STATEMENT OF BASIS (AI No. 43467)

for draft Louisiana Pollutant Discharge Elimination System permit No. **LA0106208** to discharge to waters of the State of Louisiana.

THE APPLICANT IS: Tangi Meats, LLC
Post Office Box 336
Ponchatoula, LA 70454

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

PREPARED BY: Lisa Kemp

DATE PREPARED: October 29, 2009

1. PERMIT STATUS

A. Reason For Permit Action:

Permit reissuance of a Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term

B. LPDES permits –

LPDES permit effective date: June 1, 2004
LPDES permit expiration date: May 31, 2009
EPA has not retained enforcement authority.

C. Date Application Received: December 4, 2008

2. FACILITY INFORMATION

A. FACILITY TYPE/ACTIVITY - meat processing plant

Tangi Meats, LLC is an existing meat processing plant. Pork products (pork shoulders, necks, etc.) are purchased, pickled or cured, then packaged either whole or sliced, and sold wholesale. Cubing and grinding are no longer done at the facility. Slaughtering has not been performed at the facility for some time. Products include picnics (pork shoulders), briskets, and pigtails. Approximately 160,000 pounds of finished products are produced per month or 7385 pounds per day based on a 5 day work week.

Oxidation ponds at the facility have been replaced with a mechanical treatment plant.

B. FEE RATE
1. Fee Rating Facility Type: minor
2. Complexity Type: II BPJ points to 5 based on low flow
3. Wastewater Type: II
4. SIC code: 2013, 5147

C. LOCATION - 15337 W. Hoffman Road, Hammond, Tangipahoa Parish
Latitude 30° 27' 07", Longitude 90° 28' 19" (previous permit)

3. OUTFALL INFORMATION

Outfall 001

Discharge Type:	process wastewater from meat processing activities, equipment washdown, and treated sanitary wastewater
Treatment:	mechanical treatment plant
Location:	at the point of discharge from the treatment plant, prior to combining with other waters
Flow:	estimated 1500 gpd
Discharge Route:	Ponchatoula Creek via open ditch

4. RECEIVING WATERS

STREAM - Ponchatoula Creek via open ditch

BASIN AND SEGMENT - Lake Pontchartrain Basin, Segment 040505

DESIGNATED USES - a. primary contact recreation
b. secondary contact recreation
c. propagation of fish and wildlife

5. TMDL STATUS

Subsegment 040505, Ponchatoula Creek and Ponchatoula River, is listed on LDEQ's Final 2006 303(d) List as impaired for nutrients, organic enrichment/low DO, pathogen indicators, lead, mercury, and TDS. The mercury impairment is listed as due to atmospheric depositions – toxics, and unknown sources. 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 meat processing plant point source category (e.g. lead, mercury, and TDS) have been eliminated in the formulation of effluent limitations and other requirements of this permit. Additionally, suspected causes of impairment which could be attributed to pollutants which were not determined to 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. Suspected causes of concern remaining after this elimination process are addressed in a manner consistent with the Department's permitting guidance for implementing Louisiana's surface water quality standards as follows:

Nutrients

LDEQ's position regarding water quality criteria for nutrients is that when oxygen-demanding substances are controlled and limited in order to ensure that the dissolved oxygen criterion is supported, nutrients are also controlled and limited. *See In The Matter of Sierra Club and Louisiana Environmental Network Request for Nutrient Limits.* Docket No. AHD-DR-96001. LDEQ April 29, 1996. LAC 33:IX.2707.C.f.iii allows the establishment of effluent limitations based on an indicator parameter for the pollutant of concern. LDEQ's consistent approach to controlling nutrients where the WQMP does not otherwise require specific nutrient limitations is achieved by limiting the discharge of oxygen-demanding substances through a $CBOD_5$ limitation. Compliance with the $CBOD_5$ limitation as the indicator parameter will result in the

control of nutrients from the discharge sufficient to attain and maintain the applicable water quality standard. Effluent monitoring of the indicator parameter as conducted by the permittee in accordance with Part I of the permit in addition to LDEQ's ambient water quality monitoring program will allow for further evaluation by the Department to determine the effectiveness of the limitation. The reopener clause located in Part II of the permit allows the Department to modify or revoke and reissue the permit if the limitations as set on the indicator parameter are shown to no longer attain and maintain applicable water quality standards.

