Comment Summary Response & Concise Statement
2016 Triennial Review
LAC 33:IX. 1101, 1105, 1107, 1109, 1113, 1115, 1119, 1121, and 1123
Log Number WQ097

Concise statement arguments:

FOR: [The reason supporting WHY the suggestion in the comment should be adopted by DEQ. Usually this is the commenter's perspective.]

AGAINST: [The reason WHY the department feels the suggestion should NOT be adopted.]

COMMENT 1: Tulane Environmental Law Clinic requests a response from the department as to why dissolved oxygen criteria for 31 subsegments identified in an order rendered against the US Environmental Protection Agency (EPA), et al. in Federal District Court on February 25, 2019 were not included in WQ097. LDEQ should list the applicable water quality standard for these 31 waters as 5.0 mg/L for freshwaters and 4.0 mg/L for estuarine waters, both because that is the legally applicable standard and because it is required to protect the designated uses. A dissolved oxygen criteria of 2.3 mg/L from March through November in the eLMRAP ecoregion would adversely affect both the Alabama heelsplitter and the Gulf sturgeon, and would result in the destruction and/or adverse modification of critical habitat for the Gulf Sturgeon.

FOR: The 2016 Triennial Review (WQ097) should include dissolved oxygen (DO) criteria of 5.0 mg/L for freshwater and 4.0 mg/L for estuarine waters in 31 subsegments located in the eastern Lower Mississippi River Alluvial Plain (eLMRAP) ecoregion, which were identified in an order rendered against the EPA, et al. in Federal District Court on February 25, 2019.

AGAINST: DO criteria for 31 eLMRAP subsegments identified in an order rendered against the EPA, et al. in Federal District Court on February 25, 2019 will not be considered in WQ097.

RESPONSE 1: The department acknowledges the order rendered against the USEPA, et al. in Federal District Court on February 25, 2019 concerning DO criteria in 31 subsegments (hereafter, eLMRAP DO criteria). The department is awaiting action from USEPA regarding the approval or disapproval of eLMRAP DO criteria. Until EPA acts, the dissolved oxygen criteria in these 31 subsegments is 5.0 mg/L

for freshwaters and 4.0 mg/L for estuarine waters. If/when it is necessary to revise eLMRAP DO criteria, the department will pursue rulemaking separately from WQ097.

COMMENT 2: Five of the 31 subsegments (040305, 040401, 040506, 040604, and 040605) appear with changes in WQ097 because of apparent subsegment changes.

FOR/AGAINST: The department agrees with the comment; no arguments are necessary.

RESPONSE 2: Subsegments 040305, 040401, 040506, 040604, and 040605 appear in WQ097 because of revised subsegment descriptions.

COMMENT 3: LDEQ's proposed adoption of ammonia criteria is consistent with those revised recommendations for freshwater ammonia criteria published by EPA in 2013.

FOR/AGAINST: The department agrees with the comment; no arguments are necessary.

RESPONSE 3: The department appreciates the support.

COMMENT 4: LDEQ's proposed addition of the option for freshwater site-specific copper criteria to be developed using the Biotic Ligand Model (BLM) is also consistent with EPA recommendations.

FOR/AGAINST: The department agrees with the comment; no arguments are necessary.

RESPONSE 4: The department appreciates the support.

COMMENT 5: EPA likewise commends LDEQ for proposed revisions to its antidegradation policy consistent with the 2015 revisions to antidegradation policy and implementation requirements found in federal regulation at 40 CFR part 131.12.

FOR/AGAINST: The department agrees with the comment; no arguments are

necessary.

RESPONSE 5: The department appreciates the support.

COMMENT 6: LDEQ has indicated that it is evaluating appropriate bioaccumulation factor (BAF) values based on lipid fractions per trophic level for appropriate resident Louisiana aquatic species that it will use to update the state's human health criteria (HHC) in the near future. States have flexibility to adjust national BAFs to reflect local conditions. While this process could be carried out for all parameters in Table 1 of the water quality standards in a single rulemaking, it could also be done in phases as BAFs are generated for different chemical categories or groups of individual chemicals of primary concern. EPA supports these efforts and remains available to help Louisiana derive state-specific BAFs in a timely manner.

