STATEMENT OF BASIS

as required by LAC 33:IX.3109 for LPDES facilities, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0086169; AI 31128; PER20090001** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

I. **THE APPLICANT IS:** City of Baton Rouge/Parish of East Baton Rouge
East Baton Rouge North Landfill
Post Office Box 1471
Baton Rouge, LA 70821

II. **PREPARED BY:** Angela Marse

DATE PREPARED: October 5, 2009

III. **PERMIT ACTION:** reissue LPDES permit LA0086169, AI31128

LPDES application received:	January 30, 2009
LPDES permit issued:	May 1, 2004
LPDES permit expired:	April 30, 2009
LPDES permit modified:	April 1, 2005

IV. **FACILITY INFORMATION:**

A. The application is for the discharge of treated landfill wastewater (including leachate, contact stormwater from active areas of the landfill, stormwater runoff from the scale area and transfer station) treated sanitary wastewater, maintenance shop washwater, and non-contact stormwater from a municipal sanitary solid waste landfill serving Baton Rouge and surrounding areas.

B. The facility is located at 16001 Samuels Road in Baton Rouge, East Baton Rouge Parish.

C. Sanitary wastewater and landfill wastewater are treated in a sequential batch reactor. (Sanitary wastewater is treated through sanitary treatment package plant prior to the sequential batch reactor.) Treated landfill wastewater and treated sanitary wastewater along with contact stormwater are then treated in a series of settling ponds. Disinfection is by ultraviolet light.

D. Outfall 001

Discharge Location:	Latitude	30°35'36" North
	Longitude	91°13'54" West
Description:	treated leachate, treated sanitary wastewater, treated contact stormwater from active areas of the landfill, and stormwater runoff from the scale area and transfer station	
Expected flow:	0.319 MGD	

Type of Flow Measurement which the facility is currently using: flow meter

Outfall 002

Discharge Location:	Latitude	30°35'47" North
	Longitude	91°13'49" West
Description:	non-contact stormwater from the east watershed	
Expected flow:	0.051MGD	

Type of Flow Measurement which the facility is currently using:
Engineering calculation

Outfall 003

Discharge Location:	Latitude	30°35'34" North
	Longitude	91°14'03" West
Description:	non-contact stormwater from the west watershed	
Expected flow:	0.031 MGD	

Type of Flow Measurement which the facility is currently using:
Engineering calculation

Outfall 004

Discharge Location:	Latitude	30°35'47" North
	Longitude	91°13'50" West
Description:	non-contact stormwater from the maintenance shop area, diesel fuel storage area, administrative area, washdown water from the shop area and the area between the cleaning station, the maintenance shop, near the transfer station area and roadway entrance and from the interior of the landfill	
Expected flow:	0.022MGD	

Type of Flow Measurement which the facility is currently using:
Engineering calculation

Outfall 009

Discharge Location:	Latitude	30°35'36" North
	Longitude	91°13'54" West
Description:	non-contact stormwater from approximately 1.2 acres between the New Sedimentation Basin and the existing impoundments; also provides emergency overflow capacity to prevent overtopping of the New Sedimentation Basin	
Expected flow:	no flow, emergency only	

Type of Flow Measurement which the facility is currently using:
Engineering calculation

Outfall 204

Discharge Location:	Latitude	30°35'47" North
	Longitude	91°14'58" West
Description:	accumulated stormwater from spent bauxite impoundments	
Expected flow:	2.051 MGD	

Type of Flow Measurement which the facility is currently using:
estimate based on pump curve

V. RECEIVING WATERS:

The discharge from outfalls 001, 002, 003, 004, 009 are into an unnamed tributary of Bayou Baton Rouge, thence into Bayou Baton Rouge, thence into the Mississippi River in segment 070502 of the Mississippi River Basin. The discharge from outfall 204 is into Profit Island Chute, thence into the Mississippi River in segment 070201 of the Mississippi River Basin. Segment 070502 is listed on the 303(d) list of impaired waterbodies.

The **critical low flow** (7Q10) of unnamed tributary of Bayou Baton Rouge is 0.1 cfs.

The **hardness value** is 41.7mg/l and the **fifteenth percentile value for TSS** is 12mg/l.

