STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0074870; AI 20028; PER20080001** 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:

Total Environmental Solutions, Inc
Bellemont Estates
PO Box 14056
Baton Rouge, LA 70898

II. PREPARED BY: Rachel Davis

DATE PREPARED: January 16, 2009

III. PERMIT ACTION: reissue LPDES permit LA0074870, AI 20028; PER20080001

LPDES application received: August 8, 2008

EPA has not retained enforcement authority.

LPDES permit issued: June 1, 2004
LPDES permit expires: May 31, 2009

IV. FACILITY INFORMATION:

A. The application is for the discharge of treated sanitary wastewater from an exisiting privately owned treatment works serving the Bellemont Estates Subdivision.

B. The permit application does not indicate the receipt of industrial wastewater.

C. The facility is located on Amanda Drive, off Butcher Switch Road in Lafayette, Lafayette Parish.

D. The treatment facility consists of an extended aeration treatment plant with chlorine disinfection.

E. Outfall 001

Discharge Location: Latitude 30° 17' 47" North
Longitude 92° 00' 87" West

Description: treated sanitary wastewater

Expected Flow: 117 homes x 400 gallons/day/home = 0.0468 MGD

Calculations for gallons per day were based upon figures obtained from Chapter 15 of the State of Louisiana Sanitary Code, Department of Health and Hospitals, Office of Public Health.

Type of Flow Measurement which the facility is currently using:
V-Notch Weir or stopwatch and bucket

V. RECEIVING WATERS:

The discharge is into an unnamed drainage ditch, thence into Francois Coulee, thence into the Vermilion River in segment 060801 of the Vermilion Teche River Basin. This segment is not listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 060801 of the Vermilion Teche River Basin are as indicated in the table below[1/]:

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

[1/]The designated uses and degree of support for Segment 060801 of the Vermilion Teche River Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 060801 of the Vermilion-Teche 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 November 24, 2008 from Rieck (FWS) to Nolan (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.

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:

Ms. Rachel Davis
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:

Subsegment 060801, is not listed on LDEQ's Final 2006 303(d) List as impaired. However, subsegment 060801 was previously listed as impaired for phosphorus, nitrogen, organic enrichment/low DO, pathogen indicators, suspended solids/turbidity/ siltation, and carbofuran for which the below TMDL's have been developed. The Department of Environmental Quality 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 TMDL's and/or water quality studies. The DEQ 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 necessary to achieve compliance with water quality standards.

The following TMDLs have been established for subsegment 060801:

1999 Review and Assessment of the 1987 Vermilion River Watershed TMDL for Dissolved Oxygen

This TMDL was revised in December 1999, and approved by EPA on April 5, 2001. This TMDL re-established that NPDES permits for individual point sources in the Vermilion Watershed should continue to be issued on the basis of flow rates as follows:

FLOW RATE	PERMIT LIMITS
greater than 25,000 gpd	May – Dec.: 10 mg/l $CBOD_5$/5 mg/l NH_3-N/5 mg/l DO Jan.- April: 20 mg/l $CBOD_5$/10 mg/l NH_3-N/5 mg/l DO
25,000 gpd or less	secondary limits year round

Therefore, this discharge will be permitted accordingly.

Vermilion River TMDL for Fecal Coliform

The *Vermilion River TMDL for Fecal Coliform* was finalized on April 5, 2001, addressing the presence of pathogen indicators in the watershed. As per this TMDL, "...there will be no change in the permit requirements based upon a wasteload allocation resulting from this TMDL." Therefore, Fecal Coliform effluent limitations will be permitted according to the current state policy.

TMDL for TSS, Turbidity, and Siltation for the 15 Subsegments in the Vermilion River Basin

As per the *TMDL for TSS, Turbidity, and Siltation for the 15 Subsegments in the Vermilion River Basin*, "point source loads are so small as to be insignificant, and because effective policies are in place to limit TSS discharges, no specific reductions from point sources are required." Therefore, TSS limits will be established in this permit according to the current state guidance.