FOR/AGAINST: The department agrees with the comment; no arguments are necessary.

RESPONSE 6: The department appreciates the support.

COMMENT 7: EPA continues to recommend the inclusion of a Relative Source Contribution (RSC) factor in HHC calculations to account for non-water exposure sources [both ingestion exposures (e.g., food) and exposures other than the oral route (e.g., inhalation)] so that the entire reference dose (RfD) is not apportioned to drinking water and fish consumption alone. As noted in Section 4.2.1 of EPA's 2000 Human Health Methodology, EPA "emphasizes that the purpose of the RSC is to ensure that the level of a chemical allowed by a criterion or multiple criteria, when combined with other identified sources of exposure common to the population of concern, will not result in exposures that exceed the RfD…" In essence, criteria that reflect 100% of the RfD leave no buffer room for additional exposures from other 'non' ambient water/fish consumption sources that, in aggregate, may result in overexposure of a population to a contaminant. As previously noted by LDEQ, there are additional regulatory authorities external to the Clean Water Act that exist to control other exposure sources, but there may not be complete assurance that controls implemented under these authorities will result in no additional exposure to a particular contaminant.

FOR: The department should adopt an RSC factor in HHC calculations to

account for non-water exposure sources and exposures other than the oral route.

AGAINST: The department will refrain using RSC in HHC calculations.

RESPONSE 7: The department asserts the inclusion of RSC, which is an estimated data input for "nonwater" sources of exposure in the derivation of HHC, digresses from the focus of the media it is designed to protect (i.e., water) and from the principal goal of the CWA (i.e., to restore and maintain the chemical physical and biological integrity of the Nation's waters, where attainable). The department maintains there are more practical and appropriate regulatory mechanisms (e.g., Clean Air Act, CERCLA, and FIFRA) to protect human health that directly control the transmission of toxic substances through "nonwater" sources of exposure. RSC estimates the relative contribution of "non-oral" exposure routes (i.e., dermal and respiratory exposure) as being a percentage of the calculated RfD from oral toxicity studies. As a default value, the EPA recommends using 20% for RSC, meaning 20% of the calculated RfD from oral toxicity studies can only be attributed to the oral exposure route and 80% to "non-oral" exposure routes. Thus, applying a 20% RSC to a criterion makes them 80% more stringent in order to account for "non-oral" exposure routes. The oral ingestion exposure route affects different organ systems than the dermal and respiratory exposure routes, and threshold effects used to calculate an RfD can vary per exposure route. The department asserts the EPA guidance did not adequately justify how the measured RfD from oral toxicity studies correlate with measured RfD values from dermal and respiratory toxicity studies to justify the use of RSC estimates. The department maintains the full apportionment of the RfD measured from oral toxicity studies to drinking water and fish consumption alone is appropriate, and the inclusion of "non-oral/non-water" exposures through the RSC through an estimated data input generates overly conservative criteria.

COMMENT 8: EPA published revised aquatic life criteria recommendations for cadmium in 2016 to incorporate the latest scientific information. The updated freshwater criteria are hardness-based equations:

- acute criterion = $e^{(0.9789(\ln(\text{hardness})) - 3.866}$
- chronic criterion = $e^{(0.79779(\ln(\text{hardness})) - 3.909}$

The conversion factors for the freshwater cadmium criteria in Louisiana's current WQS are still applicable and should be retained.

The conversion factor of 0.994 for the saltwater acute and chronic criteria is still current and is incorporated in EPA's recommended saltwater cadmium criteria. EPA recommends that LDEQ update the state's freshwater and saltwater cadmium criteria to reflect the updated scientific information.

FOR: The department should adopt EPA's revised 2016 cadmium aquatic life criteria (ALC).

AGAINST: The department's existing cadmium ALC are still valid.

RESPONSE 8: As part of the 2016 Triennial Review, the department considered EPA's 2016 cadmium ALC criteria document. Current cadmium ALC are based on a species recalculation that eliminated sensitive nonresident species. The department found that EPA's updated recommended criteria calculations used species that are nonresident in Louisiana. The agency is evaluating revisions to cadmium ALC using appropriate species for recalculation based on EPA's 2016 criteria document. The department concurs with EPA that the existing cadmium ALC are still applicable and should be retained.