The designated uses and degree of support for Segment 070502 and Segment 070201 of the Mississippi River Basin are as indicated in the table below[1/]:

Overall Degree of Support for Segment	Degree of Support of Each Use						
Partially Supported	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
	Not Supported	Fully Supported	Fully Supported	N/A	N/A	N/A	N/A

[1/] The designated uses and degree of support for Segment 070502 of the Mississippi River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2004 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

Overall Degree of Support for Segment	Degree of Support of Each Use						
Fully Supported	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
	Fully Supported	Fully Supported	Fully Supported	N/A	Fully Supported	N/A	N/A

[1/] The designated uses and degree of support for Segment 070201 of the Mississippi River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2004 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

Section 303 (d) of the Clean Water Act as amended by the Water Quality Act of 1987, and EPA's regulations at 40 CFR 130 require that each state identify those waters within its boundaries not meeting water quality standards. The Clean Water Act further requires states to implement plans to address impairments. LDEQ is developing Total Maximum Daily Loadings Studies (TMDLs) to address impaired waterbodies. Segment 070502 of the Mississippi River Basin is on the 2006 Integrated 303(d) List of Impaired Waterbodies. The suspected cause of impairment is pathogens. To date no TMDLs have been completed for this waterbody. To address the pathogen impairment, effluent limits for fecal coliform have been included in the permit. Fecal coliform is the best indicator to determine the potential presence of pathogenic organisms in wastewater. Permit limits are reflective of the most stringent water quality standards based on the designated use of the receiving stream (primary contact recreation).

VI. ENDANGERED SPECIES:

The receiving waterbodies in Subsegments 070502 and 070201 of the Mississippi River Basin have been identified by the U.S. Fish and Wildlife Service (FWS) as habitat for the *Pallid sturgeon*, which is listed as a threatened/endangered species. This draft permit has been sent to the FWS for review. This strategy was submitted with a letter dated November 17, 2008 from Rieck (FWS) to Nolan (LDEQ) as set forth in the Memorandum of Understanding between the LDEQ and the FWS. LDEQ has determined that the issuance of the LPDES permit is not likely to have an adverse affect upon the *Pallid sturgeon* since effluent limitations are established in the permit to ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. 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.

VIII. PUBLIC NOTICE:

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

For additional information, contact:

Mrs. Angela Marse
Water Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:

Final Effluent Limits:

OUTFALL 001
No Total Maximum Daily Load Studies or other water quality studies have bee completed since the issuance of the previous permit. Therefore effluent limits for outfall 001 will remain the same. Limits are based on receiving stream and wastewater characteristics, Effluent Limitation Guidelines for Landfills Point Source Category, the Multi-Sector General Permit, Water Quality Criteria, and the previous permit.

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg.	Weekly Avg.	Basis
BOD_5	20 mg/l	30 mg/l	Previous LPDES permit.
TSS	20 mg/l	30 mg/l	Previous LPDES permit.
Ammonia-Nitrogen	4.9 mg/l	10 mg/l	EPA's Effluent Guidelines for Landfills Point Source Category at 40 CFR Part 445.
TOC	---	50 mg/l	Previous permit and Multi-Sector General Permit-Sector L issued May 1, 2006.
Oil and Grease	---	15 mg/l	Previous permit and Multi-Sector General Permit-Sector L issued May 1, 2006.
Chlorides	---	250 mg/l	LAC 33:IX.1113.C.2 and the previous permit
Sulfates	---	250 mg/l	LAC 33:IX.1113.C.2 and the previous permit.
Alpha Terpineol	0.016 mg/l	0.033 mg/l	EPA's Effluent Guidelines for Landfills Point Source Category at 40 CFR Part 445.
Benzoic Acid	0.071 mg/l	0.12 mg/l	EPA's Effluent Guidelines for Landfills Point Source Category at 40 CFR Part 445.
P-Cresol	0.014 mg/l	0.025 mg/l	EPA's Effluent Guidelines for Landfills Point Source Category at 40 CFR Part 445.
Zinc	0.11 mg/l	0.2 mg/l	EPA's Effluent Guidelines for Landfills Point Source Category at 40 CFR Part 445.
Phenol	0.015 mg/l	0.026 mg/l	EPA's Effluent Guidelines for Landfills Point Source Category at 40 CFR Part 445.

Other Effluent Limitations:

1) **Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5., the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Daily Maximum) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgement in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) **pH**

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time. (Limits as established through BPJ considering BCT for similar waste streams in accordance with LAC 33:IX.5905.C.)

