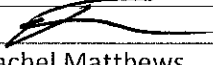
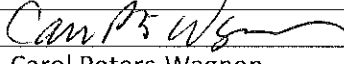


**Region 6 Compliance Assurance and Enforcement Division
INSPECTION REPORT**

Inspection Date(s):	October 24, 2017		
Media:	Water		
Regulatory Program(s)	NPDES		
Company Name:	ExxonMobil Chemical Company		
Facility Name:	ExxonMobil Baton Rouge Chemical Plant		
Facility Physical Location:	4999 Scenic HWY		
(city, state, zip code)	Baton Rouge, LA 70805		
Mailing address:	PO Box 241		
(city, state, zip code)	Baton Rouge, LA 70821		
County/Parish:	East Baton Rouge Parish		
Facility Contact:	David Gatz (225) 400-1440	Wastewater Advisor f.david.gatz@exxonmobil.com	
FRS Number:	110000449970		
Identification/Permit Number:	AI # 286 / LPDES Permit # LA0005401		
Media Number:			
NAICS:	325110-Petrochemical Manufacturing, 325199-Other Basic Organic Chemical Manufacturing, 325211-Plastics Material and Resin Manufacturing, 325212-Synthetic Rubber Manufacturing, 48611-Pipeline Transportation of Crude Oil, 48211-Rail Transportation, 32511-Petrochemical Manufacturing, 32521-Resin and Synthetic Rubber Manufacturing		
SIC:	2869-Industrial Organic Chemicals, 2813-Industrial Gases, 2822-Synthetic Rubber, 2865-Cyclic Crudes etc., and 4952-Sanitary		
Personnel participating in inspection:			
Rachel Matthews	EPA – Region 6	Life Scientist	214-665-8589
Mike Tillman	EPA – Region 6	Environmental Scientist	214-665-7531
Margaret Parker	LDEQ	Environmental Scientist III	225-219-3173
David Gatz	ExxonMobil	Wastewater Advisor	225-400-1440
Haley Delk	ExxonMobil	AWT Contact Engineer	225-316-9105
Joey Rinaudo	ExxonMobil	Environmental Regulatory Program Supervisor	225-397-4623
EPA Lead Inspector Signature/Date	 Rachel Matthews		Date 12-19-17
Supervisor Signature/Date	 Carol Peters-Wagnon		Date 12/19/17

Section I - INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspectors Rachel Matthews and Mike Tillman arrived at the ExxonMobil Baton Rouge Chemical Plant (Plant) at 9:00am on October 24, 2017 for an unannounced Compliance Evaluation Inspection (CEI). After initial facility entry we met with David Gatz, Wastewater Advisor of the Plant, as well as other staff, at the Opening Conference. We presented our credentials to Mr. Gatz and informed him this was an EPA inspection to determine compliance with the facility's National Pollutant Discharge Elimination System (NPDES) permit and Clean Water Act (CWA). The inspection was conducted under the authority of the NPDES permit program, in accordance with the Federal CWA.

This report is based on information supplied by the Plant's representatives (the permittee), observations made by the U.S. EPA inspector(s), and records and reports maintained by the permittee, the State of Louisiana, and the U.S. EPA.

FACILITY DESCRIPTION

The Plant is located on Scenic Hwy in Baton Rouge, East Baton Rouge Parish. It is a petrochemical processing and manufacturing facility, founded in 1940, and completely built out on 150 acres. With approximately 930 full time employees and 1000 contract employees, this facility manufactures over six (6) billion pounds of petrochemical products annually. Primary products include various organic chemicals, synthetic rubber, and petroleum resins. Products are shipped via pipeline, railway, tankers, barges, and trucks. ExxonMobil has a refinery next to the chemical plant, with some connected operations. Combined, the two have sixteen (16) major operating units, ten (10) process units are located on the chemical plant. See aerial photo 1 in the photo log (Appendix 1) for a full view of the chemical plant. In addition, a more in-depth description of the various processes can be found in the current application. See Appendix 3 for the written description within the current permit application.

The current permit (Appendix 2) was effective on September 1, 2012 with the application currently being reviewed for permit renewal. The permit includes authorization to discharge treated wastewater from six (6) outfalls. Discharges are to the Monte Sano Bayou. The primary outfall (001) for treated process and sanitary wastewater is permitted to continuously discharge treated wastewater from the various treatment units (combined to make the Advanced Wastewater Treatment system), including but not limited to: process wastewater, utility wastewater, sanitary wastewater, laboratory water, etc. as well as process area storm water.

Another outfall (009) is permitted as an "emergency overflow discharge of Outfall 001 wastewaters from the advanced wastewater treatment unit" when there is "extreme rainfall conditions where the total flow exceeds the combined capacity of the transfer pumps and the five detention pumps" (See permit and permit application). The permit requires the permittee to "conduct concurrent monitoring" of 001 and 009 of certain parameters and "reported as an arithmetic sum on the DMR for Outfall 001" when 009 has discharges. There are no requirements to report discharges from 009 separately.

Other outfalls are permitted for non-process wastewater, cooling tower water, fire training and equipment test waters, emergency eye/shower wash waters, non-process storm water, steam condensate, as well as river and well waters.

The Advanced Wastewater Treatment (AWT) system consists of: 1) Oil/water separator with grit settling chambers, 2) Surge tanks for significant amounts of process area storm water, 3) Dissolved Air Flotation (DAF) unit, 4) Cooling tower, 5) Moving Bed Biological Reactor, 6) High Oxygen Activated Sludge Unit (UNOX), 7) Clarifiers, 8) Equalization tanks where the pH is adjusted, and 9) Sludge filter press. See Appendix 4 for the Water/Wastewater Flow Diagram.

Section II - OBSERVATIONS

During the inspection, we first saw the separator and outfall 009 location as well as two (2) of the four (4) surge tanks. See photos 1-3 and aerial photo 1. According to staff, during heavy rain events, when the AWT cannot keep up with inflow due to significant increases in process area storm water, the surge tanks (total capacity of 14 million gallons) are used to hold the mixed wastewater until such time as the wastewater treatment system can handle the flow. 16,000 gallons per minute pumps are used to pipe the excess water to the surge tanks. However, when the surge tanks are full, and the AWT still cannot keep up with the inflow, the gate valve at 009 is manually opened to allow the overflow (bypass) of the untreated wastewater and process area storm water (before the area is submerged). The sump area is also where the samples (grab) are taken. It was explained that staff sometimes need to sandbag the sump area to keep it from being submerged while they are accessing it.

The current application includes a request to relocate the sample site for outfall 009 (currently within the sump) to the Analyzer House for safety purposes. It was explained that a pump would be added to an end cap at the pipes located at 009 sump area, which would send the samples to the Analyzer House. See photos 3 and 4.

Outfalls 001 and 004 discharge between the 2 surge tank areas (see photo 5 and aerial photo 3).

The Analyzer House, where samples are collected and pH is continuously monitored for Outfall 001, currently, includes a redundant composite auto-sampler set up. Both auto-samplers were calibrated by an outside company in August of 2017. At the time of the inspection, both samplers showed 3° Celsius and the log sheets for both showed a consistent 2.5° Celsius. The pH meter is calibrated in-house and connected to a continuous computer monitoring system where historical reports can be run in various sequence. See example of 1 minute, 6 minute, and hourly pH readings (Appendix 5). The electronic flow meter is also located in the Analyzer house and similar reports can also be run for gallons per minute (see Appendix 6).

The inspection also included the main area of most AWT units: the cooling tower, equalization tanks, primary clarifiers, the DAF unit, the UNOX unit, final clarifiers, and Parshall Flume. The Moving Bed Biological Reactor was not inspected at this time. It is located at the northeast end of the plant. Effluent from the DAF system is sent to the Moving Bed Biological Reactor, where it is then sent back to the UNOX system. The majority of the AWT units are also located at the northwest area of the facility, close to the Analyzer House. See aerial photo 3.

The onsite inspection concluded on October 24, 2017 while we awaited requested records for review at a later date so as not to encumber ExxonMobil staff another day. After receiving the records, we conducted a review, with some follow up questions. The following was noted:

1. On May 30, 2015 storm water (normally sent to the AWT) was discharged to Outfall 009 (the overflow site) due to a heavy rainfall. Grab samples were collected on May 30, 2015. While there was not enough flow to ensure enough samples for all required analyses, the Biochemical Oxygen Demand (BOD) samples were received by the laboratory outside of the 48-hour hold time according to the lab report. Samples were collected on 5/30/2015 at 18:24 while the laboratory received them on 6/3/2015 at 15:35 (4 days later). In addition, the laboratory did not receive the samples properly preserved nor were all of them in proper containers. There was no indication of an exceedance. See Appendix 7.
2. On October 25, 2015, process wastewater and storm water discharged to Outfall 009 due to a heavy rainfall. Grab samples were collected on October 25, 2015. The Biochemical Oxygen Demand (BOD) samples were received by the laboratory outside of the 48-hour hold time according to the lab report. Samples were collected on 10/25/2015 at 19:50 while the laboratory received them on 10/28/2015 at 11:50 (almost 3 days later). In addition, there was no custody seal, chain of custody does not show sample preservation, and the name of the sampler was absent from the chain of custody form. See Appendix 8.
3. Also during the October 25, 2015 overflow, grab samples were collected from Outfall 001 on October 25, 2015 in order to “conduct concurrent monitoring” with Outfall 009, as required in the permit. The Biochemical Oxygen Demand (BOD) samples were received by the laboratory outside of the 48-hour hold time according to the lab report. Samples were collected on 10/25/2015 at 19:50 while the laboratory received them on 10/28/2015 at 11:50 (almost 3 days later). In addition, there was no custody seal, chain of custody does not show sample preservation, and the name of the sampler was absent from the chain of custody form. See Appendix 8.
4. On October 26, 2015 rain continued and overflows from Outfall 009 continued. On this day, the normally required composite and grab samples were already being collected for Outfall 001 and no grab sample was taken concurrently for Outfall 009. The permit requires samples from 009 to be collected at various times when it is overflowing: flow and pH 1/day, oil & grease and Chemical Oxygen Demand (COD) 1/week, and BOD and Total Suspended Solids (TSS) 3/week. All other parameters are at 1/quarter or 1/year.
5. Several Chain of Custody reports show the lab added preservatives to samples upon receipt, many hours after the samples were collected. See Appendix 9.

Section III – AREAS OF CONCERN

Concern – The V-notch weirs on each of the final clarifiers were in need of maintenance, requiring cleaning. Algae blooms and other debris collecting on the weirs were causing system short circuiting. (See photo 6). The flow gauge on the Parshall Flume prior to final discharge to 001 was dirty and unreadable. (See photo 7)

Requirement - The permit, under Part III, Section B 3 Proper Operation and Maintenance, requires the permittee to “properly operate and maintain all facilities and systems of treatment and control (and

related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of the permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures”.

Concern – Multiple failures within the sample delivery methods and chain of custody as mentioned above with regard to chain of custody reviews. These include:

1. Hold times exceeded,
2. No custody seal,
3. Chain of custody does not show type of sampling container used or sample preservation,
4. Use of incorrect sampling containers,
5. The name of the sampler was absent from the chain of custody form, and
6. Preservatives not added as soon as possible after collection

Requirement - The permit, under Part III, Section B 3 Proper Operation and Maintenance, requires the permittee to “properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of the permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures”.

Requirement – The permit, under Part III, Section C.5.c Monitoring Procedures, requires that “...adequate analytical quality assurance/quality control program to produce defensible data of known precision and accuracy. All quality control measures shall be assessed and evaluation on an on-going basis and quality control acceptance criteria shall be used to determine the validity of the data. All method specific quality control as prescribed in the method shall be followed...”

Section IV – FOLLOW UP

The following requested information was received by EPA on October 24, 2017 after the inspection

- Sample and monitoring analyses
- Chain-of-custody reports
- Waste manifests
- PDF version of facility layout
- PDF version of flow diagram

Section V – LIST OF APPENDICES

Appendix 1 – Photo Log

Appendix 2 – Permit

Appendix 3 – Permit Application, written description section

Appendix 4 – Water/Wastewater Flow Diagram

Appendix 5 – Example pH readings, screen shot

Appendix 6 – Example flow meter readings, screen shot

Appendix 7 – June 15, 2017 Letter and Monitoring Report

Appendix 8 – November 13, 2015 Letter and Monitoring Report

Appendix 9 – Multiple Chain of Custody Reports

Appendix 1

Photograph Log



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Location: ExxonMobil Baton Rouge Chemical Plant		
City: Baton Rouge	County/Parish: East Baton Rouge	State: LA



Aerial Photo 1 – View of facility from Google Maps



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Location: ExxonMobil Baton Rouge Chemical Plant		
City: Baton Rouge	County/Parish: East Baton Rouge	State: LA



Photo 1 - Sump with Gate Valve to allow emergency overflow at outfall 009. When necessary, gate valve opened manually with pulley. Samples for 009 taken within sump.



Photo 2 – standing on sump grate looking at location to outfall 009 on other side of wall



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Location: ExxonMobil Baton Rouge Chemical Plant		
City: Baton Rouge	County/Parish: East Baton Rouge	State: LA



Photo 3 – Piping where alternative sample point can be added for outfall 009. Two of four surge tanks in background.



Photo 4 (Snip of NW corner of facility layout) location of Analyzer House and several outfalls



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Location: ExxonMobil Baton Rouge Chemical Plant		
City: Baton Rouge	County/Parish: East Baton Rouge	State: LA



Aerial Photo 2 – View of separator unit, sump and gate valve for outfall 009 at end of unit, outfall 009 location, and partial view of one surge tank, using Bing Maps.



Photo 5 – Outfalls 001 and 004 discharge between the 2 surge tank areas, with view of the 2 western most tanks.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Photograph Log

Location: ExxonMobil Baton Rouge Chemical Plant		
City: Baton Rouge	County/Parish: East Baton Rouge	State: LA



Aerial Photo 3 – Majority of AWT Units, plus some outfall locations.



Photo 6 - clarifier



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Location: ExxonMobil Baton Rouge Chemical Plant		
City: Baton Rouge	County/Parish: East Baton Rouge	State: LA



Photo 7 – Flow gauge at Parshall Flume

Appendix 2 – Permit

BOBBY JINDAL
GOVERNOR



PEGGY M. HATCH
SECRETARY

State of Louisiana
DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL SERVICES

JUL 19 2012

CERTIFIED MAIL 7005 1820 0002 2089 0839

-RETURN RECEIPT REQUEST

File No.: LA0005401
AI No.: 286
Activity No.: PER20110003

Mr. Paul Stratford, Site Manager
ExxonMobil Chemical Company
Baton Rouge Chemical Plant
Post Office Box 241
Baton Rouge, LA 70821-0241

RE: Louisiana Pollutant Discharge Elimination System (LPDES) permit to discharge treated process wastewater, stormwater runoff, utility wastewaters, groundwater remediation wastewater, sanitary wastewater, and miscellaneous wastewaters to Monte Sano Bayou from an existing organic chemicals, synthetic rubber, and petroleum resins manufacturing facility located at 4999 Scenic Highway in Baton Rouge, East Baton Rouge Parish.

Dear Mr. Stratford:

This Office has not received comments from either the general public or from the permittee in response to the public notice published in the Department of Environmental Quality Public Notice Mailing List on May 14, 2012, and *The Advocate* on May 16, 2012.

Pursuant to the Clean Water Act (33 U.S.C. 1251 *et seq.*), and the Louisiana Environmental Quality Act (La. R.S. 30:2001, *et seq.*), the attached LPDES permit has been issued. 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. A request for hearing must be sent to the following:

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

Upon the effective date, this final permit shall replace the previously effective LPDES permit. Monitoring results shall be reported on a Discharge Monitoring Report (DMR) form per the schedule specified by the permit. A copy of the form to be used is attached for your convenience.

Pursuant to LAC 33:IX.1309.I, LAC 33:IX.6509.A.1, and LAC 33:I.1701, you must pay any outstanding fees to the Department. Therefore, you are encouraged to verify your facility's fee status by contacting LDEQ's Office of Management and Finance, Financial Services Division at (225) 219-3863. **Any outstanding fees must be remitted via a check to the Louisiana Department of Environmental Quality within thirty (30) days after the effective date of your permit.** Failure to

ExxonMobil Chemical Company
RE: LA0005401, AI No. 286
Page 2

pay the full amount due in the manner and time prescribed could result in applicable enforcement actions as prescribed in the Environmental Quality Act, including, but not limited to revocation or suspension of the applicable permit, and/or a civil penalty against you.

To ensure that all correspondence regarding this facility is properly filed into the Department's Electronic Document Management System, you must reference your Agency Interest (AI) number 286 and LPDES permit number LA0005401 on all future correspondence to this Department, including Discharge Monitoring Reports.

Should you have any questions concerning this permit, please feel free to contact Melanie Connor of the Office of Environmental Services, at the letterhead address or by telephone at (225) 219-3594.

Sincerely,



Sam L. Phillips,
Assistant Secretary

MBC

Attachment(s): DMR and final permit

cc: Ms. Melanie Connor
Mr. Jenniffer Sheppard
Mr. Bruce Fielding
Water Permits Division

Ms. Evelyn Rosborough (6WQ-CA)
U.S. EPA, Region VI

Ms. Kelly Petersen
Permit Compliance Unit
Office of Environmental Compliance

Capital Regional Office
Office of Environmental Compliance

c: IO-W File

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

Form Approved
OMB No. 2040-0004

ADDRESS

PERMIT NUMBER		DISCHARGE NUMBER	
---------------	--	------------------	--

FACILITY
LOCATION

FROM		TO	
YEAR	MO	DAY	TO
YEAR	MO	DAY	DAY

☐ Check here if No Discharge

NOTE: Read Instructions before completing this form

PARAMETER	X	QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		VALUE	VALUE	UNITS	VALUE	VALUE	VALUE	UNITS			
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
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NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	TELEPHONE		DATE	
	AREA CODE	NUMBER	YEAR	MO DAY
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT				

TYPED OR PRINTED

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

Paperwork Reduction Act Notice

Public Reporting Burden for this collection information is estimated to vary from a range of 10 hours as an average per response for some minor facilities, to 110 hours as an average per response for some major facilities, with a weighted average for major and minor facilities of 18 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to ICR Coordinator, Office of Wastewater Management (MC4201M), US Environmental Protection Agency, 1200 Pennsylvania Avenue, NW, Washington, DC 20460; and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

General Instructions

1. If form has been partially completed by preprinting, disregard instructions directed at entry of that information already preprinted.
2. Enter "*Permittee Name/Mailing Address* (and facility name/location, if different)," "*Permit Number*," and "*Discharge Number*" where indicated. (A separate form is required for each discharge.)
3. Enter dates beginning and ending "*Monitoring Period*" covered by form where indicated.
4. Enter each "*Parameter*" as specified in monitoring requirements of permit.
5. Enter "*Sample Measurement*" data for each parameter under "*Quantity*" and "*Quality*" in units specified in permit.
6. Enter "*Permit Requirement*" for each parameter under "*Quantity*" and "*Quality*" as specified in permit.
7. Under "*No Ex*" enter number of sample measurements during monitoring period that exceed maximum (and/or minimum or 7-day average as appropriate) permit requirement for each parameter. If none, enter "0".
8. Enter "*Frequency of Analysis*" both as "*Sample Measurement*" (actual sample type used during monitoring period) and as "*Permit Requirement*," specified in permit. (e.g., Enter "*Cont.*" for continuous monitoring, "*1/7*" for one day per week, "*1/30*" for one day per month, "*1/90*" for one day per quarter, etc.)
9. Enter "*Sample Type*" both as "*Sample Measurement*" (actual sample type used during monitoring period) and as "*Permit Requirement*," (e.g., Enter "*Grab*" for individual sample, "*24HC*" for 24-hour composite, "*N/A*" for continuous monitoring, etc.)
10. Where violations of permit requirements are reported, attach a brief explanation to describe cause and corrective actions taken, and reference each violation by date.
11. If "no discharge" occurs during monitoring period, enter "*No Discharge*" across form in place of data entry.
12. Enter "*Name/Title of Principal Executive Officer*" with "*Signature of Principal Executive Officer of Authorized Agent*," "*Telephone Number*," and "*Date*" at bottom of form.
13. Mail signed Report to Office(s) by date(s) specified in permit. Retain copy for your records.
14. More detailed Instructions for use of this *Discharge Monitoring Report (DMR)* form may be obtained from Office(s) specified in permit.

Legal Notice

This report is required by law (33 U.S.C. 1318; 40 C.F.R. 125.27). Failure to report or failure to report truthfully can result in civil penalties not to exceed \$ 10,000 per day of violation; or in criminal penalties not to exceed \$25,000 per day of violation, or by imprisonment for not more than one year, or by both.



PERMIT NUMBER:

LA0005401

AI No.: 286

OFFICE OF ENVIRONMENTAL SERVICES
Water Discharge Permit

Pursuant to the Clean Water Act, as amended (33 U.S.C. 1251 et seq.), and the Louisiana Environmental Quality Act, as amended (La. R. S. 30:2001 et seq.), rules and regulations effective or promulgated under the authority of said Acts, and in reliance on statements and representations heretofore made in the application, a Louisiana Pollutant Discharge Elimination System permit is issued authorizing

ExxonMobil Chemical Company
Baton Rouge Chemical Plant
Post Office Box 241
Baton Rouge, LA 70821-0241

Type Facility: organic chemicals, synthetic rubber, and petroleum resins manufacturing facility

Location: 4999 Scenic Highway, Baton Rouge
East Baton Rouge Parish

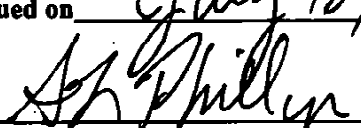
Receiving Waters: Monte Sano Bayou (Segment 070504)

to discharge in accordance with effluent limitations, monitoring requirements, and other conditions set forth in Parts I, II, and III attached hereto.

This permit shall become effective on September 1, 2012

This permit and the authorization to discharge shall expire five (5) years from the effective date of the permit.

Issued on July 18, 2012



Sam L. Phillips
Assistant Secretary

PART I

Page 2 of 13

Permit No. LA0005401

AI No. 286

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning the effective date and lasting through the expiration date the permittee is authorized to discharge from:

Outfall 001, the continuous discharge of isopropanol/MEK/Sec-Butyl Alcohol process wastewater, maintrain ethylene/RGR process wastewater, olefins purification & extraction process wastewater, cyclopentadiene process wastewater, heartcut distillate process wastewater, neo acids process wastewater, petroleum resins process wastewater, plastidizer process wastewater, catalyst process wastewater, oxo alcohol process wastewater, groundwater well recovery wastewater, spent caustic oxidation wastewater, eagle ester process wastewater, lion alcohol process wastewater, aromatics process wastewater, synthetic rubber process wastewater, synthetic rubber process area stormwater, synthetic rubber and OCPSF process area washwater, OCPSF process area stormwater, miscellaneous de minimus process area waters, sanitary wastewater, filter press wastewater, boiler blowdown, cooling tower blowdown, flare system wastewater, steam condensate, miscellaneous utility wastewaters, firefighting water, fire training and equipment test water, stormwater associated with construction activity, wastewater associated with maintenance activity, laboratory wastewater, and kitchen water from the cafeteria.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	STORET Code	Discharge Limitations				Monitoring Requirements	
		Other Units				Measurement Frequency	Sample Type
		(lbs/day, UNLESS STATED)		(ug/L, UNLESS STATED)			
CONVENTIONAL AND NONCONVENTIONAL		Monthly Average	Daily Maximum	Monthly Average	Daily Maximum		
Flow-MGD	50050	Report	Report	---	---	Continuous	Recorder(*1)
pH Range Excursions (Continuous Monitoring), Number of Events >60 Minutes	82581	---	0(*2)	---	---	Continuous	Recorder(*3)
pH Range Excursions (Continuous Monitoring), Monthly Total Accumulated Time in Minutes	82582	---	446(*2)	---	---	Continuous	Recorder(*3)
pH Minimum/Maximum Values (Standard Units)	00400	---	---	Report(*2) (Min)	Report(*2) (Max)	Continuous	Recorder(*3)
BOD ₅ (*4)	00310	2086	4765	---	---	3/week	24-hr. Composite
TSS (*4)	00530	3579	9355	---	---	3/week	24-hr. Composite
Oil and Grease (*4)	03582	836	1254	---	---	1/week	Grab
COD (*4)	80108	12420	28934	---	---	1/week	24-hr. Composite
Fecal Coliform (col./100 ml)	74055	---	---	200	400	1/6 months	Grab
Total Residual Chlorine	50060	---	---	---	Report	1/quarter	Grab
METALS							
Total Lead	01051	---	---	---	Report	1/quarter	24-hr. Composite
VOLATILE COMPOUNDS(*4)(*5)(*6)							
Acrylonitrile	34215	4.73	11.92	---	---	1/year	24-hr. Composite
Benzene	34030	1.82	6.70	---	---	1/quarter	24-hr. Composite
Carbon Tetrachloride	32102	0.89	1.87	---	---	1/year	24-hr. Composite
Chlorobenzene	34301	0.74	1.38	---	---	1/year	24-hr. Composite
Chloroethane	34311	5.12	13.21	---	---	1/year	24-hr. Composite
Chloroform	32106	1.03	2.27	---	---	1/year	24-hr. Composite
1,2-Dichlorobenzene	34536	3.79	8.03	---	---	1/year	24-hr. Composite
1,3-Dichlorobenzene	34566	1.53	2.17	---	---	1/year	24-hr. Composite

PART I

Page 3 of 13
 Permit No. LA0005401
 AI No. 286

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 001 continued)

Effluent Characteristic	STORET Code	Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (ug/L, UNLESS STATED)		Measurement Frequency	Sample Type
		Monthly Average	Daily Maximum	Monthly Average	Daily Maximum		
1,4-Dichlorobenzene	34571	0.74	1.38	---	---	1/year	24-hr. Composite
1,1-Dichloroethane	34496	1.08	2.91	---	---	1/year	24-hr. Composite
1,2-Dichloroethane	34531	3.35	10.4	---	---	1/year	24-hr. Composite
1,1-Dichloroethylene	34501	0.79	1.23	---	---	1/year	24-hr. Composite
1,2-trans-Dichloroethylene	34546	1.03	2.66	---	---	1/year	24-hr. Composite
1,2-Dichloropropane	34541	7.54	11.33	---	---	1/year	24-hr. Composite
1,3-Dichloropropylene	51044	1.43	2.17	---	---	1/year	24-hr. Composite
Ethylbenzene	34371	1.58	5.32	---	---	1/year	24-hr. Composite
Methyl Chloride	34418	4.24	9.36	---	---	1/year	24-hr. Composite
Methylene Chloride	34423	1.97	4.39	---	---	1/year	24-hr. Composite
Tetrachloroethylene	34475	1.08	2.76	---	---	1/year	24-hr. Composite
Toluene	34010	1.28	3.94	---	---	1/quarter	24-hr. Composite
1,1,1-Trichloroethane	34506	1.03	2.66	---	---	1/year	24-hr. Composite
1,1,2-Trichloroethane	34511	1.03	2.66	---	---	1/year	24-hr. Composite
Trichloroethylene	39180	1.03	2.66	---	---	1/year	24-hr. Composite
Vinyl Chloride	39175	5.12	13.21	---	---	1/year	24-hr. Composite
ACID COMPOUNDS(*4)(*5)							
2-Chlorophenol	34586	1.53	4.83	---	---	1/year	24-hr. Composite
2,4-Dichlorophenol	34601	1.92	5.52	---	---	1/year	24-hr. Composite
2,4-Dimethylphenol	34606	0.89	1.77	---	---	1/year	24-hr. Composite
4,6-Dinitro-o-Cresol	34657	3.84	13.65	---	---	1/year	24-hr. Composite
2,4-Dinitrophenol	34616	3.50	6.06	---	---	1/year	24-hr. Composite
2-Nitrophenol	34591	2.02	3.40	---	---	1/year	24-hr. Composite
4-Nitrophenol	34646	3.55	6.11	---	---	1/year	24-hr. Composite
Phenol	34694	0.74	1.28	---	---	1/year	24-hr. Composite
BASE NEUTRAL COMPOUNDS(*4)(*5)							
Acenaphthene	34205	1.08	2.91	---	---	1/year	24-hr. Composite
Acenaphthylene	34200	1.08	2.91	---	---	1/year	24-hr. Composite
Anthracene	34220	1.08	2.91	---	---	1/year	24-hr. Composite
Benzo(a)anthracene	34526	1.08	2.91	---	---	1/year	24-hr. Composite
Benzo(a)pyrene	34247	1.13	3.01	---	---	1/year	24-hr. Composite
3,4-Benzofluoranthene	34230	1.13	3.01	---	---	1/year	24-hr. Composite
Benzo(k)fluoranthene	34242	1.08	2.91	---	---	1/year	24-hr. Composite
Bis(2-ethylhexyl)phthalate	39100	5.08	13.75	---	---	1/year	24-hr. Composite
Chrysene	34320	1.08	2.91	---	---	1/year	24-hr. Composite
Diethyl phthalate	34336	3.99	10.00	---	---	1/year	24-hr. Composite
Dimethyl phthalate	34341	0.94	2.32	---	---	1/year	24-hr. Composite
Di-n-butyl phthalate	39110	1.33	2.81	---	---	1/year	24-hr. Composite
2,4-Dinitrotoluene	34611	5.57	14.04	---	---	1/year	24-hr. Composite
2,6-Dinitrotoluene	34626	12.57	31.59	---	---	1/year	24-hr. Composite
Fluoranthene	34376	1.23	3.35	---	---	1/year	24-hr. Composite
Fluorene	34381	1.08	2.91	---	---	1/year	24-hr. Composite
Hexachlorobenzene	39700	0.000257	0.000612	---	---	1/year	24-hr. Composite
Hexachlorobutadiene	34391	0.12	0.29	---	---	1/year	24-hr. Composite

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EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 001 continued)

Effluent Characteristic	STORET Code	Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (ug/L, UNLESS STATED)		Measurement Frequency	Sample Type
		Monthly Average	Daily Maximum	Monthly Average	Daily Maximum		
Hexachloroethane	34396	1.03	2.66	---	---	1/year	24-hr. Composite
Naphthalene	34696	1.08	2.91	---	---	1/year	24-hr. Composite
Nitrobenzene	34447	1.33	3.35	---	---	1/year	24-hr. Composite
Phenanthrene	34461	1.08	2.91	---	---	1/year	24-hr. Composite
Pyrene	34469	1.23	3.30	---	---	1/year	24-hr. Composite
1,2,4-Trichlorobenzene	34551	3.35	6.90	---	---	1/year	24-hr. Composite
WHOLE EFFLUENT (ACUTE)		(Percent %, UNLESS STATED)					
TOXICITY TESTING (*7)	STORET Code	Monthly Avg Minimum	48-Hour Minimum	Maximum		Measurement Frequency (*8)	Sample Type
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 48-Hour Acute, <u>Pimephales promelas</u>	TEM6C	Report	Report	---		1/quarter	24-Hour Composite
NOEC, Value [%], Lethality, Static Renewal, 48-Hour Acute, <u>Pimephales promelas</u>	TOM6C	Report	Report	---		1/quarter	24-Hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 48-Hour Acute, <u>Pimephales promelas</u>	TQM6C	---	---	Report		1/quarter	24-Hour Composite
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 48-Hour Acute, <u>Daphnia pulex</u>	TEM3D	Report	Report	---		1/quarter	24-Hour Composite
NOEC, Value [%], Lethality, Static Renewal, 48-Hour Acute, <u>Daphnia pulex</u>	TOM3D	Report	Report	---		1/quarter	24-Hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 48-Hour Acute, <u>Daphnia pulex</u>	TQM3D	---	---	Report		1/quarter	24-Hour Composite

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall 001, samples are collected from the flow weighted composite sampler in Analyzer House A at the southeast corner of Avenue J and 33rd Street. This discharge stream enters Monte Sano Bayou northwest of the intersection of plant roads Avenue H and 33rd Street.

FOOTNOTE(S):

(*1) See Part II.I.

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EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 001 continued)

- (*2) The pH shall be within the range of 6.0 - 9.0 standard units at all times subject to the continuous monitoring pH range excursion provisions at Part II.J.
- (*3) See Part II.K.
- (*4) The permittee shall conduct concurrent monitoring for these parameters at Outfall 001 and Outfall 009. The arithmetic sum of the daily pollutant mass discharges from these outfalls during the same 24-hour sampling period shall not exceed the corresponding Monthly Average and Daily Maximum loadings listed above. The sum of the results for both outfalls shall be reported on the DMR for Outfall 001. If there is no discharge from Outfall 009, the permittee shall report the results for Outfall 001 only and place a note in the comment section of the DMR that states there were no discharges from Outfall 009 during the monitoring period.
- (*5) See Part II.L.
- (*6) See Part II.F.2.
- (*7) Samples shall be taken from the flow-weighted composite of Outfalls 001 and 004 and the results shall be reported on the DMR as 001.
- (*8) See Part II.R.5. Monitoring frequency reduction.

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EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

During the period beginning the effective date and lasting through the expiration date the permittee is authorized to discharge from:

Outfall 002, the intermittent discharge of steam condensate, well water, eye wash and safety shower waters, fire training and equipment test waters, and non-process area stormwater.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	STORET Code	Discharge Limitations				Monitoring Requirements	
		Other Units				Measurement Frequency (*1)	Sample Type
		(lbs/day, UNLESS STATED)	(mg/L, UNLESS STATED)	Monthly Average	Daily Maximum		
Flow-MGD	50050	Report	Report	---	---	1/week	Estimate
Oil and Grease	03582	---	---	---	15	1/week	Grab
TOC	00680	---	---	---	50	1/week	Grab
pH Minimum/Maximum Values (Standard Units)	00400	---	---	6.0 (*2) (Min)	9.0 (*2) (Max)	1/week	Grab

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall 002, samples are taken at the sample station located approximately 200 ft. north of the corner of Avenue E and 32nd Street prior to combining with the waters of Monte Sano Bayou.

FOOTNOTE(S):

(*1) When discharging.

(*2) The permittee shall report on the discharge monitoring reports both the minimum and maximum instantaneous pH values measured.

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EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

During the period beginning the effective date and lasting through 3 years from the permit effective date the permittee is authorized to discharge from:

Outfall 003, the continuous discharge of cooling tower blowdown, raw river water, non-process area stormwater, regeneration water, steam condensate, well water, eye wash and safety shower waters, and fire training and equipment test waters.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	STORET Code	Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)	Other Units (mg/L, UNLESS STATED)			Measurement Frequency	Sample Type
		Monthly Average	Daily Maximum	Monthly Average	Daily Maximum		
Flow-MGD	50050	Report	Report	---	---	Continuous	Recorder
Flow-MGD (*1)	50050	Report	Report	---	---	1/day	Estimate
Oil and Grease	03582	---	---	---	15	1/week	Grab
TOC	00680	---	---	---	50	1/week	24-hr. Composite
Total Residual Chlorine	50060	---	---	---	Report	1/6 months	Grab
Total Lead	01051	---	---	---	Report	1/quarter	24-hr. Composite
pH Range Excursions (Continuous Monitoring), Number of Events >60 Minutes	82581	---	0(*2)	---	---	Continuous	Recorder(*3)
pH Range Excursions (Continuous Monitoring), Monthly Total Accumulated Time in Minutes	82582	---	446(*2)	---	---	Continuous	Recorder(*3)
pH Minimum/Maximum Values (Standard Units)	00400	---	---	Report(*2) (Min)	Report(*2) (Max)	Continuous	Recorder(*3)
WHOLE EFFLUENT (ACUTE)		(Percent %, UNLESS STATED)					
TOXICITY TESTING	STORET Code	Monthly Avg Minimum	48-Hour Minimum	Maximum		Measurement Frequency (*4)	Sample Type
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 48-Hour Acute, <u>Pimephales promelas</u>	TEM6C	Report	Report	---		1/quarter	24-Hour Composite
NOEC, Value [%], Lethality, Static Renewal, 48-Hour Acute, <u>Pimephales promelas</u>	TOM6C	Report	Report	---		1/quarter	24-Hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 48-Hour Acute, <u>Pimephales promelas</u>	TQM6C	---	---	Report		1/quarter	24-Hour Composite
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 48-Hour Acute, <u>Daphnia pulex</u>	TEM3D	Report	Report	---		1/quarter	24-Hour Composite

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EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 003 continued)

<u>WHOLE EFFLUENT (ACUTE)</u> <u>TOXICITY TESTING</u>	STORET Code	(Percent %, UNLESS STATED)			Measurement Frequency (*3)	Sample Type
		Monthly Avg Minimum	48-Hour Minimum	Maximum		
NOEC, Value [%], Lethality, Static Renewal, 48-Hour Acute, <u>Daphnia pulex</u>	TOM3D	Report	Report	---	1/quarter	24-Hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 48-Hour Acute, <u>Daphnia pulex</u>	TQM3D	---	---	Report	1/quarter	24-Hour Composite

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall 003, samples from a slipstream of Outfall 003 are taken in Analyzer House "B", approximately 50 feet west of the Outfall, prior to combining with the waters of Monte Sano Bayou.

FOOTNOTE(S):

- (*1) The sample type of estimate is only allowed during times when Outfall 003 becomes inundated with the waters of Monte Sano Bayou. See Part II.P.
- (*2) The pH shall be within the range of 6.0 - 9.0 standard units at all times subject to the continuous monitoring pH range excursion provisions at Part II.J.
- (*3) See Part II.K.
- (*4) See Part II.R.5 Monitoring frequency reduction.

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EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

During the period beginning the effective date and lasting through the expiration date the permittee is authorized to discharge from:

Outfall 004, the continuous discharge of cooling tower blowdown, raw river water, non-process area stormwater, regeneration water, steam condensate, well water, eye wash and safety shower waters, and fire training and equipment test waters.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	STORET Code	Discharge Limitations				Monitoring Requirements		
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)		Measurement Frequency	Sample Type	
		Monthly Average	Daily Maximum	Monthly Average	Daily Maximum			
Flow-MGD	50050	Report	Report	---	---	Continuous	Recorder	
Flow-MGD (*1)	50050	Report	Report	---	---	1/day	Grab	
Oil and Grease	03582	---	---	---	15	1/week	Grab	
TOC	00680	---	---	---	50	1/week	Grab	
Total Residual Chlorine	50060	---	---	---	Report	1/6 months	Grab	
Total Lead	01051	---	---	---	Report	1/quarter	24-hr. Composite	
pH Range Excursions (Continuous Monitoring), Number of Events >60 Minutes	82581	---	0(*2)	---	---	Continuous	Recorder(*3)	
pH Range Excursions (Continuous Monitoring), Monthly Total Accumulated Time in Minutes	82582	---	446(*2)	---	---	Continuous	Recorder(*3)	
pH Minimum/Maximum Values (Standard Units)	00400	---	---	Report(*2) (Min)	Report(*2) (Max)	Continuous	Recorder(*3)	
WHOLE EFFLUENT (ACUTE)								
TOXICITY TESTING (*4)	STORET Code	Monthly Avg Minimum		(Percent %, UNLESS STATED) 48-Hour Minimum Maximum		Measurement Frequency (*5)	Sample Type	
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 48-Hour Acute, <u>Pimephales promelas</u>	TEM6C	Report		Report ---		1/quarter	24-Hour Composite	
NOEC, Value [%], Lethality, Static Renewal, 48-Hour Acute, <u>Pimephales promelas</u>	TOM6C	Report		Report ---		1/quarter	24-Hour Composite	
NOEC, Value [%], Coefficient of Variation, Static Renewal, 48-Hour Acute, <u>Pimephales promelas</u>	TQM6C	---		---		Report	1/quarter	24-Hour Composite
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 48-Hour Acute, <u>Daphnia pulex</u>	TEM3D	Report		Report ---		1/quarter	24-Hour Composite	

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EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 004 continued)

<u>WHOLE EFFLUENT (ACUTE)</u>		(Percent %, UNLESS STATED)			Measurement Frequency (*5)	Sample Type
<u>TOXICITY TESTING (*4)</u>	STORET Code	Monthly Avg Minimum	48-Hour Minimum	Maximum		
NOEC, Value [%], Lethality, Static Renewal, 48-Hour Acute, <u>Daphnia pulex</u>	TOM3D	Report	Report	---	1/quarter	24-Hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 48-Hour Acute, <u>Daphnia pulex</u>	TQM3D	---	---	Report	1/quarter	24-Hour Composite

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall 004, samples from a slipstream of Outfall 004 are taken in Analyzer House "B", approximately 650 feet east of the outfall, prior to combining with the waters of Monte Sano Bayou.

FOOTNOTE(S):

- (*1) The sample type of estimate is only allowed during times when Outfall 004 becomes inundated with the waters of Monte Sano Bayou. See Part II, Paragraph P.
- (*2) The pH shall be within the range of 6.0 - 9.0 standard units at all times subject to the continuous monitoring pH range excursion provisions at Part II.J.
- (*3) See Part II.K.
- (*4) Samples shall be taken from the flow-weighted composite of Outfalls 001 and 004 and the results shall be reported on the DMR as 001.
- (*5) See Part II.R.5, Monitoring frequency reduction.

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EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

During the period beginning the effective date and lasting through the expiration date the permittee is authorized to discharge from:

Outfall 005, the intermittent discharge of steam condensate, eye wash and safety showers, well water, fire training and equipment test waters, and non-process area stormwater.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	STORET Code	Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		(mg/L, UNLESS STATED)		Measurement Frequency (*1)	Sample Type
		Monthly Average	Daily Maximum	Monthly Average	Daily Maximum		
Flow-MGD	50050	Report	Report	---	---	1/week	Estimate
TOC	00680	---	---	---	50	1/week	Grab
Oil and Grease	03582	---	---	---	15	1/week	Grab
pH Minimum/Maximum Values (Standard Units)	00400	---	---	6.0 (*2) (Min)	9.0 (*2) (Max)	1/week	Grab

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall 005, at the point of discharge at the sample station on the southwest corner of Avenue J and 33rd Street prior to combining with the waters of Monte Sano Bayou.