In addition, Ammonia limits are included in the permit based on 40 CFR Part 432, Subpart H.

Organic enrichment/low dissolved oxygen (DO)

$CBOD_5$ limits have been established in the permit to protect against further impairment of the receiving stream.

Pathogen indicators (Fecal Coliform)

A fecal coliform limit has been established in the permit to protect against further impairment of the receiving stream.

6. CHANGES FROM PREVIOUS PERMIT

1. Limits for $CBOD_5$, TSS, and Oil & Grease have been calculated based on 40 CFR Part 432, Subpart H – Ham Processors. The facility was previously categorized as a small processor, subject to 40 CFR Part 432, Subpart E. A small processor is defined as an operation that produces no more than 6000 pounds per day of any type or combination of finished products. Because production has increased from 1500 lbs/day to 7385 lbs/day, Tangi Meats is no longer considered a small producer.

2. Treatment has changed from an oxidation pond to a mechanical treatment plant. Mass loadings for sanitary wastewater have been calculated based on a mechanical treatment plant system and an estimated flow of 300 gpd (15 employees @ 20 gpd/employee).

3. Ammonia limits are now included in the permit based on 40 CFR Part 432, Subpart H. Therefore, $CBOD_5$ is now required instead of BOD_5.

4. Monitoring frequency has been increased to 2/ month due to noncompliance.

7. COMPLIANCE HISTORY/COMMENTS

A. OEC – There are no open, appealed, or pending OEC enforcement actions as of October 13, 2009.

B. DMR Review/Excursions – DMRs on file for the period August, 2007 through July, 2009 were reviewed. Only Daily Maximum values were reported on the DMRs, although the current permit includes both monthly average and daily maximum limitations. Flow was not reported on the DMRs from August, 2008 through March, 2009. The following excursions were reported:

Date	Parameter	Outfall	Reported Value	Permit Limits
07/09	BOD_5	001	4.64 lbs/day	3.05 lbs/day
	Fecal Coliform	001	>1600 col/100 ml	400 col/100 ml
06/08	pH (min)	001	5.43 s.u.	6.0 s.u.
09/07	Fecal Coliform	001	>1600 col/100 ml	400 col/100 ml

C. Inspections –

A compliance inspection performed at this facility on November 16, 2009 revealed the following:

1. The facility's wastewater discharge permit became effective on 06/01/2004. The facility has submitted a permit renewal application to the permits division.
2. The facility has closed out the two-celled oxidation pond and backfilled the ponds in. A new treatment system was installed in the fourth quarter of 2007. The facility has installed a mechanical treatment system, which consists of two catch basins, an inground extended air treatment plant of concrete construction and a lift station that pumps the treated waste water to Ponchatoula Creek. The effluent is pumped to Ponchatoula Creek once the basin of the lift station reaches a certain level. The facility has solids pumped out of the treatment system every 6-8 months by a contractor and sent off site for disposal. A visual inspection of the treatment system was performed. The system was operating properly at this time. There was no effluent discharge during the visual inspection.
3. All records and reports were on site and available for review. A Discharge Monitoring Reports review was performed on reports from January, 2009 to September, 2009. The facility is not reporting the estimated flow and the monthly average loadings on the reports. (Note: daily maximum results reported on the DMRs exceed the monthly average loadings permitted for BOD and TSS.) The facility exceeded their permit limits for daily maximum BOD and Fecal Coliform in July, 2009.
4. There were no odors observed during the inspection.
5. The lab uses the same flow each month when calculating the loadings for BOD, TSS, and Oil & Grease.