3) **Solids and Foam**

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

4) **Priority Pollutant Scan**

The treatment facility will be treating leachate and contaminated stormwater. Studies have shown the leachate generated at municipal solid waste landfills can be highly concentrated and variable, and may include the presence of priority pollutants. Contributing to this variability may be the presence of household hazardous waste in the municipal solid waste stream (EPA, 1987). Pollutants which may be found in leachate include volatile organic compounds, metals, and pesticides.

This Office has established a list of priority pollutants with threshold limits intended as action levels. Should a substance exceed the level of the established concentration, the Department is to be notified, in writing, within five (5) days of exceedance and the North Baton Rouge Landfill shall institute a study to determine the source of the substance. Within sixty (60) days of the written notification the permittee shall submit a written account of the nature of the study, the study results, and measures being taken to secure abatement.

1. Draft Threshold Limits – The draft threshold limits are derived from either technology-based effluent limits or State Water Quality Standards and requirements. The most stringent of these limits is contained in the permit. Technology-based effluent limitations are based on the applicable effluent limitations guidelines, on Best Professional Judgment (BPJ) in the absence of applicable guidelines, or on a combination of these two methods. Currently, there are guidelines for the treatment of leachate from a municipal solid waste landfill and they have been included in the permit in addition to these threshold

from previously issued BPJ based water discharge permits for municipal solid waste landfills and other land disposal facilities. Each of the guideline regulations were accompanied by a development document, which provided the support for the final guideline. A water quality screen was performed using stream characteristics for Baton Rouge Bayou. This screen was used to establish water quality based limits. (See Appendix B.)

2. Derivation of Threshold Limits

LDEQ/EPA Technology-Based Limits – In the early 1980's the LDEQ and EPA developed effluent limitations for all of the priority pollutants contained in the EPA 2C application for land disposal facilities. Although the limitations were technology-based and derived prior to formal State water quality criteria, water quality considerations played a significant role in the development of the limits.

The threshold limits established for metals and pesticides are water quality based in accordance with the state water quality criteria (Appendix B). For metals where state criteria have not been promulgated, threshold limits have been established using technology-based effluent limits taken from water discharge permits previously issued to municipal solid waste landfills and other land disposal facilities. In accordance with the water quality standards, there may be no discharge of PCBs.

Chemical	DEQ/EPA Daily Max. ug/l	WQBL Daily Max. ug/l	Threshold Value ug/l	MQL Required ug/l
METALS, CYANIDE, AND TOTAL PHENOLS				
Total Antimony	600		600	60
Total Arsenic	100	576	100	10
Total Beryllium	100		100	5
Total Cadmium	100	4	4	1
Chromium III	100	861	100	10
Chromium VI	100	16	16	10
Total Copper	500	24	24	10
Total Cyanide	100	11	11	20
Total Lead	150	11	11	5
Total Mercury	10	0.07	0.07	0.2
Total Nickel (freshwater)	500	360	360	40
Total Selenium	100		100	5
Total Silver	100		100	2
Total Thallium	100		100	10
Total Phenols	50		50	5
VOLATILE COMPOUNDS				
Acrolein	100		100	50
Acrylonitrile	100		100	50
Benzene	100	90	90	10
Bromodichloromethane	100	50	50	10
Bromoform	100		100	10
Carbon Tetrachloride	100	9	9	10

Chlorobenzene	100		100	50
Chloroethane	100		100	10
2-Chloroethyl vinyl ether	100		100	50
Chloroform	100	504	100	10
Dibromochloromethane	100	37	37	10
1,1-Dichloroethane	100		100	10
1,2-Dichloroethane	100	49	49	10
1,1-Dichloroethylene (1,1-Dichloroethene)	100	4	4	10
1,2-Dichloropropane	100		100	10
1,3-Dichloropropene (1,3-Dichloropropylene)	100	600	100	10
Ethylbenzene	100	3172	100	10
Methyl Bromide (Bromomethane)	100		100	50
Methyl Chloride (Chloromethane)	100	54571	100	50
Methylene Chloride	100	627	100	20
1,1,2,2,-Tetra-chloroethane	100	13	13	10
Tetrachloroethylene	100	18	18	10
1,2-*trans*-Dichloroethylene	100		100	10
Toluene	100	1259	100	
1,2-*trans*-Dichloroethylene (1,2-dichloroethene)	100		100	10
1,1,1-Trichloroethane	100	5233	100	10
1,1,2-Trichloroethane	100	50	50	10
Trichloroethylene (Trichloroethene)	100	151	100	10
Vinyl Chloride	100	258	100	10
ACID COMPOUNDS				
2-Chlorophenol (o-Chlorophenol)	100	256	100	10
2,4-Dichlorophenol	100	200	100	10
2,4-Dimethylphenol	100		100	10
2,4-Dinitrophenol	100		100	50
4,6-Dinitro-o-Cresol {4,6-Dinitro-o-phenol} {4,6-Dinitro-2-mehtyl phenol}	100		100	50
2-Nitrophenol	100		100	20
4-Nitrophenol	100		100	50
P-Chloro-M-Cresol	100		100	
Pentachlorophenol	100		100	50
Phenol	100		100	10
2,4,6-Trichlorophenol	100		100	10
PESTICIDES				
Aldrin	10	0.0029	0.0029	0.05
Chlordane	10	0.0014	0.0014	0.2

