LPDES PERMIT NO. LA0001431, AI NO. 4762, ACTIVITY NO. PER20080002

LPDES STATEMENT OF BASIS
FOR THE DRAFT LOUISIANA POLLUTANT DISCHARGE ELIMINATION SYSTEM (LPDES) PERMIT TO DISCHARGE TO WATERS OF LOUISIANA

COMPANY/FACILITY: Enterprise Gas Processing, LLC
Tebone Fractionation Plant
P. O. Box 4324
Houston, Texas 77210

ISSUING OFFICE: Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

PREPARED BY: Elizabeth H. Johnson
Water Permits Division
Phone: 225-219-3093
Email: elizabeth.johnson@la.gov

DATE PREPARED: May 21, 2009

I. PERMIT STATUS

A. Reason For Permit Action:

Proposed reissuance of a 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, 405-415 and 417-471 have been adopted by reference at LAC 33:IX.4903 and will not have dual references. In addition, state standards (LAC 33:IX.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 effective date: March 1, 2004
LPDES permit expiration date: February 28, 2009

C. Application was received on November 24, 2008.

II. FACILITY INFORMATION

A. Location:

10324 Louisiana Highway 75, Geismar, Ascension Parish
Latitude: 30° 13' 8", Longitude: 91° 1' 59"

B. Applicant Activity:

According to the application, Enterprise Gas Processing, LLC, Tebone Fractionation Plant is an existing facility that fractionates a natural gas liquid mix into individual components. Raw material enters the facility via pipeline and is separated into ethane, propane, isobutene, normal butane and natural gasoline. Wastewaters are discharged to an adjacent marsh area that drains to New River. Wastewaters discharged include treated process wastewater, process and non-process area stormwater, cooling tower blowdown, sand filter backwash wastewater, treated sanitary wastewater, hydrostatic test wastewater and *de minimis* wastewaters that include safety shower wastewater, eye-wash station wastewater, facility washwater, fire systems test wastewater and excess well water wastewater.

C. Technology Basis:

40 CFR Chapter I, Subchapter N, Effluent Guidelines and Standards, Parts 401, 405-417 and 421-471 as adopted by reference in LAC 33:IX.4903.

Guideline	Reference
NA	NA

Other sources of technology based limits:
Current Permit (Effective March 1, 2004)
LDEQ Stormwater Guidance, letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (USEPA)
Louisiana Water Quality Management Plan for Sanitary Dischargers
Best Professional Judgment (BPJ)
General Permit LAG480000
General Permit LAG530000
General Permit LAG670000

D. Fee Rate:

1. Fee Rating Facility Type: Minor
2. Complexity Type: II
3. Wastewater Type: II
4. SIC codes: 1321

E. Continuous Facility Effluent Flow:

0.0908 Million gallons per day (MGD)

III. RECEIVING WATERS:

A. Stream:

Internal facility drainage ditches to an unnamed marsh that drains to New River

B. Basin and Subsegment:

Lake Pontchartrain Basin, Subsegment 040404

C. Designated Uses:

The designated uses of this subsegment in the Lake Pontchartrain Basin are primary contact recreation, secondary contact recreation, propagation of fish and wildlife and oyster propagation

IV. OUTFALL INFORMATION:

Outfall 001:

A. Discharge Type:

The discharge of treated process wastewater, process and non-process area stormwater, cooling tower blowdown, treated sanitary wastewater, hydrostatic test wastewater and *de minimis* wastewater (facility wash water, fire systems test water, safety shower wastewater and eyewash station wastewater).

B. Location:

At the point of discharge, from the southwest corner of the facility prior to mixing with other waters of the state at Latitude 30° 13' 9", Longitude 91° 02'04".

C. Treatment:

Process area stormwater is collected and treated in and oil and water separator prior to discharging to Final Outfall 001.

D. Flow:

Continuous at 0.0908 MGD

Internal Outfall 101

A. Discharge Type:

The discharge of cooling tower blowdown wastewater.

B. Location:

At the point of discharge from the cooling tower prior to mixing with waters of Final Outfall 001 at Latitude 30° 13' 9", Longitude 91°1' 58".

C. Treatment:

None

D. Flow:

Continuous at 0.0797 MGD

Internal Outfall 201

A. Discharge Type:

The discharge of treated sanitary wastewater.

B. Location:

At the point of discharge from the sanitary treatment plant, prior to mixing with waters of Final Outfall 001 at Latitude 30°13'8", Longitude 91°1' 57".

C. Treatment:

Activated sludge followed with chlorination.

