APPENDIX D:
Original Public Comment Letters

BOBBY JINDAL
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State of Louisiana

DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL SERVICES

December 21, 2011

Mrs. Diane Smith (6WQ)
Water Quality Protection Division
U. S. Environmental Protection Agency, Region 6
1445 Ross Avenue
Dallas, TX 75202-2733

RE: Comments on Federal Register: December 12, 2011 (Volume 76, Number 238) [FRC-9505-4] Clean Water Act Section 303(d): TMDLs for Mercury, Total Dissolved Solids (TDS), Total Suspended Solids, Sediment, Turbidity, and Fecal Coliform Bacteria for Selected Subsegments in the Lake Pontchartrain Basin

Dear Mrs. Smith:

The Louisiana Department of Environmental Quality hereby submits comments on the TMDLs prepared for EPA Region 6 for TMDLs for Mercury in Selected Subsegments in the Lake Pontchartrain Basin, Louisiana (Subsegments 040303, 040401, 040403, 040501, 040701, 040801, 040905, 040906); TMDLs for Total Dissolved Solids (TDS) for Selected Subsegments in the Lake Pontchartrain Basin, Louisiana (Subsegments 040501 and 040504); TMDLs for Total Suspended Solids, Sediment, and Turbidity for Selected Subsegments in the Lake Pontchartrain Basin, Louisiana (Subsegments 040301, 040401, and 040903); and DRAFT TMDLs for Fecal Coliform Bacteria for Selected Subsegments in the Lake Pontchartrain Basin (040102, 040103, 040201, 040302, 040304, 040305, 040503, 040504, 040505, 040603, 040703, 040909, 040910, 041302, 041401).

LDEQ appreciates the opportunity that EPA provided for review of these draft TMDLs.

If you have any questions or comments, please contact Mr. William C. Berger, Jr. of my staff at 225-219-3366.

Sincerely,

William C. Berger, Jr.
12-22-11

William C. Berger, Jr., P.E.
TMDL/Water Quality Manager

12-23-11

Attachment

Ec with attachment:
Melvin Mitchell, LDEQ
Yvonne Baker, LDEQ
Claudia Hosch, EPA (6WQ)
Richard Wooster, EPA (6SF)
Brian Mueller, EPA (6WQ)

LDEQ Comments Concerning the following TMDLs submitted to EPA by Tetra Tech:

TMDLs for Mercury in Selected Subsegments in the Lake Pontchartrain Basin, Louisiana (Subsegments 040303, 040401, 040403, 040501, 040701, 040801, 040905, 040906)

By – Tetra Tech, Inc., November 2, 2011

General Comments

- LDEQ will be responsible for the implementation of this TMDL and future updates to this TMDL. Therefore, LDEQ requests that complete documentation, including all appendices be provided to LDEQ upon approval of the TMDL.
- LDEQ recommends that before reducing the allocation of any point source discharge, either to air or to surface waters, it should be determined that the point source, alone or in combination with other dischargers, has a significant impact on mercury levels in the surface waters of a watershed or in the coastal waters.
- LDEQ noticed that the data presented in this TMDL does not evaluate the percent of total mercury loading to the referenced subsegments that is from Louisiana sources, either by point source or atmospheric deposition. What percent of the loading is from LA sources? What percent of LA contribution is from point sources?
- It was assumed that a linear relationship exists between fish tissue concentration and methyl mercury concentrations in the water column. This relationship is variable and does not strongly support these TMDLs. Studies of the fish tissue concentrations of mercury in fresh water species does not indicate a linear relationship between water column or sediment concentrations and fish tissue concentrations. These relationships are likely to be complex and difficult to determine.
- Louisiana does not agree that fish tissue data should be used in the development of in-stream water quality based TMDLs. In-stream water quality does not directly correlate to fish tissue values due to the fact that mercury (methyl mercury) accumulates in different species at different rates. Accumulation may occur over long periods of time and as a result, older fish may contain higher levels of mercury.

Specific Comments

- Section 2.5 Point Sources, Table 2-4, page 2-5: LDEQ requests that the EPA add a note at the end of Table 2-4 to say "Note b. Only facilities that demonstrate a reasonable potential to discharge mercury may be required to develop a mercury minimization program or received a mercury limit or monitoring requirement."

- Page ii, Table ES-2: LDEQ has reviewed the calculations and determined there were some errors. LDEQ recommends that EPA correct the values provided as the sum of the WLAs (∑WLAs) for subsegments 040701 and 040801 to match the values provided in Table 4-1, page 4-3.