COMMENT 9: EPA published an updated freshwater aquatic life criterion for selenium in 2016, which consists of several components to protect aquatic life from chronic effects. The chronic criterion includes values expressed both in terms of fish tissue concentration (egg/ovary, whole body, muscle) and water concentration (lentic, lotic). EPA recommends that LDEQ consider the adoption of the comprehensive 2016 selenium criterion.

FOR: The department should adopt EPA's 2016 selenium aquatic life criteria.

AGAINST: The department has insufficient data to adopt selenium ALC.

RESPONSE 9: As part of the 2016 Triennial Review, the department considered EPA's 2016 selenium freshwater ALC document. In late 2019, the department was granted funding by EPA to monitor selenium at select ambient monitoring sites, and this data collection effort will help to inform the agency on selenium concentrations in selected waterbodies. The department will reevaluate adoption of selenium freshwater ALC after this data collection and review effort is complete.

COMMENT10: EPA published revised recommendations for aluminum aquatic life criteria in the Federal Register on December 21, 2018. The updated freshwater criteria reflect the latest science and allow users to develop criteria using local water chemistry parameters (pH, dissolved organic carbon, and hardness). Lookup tables are provided in an appendix to the criteria document to find the criteria concentrations which correspond to local water chemistry parameters.

FOR: The department should adopt EPA's 2018 aluminum ALC.

AGAINST: The department has insufficient data to adopt aluminum ALC.

RESPONSE 10: EPA's 2018 aluminum ALC was published after the initiation of the 2016 Triennial Review period and was not considered in this review. In late 2019, the department was granted funding by EPA to monitor aluminum at select ambient monitoring sites, and this data collection effort will help to inform the agency on aluminum concentrations in selected waterbodies. The department will evaluate adoption of aluminum freshwater ALC after this data collection and review effort is complete.

COMMENT 11: EPA published national recommendations for Human Health Recreational Ambient Water Quality Criteria or Swimming Advisories (AWQC/SA) for Microcystins and Cylindrospermopsin in May 2019. Microcystins and cylindrospermopsin are two types of toxins produced by cyanobacteria. The recommended ambient water quality criteria for microcystins and cylindrospermopsin consist of three components—magnitude, duration and frequency--that are considered protective of human health in recreational waters. In developing these recommendations, EPA incorporated the existing peer-reviewed and published science on the adverse human health effects of these toxins, recreation-specific exposure parameters from the peer-reviewed scientific literature and EPA's Exposure Factors Handbook using established criteria methodologies. EPA derived these recommended values based on children's recreational exposures because children can be more highly exposed compared to other age groups. The recommendations are also protective of older age groups.

FOR: The department should adopt EPA's 2019 recommendations for recreational human health criteria (HHC) for microcystins and

cylindrospermopsin.

AGAINST: The department has no data to adopt recreational HHC for microcystins and cylindrospermopsin in WQ097.

RESPONSE 11: EPA's 2019 recommendations for recreational HHC for microcystins and cylindrospermopsin were published after the initiation of the 2016 Triennial Review period and were not considered in this review. The department is evaluating this criteria recommendation.

COMMENT 12: EPA recommends the adoption of the CWA section 304(a) human health criterion of 0.3 mg/kg for methylmercury (measured in fish tissue). This value has undergone extensive peer review by the U.S. National Academy of Sciences, National Research Council. In 2010, EPA also published companion implementation guidance to address issues associated with the water quality criterion and to facilitate implementation of the criterion in the total maximum daily load and permitting programs.

FOR: The department should adopt methylmercury HHC.

AGAINST: Methylmercury is a component of total mercury, for which the department's has existing HHC.

RESPONSE 12: Since the department has existing HHC for total mercury (of which methylmercury is a component), the department did not specifically review methylmercury as part of the 2016 Triennial Review. The department will evaluate methylmercury for HHC in a future review.

COMMENT 13: Under the state's proposed antidegradation policy, the state will identify those waters where the water quality exceeds levels necessary to support the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water and for which such water quality will be "maintained and protected." EPA encourages LDEQ to identify the approach it will take when identifying these waters - parameter-by-parameter, waterbody-by-waterbody, or a hybrid of these two approaches. LDEQ has indicated that this decision requires further internal agency discussion. EPA remains available to assist efforts to address this question in future rulemakings or updates to the state's antidegradation implementation plan.