An inspection performed at this facility on August 19, 2008 in response to a citizen complaint of solid waste being dumped in the ditches revealed the following:

1. No evidence was seen of solid waste material being thrown into the ditch.
2. The water in the ditch, however, was black and had a septic smell. A trickle of water from the discharge pipe from the facility's wastewater treatment unit was clear. As the inspector was discussing the complaint with the company's owner, Mr. Pellichino, the volume of discharge from the effluent pipe increased drastically. The water suddenly turned black and had a strong odor. It appears that when the sump pump turns on, sludge in the sump is disturbed and slug of this sludge is pumped out with the water. The inspector advised Mr. Pellichino to raise the pump higher off the bottom of the collection sump. He was also advised to periodically have the sump cleaned with a vacuum truck.
3. No other areas of concern were noted at this time.

8. EXISTING EFFLUENT LIMITS

Pollutant	Limitation		Frequency
	Monthly Avg	Daily Max	
	lbs/day (unless stated)		
Flow	Report	Report	1/month
BOD_5	1.54	3.05	1/month
TSS	1.88	3.71	1/month
Oil & Grease	0.75	1.50	1/month
Ammonia as N	Report	Report	1/quarter
Fecal Coliform colonies/100ml	---	400	1/month
pH, s.u.	6.0 (min)	9.0 (max)	1/month

9. ENDANGERED SPECIES

The receiving waterbody, Subsegment 040505 of the Lake Pontchartrain Basin, has been identified by the U.S. Fish and Wildlife Service (FWS) as habitat for the Gulf sturgeon, which is listed as an endangered species. LDEQ has not submitted this draft permit to the FWS for review in accordance 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, and based on information provided by the FWS, LDEQ has determined that the issuance of the LPDES permit is not likely to have an adverse effect upon the Gulf sturgeon. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore, the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

10. 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.

11. TENTATIVE DETERMINATION

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

12. 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:

LDEQ-EDMS Document 44314289, Page 38 of 43

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

Rationale for Tangi Meats, LLC

1. **Outfall 001** - process wastewater from meat processing activities, equipment washdown, treated sanitary wastewater, and stormwater runoff (estimated flow is 1500 gpd)

Pollutant	Limitation		Reference
	Monthly Avg	Daily Max	
Flow (gpd)	Report	Report	LAC 33:IX.2707.I.1.b
$CBOD_5$	2.37 lbs/day	4.69 lbs/day	40 CFR 432.82; LAG530000; BPJ
TSS	2.81 lbs/day	5.57 lbs/day	40 CFR 432.82; LAG530000; BPJ
Oil & Grease	0.84 lbs/day	1.66 lbs/day	40 CFR 432.82; LAG530000; BPJ
Ammonia	4.0 mg/L	8.0 mg/L	40 CFR 432.83 (a)
Fecal Coliform colonies/100ml	---	400	40 CFR 432.82; LAG530000; BPJ
pH, s.u.	6.0 (min)	9.0 (max)	40 CFR 432.82; LAG530000; BPJ

Treatment: mechanical treatment plant

Monitoring Frequency: twice/month for all parameters at the point of discharge from the treatment system, prior to mixing with other waters. Monitoring frequency has been increased due to compliance history (see Section 7).

Limits Justification: Limitations are based on Effluent Guidelines for Meat and Poultry Products Point Source Category, 40 CFR Part 432, Subpart H – Ham Processors; BPT, BAT, and on sanitary limits established in the Class I Sanitary General Permit (LAG530000). Because ammonia limits are included in the permit, $CBOD_5$ is now required instead of BOD_5.

Calculated Mass Loading Limits for Process Wastewater:
The following mass limits are calculated from the Effluent Limitations Guidelines (ELGs) for the Meat and Poultry Products Point Source (MPPS) Category, per 40 CFR Part 432, Subpart H.