DDD	10	0.0019	0.0018	0.1
DDE	10	0.0014	0.0014	0.1
DDT	10	0.0014	0.0014	0.1
Dieldrin	10	0.0004	0.0004	0.1
Endosulfan	10	0.111	0.111*	0.1
Endosulfan	10	0.111	0.111	0.1
Total Endosulfan		0.222	0.222	0.1
Endosulfan sulfate	10		10	0.1
Endrin	5	0.74	0.74	0.1
Endrin aldehyde	10		10	0.1
Heptachlor	10	0.0005	0.0005	0.05
Heptachlor Epoxide	10		10	0.05
Hexachlorocyclohexane – (BHC-)	10		10	0.05
Hexachlorocyclohexane – (BHC-)	10		10	0.05
Hexachlorocyclohexane – (BHC-)	10		10	0.05
Hexachlorocyclohexane – (Lindane)	10	0.42	0.42	0.05
Total PCB's	No discharge			1.0
Toxaphene	10	0.0004	0.0004	5.0
BASE/NEUTRAL COMPOUNDS				
Acenaphthene	100		100	10
Acenapthylene	100		100	10
Anthracene	100		100	10
Benzidene	100	0.0012	0.0012	50
Benzo(*a*)anthracene	100		100	10
3,4-Benzofluoranthene {Benzo(*b*)fluoranthene}	100		100	10
Benzo(*k*)fluoranthene	100		100	10
Benzo(*a*)pyrene	100		100	10
Benzo(*ghi*)perylene	100		100	10
Benzyl butyl Phthalate {Butyl benzyl Phthalate}	100		100	10
Bis(2-chloroethyl)ether	100		100	10
Bis(2-chloroethoxy) methane	100		100	10
Bis(2-ethylhexyl) Phthalate	100		100	10
Bis(2-chloroisopropyl) ether	100		100	10
4-Bromophenyl phenyl ether	100		100	10
2-Chloronaphthalene	100		100	10
4-Chlorophenyl phenyl ether	100		100	10
Chrysene	100		100	10
Dibenzo (*a,h*) anthracene	100		100	20
Di-*n*-Butyl Phthalate	100		100	10
1,2-Dichlorobenzene	100		100	10
1,3-Dichlorobenzene	100		100	10
1,4-Dichlorobenzene {p-Dichlorobenzidine}	100		100	10

3,3-Dichlorobenzidine	100		100	50
Diethyl Phthalate	100		100	10
Dimethyl Phthalate	100		100	10
2,6-Dinitrotoluene	100		100	10
2,4-Dinitrotoluene	100		100	10
Di-*n*-octyl Phthalate	100		100	10
1,2-Diphenylhydrazine	100		100	20
Fluoranthene	100		100	10
Fluorene	100		100	10
Hexachlorobenzene	100	0.002	0.002	10
Hexachlorobutadiene	100	0.792	0.792	10
Hexachlorocyclopentadiene	100		100	10
Hexachloroethane	100		100	20
Ideno (1,2,3-*cd*)pyrene	100		100	20
Isophorone	100		100	10
Naphthalene	100		100	10
Nitrobenzene	100		100	10
N-nitrosodimethylamine	100		100	50
N-nitrosodiphenylamine	100		100	20
N-nitrosodi-*n*-propylamine	100		100	20
Phenanthrene	100		100	10
Pyrene	100		100	10
1,2,4-Trichlorobenzene	100		100	10

* Chronic Value taken from the Water Quality Criteria Summary
Total Chromium has been removed from State Water Quality Standards and replaced with criteria for Chromium III and Chromium VI, reference to Total Chromium has been removed from the PPS tables.