FOOTNOTE(S):

(*1) When discharging.

(*2) The permittee shall report on the discharge monitoring reports both the minimum and maximum instantaneous pH values measured.

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EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning the effective date and lasting through the expiration date the permittee is authorized to discharge from:

Outfall 009, the emergency overflow discharge of Outfall 001 wastewaters from the advanced wastewater treatment unit.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	STORET Code	Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (ug/L, UNLESS STATED)		Measurement Frequency	Sample Type
CONVENTIONAL AND NONCONVENTIONAL		Monthly Average	Daily Maximum	Monthly Average	Daily Maximum		
Flow-MGD	50050	Report	Report	---	---	1/day	Estimate
pH Minimum/Maximum Values (Standard Units)	00400	---	---	6.0 (*1) (Min)	9.0 (*1) (Max)	1/day	Grab
BOD ₅	00310	(*2)	(*2)	---	---	3/week	Grab
TSS	00530	(*2)	(*2)	---	---	3/week	Grab
Oil and Grease	03582	(*2)	(*2)	---	---	1/week	Grab
COD	80108	(*2)	(*2)	---	---	1/week	Grab
Total Residual Chlorine	50060	---	---	---	Report	1/quarter	Grab
METALS							
Total Lead	01051	---	---	---	Report	1/quarter	Grab
VOLATILE COMPOUNDS							
Acrylonitrile	34215	(*2)	(*2)	---	---	1/year	Grab
Benzene	34030	(*2)	(*2)	---	---	1/quarter	Grab
Carbon Tetrachloride	32102	(*2)	(*2)	---	---	1/year	Grab
Chlorobenzene	34301	(*2)	(*2)	---	---	1/year	Grab
Chloroethane	34311	(*2)	(*2)	---	---	1/year	Grab
Chloroform	32106	(*2)	(*2)	---	---	1/year	Grab
1,2-Dichlorobenzene	34536	(*2)	(*2)	---	---	1/year	Grab
1,3-Dichlorobenzene	34566	(*2)	(*2)	---	---	1/year	Grab
1,4-Dichlorobenzene	34571	(*2)	(*2)	---	---	1/year	Grab
1,1-Dichloroethane	34496	(*2)	(*2)	---	---	1/year	Grab
1,2-Dichloroethane	34531	(*2)	(*2)	---	---	1/year	Grab
1,1-Dichloroethylene	34501	(*2)	(*2)	---	---	1/year	Grab
1,2-trans-Dichloroethylene	34546	(*2)	(*2)	---	---	1/year	Grab
1,2-Dichloropropane	34541	(*2)	(*2)	---	---	1/year	Grab
1,3-Dichloropropylene	51044	(*2)	(*2)	---	---	1/year	Grab
Ethylbenzene	34371	(*2)	(*2)	---	---	1/year	Grab
Methyl Chloride	34418	(*2)	(*2)	---	---	1/year	Grab
Methylene Chloride	34423	(*2)	(*2)	---	---	1/year	Grab
Tetrachloroethylene	34475	(*2)	(*2)	---	---	1/year	Grab
Toluene	34010	(*2)	(*2)	---	---	1/quarter	Grab
1,1,1-Trichloroethane	34506	(*2)	(*2)	---	---	1/year	Grab
1,1,2-Trichloroethane	34511	(*2)	(*2)	---	---	1/year	Grab
Trichloroethylene	39180	(*2)	(*2)	---	---	1/year	Grab
Vinyl Chloride	39175	(*2)	(*2)	---	---	1/year	Grab
ACID COMPOUNDS							
2-Chlorophenol	34586	(*2)	(*2)	---	---	1/year	Grab

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EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 009 continued)

	STORET Code	(lbs/day, UNLESS STATED) (ug/L, UNLESS STATED)				Measurement Frequency	Sample Type
		Monthly Average	Daily Maximum	Monthly Average	Daily Maximum		
2,4-Dichlorophenol	34601	(*2)	(*2)	---	---	1/year	Grab
2,4-Dimethylphenol	34606	(*2)	(*2)	---	---	1/year	Grab
4,6-Dinitro-o-Cresol	34657	(*2)	(*2)	---	---	1/year	Grab
2,4-Dinitrophenol	34616	(*2)	(*2)	---	---	1/year	Grab
2-Nitrophenol	34591	(*2)	(*2)	---	---	1/year	Grab
4-Nitrophenol	34646	(*2)	(*2)	---	---	1/year	Grab
Phenol	34694	(*2)	(*2)	---	---	1/year	Grab
BASE NEUTRAL COMPOUNDS)							
Acenaphthene	34205	(*2)	(*2)	---	---	1/year	Grab
Acenaphthylene	34200	(*2)	(*2)	---	---	1/year	Grab
Anthracene	34220	(*2)	(*2)	---	---	1/year	Grab
Benzo(a)anthracene	34526	(*2)	(*2)	---	---	1/year	Grab
Benzo(a)pyrene	34247	(*2)	(*2)	---	---	1/year	Grab
3,4-Benzofluoranthene	34230	(*2)	(*2)	---	---	1/year	Grab
Benzo(k)fluoranthene	34242	(*2)	(*2)	---	---	1/year	Grab
Bis(2-ethylhexyl)phthalate	39100	(*2)	(*2)	---	---	1/year	Grab
Chrysene	34320	(*2)	(*2)	---	---	1/year	Grab
Diethyl phthalate	34336	(*2)	(*2)	---	---	1/year	Grab
Dimethyl phthalate	34341	(*2)	(*2)	---	---	1/year	Grab
Di-n-butyl phthalate	39110	(*2)	(*2)	---	---	1/year	Grab
2,4-Dinitrotoluene	34611	(*2)	(*2)	---	---	1/year	Grab
2,6-Dinitrotoluene	34626	(*2)	(*2)	---	---	1/year	Grab
Fluoranthene	34376	(*2)	(*2)	---	---	1/year	Grab
Fluorene	34381	(*2)	(*2)	---	---	1/year	Grab
Hexachlorobenzene	39700	(*2)	(*2)	---	---	1/year	Grab
Hexachlorobutadiene	34391	(*2)	(*2)	---	---	1/year	Grab
Hexachloroethane	34396	(*2)	(*2)	---	---	1/year	Grab
Naphthalene	34696	(*2)	(*2)	---	---	1/year	Grab
Nitrobenzene	34447	(*2)	(*2)	---	---	1/year	Grab
Phenanthrene	34461	(*2)	(*2)	---	---	1/year	Grab
Pyrene	34469	(*2)	(*2)	---	---	1/year	Grab
1,2,4-Trichlorobenzene	34551	(*2)	(*2)	---	---	1/year	Grab

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall 009, at the point of discharge from the AWT overflow window

FOOTNOTE(S):

- (*1) The permittee shall report on the discharge monitoring reports both the minimum and maximum instantaneous pH values measured.
- (*2) The permittee shall conduct concurrent monitoring for these parameters at Outfalls 001 and 009. See corresponding mass limitations listed in Part I, Page 2-5 of 13. The results for the mass loadings shall be reported as an arithmetic sum on the DMR for Outfall 001. If there were no discharges from Outfall 009, the permittee shall place a note in the comment section of the DMR that states there were no discharges from Outfall 009 during the monitoring period.

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OTHER REQUIREMENTS

In addition to the standard conditions required in all permits and listed in Part III, the Office has established the following additional requirements in accordance with the Louisiana Water Quality Regulations.

- A. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations or additional restrictions, if necessary, to maintain the water quality integrity and the designated uses of the receiving water bodies.
- B. This permit does not in any way authorize the permittee to discharge a pollutant not listed or quantified in the application or limited or monitored for in the permit.
- C. Authorization to discharge pursuant to the conditions of this permit does not relieve the permittee of any liability for damages to state waters or private property. For discharges to private land, this permit does not relieve the permittee from obtaining proper approval from the landowner for appropriate easements and rights of way.
- D. For definitions of monitoring and sampling terminology see Part III, Section F.
- E. 24-HOUR ORAL REPORTING: DAILY MAXIMUM LIMITATION VIOLATIONS

Under the provisions of Part III.D.6.e.(3) of this permit, violations of daily maximum limitations for the following pollutants shall be reported orally to the Office of Environmental Compliance within 24 hours from the time the permittee became aware of the violation followed by a written report in five days.

VOLATILE COMPOUNDS

Acrylonitrile
Benzene
Carbon Tetrachloride
Chlorobenzene
Chloroethane
Chloroform
1,2-Dichlorobenzene
1,3-Dichlorobenzene
1,4-Dichlorobenzene
1,1-Dichloroethane
1,2-Dichloroethane
1,1-Dichloroethylene
1,2-trans-Dichloroethylene
1,2-Dichloropropane
1,3-Dichloropropylene
Ethylbenzene
Methyl Chloride
Methylene Chloride
Tetrachloroethylene
Toluene
1,1,1-Trichloroethane
1,1,2-Trichloroethane
Trichloroethylene
Vinyl Chloride

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ACID COMPOUNDS

2-Chlorophenol
2,4-Dichlorophenol
2,4-Dimethylphenol
4,6-Dinitro-o-cresol
2,4-Dinitrophenol
2-Nitrophenol
4-Nitrophenol
Phenol

BASE NEUTRAL COMPOUNDS

Acenaphthene
Acenaphthylene
Anthracene
Benzo(a)anthracene
Benzo(a)pyrene
3,4-Benzofluoranthene
Benzo(k)fluoranthene
Bis(2-ethylhexyl)phthalate
Chrysene
Diethyl phthalate
Dimethyl phthalate
Di-n-butyl phthalate
2,4-Dinitrotoluene
2,6-Dinitrotoluene
Fluoranthene
Fluorene
Hexachlorobenzene
Hexachlorobutadiene
Hexachloroethane
Naphthalene
Nitrobenzene
Phenanthrene
Pyrene
1,2,4-Trichlorobenzene

F. COMPOSITE SAMPLING (24-HOUR)1. STANDARD PROVISIONS

Unless otherwise specified in this permit, the term "24-hour composite sample" means a sample consisting of a minimum of four (4) aliquots of effluent collected at regular intervals over a normal 24-hour operating day and combined in proportion to flow or a sample continuously collected in proportion to flow over a normal 24-hour operating period.

2. VOLATILE COMPOUNDS

For the "24-hour composite" sampling of volatile compounds using EPA Methods 601, 602, 603, 624, 1624, or any other 40 CFR Part 136 (See LAC 33:IX.2531) method approved after the effective date of the permit, the permittee shall manually collect four (4) aliquots (grab samples) in clean zero head-space containers at regular intervals during the actual hours of

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OTHER REQUIREMENTS (continued)

discharge during the 24-hour sampling period using sample collection, preservation, and handling techniques specified in the test method. These aliquots must be combined in the laboratory to represent the composite sample of the discharge. One of the following alternative methods shall be used to composite these aliquots.

- a. Each aliquot is poured into a syringe. The plunger is added, and the volume in the syringe is adjusted to 1-1/4 ml. Each aliquot (1-1/4 ml.) is injected into the purging chamber of the purge and trap system. After four (4) injections (total 5 ml.), the chamber is purged. Only one analysis or run is required since the aliquots are combined prior to analysis.
- b. Chill the four (4) aliquots to 4 Degrees Centigrade. These aliquots must be of equal volume. Carefully pour the contents of each of the four aliquots into a 250-500 ml. flask which is chilled in a wet ice bath. Stir the mixture gently with a clean glass rod while in the ice bath. Carefully fill two (2) or more clean 40 ml. zero head-space vials from the flask and dispose of the remainder of the mixture. Analyze one of the aliquots to determine the concentration of the composite sample. The remaining aliquot(s) are replicate composite samples that can be analyzed if desired or necessary.
- c. Alternative sample compositing methods may be used following written approval by this Office.

The individual samples resulting from the application of these compositing methods shall be analyzed following the procedures specified for the selected test method. The resulting analysis shall be reported as the daily composite concentration.

As an option to the above compositing methods, the permittee may manually collect four (4) aliquots (grab samples) in clean zero head-space containers at regular intervals during the actual hours of discharge during the 24-hour sampling period using sample collection, preservation, and handling techniques specified in the test method. A separate analysis shall be conducted for each discrete grab sample following the approved test methods. The determination of daily composite concentration shall be the arithmetic average (weighted by flow) of all grab samples collected during the 24-hour sampling period.

G. 40 CFR PART 136 (See LAC 33:IX.4901) ANALYTICAL REQUIREMENTS

Unless otherwise specified in this permit, monitoring shall be conducted according to analytical, apparatus and materials, sample collection, preservation, handling, etc., procedures listed at 40 CFR Part 136, and in particular, Appendices A, B, and C (See LAC 33:IX.4901).

H. FLOW MEASUREMENT "ESTIMATE" SAMPLE TYPE

If the flow measurement sample type in Part I is specified as "estimate", flow measurements shall not be subject to the accuracy provisions established at Part III.C.6 of this permit. The daily flow value may be estimated using best engineering judgement.

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I. FLOW MEASUREMENT "CONTINUOUS" SAMPLE TYPE - ALTERNATIVE PROCEDURE FOR OUTFALL 001

In the event of a flow monitoring device failure with equipment used for backup purposes, the permittee shall use the daily average flow prior to the upset event to estimate flow. Continuous monitoring must be restored as soon as possible, and in no event more than 72 hours from the time of the monitor failure. This exception to continuous flow monitoring can be used no more than once per month per outfall. During periods of interruption of instantaneous flow measurement, sample compositors will collect samples at regular intervals of time.

In the event of a flow monitoring device failure, the permittee shall provide the following information in the comment section of the DMR:

- a. The date and time of the flow monitoring device failure.
- b. The date and time that the flow monitoring device is restored.

J. pH RANGE EXCURSION PROVISIONS

Where a permittee continuously measures the pH of wastewater as a requirement or option in a Louisiana Pollutant Discharge Elimination System (LPDES) permit, the permittee shall maintain the pH of such wastewater within the range set forth in the permit, except that excursions from the range are permitted, provided:

1. The total time during which the pH values are outside the required range of pH values shall not exceed 446 minutes in any calendar month; and
2. No individual excursion from the range of pH values shall exceed 60 minutes.

For the purposes of this section, an "excursion" is an unintentional and temporary incident in which the pH value of discharge wastewater exceeds the range set forth in the permit.

K. pH MEASUREMENT "CONTINUOUS" SAMPLE TYPE -ALTERNATIVE PROCEDURE FOR OUTFALLS 001, 003 AND 004

In the event of a pH monitoring device failure with equipment used for backup purposes, the permittee shall take hourly samples (at a minimum) of the effluent for permit compliance (pH range excursion) until continuous monitoring is restored. Grab samples shall begin no later than 1 hour after the pH interruption. Continuous monitoring must be restored as soon as possible, and in no event more than 72 hours from the time of the monitor failure. This exception to continuous pH monitoring can be used no more than once per month.

In the event of a pH monitor failure where the grab sample option is used, the permittee shall provide the following additional information in the comment section of the DMR:

- a. Indication that the Grab Sample Option is being used.
- b. Frequency that grab samples were taken (i.e. hourly, every half hour, every quarter hour, etc.

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- c. The date and time of the pH monitor failure.
- d. The date and time continuous pH monitoring is restored.

Please be advised that if the grab sample option is used and sample is out of range, then all minutes within that time frame between collected samples are considered out of range.

L. MINIMUM QUANTIFICATION LEVEL (MQL)

If any individual analytical test result is less than the minimum quantification level listed below, a value of zero (0) may be used for that individual result for the Discharge Monitoring Report (DMR) calculations and reporting requirements.

<u>NONCONVENTIONAL</u>	<u>MQL (µg/L)</u>
Phenolics, Total Recoverable (4AAP)	5
Chlorine (Total Residual)	33
3-Chlorophenol	10
4-Chlorophenol	10
2,3-Dichlorophenol	10
2,5-Dichlorophenol	10
2,6-Dichlorophenol	10
3,4-Dichlorophenol	10
2,4-D	10
2,4,5-TP (Silvex)	4
<u>METALS AND CYANIDE</u>	<u>MQL (µg/L)</u>
Aluminum (Total)	2.5
Antimony (Total)	60
Arsenic (Total)	5
Beryllium (Total)	0.5
Cadmium (Total)	1
Chromium (Total)	10
Chromium (3+)	10
Chromium (6+)	10
Copper (Total)	3
Lead (Total)	2
Mercury (Total)	0.005
Molybdenum (Total)	30
Nickel (Total) Freshwater	5
Nickel (Total) Marine	5
Selenium (Total)	5
Silver (Total)	0.5
Thallium (Total)	0.5
Zinc (Total)	20
Cyanide (Total)	10
<u>DIOXIN</u>	<u>MQL (µg/L)</u>
2,3,7,8-TCDD	0.00001

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<u>VOLATILE COMPOUNDS</u>	<u>MOQL (µg/L)</u>
Acrolein	50
Acrylonitrile	20
Benzene	10
Bromoform	10
Carbon Tetrachloride	2
Chlorobenzene	10
Chlorodibromomethane	10
Chloroethane	50
2-Chloroethylvinylether	10
Chloroform	10
1,2-Dichlorobenzene	10
1,3-Dichlorobenzene	10
1,4-Dichlorobenzene	10
Dichlorobromomethane	10
1,1-Dichloroethane	10
1,2-Dichloroethane	10
1,1-Dichloroethylene	10
1,2-Dichloropropane	10
1,3-Dichloropropylene	10
Ethylbenzene	10
Methyl Bromide [Bromomethane]	50
Methyl Chloride [Chloromethane]	50
Methylene Chloride	20
1,1,2,2-Tetrachloroethane	10
Tetrachloroethylene	10
Toluene	10
1,2-trans-Dichloroethylene	10
1,1,1-Trichloroethane	10
1,1,2-Trichloroethane	10
Trichloroethylene	10
Vinyl Chloride	10
Xylene (Total)	10
<u>ACID COMPOUNDS</u>	<u>MOQL (µg/L)</u>
2-Chlorophenol	10
2,4-Dichlorophenol	10
2,4-Dimethylphenol	10
4,6-Dinitro-o-Cresol [2-Methyl-4,6-Dinitrophenol]	50
2,4-Dinitrophenol	50
2-Nitrophenol	20
4-Nitrophenol	50
p-Chloro-m-Cresol [4-Chloro-3-Methylphenol]	10
Pentachlorophenol	5
Phenol	10
2,4,6-Trichlorophenol	10

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<u>BASE/NEUTRAL COMPOUNDS</u>	<u>MOL (µg/L)</u>
Acenaphthene	10
Acenaphthylene	10
Anthracene	10
Benzidine	50
Benzo(a)anthracene	5
Benzo(a)pyrene	5
3,4-Benzofluoranthene	10
Benzo(ghi)perylene	20
Benzo(k)fluoranthene	5
Bis(2-chloroethoxy) Methane	10
Bis(2-chloroethyl) Ether	10
Bis(2-chloroisopropyl) Ether	10
Bis(2-ethylhexyl) Phthalate	10
4-Bromophenyl Phenyl Ether	10
Butylbenzyl Phthalate	10
2-Chloronaphthalene	10
4-Chlorophenyl Phenyl Ether	10
Chrysene	5
Dibenzo(a,h)anthracene	5
3,3'-Dichlorobenzidine	5
Diethyl Phthalate	10
Dimethyl Phthalate	10
Di-n-Butyl Phthalate	10
2,4-Dinitrotoluene	10
2,6-Dinitrotoluene	10
Di-n-octyl Phthalate	10
1,2-Diphenylhydrazine	20
Fluoranthene	10
Fluorene	10
Hexachlorobenzene	5
Hexachlorobutadiene	10
Hexachlorocyclopentadiene	10
Hexachloroethane	20
Indeno(1,2,3-cd)pyrene [2,3-o-Phenylene Pyrene]	5
Isophorone	10
Naphthalene	10
Nitrobenzene	10
n-Nitrosodimethylamine	50
n-Nitrosodi-n-Propylamine	20
n-Nitrosodiphenylamine	20
Phenanthrene	10
Pyrene	10
1,2,4-Trichlorobenzene	10
<u>PESTICIDES</u>	<u>MOL (µg/L)</u>
Aldrin	0.01
Alpha-BHC	0.05
Beta-BHC	0.05
Gamma-BHC [Lindane]	0.05
Delta-BHC	0.05

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Chlordane	0.2
4,4'-DDT	0.02
4,4'-DDE [p,p-DDX]	0.1
4,4'-DDD [p,p-TDE]	0.1
Dieldrin	0.02
Alpha-Endosulfan	0.01
Beta-Endosulfan	0.02
Endosulfan Sulfate	0.1
Endrin	0.02
Endrin Aldehyde	0.1
Heptachlor	0.01
Heptachlor Epoxide [BHC-Hexachlorocyclohexane]	0.01
PCB-1242	0.2
PCB-1254	0.2
PCB-1221	0.2
PCB-1232	0.2
PCB-1248	0.2
PCB-1260	0.2
PCB-1016	0.2
Toxaphene	0.3

The permittee may develop an effluent specific method detection limit (MDL) in accordance with Appendix B to 40 CFR Part 136 (See LAC 33:IX.4901). For any pollutant for which the permittee determines an effluent specific MDL, the permittee shall send to this Office a report containing QA/QC documentation, analytical results, and calculations necessary to demonstrate that the effluent specific MDL was correctly calculated. An effluent specific minimum quantification level (MQL) shall be determined in accordance with the following calculation:

$$MQL = 3.3 \times MDL$$

Upon written approval by this Office, the effluent specific MQL may be utilized by the permittee for all future Discharge Monitoring Report (DMR) calculations and reporting requirements.

- M. The permittee shall achieve compliance with the effluent limitations and monitoring requirements specified for discharges in accordance with the following schedule:

Effective date of the permit

N. PERMIT REOPENER CLAUSE:

This permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(C) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act, or more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDLs, if the effluent standard, limitations, water quality studies or TMDLs so issued or approved:

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1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
2. Controls any pollutant not limited in the permit; or
3. Require reassessment due to change in 303(d) status of waterbody; or
4. Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

The Louisiana Department of Environmental Quality (LDEQ) reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDLs for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

O. Facility Specific SWP3 Conditions:

The permittee shall implement Best Management Practices consistent with those required by the LPDES permits for stormwater discharge associated with construction activities (LAR100000 and LAR200000).

Stormwater discharges are covered under the Multi-Sector General Permit LAR05N087.

Should coverage under the Multi-Sector General Permit be canceled at any time, the permittee shall submit a request in writing to modify the permit to include additional stormwater outfalls and/or additional stormwater requirements.

P. REPORTING REQUIREMENTS FOR FLOW DURING INUNDATION OF OUTFALLS 003 AND/OR 004

The permittee shall monitor flow at Outfalls 003 and 004 continuously by recorder at all times with the following exception. When Outfall 003 and/or Outfall 004 become(s) inundated with waters of Monte Sano Bayou, the permittee is allowed to monitor flow on a daily basis by estimation.

The following monitoring requirements shall apply to the permittee upon monitoring for flow by estimate during times of inundation of Outfall 003 and/or 004.

1. Estimated flow monitoring at Outfalls 003 and 004 is only allowed during time when the outfall is inundated with waters of Monte Sano Bayou.
2. The permittee must notify the LDEQ Office of Environmental Compliance orally within 24 hours of switching between monitoring changes of flow from recorder to estimate and when switching back to recorder from estimate.

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3. The permittee must submit a written report along with the DMR indicating the start and end dates and the duration in days of the monitoring of flow by estimate for Outfalls 003 and/or 004. The report shall also include the date and time that the permittee orally notified the LDEQ Office of Environmental Compliance.
4. The permittee must report the monitoring values for flow in the appropriate section of the DMR. Should the change of monitoring sample type from recorder to estimate or estimate to recorder occur within the same monitoring period, the permittee must report the values of flow on the DMR for both the continuous/recorder and daily/estimate monitoring.

Q. DISCHARGE MONITORING REPORTS

Monitoring results must be reported on a Discharge Monitoring Report (DMR) form (EPA No. 3320-1 or an approved substitute). All monitoring reports must be retained for a period of at least three (3) years from the date of the sample measurement. The permittee shall make available to this Department, upon request, copies of all monitoring data required by this permit.

If there is no discharge during the reporting period, place an "X" in the NO DISCHARGE box located in the upper right corner of the Discharge Monitoring Report for that outfall.

Monitoring results for each reporting period shall be summarized on a Discharge Monitoring Report (DMR) Form (one DMR form per monitoring period per outfall) and submitted to the Office of Environmental Compliance either hand delivered, postmarked, or electronically submitted in accordance with LAC 33:1.2101.A and B no later than the 15th day of the month following each reporting period.

1. For parameter(s) with monitoring frequencies of 1/month or more frequent (i.e. continuous, 1/batch, 1/discharge event, 1/day, 3/week, 2/week, 1/week, 2/month, etc.), DMRs shall be submitted in accordance with the following schedule:

Submit DMR postmarked by the 15th day of the following month.

2. For parameter(s) that require a monitoring frequency of 1/2 months, DMRs shall be submitted in accordance with the following schedule:

Monitoring PeriodDMR Postmark Date

Jan-Feb, Mar-Apr, & May-Jun
Jul-Aug, Sept-Oct, & Nov-Dec

July 15th
January 15th

3. For parameter(s) that require a monitoring frequency of quarterly, DMRs shall be submitted in accordance with the following schedule:

Monitoring PeriodDMR Postmark Date

January, February, March
April, May, June
July, August, September
October, November, December

April 15th
July 15th
October 15th
January 15th

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4. For parameter(s) that require a semiannual monitoring frequency, DMRs shall be submitted in accordance with the following schedule:

Monitoring PeriodDMR Postmark Date

January - June

July 15th

July - December

January 15th

5. For parameter(s) that require an annual monitoring frequency, DMRs shall be submitted in accordance with the following schedule:

Monitoring PeriodDMR Postmark Date

January-December

January 15th

If not submitting electronically, duplicate sets of DMRs (one set of originals and one set of copies) signed and certified as required by LAC 33:IX.2503, and all other reports (one set of originals) required by this permit shall be submitted to the Permit Compliance Unit at the following address:

Department of Environmental Quality
Office of Environmental Compliance
Permit Compliance Unit
Post Office Box 4312
Baton Rouge, Louisiana 70821-4312

R. 48 HR ACUTE BIOMONITORING REQUIREMENTS: FRESHWATER

It is unlawful and a violation of this permit for a permittee or the designated agent to manipulate test samples in any manner, to delay shipment, or to terminate a toxicity test. Once initiated, all toxicity tests must be completed unless specific authority has been granted by the Louisiana Department of Environmental Quality.

1. SCOPE AND METHODOLOGY

- a. The permittee shall test the effluent for toxicity in accordance with the provisions in this section.

APPLICABLE TO OUTFALL(S): 001 and 004

CRITICAL DILUTION: 97%

EFFLUENT DILUTION SERIES: 31%, 41%, 54%, 73% and 97%

APPLICABLE TO OUTFALL(S): 003

CRITICAL DILUTION: 93%

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EFFLUENT DILUTION SERIES: 29%, 39%, 52%, 70% and 93%

COMPOSITE SAMPLE TYPE: Defined at PART I

TEST SPECIES/METHODS: 40 CFR Part 136 (See LAC 33:IX.4901)

Daphnia pulex acute static renewal 48-hour definitive toxicity test using EPA 821-R-02-012, or the latest update thereof. A minimum of five (5) replicates with ten (10) organisms per replicate must be used in the control and in each effluent dilution of this test.

Pimephales promelas (Fathead minnow) acute static renewal 48-hour definitive toxicity test using EPA 821-R-02-012, or the latest update thereof. A minimum of five (5) replicates with ten (10) organisms per replicate must be used in the control and in each effluent dilution of this test.

- b. The NOEC (No Observed Effect Concentration) is defined as the greatest effluent dilution at and below which lethality that is statistically different from the control (0% effluent) at the 95% confidence level does not occur.
- c. This permit may be reopened to require whole effluent toxicity limits, chemical specific effluent limits, additional testing, and/or other appropriate actions to address toxicity.
- d. Test failure is defined as a demonstration of statistically significant lethal effects to a test species at or below the effluent critical dilution.

2. PERSISTENT LETHALITY

The requirements of this subsection apply only when a toxicity test demonstrates significant lethal effects at or below the critical dilution. Significant lethal effects are herein defined as a statistically significant difference at the 95% confidence level between the survival of the appropriate test organism in a specified effluent dilution and the control (0% effluent).

If any valid test demonstrates significant lethal effects to a test species at or below the critical dilution, the frequency of testing for that species is automatically increased to once per quarter for the term of the permit.

- a. The permittee shall conduct a total of three (3) additional tests for any species that demonstrates statistically significant lethal toxic effects at the critical dilution or lower effluent dilutions. The additional tests shall be conducted monthly during the next three consecutive months in which a discharge occurs to determine if toxicity is persistent or occurs on a periodic basis. The purpose of this testing is to determine whether toxicity is present at a level and frequency that will provide toxic sample results to use in performing a Toxicity Reduction Evaluation (TRE). If no additional test failures occur during the retest monitoring period, the testing frequency will be once per quarter for the term of the permit or until another test

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failure occurs. The permittee may substitute one of the additional tests in lieu of one routine toxicity test. A full report shall be prepared for each test required by this section in accordance with procedures outlined in Item 4 of this section and submitted with the period discharge monitoring report (DMR) to the permitting authority for review.

- b. If any of the valid additional tests demonstrates significant lethal effects at or below the critical dilution, the permittee shall initiate Toxicity Reduction Evaluation (TRE) requirements as specified in Item 6 of this section. The permittee shall notify the Department of Environmental Quality, Office of Environmental Compliance - Permit Compliance Unit in writing within 5 days of the failure in any retest, and the TRE initiation date will be the test completion date of the first failed retest. A TRE may also be required due to a demonstration of intermittent lethal effects at or below the critical dilution, or for failure to perform the required retests.
- c. The provisions of Item 2.a are suspended upon submittal of the TRE Action Plan.

3. REQUIRED TOXICITY TESTING CONDITIONSa. Test Acceptance

The permittee shall repeat a test, including the control and all effluent dilutions, if the procedures and quality assurance requirements defined in the test methods or in this permit are not satisfied, including the following additional criteria:

- i. Each toxicity test control (0% effluent) must have a survival equal to or greater than 90%.
- ii. The percent coefficient of variation between replicates shall be 40% or less in the control (0% effluent) for: Daphnia pulex survival test; and Fathead minnow survival test.
- iii. The percent coefficient of variation between replicates shall be 40% or less in the critical dilution, unless significant lethal effects are exhibited for: Daphnia pulex survival test; and Fathead minnow survival test.

Test failure may not be construed or reported as invalid due to a coefficient of variation value of greater than 40%. A repeat test shall be conducted within the required reporting period of any test determined to be invalid.

b. Statistical Interpretation

For the Daphnia pulex survival test and the Fathead minnow survival test, the statistical analyses used to determine if there is a statistically significant difference between the control and the critical dilution shall be in accordance with the methods for determining the No Observed Effect Concentration (NOEC) as described in EPA 821-R-02-012, or the most recent update thereof.

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If the conditions of Test Acceptability are met in Item 3.a above and the percent survival of the test organism is equal to or greater than 90% in the critical dilution concentration and all lower dilution concentrations, the test shall be considered to be a passing test regardless of the NOEC, and the permittee shall report a NOEC of not less than the critical dilution for the DMR reporting requirements found in Item 4 below.

c. Dilution Water

- i. Dilution water used in the toxicity tests will be receiving water collected as close to the point of discharge as possible but unaffected by the discharge. The permittee shall substitute synthetic dilution water of similar pH, hardness and alkalinity to the closest downstream perennial water for;
 - (A) toxicity tests conducted on effluent discharges to receiving water classified as intermittent streams; and
 - (B) toxicity tests conducted on effluent discharges where no receiving water is available due to zero flow conditions.
- ii. If the receiving water is unsatisfactory as a result of instream toxicity (fails to fulfill the test acceptance criteria of Item 3.a), the permittee may substitute synthetic dilution water for the receiving water in all subsequent tests provided the unacceptable receiving water test met the following stipulations:
 - (A) a synthetic dilution water control which fulfills the test acceptance requirements of Item 3.a was run concurrently with the receiving water control;
 - (B) the test indicating receiving water toxicity has been carried out to completion (i.e., 48 hours);
 - (C) the permittee includes all test results indicating receiving water toxicity with the full report and information required by Item 4 below; and
 - (D) the synthetic dilution water shall have a pH, hardness and alkalinity similar to that of the receiving water or closest downstream perennial water not adversely affected by the discharge, provided the magnitude of these parameters will not cause toxicity in the synthetic dilution water.

d. Samples and Composites

- i. The permittee shall collect two 24-hour flow-weighted composite samples from the outfall(s) listed at Item 1.a above. A 24-hour composite sample consists of a minimum of 4 effluent portions collected at equal time intervals representative of a 24-hour operating day and combined

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OTHER REQUIREMENTS (continued)

proportional to flow or a sample continuously collected proportional to flow over a 24-hour operating day.

- ii. The permittee shall collect a second 24-hour composite sample for use during the 24-hour renewal of each dilution concentration for both tests. The permittee must collect the 24-hour composite samples so that the maximum holding time for any effluent sample shall not exceed 36 hours. The permittee must have initiated the toxicity test within 36 hours after the collection of the last portion of the first 24-hour composite sample. Samples shall be chilled to 0-6 degrees Centigrade during collection, shipping and/or storage.
- iii. The permittee must collect the 24-hour composite samples such that the effluent samples are representative of any periodic episode of chlorination, biocide usage or other potentially toxic substance discharged on an intermittent basis.
- iv. If the flow from the outfall(s) being tested ceases during the collection of effluent samples, the requirements for the minimum number of effluent samples, the minimum number of effluent portions and the sample holding time are waived during that sampling period. However, the permittee must collect an effluent composite sample volume during the period of discharge that is sufficient to complete the required toxicity tests with daily renewal of effluent. When possible, the effluent samples used for the toxicity tests shall be collected on separate days. The effluent composite sample collection duration and the static renewal protocol associated with the abbreviated sample collection must be documented in the full report required in Item 4. of this section.
- v. MULTIPLE OUTFALLS: If the provisions of this section are applicable to multiple outfalls, the permittee shall combine the composite effluent samples in proportion to the average flow from the outfalls listed in Item 1.a above for the day the sample was collected. The permittee shall perform the toxicity test on the flow-weighted composite of the outfall samples.
- vi. The permittee shall have the sample dechlorinated in the laboratory prior to installation of dechlorination systems. However, upon operation of dechlorination systems, the permittee shall not allow the sample to be dechlorinated at the laboratory.

4. REPORTING

- a. A valid test must be completed and test results must be submitted for each species during each Monitoring Period. The permittee shall prepare a full report of the results of all tests conducted pursuant to this Part in accordance with the Report Preparation Section of EPA 821-R-02-012, for every valid or invalid toxicity test initiated, whether carried to completion or not. The permittee shall retain each full report pursuant to the provisions of Part III.C.3 of this permit. For any test which fails, is considered invalid or which is terminated early for any reason, the full report must be submitted for agency review. Any available information

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relevant to the test failure (e.g., faulty equipment, severe weather conditions) should be included in this report to assist the agency in assessing proper controls to prevent future toxic discharges. The permittee shall submit the first full report to the following address:

Department of Environmental Quality
Office of Environmental Compliance
Enforcement Division
P.O. Box 4312
Baton Rouge, Louisiana 70821-4312
Attn: Permit Compliance Unit

In addition, if enforcement authority has been retained by EPA, a copy of the report must also be submitted to the following address:

U.S. Environmental Protection Agency, Region 6
Water Enforcement Branch, 6 EN-WC
1445 Ross Ave.
Dallas, Texas 75202

- b. The permittee shall submit the results of each valid toxicity test on the DMR for that Monitoring Period in accordance with Part III.D.4 of this permit. Submit retest information clearly marked as such on the DMR for the Monitoring Period in which the retest occurred. Only results of valid tests are to be reported on the DMR. The permittee shall submit the Tables 1-4 Summary Sheets with each valid test.

i. Pimephales promelas (Fathead minnow)

- (A) If the No Observed Effect Concentration (NOEC) for survival is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TEM6C.
- (B) Report the NOEC value for survival, Parameter No. TOM6C.
- (C) Report the highest (critical dilution or control) Coefficient of Variation, Parameter No. TQM6C.

ii. Daphnia pulex

- (A) If the NOEC for survival is less than the critical dilution, enter a "1"; otherwise, enter a "0" for Parameter No. TEM3D.
- (B) Report the NOEC value for survival, Parameter No. TOM3D.
- (C) Report the highest (critical dilution or control) Coefficient of Variation, Parameter No. TQM3D.

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- iii. The permittee shall report the following results for all VALID toxicity retests on the DMR for that Monitoring Period.
- (A) Retest #1 (STORET 22415): If the first monthly retest following failure of a routine test for either test species results in an NOEC for survival less than the critical dilution, report a "1"; otherwise, report a "0".
 - (B) Retest #2 (STORET 22416): If the second monthly retest following failure of a routine test for either test species results in an NOEC for survival less than the critical dilution, report a "1"; otherwise, report a "0".
 - (C) Retest #3 (STORET 51443): If the third monthly retest following failure of a routine test for either test species results in an NOEC for survival less than the critical dilution, report a "1"; otherwise, report a "0".

If, for any reason, a retest cannot be performed during the Monitoring Period in which the triggering routine test failure is experienced, the permittee shall report it on the following Monitoring Period's DMR, and the comments section of the DMRs shall be annotated to that effect. If retesting is not required during a given Monitoring Period, the permittee shall leave these DMR fields blank.

The permittee shall submit the toxicity testing information contained in Tables 1-4 of this permit with the DMR subsequent to each and every toxicity test Monitoring Period. The DMR and the summary tables should be sent to the address indicated in 4.a.

5. MONITORING FREQUENCY REDUCTION

- a. Upon successfully passing the first four quarters of WET testing after permit issuance/reissuance and in the absence of subsequent lethal toxicity for one or both test species at or below the critical dilution, the permittee may apply for a testing frequency reduction. If granted, the monitoring frequency for that test species may be reduced to not less than once per year for the less sensitive species (usually the Fathead minnow) and not less than once per six months for the more sensitive test species (usually the *Daphnia pulex*). Monitoring frequency reduction shall not apply to monitoring frequencies of once per year.
- b. CERTIFICATION - The permittee must certify in writing that no test failures have occurred and that all tests meet all test acceptability criteria in Item 3.a. above. In addition, the permittee must provide a list with each test performed including test initiation date, species, NOEC's for lethal and sub-lethal effects and the maximum coefficient of variation for the controls. Upon review and acceptance of this information the agency will issue a letter of confirmation of the monitoring frequency reduction. A copy of the letter will be forwarded to the agency's Permit Compliance Unit to update the permit reporting requirements.

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OTHER REQUIREMENTS (continued)

- c. This monitoring frequency reduction applies only until the expiration date of this permit, at which time the Monitoring Frequency/Monitoring Period for both test species reverts to once per quarter until the permit is re-issued.
- d. SURVIVAL FAILURES - If any test fails the survival endpoint at any time during the term of this permit, three monthly retests are required and the monitoring frequency for the affected test species shall be increased to once per quarter until the permit is reissued. Monthly retesting is not required if the permittee is performing a TRE.

6. TOXICITY REDUCTION EVALUATION (TRE)

- a. Within ninety (90) days of confirming lethality in the retests, the permittee shall submit a Toxicity Reduction Evaluation (TRE) Action Plan and Schedule for conducting a TRE. The TRE Action Plan shall specify the approach and methodology to be used in performing the TRE. A Toxicity Reduction Evaluation is an investigation intended to determine those actions necessary to achieve compliance with water quality-based effluent requirements/and or chemical-specific limits by reducing an effluent's toxicity to an acceptable level. A TRE is defined as a step-wise process which combines toxicity testing and analyses of the physical and chemical characteristics of a toxic effluent to identify the constituents causing effluent toxicity and/or treatment methods which will reduce the effluent toxicity. The TRE Action Plan shall lead to the successful elimination of effluent toxicity at the critical dilution and include the following:
 - i. Specific Activities. The plan shall detail the specific approach the permittee intends to utilize in conducting the TRE. The approach may include toxicity characterizations, identifications and confirmation activities, source evaluation, treatability studies, or alternative approaches. When the permittee conducts Toxicity Characterization Procedures the permittee shall perform multiple characterizations and follow the procedures specified in the document "Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures" (EPA-600/6-91/003) or alternate procedures. When the permittee conducts Toxicity Identification Evaluations and Confirmations, the permittee shall perform multiple identifications and follow the methods specified in the documents "Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/080) and "Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity" (EPA/600/R-92/081), as appropriate.

