LPDES PERMIT NO. LA0003026, AI No. 2538

LPDES FACT SHEET and RATIONALE
FOR THE DRAFT LOUISIANA POLLUTANT DISCHARGE ELIMINATION SYSTEM
(LPDES) PERMIT TO DISCHARGE TO WATERS OF LOUISIANA

I. Company/Facility Name: ConocoPhillips Company
Lake Charles Refinery
Post Office Box 37
Westlake, Louisiana 70669

II. Issuing Office: Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

III. Prepared By: Jenniffer Sheppard
Water Permits Division
Phone #: 225-219-3138
E-mail: jenniffer.sheppard@la.gov

Date Prepared: August 28, 2006

IV. Permit Action/Status:

A. Reason For Permit Action:

Proposed reissuance of an Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term following regulations promulgated at LAC 33:IX.2711/40 CFR 122.46.

* In order to ease the transition from NPDES to LPDES permits, dual regulatory references are provided where applicable. The LAC references are the legal references while the 40 CFR references are presented for informational purposes only. In most cases, LAC language is based on and is identical to the 40 CFR language. 40 CFR Parts 401 and 405-471 have been adopted by reference at LAC 33:IX.4903 and will not have dual references. In addition, state standards (LAC Chapter 11) will not have dual references.

LAC 33:IX Citations: Unless otherwise stated, citations to LAC 33:IX refer to promulgated regulations listed at Louisiana Administrative Code, Title 33, Part IX.

40 CFR Citations: Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations in accordance with the dates specified at LAC 33:IX.4901, 4903, and 2301.F.

B. LPDES permit - LPDES permit effective date: June 1, 1997
LPDES permit expiration date: May 31, 2002
EPA has not retained enforcement authority.

C. Application received on January 2002. Updated information submitted on May 31, 2002, January 29, 2003, March 5, 2003, September 3, 2003, March 15, 2005, August 28, 2006, and e-mail correspondence from March 3, 2006, June 12, 2006, June 15, 2006, and August 30, 2006.

V. Facility Information:

A. Location - 2200 Old Spanish Trail, Westlake

B. Applicant Activity - According to the application, ConocoPhillips Company - Lake Charles Refinery, is a petroleum refinery and manufactures refined petroleum products from crude petroleum. These products include fuel gas, LPG propane, butane, gasoline, jet fuels, fuel oils, petroleum coke and sulfur from sulfur recovery operations.

Stormwater discharges from ConocoPhillips Company - Lake Charles Refinery are covered under the Multi-Sector General Permit (MSGP), LAR05N651, effective on June 28, 2005. The following Outfalls are now covered under the MSGP: Outfalls 007, 008, 010, 011, 012, 013, 014, 015, 016, 017, 018, 019, 020, 021, 028, 029, 031, 032, 033, 034, 035, 036, 037, 038, 039, 040, 041, 042, 043, 044, 045, 046, 047, 052, 053, 054, 055, 056, 057, 058, 059, 060, and 061.

Stormwater outfalls retained in this permit include: Outfalls 003, 004, 006, 009, and 030.

Hydrostatic test discharges listed as part of the outfall descriptions for 003, 004, 006, 009, and 030 are covered under the Hydrostatic Test General Permit, LAG679013.

C. Technology Basis - (40 CFR Chapter 1, Subchapter N/Parts 401, and 405-471 have been adopted by reference at LAC 33:IX.4903)

Guideline	Reference
Refinery Guidelines	40 CFR 419
Feedstock rate to Topping Unit(s), 1000 bbl/day -	258
Process Unit Rates, 1000 bbl/day:	
Crude desalting	258.000
Atmospheric distillation	258.000
Vacuum crude distillation	212.200
Thermal cracking	12.150
Fluid catalytic cracking	48.500
Hydrocracking	36.969
Delayed coking	55.300
Lube hydrofining	28.688
Sulfuric acid alkylation *	12.300
Catalytic reforming *	48.865

* Not applicable to refinery process configuration factor.

Ballast water flow, 1000 gal/day - 28.8
Stormwater flow, 1000 gal/day - 1036.8, based on max 30 flow from application.

Other sources of technology based limits:
LDEQ Stormwater Guidance, letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6).

Multi-Sector General Permit (MSGP) for Industrial Stormwater Discharges, LAR050000
Best Professional Judgement (BPJ)

D. Fee Rate -
1. Fee Rating Facility Type: major
2. Complexity Type: V
3. Wastewater Type: II
4. SIC code: 2911

E. Continuous Facility Effluent Flow - 5.43 MGD (Max 30 Day Flow).

VI. Receiving Waters:

Calcasieu River
1. TSS (15%), mg/L: 10
2. Average Hardness, mg/L $CaCO_3$: 977.65
3. Critical Flow, cfs: 1181
4. Mixing Zone Fraction: 0.333
5. Harmonic Mean Flow, cfs: 3542
6. River Basin: Calcasieu River, Segment No. 030301
7. Designated Uses:
   The designated uses are primary contact recreation, secondary contact recreation, and fish and wildlife propagation.

Bayou Verdine
1. River Basin: Calcasieu River, Segment No. 030306
2. Designated uses are primary contact recreation, secondary contact recreation, and fish and wildlife propagation.

Information based on the following: Water Quality Management Plan, Volume 5A, 1994; LAC 33:IX Chapter 11;/Recommendation(s) from the Engineering Section. Hardness and 15% TSS data come from monitoring station Bayou D'Inde near Lake Charles (#094) listed in Hardness and TSS Data for All LDEQ Ambient Stations for the Period of Record as of March 1998, LeBlanc. This station is near the juncture of Bayou D'Inde and the Calcasieu River and reflects the water quality conditions in this area better than the stations at Burton's Landing or I-10.

VII. Outfall Information:

Outfall 001

A. Type of wastewater - the discharge of treated process wastewater; ballast water/crude tank drains; utility wastewater (*1); cooling tower blowdown; maintenance washwater; sanitary wastewater; process and non-process area stormwater runoff; hydrostatic test water; wastewater/purge water associated with development of monitoring wells; and previously monitored/treated wastewater from groundwater remediation activities from Internal Outfalls 101 and 201.

(*1) Utility wastewaters include wastewaters generated from the proposed Steam Methane Reformer (SMR) unit operated by Air Products and Chemicals, Inc., to be treated and discharged via Outfall 001.

B. Location - Discharge to Calcasieu River at Latitude 30°13'13", Longitude 93°15'14".

C. Treatment - treatment of wastewaters consists of:
- primary treatment
- primary dissolved/induced gas flotation
- equalization
- activated sludge
- secondary clarification
- final dissolved air flotation
- equalization
- aeration (effluent diffuser)

D. Flow - 5.373 MGD (Average Flow), 5.43 MGD (Max 30 Day Flow)

Process Area Wastewater*	1.2600 MGD
Process Area Stormwater*	1.2672 MGD
Cooling Water/Utilities Wastewater*	0.9504 MGD
Ballast Water/Crude Tank Drains*	0.0432 MGD
Sanitary Wastewater*	0.0432 MGD
Desalting of Crude*	0.7560 MGD
Remediated Groundwater*	0.0144 MGD
Truck Wash Waters	0.0018 MGD
Process Area Runoff (Intermittent)*	1.0368 MGD
<u>Additional Proposed Flow:</u>	
Remediated Groundwater*	0.0144 MGD

E. Receiving waters - Calcasieu River

F. Basin and segment - Calcasieu River Basin, Segment 030301

<u>Internal Outfall 101</u>

A. Type of wastewater - the discharge of wastewater from the remediation of 1,2-dichloroethane (EDC) contaminated groundwater and cooling tower blowdown.

