailing Address</b> (page 16)</p>	<p>Street or P. O. Box: P.O. Box 271</p>		
	<p>City, Town, or Village: Baton Rouge</p>		
	<p>State: LA</p>		
	<p>County: East Baton Rouge</p>	<p>Zip Code: 70821</p>	
<p><b>8. Site Contact Person</b> (page 16)</p>	<p>First Name: Omer</p>	<p>MI:</p>	<p>Last Name: Wolff</p>
	<p>Phone Number: 225-356-3341 Extension</p>	<p>N/A</p>	<p>Email address:</p>
<p><b>9. Operator and Legal Owner of the Site</b> (pages 16 and 17)</p>	<p>A. Name of Site's Operator: Formosa Plastics Corporation Louisiana</p> <p>Operator Type: <input checked="" type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal</p>		<p>Date Became Operator (mm/dd/yyyy):</p> <p><input type="checkbox"/> Indian <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other</p>
	<p>B. Name of Site's Legal Owner: Formosa Plastics Corporation Louisiana</p> <p>Owner Type: <input checked="" type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal</p>		<p>Date Became Owner (mm/dd/yyyy):</p> <p><input type="checkbox"/> Indian <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other</p>

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9. Legal Owner (Continued) Address	Street or P. O. Box: P.O. Box 271	
	City, Town, or Village: Baton Rouge	
	State: LA	
	Country: USA	Zip Code: 70821

10. Type of Regulated Waste Activity  
Mark Yes or No for all activities; complete any additional boxes as instructed. (See Instructions on pages 18 to 21.)

A. Hazardous Waste Activities  
Complete all parts for 1 through 6.

- Y  N  1. Generator of Hazardous Waste  
If Yes, choose only one of the following - a, b, or c.
- a. LQG: Greater than 1,000 kg/mo (2,200 lbs./mo.) of non-acute hazardous waste; or
- b. SQG: 100 to 1,000 kg/mo (220 - 2,200 lbs./mo.) of non-acute hazardous waste; or
- c. CESQG: Less than 100 kg/mo (220 lbs./mo.) of non-acute hazardous waste

In addition, indicate other generator activities.

- Y  N  d. United States Importer of Hazardous Waste
- Y  N  e. Mixed Waste (hazardous and radioactive) Generator

Y  N  2. Transporter of Hazardous Waste

Y  N  3. Treater, Storer, or Disposer of Hazardous Waste (at your site) Note: A hazardous waste permit is required for this activity.

Y  N  4. Recycler of Hazardous Waste (at your site)

Y  N  5. Exempt Boiler and/or Industrial Furnace

If Yes, mark each that applies.

- a. Small Quantity On-site Burner Exemption
- b. Smelting, Melting, and Refining Furnace Exemption

Y  N  6. Underground Injection Control  
B. Universal Waste Activities

Y  N  1. Large Quantity Handler of Universal Waste (accumulate 5,000 kg or more) [refer to your State regulations to determine what is regulated]. Indicate types of universal waste generated and/or accumulated at your site. If Yes, mark all boxes that apply:

Generate Accumulate

Y  N  2. Used Oil Processor and/or Re-refiner  
If Yes, mark each that applies.

- |                          |                          |                          |
|--------------------------|--------------------------|--------------------------|
| a. Batteries             | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Pesticides            | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Thermostats           | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Lamps                 | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Other (specify) _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Other (specify) _____ | <input type="checkbox"/> | <input type="checkbox"/> |
| g. Other (specify) _____ | <input type="checkbox"/> | <input type="checkbox"/> |

C. Used Oil Activities  
Mark all boxes that apply.

Y  N  1. Used Oil Transporter  
If Yes, mark each that applies.

- a. Transporter
- b. Transfer Facility
- a. Processor
- b. Re-refiner

Y  N  3. Off-Specification Used Oil Burner

Y  N  4. Used Oil Fuel Marketer

If Yes, mark each that applies.

- a. Marketer Who Directs Shipment of Off-Specification Used Oil to Off-Specification Used Oil Burner
- b. Marketer Who First Claims the Used Oil Meets the Specifications

Y  N  2. Destination Facility for Universal Waste  
Note: A hazardous waste permit may be required for this activity.

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**11. Description of Hazardous Wastes (See Instructions on page 22.)**

**A. Waste Codes for Federally Regulated Hazardous Wastes.** Please list the waste codes of the Federal hazardous wastes handled at your site. List them in the order they are presented in the regulations (e.g., D001, D003, F007, U112). Use an additional page if more spaces are needed.