The documents referenced above may be obtained through the National Technical Information Service (NTIS) by phone at (703) 487-4650, or by writing:

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U.S. Department of Commerce
National Technical Information Service
5285 Port Royal Road
Springfield, Va. 22161

- ii. Sampling Plan (e.g., locations, methods, holding times, chain of custody, preservation, etc.). The effluent sample volume collected for all tests shall be adequate to perform the toxicity test, toxicity characterization, identification and confirmation procedures, and conduct chemical specific analyses when a probable toxicant has been identified;

Where the permittee has identified or suspects specific pollutant(s) and/or source(s) of effluent toxicity, the permittee shall conduct, concurrent with toxicity testing, chemical specific analyses for the identified and/or suspected pollutant(s) and/or source(s) of effluent toxicity. Where lethality was demonstrated within 24 hours of test initiation, each composite sample shall be analyzed independently. Otherwise the permittee may substitute a composite sample, comprised of equal portions of the individual composite samples, for the chemical specific analysis;

- iii. Quality Assurance Plan (e.g., QA/QC implementation, corrective actions, etc.); and
 - iv. Project Organization (e.g., project staff, project manager, consulting services, etc.).
- b. The permittee shall initiate the TRE Action Plan within thirty (30) days of plan and schedule submittal. The permittee shall assume all risks for failure to achieve the required toxicity reduction.
 - c. The permittee shall submit a quarterly TRE Activities Report, with the Discharge Monitoring Report in the months of January, April, July and October, containing information on toxicity reduction evaluation activities including:
 - i. any data and/or substantiating documentation which identify the pollutant(s) and/or source(s) of effluent toxicity;
 - ii. any studies/evaluations and results on the treatability of the facility's effluent toxicity; and
 - iii. any data which identify effluent toxicity control mechanisms that will reduce effluent toxicity to the level necessary to achieve compliance with permit biomonitoring requirements and/or chemical-specific limits.

The TRE Activities Report shall be submitted to the following addresses:

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Department of Environmental Quality
Office of Environmental Compliance
Enforcement Division
P.O. Box 4312
Baton Rouge, Louisiana 70821-4312
Attn: Permit Compliance Unit

U.S. Environmental Protection Agency, Region 6
Water Enforcement Branch, 6 EN-WC
1445 Ross Avenue
Dallas, Texas 75202

- d. The permittee shall submit a Final Report on Toxicity Reduction Evaluation Activities no later than twenty-eight (28) months from confirming lethality in the retests, which provides information pertaining to the specific control mechanism selected that will, when implemented, result in the permittee achieving compliance with permit biomonitoring requirements and/or chemical-specific limits. The report will also provide a specific corrective action schedule for implementing the selected control mechanism.

A copy of the Final Report on Toxicity Reduction Evaluation Activities shall also be submitted to the above addresses.

- e. Quarterly testing during the TRE is a minimum monitoring requirement. LDEQ recommends that permittees required to perform a TRE not rely on quarterly testing alone to ensure success in the TRE, and that additional screening tests be performed to capture toxic samples for identification of toxicants. At the end of the TRE, LDEQ will consider all information submitted and establish appropriate controls to prevent future toxic discharges, including WET and/or chemical-specific limits per state regulations at LAC 33:IX.2707.D.1.e.

**TABLE 1
SUMMARY SHEET**

Daphnia pulex ACUTE (FRESH) SURVIVAL TEST RESULTS

PERMITTEE: ExxonMobil Chemical Company

FACILITY SITE: Baton Rouge Chemical Plant

LPDES PERMIT NUMBER: LA0005401, 286

OUTFALL IDENTIFICATION: 001 & 004

OUTFALL SAMPLE IS FROM SINGLE MULTIPLE DISCHARGES

BIOMONITORING LABORATORY:

DILUTION WATER USED: RECEIVING WATER LAB WATER

CRITICAL DILUTION 97% DATE TEST INITIATED

Are the test results to be considered valid? yes no

If X no (test invalid), what are the reasons for invalidity?

Is this a retest of a previous invalid test? yes no

Is this a retest of a previous test failure? yes no

NOEC = % effluent

LC₅₀48 = % effluent

DILUTION SERIES RESULTS

percent survival

TIME OF READING	REP	0%	97%	73%	54%	41%	31%
24-HOUR	A						
	B						
	C						
	D						
	E						
48-HOUR	A						
	B						
	C						
	D						
	E						
MEAN							

Is the mean survival at 48 hours significantly less ($p=0.05$) than the control survival for the low flow or critical dilution?

 yes no

TABLE 2 SUMMARY SHEET

Pimephales promelas ACUTE (FRESH) SURVIVAL TEST RESULTS

 PERMITTEE: ExxonMobil Chemical Company

 FACILITY SITE: Baton Rouge Chemical Plant

 LPDES PERMIT NUMBER: LA0005401, 286

 OUTFALL IDENTIFICATION: 001 & 004

 OUTFALL SAMPLE IS FROM SINGLE MULTIPLE DISCHARGES

 BIOMONITORING LABORATORY:

 DILUTION WATER USED: RECEIVING WATER LAB WATER

 CRITICAL DILUTION 97% DATE TEST INITIATED

 Are the test results to be considered valid? yes no

 If X no (test invalid), what are the reasons for invalidity?

 Is this a retest of a previous invalid test? yes no

 Is this a retest of a previous test failure? yes no

 NOEC = % effluent

 LC₅₀48 = % effluent

DILUTION SERIES RESULTS percent survival

TIME OF READING	REP	0%	97%	73%	54%	41%	31%
24-HOUR	A						
	B						
	C						
	D						
	E						
48-HOUR	A						
	B						
	C						
	D						
	E						
MEAN							

Is the mean survival at 48 hours significantly less (p=0.05) than the control survival for the low flow or critical dilution?

 yes no

**TABLE 3
SUMMARY SHEET**

Daphnia pulex ACUTE (FRESH) SURVIVAL TEST RESULTS

PERMITTEE: ExxonMobil Chemical Company
 FACILITY SITE: Baton Rouge Chemical Plant
 LPDES PERMIT NUMBER: LA0005401, 286
 OUTFALL IDENTIFICATION: 003
 OUTFALL SAMPLE IS FROM SINGLE MULTIPLE DISCHARGES
 BIOMONITORING LABORATORY:
 DILUTION WATER USED: RECEIVING WATER LAB WATER
 CRITICAL DILUTION 93% DATE TEST INITIATED

Are the test results to be considered valid? yes no
 If X no (test invalid), what are the reasons for invalidity?

Is this a retest of a previous invalid test? yes no
 Is this a retest of a previous test failure? yes no

NOEC = % effluent
 LC₅₀48 = % effluent

DILUTION SERIES RESULTS
percent survival

TIME OF READING	REP	0%	93%	70%	52%	39%	29%
24-HOUR	A						
	B						
	C						
	D						
	E						
48-HOUR	A						
	B						
	C						
	D						
	E						
MEAN							

Is the mean survival at 48 hours significantly less ($p=0.05$) than the control survival for the low flow or critical dilution?
 yes no

yes no

PART III
STANDARD CONDITIONS FOR LPDES PERMITS

SECTION A. GENERAL CONDITIONS

1. Introduction

In accordance with the provisions of LAC 33:IX.2701, et seq., this permit incorporates either expressly or by reference ALL conditions and requirements applicable to the Louisiana Pollutant Discharge Elimination System Permits (LPDES) set forth in the Louisiana Environmental Quality Act (LEQA), as amended, as well as ALL applicable regulations.

2. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act (CWA) and the Louisiana Environmental Quality Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

3. Penalties for Violation of Permit Conditions

a. La. R. S. 30:2025 provides for civil penalties for violations of these regulations and the Louisiana Environmental Quality Act. La. R. S. 30:2076.2 provides for criminal penalties for violation of any provisions of the LPDES or any order or any permit condition or limitation issued under or implementing any provisions of the LPDES program. (See Section E. Penalties for Violation of Permit Conditions for additional details).

b. Any person may be assessed an administrative penalty by the State Administrative Authority under La. R. S. 30:2025 for violating a permit condition or limitation implementing any of the requirements of the LPDES program in a permit issued under the regulations or the Louisiana Environmental Quality Act.

4. Toxic Pollutants

a. Other effluent limitations and standards under Sections 301, 302, 303, 307, 318, and 405 of the Clean Water Act. If any applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the Clean Water Act for a toxic pollutant and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, the state administrative authority shall institute proceedings under these regulations to modify or revoke and reissue the permit to conform to the toxic effluent standard or prohibition.

b. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions, or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.

5. Duty to Reapply

a. Individual Permits. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The new application shall be submitted at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the state administrative authority. (The state administrative authority shall not grant permission for applications to be submitted later than the expiration date of the existing permit.) Continuation of expiring permits shall be governed by regulations promulgated at LAC 33:IX.2321 and any subsequent amendments.

- b. **General Permits.** General permits expire five years after the effective date. The 180-day reapplication period as defined above is not applicable to general permit authorizations. Reissued general permits may provide automatic coverage for permittees authorized under the previous version of the permit, and no new application is required. Requirements for obtaining authorization under the reissued general permit will be outlined in Part I of the new permit. Permittees authorized to discharge under an expiring general permit should follow the requirements for obtaining coverage under the new general permit to maintain discharge authorization.

6. Permit Action

This permit may be modified, revoked and reissued, or terminated for cause in accordance with LAC 33:IX.2903, 2905, 2907, 3105 and 6509. The causes may include, but are not limited to, the following:

- a. Noncompliance by the permittee with any condition of the permit;
- b. The permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee's misrepresentation of any relevant facts at any time; or
- c. A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination;
- d. A change in any condition that requires either a temporary or a permanent reduction or elimination of any discharge;
- e. Failure to pay applicable fees under the provisions of LAC 33: IX. Chapter 13;
- f. Change of ownership or operational control.

The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

7. Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege, nor does it authorize any injury to private or public property, nor any infringement of federal, state, or local laws or regulations.

8. Duty to Provide Information

The permittee shall furnish to the state administrative authority, within a reasonable time, any information which the state 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 state administrative authority, upon request, copies of records required to be kept by this permit.

9. Criminal and Civil Liability

Except as provided in permit conditions on "Bypassing" and "Upsets", nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance. Any false or materially misleading representation or concealment of information required to be reported by the provisions of the permit, the Act, or applicable regulations, which avoids or effectively defeats the regulatory purpose of the Permit may subject the Permittee to criminal enforcement pursuant to La. R.S. 30:2025.

10. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Clean Water Act.

11. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Clean Water Act.

12. Severability

If any provision of these rules and regulations, or the application thereof, is held to be invalid, the remaining provisions of these rules and regulations shall not be affected, so long as they can be given effect without the invalid provision. To this end, the provisions of these rules and regulations are declared to be severable.

13. Dilution

A permittee shall not achieve any effluent concentration by dilution unless specifically authorized in the permit. A permittee shall not increase the use of process water or cooling water or otherwise attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve permit limitations or water quality.

14. Facilities Requiring Approval from Other State Agencies

In accordance with La. R.S.40.4(A)(6) the plans and specifications of all sanitary sewerage treatment systems, both public and private, must be approved by the Department of Health and Hospitals state health officer or his designee. It is unlawful for any person, firm, or corporation, both municipal and private to operate a sanitary sewage treatment facility without proper authorization from the state health officer.

In accordance with La. R.S.40.1149, it is unlawful for any person, firm or corporation, both municipal and private, operating a sewerage system to operate that system unless the competency of the operator is duly certified by the Department of Health and Hospitals state health officer. Furthermore, it is unlawful for any person to perform the duties of an operator without being duly certified.

In accordance with La. R.S.48.385, it is unlawful for any industrial wastes, sewage, septic tanks effluent, or any noxious or harmful matter, solid, liquid or gaseous to be discharged into the side or cross ditches or placed upon the rights-of-ways of state highways without the prior written consent of the Department of Transportation and Development chief engineer or his duly authorized representative and of the secretary of the Department of Health and Hospitals.

15. The standards provided in Chapter 11 – Surface Water Quality Standards are official regulations of the state, and any person who discharges pollutants to the waters of the state in such quantities as to cause these standards to be violated shall be subject to the enforcement procedures of the state as specified in R.S. 30:2025.

SECTION B. PROPER OPERATION AND MAINTENANCE**1. Need to Halt or Reduce not a Defense**

It shall not be a defense for a 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.

2. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. The permittee shall also take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with the permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

3. Proper Operation and Maintenance

- a. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up

or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

- b. The permittee shall provide an adequate operating staff which is duly qualified to carry out operation, maintenance and other functions necessary to ensure compliance with the conditions of this permit.

4. Bypass of Treatment Facilities

- a. Bypass. The intentional diversion of waste streams from any portion of a treatment facility.
- b. Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Section B.4.c. and 4.d of these standard conditions.
- c. Notice
 - (1) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice to the Office of Environmental Services, Water Permits Division, if possible at least ten days before the date of the bypass.
 - (2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in LAC 33:IX.2701.L.6 (24-hour notice) and Section D.6.e. of these standard conditions.
- d. Prohibition of bypass
 - (1) Bypass is prohibited, and the state administrative authority may take enforcement action against a permittee for bypass, unless:
 - (a) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
 - (b) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and,
 - (c) The permittee submitted notices as required by Section B.4.c of these standard conditions.
 - (2) The state administrative authority may approve an anticipated bypass after considering its adverse effects, if the state administrative authority determines that it will meet the three conditions listed in Section B.4.d(1) of these standard conditions.

5. Upset Conditions

- a. Upset. An exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.
- b. Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of Section B.5.c. are met. No determination made during administrative review of claims that noncompliance was caused by an upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- c. Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - (1) An upset occurred and that the permittee can identify the cause(s) of the upset;

- (2) The permitted facility was at the time being properly operated; and
- (3) The permittee submitted notice of the upset as required by LAC 33:IX.2701.L.6.b.ii. and Section D.6.e.(2) of these standard conditions; and
- (4) The permittee complied with any remedial measures required by Section B.2 of these standard conditions.

d. Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

6. Removed Substances

Solids, sewage sludges, filter backwash, or other pollutants removed in the course of treatment or wastewater control shall be properly disposed of in a manner such as to prevent any pollutant from such materials from entering waters of the state and in accordance with environmental regulations.

7. Percent Removal

For publicly owned treatment works, the 30-day average percent removal for Biochemical Oxygen Demand and Total Suspended Solids shall not be less than 85 percent in accordance with LAC 33:IX.5905.A.3. and B.3. Publicly owned treatment works utilizing waste stabilization ponds/oxidation ponds are not subject to the 85 percent removal rate for Total Suspended Solids.

SECTION C. MONITORING AND RECORDS

1. Inspection and Entry

The permittee shall allow the state administrative authority or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon the presentation of credentials and other documents as may be required by the law to:

- a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit.

Enter upon the permittee's premises where a discharge source is or might be located or in which monitoring equipment or records required by a permit are kept for inspection or sampling purposes. Most inspections will be unannounced and should be allowed to begin immediately, but in no case shall begin more than thirty (30) minutes after the time the inspector presents his/her credentials and announces the purpose(s) of the inspection. Delay in excess of thirty (30) minutes shall constitute a violation of this permit. However, additional time can be granted if the inspector or the Administrative Authority determines that the circumstances warrant such action; and

- b. Have access to and copy, at reasonable times, any records that the department or its authorized representative determines are necessary for the enforcement of this permit. For records maintained in either a central or private office that is open only during normal office hours and is closed at the time of inspection, the records shall be made available as soon as the office is open, but in no case later than the close of business the next working day;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act or the Louisiana Environmental Quality Act, any substances or parameters at any location.
- e. Sample Collection
 - (1) When the inspector announces that samples will be collected, the permittee will be given an additional thirty (30) minutes to prepare containers in order to collect duplicates. If the permittee

cannot obtain and prepare sample containers within this time, he is considered to have waived his right to collect duplicate samples and the sampling will proceed immediately. Further delay on the part of the permittee in allowing initiation of the sampling will constitute a violation of this permit.

- (2) At the discretion of the administrative authority, sample collection shall proceed immediately (without the additional 30 minutes described in Section C.1.a. above) and the inspector shall supply the permittee with a duplicate sample.

- f. It shall be the responsibility of the permittee to ensure that a facility representative familiar with provisions of its wastewater discharge permit, including any other conditions or limitations, be available either by phone or in person at the facility during all hours of operation. The absence of such personnel on-site who are familiar with the permit shall not be grounds for delaying the initiation of an inspection except in situations as described in Section C.1.b. of these standard conditions. The permittee shall be responsible for providing witnesses/escorts during inspections. Inspectors shall abide by all company safety rules and shall be equipped with standard safety equipment (hard hat, safety shoes, safety glasses) normally required by industrial facilities.

- g. Upon written request copies of field notes, drawings, etc., taken by department personnel during an inspection shall be provided to the permittee after the final inspection report has been completed.

2. Representative Sampling

Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. All samples shall be taken at the outfall location(s) indicated in the permit. The state administrative authority shall be notified prior to any changes in the outfall location(s). Any changes in the outfall location(s) may be subject to modification, revocation and reissuance in accordance with LAC 33:IX.2903.

3. Retention of Records

Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report, or application. This period may be extended by request of the state administrative authority at any time.

4. Record Contents

Records of monitoring information shall include:

- a. The date, exact place, and time of sampling or measurements;
- b. The individual(s) who performed the sampling or measurements;
- c. The date(s) analyses were performed;
- d. The time(s) analyses were begun;
- e. The individual(s) who performed the analyses;
- f. The analytical techniques or methods used;
- g. The results of such analyses; and
- h. The results of all quality control procedures.

5. Monitoring Procedures

- a. Monitoring results must be conducted according to test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in 40 CFR Part 503, unless other test procedures have been specified in this permit.
- b. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instruments at intervals frequent enough to insure accuracy of measurements and shall maintain appropriate records of such activities.

- c. The permittee or designated laboratory shall have an adequate analytical quality assurance/quality control program to produce defensible data of known precision and accuracy. All quality control measures shall be assessed and evaluated on an on-going basis and quality control acceptance criteria shall be used to determine the validity of the data. All method specific quality control as prescribed in the method shall be followed. If quality control requirements are not included in the method, the permittee or designated laboratory shall follow the quality control requirements as prescribed in the Approved Edition (40 CFR Part 136) Standard Methods for the Examination of Water and Wastes, Sections 1020A and 1020B. General sampling protocol shall follow guidelines established in the "Handbook for Sampling and Sample Preservation of Water and Wastewater, 1982" U.S. Environmental Protection Agency. This publication is available from the National Technical Information Service (NTIS), Springfield, VA 22161, Phone number (800) 553-6847. Order by NTIS publication number PB-83-124503.

6. Flow Measurements

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to insure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10% from true discharge rates throughout the range of expected discharge volumes. Guidance in selection, installation, calibration and operation of acceptable flow measurement devices can be obtained from the following references:

- a. "A Guide to Methods and Standards for the Measurement of Water Flow, 1975," U.S. Department of Commerce, National Bureau of Standards. This publication is available from the National Technical Information Service (NTIS), Springfield, VA 22161, Phone number (800) 553-6847. Order by NTIS publication number COM-75-10683.
- b. "Flow Measurement in Open Channels and Closed Conduits, Volumes 1 and 2," U.S. Department of Commerce, National Bureau of Standards. This publication is available from the National Technical Service (NTIS), Springfield, VA, 22161, Phone number (800) 553-6847. Order by NTIS publication number PB-273 535.
- c. "NPDES Compliance Flow Measurement Manual," U.S. Environmental Protection Agency, Office of Water Enforcement. This publication is available from the National Technical Information Service (NTIS), Springfield, VA 22161, Phone number (800) 553-6847. Order by NTIS publication number PB-82-131178.

7. Prohibition for Tampering: Penalties

- a. La. R.S. 30:2025 provides for punishment of any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit.
- b. La. R.S. 30:2076.2 provides for penalties for any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance.

8. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 (See LAC 33:IX.4901) or, in the case of sludge use and disposal, approved under 40 CFR Part 136 (See LAC 33:IX.4901) unless otherwise specified in 40 CFR Part 503, or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the state administrative authority.

9. Averaging of Measurements

Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the state administrative authority in the permit.

10. Laboratory Accreditation

- a. LAC 33:1.Subpart 3, Chapters 45-59 provide requirements for an accreditation program specifically applicable to commercial laboratories, wherever located, that provide chemical analyses, analytical results, or other test data to the department, by contract or by agreement, and the data is:
- (1) Submitted on behalf of any facility, as defined in La. R.S.30:2004;
 - (2) Required as part of any permit application;
 - (3) Required by order of the department;
 - (4) Required to be included on any monitoring reports submitted to the department;
 - (5) Required to be submitted by contractor
 - (6) Otherwise required by department regulations.
- b. The department laboratory accreditation program, Louisiana Environmental Laboratory Accreditation Program (LELAP) is designed to ensure the accuracy, precision, and reliability of the data generated, as well as the use of department-approved methodologies in generation of that data. Laboratory data generated by commercial environmental laboratories that are not (LELAP) accredited will not be accepted by the department. Retesting of analysis will be required by an accredited commercial laboratory.

Where retesting of effluent is not possible (i.e. data reported on DMRs for prior month's sampling), the data generated will be considered invalid and in violation of the LPDES permit.

- c. Regulations on the Louisiana Environmental Laboratory Accreditation Program and a list of labs that have applied for accreditation are available on the department website located under **DIVISIONS → PERMIT SUPPORT SERVICES → LABORATORY ACCREDITATION** at the following link:

<http://www.deq.louisiana.gov>

Questions concerning the program may be directed to (225) 219-9800.

SECTION D. REPORTING REQUIREMENTS**1. Facility Changes**

The permittee shall give notice to the state administrative authority as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

- a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or,
- b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under LAC 33:IX.2703.A.1.
- c. For Municipal Permits. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to Section 301, or 306 of the CWA if it were directly discharging those pollutants; and any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit. In no case are any new connections, increased flows, or significant changes in influent quality permitted that will cause violation of the effluent limitations specified herein.

2. Anticipated Noncompliance

The permittee shall give advance notice to the state administrative authority of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

3. Transfers

This permit is not transferable to any person except after notice to the state administrative authority. The state administrative authority may require modification or revocation and reissuance of the permit to change

the name of the permittee and incorporate such other requirements as may be necessary under the Clean Water Act or the Louisiana Environmental Quality Act. (See LAC 33:IX.2901; in some cases, modification or revocation and reissuance is mandatory.)

A permit may be transferred by the permittee to a new owner or operator only if: (1) the permit has been modified or revoked and reissued (under LAC 33:IX.2903.A.2.b) by the permittee and new owner submitting a Name/Ownership/Operator Change Form (NOC-1 Form) and approved by LDEQ (LAC 33:I.Chapter 19); or (2) a minor modification made (under LAC 33:IX.2905) to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act and the Louisiana Environmental Quality Act.

The NOC-1 form can be found at the following link:
<http://www.deq.louisiana.gov/portal/Portals/0/assistance/NOC-1%20FORM%20Jan%2025,%202006.pdf>

4. Monitoring Reports

Monitoring results shall be reported at the intervals and in the form specified in Part I or Part II of this permit.

The permittee shall submit properly completed Discharge Monitoring Reports (DMRs) on the form specified in the permit. Preprinted DMRs are provided to majors/92-500s and other designated facilities. Please contact the Permit Compliance Unit concerning preprints. Self-generated DMRs must be pre-approved by the Permit Compliance Unit prior to submittal. Self-generated DMRs are approved on an individual basis. Requests for approval of self-generated DMRs should be submitted to:

Supervisor, Permit Compliance Unit
Office of Environmental Compliance
Post Office Box 4312
Baton Rouge, LA 70821-4312

Copies of blank DMR templates, plus instructions for completing them, and EPA's LPDES Reporting Handbook are available at the department website located at:

<http://www.deq.louisiana.gov/portal/Default.aspx?tabid=2276>

5. Compliance Schedules

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

6. Requirements for Notification

a. Emergency Notification

As required by LAC 33:I.3915, in the event of an unauthorized discharge that does cause an emergency condition, the discharger shall notify the hotline (DPS 24-hour Louisiana Emergency Hazardous Materials Hotline) by telephone at (225) 925-6595 (collect calls accepted 24 hours a day) immediately (a reasonable period of time after taking prompt measures to determine the nature, quantity, and potential off-site impact of a release, considering the exigency of the circumstances), but in no case later than one hour after learning of the discharge. (An emergency condition is any condition which could reasonably be 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.) Notification required by this section will be made regardless of the amount of discharge. Prompt Notification Procedures are listed in Section D.6.c. of these standard conditions.

A written report shall be provided within seven calendar days after the notification. The report shall contain the information listed in Section D.6.d. of these standard conditions and any additional information in LAC 33:I.3925.B.

b. Prompt Notification

As required by LAC 33:I.3917, in the event of an unauthorized discharge that exceeds a reportable quantity specified in LAC 33:I.Subchapter E, but does not cause an emergency condition, the discharger shall promptly notify the department within 24 hours after learning of the discharge. Notification should be made to the Office of Environmental Compliance, Surveillance Division Single Point of Contact (SPOC) in accordance with LAC 33:I.3923.

In accordance with LAC 33:I.3923, prompt notification shall be provided within a time frame not to exceed 24 hours and shall be given to the Office of Environmental Compliance, Surveillance Division (SPOC) as follows:

- (1) by the Online Incident Reporting screens found at <http://www.deq.louisiana.gov/portal/tabid/66/Default.aspx> ;or
- (2) by e-mail utilizing the Incident Report Form and instructions found at <http://www.deq.louisiana.gov/portal/tabid/66/Default.aspx>;or
- (3) by telephone at (225) 219-3640 during office hours, or (225) 342-1234 after hours and on weekends and holidays.

c. Content of Prompt Notifications. The following guidelines will be utilized as appropriate, based on the conditions and circumstances surrounding any unauthorized discharge, to provide relevant information regarding the nature of the discharge:

- (1) the name of the person making the notification and the telephone number where any return calls from response agencies can be placed;
- (2) the name and location of the facility or site where the unauthorized discharge is imminent or has occurred, using common landmarks. In the event of an incident involving transport, include the name and address of the transporter and generator;
- (3) the date and time the incident began and ended, or the estimated time of continuation if the discharge is continuing;
- (4) the extent of any injuries and identification of any known personnel hazards that response agencies may face;
- (5) the common or scientific chemical name, the U.S. Department of Transportation hazard classification, and the best estimate of amounts of any and all discharged pollutants;
- (6) a brief description of the incident sufficient to allow response agencies to formulate their level and extent of response activity.

d. Written Notification Procedures. Written reports for any unauthorized discharge that requires notification under Section D.6.a. or 6.b., or shall be submitted by the discharger to the Office of Environmental Compliance, Surveillance Division SPOC in accordance with LAC 33:I.3925 within seven calendar days after the notification required by D.6.a. or 6.b., unless otherwise provided for in a valid permit or other department regulation. Written notification reports shall include, but not be limited to, the following information:

- (1) the name, address, telephone number, Agency Interest (AI) number (number assigned by the department) if applicable, and any other applicable identification numbers of the person, company, or other party who is filing the written report, and specific identification that the report is the written follow-up report required by this section;
- (2) the time and date of prompt notification, the state official contacted when reporting, the name of person making that notification, and identification of the site or facility, vessel, transport vehicle, or storage area from which the unauthorized discharge occurred;
- (3) date(s), time(s), and duration of the unauthorized discharge and, if not corrected, the anticipated time it is expected to continue;
- (4) details of the circumstances (unauthorized discharge description and root cause) and events leading to any unauthorized discharge, including incidents of loss of sources of radiation, and if the release point is subject to a permit:
 - (a) the current permitted limit for the pollutant(s) released;and
 - (b) the permitted release point/outfall ID.

- (5) the common or scientific chemical name of each specific pollutant that was released as the result of an unauthorized discharge, including the CAS number and U.S. Department of Transportation hazard classification, and the best estimate of amounts of any and all released pollutants (total amount of each compound expressed in pounds, including calculations);
- (6) a statement of the actual or probable fate or disposition of the pollutant or source of radiation and what off-site impact resulted;
- (7) remedial actions taken, or to be taken, to stop unauthorized discharges or to recover pollutants or sources of radiation.
- (8) Written notification reports shall be submitted to the Office of Environmental Compliance, Surveillance Division SPOC by mail or fax. The transmittal envelope and report or fax cover page and report should be clearly marked **"UNAUTHORIZED DISCHARGE NOTIFICATION REPORT."**

Written reports (LAC 33:1.3925) should be mailed to:

Louisiana Department of Environmental Quality
Post Office Box 4312
Baton Rouge, LA 70821-4312
ATTENTION: EMERGENCY AND RADIOLOGICAL SERVICES DIVISION – SPOC
"UNAUTHORIZED DISCHARGE NOTIFICATION REPORT"

The Written Notification Report may also be faxed to the Louisiana Department of Environmental Quality, Office of Environmental Compliance, Emergency and Radiological Services Division at: (225)-219-4044.

Please see LAC 33:1.3925.B for additional written notification procedures.

- e. Twenty-four Hour Reporting. The permittee shall report any noncompliance which may endanger human health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. The following shall be included as information which must be reported within 24 hours:
 - (1) Any unanticipated bypass which exceeds any effluent limitation in the permit (see LAC 33:IX.2701.M.3.b.);
 - (2) Any upset which exceeds any effluent limitation in the permit;
 - (3) Violation of a maximum daily discharge limitation for any of the pollutants listed by the state administrative authority in Part II of the permit to be reported within 24 hours (LAC 33:IX.2707.G.).

7. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under Section D.4., 5., and 6., at the time monitoring reports are submitted. The reports shall contain the information listed in Section D.6.e.

8. Other Information

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the state administrative authority, it shall promptly submit such facts or information.

9. Discharges of Toxic Substances

In addition to the reporting requirements under Section D.1-8, all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Office of Environmental Services, Water Permits Division as soon as they know or have reason to believe:

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant:

- i. listed at LAC 33:IX.7107, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:
 - (1) One hundred micrograms per liter (100 µg/L);
 - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4 -dinitro-phenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with LAC33:IX.2501.G.7; or
 - (4) The level established by the state administrative authority in accordance with LAC 33:IX.2707.F; or

- ii. which exceeds the reportable quantity levels for pollutants at LAC 33:I. Subchapter E.

b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant:

- i. listed at LAC 33:IX.7107, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
 - (1) Five hundred micrograms per liter (500 µg/L);
 - (2) One milligram per liter (1 mg/L) for antimony;
 - (3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with LAC 33:IX.2501.G.7; or
 - (4) The level established by the state administrative authority in accordance with LAC 33:IX.2707.F; or

- ii. which exceeds the reportable quantity levels for pollutants at LAC 33:I. Subchapter E.

10. Signatory Requirements

All applications, reports, or information submitted to the state administrative authority shall be signed and certified.

a. All permit applications shall be signed as follows:

- (1) For a corporation - by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
 - (a) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation; or,
 - (b) The manager of one or more manufacturing, production, or operating facilities, provided: the manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations and initiating and directing other comprehensive measures to ensure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and the authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

NOTE: DEQ does not require specific assignments or delegations of authority to responsible corporate officers identified in Section D.10.a(1)(a). The agency will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the state administrative authority to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate positions under Section D.10.a(1)(b) rather than to specific individuals.

- (2) For a partnership or sole proprietorship - by a general partner or the proprietor, respectively; or
- (3) For a municipality, state, federal, or other public agency - by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a federal agency includes:

- (a) The chief executive officer of the agency, or
 - (b) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).
- b. All reports required by permits and other information requested by the state administrative authority shall be signed by a person described in Section D.10.a., or by a duly authorized representative of that person. A person is a duly authorized representative only if:
- (1) The authorization is made in writing by a person described in Section D.10.a. of these standard conditions;
 - (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (a duly authorized representative may thus be either a named individual or an individual occupying a named position; and,
 - (3) The written authorization is submitted to the state administrative authority.
- c. Changes to authorization. If an authorization under Section D.10.b. is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Section D.10.b. must be submitted to the state administrative authority prior to or together with any reports, information, or applications to be signed by an authorized representative.
- d. Certification. Any person signing a document under Section D.10. a. or b. above, shall make the following 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."

11. Availability of Reports

All recorded information (completed permit application forms, fact sheets, draft permits, or any public document) not classified as confidential information under La. R.S. 30:2030(A) and 30:2074(D) and designated as such in accordance with these regulations (LAC 33:IX.2323 and LAC 33:IX.6503) shall be made available to the public for inspection and copying during normal working hours in accordance with the Public Records Act, La. R.S. 44:1 et seq.

Claims of confidentiality for the following will be denied:

- a. The name and address of any permit applicant or permittee;
- b. Permit applications, permits, and effluent data.
- c. Information required by LPDES application forms provided by the state administrative authority under LAC 33:IX.2501 may not be claimed confidential. This includes information submitted on the forms themselves and any attachments used to supply information required by the forms.

SECTION E. PENALTIES FOR VIOLATIONS OF PERMIT CONDITION

1. Criminal

a. Negligent Violations

The Louisiana Revised Statutes La. R. S. 30:2076.2 provides that any person who negligently violates any provision of the LPDES, or any order issued by the secretary under the LPDES, or any permit condition or limitation implementing any such provision in a permit issued under the LPDES by the secretary, or any requirement imposed in a pretreatment program approved under the LPDES is subject

to a fine of not less than \$2,500 nor more than \$25,000 per day of violation, or by imprisonment for not more than 1 year, or both. If a conviction of a person is for a violation committed after a first conviction of such person, he shall be subject to a fine of not more than \$50,000 per day of violation, or imprisonment of not more than two years, or both.

b. Knowing Violations

The Louisiana Revised Statutes La. R. S. 30:2076.2 provides that any person who knowingly violates any provision of the LPDES, or any permit condition or limitation implementing any such provisions in a permit issued under the LPDES, or any requirement imposed in a pretreatment program approved under the LPDES is subject to a fine of not less than \$5,000 nor more than \$50,000 per day of violation, or imprisonment for not more than 3 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person, he shall be subject to a fine of not more than \$100,000 per day of violation, or imprisonment of not more than six years, or both.

c. Knowing Endangerment

The Louisiana Revised Statutes La. R. S. 30:2076.2 provides that any person who knowingly violates any provision of the LPDES, or any order issued by the secretary under the LPDES, or any permit condition or limitation implementing any of such provisions in a permit issued under the LPDES by the secretary, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000, or by imprisonment for not more than 15 years, or both. A person which is an organization shall, upon conviction of violating this Paragraph, be subject to a fine of not more than one million dollars. If a conviction of a person is for a violation committed after a first conviction of such person under this Paragraph, the maximum punishment shall be doubled with respect to both fine and imprisonment.

d. False Statements

The Louisiana Revised Statutes La. R. S. 30:2076.2 provides that any person who knowingly makes any false material statement, representation, or certification in any application, record, report, plan, or other document filed or required to be maintained under the LPDES or who knowingly falsifies, tampers with, or renders inaccurate, any monitoring device or method required to be maintained under the LPDES, shall, upon conviction, be subject to a fine of not more than \$10,000, or imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this Subsection, he shall be subject to a fine of not more than \$20,000 per day of violation, or imprisonment of not more than 4 years, or both.

2. Civil Penalties

The Louisiana Revised Statutes La. R. S. 30:2025 provides that any person found to be in violation of any requirement of this Subtitle may be liable for a civil penalty, to be assessed by the secretary, an assistant secretary, or the court, of not more than the cost to the state of any response action made necessary by such violation which is not voluntarily paid by the violator, and a penalty of not more than \$32,500 for each day of violation. However, when any such violation is done intentionally, willfully, or knowingly, or results in a discharge or disposal which causes irreparable or severe damage to the environment or if the substance discharged is one which endangers human life or health, such person may be liable for an additional penalty of not more than one million dollars.

(PLEASE NOTE: These penalties are listed in their entirety in Subtitle II of Title 30 of the Louisiana Revised Statutes.)

SECTION F. DEFINITIONS

All definitions contained in Section 502 of the Clean Water Act shall apply to this permit and are incorporated herein by reference. Additional definitions of words or phrases used in this permit are as follows:

1. Clean Water Act (CWA) means the Clean Water Act (formerly referred to as the Federal Water Pollution Control Act or the Federal Water Pollution Control Act Amendments of 1972) Pub.L. 92-500, as amended by Pub.L. 95-217, Pub.L. 95-576, Pub.L. 96-483 and Pub.L. 97-117, 33 U.S.C. 1251 et. seq.).

2. Accreditation means the formal recognition by the department of a laboratory's competence wherein specific tests or types of tests can be accurately and successfully performed in compliance with all minimum requirements set forth in the regulations regarding laboratory accreditation.
3. Administrator means the Administrator of the U.S. Environmental Protection Agency, or an authorized representative.
4. Applicable Standards and Limitations means all state, interstate and federal standards and limitations to which a discharge is subject under the Clean Water Act, including, effluent limitations, water quality standards of performance, toxic effluent standards or prohibitions, best management practices, and pretreatment standards under Sections 301, 302, 303, 304, 306, 307, 308 and 403.
5. Applicable water quality standards means all water quality standards to which a discharge is subject under the Clean Water Act.
6. Commercial Laboratory means any laboratory, wherever located, that performs analyses or tests for third parties for a fee or other compensation and provides chemical analyses, analytical results, or other test data to the department. The term commercial laboratory does not include laboratories accredited by the Louisiana Department of Health and Hospitals in accordance with La. R.S.49:1001 et seq.
7. Daily Discharge means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in terms of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the sampling day. Daily discharge determination of concentration made using a composite sample shall be the concentration of the composite sample.
8. Daily Maximum discharge limitation means the highest allowable "daily discharge".
9. Director means the U.S. Environmental Protection Agency Regional Administrator, or the state administrative authority, or an authorized representative.
10. Domestic septage means either liquid or solid material removed from a septic tank, cesspool, portable toilet, Type III marine sanitation device, or similar treatment works that receives only domestic sewage. Domestic septage does not include liquid or solid material removed from a septic tank, cesspool, or similar treatment works that receives either commercial wastewater or industrial wastewater and does not include grease removed from grease trap at a restaurant.
11. Domestic sewage means waste and wastewater from humans, or household operations that is discharged to or otherwise enters a treatment works.
12. Environmental Protection Agency or (EPA) means the U.S. Environmental Protection Agency.
13. Grab sample means an individual sample collected over a period of time not exceeding 15 minutes, unless more time is needed to collect an adequate sample, and is representative of the discharge.
14. Industrial user means a nondomestic discharger, as identified in 40 CFR 403, introducing pollutants to a publicly owned treatment works.
15. LEQA means the Louisiana Environmental Quality Act.
16. Louisiana Pollutant Discharge Elimination System (LPDES) means those portions of the Louisiana Environmental Quality Act and the Louisiana Water Control Law and all regulations promulgated under their authority which are deemed equivalent to the National Pollutant Discharge Elimination System (NPDES)

under the Clean Water Act in accordance with Section 402 of the Clean Water Act and all applicable federal regulations.

17. Monthly Average, other than for fecal coliform bacteria, discharge limitations are calculated as the sum of all "daily discharge(s)" measured during a calendar month divided by the number of "daily discharge(s)" measured during that month. When the permit establishes monthly average concentration effluent limitations or conditions, and flow is measured as continuous record or with a totalizer, the monthly average concentration means the arithmetic average (weighted by flow) of all "daily discharge(s)" of concentration determined during the calendar month where C = daily discharge concentration, F = daily flow and n = number of daily samples; monthly average discharge =

$$\frac{C_1F_1 + C_2F_2 + \dots + C_nF_n}{F_1 + F_2 + \dots + F_n}$$

When the permit establishes monthly average concentration effluent limitations or conditions, and the flow is not measured as a continuous record, then the monthly average concentration means the arithmetic average of all "daily discharge(s)" of concentration determined during the calendar month.

The monthly average for fecal coliform bacteria is the geometric mean of the values for all effluent samples collected during a calendar month.

18. National Pollutant Discharge Elimination System (NPDES) means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 318, 402, and 405 of the Clean Water Act.
19. Severe property damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
20. Sewage sludge means any solid, semi-solid, or liquid residue removed during the treatment of municipal wastewater or domestic sewage. *Sewage sludge* includes, but is not limited to, solids removed during primary, secondary, or advanced wastewater treatment, scum, domestic septage, portable toilet pumpings, Type III marine sanitation device pumpings (33 CFR Part 159), and sewage sludge products. *Sewage sludge* does not include grit or screenings, or ash generated during the incineration of sewage sludge.
21. Stormwater Runoff—aqueous surface runoff including any soluble or suspended material mobilized by naturally occurring precipitation events.
22. Surface Water: all lakes, bays, rivers, streams, springs, ponds, impounding reservoirs, wetlands, swamps, marshes, water sources, drainage systems and other surface water, natural or artificial, public or private within the state or under its jurisdiction that are not part of a treatment system allowed by state law, regulation, or permit.
23. Treatment works means any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage and industrial wastes of a liquid nature to implement Section 201 of the Clean Water Act, or necessary to recycle or reuse water at the most economical cost over the estimated life of the works, including intercepting sewers, sewage collection systems, pumping, power and other equipment, and their appurtenances, extension, improvement, remodeling, additions, and alterations thereof. (See Part 212 of the Clean Water Act)
24. For fecal coliform bacteria, a sample consists of one effluent grab portion collected during a 24-hour period at peak loads.
25. The term MGD shall mean million gallons per day.
26. The term GPD shall mean gallons per day.