B. Location - Sample location at Latitude 30°14'03", Longitude 93°15'23". Discharge to Calcasieu River via final Outfall 001 at Latitude 30°13'13", Longitude 93°15'14".

C. Treatment - treatment of contaminated groundwater consists of:
- adsorption
- neutralization
- grit removal

D. Flow - Continuous Flow 0.0144 MGD average flow based on Form 2C of permit application

E. Receiving waters - Calcasieu River via Final Outfall 001.

F. Basin and segment - Calcasieu River Basin, 030301

Internal Outfall 201

A. Type of wastewater - the discharge of wastewater from the remediation of 1,2-dichloroethane (EDC) contaminated groundwater from the West End Project and cooling tower blowdown.

B. Location - Sample location at Latitude 30°14'37", Longitude 93°17'17". Discharge to Calcasieu River via final Outfall 001 at Latitude 30°13'13", Longitude 93°15'14".

C. Treatment - treatment of contaminated groundwater consists of:
- adsorption
- neutralization
- grit removal

D. Flow - Continuous Flow 0.0144 MGD average flow based on Form 2C of permit application

E. Receiving waters - Calcasieu River via Final Outfall 001.

F. Basin and segment - Calcasieu River Basin, 030301

Outfall 002

A. Type of wastewater - the emergency discharge from the stormwater overflow pond which includes non-process area stormwater; post first flush process area stormwater (*1); and de minimus flows of process-related and utility wastewaters.

(*1) Post first flush runoff is defined as rainfall in excess of 2.0 inches in a 72 hour period. First flush process area stormwater is treated and discharged via Outfall 001.

B. Location - at the point of discharge just downstream from the storm water overflow pond and prior to combining with other waters and entering Bayou Verdine at Latitude 30°14'21", Longitude 93°16'40"

C. Treatment - None

D. Flow - Intermittent

E. Receiving waters - Bayou Verdine

F. Basin and segment - Calcasieu River Basin, 030306

Outfalls 003

A. Type of wastewater - the discharge of non-process area stormwater runoff, steam condensate, and previously monitored hydrostatic test water.

B. Location - at the point of discharge in the north railroad ditch prior to entering Westlake drainage ditch and the Calcasieu River at Latitude 30°14'23", Longitude 93°15'29"

C. Treatment - None

D. Flow - Intermittent

E. Receiving waters - Calcasieu River

F. Basin and segment - Calcasieu River Basin, Segment 030301

Outfalls 004

A. Type of wastewater - the intermittent discharge of non-process area stormwater runoff, steam condensate, and previously monitored hydrostatic test water.

B. Location - at the point of discharge at the west railroad ditch, prior to commingling with any other waters and discharging into Bayou Verdine at Latitude 30°14'22", Longitude 93°16'39"

C. Treatment - None

D. Flow - Intermittent

E. Receiving waters - Bayou Verdine

F. Basin and segment - Calcasieu River Basin, Segment 030306

Outfalls 006

A. Type of wastewater - the discharge of non-process area stormwater runoff, steam condensate, and previously monitored hydrostatic test water.

B. Location - at the point of discharge prior to entering the Sampson Street drainage ditch and the Calcasieu River at Latitude 30°14'23", Longitude 93°15'29"

C. Treatment - None

D. Flow - Intermittent

E. Receiving waters - Calcasieu River

F. Basin and segment - Calcasieu River Basin, Segment 030301

Outfall 009

A. Type of wastewater - the discharge of post first flush process area stormwater runoff (*1), steam condensate, and previously monitored hydrostatic test water.

(*1) Post first flush runoff is defined as rainfall in excess of 2.0 inches in a 72 hour period. First flush process area stormwater is treated and discharged via Outfall 001.

B. Location - at the point of discharge from the No. 10 Reformer Unit manual valve, prior to commingling with any other waters and discharging into Bayou Verdine at Latitude 30°14'45", Longitude 93°16'44"

C. Treatment - None

D. Flow - Intermittent

E. Receiving waters - Bayou Verdine

F. Basin and segment - Calcasieu River Basin, 030306

Outfall 030

A. Type of wastewater - the discharge of post first flush process area stormwater runoff (*1), steam condensate, and previously monitored hydrostatic test water.

(*1) Post first flush runoff is defined as rainfall in excess of 2.0 inches in a 72 hour period. First flush process area stormwater is treated and discharged via Outfall 001.

B. Location - at the point of discharge from the Excel Unit flapper valve, prior to commingling with any other waters and discharging into Bayou Verdine at Latitude 30°14'31", Longitude 93°16'45"

C. Treatment - None

D. Flow - Intermittent

E. Receiving waters - Bayou Verdine

F. Basin and segment - Calcasieu River Basin, 030306

Outfall 051

A. Type of wastewater - the discharge of dewatering operations wastewater associated with dredging in Bayou Verdine and non-process area stormwater.

B. Location - at the point of discharge from the dredging operations, prior to mixing with any other waters and discharging into Bayou Verdine at Latitude 30°14'33", Longitude 93°17'17"

C. Treatment - treatment of dewatering operations wastewater consists of:
- settling
- filtration

D. Flow - Intermittent

E. Receiving waters - Bayou Verdine

F. Basin and segment - Calcasieu River Basin, 030306

VIII. Proposed Permit Limits:

The specific effluent limitations and/or conditions will be found in the draft permit. Development and calculation of permit limits are detailed in the Permit Limit Rationale section below.

Summary of Proposed Changes From the Current NPDES Permit:

A. Outfall 001 - Permit limits have been assigned for BOD_5, TSS, COD, Oil & Grease, Ammonia As N), Sulfide (as S), Phenolic Compounds, Total Chromium and Chromium (6+) based on the increase in production from 233.7 K bbl/day in the June 1, 1997 permit to 258 K bbl/day.

B. Outfall 001 - The applicant requested that the monitoring frequencies at Outfall 001 be reduced based on its historical compliance performance. This request has been partially granted. A compliance review covering the period of June 2004 through August 2006 showed exceedances for the following pollutants: TSS, Sulfide (as S), Phenolic Compounds, Total Chromium, and Total Cyanide. Therefore, the frequencies for these parameters will be retained as previously permitted. Based on compliance history and in accordance with the requirements stated in the USEPA Memorandum "Interim Guidance for Performance Based Reductions of NPDES Permit Monitoring Frequencies," the measurement frequencies for BOD5, Oil & Grease, COD, and Ammonia (as N) have been changed from 3/week to 1/ week and the frequency for Chromium (6+) has been changed from 1/month to 1/ 2 months.