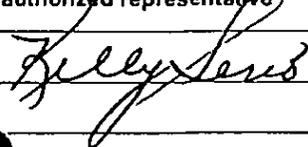
D001	D002	D006	D007	D008	D009	D018
D019	D022	D028	D035	D039	D040	D043
F001	F003	F004	F024	F025	K019	K020

**B. Waste Codes for State-Regulated (i.e., non-Federal) Hazardous Wastes.** Please list the waste codes of the State-regulated hazardous wastes handled at your site. List them in the order they are presented in the regulations. Use an additional page if more spaces are needed for waste codes.

**12. Comments (See Instructions on page 22.)**

Section 11, Box A, K174, U028, U075, U154.

**13. Certification.** I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. For the RCRA Hazardous Waste Part A Permit Application, all operator(s) and owner(s) must sign (see 40 CFR 270.10 (b) and 270.11). (See instructions on page 22.)

Signature of operator, owner, or an authorized representative	Name and Official Title (type or print)	Date Signed (mm/dd/yyyy)
	Mr. Kelly B. Serio Vice-President/Plant Manager	2/27/08

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**United States Environmental Protection Agency  
HAZARDOUS WASTE PERMIT INFORMATION FORM**

1. Facility Permit Contact (See instructions on page 23)	First Name: Omer	MI:	Last Name: Wolff
	Phone Number: 225-356-3341	Phone Number Extension: N/A	
2. Facility Permit Contact Mailing Address (See instructions on page 23)	Street or P.O. Box: P.O. Box 271		
	City, Town, or Village: Baton Rouge		
	State: LA		
	Country: USA	Zip Code: 70821	
3. Operator Mailing Address and Telephone Number (See instructions on page 23)	Street or P.O. Box: P.O. Box 271		
	City, Town, or Village: Baton Rouge		
	State: LA		
	Country: USA	Zip Code: 70821	Phone Number: 225-356-3341
4. Legal Owner Mailing Address and Telephone Number (See instructions on page 23)	Street or P.O. Box: P.O. Box 271		
	City, Town, or Village: Baton Rouge		
	State: LA		
	Country: USA	Zip Code: 70821	Phone Number: 225-356-3341
5. Facility Existence Date (See instructions on page 24)	Facility Existence Date (mm/dd/yyyy):		

6. Other Environmental Permits (See instructions on page 24)

A. Permit Type (Enter code)	B. Permit Number												C. Description	
N	L	A	0	0	0	6	1	4	9					NPDES / LPDES Permit
E	2	9	1	5	-	V	0							Utilities Unit Title V Air Permit
E	0	8	4	0	-	0	0	0	0	2	-	V	0	VCM Unit Title V Air Permit
E	1	0	0	4	-	V	0							PVC Unit Title V Air Permit
E	P	S	D	-	L	A	-	5	4	6	M	-	1	PSD Air Permit
E	P	S	D	-	L	A	-	5	6	0	M	-	3	PSD Air Permit

7. Nature of Business (Provide a brief description; see instructions on page 24)

The FPC Baton Rouge Facility consists of three operating units: the Utilities Unit, the Vinyl Chloride Monomer (VCM) Unit, and Polyvinyl Chloride (PVC) Unit. The VCM Unit produces vinyl chloride monomer using 1,2-dichloroethane (ethylene dichloride or ED) as feedstock. The VCM produced in this unit is either used as feedstock for the PVC Unit or sold. The PVC Unit produces PVC using suspension polymerization.

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Process Codes and Design Capacities (See instructions on page 24) - Enter information in the Sections on Form Page 3.

**PROCESS CODE** - Enter the code from the list of process codes in the table below that best describes each process to be used at the facility. Fifteen codes 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), enter the process information in Item 9 (including a description).

**B. PROCESS DESIGN CAPACITY** - For each code entered in Section 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 Section B(1), enter the code in Section 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 \_\_\_\_\_ for each corresponding process code.