27. The term mg/L shall mean milligrams per liter or parts per million (ppm).
28. The term SPC shall mean Spill Prevention and Control. Plan covering the release of pollutants as defined by the Louisiana Administrative Code (LAC 33:IX.Chapter 9).
29. The term SPCC shall mean Spill Prevention Control and Countermeasures Plan. Plan covering the release of pollutants as defined in 40 CFR Part 112.
30. The term µg/L shall mean micrograms per liter or parts per billion (ppb).
31. The term ng/L shall mean nanograms per liter or parts per trillion (ppt).
32. Visible Sheen: a silvery or metallic sheen, gloss, or increased reflectivity; visual color; or iridescence on the water surface.
33. Wastewater—liquid waste resulting from commercial, municipal, private, or industrial processes. Wastewater includes, but is not limited to, cooling and condensing waters, sanitary sewage, industrial waste, and contaminated rainwater runoff.
34. Waters of the State: for the purposes of the Louisiana Pollutant Discharge Elimination system, all surface waters within the state of Louisiana and, on the coastline of Louisiana and the Gulf of Mexico, all surface waters extending there from three miles into the Gulf of Mexico. For purposes of the Louisiana Pollutant Discharge Elimination System, this includes all surface waters which are subject to the ebb and flow of the tide, lakes, rivers, streams, (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, natural ponds, impoundments of waters within the state of Louisiana otherwise defined as "waters of the United States" in 40 CFR 122.2, and tributaries of all such waters. "Waters of the state" does not include waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the Clean Water Act, 33 U.S.C. 1251 et seq.
35. Weekly average, other than for fecal coliform bacteria, is the highest allowable arithmetic mean of the daily discharges over a calendar week, calculated as the sum of all "daily discharge(s)" measured during a calendar week divided by the number of "daily discharge(s)" measured during that week. When the permit establishes weekly average concentration effluent limitations or conditions, and flow is measured as continuous record or with a totalizer, the weekly average concentration means the arithmetic average (weighted by flow) of all "daily discharge(s)" of concentration determined during the calendar week where C = daily discharge concentration, F = daily flow and n = number of daily samples; weekly average discharge

$$= \frac{C_1F_1 + C_2F_2 + \dots + C_nF_n}{F_1 + F_2 + \dots + F_n}$$

When the permit establishes weekly average concentration effluent limitations or conditions, and the flow is not measured as a continuous record, then the weekly average concentration means the arithmetic average of all "daily discharge(s)" of concentration determined during the calendar week.

The weekly average for fecal coliform bacteria is the geometric mean of the values for all effluent samples collected during a calendar week.

36. Sanitary Wastewater Term(s):

- a. 3-hour composite sample consists of three effluent portions collected no closer together than one hour (with the first portion collected no earlier than 10:00 a.m.) over the 3-hour period and composited according to flow, or a sample continuously collected in proportion to flow over the 3-hour period.

- b. 6-hour composite sample consists of six effluent portions collected no closer together than one hour (with the first portion collected no earlier than 10:00 a.m.) over the 6-hour period and composited according to flow, or a sample continuously collected in proportion to flow over the 6-hour period.
- c. 12-hour composite sample consists of 12 effluent portions collected no closer together than one hour over the 12-hour period and composited according to flow, or a sample continuously collected in proportion to flow over the 12-hour period. The daily sampling intervals shall include the highest flow periods.
- d. 24-hour composite sample consists of a minimum of 12 effluent portions collected at equal time intervals over the 24-hour period and combined proportional to flow or a sample continuously collected in proportion to flow over the 24-hour period.

BOBBY JINDAL
GOVERNOR



PEGGY M. HATCH
SECRETARY

State of Louisiana

DEPARTMENT OF ENVIRONMENTAL QUALITY

ENVIRONMENTAL SERVICES

AUG 24 2012

CERTIFIED MAIL 7005 1820 0002 2085 6590

-RETURN RECEIPT REQUEST

File No.: LA0005401
AI No.: 286
Activity No.: PER20120014

Mr. Paul Stratford, Site Manager
ExxonMobil Chemical Company
Baton Rouge Chemical Plant
Post Office Box 241
Baton Rouge, LA 70821-0241

RE: Minor modification of a Louisiana Pollutant Discharge Elimination System (LPDES) permit issued to ExxonMobil Chemical Company, located at 4999 Scenic Highway in Baton Rouge, East Baton Rouge Parish.

Dear Mr. Stratford:

In accordance with LAC 33:IX.2905. A.1., this Office is modifying LPDES LA0005401 due to typographical errors found in Part I of the permit. The below modifications have been approved:

1. The storet codes for Chloroethane and 1,2-Dichloroethane have been changed at Outfalls 001 and 009 (Part I Pages 2, 3, and 12 of 13);
2. The compliance schedule at the top of page 7 of 13 has been corrected to state "During the period beginning the effective date and lasting through the expiration date..."; and
3. The sample type for TOC at Outfall 004 has been changed to 24-hr. Composite.

Attached are the modified Effluent Limitations pages (Part I, Pages 2, 3, 7, 9 and 12 of 13) reflecting the above changes and a modified title page. Please replace the appropriate pages in LPDES permit LA0005401 with these revisions. All other conditions of the permit shall continue unchanged and remain valid until the expiration date of the permit.

The fee for this agency initiated modification has been waived. However, be advised that pursuant to LAC33:IX.1309.I, LAC 33:IX.6509.A.1 and LAC 33:I.1701, you must pay any outstanding fees to the Department. Therefore, you are encouraged to verify your facility's fee status by contacting LDEQ's Office of Management and Finance, Financial Services Division at (225) 219-3863. **Any outstanding fees must be remitted via a check to the Louisiana Department of Environmental Quality within thirty (30) days after the effective date of your permit.** Failure to pay the full amount due in the manner and time prescribed could result in applicable enforcement actions as prescribed in the Environmental Quality Act, including, but not limited to revocation or suspension of the applicable permit, and/or a civil penalty against you.

ExxonMobil Chemical Company
RE: LA0005401, AI No. 286
Page 2

To ensure that all correspondence regarding this facility is properly filed into the Department's Electronic Document Management System, you must reference your Agency Interest (AI) number 286 and LPDES permit number LA0005401 on all future correspondence to this Department. Should you have any questions concerning this permit modification, please feel free to contact Melanie Connor of the Office of Environmental Services, at the letterhead address or by telephone at (225) 219-3594.

Sincerely,



Sam L. Phillips
Assistant Secretary

MBC

Attachment(s):

cc: title page, Part I page 3 of 3

Ms. Melanie Connor
Ms. Jenniffer Sheppard
Water Permits Division

Ms. Evelyn Rosborough (6WQ-CA)
U.S. EPA, Region VI

Ms. Kelly Petersen
Permit Compliance Unit
Office of Environmental Compliance

Capital Regional Office
Office of Environmental Compliance

c: cover letter, Part I - II:

IO-W File



PERMIT NUMBER:
LA0005401
AI No.: 286

OFFICE OF ENVIRONMENTAL SERVICES
Water Discharge Permit

Pursuant to the Clean Water Act, as amended (33 U.S.C. 1251 et seq.), and the Louisiana Environmental Quality Act, as amended (La. R. S. 30:2001 et seq.), rules and regulations effective or promulgated under the authority of said Acts, and in reliance on statements and representations heretofore made in the application, a Louisiana Pollutant Discharge Elimination System permit is issued authorizing

ExxonMobil Chemical Company
Baton Rouge Chemical Plant
Post Office Box 241
Baton Rouge, LA 70821-0241

Type Facility: organic chemicals, synthetic rubber, and petroleum resins manufacturing facility

Location: 4999 Scenic Highway, Baton Rouge
East Baton Rouge Parish

Receiving Waters: Monte Sano Bayou (Segment 070504)

to discharge in accordance with effluent limitations, monitoring requirements, and other conditions set forth in Parts I, II, and III attached hereto.

This permit and the authorization to discharge are effective on September 1, 2012 and shall expire five (5) years from the original effective date of the permit.

This permit was not previously modified.

This modification shall become effective on October 1, 2012

This permit and the authorization to discharge shall expire five (5) years from the effective date of the permit

Issued on August 22, 2012

Sam L. Phillips
Assistant Secretary

PART I

Modified Page 2 of 13
 Permit No. LA0005401
 AI No. 286

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning the effective date and lasting through the expiration date the permittee is authorized to discharge from:

Outfall 001, the continuous discharge of isopropanol/MEK/Sec-Butyl Alcohol process wastewater, maintrain ethylene/RGR process wastewater, olefins purification & extraction process wastewater, cyclopentadiene process wastewater, heartcut distillate process wastewater, neo acids process wastewater, petroleum resins process wastewater, plasticizer process wastewater, catalyst process wastewater, oxo alcohol process wastewater, groundwater well recovery wastewater, spent caustic oxidation wastewater, eagle ester process wastewater, lion alcohol process wastewater, aromatics process wastewater, synthetic rubber process wastewater, synthetic rubber process area stormwater, synthetic rubber and OCPSF process area washwater, OCPSF process area stormwater, miscellaneous de minimus process area waters, sanitary wastewater, filter press wastewater, boiler blowdown, cooling tower blowdown, flare system wastewater, steam condensate, miscellaneous utility wastewaters, firefighting water, fire training and equipment test water, stormwater associated with construction activity, wastewater associated with maintenance activity, laboratory wastewater, and kitchen water from the cafeteria.

Such discharges shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristic</u>		<u>Discharge Limitations</u>				<u>Monitoring Requirements</u>	
		Other Units					
		(lbs/day, UNLESS STATED) (ug/L, UNLESS STATED)					
<u>CONVENTIONAL AND NONCONVENTIONAL</u>	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow-MGD	50050	Report	Report	---	---	Continuous	Recorder(*1)
pH Range Excursions (Continuous Monitoring), Number of Events >60 Minutes	82581	---	0(*2)	---	---	Continuous	Recorder(*3)
pH Range Excursions (Continuous Monitoring), Monthly Total Accumulated Time in Minutes	82582	---	446(*2)	---	---	Continuous	Recorder(*3)
pH Minimum/Maximum Values (Standard Units)	00400	---	---	Report(*2) (Min)	Report(*2) (Max)	Continuous	Recorder(*3)
BOD ₅ (*4)	00310	2086	4765	---	---	3/week	24-hr. Composite
TSS (*4)	00530	3579	9355	---	---	3/week	24-hr. Composite
Oil and Grease (*4)	03582	836	1254	---	---	1/week	Grab
COD (*4)	80108	12420	28934	---	---	1/week	24-hr. Composite
Fecal Coliform (col./100 ml)	74055	---	---	200	400	1/6 months	Grab
Total Residual Chlorine	50060	---	---	---	Report	1/quarter	Grab
<u>METALS</u>							
Total Lead	01051	---	---	---	Report	1/quarter	24-hr. Composite
<u>VOLATILE COMPOUNDS(*4)(*5)(*6)</u>							
Acrylonitrile	34215	4.73	11.92	---	---	1/year	24-hr. Composite
Benzene	34030	1.82	6.70	---	---	1/quarter	24-hr. Composite
Carbon Tetrachloride	32102	0.89	1.87	---	---	1/year	24-hr. Composite
Chlorobenzene	34301	0.74	1.38	---	---	1/year	24-hr. Composite
Chloroethane	85811	5.12	13.21	---	---	1/year	24-hr. Composite
Chloroform	32106	1.03	2.27	---	---	1/year	24-hr. Composite
1,2-Dichlorobenzene	34536	3.79	8.03	---	---	1/year	24-hr. Composite
1,3-Dichlorobenzene	34566	1.53	2.17	---	---	1/year	24-hr. Composite

PART I

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Permit No. LA0005401
AI No. 286

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Outfall 001 continued)

Effluent Characteristic	STORET Code	Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)	Other Units (ug/L, UNLESS STATED)			Measurement Frequency	Sample Type
		Monthly Average	Daily Maximum	Monthly Average	Daily Maximum		
1,4-Dichlorobenzene	34571	0.74	1.38	---	---	1/year	24-hr. Composite
1,1-Dichloroethane	34496	1.08	2.91	---	---	1/year	24-hr. Composite
1,2-Dichloroethane	32103	3.35	10.4	---	---	1/year	24-hr. Composite
1,1-Dichloroethylene	34501	0.79	1.23	---	---	1/year	24-hr. Composite
1,2-trans-Dichloroethylene	34546	1.03	2.66	---	---	1/year	24-hr. Composite
1,2-Dichloropropane	34541	7.54	11.33	---	---	1/year	24-hr. Composite
1,3-Dichloropropylene	51044	1.43	2.17	---	---	1/year	24-hr. Composite
Ethylbenzene	34371	1.58	5.32	---	---	1/year	24-hr. Composite
Methyl Chloride	34418	4.24	9.36	---	---	1/year	24-hr. Composite
Methylene Chloride	34423	1.97	4.39	---	---	1/year	24-hr. Composite
Tetrachloroethylene	34475	1.08	2.76	---	---	1/year	24-hr. Composite
Toluene	34010	1.28	3.94	---	---	1/quarter	24-hr. Composite
1,1,1-Trichloroethane	34506	1.03	2.66	---	---	1/year	24-hr. Composite
1,1,2-Trichloroethane	34511	1.03	2.66	---	---	1/year	24-hr. Composite
Trichloroethylene	39180	1.03	2.66	---	---	1/year	24-hr. Composite
Vinyl Chloride	39175	5.12	13.21	---	---	1/year	24-hr. Composite
<u>ACID COMPOUNDS(*4)(*5)</u>							
2-Chlorophenol	34586	1.53	4.83	---	---	1/year	24-hr. Composite
2,4-Dichlorophenol	34601	1.92	5.52	---	---	1/year	24-hr. Composite
2,4-Dimethylphenol	34606	0.89	1.77	---	---	1/year	24-hr. Composite
4,6-Dinitro-o-Cresol	34657	3.84	13.65	---	---	1/year	24-hr. Composite
2,4-Dinitrophenol	34616	3.50	6.06	---	---	1/year	24-hr. Composite
2-Nitrophenol	34591	2.02	3.40	---	---	1/year	24-hr. Composite
4-Nitrophenol	34646	3.55	6.11	---	---	1/year	24-hr. Composite
Phenol	34694	0.74	1.28	---	---	1/year	24-hr. Composite
<u>BASE NEUTRAL COMPOUNDS(*4)(*5)</u>							
Acenaphthene	34205	1.08	2.91	---	---	1/year	24-hr. Composite
Acenaphthylene	34200	1.08	2.91	---	---	1/year	24-hr. Composite
Anthracene	34220	1.08	2.91	---	---	1/year	24-hr. Composite
Benzo(a)anthracene	34526	1.08	2.91	---	---	1/year	24-hr. Composite
Benzo(a)pyrene	34247	1.13	3.01	---	---	1/year	24-hr. Composite
3,4-Benzofluoranthene	34230	1.13	3.01	---	---	1/year	24-hr. Composite
Benzo(k)fluoranthene	34242	1.08	2.91	---	---	1/year	24-hr. Composite
Bis(2-ethylhexyl)phthalate	39100	5.08	13.75	---	---	1/year	24-hr. Composite
Chrysene	34320	1.08	2.91	---	---	1/year	24-hr. Composite
Diethyl phthalate	34336	3.99	10.00	---	---	1/year	24-hr. Composite
Dimethyl phthalate	34341	0.94	2.32	---	---	1/year	24-hr. Composite
Di-n-butyl phthalate	39110	1.33	2.81	---	---	1/year	24-hr. Composite
2,4-Dinitrotoluene	34611	5.57	14.04	---	---	1/year	24-hr. Composite
2,6-Dinitrotoluene	34626	12.57	31.59	---	---	1/year	24-hr. Composite
Fluoranthene	34376	1.23	3.35	---	---	1/year	24-hr. Composite
Fluorene	34381	1.08	2.91	---	---	1/year	24-hr. Composite
Hexachlorobenzene	39700	0.000257	0.000612	---	---	1/year	24-hr. Composite
Hexachlorobutadiene	34391	0.12	0.29	---	---	1/year	24-hr. Composite

PART I

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Permit No. LA0005401
AI No. 286

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

During the period beginning the effective date and lasting through the expiration date the permittee is authorized to discharge from:

Outfall 003, the continuous discharge of cooling tower blowdown, raw river water, non-process area stormwater, regeneration water, steam condensate, well water, eye wash and safety shower waters, and fire training and equipment test waters.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	STORET Code	Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)		Measurement Frequency	Sample Type
		Monthly Average	Daily Maximum	Monthly Average	Daily Maximum		
Flow-MGD	50050	Report	Report	---	---	Continuous	Recorder
Flow-MGD (*1)	50050	Report	Report	---	---	1/day	Estimate
Oil and Grease	03582	---	---	---	15	1/week	Grab
TOC	00680	---	---	---	50	1/week	24-hr. Composite
Total Residual Chlorine	50060	---	---	---	Report	1/6 months	Grab
Total Lead	01051	---	---	---	Report	1/quarter	24-hr. Composite
pH Range Excursions (Continuous Monitoring), Number of Events >60 Minutes	82581	---	0(*2)	---	---	Continuous	Recorder(*3)
pH Range Excursions (Continuous Monitoring), Monthly Total Accumulated Time in Minutes	82582	---	446(*2)	---	---	Continuous	Recorder(*3)
pH Minimum/Maximum Values (Standard Units)	00400	---	---	Report(*2) (Min)	Report(*2) (Max)	Continuous	Recorder(*3)
WHOLE EFFLUENT (ACUTE)		(Percent %, UNLESS STATED)					
TOXICITY TESTING	STORET Code	Monthly Avg Minimum	48-Hour Minimum	Maximum		Measurement Frequency (*4)	Sample Type
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 48-Hour Acute, <u>Pimephales promelas</u>	TEM6C	Report	Report	---		1/quarter	24-Hour Composite
NOEC, Value [%], Lethality, Static Renewal, 48-Hour Acute, <u>Pimephales promelas</u>	TOM6C	Report	Report	---		1/quarter	24-Hour Composite
NOEC, Value [%], Coefficient of Variation, Static Renewal, 48-Hour Acute, <u>Pimephales promelas</u>	TQM6C	---	---	Report		1/quarter	24-Hour Composite
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 48-Hour Acute, <u>Daphnia pulex</u>	TEM3D	Report	Report	---		1/quarter	24-Hour Composite

PART I

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Permit No. LA0005401

AI No. 286

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

During the period beginning the effective date and lasting through the expiration date the permittee is authorized to discharge from:

Outfall 004, the continuous discharge of cooling tower blowdown, raw river water, non-process area stormwater, regeneration water, steam condensate, well water, eye wash and safety shower waters, and fire training and equipment test waters.

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	STORET Code	Discharge Limitations				Monitoring Requirements	
		Other Units				Measurement Frequency	Sample Type
		(lbs/day, UNLESS STATED)	(mg/L, UNLESS STATED)	Monthly Average	Daily Maximum		
Flow-MGD	50050	Report	Report	---	---	Continuous	Recorder
Flow-MGD (*1)	50050	Report	Report	---	---	1/day	Estimate
Oil and Grease	03582	---	---	---	15	1/week	Grab
TOC	00680	---	---	---	50	1/week	24-hr. Composite
Total Residual Chlorine	50060	---	---	---	Report	1/6 months	Grab
Total Lead	01051	---	---	---	Report	1/quarter	24-hr. Composite
pH Range Excursions (Continuous Monitoring), Number of Events >60 Minutes	82581	---	0(*2)	---	---	Continuous	Recorder(*3)
pH Range Excursions (Continuous Monitoring), Monthly Total Accumulated Time in Minutes	82582	---	446(*2)	---	---	Continuous	Recorder(*3)
pH Minimum/Maximum Values (Standard Units)	00400	---	---	Report(*2) (Min)	Report(*2) (Max)	Continuous	Recorder(*3)
<u>WHOLE EFFLUENT (ACUTE)</u>		(Percent %, UNLESS STATED)					
<u>TOXICITY TESTING (*4)</u>	STORET Code	Monthly Avg Minimum	48-Hour Minimum	Maximum	Measurement Frequency (*5)	Sample Type	
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 48-Hour Acute, <u>Pimephales promelas</u>	TEM6C	Report	Report	---	1/quarter	24-Hour Composite	
NOEC, Value [%], Lethality, Static Renewal, 48-Hour Acute, <u>Pimephales promelas</u>	TOM6C	Report	Report	---	1/quarter	24-Hour Composite	
NOEC, Value [%], Coefficient of Variation, Static Renewal, 48-Hour Acute, <u>Pimephales promelas</u>	TQM6C	---	---	Report	1/quarter	24-Hour Composite	
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 48-Hour Acute, <u>Daphnia pulex</u>	TEM3D	Report	Report	---	1/quarter	24-Hour Composite	

PART 1

Modified Page 12 of 13

Permit No. LA0005401

AI No. 286

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning the effective date and lasting through the expiration date the permittee is authorized to discharge from:

Outfall 009, the emergency overflow discharge of Outfall 001 wastewaters from the advanced wastewater treatment unit.

Such discharges shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristic</u>	<u>STORET Code</u>	<u>Discharge Limitations</u>				<u>Monitoring Requirements</u>	
		<u>Other Units</u>				<u>Measurement Frequency</u>	<u>Sample Type</u>
<u>CONVENTIONAL AND NONCONVENTIONAL</u>		(lbs/day, UNLESS STATED)	(ug/L, UNLESS STATED)	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum
Flow-MGD	50050	Report	Report	---	---	1/day	Estimate
pH Minimum/Maximum Values (Standard Units)	00400	---	---	6.0 (*1) (Min)	9.0 (*1) (Max)	1/day	Grab
BOD ₅	00310	(*2)	(*2)	---	---	3/week	Grab
TSS	00530	(*2)	(*2)	---	---	3/week	Grab
Oil and Grease	03582	(*2)	(*2)	---	---	1/week	Grab
COD	80108	(*2)	(*2)	---	---	1/week	Grab
Total Residual Chlorine	50060	---	---	---	Report	1/quarter	Grab
<u>METALS</u>							
Total Lead	01051	---	---	---	Report	1/quarter	Grab
<u>VOLATILE COMPOUNDS</u>							
Acrylonitrile	34215	(*2)	(*2)	---	---	1/year	Grab
Benzene	34030	(*2)	(*2)	---	---	1/quarter	Grab
Carbon Tetrachloride	32102	(*2)	(*2)	---	---	1/year	Grab
Chlorobenzene	34301	(*2)	(*2)	---	---	1/year	Grab
Chloroethane	85811	(*2)	(*2)	---	---	1/year	Grab
Chloroform	32106	(*2)	(*2)	---	---	1/year	Grab
1,2-Dichlorobenzene	34536	(*2)	(*2)	---	---	1/year	Grab
1,3-Dichlorobenzene	34566	(*2)	(*2)	---	---	1/year	Grab
1,4-Dichlorobenzene	34571	(*2)	(*2)	---	---	1/year	Grab
1,1-Dichloroethane	34496	(*2)	(*2)	---	---	1/year	Grab
1,2-Dichloroethane	32103	(*2)	(*2)	---	---	1/year	Grab
1,1-Dichloroethylene	34501	(*2)	(*2)	---	---	1/year	Grab
1,2-trans-Dichloroethylene	34546	(*2)	(*2)	---	---	1/year	Grab
1,2-Dichloropropane	34541	(*2)	(*2)	---	---	1/year	Grab
1,3-Dichloropropylene	51044	(*2)	(*2)	---	---	1/year	Grab
Ethylbenzene	34371	(*2)	(*2)	---	---	1/year	Grab
Methyl Chloride	34418	(*2)	(*2)	---	---	1/year	Grab
Methylene Chloride	34423	(*2)	(*2)	---	---	1/year	Grab
Tetrachloroethylene	34475	(*2)	(*2)	---	---	1/year	Grab
Toluene	34010	(*2)	(*2)	---	---	1/quarter	Grab
1,1,1-Trichloroethane	34506	(*2)	(*2)	---	---	1/year	Grab
1,1,2-Trichloroethane	34511	(*2)	(*2)	---	---	1/year	Grab
Trichloroethylene	39180	(*2)	(*2)	---	---	1/year	Grab
Vinyl Chloride	39175	(*2)	(*2)	---	---	1/year	Grab
<u>ACID COMPOUNDS</u>							
2-Chlorophenol	34586	(*2)	(*2)	---	---	1/year	Grab

Appendix 3 – Permit Application, written description section

**EXXONMOBIL CHEMICAL COMPANY
BATON ROUGE CHEMICAL PLANT
BATON ROUGE, LOUISIANA**

**LPDES PERMIT RENEWAL APPLICATION
LPDES PERMIT No. LA0005401
AGENCY INTEREST No. 286**

February 2017

CK Project No. 13362



ExxonMobil Chemical Company
P. O. Box 241
Baton Rouge, Louisiana 70821-0241

LDEQ RECEIPT
2017 FEB 23 PM 4:10

MAIN FILE

ExxonMobil

February 21, 2017

Mr. Elliot Vega, Assistant Secretary
Louisiana Department of Environmental Quality
Office of Environmental Services
Water Permit Division
Post Office Box 4313
Baton Rouge, LA 70821-4313

PER 20170001

original to TOW
DF
copy to INDI Bickham
PAAR

Re: **LPDES Permit Renewal Application**
ExxonMobil Chemical Company
Baton Rouge Chemical Plant
LPDES Permit No. LA0005401 / Agency Interest # 286

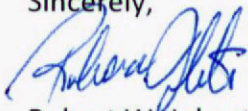
Dear Mr. Vega:

ExxonMobil Chemical Company (ExxonMobil), Baton Rouge Chemical Plant (BRCP) herewith submits an original and two copies of the individual Louisiana Pollutant Discharge Elimination System (LPDES) permit renewal application forms for the BRCP. The LPDES permit renewal application forms include United States Environmental Protection Agency (USEPA) Form 1, Form 2C, Form 2F, and required sections of the Louisiana Department of Environmental Quality (LDEQ) Form IND.

The BRCP is currently permitted to discharge process and non-process wastewaters and storm water under LPDES permit No. LA0005401. This permit was issued on July 18, 2012 and became effective on September 1, 2012. The BRCP is submitting this permit renewal application prior to March 4, 2017 (180 days prior to permit expiration) in order to facilitate the administrative continuation of the existing permit until a new permit is issued.

If you have any questions or require additional information regarding this permit renewal application, please contact David Gatz at (225) 977-4583.

Sincerely,



Robert W. Johnston
Site Manager

Attachment



LPDES PERMIT RENEWAL APPLICATION

LPDES Permit No. LA0005401

Agency Interest No. 286

ExxonMobil Chemical Company
Baton Rouge Chemical Plant
Baton Rouge, Louisiana

February 2017

Prepared by:



17170 Perkins Road
Baton Rouge, LA 70810
225-755-1000

CK Project Number: 13362

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1.0 INTRODUCTION

1.1 General Overview

ExxonMobil Chemical Company (ExxonMobil) owns and operates the Baton Rouge Chemical Plant (BRCP) located in Baton Rouge, Louisiana. ExxonMobil respectfully requests that the Louisiana Pollutant Discharge Elimination System (LPDES) permit be renewed for the BRCP. The BRCP currently discharges treated wastewater and storm water authorized under LPDES Permit No. LA0005401 (Agency Interest No. 286), which is administered by the Louisiana Department of Environmental Quality (LDEQ). This LPDES permit was issued by LDEQ on July 18, 2012 with an effective date of September 1, 2012. A minor modification was issued on August 22, 2012. The permit expires at midnight on August 31, 2017.

This LPDES permit renewal application is being submitted in accordance with the requirements of the Louisiana Administrative Code (LAC) at LAC 33:IX.2501, 2503, and 2511. According to LAC 33:IX.2501.D.2, LPDES permit renewal applications must be submitted within 180 days of the expiration of the LPDES permit unless an extension is granted by the state administrative authority. To meet the 180-day requirement, ExxonMobil is submitting this permit renewal application to LDEQ on or before March 4, 2017.

In addition to this introduction, this permit application narrative includes the following additional sections:

- Section 2 – Facility Process Description;
- Section 3 – Wastewater Generation, Treatment, and Discharge;
- Section 4 – Storm Water Drainage, Management, and Discharge;
- Section 5 – Outfall Discharge Characterization; and
- Section 6 – Requested Permit Conditions.

The information provided in this narrative should be considered in conjunction with the completed U.S. Environmental Protection Agency (EPA) Application Form 1 (Appendix A), Form 2C (Appendix B), and Form 2F (Appendix C), and other supporting appendices, tables and figures.

1.2 Facility Location

The BRCP is located on 4999 Scenic Highway in Baton Rouge, East Baton Rouge Parish, Louisiana and is situated on approximately 150 acres. The northern property is bounded by Monte Sano Bayou. The ExxonMobil Baton Rouge Refinery (BRRF) is located to the south across from Gulf States Utility Road, Albemarle is located to the west, and Scenic Highway borders the eastern property line. The geographical coordinates of the front gate are Latitude 30° 29' 34" North and Longitude 91° 10' 22" West. Figure 1 provides

the site location map, including the facility boundaries; the facility front gate; locations of registered water wells; and a 1-mile radius around the BRCP.

Information regarding registered water wells within a 1-mile buffer of the BRCP was obtained by querying the Strategic Online Natural Resources Information System (SONRIS) database maintained by the Louisiana Department of Natural Resources, Office of Conservation (LDNR). The resultant inventory of active registered water wells within the 1-mile radius of the facility is provided in Table 1. Plugged and abandoned wells, destroyed wells, monitoring wells, test holes, piezometers, observation wells, boreholes, excavated wells, and environmental recovery wells are not included as part of this inventory.

1.3 Facility Background

The BRCP is an existing organic chemicals, synthetic rubber, and petroleum resins manufacturing facility that began operations in the 1940s. The BRCP operates under Standard Industrial Classification (SIC) Codes 2869 (Industrial Organic Chemicals), 2822 (Synthetic Rubber – Vulcanizable Elastomers), and 2865 (Cyclic Crudes and Intermediates, and Organic Dyes and Pigments). The products manufactured at the BRCP include, but are not limited to, Methyl Ethyl Ketone (MEK), secondary butyl alcohol, diisopropyl ether, isopropyl alcohol, ethylene/propylene, Vistalon® rubber, butadiene, Exxon® chlorobutyl, Exxon® bromobutyl, isoprene, Escorez®, cyclics, heart-cut distillate, benzene, phthalic anhydride, Jayflex® plasticizer/phthalates, Exxal® alcohol, neo acids, olefins, and synthetic lubricants.

1.4 Facility Changes

This section provides a detailed discussion on the changes that have occurred at the facility since the issuance of the current LPDES permit and the facility changes that are anticipated during the upcoming permit cycle.

Changes That Have Occurred During Current Permit Cycle

The NOVA LION Alcohol Unit has been shut down and is no longer in operation. This unit was replaced with a new NOVA Ester Unit that includes Eagle Train 1 and 2.

Changes Anticipated During Upcoming Permit Cycle

At this time, ExxonMobil does not anticipate any significant changes to operations at the BRCP that will affect the wastewater permit during the upcoming permit cycle.

1.5 Regulatory and Permitting Background

The BRCP's current LPDES Permit No. LA0005401 authorizes the discharge of wastewater from six final outfalls (Outfalls 001, 002, 003, 004, 005, and 009). Outfall 001 is permitted to discharge treated process wastewater, utility wastewater, sanitary wastewater, and storm water. Outfalls 003 and 004 are permitted to discharge utility wastewater and non-process area storm water. Outfalls 002 and 005 are permitted to discharge non-process area storm water and miscellaneous utility wastewater. Outfall 009 is an emergency overflow discharge point for Outfall 001. The BRCP is also authorized to discharge storm water associated with industrial activity under LPDES Multi-Sector General Permit (MSGP) No. LAR05N087. A facility site layout and drainage map depicting the location of the outfalls and storm water drainage areas is provided on Figure 2.

The BRCP operates under several other environmental permits. A list of these environmental permits is provided in Table 2.

1.5.1 Technology-Based Effluent Limitations

Regulations promulgated at LAC 33:IX.2707.A and Title 40, Code of Federal Regulations (CFR) Part 122.44(a) require Technology-Based Effluent Limitations (TBELs) to be placed in LPDES permits based on effluent limitations guidelines where applicable, or Best Professional Judgement (BPJ) in the absence of guideline, or on a combination of the two.

Effluent Limitation Guidelines

The EPA has established national effluent guidelines for the Organic Chemicals, Plastics, and Synthetic Fibers (OCPSF) industry in accordance with 40 CFR, Part 414 (40 CFR 414) and rubber manufacturing industry in accordance with 40 CFR 428. ExxonMobil is an existing point source that discharges process waters associated with OCPSF and rubber manufacturing and is subject to the following effluent limitation guidelines:

- 40 CFR 414, Subpart D – Thermoplastic Resins;
- 40 CFR 414, Subpart F – Commodity Organic Chemicals;
- 40 CFR 414, Subpart G – Bulk Organic Chemicals;
- 40 CFR 414, Subpart H – Specialty Organic Chemicals;
- 40 CFR 414, Subpart I – Direct Discharge Point Sources that use End-of-Pipe Biological Treatment); and
- 40 CFR 428, Subpart C – Solution Crumb Rubber Manufacturing.

Other Sources of Technology-Based Limitations

According to the Fact Sheet and Rationale prepared for the BRCP's existing LPDES permit, effluent limitations are also based on BPJ. The BPJ limitations are based on the following sources:

- LDEQ's guidance on storm water letter dated 6/17/87 from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6);
- Previous permit.

1.5.2 Water Quality-Based Effluent Limitations

LDEQ has issued the following Water Quality-Based Effluent Limitations (WQBELs) for the discharge from Outfall 001 to Monte Sano Bayou:

- Hexachlorobenzene
- Hexachlorobutadiene

Monitoring and reporting requirements were established at Outfalls 001, 003, 004, and 009 for Total Residual Chlorine (TRC) and total lead to gather data for future Total Maximum Daily Loads (TMDLs). ExxonMobil is requesting the removal of the monitoring and reporting requirements for lead and TRC in the renewed LPDES permit based on the removal of these pollutants from the LDEQ Integrated Report as discussed in Section 6.3.

1.5.3 Whole Effluent Toxicity Testing

The BRCP is required to conduct Whole Effluent Toxicity (WET) testing at Outfalls 001, 003, and 004. WET testing for Outfalls 001 and 004 is conducted as a flow weighted composite and reported on the Discharge Monitoring Report (DMR) at Outfall 001. Due to compliance with the WET testing requirements, monitoring frequency reductions for WET testing at Outfalls 001/004 and 003 were granted by the LDEQ on September 17, 2013. A summary of the WET testing results from September 2012 through July 2016 for Outfalls 001/004 and Outfall 003 is provided in Tables 3 and 4, respectively.

1.5.4 316(b) Applicability

The BRCP uses a combination of surface water received from the BRRF and groundwater from onsite wells to satisfy its process water, cooling water, and utility water needs. The BRCP does not own or operate a Cooling Water Intake Structure (CWIS); however, the surface water obtained from the BRRF is from a CWIS. The BRRF operates under a separate LPDES permit for which the CWIS is regulated under the final 316(b) regulations. Therefore, the BRCP is not a user of a CWIS, per the applicability

requirements in 40 CFR 125.91, and is not subject to the cooling water intake requirements under section 316(b) of the Clean Water Act (CWA).

1.5.5 Environmental Assessment Statement

Louisiana Revised Statutes (L.R.S.30:2018.A) requires the applicant for a new permit or a major modification of an existing permit as defined in rules and regulations that would authorize the treatment, storage, or disposal of hazardous wastes, the disposal of solid wastes, or the discharge of water pollutants or air emissions in sufficient quantity or concentration to constitute a major source to submit an environmental assessment statement as a part of the permit application. However, L.R.S.2018.E.2 states that an application for a minor source of air emissions, hazardous wastes, or solid wastes, or for a facility or activity which is not a major facility for water discharges is exempt from R.S.30:2018.A. The BRCP is a major facility for water discharge permitting, but this application is not including a major modification. However, ExxonMobil has elected to prepare an Environmental Assessment Statement (EAS) for this permit renewal application (Appendix D).

2.0 FACILITY PROCESS DESCRIPTION

The BRCP processes petrochemical distillates and light hydrocarbon gasses into a variety of petrochemical products. Operations are represented by sixteen major operating blocks, ten of which are located within the BRCP and six are located within the BRRF. A general description of the process units is provided in this section.

Isopropyl Alcohol Unit

Isopropyl Alcohol (IPA) and a co-product, isopropyl ether, is produced in the IPA Unit by using light olefins as a feedstock in an acid catalyzed process. There are three operating sections. The crude section (ICLA) is where the olefins are reacted under an acid catalyst and hydrolyzed to crude isopropanol, which is neutralized, steam stripped, and sent to intermediate storage. The crude isopropyl alcohol is then sent through the finishing section (IFLA) where it is fractionated. The by-products such as acetone and isopropyl ether are recycled to other processes or sold. The isopropanol/water azeotrope is then sent to the dehydration section (IOLA) for additional purification into a variety of product grades.

Methyl Ethyl Ketone and Secondary Butyl Alcohol

The Methyl Ethyl Ketone / Secondary Butyl Alcohol (MEK/SBA) Unit produces MEK, SBA, Secondary Butyl Ether/Dimer (SBE/Dimer). SBA and SBE/Dimer are produced from butylenes and a sulfuric acid absorption process. Crude SBA is produced in the Crude SBA Unit (SCLA) and purified by distillation in the SBA Finishing Unit (SFLA). Finished SBA is either sold or sent to the Ketone Conversion Unit (KCLA) where crude MEK is produced. The crude MEK is purified by distillation in the Ketone Finishing Unit (KFLA).

Synthetic Rubber Production

Vistalon rubber is made by polymerizing ethylene and propylene at low temperatures using catalysts to form a polymer in a hexane carrier. Catalyst residues are removed from the polymer and the polymer is then precipitated to form a crumb rubber in water slurry by the introduction of steam and hot water. The steam and hot water flash off the hexane carrier and unreacted monomers for recovery. The rubber slurry is then pumped from the RLA-3 Unit to the Vistalon Finishing Unit (VFU) for dewatering and product packaging.

Halobutyl rubber is made by the reaction of isobutylene, isoprene and a block copolymer to form a polymer that is then halogenated in a hexane carrier. Refrigerated, stirred reactors, operated on a flow through basis, are used in carrying out the polymerization. The polymer is dissolved in hexane as it leaves the reactors and then undergoes stripping to remove unreacted monomers. The polymer is concentrated and halogenated then precipitated to form a crumb rubber in water slurry by the introduction of steam and hot water. The steam and hot water flash off the hexane solvent for recovery. The rubber slurry is then pumped from the Copolymerization Unit (RLA-1) to the Halobutyl Finishing Unit (HFU) for dewatering and product packaging.

Maintrain Ethylene Production Facilities (Maintrain)

Ethylene is produced by high temperature pyrolysis of petroleum fractions in the cracking furnaces and recovered in downstream distillation operations. Various other coproducts are also produced in the steam-cracking furnaces. These coproducts include hydrogen, methane, ethane, propylene, isoprene, steam cracked naphtha, steam cracked gas oil, and tar. The operating units in the Maintrain include the Olefins 2X Area (OLA-2X), Ethylene Production West Area (EPLA-W), and Ethylene Cracking West Area (ECLA-W).

Caustic scrubbing and various filters, molecular sieves, adsorbents, or catalysts are used to remove water or other impurities from some of the process streams. The spent caustics from these scrubbing and other scrubbing operations at the BRCP are either oxidized in the Sulfidic Caustic Operations Unit (SCOLA) for reuse, or shipped out to third parties.

Refinery Gas Recovery

Refinery Gas Recovery (RGR) facilities recover material from gas or light liquid streams from the BRRF, other BRCP units, and third parties that can be used as feeds to BRCP processes. The feed streams are processed through the Olefins 1X Area (OLA-1X) and the Ethylene Production South Area (EPLA-S). For the gas streams recovery process, caustic and water scrubber towers are used to remove unwanted materials and separate ethane and heavier hydrocarbons from the streams. Ethylene is the primary chemical that is separated from the other materials in the feed streams via a combination of distillation and refrigeration technologies.

Co-Products

The Co-Products is comprised of the Butadiene Extraction Unit (BELA-5), the Butylenes Purification Unit (BPLA), the Cyclics Purification Unit (CPLA), the Diels-Alder Reaction Unit (DARLA), and the Dilute Isoprene Unit (DILA).

1,3-butadiene is recovered from steam cracked naphtha. The feedstocks for BELA-5 are butadiene rich streams that are produced in the BRCP or from imported streams. In addition to 1,3-butadiene, 1,2-butadiene and raffinate may be routed to another BRCP unit, the BRRF, or to a third party.

Isobutylene is recovered from hydrocarbon streams that are primarily mixed C₄s in the BPLA Unit. The feedstocks for BPLA are C₄ streams that are produced in the BRCP, BRRF, or imported streams. The BPLA Unit recovers the isobutylene from these streams and sends the remaining material to other downstream processes.

Dicyclopentadiene and methylcyclopentadiene are the primary products produced in the CPLA Unit. The feedstock for CPLA is a mixture of dimers and co-dimers of cyclopentadiene and methylcyclopentadiene. In addition to dicyclopentadiene and methylcyclopentadiene, other trade name products consisting of dicyclopentadiene and methylcyclopentadiene may be produced.

The DARLA Unit is not currently operational, but continues to be evaluated for future operations. When in operation it produces ethylidene norbornene and vinyl norbornene through a Diels-Alder reaction, fractionation, and isomerization. The feedstocks are cyclopentadiene, butadiene, and dicyclopentadiene dimer, which are either produced in the BRCP or from imported streams. The ethylenenorbornene and vinylnorbornene may be routed to other BRCP units or third parties.

Isoprene is recovered from steam cracked naphtha through a series of fractionation steps and extractive distillation. The feed streams are received from other BRCP units or from imported streams.

Poly Unit

The Poly Unit is designed to feed propylene/propane and amylene streams from the BRRF and BRCP processes for polymerization into higher olefins. Impurities and contaminants are removed from the feed stream, sent to multiple reactors, and then sent to distillation towers and furnaces where the unreacted olefins, paraffins, and lighter olefin products are separated from higher olefin products. The higher olefin products are fed to the OXO Unit and the other separated products are sent to other BRCP or BRRF processes.

Phthalic Anhydride and Partial Oxidation

In the Phthalic Anhydride (PALA) Unit, ortho-xylene (o-xylene) is reacted with air in catalyst packed reactor tubes to produce crude phthalic anhydride (PAN). The crude PAN is sent to the finishing section to convert phthalic acid into phthalic anhydride, which is then purified in towers to remove light and heavy impurities. The finished PAN product is utilized as feedstock to onsite units or sold.

The Partial Oxidation (POX) Unit produces synthesis gas (syngas) by oxidizing hydrocarbon feed with oxygen and steam in a reactor at a high temperature and pressure. Syngas is used onsite as a raw material in the production of OXO alcohols and Neo Acids. Wastewater generated from this process is sent to the BRRF.