D. Flow:

Intermittent

Internal Outfall 102 (Virtual Outfall)

A. Discharge Type:

The discharge of hydrostatic test wastewater.

B. Location:

At the point of discharge from the tested vessel or pipe prior to mixing with waters of Final Outfall 001 and/or Final Outfall 002.

C. Treatment:

None

D. Flow:

Intermittent

Outfall 002

A. Discharge Type:

The discharge of non-process area stormwater, Internal Outfall 202, Internal Outfall 102 and *de minimis* wastewater.

B. Location:

At the point of discharge, from the southwest corner of the facility prior to mixing with other waters of the state at Latitude 30° 13' 16", Longitude 91° 1'58".

C. Treatment:

Stormwater from the tank containment area is collected in a stormwater pond with an overflow weir prior to mixing with waters of Final Outfall 002.

D. Flow:

Intermittent at 0.0227 MGD

Internal Outfall 202

A. Discharge Type:

The discharge of sand filter backwash wastewater.

B. Location:

At the point of discharge from the sand filter, prior to mixing with waters of Final Outfall 002.

C. Treatment:

None

D. Flow:

Continuous at 0.0095 MGD

V. PROPOSED CHANGES FROM PREVIOUS PERMIT:

A. Internal Outfall 301 was deleted from this permit. At the request of the permittee, the hydrostatic test wastewater outfalls Internal Outfall 301 and Internal Outfall 102 were combined to one virtual outfall that will discharge to either final Outfall 001 or Outfall 002. This outfall will continue to use the designation Outfall 102.

B. The limitation of the parameter fecal coliform from Internal Outfall 201, Treated Sanitary Wastewater, was changed from a weekly average to a daily maximum to better reflect current permitting practices.

C. The monitoring frequency of all the parameters from Internal Outfall 101, Cooling Tower Blowdown, was changed from once per month to twice per month due to the failure to consistently meet the permit limits.

VI. 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 limitation and conditions, including a citation to the applicable effluent limitation guideline or performance standard provisions as required under LAC 33:IX.2707 and reasons why they are applicable or an explanation of how the alternate effluent limitations were developed.

A. Outfall 001:

The continuous discharge of treated process wastewater, process and non-process area stormwater, cooling tower blowdown, treated sanitary wastewater, hydrostatic test wastewater and *de minimis* wastewater (facility wash water, fire systems test water, safety shower wastewater and eyewash station wastewater).

PARAMETER	MONTHLY AVERAGE	DAILY MAXIMUM	MONITORING FREQUENCY
Flow-MGD	Report	Report	1/daily
TOC	---	50 mg/L	1/month
Oil & Grease	---	15 mg/L	1/month
pH(standard units)	6.0	9.0	1/month

Site Specific Considerations for Outfall 001

Flow is established in accordance with LAC 33:IX.2707.I.1.b. Flow shall be monitored at a frequency of once per day and reported on the DMR as an estimate. These requirements have been retained from the current LPDES permit, effective on March 1, 2004.

TOC and Oil and Grease limitations and monitoring requirements are established in accordance with the LDEQ Storm Water Guidance and the General Rationale for Natural Gas Processing Plants and Compressor Stations. TOC and Oil and Grease shall be monitored at a frequency of once per month and collected as grab samples. These requirements have been retained from the current LPDES permit, effective on March 1, 2004.

pH is established in accordance with LAC 33:IX.1113.C.1. pH shall be monitored at a frequency of once per month and collected as a grab sample. These requirements have been retained from the current LPDES permit, effective on March 1, 2004.

B. Internal Outfall 101:

The continuous discharge of cooling tower blowdown.

PARAMETER	MONTHLY AVERAGE	DAILY MAXIMUM	MONITORING FREQUENCY
Flow-MGD	Report	Report	2/month
FAC[1]		0.5 mg/L	2/month
COD	---	125 mg/L	2/month
Temperature	---	95°F	2/month
Zinc total (as Zn)[2]	---	1.0 mg/L	2/month

1 Monitor only during times of chlorination.
2 Limitation and monitoring for total zinc is applicable only when the permittee uses cooling water treatment and/or cooling tower maintenance chemicals that contain zinc.

Site Specific Considerations for Outfall 101

Flow is established in accordance with LAC 33:IX.2707.I.1.b. Flow shall be monitored at a frequency of twice per month and reported on the DMR as an estimate. The limitation requirements have been retained from the current LPDES permit, effective on March 1, 2004. The monitoring frequency was increased due to compliance issues.