PROCESS CODE	PROCESS	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY	PROCESS CODE	PROCESS	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
D79	Underground Injection Well Disposal	Gallons; Liters; Gallons Per Day; or Liters Per Day	T81	Cement Kiln	For T81-T93:
D80	Landfill	Acres-feet; Hectare-meter; Acres; Cubic Meters; Hectares; Cubic Yards	T82	Lime 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; or Million Btu Per Hour
D81	Land Treatment	Acres or Hectares	T83	Aggregate Kiln	
D82	Ocean Disposal	Gallons Per Day or Liters Per Day	T84	Phosphate Kiln	
D83	Surface Impoundment Disposal	Gallons; Liters; Cubic Meters; or Cubic Yards	T85	Coke Oven	
D99	Other Disposal	Any Unit of Measure in Code Table Below	T86	Blast Furnace	
S01	Container	Gallons; Liters; Cubic Meters; or Cubic Yards	T87	Smelting, Melting, or Refining Furnace	
S02	Tank Storage	Gallons; Liters; Cubic Meters; or Cubic Yards	T88	Titanium Dioxide Chloride Oxidation Reactor	
S03	Waste Pile	Cubic Yards or Cubic Meters	T89	Methane Reforming Furnace	
S05	Drip Pad	Gallons; Liters; Acres; Cubic Meters; Hectares; or Cubic Yards	T90	Pulping Liquor Recovery Furnace	
S06	Containment Building Storage	Cubic Yards or Cubic Meters	T91	Combustion Device Used in The Recovery Of Sulfur Values From Spent Sulfuric Acid Halogen Acid Furnaces, Other Industrial Furnaces Listed in 40 CFR 0260.10	
S99	Other Storage	Any Unit of Measure in Code Table Below	T92		
T01	Tank Treatment	Gallons Per Day; Liters Per Day	T93		
T02	Surface Impoundment Treatment	Gallons Per Day; Liters Per Day	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
T03	Inclinator	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			
	<b>Treatment:</b>			<b>Miscellaneous (Subpart X):</b>	
X01	Open Reaction/Open Detonation	Any Unit of Measure in Code Table 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	UNIT OF MEASURE	UNIT OF MEASURE CODE	UNIT OF MEASURE	UNIT OF MEASURE CODE
Gallons	C	Short Tons Per Hour	D	Cubic Yards	Y
Gallons Per Hour	E	Metric Tons Per Hour	W	Cubic Meters	C
Gallons Per Day	U	Short Tons Per Day	N	Acres	B
Liters	L	Metric Tons Per Day	S	Acre-feet	A
Liters Per Hour	H	Pounds Per Hour	J	Hectares	Q
Liters Per Day	V	Kilograms Per Hour	R	Hectare-meter	F
		Million Btu Per Hour	X	Btu Per Hour	I



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**10. Description of Hazardous Wastes (See instructions on page 25) - Enter information in the sections on Form Page 5.**

**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 Section A, estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in Section 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 Section 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 Section 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 listed hazardous wastes.

For non-listed hazardous waste: For each characteristic or toxic contaminant entered in Section 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 Section A. On the same line complete Sections 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 Section A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In Section 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 (Enter code)	C. Unit of Measure	D. PROCESSES	
				(1) PROCESS CODES (Enter code)	(2) PROCESS DESCRIPTION (If a code is not entered in D(1))
X 1	N/A - Closed Unit				
X 2					
X 3					
X 4					





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1. Map (See instructions on pages 25 and 26)

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 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.

2. Facility Drawing (See instructions on page 26)

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

3. Photographs (See instructions on page 26)

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).

4. Comments (See instructions on page 26)

This RCRA permit renewal application is being submitted for the Formosa Plastics Corporation, Louisiana (FPC) Neutralization Pond and Waste Water Stripper Pond, which are closed facilities presently in post-closure care. Therefore, this form was completed for the closed Neutralization Pond and Waste Water Stripper Pond. As stated in the Waste Water Stripper Pond Closure Plan, the maximum sludge contained in the Waste Water Stripper Pond prior to closure was 10,000 cubic yards. As stated in the Neutralization Pond Closure Plan, it was estimated that the maximum sludge contained in the Neutralization Pond prior to closure was 2,400 cubic yards.

Multiple horizontal lines for handwritten input.

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**BODY  
OF PERMIT**

**DRAFT**

**HAZARDOUS WASTE POST-CLOSURE PERMIT**

**FORMOSA PLASTICS CORPORATION, LOUISIANA**

**EPA ID# LAD041224932**

**Baton Rouge, Louisiana**

**East Baton Rouge Parish**

**Agency Interest #288 / PER20050009**

**Permit Number LAD041224932-PC-RN-1**

**I. PERMIT PREAMBLE**

This permit is issued to Formosa Plastics Corporation, Louisiana, 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 Permittee'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.

All definitions contained in this permit shall have the meaning as defined in the Louisiana Administrative Code (LAC), Title 33, Part V, Subpart 1 unless otherwise stated herein.

All regulating citations are defined as being the regulation in effect on the date of issuance of this permit, except as provided by LAC 33:V.307. New and/or amended regulations are not included as permit requirements until permit modification procedures as specified in Condition II.C of this permit are completed.