Neo Acids

The Neo Acids Unit manufactures a range of carboxylic acids by using a catalyst based reaction to convert olefins to carboxylic acids. The crude carboxylic acids are sent through a distillation process to refine the material into sales grade products.

OXO Alcohol

The OXO Alcohol (OXO) Unit produces C₇ through C₁₃ alcohols by an oxonation reaction which uses olefins, carbon monoxide and hydrogen. The process includes feed preparation, oxonation, demetallization, catalyst manufacture, hydrogenation, and distillation. In the presence of the cobalt-based catalyst, the olefin and syngas are reacted to form the associated aldehyde, which is then sent to the demetallization section to remove catalyst. The aldehyde is further wasted to remove remaining metals and acids before being hydrogenated. Hydrogen is mixed with the aldehyde and passed over a catalyst to produce crude alcohol and then it is distilled to purify the alcohol for sales and/or use in other processes.

Catalyst Plant

A cobalt catalyst is produced in the Catalyst Plant which is used in the oxonation process in the OXO Unit. The active catalyst is a cobalt complex which is generated from a carbon monoxide-hydrogen mixture and any of several forms of cobalt.

NOVA Ester (Eagle Train 1 and Eagle Train 2)

The NOVA Ester Unit consists of two separate process trains, Eagle Train 1 and Eagle Train 2. Eagle Train 1 produces a synthetic lubricant from raw materials that is brought into the BRCP. The process consists of a batch reaction section, a crude filtration section, a stripping section, and a finished product filtration section. Two feed streams are converted into the crude product in a batch reactor, then cooled and filtered to remove solids. After filtration, the

product is purified in the stripping section where residual unreacted material is removed. The finished product is filtered again and pumped to product storage and sold.

Eagle Train 2 manufactures a range of polyol ester products. Eagle Train 2 consists of a batch reaction section where the crude ester is made. The crude material is sent through a stripping, neutralization, decoloring, and filtration process to refine the material into sales grade esters for shipment. The wastewater acid extraction unit pre-treats Eagle Train 2 wastewater by removing organic acids before the wastewater is discharged to the BRCP Advanced Wastewater Treatment (AWT) plant.

Plasticizer Unit

Plasticizers (PLA) or esters of oxo alcohols (C_6 through C_{13} alcohols) and anhydrides or organic acids are produced in a batch reaction in the presence of an organic acid catalyst or metal-based catalyst. A raw material, phthalic anhydride, is used in this reaction. The raw materials are converted to crude ester products in the reaction section. The crude material is then sent to through a distillation and filtering process in the finishing section to refine the material into sales grade C_6 through C_{13} phthalate ester products. Ester product is recovered from the process water used in the finishing section and then sent to the AWT.

Heartcut Distillate Unit

The Heartcut Distillate (HCD) Unit produces a C_8 - C_{12} aromatic stream that is used for the manufacture of petroleum hydrocarbon resins. The feedstocks are distillates from steam cracking facilities. Distillation towers remove light and heavy hydrocarbons and send them to other process units for further processing.

Petroleum Resins

There are two petroleum resin units, the ESCOREZ 1000 Unit (E-1000) and the ESCOREZ 5000 (E-5000) that produce a series of petroleum hydrocarbon resins for the adhesive industry. E-1000 resins are prepared by catalytic polymerization of C_5 - C_6 olefins and diolefins, C_8 - C_{10} aromatic olefins, and mixed aliphatic-aromatic resins. E-5000 resins are a light color to water-white hydrocarbon resins prepared by thermal polymerization of cyclo diene hydrocarbons followed by catalytic hydrogenation for color removal.

Aromatics Production (Aromatics)

Aromatics produces benzene, toluene, and mixed xylenes from steam cracked naphthas and reformates. Aromatics consists of three units, the Linear Olefins Unit (LOLA), Benzene Hydrofining Unit (BHFA), and the Aromatics Extraction Unit (Extraction). The LOLA Unit removes impurities, such as light ends and trace amounts of oxygen and water from the steam cracked naphtha. The Xylenes Recovery Unit (XRU), part of the LOLA Unit, provides additional separation and distillation to produce mixed xylenes for sale. The naphtha from the LOLA Unit is

then sent to the BHLA Unit, where the benzene hydrofiner converts or hydrogenates the naphtha feed, diolefins, and olefins into paraffins. The Extraction Unit separates the aromatics from the paraffins and naphthenes through fractionation.

Wastewater Improvement, Louisiana

The Wastewater Improvement, Louisiana (WILA) Unit recovers hydrocarbons from a variety of wastewater streams via a series of solids settling, density separation, and filtration steps, followed by steam stripping. The hydrocarbons (wet naphtha) are mainly routed to the WILA Unit via pipeline or truck.

3.0 WASTEWATER GENERATION, TREATMENT, AND DISCHARGE

3.1 General

In accordance with the LPDES permit application requirements at LAC 33:IX.2501.G, this section provides information on the water supply sources, collection, treatment and discharge of non-storm water and storm water discharges associated with the BRCP operations.

A water balance providing the maximum 30-day average flow for the BRCP is included on Figure 3. Additional discussion about various water supply sources and water and/or wastewater generated and treated prior to discharge is provided in the sections below.

3.2 Source Water

ExxonMobil Baton Rouge Refinery

The BRRF provides raw and clarified river water to the BRCP. Raw river water supplies the firewater system and is used for miscellaneous facility and maintenance activities. The majority of the clarified river water received at the BRCP is used to supply make-up water to the cooling towers, but it also supplies water to some unit processes.

Excess non-contact raw river water obtained from the raw river pumps operated at the BRRF to maintain proper operating head pressure is discharged through Outfalls 003 and 004.

Groundwater Wells

The BRCP obtains source water from multiple groundwater wells. The groundwater wells are used to supply water for processes, make-up water for cooling towers and boilers, miscellaneous maintenance and utilities, and potable water.

3.3 Utility Wastewater

Utility wastewater generated to support the BRCP and some BRRF operations include, but are not necessarily limited to the following sources:

- Source water treatment;
- AWT chemical carrier water;
- Boilers; and
- Cooling towers.

3.3.1 Source Water Treatment

The BRCP may utilize several types of water treatment and purification processes to treat its source water prior to use. The water treatment depends on the use of the water. Source water treatment includes, but is not limited to filtration and cation/anion exchange. The wastewater generated from these source water treatment systems are discharged through Outfalls 001, 003, and 004 include, but is not necessarily limited to the following:

- Anion/Cation regeneration and rinse water; and
- Filter backwash.

On occasion, the ground water wells must be cleaned, serviced, and tested to maintain proper operation. These maintenance activities generate a *de minimis* amount of well development/testing, maintenance, and cleaning wastewater, which can be discharged through Outfalls 001, 002, 003, 004, and 005.

3.3.2 AWT Chemical Carrier Water

AWT chemical carrier water is facility water used to provide chemical additions to the AWT to maintain proper operations. This water is introduced into the AWT and is discharged through Outfall 001.

3.3.3 Boiler/Steam System

The BRCP owns and operates multiple gas-fired boilers to produce steam for various processes, but also obtains steam from nearby industrial facilities. The BRCP may also bring in rental boilers during boiler outages, maintenance activities, or as necessary to meet steam demand. Wastewater generated from the boiler/steam system includes boiler blowdown, steam condensate released from steam traps, and miscellaneous boiler and steam system maintenance wastewater.

3.3.4 Cooling Towers

The BRCP utilizes cooling towers to provide heat transfer/cooling from process equipment. Wastewater generated from the cooling towers include cooling tower blowdown, cooling tower drift, and miscellaneous cooling tower maintenance wastewater. Cooling tower blowdown is discharged through Outfalls 001, 002, 003, and 004. The BRCP also receives cooling tower blowdown generated at the BRRF. This cooling tower blowdown is discharged through Outfalls 003 and 004.

3.4 Process Wastewaters

The BRCP generates process wastewater associated with OCPSF manufacturing facilities defined in 40 CFR 414, Subparts D, F, G, H, and I, and rubber manufacturing facilities as defined in 40 CFR 428, Subpart C which consist of, but is not necessarily limited to, the following wastewater sources and types:

- IPA Unit wastewater;
- MEK/SBA Unit wastewater;
- Synthetic Rubber Unit wastewater;
- Maintrain Unit wastewater;
- RGR Unit wastewater;
- Co-Products wastewater;
- Neo Acids Unit wastewater;
- Oxo Unit wastewater;
- Catalyst Plant wastewater;
- NOVA Unit wastewater;
- PLA Unit wastewater;
- HCD Unit wastewater;
- Petroleum Resin Units wastewater;
- Aromatics Unit wastewater;
- Spent caustic oxidation wastewater;
- WILA Unit wastewater;
- Laboratory wastewater;
- Groundwater recovery well water;
- Filter press wastewater;
- Flare system wastewater (includes flare seal drum and flare stack knockout);
- Process area storm water;
- Miscellaneous de minimis process wastewaters including, but not limited to:
 - Process and oily condensates;
 - Process area and contaminated equipment wash water;
 - Tank bottom water draws;
 - Tower bottom water draws;
 - Heat exchanger bundle cleaning wastewater;

- Catalyst regeneration wastewaters;
- Quench water;
- Purge water;
- Pump seal flush water;
- Residue gas knockout water;
- Caustic scrubber purge;
- Groundwater remediation activities;
- Miscellaneous process and oily wastewater from other ExxonMobil facilities;
- Tank washwater; and
- Hydrostatic test water from testing of process piping, tanks, and equipment.

All process wastewater listed above is treated in the AWT and discharged via Outfall 001.

3.5 Non-Process Wastewaters

Non-process wastewaters are considered a group of several low contamination potential wastewater types that may be present throughout the BRCP. These miscellaneous non-process wastewaters may be present in the discharge from Outfalls 001, 002, 003, 004, and 005. Sources of non-process wastewater include, but are not necessarily limited to, the following types:

- Emergency eyewash and safety shower station testing and use;
- Firewater system water including testing (without foams) and firefighting activities (with or without foam);
- Uncontaminated condensate from air conditioners, coolers and compressors, and atmospheric condensate generated on the outside of storage tanks and equipment;
- Routine pavement, pad and utility/maintenance wash down (without soaps and detergents);
- Routine external building wash down wastewater (without soaps and detergents);
- Non-contact cooling water for various equipment, including but limited to pumps, furnace air preheaters, etc.;
- Freeze protection water using potable or uncontaminated service water;
- Line flushing (potable water, including disinfection, or other non-process lines);
- Well pump bypass water;
- Cooling tower drift;
- Uncontaminated groundwater;
- Uncontaminated water used to rinse dust off vehicles (without soaps and detergents);
- Uncontaminated water used for dust suppression;
- Drainage from irrigation of vegetation and landscaping; and

- *De minimis* leaks from the potable, cooling water, utility, or fire water distribution system network pipelines.

3.6 Hydrostatic Test Wastewater

Periodically, the BRCP may conduct hydrostatic tests on piping, vessels, tanks, and other equipment located throughout the facility. Currently, hydrostatic test wastewater is discharged to the sewer system, treated in the AWT and discharged to through Outfall 001. As part of this permit renewal, ExxonMobil is requesting to add a new internal outfall (Internal Outfall 106) to provide the flexibility to also discharge hydrostatic test wastewater through Outfalls 002, 003, 004, and 005.

In scenarios where there is an opportunity to discharge hydrostatic test water through Outfalls 002, 003, 004, and 005, the hydrostatic test water would be sampled to determine compliance with the effluent limitations of Internal Outfall 106. If the results meet the effluent limitations established for Internal Outfall 106, the hydrostatic test water would be allowed to discharge through Outfalls 002, 003, 004, and 005 and the results reported on the DMRs. Hydrostatic test water that does not meet the effluent limitations would be handled as a process wastewater, as is the current practice, and routed to the AWT for treatment prior to being discharged through Outfall 001.

3.7 Sanitary Wastewater

Sanitary wastewater generated at the BRCP is collected in onsite septic tanks and pumped to the oily process sewer where it flows into the AWT for treatment prior to discharge from Outfall 001. On occasion, the BRCP may also accept and treat sanitary wastewater from other ExxonMobil facilities.

Portable restrooms are also utilized throughout the BRCP, which are owned and maintained by an approved third party vendor. Sanitary wastewater from these portable restrooms is collected by approved sewage haulers and disposed in approved sewage disposal/treatment facilities.

3.8 Wastewater Treatment

The BRCP operates a complex system of underground and aboveground wastewater and storm water sewer collection systems, which is segregated into the following three color-coded sewer systems:

- Oily process sewer — green
- Non-oily process sewer — blue
- Non-process sewer - red

The process sewers (green and blue sewers) collect process wastewater, process area storm water, utility wastewater, such as cooling tower and boiler blowdowns, miscellaneous non-process wastewaters, and sanitary wastewater. Sanitary wastewater is treated in onsite septic tanks prior to entering the green oily sewer, where it is then routed to the AWT for further treatment. The wastewater collected in the green and blue sewers is routed to the AWT for treatment.

The AWT unit employs both physical and biological treatment and consists of the following equipment and/or processes:

- Oil/water separator removes floating oil from oily wastewaters;
- Surge tanks are used to temporarily store and manage wastewater periodically, especially during heavy rainfall events;
- Dissolved Air Floatation (DAF) unit provides removal of emulsions and fine solids;
- Cooling tower for temperature control prior to entering biological treatment;
- Equalization tanks are used to mix oily and non-oily wastewaters;
- Biological treatment – moving bed reactors (MBLA unit);
- Biological treatment – high purity oxygen activated sludge (UNOX unit); and
- Clarifiers allow for sedimentation.

Under normal operating conditions, wastewater collected in the green oily sewer is sent to an oil/water separator, the DAF unit, and cooling tower before combining with wastewater from the blue non-oily process sewer in the equalization tank. The pH is adjusted and nutrients added as needed to the wastewater leaving the equalization tank. The wastewater flows from the equalization tank into the MBLA unit and then to the UNOX unit for biological treatment. After biological treatment, the wastewater enters the clarifiers where anti-foaming agents and coagulants are added on an as needed basis to enhance sedimentation, prevent foam, and improve water quality of the final effluent from Outfall 001.

During periods of heavy rainfall, effluent from the oil/water separator is routed to rainwater surge tanks (EGTK – 01, 02, 03, and 04) and effluent from the non-oily process sewer is routed to rainwater surge tank (EITK-26) to manage wastewater flows through the AWT. To avoid overloading the AWT, the BRCP may also implement alternative wastewater routing and treatment options. In extreme rainfall conditions where the total flow exceeds the combined capacity of the transfer pumps and the five detention pumps, the excess storm water and wastewater will be discharged through Outfall 009 directly into Monte Sano Bayou without undergoing complete treatment at the AWT.

The red non-process sewer collects, monitors, and discharges storm water from non-process areas on the site including employee parking areas, non-process related roads, and roof drainage and discharges directly through existing Outfalls 002, 003, 004, and 005. It consists of two diversion sewers and two storm sewers. The two diversion sewers, Avenue

"C" and Avenue "H" route non-process storm water to outfalls 003 and 004, respectively. Avenue "H" is the normal disposition for the Knox Field sump which contributes non-process area storm water. The Knox Field sump is approximately a one-half acre earthen surface impoundment located in the BRRF which collects non-process area storm water. The two storm sewers, Avenue "E" and Avenue "J" route storm water to Outfalls 002 and 005, respectively.

3.8.1 Water and Wastewater Treatment Chemicals

The specific water and wastewater treatment chemicals and products currently in use or proposed for use at the BRCP are listed in Table 5. ExxonMobil anticipates these specific products (or their equivalent substitutes) will be used during the upcoming permit cycle. Safety data sheets (SDS) are maintained at the facility and can be made available upon request if required for this permit request.

3.8.2 Solids Management

Sludges and biosolids generated in the wastewater treatment process are dewatered using filter presses and are sent for offsite disposal in a permitted facility. The water from the filter presses is sent back to the AWT.

Sewage sludge from the septic tanks is removed on an as needed basis and wasted to the AWT.

3.9 Outfalls and Associated Wastewater Contributions

Outfall 001

Outfall 001 is an external outfall that continuously discharges treated wastewater including utility wastewater as described in Section 3.3, process wastewater as described in Section 3.4, non-process wastewater listed in Section 3.5, hydrostatic test water as described in Section 3.6, and sanitary wastewater as described in Section 3.7. The treated wastewater is discharged from Outfall 001 to Monte Sano Bayou.

Outfall 002

Outfall 002 is an external outfall that intermittently discharges utility wastewater including well water as described in 3.3.1 and steam condensate as described in Section 3.3.3; *de minimis* cooling tower blowdown as described in Section 3.3.4; miscellaneous non-process wastewaters listed in Section 3.5; previously monitored hydrostatic test water as described in Section 3.6 for proposed Internal Outfall 106; and non-process area storm water as described in Section 3.8. Outfall 002 discharges to Monte Sano Bayou.

Outfall 003

Outfall 003 is an external outfall that continuously discharges raw river water as described in Section 3.2; utility wastewater including source water treatment and well water as described in Section 3.3.1, boiler blowdown and steam condensate as described in Section 3.3.3, and cooling tower blowdown as described in Section 3.3.4; miscellaneous non-process wastewaters listed in Section 3.5; previously treated hydrostatic test water as described in Section 3.6 for proposed Internal Outfall 106; and non-process area storm water as described in Section 3.8. Outfall 003 discharges to Monte Sano Bayou.

Outfall 004

Outfall 004 is an external outfall that continuously discharges raw river water as described in Section 3.2; utility wastewater including source water treatment and well water as described in Section 3.3.1, boiler blowdown and steam condensate as described in Section 3.3.3, and cooling tower blowdown as described in Section 3.3.4; miscellaneous non-process wastewaters listed in Section 3.5; previously treated hydrostatic test water as described in Section 3.6 for proposed Internal Outfall 106; and non-process area storm water as described in Section 3.8. Outfall 004 discharges to Monte Sano Bayou.

Outfall 005

Outfall 005 is an external outfall that intermittently discharges utility wastewater including well water as described in 3.3.1 and steam condensate as described in Section 3.3.3; miscellaneous non-process wastewaters listed in Section 3.5; previously monitored hydrostatic test water as described in Section 3.6 for proposed Internal Outfall 106; and non-process area storm water as described in Section 3.8. Outfall 005 discharges to Monte Sano Bayou.

Internal Outfall 106 (Proposed)

Internal Outfall 106 is a proposed internal outfall designated as the sample point associated with the intermittent discharges of hydrostatic test water through Outfalls 002, 003, 004, and 005.

Proposed Sample Location – At the point of discharge from the pipe, tank, vessel, and/or equipment being tested prior to combining with other waters of Outfalls 002, 003, 004, or 005.

Outfall 009

Outfall 009 is an emergency overflow outfall for Outfall 001 and discharges following extreme rainfall events, as discussed in section 3.8. Effluent discharged from Outfall 009 contains the same wastewater types as Outfall 001, but consists primarily of storm water. Emergency discharges from Outfall 009 enter Monte Sano Bayou.

3.10 Receiving Stream Information

Outfalls 001, 002, 003, 004, 005, and 009 discharge into Monte Sano Bayou (Subsegment No. 070504). Monte Sano Bayou is listed in LDEQ's Final 2014 and the 2016 Final Draft Integrated Report as impaired for dissolved oxygen (DO). To date, there are no TMDLs completed for Monte Sano Bayou.

The suspected cause for the DO impairment is discharges from Municipal Separate Storm Sewer Systems (MS4). ExxonMobil does not discharge to Monte Sano Bayou through an MS4 and has effluent limits for 5-day biochemical oxygen demand (BOD₅) and chemical oxygen demand (COD) at Outfalls 001 and 009. Effluent limitations for total organic carbon (TOC) are also established at Outfalls 002, 003, 004, and 005. The effluent limits for BOD₅, COD, and TOC are established to be protective of the receiving stream and should be adequate to address the DO impairment.

4.0 STORM WATER DRAINAGE, MANAGEMENT, AND DISCHARGE

4.1 General

In accordance with the LPDES permit application requirements at LAC 33:IX.2501 and 2511.C, this section provides a discussion on storm water drainage, management and discharges from the BRCP. This information should be considered in conjunction with the information provided in the EPA Application Form 2F (Appendix C).

4.2 Storm Water Drainage

The BRCP is currently authorized to discharge storm water under LPDES Permit No. LA0005401 from six final outfalls (Outfalls 001, 002, 003, 004, 005 and 009) and via sheet flow under MSGP No. LAR05N087. A description of the drainage areas for these outfalls is provided in Section 3.8. Additional portions of the property discharge storm water runoff associated with industrial activity via sheet flow or discharge storm water runoff that is not associated with industrial activity. Storm water drainage areas and associated storm water outfalls are illustrated on Figure 2.

4.3 Storm Water Management

The management of storm water at the BRCP is achieved through existing non-structural controls, structural controls, and Best Management Practices (BMPs). The BRCP employs numerous structural controls and operational practices to minimize the potential for releases of pollutants. The nonstructural measures employed by the BRCP include, but are not limited to:

- Storm Water Pollution Prevention Plan (SWP3);
- Environmental inspections;
- Spill Prevention, Control, and Countermeasure (SPCC) Plan;
- Spill Prevention and Control (SPC) Plan;
- Facility Response Plan (FRP);
- Hazardous Waste Contingency Plan;
- Employee safety and environmental training programs; and
- Equipment preventative maintenance programs.

These plans and programs incorporate definite inspection schedules that encourage continual awareness of the importance of minimizing the potential for storm water contacting contaminant sources and maintaining the facility's storm water drainage and treatment systems.

Structural controls at the facility include the use of concrete curbing, covered roof buildings, secondary containment dikes, drainage sumps, and oil booms to minimize pollutants from entering the drainage system.

A list of significant materials stored and handled at the facility is provided in Table 6. Other materials such as industrial solid and hazardous wastes are collected and properly disposed offsite at permitted disposal facilities.

4.4 Fertilizers, Herbicides, and Pesticides

Application of conventional fertilizers, herbicides and pesticides at specific intervals for property maintenance and landscaping is performed internally and by licensed contractors throughout the site. Fertilizer and soil conditioners are applied on an as-needed basis to maintain vegetation that is beneficial for landscaping and/or erosion control. Only commercially-available products are used, and they are applied in a manner and at rates consistent with the manufacturer instructions provided with the specific fertilizers or soil conditioners.

Herbicides are applied throughout the facility on an as-needed basis and only in minimal amounts required to control weeds within the property, roadways and ditches. Only commercially-available products are used and they are applied in a manner and at rates

consistent with the registered usages for the specific herbicide selected as required by the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).

Pesticides are applied on an as-needed basis for routine pest control. Only commercially-available products are used and applied in a manner and at rates consistent with the registered usages for the specific pesticides selected as required by FIFRA.

4.5 Spill History

There have not been any spills to water or soil at the BRCP within the past three years (October 2013 through September 2016) that have exceeded a Reportable Quantity (RQ).

5.0 OUTFALL DISCHARGE CHARACTERIZATION

5.1 Discharge Monitoring Reports

Data obtained from DMRs during the period of October 2013 through September 2016 were utilized for this permit renewal application. It is believed that this period is representative of current and future discharges at the facility.

5.2 Characterization Data Provided for Permit Renewal Application

Dry weather samples were collected at Outfalls 001, 003, and 004 on June 23 and 24, 2016. An additional dry weather sample was collected on August 22, 2016 at Outfall 001. Outfall 001 was not sampled under wet weather conditions because wastewater that discharges through Outfall 001 is fully treated and it is difficult to ascertain when actual storm water component is discharged. Similarly, Outfalls 003 and 004 continuously discharge cooling tower blowdown and utility wastewater with a small portion of storm water. Wet weather samples were collected at Outfalls 002 and 005 on November 28, 2016.

Effluent samples were analyzed for constituents required under LPDES permit application requirements at LAC 33:IX.25. All analytical methods were consistent with those required under 40 CFR 136. The wastewater characterization data are presented in the EPA Application Forms 2C and 2F provided in Appendices B and C, respectively.

6.0 REQUESTED PERMIT CONDITIONS

6.1 Updated Outfall Descriptions

ExxonMobil requests that the outfall descriptions be updated in the renewed permit as provided below:

Outfall 001 – The continuous discharge of treated process wastewater; process and non-process area storm water; utility wastewater; miscellaneous non-process wastewater; hydrostatic test water; and sanitary wastewater.

Outfall 002 – The intermittent discharge of non-process area storm water; utility wastewater; miscellaneous non-process wastewater; and previously monitored hydrostatic test water from Internal Outfall 106.

Outfall 003 – The continuous discharge of utility water; non-process area storm water; miscellaneous non-process wastewater; and previously monitored hydrostatic test water from Internal Outfall 106.

Outfall 004 – The continuous discharge of utility water; non-process area storm water; miscellaneous non-process wastewater; and previously monitored hydrostatic test water from Internal Outfall 106.

Outfall 005 - The intermittent discharge of non-process area storm water; utility wastewater; miscellaneous non-process wastewater; and previously monitored hydrostatic test water from Internal Outfall 106.

6.2 Basis for Effluent Limitations at Outfall 001

Given the variety of operations contributing wastewater and storm water to Outfall 001, the existing permit limits were calculated using a “building block” approach that used a combination of point source category effluent limitation guidelines from 40 CFR 414, Subparts D, F, G, H & I and 40 CFR 428 Subpart C, and BPJ where effluent limitations did not apply. ExxonMobil believes using the “building block” approach similar to what was used in the current permit to calculate the discharge limits for Outfall 001 is appropriate for this permit renewal. For purposes of estimating TBELs under the “building block” approach, OCPSP flows should be apportioned as summarized below:

OCPSP Subpart	Process Units	Percentage
Subpart D – Thermoplastic Resins	Petroleum Resins (E-1000, E-5000), WILA	17.1%
Subpart F – Commodity Organic Chemicals	IPA, SBA, EPLA-W, OLA-1X, EPLA-S, BELA-5, DSLA, HCD, WILA	28.8%
Subpart G – Bulk Organic Chemicals	MEK, ECLA-W, DILA, BPLA, CPLA, OXO Alcohol, Catalyst Plant, PLA, and Aromatics (LOLA, BHLA, Extraction, XRU), WILA	36.2%
Subpart H – Specialty Organic Chemicals	Neo Acids, OLA-2X, NOVA, WILA	17.9%
TOTAL		100%

The OCPSF effluent guidelines under 40 CFR 414 Subparts D, F, G, H, & I were used to establish effluent limits for BOD₅, TSS, and priority pollutants based on OCPSF process wastewater streams. Mass limit allocations based on BPJ for oil & grease and COD were also applied to the OCPSF process wastewater streams. The synthetic crumb rubber effluent guidelines under 40 CFR 428.32 were used to establish permit limits for BOD₅, TSS, COD and oil and grease based on rubber production rates. Additional mass limit allocations were applied to sanitary wastewater contribution (BOD₅ and TSS) and utility wastewater contributions (BOD₅, TSS, and oil & grease) using BPJ consistent with existing LDEQ permitting practices.

The mass limit allocations for oil & grease applied to the OCPSF process wastewater and utility wastewater streams were calculated using a monthly average concentration of 10 mg/L and a daily maximum concentration of 15 mg/L based on LDEQ's storm water guidance and the previous permit. The mass limit allocations for COD applied to the OCPSF process wastewater were based on a historically established COD/BOD₅ ratio.

ExxonMobil requests that effluent limitations for Outfall 001 be calculated for the renewal permit using the same "building block" approach and BPJ allocations utilized in the current permit and as described above. The updated wastewater sources and their maximum 30-Day average flow rates, and production rates are provided on the EPA Form 2C (Appendix B).

6.3 Removal of Total Residual Chlorine and Lead Reporting Limits

ExxonMobil requests that the monitoring and reporting requirements for TRC and total lead be removed from Outfalls 001, 003, 004, and 009 in the permit renewal. TRC and total lead were included in the current permit for TMDL data collection purposes. When the current permit was issued, Monte Sano Bayou was listed on LDEQ's Final 2010 303(d) list as impaired for chlorine and total lead. Chlorine and total lead are no longer listed as an impairment on LDEQ's Final 2014 303(d) list or on the 2016 Final Draft 303(d) list.

Chlorine was removed as an impairment on February 14, 2013, and according to EPA's Water Quality Assessment Report website, the original basis for listing chlorine as an impairment was incorrect. Therefore, continuing to monitor and report TRC from Outfalls 001, 003, 004, and 009 is no longer warranted and should be removed from the final permit.

Total lead was removed as an impairment on July 21, 2015 because the water quality standard for lead has been attained in Monte Sano Bayou. Therefore, monitoring and reporting requirements for total lead at Outfalls 001, 003, 004, and 009 for purposes of TMDL data collection is no longer needed and should be removed.

6.4 Sample Location Update for Outfall 009

Due to safety issues while collecting samples at the current sample location for Outfall 009 (AWT overflow window), the sample location will be moved to a safer location in the Analyzer House A building, which is still representative of the final effluent discharged at Outfall 009. The new sample location for Outfall 009 in the renewed permit should read "samples are collected at the separator effluent line located in Analyzer House A at the southeast corner of Avenue J and 33rd Street."

6.5 Concurrent Sampling and Reporting Footnote at Outfalls 001 and 009

Footnote (*4) at Outfall 001 and footnote (*2) at Outfall 009 in the current permit states "The permittee shall conduct concurrent monitoring at Outfall 001 and Outfall 009. The arithmetic sum of the daily pollutant mass discharges from these outfalls during the same 24-hour sampling period shall not exceed the corresponding Monthly Average and Daily Maximum loadings. The sum of the results for both outfalls shall be reported on the DMR for Outfall 001."

It is often difficult to conduct concurrent monitoring at Outfalls 001 and 009 when the emergency discharge from Outfall 009 occurs because it is typically not planned and Outfall 001 is monitored on a planned routine schedule. There are instances when Outfall 009 discharges in between the routine 24-hour monitoring schedule for Outfall 001. In some instances, the discharge at Outfall 009 may begin within and extend beyond the scheduled 24-hour sampling period for Outfall 001 resulting in two 24-hour monitoring periods.

To avoid unintentional non-compliance associated with concurrent sampling requirements and still provide a representative analysis of the daily pollutant mass discharged from both outfalls ExxonMobil requests that the footnote language be updated to state:

"The arithmetic sum of the daily pollutant mass discharges from Outfalls 001 and 009 during the same 24-hour sampling period, if available, or the arithmetic sum of the daily pollutant mass discharges from the nearest calendar day(s) for Outfall 001 and the actual day for Outfall 009 shall not exceed the corresponding Monthly Average and Daily Maximum loadings. The sum of the results for both outfalls shall be reported on the DMR for Outfall 001."

6.6 Addition of Internal Outfall 106 for Discharges of Hydrostatic Test Water

ExxonMobil is requesting that a new internal outfall (Internal Outfall 106) be added for hydrostatic test water to be discharged through Outfalls 002, 003, 004, and 005. It is anticipated that the effluent limitations at Internal Outfall 106 will be consistent with the effluent limitations established in LPDES General Permit No. LAG670000 for discharges of Hydrostatic Test and Vessel Testing Wastewater.

6.7 Sampling Frequency Reduction Requests

ExxonMobil requests that the LDEQ reduce the monitoring frequencies for the following parameters: BOD₅, TSS, oil & grease, COD, benzene, and toluene at Outfall 001 based on EPA's *Interim Guidance for Performance Based Reductions of NPDES Permit Monitoring Frequencies* and compliance history. Table 7 presents the comparison of the long-term effluent average to the monthly average limit and the requested monitoring frequencies.

ExxonMobil is requesting that the monitoring frequencies for oil & grease and TOC at Outfalls 003 and 004 be reduced from 1/week to 1/month based on BPJ and an excellent compliance history at these outfalls.

In addition, ExxonMobil requests that the monitoring frequency for all parameters at Outfalls 002 and 005 be reduced from 1/week to 1/quarter based on the excellent compliance history at these outfalls and the LDEQ's established storm water guidance for permitting non-process area storm water outfalls. The LDEQ typically establishes a monitoring frequency of 1/quarter at non-process area storm water outfalls in LPDES permits for both major and minor industrial facilities. The effluent discharged from Outfalls 002 and 005 consists primarily of non-process area storm water runoff and is only discharged on an intermittent basis during storm events. Therefore, a monitoring frequency reduction to 1/quarter would be consistent with the LDEQ's current policy for permitting non-process area storm water outfalls.

6.8 Addition of Storm Water Pollution Prevention Plan Requirements

ExxonMobil is requesting termination of MSGP No. LAR05N087 with the issuance of the permit renewal. According to Part II Paragraph O of the current LPDES permit, additional storm water outfalls and/or storm water requirements would need to be included in the permit if the MSGP was ever terminated. There are no storm water outfalls covered under the MSGP that need to be transferred to this permit; therefore, ExxonMobil is only requesting to include the storm water pollution prevention requirements in the permit renewal.

6.9 Non-Detect Reporting Conditions

ExxonMobil uses a commercial analytical laboratory for sample analysis that is accredited under the Louisiana Environmental Laboratory Accreditation Program (LELAP) and requests that the LDEQ maintain, revise, or include the Limits of Quantification (LOQ) for the parameters listed below as part of the renewed LPDES permit.

Proposed Limits of Quantification

Parameter	LOQ (mg/L)
BOD ₅	1
Oil & Grease	5
COD	5
TOC	2
TSS	5

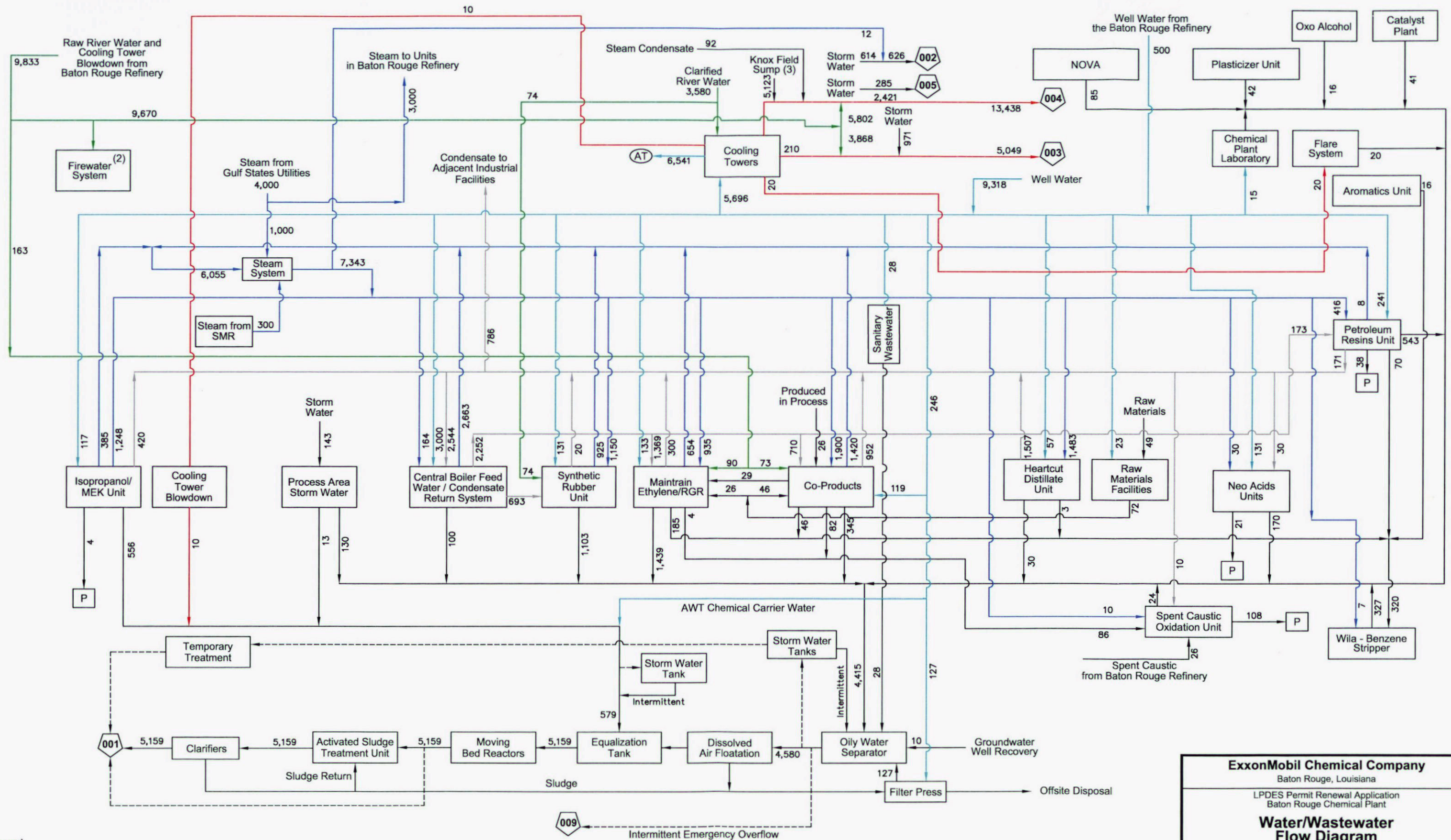
ExxonMobil requests that laboratory results reported as less than the LOQ concentration in the table above may be reported as zero in the DMRs.

6.10 Alternate Sample Locations for Outfalls 001, 003, and 004

ExxonMobil requests that alternate representative sample locations for Outfalls 001, 003, and 004 be established in the reissued LPDES permit to enable compliance sample collection during activities that impact sample equipment. The proposed alternate sample locations are illustrated on Figure 2, and the coordinates and location descriptions for the proposed sample locations are provided below:

- Alternate Outfall 001 – Located at the UNOX Effluent Parschall Flume
Latitude: 30° 29' 95" North; Longitude: 91° 10' 57" West
- Alternate Outfall 003 – Located at Ave C south of # 16 Flare
Latitude: 30° 30' 01" North; Longitude: 91° 10' 33" West
- Alternate Outfall 004 – Located at Ave H and 33rd Street
Latitude: 30° 30' 02" North; Longitude: 91° 10' 53" West

Appendix 4 – Water/Wastewater Flow Diagram



Notes:
 (1) Outfall 001 flows are based on maximum 30-day average flows from October 2013 - September 2016.
 (2) Firewater System water can be discharged through Outfalls 001, 002, 003, 004, and 005.
 (3) Includes storm water from Baton Rouge Refinery.
 (4) Laboratory wastewater flow is included in the HFU stream.
 All flows are in GPM.

ExxonMobil Chemical Company

Baton Rouge, Louisiana

LPDES Permit Renewal Application
 Baton Rouge Chemical Plant

**Water/Wastewater
 Flow Diagram**

East Baton Rouge Parish

CK ASSOCIATES
 Environmental Consultants

Drawn:	CAL/ACAD
Checked:	JCR
Approved:	DJL
Date:	01/27/17
Dwg. No.:	B13556-08

Figure 3

Appendix 5 – Example pH readings, screen shot

TABHIS 1 MINUTE

1	6.594	6.588	6.582
2	6.594	6.588	6.578
3	6.594	6.585	6.582
4	6.591	6.585	6.585
5	6.594	6.578	6.585
6	6.591	6.585	6.582
7	6.591	6.582	6.585
8	6.591	6.585	6.582
9	6.591	6.588	6.578
10	6.591	6.585	6.578
11	6.591	6.582	6.582
12	6.591	6.585	6.582
13	6.591	6.585	6.582
14	6.591	6.588	6.582
15	6.591	6.591	6.578
16	6.594	6.588	6.578
17	6.588	6.591	6.582
18	6.591	6.588	6.578
19	6.588	6.585	6.578
20	6.591	6.578	NOW

TO CHANGE TAG:
TOUCH HERE AND
ENTER NEW TAG

TO SHOW VALVE
HISTORY TOUCH
HERE THEN ENTER

TABULAR HISTORY

ENQ552.PV

PH

*UNOX EFFLUENT PH

TIME OF
HISTORY
COLLECTION
11:08:39
LIVE
READING
6.572

HOURLY

12	6.586
13	6.576
14	6.570
15	6.565
16	6.560
17	6.558
18	6.557
19	6.562
20	6.559
21	6.568
22	6.576
23	6.584
0	6.594
1	6.601
2	6.608
3	6.609
4	6.608
5	6.615
6	6.622
7	6.629
8	6.625
9	6.610
10	6.598
11	6.587
NOW	6.579

6 MINUTE

	6:	7:	8:	9:	10:	THIS HR
00	6.627	6.629	6.621	6.602	6.596	6.580
06	6.628	6.628	6.621	6.600	6.592	6.579
12	6.628	6.628	6.618	6.602	6.593	-----
18	6.627	6.625	6.620	6.600	6.591	-----
24	6.629	6.623	6.616	6.597	6.591	-----
30	6.630	6.625	6.613	6.600	6.588	-----
36	6.629	6.625	6.602	6.596	6.584	-----
42	6.629	6.627	6.601	6.598	6.586	-----
48	6.627	6.625	6.600	6.599	6.585	-----
54	6.628	6.623	6.602	6.597	6.583	-----

DAILY

TODAY'S AVG 6.610

DAILY
PLOT

6.423
6.460
6.452

6.339
6.333
6.229
6.322
6.351
6.404

6.403
6.413
6.405
6.407
6.442
6.466
6.459

6.440
6.465
6.480
6.480
6.517
6.644

6.586
6.559
6.550
6.550
6.522
6.584

-7
-6
-5
-4
-2
-1

LARGE
TREND6 MINUTE
TABULAR

2 MINS	16 HR
1 HR	24 HR
2 HR	48 HR
8 HR	96 HR

9	6.610
10	6.598
11	6.587
NOW	6.579

Appendix 6 – Example flow meter readings, screen shot

[illegible]

Appendix 7 – June 15, 2017 Letter and Monitoring Report



June 15, 2015

Certified Mail 7014 0510 0001 5219 7058

Louisiana Department of Environmental Quality
Office of Environmental Compliance
Permit Compliance Unit
P. O. Box 4312
Baton Rouge, Louisiana 70821-4312

Monitoring Reports
LPDES Permit No. LA0005401
Agency Interest No. 286

Enclosed are the Discharge Monitoring Reports (DMRs) for the monthly monitoring period of May 2015, as required under the subject permit for the ExxonMobil Baton Rouge Chemical Plant (BRCP). Below is a summary of events that occurred during the monitoring period.