C. Outfall 001 - Monitoring and reporting requirements for total zinc are deleted, as sufficient data has been collected to characterize the effluent for water quality screening, and screening results (see Appendix B) indicate that water quality-based limits are not needed. In addition, zinc is not identified on the 303(d) list as a pollutant of concern for the receiving stream, and thus TMDL development is not required for zinc.

D. Outfall 001 - Biomonitoring frequency has been reduced from 1/month to 1/quarter. In addition, the Whole Effluent Toxicity (WET) limit defined as the critical dilution has changed from 1.78% in the current permit to 2.1% in the proposed permit. These changes are in accordance with LDEQ/OES Permitting Guidance Document for Implementing Louisiana Surface Water Standards, EPA Region 6 Post-Third Whole Effluent Toxicity Testing Frequencies (Revised June 30, 2000), BPJ of the reviewer, and Upper Calcasieu Estuary TMDLs issued in the Federal Register on June 13, 2002. ConocoPhillips requested that the biomonitoring frequency be reduced to once every six months. This request is denied.

E. Outfall 001 - Total Copper, Total Mercury, Benzo(a)anthracene and Benzo(a)pyrene daily maximum limits have been added based on the Upper Calcasieu Estuary TMDL issued in the Federal Register on June 13, 2002. These limits shall become effective on June 13, 2008. Interim reporting requirements have been established for these parameters until these final limits become effective.

F. Outfall 001 -The applicant requested that utility wastewater from the Steam Methane Reformer (SMR) unit to be operated by Air Products and Chemicals, Inc be approved for

treatment and discharge thru Outfall 001. This request is approved.

G. Outfalls 001 and 002 - Due to some de minimus amounts of process wastewaters being discharged through Outfall 002, limitations associated with the refinery guidelines under 40 CFR 419 will be the arithmetic sum of discharges from both outfalls. The previous permit allowed for the arithmetic sum of Outfall 005, in addition to Outfalls 001 and 002.

H. Internal Outfall 201 - This internal outfall has been added to the permit for the discharge of wastewater from the remediation of 1,2-Dichloroethane (EDC) contaminated groundwater from the West End Project. Based on information provided in the application, this internal outfall has been assigned permit requirements similar to existing Internal Outfall 101.

I. Outfall 002 - Due to the intermittent nature of this outfall, the monitoring frequencies for all summed parameters (BOD5, TSS, Oil & Grease, COD, Ammonia (as N), Sulfide (as S), Phenolic Compounds, Total chromium, Chromium (6+), and Total Cyanide) have been changed to 1/discharge event.

J. Outfall 002 - Monitoring requirements are established for Total Copper, Total Mercury, Total Nickel, Total Zinc, Total Calcium, 1,2-Dichloroethane, Phenol, 2-Methylnapthalene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Pyrene, and Phenanthrene in accordance with Upper Calcasieu Estuary TMDL issued in the Federal Register on June 13, 2002 for Bayou Verdine.

K. Stormwater Outfalls 003, 004, 006-029, 031-061 - ConocoPhillips requested in its permit application and subsequent June 3, 2002 letter that LPDES Multi-Sector General Permit conditions replace the individual permit requirements for their 47 stormwater outfalls. This request is partially granted. Outfall 050 has been deleted as the applicant has identified that this outfall has been eliminated and will no longer discharge.

Outfalls (007, 008, 010, 011, 012, 013, 014, 015, 016, 017, 018, 019, 020, 021, 028, 029, 031, 032, 033, 034, 035, 036, 037, 038, 039, 040, 041, 042, 043, 044, 045, 046, 047, 052, 053, 054, 055, 056, 057, 058, 059, 060, and 061) pose low potential for contamination, and have thus obtained coverage under the Multi-Sector General Permit (MSGP), LAR05N651, effective on June 28, 2005.

Outfalls 003 and 006 were determined to pose potential for stormwater contamination, and are thus retained as individual outfalls in Part I of the draft permit. A monitoring frequency of 1/week has been retained based on the existing permit, effective on June 1, 1997. Monitoring for Total Copper and Total Mercury at a frequency of 1/quarter by grab sample will also be required in accordance with the Upper Calcasieu Estuary TMDL for the Calcasieu River issued in the Federal Register on June 13, 2002.

Outfall 004 has been determined to pose potential for stormwater contamination, and has thus been retained as an individual outfall in Part I of the draft permit. A monitoring frequency of 1/week has been retained based on the current permit, effective June 1, 1997. Monitoring for Total Copper, Total Mercury, Total Nickel, Total Zinc, Total Calcium, 1,2-Dichloroethane, Phenol, 2-Methylnapthalene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Pyrene, and Phenanthrene at a frequency of 1/quarter by grab sample will also be required in accordance with the Upper Calcasieu Estuary TMDL issued in the Federal Register on June 13, 2002 for Bayou Verdine.

Outfalls 009 and 030 were also were determined to pose potential for stormwater contamination, and are thus retained as individual outfalls in Part I of the draft permit. A monitoring frequency of 1/quarter has been retained based on the current permit, effective on June 1, 1997. Monitoring for Total Copper, Total Mercury, Total Nickel, Total Zinc, Total Calcium, 1,2-Dichloroethane, Phenol, 2-Methylnapthalene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Pyrene, and Phenanthrene at a frequency of 1/quarter by grab sample will also be required in accordance with the Upper Calcasieu Estuary TMDL issued in the Federal Register on June 13, 2002 for Bayou Verdine.

L. Outfall 005 - this outfall has been deleted as the applicant has identified that this outfall has been eliminated and will no longer discharge.

M. Outfall 051 - The applicant requested that wastewater from dredging operations of Bayou Verdine be permitted for discharge. This request has been granted. Monthly Average and Daily Maximum limitations were established for Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(k)fluoranthene, Chrysene, Fluoranthene, Fluorene, Naphthalene, Pyrene, and Phenanthrene based on BPJ. These pollutants are polycyclic aromatic hydrocarbons expected to be present in the discharge. Therefore, the polycyclic aromatic hydrocarbons concentrations listed in 40 CFR 414, Subpart J have been applied based on BPJ. A monitoring frequency of 1/week by grab sample has been established for these parameters. Monitoring for Total Copper, Total Mercury, Total Nickel, Total Zinc, Total Calcium, 1,2-Dichloroethane, Phenol, 2-Methylnapthalene, and Dibenzo(a,h)anthracene at a frequency of 1/quarter by grab sample will also be required in accordance with the Upper Calcasieu Estuary TMDL issued in the Federal Register on June 13, 2002 for Bayou Verdine.

IX. Permit Limit Rationale:

The following section sets forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit. Also set forth are any calculations or other explanations of the derivation of specific effluent limitations and conditions, including a citation to the applicable effluent limitation guideline or performance standard provisions as required under LAC 33:IX.2707/40 CFR Part 122.44 and reasons why they are applicable or an explanation of how the alternate effluent limitations were developed.

A. TECHNOLOGY-BASED VERSUS WATER QUALITY STANDARDS-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Following regulations promulgated at LAC 33:IX.2707.L.2.b/40 CFR Part 122.44(l)(2)(ii), the draft permit limits are based on either technology-based effluent limits pursuant to LAC 33:IX.2707.A/40 CFR Part 122.44(a) or on State water quality standards and requirements pursuant to LAC 33:IX.2707.D/40 CFR Part 122.44(d), whichever are more stringent.