Free available chlorine (FAC) is established by BPJ in accordance with the Steam Electric Power Generating Point Source Category (40 CFR Part 423.13(d)(1). FAC shall be monitored at a frequency of twice per month and collected as a grab sample. The requirement of Total Residual Chlorine (TRC) was changed to FAC in the permit effective March 1, 2004 at the request of the permittee. The limitation requirement has been retained from the current LPDES permit, effective on March 1, 2004. The monitoring frequency was increased due to compliance issues.

COD limitations and monitoring requirements are established by BPJ in accordance with the LDEQ Storm Water Guidance and the General Rationale for Natural Gas Processing Plants and Compressor Stations. COD shall be monitored at a frequency of twice per month and collected as a grab sample. These requirements have been retained from the current LPDES permit, effective on March 1, 2004. The monitoring frequency was increased due to compliance issues.

The Temperature limitation is established by BPJ using the NPDES permit issued June 28, 1974. This limitation has been included in subsequent permits and is retained in this draft permit. Temperature shall be monitored at a frequency of once per month and analyzed immediately. The monitoring frequency was increased due to compliance issues.

pH is established in accordance with LAC 33:IX.1113.C.1. pH shall be monitored at a frequency of once per month when discharging and collected as a grab sample. These requirements have been retained from the current LPDES permit, effective on March 1, 2004. The monitoring frequency was increased due to compliance issues.

Zinc is established by BPJ in accordance with the Steam Electric Power Generating Point Source Category (40 CFR Part 423.13(d)(1). Zinc shall be monitored at a frequency of twice per month and collected as a grab sample. These requirements have been retained from the current LPDES permit, effective on March 1, 2004. The monitoring frequency was increased due to compliance issues.

D. Internal Outfall 201:

The intermittent discharge of treated sanitary wastewater.

PARAMETER	MONTHLY AVERAGE	WEEKLY AVERAGE	MONITORING FREQUENCY[1]
Flow-MGD	Report	Report	1/6 months
BOD_5	---	45 mg/L	1/6 months
TSS	---	45 mg/L	1/6 months
Fecal Coliform[2]	---	400 colonies/100 ml[3]	1/6 months

1 When discharging

2 Future water quality studies may indicate potential toxicity from the presence of residual chlorine in the treatment facility's effluent. Therefore, the applicant is hereby advised that a future Total Residual Chlorine limitation may be required if chlorine is used as a method of disinfection. In many cases, this becomes a NO MEASURABLE Total Residual Chlorine limitation. If such a limitation were imposed, the applicant would be required to provide for the dechlorination of the effluent prior to discharge.

3 Statistical basis shall be daily maximum in lieu of weekly average.

Site-Specific Considerations for Outfall 201

Flow is established in accordance with LAC 33:IX.2707.I.1.b. Flow shall be monitored at a frequency of once every six (6) months when discharging and reported on the DMR as an estimate. The limits have been retained from the current LPDES permit, effective on March 1, 2004.

BOD_5 limitations and monitoring requirements are established in accordance with the LPDES Class I General Permit LAG530000. The limits have been retained from the current LPDES permit, effective on March 1, 2004

TSS limitations and monitoring requirements are established based on Class I General Permit LAG530000. TSS shall be monitored at a frequency of once every six (6) months when discharging and collected as a grab sample. The limits have been retained from the current LPDES permit, effective on March 1, 2004.

Fecal coliform limiting and monitoring requirements are established in accordance with LPDES Class I General Permit LAG530000. Fecal coliform shall be monitored at a frequency of once every six (6) months when discharging and collected as a grab sample. These requirements have been retained from the current LPDES permit effective on March 1, 2004.

E. Internal Outfall 102:

The intermittent discharge of hydrostatic test wastewater.

PARAMETER	MONTHLY AVERAGE	DAILY MAXIMUM	MONITORING FREQUENCY[1,2]
Flow-GPD	---	Report	1/discharge event
TSS[3]	---	90 mg/L	1/discharge event
TOC[4]	---	50 mg/L	1/discharge event
Benzene[4]	---	50 µg/L	1/discharge event
Total BTX[4,5]	---	250 µg/L	1/discharge event
Lead[4]	---	50 µg/L	1/discharge event

1 A representative sample of the tank contents shall be taken and analyzed prior to batch discharge. If a sample exceeds any discharge limit, the batch shall be discharged.

2 If any discharge extends beyond one week in duration, then sampling the above parameters shall continue on a weekly basis until discharge ends.