FOR/AGAINST: The department agrees with this comment; no arguments are necessary.

RESPONSE 13: The department appreciates the support.

COMMENT 14: LDEQ has long used the indicator fecal coliform and associated numeric criteria to protect primary contact recreation in freshwaters of the state. The EPA has discouraged the use of total and fecal coliforms as indicators of fecal contamination since 1986 because they are not reliable indicators of illness to swimmers. As far back as 1986, the EPA clearly stated the Agency's expectations for states to transition to indicators that are superior to fecal coliforms. In 1986 and again in 2012, the EPA, pursuant to Section 304(a) of the CWA, 33 U.S.C. § 1314(a), issued nationally recommended recreational water quality criteria (RWQC) to protect the public from exposure to harmful levels of pathogens while participating in primary contact recreation activities such as swimming. These recommended RWQC are based on two bacterial indicators of fecal contamination - E. coli or enterococci in fresh waters, and enterococci in marine waters. LDEQ updated its RWQC for coastal recreation waters in 2016 to reflect EPA's 2012 recommended RWQC, but has yet to update its RWQC for freshwaters. EPA notes that most states across the country have successfully made the transition to the recommended RWQC indicators and are now implementing these criteria in monitoring, assessment and permitting programs. EPA strongly recommends that LDEQ re-examine EPA's recommended freshwater RWQC for adoption. LDEQ may wish to consider phasing implementation across the state, beginning with the monitoring and assessment of E. coli and/or enterococcus in tandem with fecal coliform strictly in those waters where it is known that swimming activities occur frequently and by larger numbers of people, followed by a broadening of their application to other freshwaters of the state as comfort with the use of E. coli and enterococci in monitoring, assessment and permitting programs increases with time.

FOR: The department should expand freshwater bacteria RWQC.

AGAINST: The department's existing freshwater bacteria RWQC is currently focused in priority areas of recreation.

RESPONSE 14: The department is open to discussion regarding freshwater bacteria RWQC.

COMMENT 15: We (the Little Tchefuncte River Association) object to the lowering of the DO criteria to 2.3 mg/L for March through November for many of the water bodies in the Eastern Lower Mississippi (River Alluvial Plain) Ecoregion from the acceptable 5.0 mg/L.

FOR: The department should consider eLMRAP DO criteria in WQ097.

AGAINST: The department will not consider eLMRAP DO criteria in WQ097.

RESPONSE 15: Please see response to Comment 1.

COMMENT 16: Of particular concern is subsegment 070807 (sic, 040807). This subsegment represents the lower reach of what is locally known as the Little Tchefuncte River, and was inappropriately separated from subsegment 040801 by the Eastern Lower Mississippi River Alluvial Plain Ecoregion Use Attainability Study. LDEQ data shows that this subsegment, with the exception of the lowest portion near the Bogue Falaya River which consistently stays above 2.3 mg/L DO, achieves the 5.0 mg/L DO throughout the year. Additionally, LDEQ Sample site 0107 west of Covington at the top of subsegment 040807 shows the DO never falls below 5.0 mg/L, actually exceeding this value throughout the year. For the above reasons, we request that the DO. Standard be relisted as 5.0 throughout the year.

FOR: The department should consider eLMRAP DO criteria.

AGAINST: The department will not consider eLMRAP DO in WQ097.

RESPONSE 16: Please see response to Comment 1.

COMMENT 17: In the (LAC 33:IX) §1105 Definitions, a new definition of 'highest attainable use' has been proposed. The definition as proposed is confusing. The first sentence refers to a 'modified aquatic life, wildlife or recreation use.' This does not make clear that the highest attainable use of most waters need not be modified. This definition seems to imply that the highest attainable use cannot be a regular existing or designated use. If it is the 'highest attainable,' it may not need to be a modified use.

FOR/AGAINST: No arguments necessary; comment does not suggest amendment or change.