B. TECHNOLOGY-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Regulations promulgated at LAC 33:IX.2707.A/40 CFR Part 122.44(a) require technology-based effluent limitations to be placed in LPDES permits based on effluent limitations guidelines where applicable, on BPJ (best professional judgement) in the absence of guidelines, or on a combination of the two. The following is a rationale for types of wastewaters. See outfall information descriptions for associated outfall(s) in Section VII.

1. **Outfall 001 (Interim and Final)** - the discharge of treated process wastewater; ballast water/crude tank drains; utility wastewater (*1); cooling tower blowdown; maintenance washwater; sanitary wastewater; process and non-process area stormwater runoff; hydrostatic test water; wastewater/purge water associated with development of monitoring wells; and previously monitored/treated wastewater from groundwater remediation activities from Internal Outfalls 101 and 201.

   (*1) Utility wastewaters include wastewaters generated from the proposed Steam Methane Reformer (SMR) unit operated by Air Products and Chemicals, Inc., to be treated and discharged via Outfall 001.

   ConocoPhillips Company, Lake Charles Refinery is subject to Best Practicable Control Technology Currently Available (BPT) and Best Available Technology Economically Achievable (BAT) effluent limitation guidelines listed below:

Manufacturing Operation	Guideline
Refinery	40 CFR 419, Subpart D

   Sanitary wastewater that is included as a part of the process wastewater stream receive BPJ allocations for BOD_5, COD and TSS loading(s) to the process wastewaters at Appendix A and associated appendices.

PARAMETER	**MONTHLY AVERAGE (LBS/DAY)**	**DAILY MAXIMUM (LBS/DAY)**
Flow	Report	Report (continuous recording)
pH, Std. Units	Report	Report (continuous recording)
BOD_5	3031*	5927*
TSS	2652*	4144*
Oil & Grease	992*	1888*
COD	21894*	42250*
Ammonia (as N)	1167*	2548*
Sulfide (as S)	16.3*	36.2*
Phenolic Compounds	13.7*	43.8*
Total Chromium	16.3*	46.5*
Chromium (6+)	1.4*	3.2*
Total Cyanide	0.1*	0.236*

* Arithmetic Sum of Outfalls 001 and 002.

Site-Specific Consideration(s)

Flow - established in accordance with LAC 33:IX.2707.I.1.b.

PH - established in accordance with LAC 33:IX.1113.C.1.

BOD_5, TSS, Oil & Grease, COD, Ammonia, Sulfide, Phenolic Compounds, Total Chromium, Hexavalent Chromium - limitations established in accordance with Refinery Guidelines under 40 CFR 419, Subpart D for the Lube Subcategory based on the production of 258,000 barrels per day.

Total Cyanide - limitations were retained from the current LPDES permit, effective on June 1, 1997.

2. **Internal Outfall(s) 101 and 201** - Groundwater Remediation Wastewaters & Cooling Tower Blowdown.

   * Outfall 101 - wastewater from the remediation of 1,2-dichloroethane (EDC) contaminated groundwater and cooling tower blowdown.

   * Outfall 201 - wastewater from the remediation of 1,2-dichloroethane (EDC) contaminated groundwater from the West End Project and cooling tower blowdown.

Groundwater Remediation wastewaters and cooling tower blowdown being discharged to discrete outfalls receive BPJ limitations/monitoring requirements according to the following schedule:

PARAMETER	MONTHLY AVERAGE μg/L	DAILY MAXIMUM μg/L
Flow (MGD)	Report	Report
1,2-Dichloroethane	50	100

Site-Specific Consideration(s)

Flow - established in accordance with LAC 33:IX.2707.I.1.b.

1,2-Dichloroethane - limitations for Outfall 101 were retained from the current LPDES permit, effective on June 1, 1997. The same limitations have been applied based on BPJ at Outfall 201 since this discharge closely resembles that of Outfall 101.

3. **Outfall(s) 002** - the emergency discharge from the stormwater overflow pond which includes non-process area stormwater; post first flush process area stormwater (*1); and de minimus flows of process-related and utility wastewaters.

   (*1) Post first flush runoff is defined as rainfall in excess of 2.0 inches in a 72 hour period. First flush process area stormwater is treated and discharged via Outfall 001.

   Stormwater associated with process area post first flush, non-process area stormwater, and de minimus flows of process-related and utility wastewaters shall receive the following BPJ limitations:

PARAMETER	**MONTHLY AVERAGE (LBS/DAY)**	**DAILY MAXIMUM (LBS/DAY)**
Flow	Report	Report
pH, Std. Units	Report	Report
BOD_5	3031*	5927*
TSS	2652*	4144*
Oil & Grease	992*	1888*
COD	21894*	42250*
Ammonia (as N)	1167*	2548*
Sulfide (as S)	16.3*	36.2*
Phenolic Compounds	13.7*	43.8*
Total Chromium	16.3*	46.5*
Chromium (6+)	1.4*	3.2*
Total Cyanide	0.1*	0.236*

* Arithmetic Sum of Outfalls 001 and 002.

Site-Specific Consideration(s)

Flow - established in accordance with LAC 33:IX.2707.I.1.b.

PH - established in accordance with LAC 33:IX.1113.C.1.

BOD_5, TSS, Oil & Grease, COD, Ammonia, Sulfide, Phenolic Compounds, Total Chromium, Hexavalent Chromium - limitations established in accordance with Refinery Guidelines under 40 CFR 419, Subpart D for the Lube Subcategory based on the production of 258,000 barrels per day.

Total Cyanide - limitations were retained from the current LPDES permit, effective on June 1, 1997.

4. Outfall(s) 003, 004, 006, 009, and 030 - Stormwater & Utility

*Outfalls 003, 004, and 006 - the discharge of non-process area stormwater runoff, steam condensate, and previously monitored hydrostatic test water.

*Outfalls 009 and 030 - the discharge of post first flush process area stormwater runoff (*1), steam condensate, and previously monitored hydrostatic test water.

(*1) Post first flush runoff is defined as rainfall in excess of 2.0 inches in a 72 hour period. First flush process area stormwater is treated and discharged via Outfall 001.

Stormwater and utility wastewaters as described above shall receive the following BPJ limitations:

PARAMETER	MONTHLY AVERAGE mg/L	DAILY MAXIMUM mg/L
Flow (MGD)	Report	Report
TOC	N/A	50
Oil and Grease	N/A	15
pH (Std. Units)	6.0 (min)	9.0 (max)

Site-Specific Consideration(s)

Flow - established in accordance with LAC 33:IX.2707.I.1.b.

PH - established in accordance with LAC 33:IX.1113.C.1.

TOC and Oil & Grease - limitations were retained from the current LPDES permit, effective on June 1, 1997. These limitations are in accordance with the requirements of the Multi-Sector General Permit (MSGP) and similarly permitted discharges.