A pump failure on the Outfall 003 pH analyzer circuit occurred on 5/20/2015; consequently, grab samples were collected and utilized for the pH analysis for Outfall 003. The failure began on 5/20/2015 at 02:05 am and ended at 5/20/2015 06:40 am for duration of 275 minutes. Grab sample collection for pH analysis was initiated within an hour of the failure and continued at hourly intervals during the failure, with the exception of one sample which was collected 70 minutes following the previous sample.

On May 30, 2015, ExxonMobil Baton Rouge Chemical Plant (BRCP) experienced a rainfall event during which 3.22 inches of rain fell in one hour, and approximately 2.7 inches fell during the most intense 30-minute period. According to data cited in the "U.S. Department of Commerce Technical Paper No. 40", this rainfall event is equivalent to a 10yr/1hr event and also equivalent to a 25yr/30min event.

During this intense rainfall event, storm water runoff from the drainage area surrounding Outfall 009 initially followed normal drain routes into area storm water drains and thence into sewer system, where it was collected and treated prior to discharge through our treated water Outfall 001. Subsequently, the rain intensity increased to the point where the storm water runoff overwhelmed the storm water drains surrounding Outfall 009, resulting in a discharge of area storm water through Outfall 009 lasting for approximately 15 minutes.

Outfall 009 is currently permitted as an emergency outfall for Outfall 001 wastewaters specifically defined as process area storm water and OCPSF process wastewaters. The drainage area surrounding Outfall 009 is an industrial area. However, it does not include any process wastewater, nor does it include any process area storm water runoff.

Louisiana Department of Environmental Quality
Office of Environmental Compliance
Permit Compliance Unit
P. O. Box 4312
Baton Rouge, Louisiana 70821-4312
Page 2

BRCP collected a sample of the Outfall 009 discharge and analyzed for Oil & Grease, Chemical Oxygen Demand, Volatile Compounds, Total Suspended Solids, BOD⁵, Lead, Total Organic Carbon, and pH. However, not enough sample volume was collected to analyze for Base Neutral Acid Compounds and Total Residual Chlorine. In addition, BRCP did not collect a concurrent set of samples from Outfall 001 as required by LPDES permit. The Outfall 009 discharge sample analysis, flow rate, and mass calculations are summarized in Table 1. BRCP does not believe there was any deleterious effect upon the environment within Monte Sano Bayou as a result of the discharge of area storm water through Outfall 009.

As a result of this event, BRCP is in the process of updating our procedures and training for affected personnel. The updated procedures will include readily available sampling kits for Outfall 009/Outfall 001 in the event this type of discharge were to occur again. BRCP is also evaluating facilities to determine if this type of discharge can be averted in the future.

Should you have any questions, you may contact Brady Fontenot at (225) 977-7226.

Sincerely,



Stephen J. Hamilton
Process Manager

Enclosures
/kbd
ENV4000

TABLE 1: Outfall 009 Laboratory Results and Mass Discharge Rates

Event / Sample Date: 5/30/2015

Duration of Event, min: 15
Total Flow gal/day: 50
Flow Rate, gpm: 0.03472

Analytes	Laboratory		Flow	Average	Maximum	Permit ¹	Permit ¹	Permit
	Result, ug/L	PQL, ug/L	gpm	Lbs/d	Lbs/d	Avg lbs/d	Max lbs/d	MQL, ug/L
Volatiles:								
Acrylonitrile	Non Detect	20	0.0347	0.0000	0.0000	4.73	11.92	20
Carbon Tetrachloride	Non Detect	2	0.0347	0.0000	0.0000	0.89	1.87	2
Chlorobenzene	Non Detect	5	0.0347	0.0000	0.0000	0.74	1.38	10
Chloroethane	Non Detect	5	0.0347	0.0000	0.0000	5.12	13.21	50
Chloroform	Non Detect	5	0.0347	0.0000	0.0000	1.03	2.27	10
1,1 -Dichloroethane	Non Detect	5	0.0347	0.0000	0.0000	1.08	2.91	10
1,2 -Dichloroethane	Non Detect	5	0.0347	0.0000	0.0000	3.35	10.4	10
1,1 -Dichloroethylene	Non Detect	5	0.0347	0.0000	0.0000	0.79	1.23	10
1,2 -trans-Dichloroethylene	Non Detect	5	0.0347	0.0000	0.0000	1.03	2.66	10
1,2 -Dichloropropane	Non Detect	5	0.0347	0.0000	0.0000	7.54	11.33	10
1,3 -Dichloropropylene	Non Detect	5	0.0347	0.0000	0.0000	1.43	2.17	10
Ethylbenzene	Non Detect	5	0.0347	0.0000	0.0000	1.58	5.32	10
Methyl Chloride	Non Detect	5	0.0347	0.0000	0.0000	4.24	9.36	50
Methylene Chloride	Non Detect	5	0.0347	0.0000	0.0000	1.97	4.39	20
Tetrachloroethylene	Non Detect	5	0.0347	0.0000	0.0000	1.08	2.76	10
1,1,1 -Trichloroethane	Non Detect	5	0.0347	0.0000	0.0000	1.03	2.66	10
1,1,2 -Trichloroethane	Non Detect	5	0.0347	0.0000	0.0000	1.03	2.66	10
Trichloroethylene	Non Detect	5	0.0347	0.0000	0.0000	1.03	2.66	10
Vinyl Chloride	Non Detect	5	0.0347	0.0000	0.0000	5.12	13.21	10
Benzene	Non Detect	5	0.0347	0.0000	0.0000	1.82	6.7	10
Toluene	Non Detect	5	0.0347	0.0000	0.0000	1.28	3.94	10
Lead	45.8	1	Report Only					2
Other Analytes	Result, mg/L	PQL, mg/L	gpm	Lbs/d	Lbs/d	Avg lbs/d	Max lbs/d	Permit MQL, mg/L
² BOD, 5-day	Non Detect	2	0.0347	0.0008	0.0008	2086	4,765	-
Solids, Total Suspended	Non Detect	5	0.0347	0.0021	0.0021	3,579	9,355	-
³ Oxygen Demand, Chem.	7.4	5.0	0.0347	0.0031	0.0031	12,420	28,934	-
³ Oil and Grease	Non Detect	2.5	0.0347	0.0000	0.0000	836	1,254	5
Carbon, Total Organic	Non Detect	2.0	0.0347	0.0008	0.0008	-	-	-
	Result			Average	Maximum	Limit	Limit	
	pH Unit			pH	pH	Min	Max	
² pH	7.59			7.59	7.59	6	9	

Notes:¹Permit limits are for total of Outfall 001 and Outfall 009 combined²The BOD and pH samples were analyzed outside of hold time³Preservatives were added by the laboratory for COD and O&G sample

The sample was not analyzed for Total Residual Chlorine, Acid Compounds, and Base Neutral Compounds.



NELAP CERTIFICATE NUMBER: 01955
DOD ELAP CERTIFICATE NUMBER: L14-243

ANALYTICAL RESULTS

PERFORMED BY

GCAL, LLC
7979 Innovation Park Dr.
Baton Rouge, LA 70820

Report Date 06/11/2015

GCAL Report 215060373



Deliver To ExxonMobil Chemical
PO Box 551
Baton Rouge, LA 70821
225-977-5285

Attn David Leber

Project BR Chemical Plant



Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

Common Abbreviations that may be Utilized in this Report

ND	Indicates the result was Not Detected at the specified reporting limit
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
DL	Detection Limit
DL	Diluted analysis – when appended to Client Sample ID
LOD	Limit of Detection
LOQ	Limit of Quantitation
RE	Re-analysis
N	Metals Matrix Spike or Matrix Spike Duplicate Recovery is outside control limits
00:00	Reported as a time equivalent to 12:00 AM

Reporting Flags that may be Utilized in this Report

J or I	Indicates the result is between the MDL and LOQ
U	Indicates the compound was analyzed for but not detected
B	Indicates the analyte was detected in the associated Method Blank
Q	Indicates a non-compliant QC Result (See Q Flag Application Report)
*	Indicates a non-compliant or not applicable QC recovery or RPD

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with NELAC, this report shall be reproduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with the NELAC standard and terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Estimated uncertainty of measurement is available upon request. This report is in compliance with the DOD QSM as specified in the contract if applicable.


Robyn Migues/Director Data Del

Authorized Signature
GCAL Report 215060373

Case Narrative

Client: ExxonMobil Chemical **Report:** 215060373

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the Report Sample Summary page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

CONVENTIONALS

The sample was received outside the 48-hour holding time for BOD.

MISCELLANEOUS

Sample 21506037301 (OUTFALL 009), container ID 21506037301-1 had to be preserved at the laboratory with H₂SO₄. This container was used to analyze HACH 8000.

Sample 21506037301 (OUTFALL 009), container ID 21506037301-3 had to be preserved at the laboratory with HNO₃. This container was used to analyze EPA 200.8 Rev. 5.4.

Sample 21506037301 (OUTFALL 009), container ID 21506037301-6 had to be preserved at the laboratory with HCL to pH less than 2. This container was used to analyze Sm 5310 B-2011.



Report#: 215060373
Project ID: BR Chemical Plant

Report Date: 06/11/2015

Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21506037301	OUTFALL 009	Water	05/30/2015 18:24	06/03/2015 15:35

Summary of Compounds Detected

OUTFALL 009	Collect Date	05/30/2015 18:24	GCAL ID	21506037301
	Receive Date	06/03/2015 15:35	Matrix	Water

EPA 200.8

CAS#	Parameter	Result	LOQ	Units
7439-92-1	Lead	45.8	1.00	ug/L

HACH 8000

CAS#	Parameter	Result	LOQ	Units
C-004	COD	7.4	5.0	mg/L

SM 4500-H+ B/EPA 9040C

CAS#	Parameter	Result	LOQ	Units
pH	pH	7.59	1.00	pH unit

Sample Results

OUTFALL 009

Collect Date 05/30/2015 18:24

GCAL ID 21506037301

Receive Date 06/03/2015 15:35

Matrix Water

EPA 8260B

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	06/04/2015 16:59	JCK	559930

CAS#	Parameter	Result	LOQ	Units
71-55-6	1,1,1-Trichloroethane	ND	5.00	ug/L
79-00-5	1,1,2-Trichloroethane	ND	5.00	ug/L
75-34-3	1,1-Dichloroethane	ND	5.00	ug/L
75-35-4	1,1-Dichloroethene	ND	5.00	ug/L
95-50-1	1,2-Dichlorobenzene	ND	5.00	ug/L
107-06-2	1,2-Dichloroethane	ND	5.00	ug/L
78-87-5	1,2-Dichloropropane	ND	5.00	ug/L
541-73-1	1,3-Dichlorobenzene	ND	5.00	ug/L
542-75-6	1,3-Dichloropropylene	ND	5.00	ug/L
106-46-7	1,4-Dichlorobenzene	ND	5.00	ug/L
107-13-1	Acrylonitrile	ND	20.0	ug/L
71-43-2	Benzene	ND	5.00	ug/L
56-23-5	Carbon tetrachloride	ND	5.00	ug/L
108-90-7	Chlorobenzene	ND	5.00	ug/L
75-00-3	Chloroethane	ND	5.00	ug/L
67-66-3	Chloroform	ND	5.00	ug/L
74-87-3	Chloromethane	ND	5.00	ug/L
100-41-4	Ethylbenzene	ND	5.00	ug/L
75-09-2	Methylene chloride	ND	5.00	ug/L
127-18-4	Tetrachloroethene	ND	5.00	ug/L
108-88-3	Toluene	ND	5.00	ug/L
156-60-5	trans-1,2-Dichloroethene	ND	5.00	ug/L
79-01-6	Trichloroethene	ND	5.00	ug/L
75-01-4	Vinyl chloride	ND	5.00	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	50	52.7	ug/L	105	78 - 130
1868-53-7	Dibromofluoromethane	50	48.5	ug/L	97	77 - 127
2037-26-5	Toluene d8	50	51.8	ug/L	104	76 - 134
17060-07-0	1,2-Dichloroethane-d4	50	49.2	ug/L	98	71 - 127

EPA 200.8

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
06/04/2015 15:10	559973	EPA 200.8	1	06/05/2015 10:09	JBW2	560014

CAS#	Parameter	Result	LOQ	Units
7439-92-1	Lead	45.8	1.00	ug/L

Sample Results

OUTFALL 009	Collect Date	05/30/2015 18:24	GCAL ID	21506037301
	Receive Date	06/03/2015 15:35	Matrix	Water

HACH 8000

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	06/05/2015 07:43	SLE	559932
CAS#	Parameter			Result	LOQ	Units
C-004	COD			7.4	5.0	mg/L

SM 2540 D-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	06/04/2015 12:50	WRW	559964
CAS#	Parameter			Result	LOQ	Units
C-009	Total Suspended Solids			ND	5	mg/L

SM 4500-H+ B/EPA 9040C

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	06/04/2015 08:30	SMR	559921
CAS#	Parameter			Result	LOQ	Units
pH	pH			7.59	1.00	pH unit

SM 5210 B-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
06/03/2015 17:00	559864	BOD PREP	1	06/03/2015 17:00	RYC	560174
CAS#	Parameter			Result	LOQ	Units
C-002	BOD			ND	2	mg/L

SM 5310 B-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	06/05/2015 10:18	KLC2	559944
CAS#	Parameter			Result	LOQ	Units
C-012	Total Organic Carbon			ND	2.0	mg/L

GC/MS Volatiles QC Summary

Analytical Batch 559930		Client ID GCAL ID Sample Type Prep Date Analysis Date Matrix	MB559930 1451223 MB NA 06/04/2015 09:44 Water	LCS559930 1451224 LCS NA 06/04/2015 07:57 Water	LCSD559930 1451225 LCSD NA 06/04/2015 08:18 Water							
EPA 8260B		Units Result	ug/L LOQ	Spike Added	Result	%R	Control Limits %R	Spike Added	Result	%R	RPD	RPD Limit
1,1,1-Trichloroethane	71-55-6	ND	5.00	50.0	50.2	100	76 - 126	50.0	49.6	99	1	30
1,1,2-Trichloroethane	79-00-5	ND	5.00	50.0	44.1	88	72 - 121	50.0	46.2	92	5	30
1,1-Dichloroethane	75-34-3	ND	5.00	50.0	45.4	91	74 - 127	50.0	46.8	94	3	30
1,1-Dichloroethene	75-35-4	ND	5.00	50.0	44.8	90	69 - 129	50.0	45.7	91	2	20
1,2-Dichlorobenzene	95-50-1	ND	5.00	50.0	45.3	91	71 - 126	50.0	46.4	93	2	30
1,2-Dichloroethane	107-06-2	ND	5.00	50.0	49.9	100	71 - 129	50.0	50.7	101	2	30
1,2-Dichloropropane	78-87-5	ND	5.00	50.0	47.5	95	72 - 128	50.0	48.6	97	2	30
1,3-Dichlorobenzene	541-73-1	ND	5.00	50.0	45.9	92	74 - 126	50.0	46.1	92	0	30
1,3-Dichloropropylene	542-75-6	ND	5.00	100	96.7	97	72 - 131	100	96.0	96	1	30
1,4-Dichlorobenzene	106-46-7	ND	5.00	50.0	45.7	91	72 - 122	50.0	45.0	90	2	30
Acrylonitrile	107-13-1	ND	20.0	250	276	110	64 - 137	250	294	118	6	30
Benzene	71-43-2	ND	5.00	50.0	48.7	97	70 - 129	50.0	48.7	97	0	20
Carbon tetrachloride	56-23-5	ND	5.00	50.0	51.4	103	76 - 128	50.0	51.0	102	1	30
Chlorobenzene	108-90-7	ND	5.00	50.0	47.1	94	74 - 123	50.0	47.1	94	0	20
Chloroethane	75-00-3	ND	5.00	50.0	44.5	89	62 - 141	50.0	46.4	93	4	30
Chloroform	67-66-3	ND	5.00	50.0	46.7	93	75 - 122	50.0	47.3	95	1	30
Chloromethane	74-87-3	ND	5.00	50.0	55.3	111	59 - 132	50.0	58.1	116	5	30
Ethylbenzene	100-41-4	ND	5.00	50.0	49.7	99	74 - 126	50.0	49.2	98	1	30
Methylene chloride	75-09-2	ND	5.00	50.0	38.8	78	68 - 132	50.0	39.0	78	1	30
Tetrachloroethene	127-18-4	ND	5.00	50.0	51.7	103	68 - 128	50.0	51.8	104	0	30
Toluene	108-88-3	ND	5.00	50.0	46.9	94	72 - 120	50.0	47.3	95	1	20
trans-1,2-Dichloroethene	156-60-5	ND	5.00	50.0	42.2	84	69 - 132	50.0	41.7	83	1	30
Trichloroethene	79-01-6	ND	5.00	50.0	52.2	104	76 - 129	50.0	50.8	102	3	20
Vinyl chloride	75-01-4	ND	5.00	50.0	45.8	92	68 - 132	50.0	47.9	96	4	30
Surrogate												
1,2-Dichloroethane-d4	17060-07-0	51.7	103	50	50	100	71 - 127	50	49.7	99	1	NA
4-Bromofluorobenzene	460-00-4	53.1	106	50	57.8	116	78 - 130	50	56.9	114	2	NA
Dibromofluoromethane	1868-53-7	49.2	98	50	49.6	99	77 - 127	50	49.6	99	0	NA
Toluene d8	2037-26-5	51.2	102	50	48.7	97	76 - 134	50	49.7	99	2	NA

Inorganics QC Summary

Analytical Batch 560014		Client ID	MB559973	LCS559973			
Prep Batch 559973		GCAL ID	1451537	1451538			
Prep Method EPA 200.8		Sample Type	MB	LCS			
		Prep Date	06/04/2015 15:10	06/04/2015 15:10			
		Analysis Date	06/05/2015 10:12	06/05/2015 10:16			
		Matrix	Water	Water			
EPA 200.8			Units Result	ug/L LOQ	Spike Added	Result	%R
Lead	7439-92-1		ND	1.00	50.0	51.9	104
							Control Limits%R
							85 - 115

Analytical Batch 560014		Client ID	O/F 001 2015-120	1451397MS		1451397MSD			
Prep Batch 559973		GCAL ID	21506042302	1451539		1451540			
Prep Method EPA 200.8		Sample Type	SAMPLE	MS		MSD			
		Prep Date	06/04/2015 15:10	06/04/2015 15:10		06/04/2015 15:10			
		Analysis Date	06/05/2015 10:19	06/05/2015 10:22		06/05/2015 10:26			
		Matrix	Water	Water		Water			
EPA 200.8			Units Result	ug/L LOQ	Spike Added	Result	%R	Control Limits%R	Spike Added
Lead	7439-92-1		0.69	1.00	50.0	51.6	102	70 - 130	50.0
									Result
									52.3
									%R
									103
									RPD
									1
									RPD Limit
									20

General Chemistry QC Summary

Analytical Batch 560174		Client ID	MB559864	LCS559864	
Prep Batch 559864		GCAL ID	1450978	1450979	
Prep Method BOD PREP		Sample Type	MB	LCS	
		Prep Date	06/03/2015 14:30	06/03/2015 14:30	
		Analysis Date	06/03/2015 14:30	06/03/2015 14:30	
		Matrix	Water	Water	
SM 5210 B-2011		Units	mg/L	Spike	Control
		Result	LOQ	Added	Limits%R
BOD	C-002	ND	2	198	84.5 - 115.5

Analytical Batch 560174		Client ID	001 OUTFALL COMPOSITE	1450938DUP	
Prep Batch 559864		GCAL ID	21506032201	1450980	
Prep Method BOD PREP		Sample Type	SAMPLE	DUP	
		Prep Date	06/03/2015 14:30	06/03/2015 14:30	
		Analysis Date	06/03/2015 14:30	06/03/2015 14:30	
		Matrix	Water	Water	
SM 5210 B-2011		Units	mg/L	Result	RPD
		Result	LOQ		RPD Limit
BOD	C-002	8	2	8	30

Analytical Batch 559932		Client ID	MB559932	LCS559932	
		GCAL ID	1451235	1451236	
		Sample Type	MB	LCS	
		Prep Date	NA	NA	
		Analysis Date	06/05/2015 07:43	06/05/2015 07:40	
		Matrix	Water	Water	
HACH 8000		Units	mg/L	Spike	Control
		Result	LOQ	Added	Limits%R
COD	C-004	ND	5.0	75.0	80 - 120

Analytical Batch 559932		Client ID	INFLUENT	1450884DUP	1450884MS
		GCAL ID	21506031001	1451238	1451237
		Sample Type	SAMPLE	DUP	MS
		Prep Date	NA	NA	NA
		Analysis Date	06/05/2015 07:43	06/05/2015 07:44	06/05/2015 07:44
		Matrix	Water	Water	Water
HACH 8000		Units	mg/L	Result	RPD
		Result	LOQ		RPD Limit
COD	C-004	27.1	5.0	28.9	20
				6	75.0
				100	98
					80 - 120

Analytical Batch 559921		Client ID	FB	1451130DUP	
		GCAL ID	21506037002	1451215	
		Sample Type	SAMPLE	DUP	
		Prep Date	NA	NA	
		Analysis Date	06/04/2015 08:30	06/04/2015 08:30	
		Matrix	Water	Water	
SM 4500-H+ B/EPA 9040C		Units	pH unit	Result	RPD
		Result	LOQ		RPD Limit
pH	pH	6.40	1.00	6.39	0
					6

Analytical Batch 559964		Client ID	MB559964	LCS559964	
		GCAL ID	1451426	1451427	
		Sample Type	MB	LCS	
		Prep Date	NA	NA	
		Analysis Date	06/04/2015 12:50	06/04/2015 12:50	
		Matrix	Water	Water	
SM 2540 D-2011		Units	mg/L	Spike	Control
		Result	LOQ	Added	Limits%R
Total Suspended Solids	C-009	ND	5	50	80 - 120

General Chemistry QC Summary

Analytical Batch 559964		Client ID GCAL ID Sample Type Prep Date Analysis Date Matrix	UNOX Reactors (N)(51) 21506041101 SAMPLE NA 06/04/2015 12:50 Water	1451361DUP 1451428 DUP NA 06/04/2015 12:50 Water			
SM 2540 D-2011			Units Result	mg/L LOQ	Result	RPD	RPD Limit
Total Suspended Solids		C-009	5000	5	4950	1	5.4

Analytical Batch 559964	Client ID	U31CPSG	1451380DUP			
	GCAL ID	21506041702	1451429			
	Sample Type	SAMPLE	DUP			
	Prep Date	NA	NA			
	Analysis Date	06/04/2015 12:50	06/04/2015 12:50			
	Matrix	Water	Water			
SM 2540 D-2011		Units Result	mg/L LOQ	Result	RPD	RPD Limit
Total Suspended Solids	C-009	440	5	427	3	5.4

Analytical Batch 559944		Client ID GCAL ID Sample Type Prep Date Analysis Date Matrix	MB559944 1451289 MB NA 06/04/2015 15:04 Water	LCS559944 1451290 LCS NA 06/04/2015 14:26 Water				
SM 5310 B-2011			Units Result	mg/L LOQ	Spike Added	Result	%R	Control Limits %R
Total Organic Carbon		C-012	ND	2.0	50.0	48.4	97	80 - 120

Analytical Batch 559944		Client ID	U31PP3DC		1451386MS				1451386MSD				
		GCAL ID	21506042002		1451445				1451446				
		Sample Type	SAMPLE		MS				MSD				
		Prep Date	NA		NA				NA				
		Analysis Date	06/04/2015 15:23		06/04/2015 15:47				06/04/2015 16:06				
		Matrix	Water		Water				Water				
SM 5310 B-2011			Units Result	mg/L LOQ	Spike Added	Result	%R	Control Limits %R	Spike Added	Result	%R	RPD	RPD Limit
Total Organic Carbon	C-012		11.5	2.0	50.0	59.8	97	75 - 125	50.0	57.1	91	5	25

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Post Office Box 241 • Baton Rouge, Louisiana • 70821

☐ : Mandatory ☐ : Optional ☐ : Supplier List

Due Date: 06/09/15

Atten: Allison Naquin

Fax Results to:Remarks:

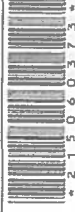
HN	HNO ₃ to pH 2	U	Unreserved
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10

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SAMPLE RECEIVING CHECKLIST



★ 215060373 ★

SAMPLE DELIVERY GROUP 215060373		CHECKLIST		
		YES	NO	NA
Client	Transport Method			
0176 - ExxonMobil Chemical	COURIER	☒	☐	☐
Profile Number	Received By			
71477	McCune, Dodie N	☐	☒	☐
Line Item(s)	Receive Date(s)			
24 - Outfall 004	06/03/15	☒	☐	☐
Were all samples received using proper thermal preservation?		☒	☐	☐
When used, were all custody seals intact?		☐	☐	☒
Were all samples received in proper containers?		☐	☒	☐
Were all samples received using proper chemical preservation?		☐	☒	☐
Was preservative added to any container at the lab?		☒	☐	☐
Were all containers received in good condition?		☒	☐	☐
Were all VOA vials received with no head space?		☐	☐	☒
Do all sample labels match the Chain of Custody?		☒	☐	☐
Did the Chain of Custody list the sampling technician?		☒	☐	☐
Was the COC maintained i.e. all signatures, dates and time of receipt included?		☒	☐	☐
COOLERS		LAB PRESERVATIONS		
Airbill	Thermometer ID: E24	HACH 8000 \ H2SO4		
	Temp(°C)	EPA 200.8 \ HNO3		
	5.0			
DISCREPANCIES				
None				
NOTES				

Revision 1.4

Page 1 of 1

Appendix 8 – November 13, 2015 Letter and Monitoring Report



November 13, 2015

Certified Mail 7014 3490 0000 4425 3075

Louisiana Department of Environmental Quality
Office of Environmental Compliance
Permit Compliance Unit
P. O. Box 4312
Baton Rouge, Louisiana 70821-4312

Monitoring Reports
LPDES Permit No. LA0005401
Agency Interest No. 286

Enclosed are the Discharge Monitoring Reports (DMRs) for the monthly monitoring period of October 2015, as required under the subject permit for the ExxonMobil Baton Rouge Chemical Plant (BRCP).

On October 25-26, 2015, the Baton Rouge area experienced an historic rainfall event, and as a result of this event, BRCP incurred an emergency overflow at Outfall 009. The emergency overflow occurred from October 25th at 19:34 until October 26th at 02:42. In accordance with permit provisions, BRCP completed the following actions:

- 1 On October 25, 2015 at 19:32 BRCP submitted an on-line incident report form providing information regarding the use of outfall 009 and invoking the upset provisions of the permit per LAC 33:IX.2701 L.6.b.ii and permit Part III.D.6.e(2). This was followed by a verbal notification via voice message to LDEQ SPOC at 19:53.
- 2 In a hand-delivered letter dated October 29, 2015 and stamped received October 30, 2015, and pursuant to permit Part III.B.5.c, BRCP notified LDEQ of intentions to claim the upset provision affirmative defense for this rainfall event and the potential for exceedances of permit daily maximum or monthly average limitations due to the event.
- 3 On November 5, 2015 at 16:07, within 24 hours of confirmation of laboratory results and pursuant to permit Part III.D.6.e, BRCP made verbal notification to LDEQ representative (SPOCC) of exceedances of daily maximum permit limitations of pollutants listed in the permit Part II.E.
- 4 In a hand-delivered letter dated November 10, 2015, within five days of the verbal notification and pursuant to permit Part III.D.6.e, BRCP provided a written follow-up letter to LDEQ detailing the actual exceedances of daily maximum permit limitations of pollutants listed in the permit Part II.E.

During the October 25, 2015 overflow event, BRCP collected grab samples concurrently at Outfall 009 and Outfall 001 during the overflow. The grab samples were used to determine mass loadings of Outfall 001 & Outfall 009 for October 25, 2015, and the total results were compiled for Outfall 001. With the exception of TSS and BOD, the same grab sample results were also

used to determine mass loadings for October 26, 2015. On October 26, 2015, routine 24-hour composite samples were collected for Outfall 001 TSS and BOD. The mass loadings from these samples were added to Outfall 009 mass loadings to determine the total TSS and BOD for October 26, 2015.

The analytical laboratory report for the samples collected on October 25, 2015 included several comments in the case narrative. For the BOD analyses for Outfall 001 & Outfall 009, the samples were received outside of holding time but were analyzed at BRCP's request. All four dilutions for BOD on Outfall 009 sample were depleted of oxygen. The reported values of >64 for Outfall 009 and 111 for Outfall 001 were the best information available regarding the nature of the emergency discharge; therefore, these results were used to estimate daily mass loading and evaluate exceedances of daily and monthly permit limits. For several other analyses, the samples had to be diluted, resulting in higher reporting limits. For these reasons and others noted in the laboratory case narrative, a copy of the laboratory report is included with this DMR submission.

As a result of the emergency overflow, the following daily maximum permit limits were exceeded.

Analyte	Daily Max Permit Limit Lb.	10/25/15 Daily Max. Actual Lb.	10/26/15 Daily Max. Actual Lb.
BOD	4765	>9481	(below limit)
Oil and Grease	1254	2171	1324
Toluene	3.94	6.92	4.22
Phenol	1.28	1.3	(below limit)
Hexachlorobenzene	0.00061	0.3	0.19
Naphthalene	2.91	123.59	75.38

BRCP has included data for Outfall 001 and Outfall 009 DMR parameters that require a monthly reporting frequency in this monthly DMR submittal. Other parameters that require reporting on a quarterly, semiannual or annual basis will be reported in DMRs at the appropriate time.

Should you have any questions, you may contact Brady Fontenot at (225) 977-7226.

Sincerely,


Stephen J. Hamilton,
BRCP Process Manager

PERMITTEE NAME/ADDRESS
NAME: EXXONMOBIL CHEMICAL CO
ADDRESS: ENVIRONMENTAL MANAGER
PO BOX 241
BATON ROUGE LA 70821
FACILITY: EXXON CHEMICAL CO USA
LOCATION: BATON ROUGE LA 70821
ATTN: R. W. Johnston, Site Manager

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

LA0005401	001 A
PERMIT NUMBER	DISCHARGE NUMBER

MAJOR
(SUBR KH)
P - FINAL
PROCESS WW & PROCESS STWTR
EFFLUENT

MONITORING PERIOD					
YEAR	MO	DAY	YEAR	MO	DAY
15	10	01	15	10	31

NO DISCHARGE

PARAMETER (32-33)		(3 Card Only) QUANTITY OR LOADING			(4 Card Only) QUALITY OR CONCENTRATION				NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)	
		(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS				
BOD, 5-DAY 20 DEG. C 00410 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	1893	9481	(26)	*****	*****	*****	****	1	14/31	24HC	
	PERMIT REQUIREMENT	2086	4765	LBS/DY	*****	*****	*****	****		03/07	24HC	
PH	SAMPLE MEASUREMENT	*****	*****	****	6.2	*****	7.7	(12)	0	CONT	RECORD	
00490 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*****	****	REPORT MINIMUM	*****	REPORT MAXIMUM	SU		CONT	RECORD	
SOLIDS, TOTAL SUSPENDED 00530 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	2963	9311	(26)	*****	*****	*****	****	0	14/31	24HC	
	PERMIT REQUIREMENT	3579	9355	LBS/DY	*****	*****	*****	****		03/07	24HC	
OXYGEN DEMAND, CHEM. (HIGH LEVEL) (COD) 80108 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	7658	12688	(26)	*****	*****	*****	****		5/31	24HC	
	PERMIT REQUIREMENT	12420	28934	LBS/DY	*****	*****	*****	****		1/07	24HC	
OIL AND GREASE 03582 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	583	2171	(26)	*****	*****	*****	****	2	01/07	GRAB	
	PERMIT REQUIREMENT	836	1254	LBS/DY	*****	*****	*****	****		01/07	GRAB	
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	6.858	8.386	(03)	*****	*****	*****	****		CONT	RECORD	
	PERMIT REQUIREMENT	REPORT	REPORT	MGD	*****	*****	*****	****		CONT	RECORD	
	SAMPLE MEASUREMENT											
	PERMIT REQUIREMENT											
NAME / TITLE PRINCIPAL EXECUTIVE OFFICER										TELEPHONE		DATE
Stephen J. Hamilton										225 977 2464		2015/11/13
Process Manager										ARFA CODE		NUMBER
TYPED OR PRINTED										OFFICER OR AUTHORIZED AGENT		YEAR MO DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS
On October 25-26, 2015, the Baton Rouge area experienced an historic rainfall event, and as a result of this event, BRCP incurred an emergency overflow at Outfall 009. The emergency overflow occurred from October 25th at 1:34 until October 26th at 02:42. Please reference the cover letter for more details regarding the notifications that were made including invocation of the upset provisions, and the sample data associated with this event.

7

PERMITTEE NAME/ADDRESS

NAME: EXXONMOBIL CHEMICAL CO
ADDRESS: ENVIRONMENTAL MANAGER
PO BOX 241
BATON ROUGE LA 70821
FACILITY: EXXON CHEMICAL CO USA
LOCATION: BATON ROUGE LA 70821
ATTN: R. W. Johnston, Site Manager

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

(2-16)			(17-19)				
LA0005401			001 A				
PERMIT NUMBER			DISCHARGE NUMBER				
MONITORING PERIOD							
YEAR	MO	DAY	TO	YEAR	MO	DAY	
15	10	01		15	10	31	
(20-21)		(22-23)	(24-25)	(26-27)		(28-29)	(30-31)

MAJOR
(SUBR KH)
F - FINAL
PROCESS WW & PROCESS STMTWR
EFFLUENT

PARAMETER (32-37)	X	QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		(3 Card Only)			(4 Card Only)						
		(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS			
PH RANGE EXCURSIONS, >60 MINUTES 82581 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	0	(93)	*****	*****	*****	****	0	CONT	RECORD
	PERMIT REQUIREMENT	*****	0 MO TOTAL	OCCUR/ MONTH	*****	*****	*****	****		CONT	RECORD
PH RANGE EXCURSIONS, MO TOTAL ACCUMULATION 82582 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	0	(14)	*****	*****	*****	****	0	CONT	RECORD
	PERMIT REQUIREMENT	*****	446 MO TOTAL	MINUTES	*****	*****	*****	****		CONT	RECORD
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
NAME / TITLE PRINCIPAL EXECUTIVE OFFICER											
Stephen J. Hamilton											
Process Manager											
TYPED OR PRINTED											
COMMENT AND EXPLANATION OF ANY VIOLATIONS											
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT											
TELEPHONE											
225 977-2464											
DATE											
2015/11/13											
YEAR MO DAY											

PERMITTEE NAME/ADDRESS
NAME: EXXONMOBIL CHEMICAL CO
ADDRESS: ENVIRONMENTAL MANAGER
PO BOX 241
BATON ROUGE LA 70821
FACILITY: EXXON CHEMICAL CO USA
LOCATION: BATON ROUGE LA 70821
ATTN: R. W. Johnston, Site Manager

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

(2-16) LA0005401	(17-19) 009 A
PERMIT NUMBER	DISCHARGE NUMBER

MAJOR
(SUBR KH)
F - FINAL
PROCESS WW & PROCESS STMTWR
EFFLUENT

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY
15	10	01		15	10	31
(20-21)		(22-23)	(24-25)	(26-27)	(28-29)	(30-31)

NO DISCHARGE ☐

PARAMETER (32-37)	SAMPLE MEASUREMENT PERMIT REQUIREMENT	(3 Card Only) QUANTITY OR LOADING			(4 Card Only) QUALITY OR CONCENTRATION				NO. EX (62-63)	FREQUENCY OF ANALYSIS (64-68)	SAMPLE TYPE (69-70)
		(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS			
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	2.930	3.640	(03)	*****	*****	*****	****	0	02/31	ESTIMA
	PERMIT REQUIREMENT	REPORT MO AVG	REPORT DAILY MX	MGD	*****	*****	*****	****		01/01	ESTIMA
PH 00400 1 0 0 EFFLUENT GROSS VALUE	SAMPLE MEASUREMENT	*****	*****	****	8.7	*****	8.7	(12)	0	01/01	GRAB
	PERMIT REQUIREMENT	*****	*****	****	6.0 INST MIN	*****	9.0 INST MAX	SU		01/01	GRAB
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME / TITLE PRINCIPAL EXECUTIVE OFFICER
Stephen J. Hamilton
Process Manager


SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE
225 977-2464
ARCA CODE NUMBER

DATE
2015/11/13
YEAR MO DAY

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)
On October 25-26, 2015, the Baton Rouge area experienced an historic rainfall event, and as a result of this event, BRCP incurred an emergency overflow at Outfall 009. The emergency overflow occurred from October 25th at 19:34 until October 26th at 02:42. Please reference the cover letter for more details regarding the notifications that were made, including invocation of the upset provisions, and the sample data associated with this event.

OUTFALL 009 - Grab Samples When Overflowing																	
	Flow	pH Min	pH Max	TSS		BOD		COD		Oil & Grease		Benzene		Toluene		Total Lead	Total Residual Chlorine (TRC)
	MGD	(SU)	(SU)	(ppm)	(lbs/d)	(ppm)	(lbs/d)	(ppm)	(lbs/d)	(ppm)	(lbs/d)	(ppm)	(lbs/d)	(ppm)	(lbs/d)	(ug/L)	(ug/L)
1-Oct																	
2-Oct																	
3-Oct																	
4-Oct																	
5-Oct																	
6-Oct																	
7-Oct																	
8-Oct																	
9-Oct																	
10-Oct																	
11-Oct																	
12-Oct																	
13-Oct																	
14-Oct																	
15-Oct																	
16-Oct																	
17-Oct																	
18-Oct																	
19-Oct																	
20-Oct																	
21-Oct																	
22-Oct																	
23-Oct																	
24-Oct																	
25-Oct	3.64	8.7	8.7	45	1366	>64	>1943	192	5830	71.5	2171	0.0118	0.36	0.228	6.92	14.6	200
26-Oct	2.22	8.7	8.7	45	833	>64	>1185	192	3556	71.5	1324	0.0118	0.22	0.228	4.22	14.6	200
27-Oct																	
28-Oct																	
29-Oct																	
30-Oct																	
31-Oct																	
Average	2.950			45	1100	>64	>1564	192	4693	72	1748	0.0118	0.29	0.228	5.57	15	
Minimum		8.7															
Maximum	3.640		8.7	45	1366	>64	>1943	192	5830	72	2171	0.0118	0.36	0.228	6.92	15	
		6.0			3579		2086		12420		836		1.82		1.28		
			9.0		9355		4765		28934		1254		6.70		3.94		

Outfall 001 + Outfall 009										Quarterly		009 + 001 Flow MGD
	Flow	TSS	BOD	COD	Oil & Grease	Benzene	Toluene					
	(gpm)	(lbs/d)	(lbs/d)	(lbs/d)	(lbs/d)	(lbs/d)	(lbs/d)					
1-Oct	4,025	2995	806									5.796
2-Oct	4,800											6.912
3-Oct	5,084											7.320
4-Oct	4,962											7.146
5-Oct	4,419	1273	689			0.000	0.000					6.364
6-Oct	4,315											6.214
7-Oct	4,334	2340	1092	3360	0							6.241
8-Oct	4,506											6.489
9-Oct	4,160	2296	1598									5.991
10-Oct	4,382											6.310
11-Oct	4,673											6.730
12-Oct	4,728	3120	1078									6.808
13-Oct	4,549											6.550
14-Oct	4,297	2011	877	2929	0							6.188
15-Oct	4,605											6.632
16-Oct	4,015	1253	723									5.782
17-Oct	3,581											5.156
18-Oct	4,796											6.907
19-Oct	5,254	1324	504									7.566
20-Oct	4,959											7.140
21-Oct	4,852	1980	1514	7220	0							6.987
22-Oct	2,333											3.360
23-Oct	4,576	1977	2142									6.589
24-Oct	5,404											7.782
25-Oct	8,186	9311	9481	12688	2171	0.36	6.92					11.788
26-Oct	7,349	4248	2440	10595	1324	0.22	4.22					10.583
27-Oct	5,808											8.363
28-Oct	5,824	3914	1468	9155	0							8.386
29-Oct	5,748											8.277
30-Oct	5,617	3438	2090									8.089
31-Oct	5,556											8.001
Average	7,047	2,963	1,893	7,658	583	0.19	3.72					7.047
Maximum	11,788	9,311	9,481	12,688	2,171	0.36	6.92					11.788
Permit Limits: Avg		3,579	2,086	12,420	836	1.82	1.28					
Max		9,355	4,765	28,934	1,254	6.70	3.94					

Momin's flow calculations
Time - mins

Water overflowed Day 1 10/25 (Mgal) 3.6440751
Water overflowed Day 2 10/26 (Mgal) 2.2193239

Water overflow rate (GPM) 13,699.53
Water overflow rate (GPM) 13,699.53

ANALYTICAL RESULTS

PERFORMED BY

GCAL, LLC
7979 Innovation Park Dr.
Baton Rouge, LA 70820

Report Date 11/11/2015

GCAL Report 215102816



Project BR Chemical Plant

Deliver To

Momin Birjis
ExxonMobil Chemical
PO Box 551
Baton Rouge, LA 70821

Additional Recipients

NONE



Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

Common Abbreviations that may be Utilized in this Report

ND	Indicates the result was Not Detected at the specified reporting limit
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
DL	Detection Limit
DL	Diluted analysis – when appended to Client Sample ID
LOD	Limit of Detection
LOQ	Limit of Quantitation
RE	Re-analysis
00:01	Reported as a time equivalent to 12:00 AM

Reporting Flags that may be Utilized in this Report

J or I	Indicates the result is between the MDL and LOQ
J	DOD flag on analyte in the parent sample for MS/MSD outside acceptance criteria
U	Indicates the compound was analyzed for but not detected
B or V	Indicates the analyte was detected in the associated Method Blank
Q	Indicates a non-compliant QC Result (See Q Flag Application Report)
*	Indicates a non-compliant or not applicable QC recovery or RPD – see narrative
E	The result is estimated because it exceeded the instrument calibration range
E	Metals - % difference for the serial dilution is > 10%

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with NELAC, this report shall be reproduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with the NELAC Institute standard and terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Estimated uncertainty of measurement is available upon request. This report is in compliance with the DOD QSM as specified in the contract if applicable.