A number of the threshold limitations established from the criteria are below EPA established minimum quantification levels (MQL). The MQL is accepted as the lowest concentration at which a substance can be quantitatively measured. Where the permit limits are below the MQL the following is noted in the permit:

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

5) Toxicity Characteristics

LAC33:IX.1121.B.3. provides for the use of biomonitoring to monitor the effluent for protection of State waters. Whole effluent biomonitoring is the most direct measure of potential toxicity which incorporates the effects of synergism of the effluent components and receiving stream water quality characteristics.

Based on information contained in the permit application, LDEQ has determined there may be pollutants present in the effluent which may have the potential to cause toxic conditions in the receiving stream in violation of Section 101(a)(3) of the Clean Water Act. The State has established a narrative criteria which, in part, states that "No substances shall be present in the waters of the State or the sediments underlying said waters in quantities alone or in combination will be toxic to human, plant, or animal life…" (LAC

33:IX.1113.B.5) Testing since the issuance of the previous permit has demonstrated 1 lethal and 4 sub-lethal test failures for *Pimephales promelas* and 1 lethal and 5 sub-lethal test failures for *Ceriodaphnia dubia*. A WET limit is established in the proposed permit to meet narrative criteria which, in part, states that 'No substances shall be present in the waters of the State or the sediments underlying said waters in quantities alone or in combination will be toxic to human, plant, or animal life ...' (LAC 33:IX.1113.B.5). The permittee will have two years to comply with the WET limit.

The permittee shall submit the results of any biomonitoring testing performed in accordance with the LPDES Permit No. LA0086169, Part II, Section E and F for the organisms indicated below.

TOXICITY TESTS	FREQUENCY
Chronic static renewal survival and reproduction test, Method 1002.0, EPA-821-R-02-013 Using Ceriodaphnia dubia	1/quarter
Chronic static renewal 7-day larval survival and growth test, Method 1000.0, EPA-821-R-02-013 Using fathead minnows Pimephales promelas	1/quarter

This frequency is based on recommendation by LDEQ Biomonitoring personnel (see attached recommendation), the receiving stream, and the facility's previous biomonitoring test results.

Dilution Series – The permit requires five (5) dilutions in addition to the control (0% effluent) to be used in toxicity tests. These additional concentrations shall be 26%, 35%, 47%, 62%, and 83%. The low-flow effluent concentration (critical low-flow dilution) is defined as 83% effluent. The critical dilution is calculated in Appendix B-1 of this fact sheet. Results of all dilutions shall be documented in a full report according to the test method publication mentioned in **Part II Section E & F** under Whole Effluent Toxicity. This full report shall be submitted to the Office of Environmental Compliance as contained in the Reporting Paragraph located in **Part II Section E& F** of the permit.

Final Effluent Limits:

OUTFALLS 002, 003, 004A and 009

The previous permit contained reporting requirements for TDS, total recoverable iron, ammonia, magnesium, arsenic, barium, cadmium, cyanide, lead, mercury, selenium, and silver. These reporting requirements were based on the NPDES General Stormwater Permit for Industrial Activities issued September 9, 1992. They were contained in the originally issued permit (effective September 1, 1993) as well. Discharges from these outfalls have been intermittent and infrequent. Because neither reporting nor threshold limits for these parameters are required by the LPDES Multi-Sector General Permit issued May1, 2006, they are not included in the draft permit.

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg.	Weekly Avg.	Basis
TOC	---	50 mg/l	Previous permit and Multi-Sector General Permit-Sector L issued May 1, 2006.
Oil & Grease	---	15 mg/l	Previous permit and Multi-Sector General Permit-Sector L issued May 1, 2006.

Other Effluent Limitations:

1) pH

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time. (Limits as established through BPJ considering BCT for similar waste streams in accordance with LAC 33:IX.5905.C.)

2) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

Other Effluent Limitations for Outfall 004A:

Effluent Characteristic	Monthly Avg.	Weekly Avg.	Basis
TSS	---	45 mg/l	Exterior Vehicle Wash Wastewater General Permit LAG750000 issued March 13, 2004.
Soaps and/or detergents[1]	Report	---	Exterior Vehicle Wash Wastewater General Permit LAG750000 issued March 13, 2004.
Visible Sheen[2]	---	No presence	Exterior Vehicle Wash Wastewater General Permit LAG750000 issued March 13, 2004.

1 Keep inventory records of the quantity and type of each soap and/or detergent used and Material Safety Data Sheet (MSDS) for each material used. Retain the inventory records and the MSDSs at the facility for three years. No DMR reporting is required for soaps and/or detergents (LAC 33:IX.2701.J.2), therefore; do not report soaps and/or detergents on the quarterly DMR form that is used to report lab analysis for other parameters (flow, TOC, TSS, oil and grease, and pH).

2 The permittee shall conduct weekly visual observations to determine if a visible sheen is present at the outfall. The permittee shall keep a manual log recording the results of the weekly visual observations. No DMR reporting is required for Visible Sheen (LAC 33:2701.A); therefore, do not report Visible Sheen on the quarterly DMR form that is used to report lab analysis for other parameters (flow, TOC, TSS, Oil & grease, and pH). However, is a visible sheen is noted during an inspection, a letter of noncompliance shall be submitted in accordance with Standard Conditions, Section D.7. Retain a manual log at the facility. Individual entries in the manual log shall be retained for three years from the inspection date.

Final Effluent Limits:

OUTFALL 204

The previous permit was modified to include discharges from outfall 204 located on the adjacent tract of land purchased by City/Parish Government from Kaiser Aluminum and Chemical Corporation. To manage material at one location, Kaiser Aluminum and Chemical Company transferred material from Mengel Road to its Irene Road red mud lakes. The mud lake system at Irene Road consists of two spent bauxite storage impoundments and a surge lake. Stormwater accumulation and percolation of precipitation through bauxite beds is collected from spent bauxite impoundments and flows to a surge lake. EPA Effluent Guidelines and standards for bauxite refining (40CFR 421, Subpart A), technology-based effluent limits guidelines for bauxite refiners are zero discharge of process wastewater. However, discharge of precipitation in excess of evaporation is allowed. Stormwater is discharged intermittently. Therefore, this outfall is included in the permit renewal. Effluent limits are the same as the previous permit.

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg.	Daily Max.	Basis
TOC	---	50 mg/l	MultiSector General Permit – Sector L and previously issued water discharge permits for similar facilities/effluents.
TSS	90 mg/l	135 mg/l	Best Professional Judgement based on secondary treatment standards for pond dischargers.

Other Effluent Limitations for Outfall 204:

1) **pH**
The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time. (Limits as established through BPJ considering BCT for similar waste streams in accordance with LAC 33:IX.5905.C.)

2) **Solids and Foam**
There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

X. PREVIOUS PERMITS:

LPDES Permit No. LA0086169: Issued: May 1, 2004
Expired: April 30, 2009
Modified: April 1, 2005

Outfall 001

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Daily Avg.	Daily Max.	Measurement Frequency	Sample Type
Flow	Report	Report	Continuous	Recorder
BOD_5	20 mg/l	30 mg/l	1/week	Grab
TSS	20 mg/l	30 mg/l	1/week	Grab
TOC	---	50 mg/l	1/week	Grab
Oil &grease	---	15 mg/l	1/week	Grab
Chlorides	---	250 mg/l	1/week	Grab
Sulfates	---	250 mg/l	1/week	Grab
Ammonia-Nitrogen	4.9 mg/l	10 mg/l	1/week	Grab
Fecal Coliform Colonies	200	400	1/week	Grab
pH	---	---	1/week	Grab
Priority Pollutants	---	Report ug/l	1/year	Grab
Alpha terpineol	0.016 mg/l	0.033 mg/l	1/quarter	Grab
Benzoic acid	0.071 mg/l	0.12 mg/l	1/quarter	Grab
p-Cresol	0.014 mg/l	0.025 mg/l	1/quarter	Grab
Zinc	0.11 mg/l	0.2 mg/l	1/quarter	Grab
Phenol	0.015 mg/l	0.026 mg/l	1/quarter	Grab