**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. If the AOC is shown not to be a SWMU by the investigation, the Administrative Authority may determine that no further action is necessary and notify the Permittee in writing.

**"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 ground water 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 , 33 U.S.C. § 1251 et seq.

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

**"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.

**"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.

**"LNAPL"** a light liquid not dissolved in water, commonly referred to as "free product."

**"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 Formosa Plastics Corporation, Gulf States Road, Baton Rouge, Louisiana 70805.

**"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.

## **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 Neutralization Pond and the Waste Water Stripper Pond in accordance with the conditions of this permit. 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 during its term constitutes compliance for purposes of enforcement, with LAC 33:V. Subpart I, except for those requirements not included in the permit under LAC 33:V.307.A.1-4, and with Subtitle C of RCRA, HSWA, 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 regulation 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 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.

### **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 Ground Water Quality Sampling Procedures, 1981, EPA-600/2-81-160, as revised; Procedures Manual for Ground Water 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 in accordance with 309.J.3, 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 ground water 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, and 1531.D.

#### **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, in accordance with LAC 33:V.309.L.7. 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 must submit 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**

**II.E.25.a.** Within sixty (60) days from the effective date of the permit, the Permittee must submit to the Administrative Authority an updated Corrective Action Plan which must describe the recovery well system inspection and maintenance requirements. Upon approval by the Administrative Authority, the Permittee will be required to do a permit modification.

**II.E.25.b.** Within sixty (60) days from the effective date of the permit, the Permittee must submit to the Administrative Authority a Notice of Intent to conduct corrective action using the Corrective Action Strategy (CAS.) This Notice must be submitted in accordance with Condition VIII.B.1, LAC 33:V.Chapter 5, Subchapter B and the deadlines specified in Appendix 1, Table 1.

### **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)** Waste Analysis Plan (RESERVED) – A waste analysis plan is not required for the units in post-closure under this permit.

**II.E.28.a.(2)** Personnel Training Plan submitted in accordance with LAC 33:V.1515 (see Attachment 1).

**II.E.28.a.(3)** Contingency Plan (RESERVED)- A Contingency Plan is not required for the units in post-closure under this permit. However, as a Large Quantity Generator of Hazardous Waste the Permittee is required to maintain a contingency plan per LAC 33:V. 1109.E.9.

**II.E.28.a.(4)** Arrangements with local authorities (RESERVED) – Arrangements with local authorities are not required for the units in post-closure under this permit. However, as a Large Quantity Generator of Hazardous Waste the Permittee is required to maintain arrangements with local authorities per LAC 33:V. 1109.E.9.

**II.E.28.a.(5)** Post-Closure Plan submitted in accordance with LAC 33:V.3523 and 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 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)** Operating Records plan as required by LAC 33:V.1529.

**II.E.28.a.(8)** Inspection Plan developed in accordance with LAC 33:V.517.G and 1509.B. (see Attachment 1)

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

**II.E.28.a.(10)** Sampling and Analysis Plan developed in accordance with LAC 33:V. Chapter 33 (see Attachment 1).

**II.E.28.a.(11)** Corrective Action Plan developed in accordance with LAC 33:V.3321 (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. Waste Discharges**

Waste 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. 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 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**

The Permittee must comply with the personnel training of LAC 33:V.1515, as referenced in Attachment 1.

#### **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**

The Permittee must initiate those applicable portions of the Contingency Plan during a hurricane as well as appropriate actions required by LAC 33:V.1507, 1509 and 1511.

### **III.K. PREPAREDNESS AND PREVENTION**

Preparedness and prevention are not required for the units in post-closure under this permit. However, as a Large Quantity Generator of Hazardous Waste, the Permittee is required to meet the requirements of LAC 33: V.1511 per LAC 33:V. 1109.E.9.

#### **III.K.1. Required Equipment**

At a minimum, the Permittee must install and maintain the equipment set forth in the Contingency Plan, as required by LAC 33:V.1511.C.

#### **III.K.2. Testing and Maintenance of Equipment**

The Permittee must test and maintain the equipment specified in Condition III.K.1 to insure its proper operation in time of emergency. The testing and maintenance of the equipment must be documented in the operating record.

### **III.K.3. Access to Communications or Alarm Systems**

The Permittee must maintain access to the communications or alarm system as required by LAC 33:V.1511.E.1 and 1511.E.2.

### **III.K.4. Arrangements with Local Authorities**

The Permittee shall comply with LAC 33:V.1511.G regarding arrangements with local authorities.