Authorized Signature
GCAL Report 215102816

Certifications

10/02/2015

Certification	Certification Number
DOD ELAP	L14-243
Alabama	01955
Arizona	AZ0718
Arkansas	12-060-0
Colorado	01955
Delaware	01955
Florida	E87854
Georgia	01955
Hawaii	01955
Idaho	01955
Illinois	200048
Indiana	01955
Kansas	E-10354
Kentucky	95
Louisiana	01955
Maryland	01955
Massachusetts	01955
Michigan	01955
Mississippi	01955
Missouri	01955
Montana	N/A
Nebraska	01955
New Mexico	01955
North Carolina	618
North Dakota	R-195
Oklahoma	9403
South Carolina	73006001
South Dakota	01955
Tennessee	01955
Texas	T104704178
Vermont	01955
Virginia	460215
USDA Soil Permit	P330-10-00117

Case Narrative

Client: ExxonMobil Chemical **Report:** 215102816

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the Report Sample Summary page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

VOLATILES MASS SPECTROMETRY

In the EPA 624 analysis, sample 21510281601 (SEPARATOR OUTFALL 009) had to be diluted due to the presence of non-target background. This dilution is reflected in the elevated reporting limits.

SEMI-VOLATILES MASS SPECTROMETRY

In the EPA 625 analysis, sample 21510281601 (SEPARATOR OUTFALL 009) had to be diluted to bracket the concentration of target compounds within the calibration range of the instrument and to eliminate interference from non-target background. This is reflected in elevated reporting limits. The recoveries for the surrogates are not applicable for those analyses at a 10 or higher dilution.

In the EPA 625 analysis, sample 21510281602 (UNOX EFFLUENT OUTFALL 001) had to be diluted to eliminate interference from non-target background. This is reflected in elevated detection limits.

METALS

In the EPA 200.8 analysis for prep batch 571482, the MS/MSD recoveries and RPD are not applicable for Sodium and Vanadium because the sample concentration is greater than four times the spike concentration. The MS and/or MSD recovery is outside the control limits for Aluminum, Barium, Calcium, Manganese, Strontium, and Zirconium. The LCS recovery is within the control limits. This indicates the analysis is in control and the sample is affected by matrix interference.

In the EPA 200.8 analysis for prep batch 571171, the MS/MSD recoveries and RPD are not applicable for Sodium because the sample concentration is greater than four times the spike concentration.

In the EPA 200.8 analysis, samples 21510281601 (SEPARATOR OUTFALL 009) and 21510281602 (UNOX EFFLUENT OUTFALL 001) had to be diluted in order to bracket the concentration within the calibration range of the instrument.

CONVENTIONALS

In the BOD analysis, samples 21510281601 (SEPARATOR OUTFALL 009) and 21510281602 (UNOX EFFLUENT OUTFALL 001) were received outside of holding time. The client was notified and authorized the lab to proceed with the analysis.

In the BOD analysis for sample 21510281601 (SEPARATOR OUTFALL 009), four dilutions were set up, and all were depleted of Oxygen. The corresponding greater than result is calculated using a final Dissolved Oxygen of 1.0 on the dilution using the least volume of sample.

In the HACH 8000 analysis, samples 21510281601 (SEPARATOR OUTFALL 009) and 21510281602 (UNOX EFFLUENT OUTFALL 001) had to be diluted in order to bracket the concentration within the calibration range of the instrument.

Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21510281601	SEPARATOR OUTFALL 009	Water	10/25/2015 19:50	10/28/2015 11:50
21510281602	UNOX EFFLUENT OUTFALL 001	Water	10/25/2015 19:50	10/28/2015 11:50

Summary of Compounds Detected

SEPARATOR OUTFALL 009

Collect Date 10/25/2015 19:50
Receive Date 10/28/2015 11:50

GCAL ID 21510281601
Matrix Water

EPA 624

CAS#	Parameter	Result	LOQ	Units
71-43-2	Benzene	11.8	5.00	ug/L
100-41-4	Ethylbenzene	146	5.00	ug/L
108-88-3	Toluene	228	5.00	ug/L

EPA 625

CAS#	Parameter	Result	LOQ	Units
83-32-9	Acenaphthene	36.8	10	ug/L
208-96-8	Acenaphthylene	40.0	10	ug/L
86-73-7	Fluorene	17.1	10	ug/L
91-20-3	Naphthalene	4070	1000	ug/L
85-01-8	Phenanthrene	31.9	10	ug/L
108-95-2	Phenol	42.8	10	ug/L

EPA 200.8

CAS#	Parameter	Result	LOQ	Units
7429-90-5	Aluminum	4000	25.0	ug/L
7440-38-2	Arsenic	1.13	1.00	ug/L
7440-39-3	Barium	38.8	1.00	ug/L
7440-70-2	Calcium	10100	500	ug/L
7440-47-3	Chromium	3.55	1.00	ug/L
7440-48-4	Cobalt	16.7	1.00	ug/L
7440-50-8	Copper	13.5	1.00	ug/L
7439-89-6	Iron	729	100	ug/L
7439-92-1	Lead	14.6	1.00	ug/L
7439-95-4	Magnesium	1140	100	ug/L
7439-96-5	Manganese	32.7	5.00	ug/L
7439-98-7	Molybdenum	2.02	1.00	ug/L
7440-02-0	Nickel	14.4	2.00	ug/L
7440-09-7	Potassium	602	100	ug/L
7440-23-5	Sodium	59800	1000	ug/L
7440-24-6	Strontium	82.4	1.00	ug/L
7440-32-6	Titanium	13.1	1.00	ug/L
7440-62-2	Vanadium	483	10.0	ug/L
7440-66-6	Zinc	444	20.0	ug/L

Summary of Compounds Detected

SEPARATOR OUTFALL 009

Collect Date 10/25/2015 19:50
Receive Date 10/28/2015 11:50

GCAL ID 21510281601
Matrix Water

EPA 1664A

CAS#	Parameter	Result	LOQ	Units
C-007	Oil and Grease	71.5	2.0	mg/L

HACH 8000

CAS#	Parameter	Result	LOQ	Units
C-004	COD	192	10.0	mg/L

SM 2540 D-2011

CAS#	Parameter	Result	LOQ	Units
C-009	Total Suspended Solids	45	5	mg/L

UNOX EFFLUENT OUTFALL 001

Collect Date 10/25/2015 19:50
Receive Date 10/28/2015 11:50

GCAL ID 21510281602
Matrix Water

EPA 625

CAS#	Parameter	Result	LOQ	Units
105-67-9	2,4-Dimethylphenol	22.2	10	ug/L

EPA 200.8

CAS#	Parameter	Result	LOQ	Units
7429-90-5	Aluminum	2230	25.0	ug/L
7440-39-3	Barium	23.9	1.00	ug/L
7440-70-2	Calcium	5530	500	ug/L
7440-47-3	Chromium	1.91	1.00	ug/L
7440-48-4	Cobalt	9.01	1.00	ug/L
7440-50-8	Copper	8.19	1.00	ug/L
7439-89-6	Iron	426	100	ug/L
7439-92-1	Lead	9.96	1.00	ug/L
7439-95-4	Magnesium	637	100	ug/L
7439-96-5	Manganese	20.5	5.00	ug/L
7440-02-0	Nickel	8.22	2.00	ug/L
7440-09-7	Potassium	298	100	ug/L
7440-23-5	Sodium	29700	1000	ug/L
7440-24-6	Strontium	43.0	1.00	ug/L
7440-32-6	Titanium	6.69	1.00	ug/L

Summary of Compounds Detected

**UNOX EFFLUENT
OUTFALL 001****Collect Date** 10/25/2015 19:50**GCAL ID** 21510281602**Receive Date** 10/28/2015 11:50**Matrix** Water**EPA 200.8 (Continued)**

CAS#	Parameter	Result	LOQ	Units
7440-62-2	Vanadium	256	10.0	ug/L
7440-66-6	Zinc	274	20.0	ug/L

EPA 1664A

CAS#	Parameter	Result	LOQ	Units
C-007	Oil and Grease	2.7	2.0	mg/L

HACH 8000

CAS#	Parameter	Result	LOQ	Units
C-004	COD	101	10.0	mg/L

SM 2540 D-2011

CAS#	Parameter	Result	LOQ	Units
C-009	Total Suspended Solids	117	5	mg/L

SM 5210 B-2011

CAS#	Parameter	Result	LOQ	Units
C-002	BOD	111	1	mg/L

Sample Results

SEPARATOR OUTFALL 009

Collect Date 10/25/2015 19:50
Receive Date 10/28/2015 11:50

GCAL ID 21510281601
Matrix Water

EPA 624

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	5	10/29/2015 05:20	LBH	571221

CAS#	Parameter	Result	LOQ	Units
71-55-6	1,1,1-Trichloroethane	ND	5.00	ug/L
79-00-5	1,1,2-Trichloroethane	ND	5.00	ug/L
75-34-3	1,1-Dichloroethane	ND	5.00	ug/L
75-35-4	1,1-Dichloroethene	ND	5.00	ug/L
95-50-1	1,2-Dichlorobenzene	ND	5.00	ug/L
107-06-2	1,2-Dichloroethane	ND	5.00	ug/L
78-87-5	1,2-Dichloropropane	ND	5.00	ug/L
541-73-1	1,3-Dichlorobenzene	ND	5.00	ug/L
542-75-6	1,3-Dichloropropylene	ND	5.00	ug/L
106-46-7	1,4-Dichlorobenzene	ND	5.00	ug/L
107-13-1	Acrylonitrile	ND	25.0	ug/L
71-43-2	Benzene	11.8	5.00	ug/L
56-23-5	Carbon tetrachloride	ND	5.00	ug/L
108-90-7	Chlorobenzene	ND	5.00	ug/L
75-00-3	Chloroethane	ND	5.00	ug/L
67-66-3	Chloroform	ND	5.00	ug/L
74-87-3	Chloromethane	ND	5.00	ug/L
100-41-4	Ethylbenzene	146	5.00	ug/L
75-09-2	Methylene chloride	ND	5.00	ug/L
127-18-4	Tetrachloroethene	ND	5.00	ug/L
108-88-3	Toluene	228	5.00	ug/L
156-60-5	trans-1,2-Dichloroethene	ND	5.00	ug/L
79-01-6	Trichloroethene	ND	5.00	ug/L
75-01-4	Vinyl chloride	ND	5.00	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	150	154	ug/L	103	75 - 120
1868-53-7	Dibromofluoromethane	150	153	ug/L	102	73 - 125
2037-26-5	Toluene d8	150	143	ug/L	95	78 - 127
17060-07-0	1,2-Dichloroethane-d4	150	158	ug/L	105	70 - 123

EPA 625

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
10/29/2015 07:00	571212	EPA 625	10	10/30/2015 05:36	CEK	571363

CAS#	Parameter	Result	LOQ	Units
120-82-1	1,2,4-Trichlorobenzene	ND	10	ug/L
120-83-2	2,4-Dichlorophenol	ND	20	ug/L
105-67-9	2,4-Dimethylphenol	ND	10	ug/L
51-28-5	2,4-Dinitrophenol	ND	20	ug/L
121-14-2	2,4-Dinitrotoluene	ND	20	ug/L
606-20-2	2,6-Dinitrotoluene	ND	20	ug/L
95-57-8	2-Chlorophenol	ND	20	ug/L

Sample Results

SEPARATOR OUTFALL 009

Collect Date 10/25/2015 19:50
Receive Date 10/28/2015 11:50

GCAL ID 21510281601
Matrix Water

EPA 625 (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
10/29/2015 07:00	571212	EPA 625 (Continued)	10	10/30/2015 05:36	CEK	571363

CAS#	Parameter	Result	LOQ	Units
88-75-5	2-Nitrophenol	ND	10	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	ND	20	ug/L
100-02-7	4-Nitrophenol	ND	20	ug/L
83-32-9	Acenaphthene	36.8	10	ug/L
208-96-8	Acenaphthylene	40.0	10	ug/L
120-12-7	Anthracene	ND	10	ug/L
56-55-3	Benzo(a)anthracene	ND	10	ug/L
50-32-8	Benzo(a)pyrene	ND	10	ug/L
205-99-2	Benzo(b)fluoranthene	ND	10	ug/L
207-08-9	Benzo(k)fluoranthene	ND	10	ug/L
117-81-7	Bis(2-Ethylhexyl)phthalate	ND	10	ug/L
218-01-9	Chrysene	ND	10	ug/L
84-66-2	Diethyl phthalate	ND	10	ug/L
131-11-3	Dimethyl phthalate	ND	10	ug/L
84-74-2	Di-n-butyl phthalate	ND	20	ug/L
206-44-0	Fluoranthene	ND	10	ug/L
86-73-7	Fluorene	17.1	10	ug/L
118-74-1	Hexachlorobenzene	ND	10	ug/L
87-68-3	Hexachlorobutadiene	ND	10	ug/L
67-72-1	Hexachloroethane	ND	10	ug/L
98-95-3	Nitrobenzene	ND	10	ug/L
85-01-8	Phenanthrene	31.9	10	ug/L
108-95-2	Phenol	42.8	10	ug/L
129-00-0	Pyrene	ND	10	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
4165-60-0	Nitrobenzene-d5	50	Diluted Out	ug/L	0*	43 - 120
321-60-8	2-Fluorobiphenyl	50	Diluted Out	ug/L	0*	16 - 128
1718-51-0	Terphenyl-d14	50	Diluted Out	ug/L	0*	43 - 138
4165-62-2	Phenol-d5	100	Diluted Out	ug/L	0*	10 - 120
367-12-4	2-Fluorophenol	100	Diluted Out	ug/L	0*	10 - 120
118-79-6	2,4,6-Tribromophenol	100	Diluted Out	ug/L	0*	19 - 133

Sample Results

SEPARATOR OUTFALL 009

Collect Date 10/25/2015 19:50
Receive Date 10/28/2015 11:50

GCAL ID 21510281601
Matrix Water

EPA 625

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
10/29/2015 07:00	571212	EPA 625	100	10/30/2015 20:46	CEK	571399

CAS#	Parameter	Result	LOQ	Units
91-20-3	Naphthalene	4070	1000	ug/L

EPA 200.8

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
10/28/2015 15:15	571171	EPA 200.8	1	11/02/2015 10:02	LWZ	571497

CAS#	Parameter	Result	LOQ	Units
7440-36-0	Antimony	ND	2.00	ug/L
7440-38-2	Arsenic	1.13	1.00	ug/L
7440-39-3	Barium	38.8	1.00	ug/L
7440-41-7	Beryllium	ND	0.50	ug/L
7440-43-9	Cadmium	ND	1.00	ug/L
7440-70-2	Calcium	10100	500	ug/L
7440-47-3	Chromium	3.55	1.00	ug/L
7440-48-4	Cobalt	16.7	1.00	ug/L
7440-50-8	Copper	13.5	1.00	ug/L
7439-89-6	Iron	729	100	ug/L
7439-92-1	Lead	14.6	1.00	ug/L
7439-95-4	Magnesium	1140	100	ug/L
7439-96-5	Manganese	32.7	5.00	ug/L
7439-98-7	Molybdenum	2.02	1.00	ug/L
7440-02-0	Nickel	14.4	2.00	ug/L
7440-09-7	Potassium	602	100	ug/L
7782-49-2	Selenium	ND	1.00	ug/L
7440-22-4	Silver	ND	0.50	ug/L
7440-24-6	Strontium	82.4	1.00	ug/L
7440-28-0	Thallium	ND	0.50	ug/L
7440-31-5	Tin	ND	1.00	ug/L
7440-32-6	Titanium	13.1	1.00	ug/L
7440-66-6	Zinc	444	20.0	ug/L
7440-67-7	Zirconium	ND	1.00	ug/L

EPA 200.8

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
10/28/2015 15:15	571171	EPA 200.8	10	11/02/2015 09:59	LWZ	571497

CAS#	Parameter	Result	LOQ	Units
7429-90-5	Aluminum	4000	25.0	ug/L
7440-23-5	Sodium	59800	1000	ug/L

Sample Results

SEPARATOR OUTFALL 009

Collect Date 10/25/2015 19:50
Receive Date 10/28/2015 11:50

GCAL ID 21510281601
Matrix Water

EPA 200.8 (Continued)

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
10/28/2015 15:15	571171	EPA 200.8 (Continued)	10	11/02/2015 09:59	LWZ	571497
CAS#	Parameter			Result	LOQ	Units
7440-62-2	Vanadium			483	10.0	ug/L

EPA 245.2

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
11/02/2015 09:45	571481	EPA 245.2	1	11/02/2015 14:13	LWZ	571521
CAS#	Parameter			Result	LOQ	Units
7439-97-6	Mercury			ND	0.00020	mg/L

EPA 1664A

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
10/29/2015 11:30	571222	EPA 1664A	1	10/29/2015 16:18	WRW	571305
CAS#	Parameter			Result	LOQ	Units
C-007	Oil and Grease			71.5	2.0	mg/L

HACH 8000

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	2	10/29/2015 11:28	DJH	571250
CAS#	Parameter			Result	LOQ	Units
C-004	COD			192	10.0	mg/L

SM 2540 D-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/28/2015 13:39	WRW	571208
CAS#	Parameter			Result	LOQ	Units
C-009	Total Suspended Solids			45	5	mg/L

Sample Results

SEPARATOR OUTFALL 009

Collect Date 10/25/2015 19:50
Receive Date 10/28/2015 11:50

GCAL ID 21510281601
Matrix Water

SM 5210 B-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
10/28/2015 17:00	571198	BOD PREP	1	10/28/2015 17:00	SLE	571527

CAS#	Parameter	Result	LOQ	Units
C-002	BOD	>64	1	mg/L

UNOX EFFLUENT OUTFALL 001

Collect Date 10/25/2015 19:50
Receive Date 10/28/2015 11:50

GCAL ID 21510281602
Matrix Water

EPA 624

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/29/2015 05:40	LBH	571221

CAS#	Parameter	Result	LOQ	Units
71-55-6	1,1,1-Trichloroethane	ND	5.00	ug/L
79-00-5	1,1,2-Trichloroethane	ND	5.00	ug/L
75-34-3	1,1-Dichloroethane	ND	5.00	ug/L
75-35-4	1,1-Dichloroethene	ND	5.00	ug/L
95-50-1	1,2-Dichlorobenzene	ND	5.00	ug/L
107-06-2	1,2-Dichloroethane	ND	5.00	ug/L
78-87-5	1,2-Dichloropropane	ND	5.00	ug/L
541-73-1	1,3-Dichlorobenzene	ND	5.00	ug/L
542-75-6	1,3-Dichloropropylene	ND	10.0	ug/L
106-46-7	1,4-Dichlorobenzene	ND	5.00	ug/L
107-13-1	Acrylonitrile	ND	20.0	ug/L
71-43-2	Benzene	ND	5.00	ug/L
56-23-5	Carbon tetrachloride	ND	2.00	ug/L
108-90-7	Chlorobenzene	ND	5.00	ug/L
75-00-3	Chloroethane	ND	5.00	ug/L
67-66-3	Chloroform	ND	5.00	ug/L
74-87-3	Chloromethane	ND	5.00	ug/L
100-41-4	Ethylbenzene	ND	5.00	ug/L
75-09-2	Methylene chloride	ND	10.0	ug/L
127-18-4	Tetrachloroethene	ND	5.00	ug/L
108-88-3	Toluene	ND	5.00	ug/L
156-60-5	trans-1,2-Dichloroethene	ND	5.00	ug/L
79-01-6	Trichloroethene	ND	5.00	ug/L
75-01-4	Vinyl chloride	ND	5.00	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
460-00-4	4-Bromofluorobenzene	30	29.8	ug/L	99	75 - 120
1868-53-7	Dibromofluoromethane	30	28.1	ug/L	94	73 - 125
2037-26-5	Toluene d8	30	31.4	ug/L	105	78 - 127
17060-07-0	1,2-Dichloroethane-d4	30	29.2	ug/L	97	70 - 123

Sample Results

UNOX EFFLUENT OUTFALL 001

Collect Date 10/25/2015 19:50
Receive Date 10/28/2015 11:50

GCAL ID 21510281602
Matrix Water

EPA 625

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
10/29/2015 07:00	571212	EPA 625	2	11/04/2015 16:21	CLS	571743

CAS#	Parameter	Result	LOQ	Units
120-82-1	1,2,4-Trichlorobenzene	ND	10	ug/L
120-83-2	2,4-Dichlorophenol	ND	10	ug/L
105-67-9	2,4-Dimethylphenol	22.2	10	ug/L
51-28-5	2,4-Dinitrophenol	ND	10	ug/L
121-14-2	2,4-Dinitrotoluene	ND	10	ug/L
606-20-2	2,6-Dinitrotoluene	ND	10	ug/L
95-57-8	2-Chlorophenol	ND	10	ug/L
88-75-5	2-Nitrophenol	ND	10	ug/L
534-52-1	4,6-Dinitro-2-methylphenol	ND	10	ug/L
100-02-7	4-Nitrophenol	ND	10	ug/L
83-32-9	Acenaphthene	ND	10	ug/L
208-96-8	Acenaphthylene	ND	10	ug/L
120-12-7	Anthracene	ND	10	ug/L
56-55-3	Benzo(a)anthracene	ND	5	ug/L
50-32-8	Benzo(a)pyrene	ND	5	ug/L
205-99-2	Benzo(b)fluoranthene	ND	10	ug/L
207-08-9	Benzo(k)fluoranthene	ND	5	ug/L
117-81-7	Bis(2-Ethylhexyl)phthalate	ND	10	ug/L
218-01-9	Chrysene	ND	5	ug/L
84-66-2	Diethyl phthalate	ND	10	ug/L
131-11-3	Dimethyl phthalate	ND	10	ug/L
84-74-2	Di-n-butyl phthalate	ND	10	ug/L
206-44-0	Fluoranthene	ND	10	ug/L
86-73-7	Fluorene	ND	10	ug/L
118-74-1	Hexachlorobenzene	ND	5	ug/L
87-68-3	Hexachlorobutadiene	ND	10	ug/L
67-72-1	Hexachloroethane	ND	10	ug/L
91-20-3	Naphthalene	ND	10	ug/L
98-95-3	Nitrobenzene	ND	10	ug/L
85-01-8	Phenanthrene	ND	10	ug/L
108-95-2	Phenol	ND	10	ug/L
129-00-0	Pyrene	ND	10	ug/L

CAS#	Surrogate	Conc. Spiked	Conc. Rec	Units	% Recovery	Rec Limits
4165-60-0	Nitrobenzene-d5	50	28.2	ug/L	56	43 - 120
321-60-8	2-Fluorobiphenyl	50	28.8	ug/L	58	16 - 128
1718-51-0	Terphenyl-d14	50	37.3	ug/L	75	43 - 138
4165-62-2	Phenol-d5	100	27.2	ug/L	27	10 - 120
367-12-4	2-Fluorophenol	100	33.7	ug/L	34	10 - 120
118-79-6	2,4,6-Tribromophenol	100	49.8	ug/L	50	19 - 133

Sample Results

UNOX EFFLUENT OUTFALL 001

Collect Date 10/25/2015 19:50
Receive Date 10/28/2015 11:50

GCAL ID 21510281602
Matrix Water

EPA 200.8

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
11/02/2015 09:30	571482	EPA 200.8	1	11/02/2015 13:55	LWZ	571497

CAS#	Parameter	Result	LOQ	Units
7440-36-0	Antimony	ND	2.00	ug/L
7440-38-2	Arsenic	ND	1.00	ug/L
7440-39-3	Barium	23.9	1.00	ug/L
7440-41-7	Beryllium	ND	0.50	ug/L
7440-43-9	Cadmium	ND	1.00	ug/L
7440-70-2	Calcium	5530	500	ug/L
7440-47-3	Chromium	1.91	1.00	ug/L
7440-48-4	Cobalt	9.01	1.00	ug/L
7440-50-8	Copper	8.19	1.00	ug/L
7439-89-6	Iron	426	100	ug/L
7439-92-1	Lead	9.96	1.00	ug/L
7439-95-4	Magnesium	637	100	ug/L
7439-96-5	Manganese	20.5	5.00	ug/L
7439-98-7	Molybdenum	ND	1.00	ug/L
7440-02-0	Nickel	8.22	2.00	ug/L
7440-09-7	Potassium	298	100	ug/L
7782-49-2	Selenium	ND	1.00	ug/L
7440-22-4	Silver	ND	0.50	ug/L
7440-24-6	Strontium	43.0	1.00	ug/L
7440-28-0	Thallium	ND	0.50	ug/L
7440-31-5	Tin	ND	1.00	ug/L
7440-32-6	Titanium	6.69	1.00	ug/L
7440-66-6	Zinc	274	20.0	ug/L
7440-67-7	Zirconium	ND	1.00	ug/L

EPA 200.8

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
11/02/2015 09:30	571482	EPA 200.8	10	11/02/2015 13:45	LWZ	571497

CAS#	Parameter	Result	LOQ	Units
7429-90-5	Aluminum	2230	25.0	ug/L
7440-23-5	Sodium	29700	1000	ug/L
7440-62-2	Vanadium	256	10.0	ug/L

Sample Results

UNOX EFFLUENT OUTFALL 001

Collect Date 10/25/2015 19:50
Receive Date 10/28/2015 11:50

GCAL ID 21510281602
Matrix Water

EPA 245.2

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
11/02/2015 09:45	571481	EPA 245.2	1	11/02/2015 14:16	LWZ	571521

CAS#	Parameter	Result	LOQ	Units
7439-97-6	Mercury	ND	0.00020	mg/L

EPA 1664A

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
10/29/2015 11:30	571222	EPA 1664A	1	10/29/2015 16:18	WRW	571305

CAS#	Parameter	Result	LOQ	Units
C-007	Oil and Grease	2.7	2.0	mg/L

HACH 8000

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	2	10/29/2015 11:28	DJH	571250

CAS#	Parameter	Result	LOQ	Units
C-004	COD	101	10.0	mg/L

SM 2540 D-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
NA	NA	NA	1	10/29/2015 10:03	WRW	571269

CAS#	Parameter	Result	LOQ	Units
C-009	Total Suspended Solids	117	5	mg/L

SM 5210 B-2011

Prep Date	Prep Batch	Prep Method	Dilution	Analysis Date	By	Analytical Batch
10/28/2015 17:00	571198	BOD PREP	1	10/28/2015 17:00	SLE	571527

CAS#	Parameter	Result	LOQ	Units
C-002	BOD	111	1	mg/L

GC/MS Volatiles QC Summary

Analytical Batch 571221		Client ID GCAL ID Sample Type Prep Date Analysis Date Matrix	MB571221 1503832 MB NA 10/28/2015 22:13 Water	LCS571221 1503833 LCS NA 10/28/2015 21:32 Water			
EPA 624		Units Result	ug/L LOQ	Spike Added	Result	%R	Control Limits%R
1,1,1-Trichloroethane	71-55-6	ND	1.00	20.0	18.7	94	75 - 125
1,1,2-Trichloroethane	79-00-5	ND	1.00	20.0	17.6	88	71 - 129
1,1-Dichloroethane	75-34-3	ND	1.00	20.0	18.5	93	73 - 128
1,1-Dichloroethene	75-35-4	ND	1.00	20.0	18.8	94	51 - 150
1,2-Dichlorobenzene	95-50-1	ND	1.00	20.0	19.9	100	63 - 137
1,2-Dichloroethane	107-06-2	ND	1.00	20.0	17.1	86	68 - 132
1,2-Dichloropropane	78-87-5	ND	1.00	20.0	18.9	95	34 - 166
1,3-Dichlorobenzene	541-73-1	ND	1.00	20.0	19.1	96	73 - 127
1,3-Dichloropropylene	542-75-6	ND	1.00	40.0	35.7	89	74 - 128
1,4-Dichlorobenzene	106-46-7	ND	1.00	20.0	19.0	95	63 - 137
Acrylonitrile	107-13-1	ND	5.00	100	105	105	57 - 145
Benzene	71-43-2	ND	1.00	20.0	18.6	93	64 - 136
Carbon tetrachloride	56-23-5	ND	1.00	20.0	19.2	96	73 - 127
Chlorobenzene	108-90-7	ND	1.00	20.0	18.3	92	66 - 134
Chloroethane	75-00-3	ND	1.00	20.0	21.9	110	38 - 162
Chloroform	67-66-3	ND	1.00	20.0	17.9	90	68 - 133
Chloromethane	74-87-3	ND	1.00	20.0	19.2	96	1 - 204
Ethylbenzene	100-41-4	ND	1.00	20.0	19.3	97	59 - 141
Methylene chloride	75-09-2	ND	1.00	20.0	17.0	85	61 - 140
Tetrachloroethene	127-18-4	ND	1.00	20.0	18.6	93	74 - 127
Toluene	108-88-3	ND	1.00	20.0	17.7	89	75 - 126
trans-1,2-Dichloroethene	156-60-5	ND	1.00	20.0	18.0	90	70 - 131
Trichloroethene	79-01-6	ND	1.00	20.0	19.0	95	67 - 134
Vinyl chloride	75-01-4	ND	1.00	20.0	19.5	98	4 - 196
Surrogate							
1,2-Dichloroethane-d4	17060-07-0	31	103	30	31.4	105	70 - 123
4-Bromofluorobenzene	460-00-4	26	87	30	29.9	100	75 - 120
Dibromofluoromethane	1868-53-7	32.4	108	30	30	100	73 - 125
Toluene d8	2037-26-5	31.1	104	30	30	100	78 - 127

Analytical Batch 571221		Client ID GCAL ID Sample Type Prep Date Analysis Date Matrix	OUTFALL 001 21510212707 SAMPLE NA 10/29/2015 00:14 Water	1501242MS 1503916 MS NA 10/29/2015 00:34 Water			
EPA 624		Units Result	ug/L LOQ	Spike Added	Result	%R	Control Limits%R
Benzene	71-43-2	1.55	1.00	20.0	20.5	95	37 - 151
Ethylbenzene	100-41-4	0.00	1.00	20.0	21.0	105	37 - 162
Toluene	108-88-3	1.51	1.00	20.0	19.3	89	47 - 150
Trichloroethene	79-01-6	1.73	1.00	20.0	21.4	98	71 - 157
Surrogate							
1,2-Dichloroethane-d4	17060-07-0	32	107	30	31.5	105	70 - 123
4-Bromofluorobenzene	460-00-4	27.6	92	30	28.5	95	75 - 120
Dibromofluoromethane	1868-53-7	32.6	109	30	30.9	103	73 - 125
Toluene d8	2037-26-5	30.5	102	30	28.8	96	78 - 127

GC/MS Semi-Volatiles QC Summary

Analytical Batch 571258		Client ID	MB571212		LCS571212				LCSD571212				
Prep Batch 571212		GCAL ID	1503681		1503682				1503683				
Prep Method EPA 3510C		Sample Type	MB		LCS				LCSD				
		Prep Date	10/29/2015 07:00		10/29/2015 07:00				10/29/2015 07:00				
		Analysis Date	10/29/2015 13:26		10/29/2015 13:43				10/29/2015 13:59				
		Matrix	Water		Water				Water				
EPA 625			Units Result	ug/L LOQ	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
1,2,4-Trichlorobenzene	120-82-1	ND	5	50.0	41.9	84	44 - 142	50.0	40.2	80	4	40	
2,4-Dichlorophenol	120-83-2	ND	5	50.0	48.0	96	39 - 135	50.0	46.9	94	2	40	
2,4-Dimethylphenol	105-67-9	ND	5	50.0	45.4	91	32 - 119	50.0	45.8	92	1	40	
2,4-Dinitrophenol	51-28-5	ND	5	50.0	42.7	85	1 - 191	50.0	44.6	89	4	40	
2,4-Dinitrotoluene	121-14-2	ND	5	50.0	50.5	101	39 - 139	50.0	49.1	98	3	40	
2,6-Dinitrotoluene	606-20-2	ND	5	50.0	51.7	103	50 - 158	50.0	51.9	104	0	40	
2-Chlorophenol	95-57-8	ND	5	50.0	43.4	87	23 - 134	50.0	45.3	91	4	40	
2-Nitrophenol	88-75-5	ND	5	50.0	51.5	103	27 - 182	50.0	52.0	104	1	40	
4,6-Dinitro-2-methylphenol	534-52-1	ND	5	50.0	48.1	96	1 - 181	50.0	49.4	99	3	40	
4-Nitrophenol	100-02-7	ND	5	50.0	20.5	41	1 - 132	50.0	22.1	44	8	40	
Acenaphthene	83-32-9	ND	5	50.0	48.8	98	47 - 145	50.0	47.7	95	2	40	
Acenaphthylene	208-96-8	ND	5	50.0	51.0	102	33 - 145	50.0	49.7	99	3	40	
Anthracene	120-12-7	ND	5	50.0	54.6	109	27 - 133	50.0	54.2	108	1	40	
Benzo(a)anthracene	56-55-3	ND	3	50.0	55.4	111	33 - 143	50.0	55.6	111	0	40	
Benzo(a)pyrene	50-32-8	ND	3	50.0	61.4	123	17 - 163	50.0	60.9	122	1	40	
Benzo(b)fluoranthene	205-99-2	ND	5	50.0	63.1	126	24 - 159	50.0	62.2	124	1	40	
Benzo(k)fluoranthene	207-08-9	ND	3	50.0	61.4	123	11 - 162	50.0	61.9	124	1	40	
Bis(2-Ethylhexyl)phthalate	117-81-7	ND	5	50.0	65.9	132	8 - 158	50.0	64.2	128	3	40	
Chrysene	218-01-9	ND	3	50.0	53.0	106	17 - 168	50.0	53.4	107	1	40	
Diethyl phthalate	84-66-2	ND	5	50.0	52.8	106	1 - 114	50.0	50.1	100	5	40	
Dimethyl phthalate	131-11-3	ND	5	50.0	50.4	101	1 - 112	50.0	49.5	99	2	40	
Di-n-butyl phthalate	84-74-2	ND	5	50.0	59.2	118	1 - 118	50.0	56.6	113	4	40	
Fluoranthene	206-44-0	ND	5	50.0	52.5	105	26 - 137	50.0	51.8	104	1	40	
Fluorene	86-73-7	ND	5	50.0	49.7	99	59 - 121	50.0	48.3	97	3	40	
Hexachlorobenzene	118-74-1	ND	3	50.0	52.4	105	1 - 152	50.0	52.6	105	0	40	
Hexachlorobutadiene	87-68-3	ND	5	50.0	39.9	80	24 - 116	50.0	38.6	77	3	40	
Hexachloroethane	67-72-1	ND	5	50.0	40.1	80	40 - 113	50.0	39.4	79	2	40	
Naphthalene	91-20-3	ND	5	50.0	43.1	86	21 - 133	50.0	42.2	84	2	40	
Nitrobenzene	98-95-3	ND	5	50.0	49.4	99	35 - 180	50.0	49.0	98	1	40	
Phenanthrene	85-01-8	ND	5	50.0	51.2	102	54 - 120	50.0	50.5	101	1	40	
Phenol	108-95-2	ND	5	50.0	19.6	39	5 - 112	50.0	21.8	44	11	40	
Pyrene	129-00-0	ND	5	50.0	57.3	115	52 - 115	50.0	56.7	113	1	40	
Surrogate													
2,4,6-Tribromophenol	118-79-6	73.2	73	100	93.3	93	19 - 133	100	92.7	93	1	NA	
2-Fluorobiphenyl	321-60-8	40.7	81	50	47.8	96	16 - 128	50	48.7	97	2	NA	
2-Fluorophenol	367-12-4	40.1	40	100	52.9	53	10 - 120	100	56.5	57	7	NA	
Nitrobenzene-d5	4165-60-0	38.9	78	50	46.6	93	43 - 120	50	46.6	93	0	NA	
Phenol-d5	4165-62-2	25.7	26	100	38.6	39	10 - 120	100	42	42	8	NA	
Terphenyl-d14	1718-51-0	50.2	100	50	59.9	120	43 - 138	50	60.4	121	1	NA	

Analytical Batch 571258		Client ID GCAL ID	MUD DUMPSTER 21510274101	1503231MS 1503684				1503231MSD 1503685					
Prep Batch 571212		Sample Type Prep Date	SAMPLE 10/29/2015 07:00	MS 10/29/2015 07:00				MSD 10/29/2015 07:00					
Prep Method EPA 3510C		Analysis Date Matrix	10/29/2015 17:56 Solid	10/29/2015 18:29 Solid				10/29/2015 18:46 Solid					
EPA 625			Units Result	ug/L LOQ	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
2,4-Dinitrotoluene	121-14-2	0.00	250	250	205	82	-	250	202	81	1		
Hexachlorobenzene	118-74-1	0.00	130	250	276	110	-	250	274	110	1		
Hexachlorobutadiene	87-68-3	0.00	250	250	225	90	-	250	240	96	6		
Hexachloroethane	67-72-1	0.00	250	250	221	88	-	250	237	95	7		
Nitrobenzene	98-95-3	0.00	250	250	252	101	-	250	260	104	3		
Surrogate													
2,4,6-Tribromophenol	118-79-6	0	0*	500	380	76	-	500	381	76	0	NA	
2-Fluorobiphenyl	321-60-8	0	0*	250	234	94	-	250	245	98	5	NA	
2-Fluorophenol	367-12-4	0	0*	500	287	57	-	500	294	59	2	NA	

GC/MS Semi-Volatiles QC Summary

Analytical Batch		Client ID	MUD DUMPSTER		1503231MS				1503231MSD				
571258		GCAL ID	21510274101		1503684				1503685				
Prep Batch		Sample Type	SAMPLE		MS				MSD				
571212		Prep Date	10/29/2015 07:00		10/29/2015 07:00				10/29/2015 07:00				
Prep Method		Analysis Date	10/29/2015 17:56		10/29/2015 18:29				10/29/2015 18:46				
EPA 3510C		Matrix	Solid		Solid				Solid				
EPA 625			Units Result	ug/L LOQ	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
Nitrobenzene-d5	4165-60-0	0	0*	250	222	89	-	250	239	96	7	NA	
Phenol-d5	4165-62-2	0	0*	500	205	41	-	500	204	41	1	NA	
Terphenyl-d14	1718-51-0	0	0*	250	282	113	-	250	284	114	1	NA	

Inorganics QC Summary

Analytical Batch		Client ID	MB571481		LCS571481			
571521		GCAL ID	1504854		1504855			
Prep Batch		Sample Type	MB		LCS			
571481		Prep Date	11/02/2015 09:45		11/02/2015 09:45			
Prep Method		Analysis Date	11/02/2015 14:09		11/02/2015 14:11			
EPA 245.2		Matrix	Water		Water			
EPA 245.2			Units Result	mg/L LOQ	Spike Added	Result	%R	Control Limits%R
Mercury		7439-97-6	ND	0.00020	0.0050	0.0055	109	80 - 120

Analytical Batch 571521	Client ID GCAL ID	OUTFALL 001 21510285201	1503676MS 1504444					1503676MSD 1504445				
Prep Batch 571481	Sample Type Prep Date	SAMPLE 11/02/2015 09:45	MS 11/02/2015 09:45					MSD 11/02/2015 09:45				
Prep Method EPA 245.2	Analysis Date Matrix	11/02/2015 14:18 Water	11/02/2015 14:20 Water					11/02/2015 14:22 Water				
EPA 245.2		Units Result	mg/L LOQ	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
Mercury	7439-97-6	0.0	0.00020	0.0050	0.0056	112	80 - 120	0.0050	0.0056	112	0	20