TMDLs for Total Dissolved Solids (TDS) for Selected Subsegments in the Lake Pontchartrain Basin, Louisiana (Subsegments 040501 and 040504)

By – Tetra Tech, Inc., November 2, 2011

General Comments:

- LDEQ will be responsible for the implementation of this TMDL and future updates to this TMDL. Therefore, LDEQ requests that complete documentation, including all appendices be provided to LDEQ upon approval of the TMDL.

- LDEQ requests that the phased approach should not be used for this TMDL. Please remove the phased approach and keep the following statements in Section 4.2.1, "To avoid any unnecessary permitting process or unintended monitoring requirements for a number of sources that may not be discharging the pollutants of concern, LDEQ will review these WLAs during the permitting process on a case-by-case basis. LDEQ will determine if a permit limit is appropriate or if the permittee reasonably could cause or contribute to a water quality violation (with LDEQ ensuring that the goals of the TMDL are still being met."

- Remove any references to chloride and sulfate since this TMDL is a TDS TMDL. It is not a Chloride, Sulfate and TDS TMDL.

Specific Comments:

- Section 4.2 states, "To be conservative, the facilities were assigned WLAs using a water quality target, and no point source has been given a reduction from that level." However, please be aware that the WLA established in the TMDL is a reduction from estimated discharge values.
- Delete Section 5.2, Phased LDEQ TMDL Approach.
- **NOTE**: If phased implementation remains in the TMDL report, please adjust the following:

  1. Section 5.2.1, 1, delete chlorides and sulfates from the first sentence. It should read: New discharges of TDS loads.
  2. Section 5.2.1, 1, second sentence should read: However, before the subsequent renewal of each permit, an assessment of TDS monitoring data from

designated outfalls could be conducted to determine if permit limits are appropriate during Phase I.

3. Section 5.2.1, 1, third sentence should read: Permit limits will be established on the basis of regulatory guidelines and in accordance with LDEQ's *Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards*, WQMP Volume 3 and LAC33:IX.1115.C.8 (LDEQ 2008)
4. Section 5.2.1, 1, last sentence should read: Applicable General Permit schedules will be updated to meet the requirements of the TMDL upon the first renewal of each series following the TMDL approval date. Examples of facility outfalls that may be considered are provided below.
5. Section 5.2.1, 1.a, second sentence: Where are the reference values?
6. Section 5.2.1, 2, second sentence should read: Permit limits will be established on the basis of regulatory guidelines and in accordance with LDEQ's *Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards*, WQMP Volume 3 (LDEQ 2008) and LAC33:IX.1115.C.8 (LDEQ 2008).

- A review of LDEQ's TEMPO database indicated the following information in items 1 and 2 below. **These items should be reviewed and considered in the TMDL. After reviewing these items and revising the TMDL as needed, the WLA tables in Appendix D should be adjusted accordingly.**

1. Table D-1. Subsegment 040501 Facility List
   a. AI **18546**, Mo-Dad Utilities, LLC – Pine Hill Subdivision is not included.
   b. AI 43472, Sumner High School is not included.
   c. AI 94326, Cal-Maine Farms Louisiana Complex - Cal-Maine Foods #52 is not included (Outfalls 002, 004, 006-016).
   d. AI 27615, Action Oil Recovery Inc is not active.
2. Table D-2. Subsegment 040504 Facility List

   2.1 The following facility is listed in Table D-2, but may not be located within Subsegment 040504. It should be evaluated and adjusted accordingly.
   a. AI 157747, RSC Hammond – KACO Constructors LLC – Permit terminated on 2/14/2010.

   2.2 The following facilities are not listed Table D-2, but are in Subsegment 040504:
   a. AI 19580, Electroless Nickel Plating of Louisiana Inc; Outfall 002 is not included
   b. AI 42309, Lionsway LLC - Lions Way Apartments (Outfalls 001-002)
   c. AI 43998, Woodland Town Home Subdivision
   d. AI 73850, Ryan's Convenience Store & Deli
   e. AI 86145, Lamonica Apartments
   f. AI 86961, Collura Trailer 1&2 - Apartments
   h. AI 93359, R J Design LLC
   i. AI 141219, Studio Lane Apartments

j. AI160045, Binner Properties LLC - The Way Church
k. AI 160046, Binner Properties LLC - Lifetouch
l. AI 160047, Binner Properties LLC – Regiomantana
m. AI 162283, Tractor Supply Co #1351
n. AI 162476, Pat Tantillo - Olivia's Place (Outfalls 002-003)
o. AI 162908, Abundant Life Church
p. AI 164502, Rocky's Body Shop
q. AI 166812, Ken's Tropical Fish & Pet Supplies
r. AI 167734, PMC Machinery