## **III.L. CONTINGENCY PLAN**

A Contingency Plan is not required for the units in post-closure under this permit. However, as a Large Quantity Generator of Hazardous Waste the Permittee is required to maintain a contingency plan per LAC 33:V. 1109.E.9.

### **III.L.1. Implementation of Plan**

The Permittee must immediately carry out the provisions of the Contingency Plan, and follow the emergency procedures described by LAC 33:V.1513.F whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents that threaten or could threaten human health or the environment.

### **III.L.2. Copies of Plan**

The Permittee must comply with the requirements of LAC 33:V.1513.C.

### **III.L.3. Amendments to Plan**

The Permittee must review and immediately amend, if necessary, the Contingency Plan as required by LAC 33:V.1513.D.

### **III.L.4. Emergency Coordinator**

The Permittee must comply with the requirements of LAC 33:V.1513.E, and 322.B.6 concerning the emergency coordinator.

## **III.M. MANIFEST SYSTEM**

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

### **III.N. RECORD KEEPING AND REPORTING**

#### **III.N.1. Operating Record**

The Permittee shall maintain a written operating record at the facility in accordance with LAC 33:V.1529.A, B, C.

#### **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**

The Permittee shall compile and keep current an operations manual covering all aspects of the Permittee's treatment, storage and disposal facilities.

### **III.O. POST-CLOSURE**

#### **III.O.1. Post-Closure Care**

The Permittee must manage the Waste Water Stripper Pond, and Neutralization Pond in accordance with this permit, LAC 33:V. Chapter 35, Subchapter B and 2911.

#### **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 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. All cost estimates must include the cost for maintaining the Correction Action Plan (Attachment 1).

**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 resubmittal.

**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.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.

### **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**

**III.S.1.** Pursuant to LAC 33:V.3717.A, the Permittee, and any guarantor of a corporate guarantee specified in LAC 33:V.3707.F and 3711.F, must notify the Office of Environmental Services by certified mail of the commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming the Permittee or guarantor as debtor, within 10 days after commencement of the proceeding.

**III.S.2.** Any Permittee who fulfills the requirements of LAC 33:V.3707, 3711 or 3715 by obtaining a trust fund, surety bond, letter of credit, or insurance policy will be deemed to be without the required financial assurance or liability coverage in the event of bankruptcy of the trustee or issuing institution, or a suspension or revocation of the authority of the trustee institution to act as trustee or of the institution issuing the surety bond, letter of credit, or insurance policy to issue such instruments. The permittee must establish other financial assurance or liability coverage within 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 units known as the Waste Water Stripper Pond, and Neutralization Pond located on the property of Formosa Plastics Corporation, Louisiana, East Baton Rouge 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**

<b>UNIT NAME</b>	<b>UNIT TYPE</b>	<b>CAPACITY</b>
Waste Water Stripper Pond	Surface Impoundment	10,000 cubic yards
Neutralization Pond	Surface Impoundment	2,400 cubic yards

## **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. Waste Water Stripper Pond:** The post-closure care period began in October 1989, when the unit was closed in accordance with the approved closure plan and applicable regulations.

**V.A.2. Neutralization Pond:** The post-closure care period began on May 2, 1986, when the unit was closed in accordance with the approved closure plan and applicable regulations.

### **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 surface impoundments,

**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 surface impoundments.

**V.B.5.** The annual report shall include a Post-Closure activity report for the Waste Water Stripper Pond and Neutralization Pond.

#### **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 La. R.S., 30:2171 et seq. of the Act, La. 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 LAC 33:V.3527 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**

(RESERVED per Section VI.C)

### **VI.C. GROUNDWATER PROTECTION STANDARD**

Pursuant to LAC 33:V.3301.G, The Administrative Authority has Determined that:

The regulated units are situated among solid waste management units , a release has occurred, and both the regulated units and one or more of the solid waste management units are likely to have contributed to the release.

Accordingly, the Administrative Authority has determined that Formosa may follow the approved Corrective Action Plan (Attachment 1), in place of requirements listed in LAC 33:V.Chapter 33.

Upon successful demonstration by the Permittee that the corrective action associated with the regulated units warrants termination, the Permittee must submit to the Administrative Authority an application for permit modification pursuant to LAC 33:V321 to terminate the corrective action. If the regulated units were closed with waste and/or source medium (e.g., contaminated soil) left in place, the application must include provisions to establish a required program (LAC 33:V.3303 and Condition VI.B) including either a Detection monitoring Program or Compliance Monitoring Program (as determined by COC concentrations remaining in groundwater) on a schedule approved by the Administrative Authority. Pursuant to LAC 33:V.3313, if corrective action has been implemented, the compliance period cannot end until after the Permittee has

demonstrated that the corrective action has been effectively implemented and the groundwater protection standard has not been exceeded for a period of three (3) consecutive years.