Analytical Batch		Client ID	MB571171		LCS571171		
571497		GCAL ID	1503421		1503422		
Prep Batch		Sample Type	MB		LCS		
571171		Prep Date	10/28/2015 15:15		10/28/2015 15:15		
Prep Method		Analysis Date	11/02/2015 10:26		11/02/2015 09:56		
EPA 200.8		Matrix	Water		Water		
EPA 200.8		Units Result	ug/L LOQ	Spike Added	Result	%R	Control Limits%R
Aluminum	7429-90-5	ND	2.50	1000	1010	101	85 - 115
Antimony	7440-36-0	ND	2.00	100	103	103	85 - 115
Arsenic	7440-38-2	ND	1.00	50.0	49.8	100	85 - 115
Barium	7440-39-3	ND	1.00	50.0	50.2	100	85 - 115
Beryllium	7440-41-7	ND	0.50	50.0	50.0	100	85 - 115
Cadmium	7440-43-9	ND	1.00	50.0	51.1	102	85 - 115
Calcium	7440-70-2	ND	500	25000	25700	103	85 - 115
Chromium	7440-47-3	ND	1.00	50.0	50.5	101	85 - 115
Cobalt	7440-48-4	ND	1.00	50.0	51.0	102	85 - 115
Copper	7440-50-8	ND	1.00	50.0	52.4	105	85 - 115
Iron	7439-89-6	ND	100	5000	5060	101	85 - 115
Lead	7439-92-1	ND	1.00	50.0	51.0	102	85 - 115
Magnesium	7439-95-4	ND	100	5000	5220	104	85 - 115
Manganese	7439-96-5	ND	5.00	50.0	49.5	99	85 - 115
Molybdenum	7439-98-7	ND	1.00	50.0	51.0	102	85 - 115
Nickel	7440-02-0	ND	2.00	100	103	103	85 - 115
Potassium	7440-09-7	ND	100	5000	5140	103	85 - 115
Selenium	7782-49-2	ND	1.00	10.0	9.60	96	85 - 115
Silver	7440-22-4	ND	0.50	50.0	50.2	100	85 - 115
Sodium	7440-23-5	ND	100	5000	5180	104	85 - 115
Strontium	7440-24-6	ND	1.00	50.0	51.2	102	85 - 115
Thallium	7440-28-0	ND	0.50	50.0	52.0	104	85 - 115
Tin	7440-31-5	ND	1.00	50.0	50.2	100	85 - 115
Titanium	7440-32-6	ND	1.00	50.0	50.1	100	85 - 115
Vanadium	7440-62-2	ND	1.00	50.0	50.2	100	85 - 115
Zinc	7440-66-6	ND	20.0	1000	1000	100	85 - 115
Zirconium	7440-67-7	ND	1.00	10.0	10.5	105	85 - 115

Inorganics QC Summary

Analytical Batch		Client ID	WEEKLY 001A (COMP)		1503585MS			1503585MSD					
571497		GCAL ID	21510282302		1503704			1503705					
Prep Batch		Sample Type	SAMPLE		MS			MSD					
571171		Prep Date	10/28/2015 15:15		10/28/2015 15:15			10/28/2015 15:15					
Prep Method		Analysis Date	11/02/2015 14:58		11/02/2015 15:01			11/02/2015 15:05					
EPA 200.8		Matrix	Water		Water			Water					
EPA 200.8			Units	ug/L	Spike	Result	%R	Control	Spike	Result	%R	RPD	RPD
			Result	LOQ	Added			Limits%R	Added				Limit
Aluminum	7429-90-5		107	2.50	1000	1220	111	70 - 130	1000	1270	116	4	20
Antimony	7440-36-0		0.53	2.00	100	110	109	70 - 130	100	112	112	2	20
Arsenic	7440-38-2		1.54	1.00	50.0	53.8	105	70 - 130	50.0	55.7	108	3	20
Barium	7440-39-3		32.4	1.00	50.0	84.9	105	70 - 130	50.0	86.9	109	2	20
Beryllium	7440-41-7		0.0	0.50	50.0	50.9	102	70 - 130	50.0	52.5	105	3	20
Cadmium	7440-43-9		0.0	1.00	50.0	52.4	105	70 - 130	50.0	54.2	108	3	20
Calcium	7440-70-2		10600	500	25000	37200	107	70 - 130	25000	38400	111	3	20
Chromium	7440-47-3		6.97	1.00	50.0	59.1	104	70 - 130	50.0	60.8	108	3	20
Cobalt	7440-48-4		0.0	1.00	50.0	52.8	106	70 - 130	50.0	54.2	108	3	20
Copper	7440-50-8		4.20	1.00	50.0	57.3	106	70 - 130	50.0	59.7	111	4	20
Iron	7439-89-6		154	100	5000	5390	105	70 - 130	5000	5610	109	4	20
Lead	7439-92-1		0.67	1.00	50.0	54.3	107	70 - 130	50.0	55.7	110	3	20
Magnesium	7439-95-4		1220	100	5000	6520	106	70 - 130	5000	6800	112	4	20
Manganese	7439-96-5		49.4	5.00	50.0	98.9	99	70 - 130	50.0	102	105	3	20
Molybdenum	7439-98-7		13.4	1.00	50.0	67.3	108	70 - 130	50.0	69.1	111	3	20
Nickel	7440-02-0		0.61	2.00	100	104	104	70 - 130	100	108	107	4	20
Potassium	7440-09-7		4970	100	5000	10100	103	70 - 130	5000	10300	107	2	20
Selenium	7782-49-2		0.0	1.00	10.0	10.2	102	70 - 130	10.0	10.6	106	4	20
Silver	7440-22-4		0.0	0.50	50.0	51.1	102	70 - 130	50.0	52.6	105	3	20
Sodium	7440-23-5		140000	100	5000	143000	69*	70 - 130	5000	145000	114	1	20
Strontium	7440-24-6		154	1.00	50.0	204	99	70 - 130	50.0	207	105	1	20
Thallium	7440-28-0		0.0	0.50	50.0	53.8	108	70 - 130	50.0	56.0	112	4	20
Tin	7440-31-5		0.0	1.00	50.0	53.1	106	70 - 130	50.0	54.8	110	3	20
Titanium	7440-32-6		5.52	1.00	50.0	58.6	106	70 - 130	50.0	60.7	110	4	20
Vanadium	7440-62-2		1.58	1.00	50.0	54.3	106	70 - 130	50.0	56.1	109	3	20
Zinc	7440-66-6		33.1	20.0	1000	1060	103	70 - 130	1000	1090	106	3	20
Zirconium	7440-67-7		0.38	1.00	10.0	9.62	92	70 - 130	10.0	9.96	96	3	20

Analytical Batch		Client ID	MB571482	LCS571482				
571497		GCAL ID	1504856	1504857				
Prep Batch		Sample Type	MB	LCS				
571482		Prep Date	11/02/2015 09:30	11/02/2015 09:30				
Prep Method		Analysis Date	11/02/2015 13:18	11/02/2015 13:21				
EPA 200.8		Matrix	Water	Water				
EPA 200.8			Units Result	ug/L LOQ	Spike Added	Result	%R	Control Limits%R
Aluminum	7429-90-5	ND	2.50	1000	1060	106	85 - 115	
Antimony	7440-36-0	ND	2.00	100	109	109	85 - 115	
Arsenic	7440-38-2	ND	1.00	50.0	51.8	104	85 - 115	
Barium	7440-39-3	ND	1.00	50.0	52.7	105	85 - 115	
Beryllium	7440-41-7	ND	0.50	50.0	53.5	107	85 - 115	
Cadmium	7440-43-9	ND	1.00	50.0	53.4	107	85 - 115	
Calcium	7440-70-2	ND	500	25000	26700	107	85 - 115	
Chromium	7440-47-3	ND	1.00	50.0	52.1	104	85 - 115	
Cobalt	7440-48-4	ND	1.00	50.0	53.1	106	85 - 115	
Copper	7440-50-8	ND	1.00	50.0	54.4	109	85 - 115	
Iron	7439-89-6	ND	100	5000	5280	106	85 - 115	
Lead	7439-92-1	ND	1.00	50.0	53.7	107	85 - 115	
Magnesium	7439-95-4	ND	100	5000	5480	110	85 - 115	
Manganese	7439-96-5	ND	5.00	50.0	51.7	103	85 - 115	
Molybdenum	7439-98-7	ND	1.00	50.0	53.1	106	85 - 115	
Nickel	7440-02-0	ND	2.00	100	106	106	85 - 115	
Potassium	7440-09-7	ND	100	5000	5390	108	85 - 115	
Selenium	7782-49-2	ND	1.00	10.0	10.6	106	85 - 115	
Silver	7440-22-4	ND	0.50	50.0	53.7	107	85 - 115	
Sodium	7440-23-5	ND	100	5000	5490	110	85 - 115	
Strontium	7440-24-6	ND	1.00	50.0	53.6	107	85 - 115	

Inorganics QC Summary

Analytical Batch 571497		Client ID GCAL ID	MB571482 1504856	LCS571482 1504857		
Prep Batch 571482		Sample Type	MB	LCS		
Prep Method EPA 200.8		Prep Date	11/02/2015 09:30	11/02/2015 09:30		
		Analysis Date	11/02/2015 13:18	11/02/2015 13:21		
		Matrix	Water	Water		
EPA 200.8		Units Result	ug/L LOQ	Spike Added	Result	%R
Thallium	7440-28-0	ND	0.50	50.0	54.3	109
Tin	7440-31-5	ND	1.00	50.0	52.0	104
Titanium	7440-32-6	ND	1.00	50.0	51.4	103
Vanadium	7440-62-2	ND	1.00	50.0	51.6	103
Zinc	7440-66-6	ND	20.0	1000	1050	105
Zirconium	7440-67-7	ND	1.00	10.0	10.9	109

Analytical Batch		Client ID	UNOX EFFLUENT OUTFALL 0..		1503569MS			1503569MSD					
571497		GCAL ID	21510281602		1504858			1504859					
Prep Batch		Sample Type	SAMPLE		MS			MSD					
571482		Prep Date	11/02/2015 09:30		11/02/2015 09:30			11/02/2015 09:30					
Prep Method		Analysis Date	11/02/2015 13:55		11/02/2015 13:58			11/02/2015 14:02					
EPA 200.8		Matrix	Water		Water			Water					
EPA 200.8			Units	ug/L	Spike	Result	%R	Control	Spike	Result	%R	RPD	RPD
			Result	LOQ	Added			Limits%R	Added				Limit
Antimony	7440-36-0		0.50	2.00	100	97.0	96	70 - 130	100	93.9	93	3	20
Arsenic	7440-38-2		0.58	1.00	50.0	47.5	94	70 - 130	50.0	47.3	93	0	20
Barium	7440-39-3		23.9	1.00	50.0	89.5	131*	70 - 130	50.0	90.5	133*	1	20
Beryllium	7440-41-7		0.0	0.50	50.0	47.6	95	70 - 130	50.0	46.7	93	2	20
Cadmium	7440-43-9		0.0	1.00	50.0	48.2	96	70 - 130	50.0	47.9	96	1	20
Calcium	7440-70-2		5530	500	25000	41100	142*	70 - 130	25000	39900	137*	3	20
Chromium	7440-47-3		1.91	1.00	50.0	51.2	98	70 - 130	50.0	51.5	99	1	20
Cobalt	7440-48-4		9.01	1.00	50.0	63.8	110	70 - 130	50.0	65.4	113	2	20
Copper	7440-50-8		8.19	1.00	50.0	68.6	121	70 - 130	50.0	70.1	124	2	20
Iron	7439-89-6		426	100	5000	5680	105	70 - 130	5000	6040	112	6	20
Lead	7439-92-1		9.96	1.00	50.0	66.0	112	70 - 130	50.0	66.3	113	1	20
Magnesium	7439-95-4		637	100	5000	6180	111	70 - 130	5000	6150	110	1	20
Manganese	7439-96-5		20.5	5.00	50.0	98.7	156*	70 - 130	50.0	88.9	137*	10	20
Molybdenum	7439-98-7		0.84	1.00	50.0	48.7	96	70 - 130	50.0	47.9	94	2	20
Nickel	7440-02-0		8.22	2.00	100	109	101	70 - 130	100	110	102	1	20
Potassium	7440-09-7		298	100	5000	5620	106	70 - 130	5000	5490	104	2	20
Selenium	7782-49-2		0.0	1.00	10.0	9.34	93	70 - 130	10.0	9.10	91	3	20
Silver	7440-22-4		0.0	0.50	50.0	46.9	94	70 - 130	50.0	46.4	93	1	20
Strontium	7440-24-6		43.0	1.00	50.0	121	157*	70 - 130	50.0	121	156*	0	20
Thallium	7440-28-0		0.0	0.50	50.0	49.5	99	70 - 130	50.0	48.2	96	3	20
Tin	7440-31-5		0.0	1.00	50.0	48.1	96	70 - 130	50.0	45.8	92	5	20
Titanium	7440-32-6		6.69	1.00	50.0	63.9	114	70 - 130	50.0	69.8	126	9	20
Zinc	7440-66-6		274	20.0	1000	1460	119	70 - 130	1000	1450	117	1	20
Zirconium	7440-67-7		0.0	1.00	10.0	7.64	76	70 - 130	10.0	6.83	68*	11	20

Analytical Batch		Client ID	UNOX EFFLUENT OUTFALL 0..		1503569MS			1503569MSD					
571497		GCAL ID	21510281602		1504858			1504859					
Prep Batch		Sample Type	SAMPLE		MS			MSD					
571482		Prep Date	11/02/2015 09:30		11/02/2015 09:30			11/02/2015 09:30					
Prep Method		Analysis Date	11/02/2015 13:45		11/02/2015 13:48			11/02/2015 13:51					
EPA 200.8		Matrix	Water		Water			Water					
EPA 200.8			Units	ug/L	Spike	Result	%R	Control	Spike	Result	%R	RPD	RPD
			Result	LOQ	Added			Limits%R	Added				Limit
Aluminum	7429-90-5		2230	25.0	1000	5020	279*	70 - 130	1000	5550	332*	10	20
Sodium	7440-23-5		29700	1000	5000	53400	473*	70 - 130	5000	53900	484*	1	20
Vanadium	7440-62-2		256	10.0	50.0	469	425*	70 - 130	50.0	475	439*	1	20

General Chemistry QC Summary

Analytical Batch 571527 Prep Batch 571198 Prep Method BOD PREP	Client ID	MB571198		LCS571198			
	GCAL ID	1503565		1503566			
	Sample Type	MB		LCS			
	Prep Date	10/28/2015 17:00		10/28/2015 17:00			
	Analysis Date	10/28/2015 17:00		10/28/2015 17:00			
	Matrix	Water		Water			
SM 5210 B-2011		Units Result	mg/L LOQ	Spike Added	Result	%R	Control Limits%R
BOD	C-002	ND	1	198	180	91	84.5 - 115.5

Analytical Batch 571527	Client ID GCAL ID	001 OUTFALL (COMP) 21510280201	1503408DUP 1503567			
Prep Batch 571198	Sample Type Prep Date	SAMPLE 10/28/2015 17:00	DUP 10/28/2015 17:00			
Prep Method BOD PREP	Analysis Date Matrix	10/28/2015 17:00 Water	10/28/2015 17:00 Water			
SM 5210 B-2011		Units Result	mg/L LOQ	Result	RPD	RPD Limit
BOD	C-002	14	1	13	7	30

Analytical Batch 571250		Client ID	MB571250		LCS571250		
		GCAL ID	1503923		1503924		
		Sample Type	MB		LCS		
		Prep Date	NA		NA		
		Analysis Date	10/29/2015 11:23		10/29/2015 11:17		
		Matrix	Water		Water		
HACH 8000		Units Result	mg/L LOQ	Spike Added	Result	%R	Control Limits%R
COD	C-004	ND	5.0	75.0	80.2	107	90 - 110

Analytical Batch 571250		Client ID	102	1503550DUP			1503550MS				
		GCAL ID	21510281501	1503925			1503926				
		Sample Type	SAMPLE	DUP			MS				
		Prep Date	NA	NA			NA				
		Analysis Date	10/29/2015 11:25	10/29/2015 11:26			10/29/2015 11:26				
		Matrix	Water	Water			Water				
HACH 8000			Units Result	mg/L LOQ	Result	RPD	RPD Limit	Spike Added	Result	%R	Control Limits%R
COD	C-004	26.0	10.0	23.4	11	20	150	176	100	90 - 110	

Analytical Batch 571305		Client ID GCAL ID	MB571222 1503835		LCS571222 1503836			LCSD571222 1503837					
Prep Batch 571222		Sample Type Prep Date	MB 10/29/2015 11:30		LCS 10/29/2015 11:30			LCSD 10/29/2015 11:30					
Prep Method EPA 1664A		Analysis Date Matrix	10/29/2015 16:18 Water		10/29/2015 16:18 Water			10/29/2015 16:18 Water					
EPA 1664A			Units Result	mg/L LOQ	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
Oil and Grease		C-007	ND	2.0	40.0	39.9	100	78 - 114	40.0	41.1	103	3	18

Analytical Batch 571305		Client ID	OUTFALL 005		OUTFALL 005 MS				OUTFALL 005 MSD				
Prep Batch 571222		GCAL ID	21510284901		21510284903				21510284904				
Prep Method EPA 1664A		Sample Type	SAMPLE		MS				MSD				
		Prep Date	10/29/2015 11:30		10/29/2015 11:30				10/29/2015 11:30				
		Analysis Date	10/29/2015 16:18		10/29/2015 16:18				10/29/2015 16:18				
		Matrix	Water		Water				Water				
EPA 1664A			Units Result	mg/L LOQ	Spike Added	Result	%R	Control Limits%R	Spike Added	Result	%R	RPD	RPD Limit
Oil and Grease		C-007	0.9	2.0	40.0	40.9	100	78 - 114	40.0	34.7	84	16	18

General Chemistry QC Summary

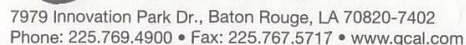
Analytical Batch 571208		Client ID	MB571208		LCS571208			
		GCAL ID	1503626		1503627			
		Sample Type	MB		LCS			
		Prep Date	NA		NA			
		Analysis Date	10/28/2015 13:39		10/28/2015 13:39			
		Matrix	Water		Water			
SM 2540 D-2011		Units Result	mg/L LOQ	Spike Added	Result	%R	Control Limits%R	
Total Suspended Solids	C-009	ND	5	50	45	90	80 - 120	

Analytical Batch 571208		Client ID GCAL ID Sample Type Prep Date Analysis Date Matrix	OUTFALL 202-ADMIN 21510275801 SAMPLE NA 10/28/2015 13:39 Water	1503312DUP 1503628 DUP NA 10/28/2015 13:39 Water			
SM 2540 D-2011			Units Result	mg/L LOQ	Result	RPD	RPD Limit
Total Suspended Solids		C-009	4	5	4	0	5.4

Analytical Batch 571208		Client ID GCAL ID Sample Type Prep Date Analysis Date Matrix	OUTFALL 201 21510282502 SAMPLE NA 10/28/2015 13:39 Water	1503588DUP 1503629 DUP NA 10/28/2015 13:39 Water			
SM 2540 D-2011			Units Result	mg/L LOQ	Result	RPD	RPD Limit
Total Suspended Solids		C-009	1	5	1	0	5.4

Analytical Batch 571269		Client ID GCAL ID Sample Type Prep Date Analysis Date Matrix	MB571269 1503999 MB NA 10/29/2015 10:03 Water	LCS571269 1504000 LCS NA 10/29/2015 10:03 Water				
SM 2540 D-2011			Units Result	mg/L LOQ	Spike Added	Result	%R	Control Limits%R
Total Suspended Solids		C-009	ND	5	50	51	102	80 - 120

Analytical Batch 571269		Client ID GCAL ID Sample Type Prep Date Analysis Date Matrix	OUTFALL 001 21510276501 SAMPLE NA 10/29/2015 10:03 Water	1503331DUP 1504001 DUP NA 10/29/2015 10:03 Water			
SM 2540 D-2011			Units Result	mg/L LOQ	Result	RPD	RPD Limit
Total Suspended Solids		C-009	10	5	10	0	5.4



Client ID: 0176 - ExxonMobil Chemical

SDG: 215102816

PM: AEC

[illegible]

WHITE: CLIENT FINAL REPORT - CANARY: CLIENT



SAMPLE DELIVERY GROUP 215102816		
Client PM AEC 0176 - ExxonMobil Chemical		Transport Method CUST
Profile Number 71477		Received By McCune, Dodie N.
Line Item(s) 21 - Special Rain Sample		Receive Date(s) 10/28/15
CHECKLIST		
Were all samples received using proper thermal preservation?		
When used, were all custody seals intact?		
Were all samples received in proper containers?		
Were all samples received using proper chemical preservation?		
Was preservative added to any container at the lab?		
Were all containers received in good condition?		
Were all VOC water samples received without head space?		
Do all sample labels match the Chain of Custody?		
Did the Chain of Custody list the sampling technician?		
Was the COC maintained i.e. all signatures, dates and time of receipt included?		
COOLERS		
Airbill	Thermometer ID: E24	Temp(°C)
		5.7
DISCREPANCIES		
None		
LAB PRESERVATIONS		
None		
NOTES		

Appendix 9 – Multiple Chain of Custody Reports

EXXONMOBIL CHEMICAL
A Division of Exxon Mobil Corporation
Post Office Box 241 • Baton Rouge, Louisiana • 70821

☐ : Mandatory ☐ : Optional ☐ : Supplier Lab Use Only

Forrest Munksgaard

Send Report to:	Supplier:	MPACT/Purchase Order No:				
ExxonMobil Contact: Betty Burden	Laboratory: GCAL	Vendor No. 1000				
Unit/location:	Address: 7979 GSRI Avenue	<table border="1"> <tr> <td>GEIDA</td> <td>COST CENTER</td> </tr> <tr> <td>0 4 8 3 5 1 0 0 0</td> <td>C02 1 3 7 2 0 5 7</td> </tr> </table>	GEIDA	COST CENTER	0 4 8 3 5 1 0 0 0	C02 1 3 7 2 0 5 7
GEIDA	COST CENTER					
0 4 8 3 5 1 0 0 0	C02 1 3 7 2 0 5 7					
Project:	Baton Rouge, LA 70820-7402	ORDER				
Phone: 225 - 977 - 4311	Phone: 225 - 769 - 4900	9				
Pager:						

[illegible]

Transporter: ☐ ExxonMobil ☐ Analytical Lab ☐ Emery ☐ Other _____ Airbill / Invoice No.: _____					Remarks: # Added per sample history. AEL 1-19-16	
	Relinquished By (signature)	Received By (signature)	Relinquished Date (month/day/year)	Relinquished Time (24.00)	Temperature °C _____ (Add Use Only)	
1	<i>[Signature]</i>	<i>[Signature]</i>	01/19/16	0430		
2	<i>[Signature]</i>	<i>[Signature]</i>	01-19-16	1210		
3	<i>[Signature]</i>	<i>[Signature]</i>	1-19-16	1300		

Matrix Code: W = Water S = Soil SD = Solids L = Liquid SL = Sludge H = Hydrocarbon CT = Charcoal tube A = Air bag O = Other (specify)

Preservative Code: H = HCl to pH < 2 NA = 0.008% $\text{Na}_2\text{S}_2\text{O}_3$ HS = H_2SO_4 to pH < 2 HN = HNO_3 to pH < 2 U = Unpreserved

White Copy: Original **Canary Copy:** Laboratory **Pink Copy:** Gate Pass **Goldenrod Copy:** Sample Shipment Center

Mon - Wed - Fri

3. BACKLIST

 SAMPLE RECEIVING CHECKLIST 																																														
SAMPLE DELIVERY GROUP 216011931																																														
Client PM AEC 0176 - ExxonMobil Chemical	Transport Method COURIER	<table border="1"> <thead> <tr> <th></th> <th>YES</th> <th>NO</th> <th>NA</th> </tr> </thead> <tbody> <tr> <td>Were all samples received using proper thermal preservation?</td> <td>☒</td> <td>☐</td> <td>☐</td> </tr> <tr> <td>When used, were all custody seals intact?</td> <td>☐</td> <td>☐</td> <td>☒</td> </tr> <tr> <td>Were all samples received in proper containers?</td> <td>☒</td> <td>☐</td> <td>☐</td> </tr> <tr> <td>Were all samples received using proper chemical preservation?</td> <td>☐</td> <td>☒</td> <td>☐</td> </tr> <tr> <td>Was preservative added to any container at the lab?</td> <td>☒</td> <td>☐</td> <td>☐</td> </tr> <tr> <td>Were all containers received in good condition?</td> <td>☒</td> <td>☐</td> <td>☐</td> </tr> <tr> <td>Were all VOC water samples received without head space?</td> <td>☐</td> <td>☐</td> <td>☒</td> </tr> <tr> <td>Do all sample labels match the Chain of Custody?</td> <td>☒</td> <td>☐</td> <td>☐</td> </tr> <tr> <td>Did the Chain of Custody list the sampling technician?</td> <td>☒</td> <td>☐</td> <td>☐</td> </tr> <tr> <td>Was the COC maintained i.e. all signatures, dates and time of receipt included?</td> <td>☒</td> <td>☐</td> <td>☐</td> </tr> </tbody> </table>		YES	NO	NA	Were all samples received using proper thermal preservation?	☒	☐	☐	When used, were all custody seals intact?	☐	☐	☒	Were all samples received in proper containers?	☒	☐	☐	Were all samples received using proper chemical preservation?	☐	☒	☐	Was preservative added to any container at the lab?	☒	☐	☐	Were all containers received in good condition?	☒	☐	☐	Were all VOC water samples received without head space?	☐	☐	☒	Do all sample labels match the Chain of Custody?	☒	☐	☐	Did the Chain of Custody list the sampling technician?	☒	☐	☐	Was the COC maintained i.e. all signatures, dates and time of receipt included?	☒	☐	☐
	YES	NO	NA																																											
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Was the COC maintained i.e. all signatures, dates and time of receipt included?	☒	☐	☐																																											
Profile Number 71477	Received By Lofton, Katie E.																																													
Line Item(s) 1 - MBLA Effluent 2 - UNOX Effluent 3 - UNOX Effluent ISS 4 - MBLA FEED	Receive Date(s) 01/19/16																																													
COOLERS		DISCREPANCIES																																												
Airbill	Thermometer ID: E26	Temp(°C) 0.6																																												
		None																																												
		LAB PRESERVATIONS SM 4509-NH3 B/C-2011 \ H2SO4																																												
NOTES																																														

Revision 1.4

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☐ : Mandatory ☐ : Optional ☐ : Supplier Lab Use Only

Form Number: _____

Send Report to:	Supplier:	MPACT/Purchase Order No:
Eaton/Mobil Contact: Betty Burden	Laboratory: GCAL	Vendor No. 1000
Unit/Location: Infrastructure	Address: 7979 GSRI Avenue	GCOA 0 4 8 3 5 1 0 0 0
Project:	Baton Rouge, LA 70820-7402	COST CENTER C02 1 3 7 2 0 5 7
Phone: 225 - 977 - 4311	Phone: 225 - 769 - 4900	ORDER 9
Pager:		

[illegible]

Matrix Code: W = Water S = Soil SD = Solid L = Liquid SL = Sludge H = Hydrocarbon CT = Charcoal Tube A = Air bag O = Other (specify)

Preservative Code: H = HCl to pH < 2 NA = 0.008% $\text{Na}_2\text{S}_2\text{O}_5$ H5 = H_2SO_5 to pH < 2 HN = HNO_3 to pH < 2 U = Unpreserved

White Copy: Original **Canary Copy:** Laboratory **Pink Copy:** Gate Pass **Goldenrod Copy:** Sample Shipment Center

Mon - Wed - Fri



SAMPLE RECEIVING CHECKLIST



SAMPLE DELIVERY GROUP 215021402		CHECKLIST	YES	NO	NA
Client 0176 - ExxonMobil Chemical	Transport Method COURIER	Were all samples received using proper thermal preservation?	☒	☐	☐
Profile Number 71477	Received By Saucier, Charlotte M.	When used, were all custody seals intact?	☐	☐	☒
Line Item(s) 1 - MBLA Effluent 2 - UNOX Effluent 3 - UNOX Effluent TSS 4 - MBLA FEED	Receive Date(s) 02/14/15	Were all samples received in proper containers?	☒	☐	☐
		Were all samples received using proper chemical preservation?	☐	☒	☐
		Was preservative added to any container at the lab?	☒	☐	☐
		Were all containers received in good condition?	☒	☐	☐
		Were all VOA vials received with no head space?	☐	☐	☒
		Do all sample labels match the Chain of Custody?	☒	☐	☐
		Did the Chain of Custody list the sampling technician?	☒	☐	☐
		Was the COC maintained i.e. all signatures, dates and time of receipt included?	☒	☐	☐
COOLERS		DISCREPANCIES	LAB PRESERVATIONS		
Airbill	Thermometer ID: E26	Temp(°C)	None		
		1.2	21502140202-2\ H2SO4 21502140204-2\ H2SO4		
NOTES					

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http://webserver1/GCAL_Intranet/SecureWO_Checklist2.aspx

1/1

EXXONMOBIL CHEMICAL

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CHAIN OF - CUSTODY RECORD

☐ : Mandatory ☐ : Optional ☐ : Supplier L

Client ID: 0176 - ExxonMobil Chemical

SDG: 216102552

PM: AEC



Send Report to:
ExxonMobil Contact: **AWT Process Contact**
Unit/Location: **CPWO 2450**
Project: **AWT BOD & TSS MWF Samples**
Phone: **225 - 977 - 4432**
Pager:

Supplier:
Laboratory: **GCAL**
Address: **7979 GSRI Avenue**
Baton Rouge, LA 70820
Phone: **225 - 769 - 4900**

MPA
Vendor No. **1000**
GCDA: **0 4 8 3 5 1 0 0 0** COST CENTER: **C 0 2 1 3 7 2 0 5 7**
ORDER: **9**

Sampled by: <i>[Signature]</i>		Fax Results to:		Analytical Requests										Analysis Due Date
Company: <i>XOM</i>		Fax Number:												Sample Group No.
Sample Station	Sample ID Code or Description	Sample Type	Sample Collect Date (mm/dd/yy)	Sample Collect Time (Military Time)	M at i x	P re-serv-a-tives	T e m p	Total No. Bottles, Volume & Containers	TKN SM 4500-NH ₃ -B/C	SOL BOD5 SM 5210B	Total BOD5 SM 5210B	TSS SM 2540D		Supplier Lab ID:
	MBLA FEED MWF	24-hr Comp	10/24/16	23:59	W		<6°C	1/2 GAL P, G	✓	✓				1
	MBLA Effluent MWF	24-hr Comp	10/24/16	23:59	W		<6°C	1/2 GAL P, G	✓	✓				2
	UNOX Effluent MWF	24-hr Comp	10/24/16	23:59	W		<6°C	1 Qt P, G	✓					3
	UNOX Effluent (001) BOD/TSS	24-hr Comp	10/24/16	23:59	W		<6°C	1/2 GAL P, G			✓	✓		4.5

Turn Around Time: ☒ Standard ☐ One Week ☐ Three Days ☐ 24 - 48 Hours ☐ Other

Transporter: ☐ ExxonMobil ☐ Analytical Lab ☐ Emergency ☐ Other

Bill / Invoice No: _____

	Relinquished By (signature)	Received By (signature)	Relinquished Date (mm/dd/yy)	Relinquished Time (Military Time)
1	<i>[Signature]</i>	<i>[Signature]</i>	10/25/16	0430
2	<i>[Signature]</i>	<i>[Signature]</i>	10/25/16	0530
3	<i>[Signature]</i>	<i>[Signature]</i>	11-25-16	1210
4	<i>[Signature]</i>	<i>[Signature]</i>	11-25-16	1420

Remarks:

Temperature °C *14.6* (Lab Use Only)

Matrix Code: W = Water S = Soil SO = Solid L = Liquid SL = Sludge H = Hydrocarbon CT = Charcoal Tube A = Air bag O = Other (specify)
Preservative Code: H = HCl to pH < 2 NA = NaOH to pH > 12 HS = H₂SO₄ to pH < 2 HB = HNO₃ to pH < 2 U = Unpreserved
Container Code: G = Glass P = Plastic TFC = Teflon lined cap TFS = Teflon lined septum

Monday / Wednesday / Friday



SAMPLE RECEIVING CHECKLIST



4 2 1 6 1 0 2 5 5 2 4

SAMPLE DELIVERY GROUP 216102552			CHECKLIST	YES	NO	NA
Client: PM AEC ExxonMobil Chemical	Transport Method: COURIER		Samples received with proper thermal and chemical preservation?	☐	☒	☐
			Radioactivity is < 1600 cimp? If no, record cimp value in notes section	☒	☐	☐
			Custody seals present and intact?	☐	☐	☒
Profile Number: 271415	Received By: McCune, Dodie N		GOC relinquished and complete (including sample IDs, collect dates/times, and sampler name)?	☒	☐	☐
			Short holds or RUSH samples received?	☒	☐	☐
			All containers received in good condition and within hold time?	☒	☐	☐
			All sample labels and containers received match the chain of custody?	☒	☐	☐
Line Item(s): 1 - MBLA FEED MWF 2 - MBLA Effluent MWF 3 - UNOX Effluent MWF 4 - UNOX Effluent (001) ROD 5 - UNOX Effluent (001) TSS	Receive Date(s): 10/25/16		Preservation checked at receipt? Exceptions: VOC, Coliform, TOC, Oil and Grease, DOC	☒	☐	☐
			Preservative added to any containers?	☒	☐	☐
			VOC water containers received with headspace < 8mm?	☐	☐	☒
			Received filtered sample volume for dissolved analysis?	☐	☐	☒
			Trip blank present in all coolers containing VOC waters?	☐	☐	☒
			Samples collected in containers provided by GCAL?	☐	☒	☐
COOLERS			DISCREPANCIES	LAB PRESERVATIONS		
Airbill	Thermometer ID: E29	Temp(°C)	None	SM 4500-NH3 B/C-2011 \ H2504 SM 4500-NH3 B/C-2011 \ H2504		
		0.4				
NOTES						

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☐ : Mandatory ☐ : Optional ☐ : S

Client ID: 0176 - ExxonMobil Chemical

1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 26

Turn Around Time:	☒ Standard	☒ One Week	☐ Three Days	☐ 21 - 48 Hours	☐ Other
Transporter: ☐ ExxonMobil ☐ Analytical Lab ☐ Emery ☐ Other _____					Remarks: S2407 Temperature °C _____ (Lab Use Only)
Airbill / Invoice No.: _____					
	Relinquished By (signature)	Received By (signature)	Relinquished Date (mm/dd/yy)	Relinquished Time (Military Time)	
1			7-19-16	1130	
2			7-19-16	1108	
3			7-19-16	1230	
4					
5					

Matrix Code: W = Water S = Soil SD = Solid L = Liquid SL = Sludge H = Hydrocarbon CT = Charcoal Tube A = Air bag O = Other (specify)

Preservative Code: H = HCL to pH <2 NA = 0.008% $\text{Na}_2\text{S}_2\text{O}_3$ HS = H_2SO_3 to pH <2 HN = HNO_3 to pH <2 U = (Unpreserved)

Container Code: G = Glass P = Plastic T1C = Teflon lined cap T5 = Teflon-lined septum

Monday / Wednesday / Friday

6:44 b. 21c)

Checklist

 SAMPLE RECEIVING CHECKLIST 					
SAMPLE DELIVERY GROUP 216071928		CHECKLIST	YES	NO	NA
Client PM AEC 0176 - ExxonMobil Chemical	Transport Method COURIER	Samples received with proper thermal and chemical preservation?	☐	☒	☐
		Radioactivity is <1600 cpm? If no, record cpm value in notes section.	☒	☐	☐
		Custody seals present and intact?	☒	☐	☒
Profile Number 71477	Received By Lofton, Kate E.	COC relinquished and complete (including sample IDs, collect dates/times, and sampler name)?	☒	☐	☐
		Short holds or RUSH samples received?	☒	☐	☐
		All containers received in good condition and within hold time?	☒	☐	☐
		All sample labels and containers received match the chain of custody?	☒	☐	☐
Line Item(s) 1 - MBLA Effluent MWF 2 - UNOX Effluent MWF 3 - UNOX Effluent (001) TSS 4 - MBLA FEED MWF	Receive Date(s) 07/19/16	Preservation checked at receipt? Exceptions: VOC, Coliform, TOC, Oil and Grease, DOC	☒	☐	☐
		Preservative added to any containers?	☒	☐	☐
		VOC water containers received with headspace < 6mm?	☐	☐	☒
		Received filtered sample volume for dissolved analysis?	☐	☐	☒
		Trip blank present in all coolers containing VOC waters?	☐	☐	☒
		Samples collected in containers provided by GCAL?	☐	☒	☐
COOLERS		DISCREPANCIES	LAB PRESERVATIONS		
Airbill	Thermometer ID: E26	Temp(°C)	None		
		1.1	SM 4500-NH3 B/C-2011 \ H2SO4		
			SM 4500-NH3 B/C-2011 \ H2SO4		
NOTES					

Revision 1.5

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EXXONMOBIL CHEMICAL

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CHAIN - OF - CUSTODY RECC

☐ : Mandatory ☐ : Optional ☐ : Supply

Client ID: 0176 - ExxonMobil Chemical

SDG: 216072107

PM: AEC



Send Report to: ExxonMobil Contact: AWT Process Contact		Supplier: Laboratory: GCAL	
Unit Location: CPWO 2450		Address: 7979 GSRI Avenue	
Project: AWT BOD & TSS MWF Samples		City: Baton Rouge, LA 70820	
Phone: 225 - 977 - 4432		Phone: 225 - 769 - 4900	
Pager:		Version: 1000	
GCOA: 048351000		COST CENTER: C021372057	
ORDER: 9			

Sampled by:			Fax Results to:							Analytical Requests					Analysis Due Date
Company:			Fax Number:												Sample Group No.
Sample Station	Sample ID Code or Description	Sample Type	Sample Collect Date (mm/dd/yy)	Sample Collect Time (Military Time)	Matrix	Preservatives	Temp	Total No. Bottles, Volume & Containers	TKN SM 4500-NH ₃ B/C	Sol. BOD5 SM 5210B	Total BOD5 SM 5210B	TSS SM 2540D	Supplier Lab ID:		
200	MBLA FEED MWF	24-hr Comp	7-20-16	23:59	W		<6°C	1/2 GAL P.G	✓	✓			1		
200	MBLA Effluent MWF	24-hr Comp	7-20-16	23:59	W		<6°C	1/2 GAL P.G	✓	✓			2		
200	UNOX Effluent MWF	24-hr Comp	7-20-16	23:59	W		<6°C	1 Qt P.G	✓				3		
200	UNOX Effluent (001) BOD/TSS	24-hr Comp	7-20-16	23:59	W		<6°C	1/2 GAL P.G			✓	✓	4 5		
Turn around Time:		☒ Standard		☒ One Week		☐ Three Days		☐ 24 - 48 Hours		☐ Other					

Turn Around Time: ☒ Standard ☐ One Week ☐ Three Days ☐ 24-48 Hours ☐ Other

Transporter: ☐ ExxonMobil ☐ Analytical Lab ☐ Empty ☐ Other					Remarks:
Facility / Invoice No.:					
Relinquished By (Signature)	Received By (Signature)	Relinquished Date (mm/dd/yy)	Relinquished Time (Military Time)		
1. [Signature]	[Signature]	7-21-16	09:40		
2. [Signature]	[Signature]	7-21-16	09:15		
3. [Signature]	[Signature]	7-21-16	09:55		
4.					
5.					
Temperature °C:					(Lab Use Only)

Matrix Code: W = Water S = Soil SD = Solid L = Liquid SL = Sludge H = Hydrocarbon CT = Charcoal Tube A = Air bag O = Other (specify) ...

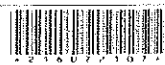
Preservative Code: H = HCl to pH < 2 NA = 0.008% Na₂S₂O₃ HS = H₂SO₄ to pH < 2 HN = HNO₃ to pH < 2 U = Unpreserved

Container Code: G = Glass P = Plastic LLC = Teflon-lined cap TLS = Teflon-lined septum

Monday / Wednesday / Friday

(attach copy)

Checklist

 SAMPLE RECEIVING CHECKLIST 																																			
SAMPLE DELIVERY GROUP 216072107																																			
Client PM AEC 0176 - ExxonMobil Chemical	Transport Method COURIER	CHECKLIST <table border="1"> <thead> <tr> <th>YES</th> <th>NO</th> <th>NA</th> </tr> </thead> <tbody> <tr> <td>☐</td> <td>☒</td> <td>☐</td> </tr> <tr> <td>☒</td> <td>☐</td> <td>☐</td> </tr> <tr> <td>☒</td> <td>☐</td> <td>☒</td> </tr> <tr> <td>☐</td> <td>☒</td> <td>☐</td> </tr> <tr> <td>☒</td> <td>☐</td> <td>☐</td> </tr> <tr> <td>☒</td> <td>☐</td> <td>☐</td> </tr> <tr> <td>☒</td> <td>☐</td> <td>☐</td> </tr> <tr> <td>☒</td> <td>☐</td> <td>☐</td> </tr> <tr> <td>☐</td> <td>☐</td> <td>☒</td> </tr> <tr> <td>☐</td> <td>☒</td> <td>☐</td> </tr> </tbody> </table>	YES	NO	NA	☐	☒	☐	☒	☐	☐	☒	☐	☒	☐	☒	☐	☒	☐	☐	☒	☐	☐	☒	☐	☐	☒	☐	☐	☐	☐	☒	☐	☒	☐
YES	NO	NA																																	
☐	☒	☐																																	
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Profile Number 71477	Received By Lofton, Katie E.	COC relinquished and complete (including sample IDs, collect dates/times, and sampler name)? ☐																																	
Line Item(s) 1 - MBLA Effluent MWF 2 - UNOX Effluent MWF 3 - UNOX Effluent (001) TSS 4 - MBLA FEED MWF	Receive Date(s) 07/21/16	Short holds or RUSH samples received? ☒																																	
		All containers received in good condition and within hold time? ☒																																	
		All sample labels and containers received match the chain of custody? ☒																																	
		Preservation checked at receipt? Exceptions: VOC, Coliform, TOC, Oil and Grease, DOC ☒																																	
		Preservative added to any containers? ☒																																	
		VOC water containers received with headspace < 6mm? ☐																																	
		Received filtered sample volume for dissolved analysis? ☐																																	
		Trip blank present in all coolers containing VOC waters? ☒																																	
		Samples collected in containers provided by GCAL? ☒																																	
COOLERS		DISCREPANCIES																																	
Airbill	Thermometer ID: E26	LAB PRESERVATIONS																																	
	Temp(°C) 0.5	SM 4500-NH3 B/C-2011 \ H2504 SM 4500 NH3 B/C-2011 \ H2504																																	
NOTES																																			

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