Outfalls 002, 003, 009

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Daily Avg.	Daily Max.	Measurement Frequency	Sample Type
Flow	Report	Report	Daily	Estimate
TOC	---	50 mg/l	1/month	Grab
Oil &grease	---	15 mg/l	1/month	Grab
Ammonia	Report	Report	1/month	Grab
TDS	---	Report	1/month	Grab
pH	---	---	1/month	Grab
Total Recoverable Iron	---	Report	1/6 month	Grab
Total Arsenic	---	Report	1/6 months	Grab
Total Barium	---	Report	1/6 months	Grab

Total Cadmium	---	Report	1/6 months	Grab
Total Cyanide	---	Report	1/6 months	Grab
Total Lead	---	Report	1/6 months	Grab
Total Magnesium	---	Report	1/6 months	Grab
Magnesium (Dissolved)	---	Report	1/6 months	Grab
Total Mercury	---	Report	1/6 months	Grab
Total Selenium	---	Report	1/6 months	Grab
Total Silver	---	Report	1/6 months	Grab

Outfall 004

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Daily Avg.	Daily Max.	Measurement Frequency	Sample Type
Flow	Report	Report	Daily	Estimate
TOC	---	50 mg/l	1/month	Grab
Oil &grease	---	15 mg/l	1/month	Grab
Ammonia	Report	Report	1/month	Grab
TDS	---	Report	1/month	Grab
pH	---	---	1/month	Grab
Total Recoverable Iron	---	Report	1/6 month	Grab
Total Arsenic	---	Report	1/6 months	Grab
Total Barium	---	Report	1/6 months	Grab
Total Cadmium	---	Report	1/6 months	Grab
Total Cyanide	---	Report	1/6 months	Grab
Total Lead	---	Report	1/6 months	Grab
Total Magnesium	---	Report	1/6 months	Grab
Magnesium (Dissolve)	---	Report	1/6 months	Grab
Total Mercury	---	Report	1/6 months	Grab
Total Selenium	---	Report	1/6 months	Grab
Total Silver	---	Report	1/6 months	Grab
Soaps and detergents	---	Report	1/6 months	Grab
Visible Sheen	---	Report	1/6 months	Grab

Outfalls 005 and 006

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Daily Avg.	Daily Max.	Measurement Frequency	Sample Type
Flow	Report	Report	Daily	Estimate
TOC	---	50 mg/l	1/month	Grab
Oil &grease	---	15 mg/l	1/month	Grab
Total Recoverable Iron	---	Report	1/month	Grab
pH	---	---	1/month	Grab

Outfall 204

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Daily Avg.	Daily Max.	Measurement Frequency	Sample Type
Flow	Report	Report	Daily	Estimate
TOC	---	50 mg/l	1/quarter	Grab
TSS	90 mg/l	135 mg/l	1/quarter	Grab
pH	---	---	1/quarter	Grab

The permit contains biomonitoring.
The permit contains stormwater language.

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:

A) Inspections

A review of the files indicates the following most recent inspection performed for this facility.

Date – February 22, 2007
Inspector - LDEQ
Findings and/or Violations -

1. All outfalls were inspected and no areas of concern were observed during the time of inspection.
2. SPCC Plan was last revised 1/2003.
3. Discharge monitoring reports, lab data and chain of custody forms from May 2004 to December 2006 were reviewed at LDEQ. Documents were not on-site. DMR review showed numerous excursions for BOD, TSS, TOC, Fecal, and chlorides.
4. SWPPP was reviewed at LDEQ, plan was not on-site. Plan last revised in August, 2003.
5. No spills/releases since last inspection of June 2, 2004.

B) Compliance and/or Administrative Orders

A review of the files indicates there are no recent compliance or administrative orders administered against this facility. However, due to permit excursions warning letters were sent to the facility in July, 2005 and February, 2008.

C) DMR Review

A review of the discharge monitoring reports for the period beginning January, 2007 through December, 2008 has revealed the following violations:

Parameter	Outfall	Period of Excursion	Permit Limit	Reported Quantity
BOD	001	January, 2007	30 mg/l	39 mg/l
BOD	001	October, 2007	20 mg/l	27 mg/l
TSS	001	January, 2007	20 mg/l	30 mg/l
TSS	001	January 2007	30 mg/l	71 mg/l