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

### **VII.A. STANDARD CONDITIONS**

#### **VII.A.1. Waste Minimization**

Annually, by March 1, for the previous year ending December 31, the Permittee shall enter into the operating record as required by LAC 33:V.1529.B.19, a statement certified according to LAC 33:V.513.A specifying that the Permittee has a program in place to reduce the volume and toxicity of hazardous wastes generated by the facility's operation to the degree determined by the Permittee to be economically practicable; and that the proposed method of treatment, storage, or practicable disposal method that is currently available to the Permittee minimizes the present and future threat to human health and the environment. A current description of the program shall be maintained in the operating record and a copy of the annual certified statement shall be submitted to the Administrative Authority. The following criteria should be considered for the program:

**VII.A.1.a.** Any written policy or statement that outlines goals, objectives, and/or methods for source reduction and recycling of hazardous waste at the facility;

**VII.A.1.b.** Any employee training or incentive programs designed to identify and implement source reduction and recycling opportunities;

**VII.A.1.c.** An itemized list of the dollar amounts of capital expenditures (plant and equipment) and operating costs devoted to source reduction and recycling of hazardous waste;

**VII.A.1.d.** Factors that have prevented implementation of source reduction and/or recycling;

**VII.A.1.e.** Sources of information on source reduction and/or recycling received at the facility (e.g., local government, trade associations, suppliers, etc.);

**VII.A.1.f.** An investigation of additional waste minimization efforts that could be implemented at the facility. This investigation would analyze the potential for reducing the quantity and toxicity of each waste stream through production reformulation, recycling, and all other appropriate means. The analysis would include an assessment of the technical feasibility, cost, and potential waste reduction for each option;

**VII.A.1.g.** A flow chart or matrix detailing all hazardous wastes the facility produces by quantity, type, and building/area;

**VII.A.1.h.** A demonstration of the need to use those processes that produce a particular hazardous waste due to a lack of alternative processes or available technology that would produce less hazardous waste;

**VII.A.1.i.** A description of the waste minimization methodology employed for each related process at the facility. The description should show whether source reduction or recycling is being employed;

**VII.A.1.j.** A description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years; and

**VII.A.1.k.** The Permittee may meet the requirements for waste minimization by developing an Environmental Management System according to the EPA document, Integrated Environmental Management System Implementation Guide, EPA 744-R-00-011, October 2000, found on [www.epa.gov/opptintr/dfepubs/iems/iems\\_guide/index.htm](http://www.epa.gov/opptintr/dfepubs/iems/iems_guide/index.htm).

#### **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**

**VII.A.7.a.** The Permittee shall not place in any land disposal unit the wastes specified in LAC 33:V. Chapter 22 after the effective date of the prohibition unless the Administrative Authority has established disposal or treatment standards for the hazardous waste and the Permittee meets such standards and other applicable conditions of this Permit.

**VII.A.7.b.** The Permittee may store wastes restricted under LAC 33:V.Chapter 22 solely for the purpose of accumulating quantities necessary to facilitate proper recovery, treatment, or disposal provided that it meets the requirements of LAC 33:V.2205 including, but not limited to, clearly marking each tank or container.

**VII.A.7.c.** The Permittee is required to comply with all applicable requirements of LAC 33:V.2245 as amended. Changes to the Waste Analysis Plan will be considered permit modifications at the request of the Permittee, pursuant to LAC 33:V.321.C.

**VII.A.7.d.** The Permittee shall review the Waste Analysis Plan and analyze the waste when a process changes to determine whether the waste meets applicable treatment standards. Results shall be maintained in the operating record pursuant to Condition III.C.1 and 2.

**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  
Remediation Services 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 ground water, 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 the CAS

This Permit will utilize the CAS Guidance Document ([www.epa.gov/region6/6pd/rcra\\_c/pd-o/riskman.htm](http://www.epa.gov/region6/6pd/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 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, ground water 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, ground water, 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.

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.

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.