In accordance with LAC 33:IX.2707.I.3 and 4 [40 CFR 122.44(I)(3) and (4)], a Part II condition is proposed for applicability to all storm water discharges from the facility, either through permitted outfalls or through outfalls which are not listed in the permit or as sheet flow. The Part II condition requires a Storm Water Pollution Prevention Plan (SWP3) within six (6) months of the effective date of the final permit, along with other requirements. If the permittee maintains other plans that contain duplicative information, those plans could be incorporated by reference to the SWP3. Examples of these type plans include, but are not limited to: Spill Prevention Control and Countermeasures Plan (SPCC), Best Management Plan (BMP), Response Plans, etc. The conditions will be found in the draft permit. Including Best Management Practice (BMP) controls in the form of a SWP3 is consistent with other LPDES and EPA permits regulating similar discharges of stormwater associated with industrial activity, as defined in LAC 33:IX.2522.B.14 [40 CFR 122.26(b)(14)].

5. **Outfall(s) 051** - the discharge of dewatering operations wastewater associated with dredging in Bayou Verdine and non-process area stormwater.

Dewatering operations wastewater associated with dredging in Bayou Verdine and non-process area stormwater shall receive the following BPJ limitations:

PARAMETER	**MONTHLY AVERAGE** μ **g/L**	**DAILY MAXIMUM** μ **g/L**
Flow (MGD)	Report	Report
TOC	N/A	50 mg/L
Oil and Grease	N/A	15 mg/L
pH (Std. Units)	6.0 (min)	9.0 (max)
Acenaphthene	47.0	19.0
Acenaphthylene	47.0	19.0
Anthracene(*)	47.0	19.0
Benzo(a)anthracene(*)	47.0	19.0
Benzo(a)pyrene(*)	48.0	20.0
Benzo(k)fluoranthene	47.0	19.0
Chrysene(*)	47.0	19.0
Fluoranthene(*)	54.0	22.0
Fluorine	47.0	19.0
Naphthalene	47.0	19.0
Phenanthrene(*)	47.0	19.0
Pyrene(*)	48.0	20.0

(*) Technology limits were assigned based on polycyclic aromatic hydrocarbons included in 40 CFR 414, Subpart J. These are also water quality parameters addressed by the Calcasieu Estuary Toxics TMDL, effective on June 13, 2002.

Site-Specific Consideration(s)

Flow - established in accordance with LAC 33:IX.2707.I.1.b.

PH - established in accordance with LAC 33:IX.1113.C.1.

TOC and Oil & Grease - These limitations have been established in accordance with the requirements of the Multi-Sector General Permit (MSGP) for stormwater discharges, similarly permitted discharges, and BPJ.

Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(k)fluoranthene, Chrysene, Fluoranthene, Fluorene, Naphthalene, Pyrene, and Phenanthrene - These pollutants are the polycyclic aromatic hydrocarbons included in 40 CFR 414, Subpart J. Since the permittee has indicated the possibility of the presence of these pollutants, Monthly Average and Daily Maximum concentration limitations were established based on BPJ and 40 CFR 414, Subpart J.

C. WATER QUALITY-BASED EFFLUENT LIMITATIONS

Technology-based effluent limitations and/or specific analytical results from the permittee's application were screened against state water quality numerical standard based limits by following guidance procedures established in the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, September 27, 2001. Calculations, results, and documentation are given in Appendix B.

In accordance with LAC 33:IX.2707.D.1/40 CFR § 122.44(d)(1), the existing (or potential) discharge (s) was evaluated in accordance with the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, September 27, 2001, to determine whether pollutants would be discharged "at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any state water quality standard." Calculations, results, and documentation are given in Appendix B.

The following pollutants received water quality based effluent limits/requirements:

POLLUTANT(S)	
Total Copper	Total Mercury
Benzo(a)anthracene	Benzo(a)pyrene
Total Nickel(*)	Total Zinc(*)
Total Calcium(*)	1,2-Dichloroethane(*)
Phenol(*)	2-Methylnapthalene(*)
Anthracene(*)	Chrysene(*)
Dibenzo(a,h)anthracene(*)	Fluoranthene(*)
Pyrene(*)	Phenanthrene(*)

(*) Water Quality Parameters required by the Calcasieu Toxics Estuary TMDL. These are REPORT ONLY parameters. However, some of the above parameters were assigned technology-based limitations at Outfall 051.

Minimum quantification levels (MQL's) for state water quality numerical standards-based effluent limitations are set at the values listed in the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, September 27, 2001.

They are also listed in Part II of the permit.

TMDL Waterbodies

Outfalls 001, 003, and 006

Outfalls 001, 003, and 006 discharges process wastewater and process area stormwater, non-process area stormwater runoff, and utility wastewaters to the Main Channel of the Calcasieu River via local drainage to Subsegment 030301 of the Calcasieu River Basin. Subsegment 030301 was not listed on the 2004 303(d) list of impairments due to the Upper Calcasieu Estuary Toxics TMDL being issued June 13, 2002. This TMDL addressed Copper, Mercury, and Priority Organics.

Copper, Mercury, and Priority Organics
The TMDL for Toxics for the Calcasieu Estuary was finalized on June 13, 2002, addressing the presence of toxic substances, including Copper, Mercury, and Priority Organics in the watershed. The applicant's facility received the following limitations/requirements in this TMDL at Outfalls 001, 003, and 006:

Site-Specific Consideration(s)

Interim effluent limits are proposed to commence on the effective date of the permit and expire on June 12, 2008.

Interim effluent reporting requirements: Outfall 001

PARAMETER(S)	DAILY MAX LIMIT (LBS/DAY)
Total Copper	Report
Total Mercury	Report
Benzo(a)anthracene	Report
Benzo(a)pyrene	Report

The final effluent limits are proposed to commence on June 13, 2008.

The final effluent schedule will require the following limitations: Outfall 001

PARAMETER(S)	DAILY MAX LIMIT (LBS/DAY)
Total Copper	5.2900
Total Mercury	0.0364
Benzo(a)anthracene	0.3140
Benzo(a)pyrene	0.3140

The TMDL assigned allocations for daily max monitoring only. There are no requirements placed on these parameters for monthly average monitoring.

Outfalls 003 and 006: proposed to commence on effective date of permit.

PARAMETER(S)	DAILY MAX LIMIT (μg/L)
Total Copper	Report
Total Mercury	Report

Federal regulations under 40 CFR 130.7 require the State to incorporate all final TMDLs into its current Water Quality Management Plan (WQMP). The State is also required to ensure consistency with the WQMP requirements approved by EPA under Section 208(b) of the Clean Water Act (CWA), as cited under LAC 33.IX.2707.D.6. Since the requirements established in the Final TMDL (Federal Register Notice: Volume 67, Number 114, pages 40735 - 40737, 6/13/2002) are water quality-based effluent limitations that are part of the State's current Water Quality Management Plan (Volume 8), and are more stringent than the technology based effluent limitations, the TMDL waste load allocations must remain in the permit.