3 The background concentration of Total Suspended Solids (TSS) will be allowed in the discharge if the effluent is being returned to the same water source from which the intake water was obtained. In these cases, the permit limitations will be 90 mg/L plus the concentration of TSS in the intake water. The TSS concentration of the intake water shall be reported on the Discharge Monitoring Report (DMR) along with the concentration of TSS in the effluent.

[4] Total Organic Carbon (TOC) shall be measured on discharges from pipelines, flowlines, piping, vessels or tanks which previously been in service. Benzene, Total BTEX and Lead shall be measured on discharges from pipelines, flowlines, piping, vessels or tanks which have been used for the storage or transportation of liquid or gaseous petroleum hydrocarbons. Accordingly, flow and TSS are the only testing requirements for new pipelines, flowlines, piping, vessels or tanks.

[5] BTEX shall be measured as the sum of benzene, toluene, ethylbenzene, ortho-xylene, meta-xylene and para-xylene as quantified by EPA methods 602, 624 or 1624.

Site Specific considerations for Outfall 102

Flow is established in accordance with LAC 33:IX.2707.I.1.b. Flow shall be monitored at a frequency of once per month and reported on the DMR as an estimate. These requirements have been retained from the current LPDES permit, effective on March 1, 2004.

TSS limitation and monitoring requirements are established in accordance with LPDES General Permit LAG670000. TSS shall be monitored at a frequency of once per discharge event and collected as a grab sample. This requirement has been retained from the current LPDES permit, effective on March 1, 2004.

TOC limitation and monitoring requirements are established in accordance with LPDES General Permit LAG670000. TOC shall be monitored at a frequency of once per discharge event and collected as a grab sample. This requirement has been retained from the current LPDES permit, effective on March 1, 2004.

Benzene limitation and monitoring requirements are established in accordance with LPDES General Permit LAG670000. Benzene shall be monitored at a frequency of once per discharge event and collected as a grab sample. This requirement has been retained from the current LPDES permit, effective on March 1, 2004.

Total BTEX limitation and monitoring requirements are established in accordance with LPDES General Permit LAG670000. Total BTEX shall be monitored at a frequency of once per discharge event and collected as a grab sample. This requirement has been retained from the current LPDES permit, effective on March 1, 2004.

Lead limitation and monitoring requirements are established in accordance with LPDES General Permit LAG670000. Lead shall be monitored at a frequency of once per discharge event and collected as a grab sample. This requirement has been retained from the current LPDES permit, effective on March 1, 2004.

F. Outfall 002:

The intermittent discharge of non-process area stormwater, sand filter backwash wastewater, hydrostatic test wastewater and *de minimis* wastewater (facility wash water, fire systems test water, safety shower wastewater and eyewash station wastewater).

PARAMETER	MONTHLY AVERAGE	DAILY MAXIMUM	MONITORING FREQUENCY
Flow-MGD	---	Report	1/daily
TOC	---	50 mg/L	1/quarter
Oil & Grease	---	15 mg/L	1/quarter
pH(standard units)	6.0	9.0	1/quarter

Site Specific Considerations for Outfall 002

Flow is established in accordance with LAC 33:IX.2707.I.1.b. Flow shall be monitored at a frequency of once per quarter when discharging and reported on the DMR as an estimate. These requirements have been retained from the current LPDES permit, effective on March 1, 2004.

TOC and Oil and Grease limitations and monitoring requirements are established in accordance with the LDEQ Storm Water Guidance and the General Rationale for Natural Gas Processing Plants and Compressor Stations. TOC and Oil and Grease shall be monitored at a frequency of once per quarter and collected as a grab samples. These requirements have been retained from the current LPDES permit, effective on March 1, 2004.

pH is established in accordance with LAC 33:IX.1113.C.1. pH shall be monitored at a frequency of once per quarter when discharging and collected as a grab sample. These requirements have been retained from the current LPDES permit, effective on March 1, 2004.

G. Internal Outfall 202:

The continuous discharge of sand filter backwash wastewater.

PARAMETER	MONTHLY AVERAGE	DAILY MAXIMUM	MONITORING FREQUENCY
Flow-MGD	---	Report	1/quarter
TSS	---	45 mg/L	1/quarter
Total Recoverable Iron	---	Report	1/quarter

Flow is established in accordance with LAC 33:IX.2707.I.1.b. Flow shall be monitored at a frequency of once per quarter and reported on the DMR as an estimate. These requirements have been retained from the current LPDES permit, effective on March 1, 2004.