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. Use of the 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. Use of 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. Use of 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. Use of 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 33:1.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 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 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 ground water 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, 3<sup>rd</sup> 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 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 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<sup>1</sup> permit modification (<sup>1</sup> 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<sup>1</sup> permit modification (<sup>1</sup> requiring Administrative Authority approval) 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 ground water 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<sup>1</sup> permit modification request under LAC 33:V.321.C.1 to add the newly-identified SWMU/AOC to Appendix 1, Table 2 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 ground water 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<sup>1</sup> permit modification 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<sup>1</sup> permit modification request under LAC 33:V.321.C.1. The Permittee must notify the facility mailing list within ninety (90) days of the Administrative Authority's approval of the Class 1<sup>1</sup> 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.

<u>Actions</u>	<u>Due Date</u>
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 sixty (90) days of approval of the RAS by the Administrative Authority
Submit NFA (and Permit Modification) request 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)	Fifteen (15) days after discovery

# **APPENDIX 1**

## **SUMMARY OF CORRECTIVE ACTION ACTIVITIES**

## 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 SWMUs, AOCs, closure activities and/or corrective action activities 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 LDEQ based on future geological/hydrogeological conditions and future information available to the LDEQ.<sup>1</sup>

#### IDENTIFICATION OF SWMUs, AOCs AND CORRECTIVE ACTION ACTIVITIES TO DATE

The Louisiana Department of Environmental Quality (LDEQ) Groundwater Protection Division conducted a RCRA Facility Assessment (RFA) for the Formosa Plastic Corporation (FPC) Baton Rouge Facility in August 1988. As included in the LDEQ's August 1988 RFA report, the following sixteen solid waste management units (SWMUs) were identified:

- Bayou Hebert Pond
- Waste Water Stripper Pond
- Neutralization Pond
- Brine Pond
- Lead Pond
- South Pond Dredging Pile (Exxon Purchased Property)
- VCM Sewers, Sumps (2), and Tanks (EDC Tank Farm Sump)
- Hydrocarbon Reduction Incinerator
- Tank Farm Drainage Sump and Tank
- Container Storage Area
- Sanitary Sewer Pond
- Caustic Chlorine Neutralization System
- Powerhouse Outfall 010
- Product Loading, Material Unloading
- Groundwater Recovery System
- Caustic Storage Tanks

As a result of the August 1988 RFA, the LDEQ identified the VCM Sewers, Sumps, and Tank and Caustic Storage Tanks as the only 2 SWMUs requiring a RCRA Facility Investigation (RFI) for potential releases to the groundwater and soil. No further action was required for the remaining fourteen SWMUs.

Based on EPA's review of the FPC's revised February 1991 RFI work plan, the following additional four additional areas were identified as SWMUs:

- Historical Surface Water Drainage Areas
- Asbestos Burial Site (closed)
- Cell Disposal Area (closed)

- Sulfuric Acid Storage Tanks

It was determined in the March 1991 addendum to the revised February 1991 RFI work plan that no assessment activities were necessary as a part of the RFI for the Asbestos Burial Site and the Cell Disposal Area since the areas were previously clean closed. Additionally, in the February 1991 RFI work plan, it was stated that no additional subsurface assessment activities were necessary as part of the RFI for the VCM Sewers, Sumps, and Tank based on previous assessment activities and on-going remediation in the VCM Wastewater System area. Therefore, the following four SWMUs were included in the RFI initiated at the FPC Baton Rouge Facility in April 1991 in accordance with the United States EPA approved work plans:

- EDC Tank Farm Sump
- Caustic Storage Tanks
- Historical Surface Water Drainage Areas
- Sulfuric Acid Storage Tanks

Below is a more detailed history of the units which were included in the RFI:

**VCM Sewers, Sumps, and Tank-** The VCM Waste Water System was built in 1968 and consisted of two sumps with interconnecting sewer lines and a storage tank. Based on the June 1990 RFI work plan, the sumps were inspected in 1985 and found to be structurally sound. The south sump was modified in 1986 and the north sump was removed. In 1989, the south sump was inspected and found to be structurally sound. In the June 1990 RFI work plan, the VCM Waste Water System was categorized as a "Sumps with Drains" unit type. The south sump extended to a depth equal or below the water table. Several hundred feet of in-ground drains drained into the sump. FPC conducted a major upgrade of the VCM Waste Water System in 1988, including repairing all eroded surfaces of the drain system, sealing all construction joints and cracks, repairing furan and brick lining, as necessary, installing a double wide brick wall to provide greater strength and prevent separation of the brick from the concrete wall, and removing all heavy 1,2-dichloroethane bearing waste streams from the system.