Outfalls 002, 004, 009, 030 and 051

Outfalls 002, 004, 009, 030, and 051 discharge non-process area stormwater runoff, steam condensate, previously monitored hydrostatic test water, post first flush process area stormwater, and dewatering operations wastewater associated with dredging in Bayou Verdine to Subsegment 030306 of the Calcasieu River Basin for Bayou Verdine. Subsegment 030306 was not listed on the 2004 303(d) list of impairments due to the Upper Calcasieu Estuary Toxics TMDL being issued June 13, 2002. This TMDL addressed the following impairments: Priority Organics, Metals, Mercury, Nickel, and Contaminated Sediments. On June 13, 2002, the following impairments were officially delisted: Oil & Grease and Non-Priority Organics.

To date one TMDL has been finalized and two impairments have been delisted for Bayou Verdine.

Oil & Grease & Non-priority Organics
As per the June 13, 2002 LA TMDL Delist, Oil & Grease and Non-Priority Organics have been delisted as impairments in this subsegment. Assessment of new data and information shows this subsegment is meeting water quality standards for these impairments. Consequently, no limits will be set for Non-Priority Organics. A daily max of 15 mg/L for Oil & Grease has been placed on Outfalls 004, 009, 030, and 051 based on current LDEQ guidance for stormwater discharges. The Oil & Grease limitations placed on Outfall 002 makes up an arithmetic sum of Outfalls 001 and 002. The assigned loadings of 992 lbs/day Monthly Average, and 1888 lbs/day Daily Maximum are based on Refinery Guidelines under 40 CFR 419, Subpart D for the Lube Subcategory and the production of 258,000 barrels per day. No limits will be set for Non-Priority Organics at Outfall 002.

Priority Organics, Metals, Mercury, Nickel, and Contaminated Sediments
ConocoPhillips was considered in the Bayou Verdine TMDL effective on June 13, 2002. However, since outfalls 004, 009, 030, and 051 do not consist of process wastewater no waste load allocations were given. However, the TMDL required reporting for the following pollutants on all outfalls: Total Copper, Total Mercury, Total Nickel, Total Zinc, Total Calcium, 1,2-Dichloroethane, Phenol, 2-Methylnapthalene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Pyrene, and Phenanthrene.

Site-Specific Consideration(s)

Outfalls 002, 004, 009, and 030 - proposed to commence on the effective date of the permit.

PARAMETER(S)	DAILY MAX LIMIT (μg/L)
Total Copper	Report
Total Mercury	Report
Total Nickel	Report
Total Zinc	Report
Total Calcium	Report
1,2-Dichloroethane	Report
Phenol	Report
2-Methylnapthalene	Report
Anthracene	Report
Benzo(a)anthracene	Report
Benzo(a)pyrene	Report
Chrysene	Report
Dibenzo(a,h)anthracene	Report
Fluoranthene	Report
Pyrene	Report
Phenanthrene	Report

Outfall 051 - proposed to commence on the effective date of the permit.

PARAMETER(S)	MONTHLY AVG LIMIT (µg/L)	DAILY MAX LIMIT (µg/L)
Total Copper	---	Report
Total Mercury	---	Report
Total Nickel	---	Report
Total Zinc	---	Report
Total Calcium	---	Report
1,2-Dichloroethane	---	Report
Phenol	---	Report
2-Methylnapthalene	---	Report
Dibenzo(a,h)Anthracene	---	Report
Anthracene	47.0(*)	19.0 (*)
Benzo(a)anthracene	47.0(*)	19.0 (*)
Benzo(a)pyrene	48.0(*)	20.0 (*)
Chrysene	47.0(*)	19.0 (*)
Fluoranthene	54.0(*)	22.0 (*)
Phenanthrene	47.0(*)	19.0 (*)
Pyrene	48.0(*)	20.0 (*)

(*) Pollutants are listed in the Calcasieu Estuary Toxics TMDL under subsegment 030306, effective June 13, 2002. This TMDL requires report only. However, limitations were established based on the polycyclic aromatic hydrocarbons included in 40 CFR 414, Subpart J and BPJ.

A reopener clause will be established in the permit to include more stringent limits based on final loading allocations in the completed and approved TMDL.

Monitoring frequencies for water quality based limited parameters are established in accordance with the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, September 27, 2001.

D. Biomonitoring Requirements

It has been determined that there may be pollutants present in the effluent which may have the potential to cause toxic conditions in the receiving stream. The State of Louisiana has established a narrative criteria which states, "toxic substances shall not be present in quantities that alone or in combination will be toxic to plant or animal life." The Office of Environmental Services requires the use of the most recent EPA biomonitoring protocols.

Whole effluent biomonitoring is the most direct measure of potential toxicity which incorporates both the effects of synergism of effluent components and receiving stream water quality characteristics. Biomonitoring of the effluent is, therefore, required as a condition of this permit to assess potential toxicity. The biomonitoring procedures stipulated as a condition of this permit for Outfall(s) 001 are as follows:

TOXICITY TESTS	FREQUENCY
Chronic static renewal 7-day survival and growth test using Mysidopsis bahia [Method 1007.0]	1/quarter
Chronic static renewal 7-day larval survival and growth test using inland silverside minnow (Menidia beryllina) [Method 1006.0]	1/quarter

Toxicity tests shall be performed in accordance with protocols described in the latest revision of the "Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms." The stipulated test species are appropriate to measure the toxicity of the effluent consistent with the requirements of the State water quality standards. The biomonitoring frequency has been established to reflect the likelihood of ambient toxicity and to provide data representative of the toxic potential of the facility's discharge in accordance with regulations promulgated at LAC 33:IX.2715/40 CFR Part 122.48.

Results of all dilutions as well as the associated chemical monitoring of pH, temperature, hardness, dissolved oxygen, conductivity, and salinity shall be documented in a full report according to the test method publication mentioned in the previous paragraph. The permittee shall submit a copy of the first full report to the Office of Environmental Compliance. The full report and subsequent reports are to be retained for three (3) years following the provisions of Part III.C.3 of this permit. The permit requires the submission of certain toxicity testing information as an attachment to the Discharge Monitoring Report. This permit may be reopened to require effluent limits, additional testing, and/or other appropriate actions to address toxicity if biomonitoring data show actual or potential ambient toxicity to be the result of the permittee's discharge to the receiving stream or water body. Modification or revocation of the permit is subject to the provisions of LAC 33:IX.3105/40 CFR 124.5. Accelerated or intensified toxicity testing may be required in accordance with Section 308 of the Clean Water Act.

Dilution Series

The permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests.

Outfall 001
Effluent concentrations shall be 0.88%, 1.2%, 1.6%, 2.1%, and 2.8% The low-flow effluent concentration (critical dilution) is defined as 2.1% effluent.

Site Specific Consideration(s)

None

E. MONITORING FREQUENCIES

Regulations require permits to establish monitoring requirements to yield data representative of the monitored activity [LAC 33:IX.2715/40 CFR 122.48(b)] and to assure compliance with permit limitations [LAC 33:IX.2707.I./40 CFR 122.44(I)]. The following section(s) explain the rationale for the monitoring frequencies stated in the draft permit.

1. **Outfall 001 (Interim and Final)** - the discharge of treated process wastewater; ballast water/crude tank drains; utility wastewater (*1); cooling tower blowdown; maintenance washwater; sanitary wastewater; process and non-process area stormwater runoff; hydrostatic test water; wastewater/purge water associated with development of monitoring wells; and previously monitored/treated wastewater from groundwater remediation activities from Internal Outfalls 101 and 201.