DRAFT TMDLs for Total Suspended Solids, Sediment, and Turbidity for Selected Subsegments in the Lake Pontchartrain Basin, Louisiana (Subsegments 040301, 040401, and 040903)

By – Tetra Tech, Inc., September 30, 2011

General Comments

- The LDEQ will be responsible for the implementation of this TMDL and future updates to this TMDL. Therefore, LDEQ requests that complete documentation, including all appendices, notes documenting assumptions, and live spreadsheets be provided to the LDEQ upon approval of the TMDL.

- LDEQ objects to establishing a TMDL for a constituent which does not have a numerical water quality criterion such as TSS. LDEQ object to the use of a surrogate parameter to develop a TMDL "endpoint" for parameters for which LDEQ does not have numerical criteria.

Specific Comments:

- Section 1. Introduction, Table 1-1 Section 303(d) listing information for subsegments included in this report, Page 1-2: The 2010 303(d) lists Subsegment 040401 as being impaired for both the FWP and ONR designated uses with Turbidity being the suspected cause of impairment. The suspected sources are Drainage/Filling/Loss of Wetlands and Site Clearance (Land Development or Redevelopment). It also lists Sedimentation/Siltation as a suspected cause of impairment for the ONR designated use in Subsegment 040401. However Table 1-1 shows sediment as the impairment for both the ONR and FWP designated used. Table 1-1 should be corrected to properly indicate the impairments for Subsegment 040401, as listed in the 2010 303(d) list.
- Section 2.4 Hydrologic Setting, second paragraph, page 2-5: Documentation of the Max Forbes personal communication sited in the second paragraph should be provided in the appendices of the report. This documentation should include calculation made by Max Forbes.
- Table 2-5 Active point source discharge permit information for 040301, page 2-11: The table does not include AI# 19894 Cambridge Partnership and AI# 76494

Romero's Food Mart #2. The table should be corrected to show all active facilities in Subsegment 040301, including AI# 19894 and AI# 76494.

- Table 2-6 Active point source discharge permit information for 040401, page 2-11. The table does not include AI# 1276 LA Sugar Refinery and AI# 38152 Martin Subdivision. The table should be corrected to show all active facilities in Subsegment 040401, including the AI# 1276 and AI# 38152.
- Section 4.1.1 Regression Analysis of Turbidity and TSS in Subsegment 040301, page 4-1 and Section 4.1.2 Regression Analysis of Turbidity and TSS in Subsegment 040401, page 4-2 and Section 4.1.3 Regression Analysis of Turbidity and TSS in Subsegment 040903, page 4-3- EPA/FTN used weak correlations between TSS and turbidity to develop linear regression equations. The R^2 values associated with the correlations would be considered unacceptable for any valid scientific analysis. From turbidity's numeric criteria, these equations were used to determine numeric criteria for TSS (resulting in EPA assigning numeric criteria for TSS to Louisiana streams, which conflicts with LDEQ's regulatory intentions). LDEQ takes exception to EPA's continued use of a TMDL "endpoint" in the absence of promulgated water quality criteria. TMDL's seriously impact both point and nonpoint sources and as such should not be capriciously developed for substances for which no numerical water quality criteria exists. While the methodology used for developing the endpoint is the methodology LDEQ uses for establishing water quality criteria, use of this number as the basis for a TMDL without promulgation is unacceptable.
- Appendix C TSS TMDL Calculations for Selected Subsegments in the Lake Pontchartrain Basin, Table C-2 Lead TMDL summary table for subsegment 040301: The title of the table appears to be incorrect. It should be changed to "TSS TMDL summary table for subsegment 040301".
- Appendix C TSS TMDL Calculations for Selected Subsegments in the Lake Pontchartrain Basin, Table C-4 Lead TMDL summary table for subsegment 040401: The title of the table appears to be incorrect. It should be changed to "TSS TMDL summary table for subsegment 040401".
- Appendix C TSS TMDL Calculations for Selected Subsegments in the Lake Pontchartrain Basin, Table C-6 Lead TMDL summary table for subsegment 040903: The title of the table appears to be incorrect. It should be changed to "TSS TMDL summary table for subsegment 040903".
- Appendix C TSS TMDL Calculations for Selected Subsegments in the Lake Pontchartrain Basin, Table C-6 Lead TMDL summary table for subsegment 040903: The title of the table appears to be incorrect. It should be changed to "TSS TMDL summary table for subsegment 040903".