TSS is established by BPJ in accordance with LPDES Discharges from Potable Water Treatment Plants General Permit LAG380000, Schedule A. These requirements have been retained from the current LPDES permit effective on March 1, 2004.

Total Recoverable Iron is established by BPJ in accordance with LPDES Discharges from Potable Water Treatment Plants General Permit LAG380000, Schedule A. These requirements have been retained from the current LPDES permit, effective on March 1, 2004.

VII. TMDL WATERBODIES:

Subsegment 040404, New River-From headwaters to New River Canal, is listed on LDEQ's Final 2006 303(d) List as impaired for organic enrichment/low dissdolved oxygen (DO) and pathogen indicators. To date, no TMDLs have been completed for this waterbody. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by a TMDL. Until completion of TMDLs for the Lake Pontchartrain Basin, those suspected causes for impairment which are not directly attributed to the natural gas liquids recovering and fractioning point source category have been eliminated in the formulation of effluent limitations and other requirements of this permit. Additionally, suspected causes of impairment by the discharge of pollutants was determined to not be discharged at a level which would cause, have the reasonable potential to cause or contribute to an excursion above any present state water quality standard were also eliminated.

The discharges from this facility have the potential to discharge pollutants which may contribute to organic enrichment/low dissolved oxygen (DO) of the receiving waterbody. The organic enrichment/ low DO impairment shall be addressed through the TOC parameter included in the effluent limitations and monitoring requirements for Outfalls 001 and 002. COD parameter limitations are included in the effluent limitation and monitoring requirements for Internal Outfall 101. Additionally, fecal coliform parameter limitations are included in the effluent limitation and monitoring requirements for Internal Outfall 201.

Fecal Coliform limitation of 400 colonies per/100 L as a daily maximum has been established for Internal Outfall 201. Limitations consistent with those established in generals permits have historically been considered protective of waters of the state and this Office has determined that discharge from this outfall should not cause or contribute to further organic enrichment, DO or pathogen indicators impairments in the receiving stream. The monitoring frequency has been established at once every six (6) months based on Best Professional Judgment and is consistent with the Class I Sanitary General Permit, LAG530000.

VIII. COMPLIANCE HISTORY/DMR REVIEW:

A. A warning letter AE-L-08-0214 was issued on February 12, 2009 to Enterprise Gas Processing concerning the failure to visually inspect secondary seals on natural gas storage tanks.

B. The most recent inspection was conducted on March 19, 2008. The inspection indicated areas of concern that included visual inspection of secondary seals on natural gas storage tanks.

C. Compliance Order HE L 07-0482 was issued on January 23, 2008 concerning the storage and labeling of hazardous waste.

D. A file review of all DMRs submitted from May 1, 2006 through May 21, 2009 was conducted. The following excursions were noted.

Outfall	DMR Date	Violation	
002: Stormwater	04/01/06 – 06/30/06	pH:	Did not report
101: Cooling tower Blowdown	05/01/06 – 05/31/06	FAC	0.66 mg/L
	07/01/06 – 12/31/06	FAC	1.16 mg/L
	09/01/06 – 09/30/06	COD	140 mg/L
	11/01/06 – 11/30/06	COD	140 mg/L
	02/01/07 – 02/28/07	FAC	0.56 mg/L
	03/01/07 – 03/31/07	FAC	0.53 mg/L
	06/01/07 – 06/31/07	FAC	0.52 mg/L
	07/01/07 – 07/31/07	FAC	0.6 mg/L
	08/01/07 – 08/31/07	COD	136 mg/L
	01/01/08 – 01/31/08	COD	138 mg/L
	05/01/08 – 05/31/08	COD	170 mg/L
	08/01/08 – 08/31/08	FAC	0.56 mg/L
		T°	102° F
201: Treated Sanitary	07/01/06 – 12/31/06	BOD_5	47 mg/L
	01/01/07 – 06/30/07	BOD_5	50 mg/L
		Fecal Coliform	Too numerous to count
	06/01/08 – 06/30/08	BOD_5	75 mg/L
		Fecal Coliform	Too numerous to count
	12/01/08 – 12/31/08	BOD_5	103 mg/L
		TSS	196 mg/L
202: Sand Filter Backwash	04/01/06 – 06/30/06	TSS	Did not report
		Fe	Did not report
	03/01/07 – 03/31/07	TSS	268 mg/L

IX. ENDANGERED SPECIES

The receiving waterbody, Subsegment 040404 of the Lake Pontchartrain 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 November 18, 2008, from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section7, 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.

X. 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.

XI. TENTATIVE DETERMINATION

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

XII. 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 statement of basis. 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