**EDC Tank Farm Sump-** The EDC Tank Farm Sump collected rainwater and any releases which may have occurred at the Tank Farm EDC Pump Pads. On April 14, 1988, FPC received a compliance order to route all 1,2dichloroethane contaminated runoff from the EDC Tank Farm Sump to the Waste Water Stripper due to a cracked discharge line from the sump pump. Improvements were made in accordance with the compliance order.

**Caustic Storage Tanks-** The caustic storage tanks were constructed in 1968 and 1981. The caustic storage tank farm consisted of two groups of caustic storage tanks utilized for on-site storage of caustic soda manufactured by FPC. In the June 1990 RFI work plan, the Caustic Storage Tanks were categorized as a "Bulk Storage Area" unit type.

**Historical Surface Water Drainage Areas-** This area included the former ditch that drained north into Monte Sano bayou into which the original VCM process water was discharged, the former ditch that drained southwest from the VCM plant into the Mississippi River, the

former discharge ditch of the Bayou Hebert Pond into the Monte Sano Bayou, and the former discharge ditch located in the southwest portion of the FPC Baton Rouge Facility.

**Sulfuric Acid Storage Tanks-** The Sulfuric Acid Storage Tanks consisted of two horizontal cylindrical tanks with a capacity of approximately 3,500 gallons each. The two tanks were installed in 1976. In 1989, the tanks were placed on new elevated support cradles and a lined concrete dike was installed around them to prevent drainage into Bayou Hebert Pond.

At the time of the RFA, FPC Baton Rouge Facility processes consisted of caustic soda/chlorine production and 1,2-dichloroethane and vinyl chloride monomer production. The waste streams generated at the FPC Baton Rouge Facility which were classified as hazardous waste were as follows: Heavy Ends (K019), Spent Solvent (F024), Spent Filters (F025), and Miscellaneous Solids (F024).

<sup>1</sup> All information above was taken from the response to LAC 33:V.516 in the NOD2 responses dated February 27, 2008.

**TABLE 2. SUMMARY OF ON-GOING CORRECTIVE ACTION ACTIVITIES**

<i>AOC or SWMU Number/Area Name</i>	<i>AOC/SWMU Description</i>	<i>Status of CA Activity</i>	<i>Corrective Action</i>	<i>EDMS Document ID #/ Approval Date</i>
SWMU 9: VCM Sewers, Sumps, and Tank	Soil/ Groundwater	RECAP/ Phase I RFI Report submitted August 31, 1992	TBD <sup>1</sup>	Part 1 6028478; Part 2 6010020
SWMU 18: Caustic Storage Tanks	Soil/ Groundwater	RECAP/ Phase I RFI Report submitted August 31, 1992	TBD <sup>1</sup>	Part 1 6028478; Part 2 6010020
EDC Tank Farm	Soil/ Groundwater	RECAP/ Phase I RFI Report submitted August 31, 1992	TBD <sup>1</sup>	Part 1 6028478; Part 2 6010020
Historical Surface Water Drainage	Soil/ Groundwater	RECAP/ Phase I RFI Report submitted August 31, 1992	TBD <sup>1</sup>	Part 1 6028478; Part 2 6010020
Sulfuric Acid Tanks	Soil/ Groundwater	RECAP/ Phase I RFI Report submitted August 31, 1992	TBD <sup>1</sup>	Part 1 6028478; Part 2 6010020

<sup>1</sup>“To be Determined” - Any need for corrective action will be determined subsequent to the completion of the CAS Investigation Work Plan (RFI Phase II) and the LDEQ’s approval of the RECAP report and addenda.

# **ATTACHMENT 1**

**ATTACHMENT 1**  
**LIST OF FACILITY DOCUMENTS INCORPORATED**  
**IN THE PERMIT BY REFERENCE**  
**LAD041224932**  
**AI#288**

DOCUMENT TYPE	APPLICATION/DOCUMENT DATE	ELECTRONIC DATABASE MANAGEMENT SYSTEM (EDMS) DOCUMENT ID	COMMENTS
Post-Closure Cost Estimates	August 31, 2006	34581431	Attachment B; Response to NOD 1
Post-Closure Plan	August 31, 2006	34581431	Attachment A; Response to NOD 1
Sampling and Analysis Plan	February 27, 2008	36628340	Attachment D; Response to NOD2
Inspection Plan	August 31, 2006	34581431	Attachment F, Response to NOD 1
Security Plan	February 27, 2008	36628340	Security Information provided in responses LAC 33:V.517.F and LAC 33:V.1507
Personnel Training Plan	July 1, 1999	6018248	Attachment F Post-Closure Renewal Application
Corrective Action Plan	February 27, 2008	36628340	Attachment G, Response to NOD 2