DRAFT TMDLs for Fecal Coliform Bacteria for Selected Subsegments in the Lake Pontchartrain Basin (040102, 040103, 040201, 040302, 040304, 040305, 040503, 040504, 040505, 040603, 040703, 040909, 040910, 041302, 041401)

LDEQ has reviewed the report and has no additional comments at this time.

LAKE PONTCHARTRAIN BASIN FOUNDATION
SAVE OUR COAST SAVE OUR LAKE

January 6, 2012

Diane Smith
Environmental Protection Specialist
Water Quality Protection Division
U.S. Environmental Protection Agency, Region 6
1445 Ross Ave., Dallas, TX 75202-2733

RE: DRAFT TMDLs for Mercury in Selected Subsegments in the Lake Pontchartrain Basin, Louisiana (040303, 040401, 040403, 040501, 040701, 040801, 040905, 040906)

Dear Ms Smith,

The Lake Pontchartrain Basin Foundation (LPBF) has reviewed the above referenced document and would like to submit the following comments into the public record.

The draft mercury TMDL is intended to assess the current load of mercury into the streams in question, establish a maximum allowable load, and calculate the reductions of mercury necessary to achieve the TMDL. From the Executive Summary "TMDLs provide the scientific basis for a state to establish water quality-based controls to reduce pollution from both point and nonpoint sources to restore and maintain the quality of the state's water resources (USEPA 1991)." However, these TMDLs acknowledge that almost all of the mercury is from atmospheric sources, not water sources. Also, they are based on very little direct data from which a sound conclusion could be based.

1) The VAST MAJORITY of the mercury pollution is from atmospheric sources not addressed in this TMDL

The second page of the Executive Summary acknowledges that "(a)tmospheric deposition makes up 99.6 percent of the current load." With this knowledge, the source becomes very clear- there can truly be no progress with mercury reductions without thoroughly addressing the atmospheric sources.

Table ES-2 directly below this statement lists the subsegments, the existing loads, the total allowable loads, the $\sum$ WLAs, and the $\sum$ LAs. The existing loads are presumably based on data described in Tables 3-1, 3-2, and 3-3. Table 3-1 shows six or less samples per site for half of the streams and Tables 3-2 and 3-3 show less than six samples per stream for all streams. ***These do not constitute statistically viable data sets from which valid conclusions can be drawn.*** The only statistically viable data sets are Hg in the water column for 040403- Blind River, 040501- Tickfaw River, 040701- Tangipahoa River, and 040801- Tchefuncte River (each with over 100 data points).

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From Table ES-2, the existing loads are given in lbs/yr. Given that the atmospheric deposition is assumed to be 99.6% with the remaining 0.4% as water sources (the focus of this TMDL), the water load is calculated as follows (fourth and fifth columns):

Waterbody/Segment	Existing Load (lbs/yr)	# Data Points	Atmospheric Existing Load (lbs/yr, 99.6%)	Water Existing Load(lbs/yr, 0.4%)	TMDL (lbs/day)	% Reduction
Amite/ 040303	6.65	5	6.6234	0.0266	0.016	15%
Blind/ 040401	3.76	0	3.7450	0.0150	0.0059	42%
Blind/ 040403	19.97	107	19.890	0.080	0.038	30%
Tickfaw/ 040501	13.90	116	13.844	0.0556	0.019	49%
Tangipahoa/ 040701	9.60	102	9.5616	0.0384	0.018	31%
Tchefuncte/ 040801	6.01	105	5.9860	0.0240	0.0099	40%
Liberty/ 040905	0.49	6	0.488	0.0020	0.00083	38%
Liberty/ 040906	0.59	0	0.5876	0.0024	0.00099	38%

The TMDL percent reductions ranged from 15 – 49% for the waterways. From the above table it is clear that the supposed load from water contributions is extremely small for each stream. As the water sources do not even equal 15 – 49% of the existing load, it is clear that no matter what is done to the water sources, the atmospheric sources need to be addressed to reach the target reductions.