   (*1) Utility wastewaters include wastewaters generated from the proposed Steam Methane Reformer (SMR) unit operated by Air Products and Chemicals, Inc., to be treated and discharged via Outfall 001.

   Flow and pH shall be monitored continuously. These monitoring frequencies were retained from the current permit, effective on June 1, 1997.

PARAMETER(S)	MONITORING FREQUENCY
Flow	Continuous
pH	Continuous

   TSS, Sulfide (as S), and Phenolic Compounds shall be monitored 3/week. These monitoring frequencies were retained from the current permit, effective on June 1, 1997.

PARAMETER(S)	MONITORING FREQUENCY
TSS	3/week
Sulfide (as S)	3/week
Phenolic Compounds	3/week

The frequencies for BOD_5, Oil & Grease, COD, and Ammonia (as N) were reduced from 3/week to 1/week in accordance with the requirements stated in the USEPA Memorandum "Interim Guidance for Performance Based Reductions of NPDES Permit Monitoring Frequencies."

The frequency for Total Cyanide has been retained at 1/week from the current permit, effective on June 1, 1997.

PARAMETER(S)	MONITORING FREQUENCY
BOD_5	1/week
Oil & Grease	1/week
COD	1/week
Ammonia (as N)	1/week
Total Cyanide	1/week

The frequency for Total Chromium has been retained at 1/month from the current permit, effective on June 1, 1997.

PARAMETER(S)	MONITORING FREQUENCY
Total Chromium	1/month

The frequency for Chromium (6+) has been reduced from 1/month to 1/ 2 months in accordance with the requirements stated in the USEPA Memorandum "Interim Guidance for Performance Based Reductions of NPDES Permit Monitoring Frequencies."

PARAMETER(S)	MONITORING FREQUENCY
Chromium (6+)	1/ 2 months

Total Copper, Total Mercury, Benzo(a) anthracene, and Benzo(a) pyrene shall be monitored 1/quarter. These monitoring frequencies were established in accordance with the Upper Calcasieu Estuary TMDL issued in the Federal Register on June 13, 2002.

PARAMETER(S)	MONITORING FREQUENCY
Total Copper	1/quarter
Total Mercury	1/quarter
Benzo(a) anthracene	1/quarter
Benzo(a) pyrene	1/quarter

2. **Outfall(s) 101 and 201** - Groundwater Remediation Wastewaters & Cooling Tower Blowdown

   * Outfall 101 - wastewater from the remediation of 1,2-dichloroethane (EDC) contaminated groundwater and cooling tower blowdown.

   * Outfall 201 - wastewater from the remediation of 1,2-dichloroethane (EDC) contaminated groundwater from the West End Project and cooling tower blowdown.

   Flow and 1,2-Dichloroethane shall be monitored 1/week. The monitoring frequency for Outfall 101 has been retained from the current permit, effective on June 1, 1997. Outfall 201 is similar in nature, therefore, the same frequency has been applied based on Best Professional Judgment (BPJ).

PARAMETER(S)	MONITORING FREQUENCY
Flow	1/week
1,2-Dichloroethane	1/week

3. **Outfall(s) 002** -the emergency discharge from the stormwater overflow pond which includes non-process area stormwater; post first flush process area stormwater (*1); and de minimus flows of process-related and utility wastewaters.

   (*1) Post first flush runoff is defined as rainfall in excess of 2.0 inches in a 72 hour period. First flush process area stormwater is treated and discharged via Outfall 001.

   The proposed frequency of 1/discharge is more appropriately applied for flow, pH, BOD_5, TSS, Oil & Grease, COD, Ammonia (as N), Sulfide (as S), Phenolic Compounds, Total Chromium, Chromium (6+), and Total Cyanide due to the intermittent nature of the discharge. This change is based on BPJ.

PARAMETER(S)	MONITORING FREQUENCY
Flow	1/discharge event
pH	1/discharge event
BOD_5	1/discharge event
TSS	1/discharge event
Oil & Grease	1/discharge event
COD	1/discharge event
Ammonia (as N)	1/discharge event
Sulfide (as S)	1/discharge event

PARAMETER(S)	MONITORING FREQUENCY
Phenolic Compounds	1/discharge event
Total Chromium	1/discharge event
Chromium (+6)	1/discharge event
Total Cyanide	1/discharge event

Total Copper, Total Mercury, Total Nickel, Total Zinc, Total Calcium, 1,2-Dichloroethane, Phenol, 2-Methylnapthalene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Pyrene, and Phenanthrene shall be monitored 1/quarter. These monitoring frequencies were established in accordance with the Upper Calcasieu Estuary TMDL issued in the Federal Register on June 13, 2002.

PARAMETER(S)	MONITORING FREQUENCY
Total Copper	1/quarter
Total Mercury	1/quarter
Total Nickel	1/quarter
Total Zinc	1/quarter
Total Calcium	1/quarter
1,2-Dichloroethane	1/quarter
Phenol	1/quarter
2-Methylnapthalene	1/quarter
Anthracene	1/quarter
Benzo(a)anthracene	1/quarter
Benzo(a)pyrene	1/quarter
Chrysene	1/quarter
Dibenzo(a,h)Anthracene	1/quarter
Fluoranthene	1/quarter
Pyrene	1/quarter
Phenanthrene	1/quarter

4. Outfall(s) 003, 004, 006, 009, and 030 - Stormwater & Utility

*Outfalls 003 and 006 - the discharge of non-process area stormwater runoff, steam condensate, and previously monitored hydrostatic test water.

Flow, TOC, Oil & Grease & pH were assigned monitoring frequencies of 1/week. This frequency was retained from the current permit, effective on June 1, 1997.

PARAMETER(S)	MONITORING FREQUENCY
Flow	1/week
TOC	1/week
Oil & Grease	1/week
pH	1/week

Total Copper and Total Mercury shall be monitored 1/quarter. These monitoring frequencies were established in accordance with the Upper Calcasieu Estuary TMDL issued in the Federal Register on June 13, 2002.

PARAMETER(S)	MONITORING FREQUENCY
Total Copper	1/quarter
Total Mercury	1/quarter

*Outfall 004 - the discharge of non-process area stormwater runoff, steam condensate, and previously monitored hydrostatic test water.

Flow, TOC, Oil & Grease & pH were assigned monitoring frequencies of 1/week. These frequencies were retained from the current permit, effective on June 1, 1997.

PARAMETER(S)	MONITORING FREQUENCY
Flow	1/week
TOC	1/week
Oil & Grease	1/week
pH	1/week

Total Copper, Total Mercury, Total Nickel, Total Zinc, Total Calcium, 1,2-Dichloroethane, Phenol, 2-Methylnapthalene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Pyrene, and Phenanthrene shall be monitored 1/quarter. These monitoring frequencies were established in accordance with the Upper Calcasieu Estuary TMDL issued in the Federal Register on June 13, 2002.