TSS	001	February, 2007	20mg/l	31 mg/l
TSS	001	February, 2007	30 mg/l	31 mg/l
TSS	001	May, 2007	20 mg/l	28mg/l
TSS	001	September, 2007	20 mg/l	30 mg/l
TSS	001	September, 2007	30 mg/l	48 mg/l
TSS	001	January, 2008	20 mg/l	47 mg/l
TSS	001	January, 2008	30 mg/l	59 mg/l
TSS	001	February, 2008	20 mg/l	24 mg/l
TSS	001	February, 2008	30 mg/l	37 mg/l
TSS	001	March, 2008	20 mg/l	102 mg/l
TSS	001	March, 2008	30 mg/l	102 mg/l
TSS	001	April, 2008	20 mg/l	30 mg/l
TSS	001	May, 2008	20 mg/l	72 mg/l
TSS	001	May, 2008	30 mg/l	123 mg/l
TSS	001	August, 2008	20 mg/l	35 mg/l
TSS	001	August, 2008	30 mg/l	35 mg/l
TSS	001	October, 2008	20 mg/l	24 mg/l
TSS	001	October, 2008	30 mg/l	31 mg/l
TSS	001	November, 2008	20 mg/l	29 mg/l
Ammonia	001	May, 2007	4.9 mg/l	7 mg/l
Ammonia	001	June, 2007	4.9 mg/l	13 mg/l
Ammonia	001	July, 2007	4.9 mg/l	11 mg/l
Ammonia	001	July, 2007	4.9 mg/l	11 mg/l
Ammonia	001	May, 2008	4.9 mg/l	6 mg/l
Ammonia	001	November, 2008	4.9 mg/l	5.8 mg/l
Ammonia	001	December, 2008	4.9 mg/l	9.6 mg/l
Ammonia	001	January, 2008	50 mg/l	60 mg/l
Ammonia	001	January, 2008	15 mg/l	18mg/l
Fecal coliform	001	August, 2007	200 mg/l	1735 mg/l
Fecal coliform	001	August, 2007	400 mg/l	4300 mg/l
Fecal coliform	001	November, 2007	200 mg/l	280 mg/l
Fecal coliform	001	January, 2008	200 mg/l	559 mg/l
Fecal coliform	001	January, 2008	400 mg/l	800mg/l
Fecal coliform	001	February, 2008	200 mg/l	4385 mg/l
Fecal coliform	001	February, 2008	400 mg/l	60100 mg/l
Fecal coliform	001	May, 2008	200 mg/l	3072 mg/l
Fecal coliform	001	May, 2008	400 mg/l	3700 mg/l
Fecal coliform	001	September, 2008	200 mg/l	275 mg/l

*Because of effluent violations in the above table, the Facility has been referred to the Office of Environmental Compliance.

XII. ADDITIONAL INFORMATION:

The Louisiana Department of Environmental Quality (LDEQ) reserves the right to impose 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 TMDL's. The LDEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established

TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or 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.

In accordance with LAC 33:IX.2903., 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, if the effluent standard or limitations so issued or approved:

a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or

b) Controls any pollutant not limited in the permit; or

c) Requires reassessment due to change in 303(d) status of waterbody; or

d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are based on the previous permit, compliance history, and facilities of this type.

SEWAGE SLUDGE

The facility can accept sewage sludge for disposal in accordance with LAC 33.IX.7301. Part II, Section D requires that any truck disposing of hauled sewage sludge into the landfill must be properly registered by the Louisiana Department of Environmental Quality (LDEQ) to haul sewage sludge. The receipt of hauled sewage sludge from an unauthorized/unregistered hauler shall constitute a violation of the permit.

STORMWATER POLLUTION PREVENTION PLAN

The permittee will be required to maintain a Stormwater Pollution Prevention Plan in accordance with Part II, Section C of the permit. The terms and conditions of the SWP3 shall be an enforceable Part of the permit. Any runoff leaving the developed areas of the facility, other than the permitted outfall(s), exceeding 50 mg/L TOC, 15 mg/L Oil and Grease, or having a pH less than 6.0 or greater than 9.0 standard units shall be a violation of this permit. Any discharge in excess of these limitations, which is attributable to offsite contamination, shall not be considered a violation of this permit. A visual inspection of the facility shall be conducted and a report made annually as described in. Part II, Section B of the permit.

XIII 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 this Fact Sheet.

XIV REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2009.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 2006.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards", Louisiana Department of Environmental Quality, 2008.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program", Louisiana Department of Environmental Quality, 2008.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, City of Baton Rouge/Parish of East Baton Rouge,East Baton Rouge North Landfill, January 30, 2009.