2) Wastewater Treatment Plants are not adequately sampled for potential contribution

The TMDL notes larger wastewater plants as a potential source of mercury. The TMDL cites a 2005 EPA study: "EPA believes it is appropriate to assume that discharges from municipal wastewater treatment plants (Standard Industrial Classification code 4952) discharging greater than 100,000 gallons per day in the subsegments contain mercury concentrations of 12 ng/L (USEPA, 2005)."

- According to the numeric criteria given in the executive summary, 12 ng/L is the target for mercury input. This would basically mean that the wastewater treatment plants already meet the target. Why then are the plants assigned a load in Table 4-2?
- Also, the 12 ng/L contribution of wastewater treatment plants is not based on any data collected from these plants. How can a load reduction be calculated when the true load is not known?
- Next, many of the wastewater plants listed are pond systems, an accurate determination of the actual mercury in the wastewater (and not atmospheric deposition on the pond) would have to be determined.
- Finally, an important factor is not taken into account for these waterways. While there are a handful of larger wastewater plants along these rivers, the majority of wastewater treatment is accomplished by small, individual home and commercial plants. There is a question if limits on the few large plants would actually translate into true reduction in the waterway.

3) TMDL does not adequately address mercury methylation in wetland environments

The TMDL acknowledges that much of the land use in all waterways surveyed consists of wetlands. The TMDL states: "The Lake Pontchartrain Basin consists of vast areas of swamps and marshes, especially in the lower reaches, which contribute a large natural organic load to the waterbodies. The organic load, in turn, creates conditions conducive to the production of methyl mercury. What contribution natural sources make to the mercury impairment in this basin is not clear. Those natural conditions might not be affected by implementing the TMDLs, and more data are needed to assess the natural contributions."

- It is a widely known geochemical concept of mercury methylation in wetland environments. As wetlands compose much of the land area in the affected watersheds, there needs to be some kind of quantification of this process in these watersheds.
- The above statement in the TMDL basically states that the proposed TMDL would potentially make no difference in the environment. Much more needs to be known about the actual inputs and the geochemical processes to get a true view of mercury movement in the south Louisiana environment.

4) Many of the fish species utilized in the mercury sampling are migratory- source of mercury can not be pin-pointed

The TMDL used fish tissue samples collected from the following species: Largemouth Bass, Rock Bass, Spotted Bass, White Bass, Bowfin, Black Crappie, White Crappie, Freshwater Drum, Flathead Catfish, Blue Catfish, Channel Catfish, Warmouth, Redear Sunfish, Smallmouth Buffalo, Bigmouth Buffalo, Bluegill, and Sheepshead. Many of these fish are known to utilize wetland, marsh, and saltier environments at different stages in their lifecycles. These species have access to and utilize the Pontchartrain Estuary to migrate to saltier waters during their lives. For many of these species, it cannot be assumed that the mercury in their tissues was obtained from the rivers in which they were found.

The draft TMDLs for mercury in the Pontchartrain Basin are little more than an academic exercise with not much basis in reality. In much of the study, the data is not of sufficient quantity to draw statistically sound conclusions. The TMDLs fail in several aspects:

- The load is acknowledged to be 99.6% atmospheric, yet these load reductions are not discussed.
- The water column and sediment mercury loads given for the streams are based on little to no data in at least half of the streams (for water column data) and all of the streams (for sediment data).
- The reductions given range from 15-49% in each stream. As potential water sources are extremely small, the reduction is not achievable if the atmospheric load is not addressed.
- Large wastewater treatment plants are given as a source but there are no calculations of their actual loads into the waterways.
- Mercury methylation in wetland environments is acknowledged yet no calculations of the actual impacts to the systems are made.
- Many of the fish utilized in the study are migratory and can not be conclusively proven to have accumulated the mercury in the rivers in which they were found.

The Lake Pontchartrain Basin Foundation is strongly in favor of the TMDL program as a means to clean our waterways. However, the TMDLs must be based on good science and a statistically viable data set actually collected from the streams and sources in question. The TMDL must also be written to directly address the sources of the impairment. As the watershed environmental group of the Pontchartrain Basin, we would support a mercury TMDL that adequately does all of the above. We ask that EPA and Tetra Tech perform more data collection for this TMDL and produce a TMDL to directly address the sources.

The LPBF thanks EPA for the opportunity to comment on this draft TMDL and look forward to our continued cooperation in cleaning the Pontchartrain Basin's waterways.

Sincerely,

Andrea Bourgeois-Calvin

Andrea Bourgeois-Calvin, PhD
Water Quality Program Director