RESPONSE 17: Highest attainable use refers to the highest level of a designated use for which water quality criteria can be attained. In regards to aquatic life and wildlife designated uses, Fish and Wildlife Propagation (FWP) is a higher level than Limited Aquatic Life (LAL); LAL is a modified version of FWP. In regards to recreational designated uses, secondary contact recreation (SCR) is a modified version of the higher level primary contact recreation (PCR). The highest attainable uses for most waterbodies in Louisiana are PCR and FWP, which are both not modified designated uses.

An example of a waterbody where modified designated uses are the highest attainable uses is Monte Sano Bayou (Subsegment 070504). Due to extensive channelization, it was a designated a man-made waterbody in 1994. Subsegment 070504 has the modified designated uses of SCR and LAL because the designated uses of PCR and FWP are unattainable.

COMMENT 18: More clarity should be given to the proposed (LAC 33:IX) §1109.A.2.a. This section states that waters may be identified "on a parameter-by-parameter basis or on a water body-by-water body basis. Where the state identifies waters for antidegradation protection on a water body-by-water body basis, the state shall provide an opportunity for public involvement." However, there is no statement regarding public involvement if a parameter-by-parameter approach is used. We request that this section be revised to include public involvement on all antidegradation analyses and decisions.

FOR: The department should amend LAC 33:IX.1109.A.2.a to include public involvement on all antidegradation analyses and decisions identified on a parameter-by-parameter basis.

AGAINST: Any lowering of high quality waters, regardless of antidegradation approach, are now and will continue to be subject to public participation requirements.

RESPONSE 18: Any lowering of high quality waters is subject to antidegradation and public participation requirements at LAC 33:IX.1109.A.2.a. The department closely followed federal regulation when developing this citation. However, the department concurs the proposed verbiage in WQ097 can improve upon the description of public involvement to include the parameter-by-parameter basis as well as the water

body-by-water body basis. To improve clarity that public involvement is part of the antidegradation policy, the department will rephrase LAC 33:IX.1109.A.2.a as:

a. Waters may be identified for the protections described in Paragraph 2 of this Subsection on a parameter-by-parameter basis or on a water body-by-water body basis. Where the state identifies waters for antidegradation protection ~~on a water body-by-water body basis~~, the state shall provide an opportunity for public involvement in any decisions about whether the protections described in Paragraph 2 of this Subsection will be given to a water body, and the factors considered when making those decisions. A water body shall not be excluded from the protections described in Paragraph 2 of this Subsection solely because water quality does not exceed levels necessary to support all of the uses specified in section 101(a)(2) of the Clean Water Act.

COMMENT 19: (LAC 33:IX) §1109.D describes how variances may be used in the water quality standards context. However, we did not see a public comment opportunity in these proposed regulations. If variances are issued, they could impact public health, drinking water, and wildlife. With this possibility and in the name of transparency, we request that any enacted under the rules in this section be required to have a public comment period and opportunity for a public hearing.

FOR: The department should amend LAC 33:IX.1109.D to include public comment periods and an opportunity for a public hearing for variances.

AGAINST: Water quality variances are now and will continue to be subject to public participation requirements.

RESPONSE 19: Water quality variances are subject to public participation requirements (currently at LAC 33:IX.1109.D.2). Due to renumbering of regulations in WQ097, this citation can be found at LAC 33:IX.1109.E.1.

COMMENT 20: EPA has put forward criteria for multiple pollutants. The following are pollutants that EPA recommends that LDEQ has not adopted: Acrolein, Silver, Suspended Solids, Turbidity, Sulfide-Hydrogen Sulfide, and Tributyltin (TBT). We request these criteria to be added to Louisiana's water quality standards. If they are not added, an adequate justification should be given.

FOR: The department should adopt water quality criteria for acrolein, silver, suspended solids, turbidity, sulfide-hydrogen sulfide, and TBT.

AGAINST: The department has water quality criteria for turbidity; criteria for acrolein, silver, suspended solids, sulfide-hydrogen sulfide, and TBT were not warranted in WQ097.

RESPONSE 20: As part of the 2016 Triennial Review, the department reviewed available water quality data for EPA's 304(a) new and updated criteria recommendations published since May 30, 2000. Following EPA guidance, "Supplemental Information: New or Updated CWA Section 304(a) Criteria Recommendations Published since May 30, 2000" (EPA-B20-B-15-002), criteria recommendations prior to this date were not reviewed and deemed low priority. Acrolein and TBT have new criteria recommendations, but no data to warrant action in WQ097; acrolein and TBT will be reevaluated with the next triennial review. EPA criteria recommendation published before May 30, 2000 include: silver (1980), suspended solids (1986), and sulfide-hydrogen sulfide (1986). The department has water quality criteria for turbidity (see LAC 33:IX.1113.B.9).