PARAMETER(S)	MONITORING FREQUENCY
Total Copper	1/quarter
Total Mercury	1/quarter
Total Nickel	1/quarter
Total Zinc	1/quarter
Total Calcium	1/quarter
1,2-Dichloroethane	1/quarter
Phenol	1/quarter
2-Methylnapthalene	1/quarter
Anthracene	1/quarter
Benzo(a)anthracene	1/quarter
Benzo(a)pyrene	1/quarter
Chrysene	1/quarter
Dibenzo(a,h)anthracene	1/quarter
Fluoranthene	1/quarter
Pyrene	1/quarter
Phenanthrene	1/quarter

*Outfalls 009 and 030 - the discharge of post first flush process area stormwater runoff (*1), steam condensate, and previously monitored hydrostatic test water.

(*1) Post first flush runoff is defined as rainfall in excess of 2.0 inches in a 72 hour period. First flush process area stormwater is treated and discharged via Outfall 001.

Flow, TOC, Oil & Grease & pH were assigned monitoring frequencies of 1/quarter. These frequencies were retained from the current permit, effective on June 1, 1997, and are consistent with current stormwater guidance.

Total Copper, Total Mercury, Total Nickel, Total Zinc, Total Calcium, 1,2-Dichloroethane, Phenol, 2-Methylnapthalene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Pyrene, and Phenanthrene shall be monitored 1/quarter. These monitoring frequencies were established in accordance with the Upper Calcasieu Estuary TMDL issued in the Federal Register on June 13, 2002.

PARAMETER(S)	MONITORING FREQUENCY
Flow	1/quarter
TOC	1/quarter
Oil & Grease	1/quarter
pH	1/quarter
Total Copper	1/quarter
Total Mercury	1/quarter
Total Nickel	1/quarter
Total Zinc	1/quarter
Total Calcium	1/quarter
1,2-Dichloroethane	1/quarter
Phenol	1/quarter
2-Methylnapthalene	1/quarter
Anthracene	1/quarter
Benzo(a)anthracene	1/quarter
Benzo(a)pyrene	1/quarter
Chrysene	1/quarter
Dibenzo(a,h)anthracene	1/quarter
Fluoranthene	1/quarter
Pyrene	1/quarter
Phenanthrene	1/quarter

*Outfall(s) 051 - the discharge of dewatering operations wastewater associated with dredging in Bayou Verdine and non-process area stormwater.

A monitoring frequency of 1/week has been established for Flow, TOC, Oil & Grease, pH, Acenaphthene, Acenaphthylene, Anthracene, Benzo(a)anthracene, Benzo(a)pyrene, Benzo(k)fluoranthene, Chrysene, Fluoranthene, Fluorene, Naphthalene, Pyrene, and Phenanthrene based on BPJ. These pollutants are the polycyclic aromatic hydrocarbons included in 40 CFR 414, Subpart J, expected to be present at this outfall.

PARAMETER(S)	MONITORING FREQUENCY
Flow	1/week
TOC	1/week
Oil & Grease	1/week
pH	1/week
Acenaphthene	1/week
Acenaphthylene	1/week
Anthracene	1/week
Benzo(a)anthracene	1/week
Benzo(a)pyrene	1/week
Benzo(k)fluoranthene	1/week
Chrysene	1/week
Fluoranthene	1/week
Fluorene	1/week
Naphthalene	1/week
Phenanthrene	1/week
Pyrene	1/week

Total Copper, Total Mercury, Total Nickel, Total Zinc, Total Calcium, 1,2-Dichloroethane, Phenol, 2-Methylnapthalene, Dibenzo(a,h)anthracene, shall be monitored 1/quarter. These monitoring frequencies were established in accordance with the Upper Calcasieu Estuary TMDL issued in the Federal Register on June 13, 2002.

PARAMETER(S)	MONITORING FREQUENCY
Copper	1/quarter
Mercury	1/quarter
Total Nickel	1/quarter
Total Zinc	1/quarter
Total Calcium	1/quarter
1,2-Dichloroethane	1/quarter
Phenol	1/quarter

PARAMETER(S)	MONITORING FREQUENCY
2-Methylnapthalene	1/quarter
Dibenzo(a,h)Anthracene	1/quarter

X. Compliance History/DMR Review:

A compliance review was done covering the period of June 1, 2004 through August 1, 2006. The following excursions were reported during that time

DATE	PARAMETER	OUTFALL	REPORTED VALUE		PERMIT LIMITS	
			MONTHLY AVERAGE	DAILY MAXIMUM	MONTHLY AVERAGE	DAILY MAXIMUM
06/30/04	TOC	003	NA	51.9 mg/L	NA	50.0 mg/L
07/31/04	Chromium (6+)	SUMA	NA	8.431 lbs/day	NA	3.09 lbs/day
08/31/04	TSS	SUMA	NA	7845 lbs/day	NA	4095 lbs/day
11/30/04	Oil & Grease	015(*)	NA	16.0 mg/L	NA	15.0 mg/L
01/31/05	TSS	SUMA	NA	28018 lbs/day	NA	4095 lbs/day
02/28/05	Total Phenolics	SUMA	22 lbs/day	7.2 lbs/day	13.26 lbs/day	43 lbs/day
02/28/05	pH	003	5.68 s.u. Min	NA	6.0 s.u. Min	NA
02/28/05	pH	048(*)	5.72 s.u. Min	NA	6.0 s.u. Min	NA
03/31/05	Total Sulfide	SUMA	38.4 lbs/day	488.1 lbs/day	16.1 lbs/day	35.8 lbs/day
07/31/05	Total Phenolics	SUMA	NA	71.6 lbs/day	NA	43 lbs/day
05/31/06	Oil & Grease	003	NA	21.4 mg/L	NA	15.0 mg/L
06/30/06	Total Cyanide	SUMA	0.34 lbs/day	1.68 lbs/day	0.1 lbs/day,	0.236 lbs/day
07/31/06	TSS	SUMA	NA	6031 lbs/day	NA	4095 lbs/day

SUMA = Sum of Outfalls 001, 002, and 005
(*) = Outfall now covered under the MSGP, LAR05N651

Inspection - June 26, 2006

Facility compliance evaluation inspection (CEI) was conducted on June 26, 2006. The following items were noted as part of the inspection report:

1.) Due to Hurricane Rita, no samples were collected at Outfall 001 from September 21, 2005 to October 7, 2005.

2.) Samples collected on May 25, 26, and 29th for Outfall 001 were no flow weighted due to a malfunction in the circuit board of the auto sampler. The facility still collected samples but they were time-weighted samples.

3.) The facility has installed a new weir at Outfall 002 to handle heavy rain events.

4.) Excursions (as presented in the table above) were identified.

XI. "IT" Questions - Applicant's Responses

IT Questions and ConocoPhillips Company's responses can be found in the LPDES Renewal Application dated January 2002, in Appendix D.

XII. Endangered Species:

The receiving waterbody, Subsegments 030301 and 030306 of the Calcasieu River Basin is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated September 29, 2006 from Watson (FWS) to Brown (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

XIII. Historic Sites:

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

XIV. Tentative Determination:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in the application.

XV. Variances:

No requests for variances have been received by this Office.

XVI. Public Notices:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved

in the permit decision at this Office's address on the first page of the fact sheet. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List