Monthly Average Limits
$CBOD_5$ = (7385 lbs/day) x (0.31 lbs/1000 lbs finished product) = 2.29 lbs/day
TSS = (7385 lbs/day) x (0.37 lbs/1000 lbs finished product) = 2.73 lbs/day
Oil and Grease = (7385 lbs/day) x (0.11 lbs/1000 lbs finished product) = 0.81 lbs/day

Daily Maximum Limits
$CBOD_5$ = (7385 lbs/day) x (0.62 lbs/1000 lbs finished product) = 4.58 lbs/day
TSS = (7385 lbs/day) x (0.74 lbs/1000 lbs finished product) = 5.46 lbs/day
Oil and Grease = (7385 lbs/day) x (0.22 lbs/1000 lbs finished product) = 1.62 lbs/day

Sanitary Wastewater Limits per LAG530000
Sanitary wastewater limits from LAG530000 have been applied to this discharge through BPJ and the previous permit. The limits have been converted from mg/l to lb/day as shown below. Estimated sanitary flow is based on 15 employees @ 20 gpd = 300 gpd.

Monthly Average Limits
$CBOD_5$ = (30 mg/l) x (0.0003 MGD) x (8.34) = 0.075 lbs/day
TSS = (30 mg/l) x (0.0003 MGD) x (8.34) = 0.075 lbs/day
Oil and Grease = (15 mg/l/1.5)** x (0.0003 MGD) x (8.34) = 0.03 lbs/day

Daily Maximum Limits
$CBOD_5$ = (45 mg/l) x (0.0003 MGD) x (8.34) = 0.11 lbs/day
TSS = (45mg/l) x (0.0003 MGD) x (8.34) = 0.11 lbs/day
Oil and Grease = (15 mg/l) x (0.0003 MGD) x (8.34) = 0.038 lbs/day

** Monthly Average concentration limit for Oil and Grease is not included in LAG530000. A monthly average limit has been calculated as shown and has been applied through BPJ.

Summation of $CBOD_5$, TSS, and Oil and Grease Mass Limits for Outfall 001
Since this outfall discharges commingled sanitary and process wastewater, the loadings for each wastewater type have been summed. The sanitary wastewater and process wastewater are routed through the same treatment plant.

$CBOD_5$
Monthly Average = 2.29 + 0.075 = 2.37 lbs/day
Daily Maximum = 4.58 + 0.11 = 4.69 lbs/day

TSS
Monthly Average = 2.73 + 0.075 = 2.81 lbs/day
Daily Maximum = 5.46 + 0.11 = 5.57 lbs/day

Oil and Grease
Monthly Average = 0.81 + 0.03 = 0.84 lbs/day
Daily Maximum = 1.62 + 0.038 = 1.66 lbs/day

BAT	Best Available Technology Economically Achievable
BPJ	Best Professional Judgement
BCT	Best Conventional Pollutant Control Technology
BPT	Best Practicable Control Technology Currently Available
CBOD	Carbonaceous Biochemical Oxygen Demand
su	Standard Units

NOTE
For outfalls containing concentration limits, the usage of concentration limits is based on BPJ for similar outfalls since the flow is variable and estimated.

STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENT

A SWP3 is included in the permit because in accordance with LAC 33:IX.2511.A.1, storm water discharges shall not be required to obtain an LPDES permit "... except... discharges associated with industrial activity." In accordance with LAC 33:IX.2511.B.14.a-k, facilities classified as SIC code 2013 are considered to have storm water discharges associated with industrial activity.

For first time permit issuance, the SWP3 shall be prepared, implemented, and maintained within six (6) months of the effective date of the final permit. **For renewal permit issuance**, the SWP3 shall be reviewed and updated, if necessary, within six (6) months of the effective date of the final permit. The plan should identify potential sources of storm water pollution and ensure the implementation of practices to prevent and reduce pollutants in storm water discharges associated with industrial activity at the facility (see Narrative Requirements for the AI).