COMMENT 21: Further, EPA submitted a memo on April 14, 2016 which outlined criteria that needed to be addressed or updated. We request that LDEQ adopt these criteria.

FOR: The department should adopt criteria for toxic substances listed in EPA's April 14, 2016 memo.

AGAINST: The department has valid criteria for toxic substances listed in EPA's April 14, 2016 memo.

RESPONSE 21: Criteria values listed in EPA's April 14, 2016 memo were generated using default data inputs for average Americans that differ from average Louisianans. Examples of these variable data inputs include fish consumption rate and average adult body weight. Additionally, the department is reviewing EPA's BAF methodology for calculating HHC (see response to Comment 6). The department develops criteria to reflect local conditions.

COMMENT 22: LDEQ should adopt numeric criteria for Cyanotoxins. While EPA

released final numbers for these criteria, we submit that LDEQ should adopt the EPA's draft recommendation, as opposed to its final recommended Human Health Recreational Ambient Water Quality Criteria or Swimming Advisories for Microcystins and Cylindrospermopsin.

FOR: The department should adopt draft numeric criteria for cyanotoxins, as opposed to the final values listed in EPA's 2019 recommendations for recreational HHC for microcystins and cylindrospermopsin.

AGAINST: The department has insufficient data to adopt numeric criteria for cyanotoxins in WQ097, regardless of EPA final criteria recommendation status.

RESPONSE 22: Please see response to Comment 11.

COMMENT 23: Waters in the Lake Pontchartrain Basin dissolved oxygen criteria should be returned to 5.0 mg/L.

FOR: The department should revise DO criteria in the Lake Pontchartrain Basin.

AGAINST: Changes to Lake Pontchartrain Basin DO criteria will not be considered in WQ097.

RESPONSE 23: Please see response to Comment 1.

COMMENT 24: LCA submits that to be consistent with the definition in the corresponding federal regulation, 40 CFR 131.3, the definition of "pollutant minimization program" in proposed LAC 33:IX.1105 should be revised to read as follows:

Pollutant Minimization Program—a structured set of activities to improve processes and pollutant controls that will prevent and reduce pollutant loadings in the context of LAC 33:IX.1109.E

FOR/AGAINST: The department agrees with the comment; no arguments are necessary.

RESPONSE 24: The department concurs the word "will" is provided in the definition of "pollutant minimization plan" in 40 CFR 131.3 and was absent in

WQ097. The word "will" will be included in this definition at LAC 33:IX.1109.E to be consistent with 40 CFR 131.3. The department will rephrase 33:IX.1109.E as:

Pollutant Minimization Program—a structured set of activities to improve processes and pollutant controls that will prevent and reduce pollutant loadings in the context of LAC 33:IX.1109.E.

COMMENT 25: LCA submits that to be more consistent with the corresponding federal regulation, 40 CFR 131.10(j) and not require use attainability analyses (UAA) where more stringent criteria are being applied, the first paragraph of proposed LAC 33:IX.1109.C should be revised to read as follows:

C. Water Body Exception Classification. Some water bodies may qualify for a water body exception classification. This classification will be made on a case-by-case basis. Whenever data indicate that a water body exception classification is warranted, the department will recommend the exception to the administrative authority for approval. In all cases where exceptions are proposed, the concurrence of EPA must be obtained and the opportunity for public participation must be provided during the exceptions review process. The general criteria of these standards shall apply to all water bodies classified as a water body exception except where a particular water body is specifically exempted. A use attainability analysis shall be conducted to justify a water body exception classification if an accompanying downgrade of a 101(a)(2) use or ~~revision of~~application of less stringent criteria is being proposed. Exceptions are allowed for the following three classifications of water bodies.

FOR: The department should amend LAC 33:IX.1109.C to harmonize with the corresponding federal regulation at 40 CFR 131.10(j).