TMDL for the Pesticide Carbofuran in the Mermentau and Vermilion-Teche River Basins

The *TMDL for the Pesticide Carbofuran in the Mermentau and Vermilion-Teche River Basins* was finalized on March 21, 2002, and states no point sources are known to discharge Carbofuran; therefore, no allocation was given to point source discharges in the Vermilion-Teche River Basin

OUTFALL 001

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 (lbs./day)	Monthly Avg	Weekly Avg	Basis
$CBOD_5$ May-December January-April		10 mg/l 20 mg/l	15 mg/l 30 mg/l	Based on the *1999 Review and Assessment of the 1987 Vermilion River Watershed TMDL for Dissolved Oxygen* for discharges over 25,000 GPD
TSS May-December January-April		15 mg/l 20 mg/l	23 mg/l 30 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.
Ammonia-Nitrogen May-December January-April		5 mg/l 10 mg/l	10 mg/l 20 mg/l	Based on the *1999 Review and Assessment of the 1987 Vermilion River Watershed TMDL for Dissolved Oxygen* for discharges over 25,000 GPD
Dissolved Oxygen*		5.0 mg/l	N/A	Based on the *1999 Review and Assessment of the 1987 Vermilion River Watershed TMDL for Dissolved Oxygen* for discharges over 25,000 GPD

*This Dissolved Oxygen limit is the lowest allowable average of daily discharges over a calendar month. When monitoring is conducted, the Dissolved Oxygen shall be analyzed immediately, as per 40 CFR 136.3.

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

According to LAC 33:IX.3705.A.1., Sanitary dischargers must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

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.

X. PREVIOUS PERMITS:

LPDES Permit No. LA0074870: Issued: June 1, 2004
Expires: May 31, 2009

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Monthly Avg.	Weekly Avg	Measurement Frequency	Sample Type
Flow	Report	Report	1/week	Measure
$CBOD_5$				
May-December	10 mg/l	15 mg/l	2/month	Grab
January-April	20 mg/l	30 mg/l	2/month	Grab
TSS				
May-December	15 mg/l	23 mg/l	2/month	Grab
January-April	20 mg/l	30 mg/l	2/month	Grab
Ammonia-Nitrogen				
May-December	5 mg/l	10 mg/l	2/month	Grab
January-April	10 mg/l	20 mg/l	2/month	Grab
Fecal Coliform Colonies	200	400	2/month	Grab

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:

A) Inspections

A review of the files indicates that no inspections have been performed at the facility in the past two years

B) Compliance and/or Administrative Orders

A review of the files indicates that no orders have been administered against the facility in the past two years.

C) DMR Review

A review of the discharge monitoring reports for the period beginning **Septemeber 2006** through **September 2008** has revealed the following violations:

Period of Excursion	Parameter	Outfall	Permit Limit	Reported Quantity
December 2006	TSS	001	15 mg/l	32.5 mg/l
	TSS		23 mg/l	42 mg/l
	Fecal		200	197.5
	Fecal		400	3,900
January 2007	TSS	001	20 mg/l	73.5 mg/l
	TSS		30 mg/l	133 mg/l
	Fecal		200	TNTC
	Fecal		400	TNTC
August 2007	TSS	001	15 mg/l	20.5 mg/l
	TSS		23 mg/l	36 mg/l
	Ammonia		5 mg/l	8.21 mg/l
	Ammonia		10 mg/l	16 mg/l
October 2007	TSS	001	15 mg/l	35.5 mg/l
	TSS		23 mg/l	55 mg/l
April 2008	TSS	001	20 mg/l	23 mg/l
June 2008	TSS	001	15 mg/l	28.5 mg/l
	TSS		23 mg/l	40 mg/l

XII. ADDITIONAL INFORMATION:

The Louisiana Department of Environmental Quality (LDEQ) reserves the right 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.

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

Please be aware that the Department has the authority to reduce monitoring frequencies when a permittee demonstrates two or more consecutive years of permit compliance. Monitoring frequencies established in LPDES permits are based on a number of factors, including but not limited to, the size of the discharge, the type of wastewater being discharged, the specific operations at the facility, past

compliance history, similar facilities and best professional judgment of the reviewer. We encourage and invite each permittee to institute positive measures to ensure continued compliance with the LPDES permit, thereby qualifying for reduced monitoring frequencies upon permit reissuance. If the Department can be of any assistance in this area, please do not hesitate to contact us. As a reminder, the Department will also consider an increase in monitoring frequency upon permit reissuance when the permittee demonstrates continued non-compliance.

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** shall remain as previously permitted:

Effluent Characteristics	Monitoring Requirements	
	Measurement Frequency	Sample Type
Flow	1/week	Measure
$CBOD_5$	2/month	Grab
Total Suspended Solids	2/month	Grab
Ammonia-Nitrogen	2/month	Grab
Dissolved Oxygen	2/month	Grab
Fecal Coliform Bacteria	2/month	Grab
pH	2/month	Grab

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 Statement of Basis.

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, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality; Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2004.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2004.

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, Total Environmental Solutions, Inc, Bellemont Estates, August 8, 2008.