AGAINST: The harmonization of LAC 33:IX.1109.C with 40 CFR 131.10(j) is unwarranted.

RESPONSE 25: The department concurs that 40 CFR 131.10(j) describes situations when a UAA is required. To better harmonize LAC 33:IX.1109.C with this federal citation, the department will rephrase LAC 33:IX.1109.C as:

C. Water Body Exception Classification. Some water bodies may qualify for a water body exception classification. This classification

will be made on a case-by-case basis. Whenever data indicate that a water body exception classification is warranted, the department will recommend the exception to the administrative authority for approval. In all cases where exceptions are proposed, the concurrence of EPA must be obtained and the opportunity for public participation must be provided during the exceptions review process. The general criteria of these standards shall apply to all water bodies classified as a water body exception except where a particular water body is specifically exempted. A use attainability analysis shall be conducted to justify a water body exception classification if an accompanying downgrade of a 101(a)(2) use ~~or revision of~~and application of less stringent criteria is being proposed. Exceptions are allowed for the following three classifications of water bodies.

COMMENT 26: LCA submits that in the first sentence of proposed LAC 33:IX.1109.C.3.a, the Department provides a more restrictive definition of "naturally dystrophic waters" than the definition provided in LAC 33:IX.1105; i.e., "waters which are stained with organic material and which are low in dissolved oxygen because of natural conditions." The Department should modify the first sentence of LAC 33:IX.1109.C.3.a or the definition of "naturally dystrophic waters" in LAC 33:IX.1105 so that they are mutually consistent.

FOR: The department should maintain consistency for the definition of "naturally dystrophic waters" at LAC 33:IX.1109.C.3.a and LAC 33:IX.1105.

AGAINST: LAC 33:IX.1109.C.3.a was meant to further describe "naturally dystrophic water" and not redefine it as provided in LAC 33:IX.1105.

RESPONSE 26: The department concurs the inclusion of the phrase "are defined as" in the first sentence of LAC 33:IX.1109.C.3.a could imply "naturally dystrophic waters" possess an inconsistent definition from the one provided in the current revision of LAC 33:IX.1105. The department maintains the description of "naturally dystrophic waters" at LAC 33:IX.1109.C.3.a and its definition provided at LAC 33:IX.1105 are substantively consistent. The department will clarify that "naturally dystrophic waters" was not meant to be redefined in LAC 33:IX.1109.C.3.a. To improve clarity, the department will rephrase LAC 33:IX.1109.C.3.a as:

a. Naturally dystrophic waters ~~are defined as~~include waters that receive large amounts of natural organic material largely of

terrestrial plant origin, are commonly stained by the decomposition of such organic material, and are low in dissolved oxygen because of natural conditions. Only those water bodies primarily affected by nonanthropogenic sources of oxygen-demanding substances or naturally occurring cycles of oxygen depletion will be considered for classification as naturally dystrophic waters. These water bodies typically include or are surrounded by wetlands (e.g., bottomland hardwood forests, freshwater swamps and marshes, or intermediate, brackish, or saline marshes) and have sluggish, low-gradient flows most of the year. Naturally dystrophic water bodies, though seasonally deficient in dissolved oxygen, may fully support fish and wildlife propagation and other water uses. Low dissolved oxygen concentrations (less than 5 mg/l) may occur seasonally during the warmer months of the year in naturally dystrophic water bodies.

COMMENT 27: LCA submits that a use attainability analysis should not be required before the Department permits *any new discharge* to a naturally dystrophic water. Given the sheer volume of naturally dystrophic waters within the state and the fact that no(t) all new discharges will cause or exacerbate dissolved oxygen issues, the Department would be overwhelmed with unnecessary use attainability analyses. Moreover, the Department sufficiently addresses new discharges to naturally dystrophic waters in proposed LAC 33:IX.1109.3.c and those provisions in proposed LAC 33:IX.1109.3.d applicable to wetlands. LCA thus submits that the first sentence in the first paragraph of proposed LAC 33:IX.1109.C.3.d should be deleted. Failing that, it should be revised to read as follows:

d. Any use attainability analysis for proposed naturally dystrophic water body classification shall provide information sufficient for the department to determine natural background conditions and identify those proposed new or modified discharges that warrant specific evaluation under Clause C.3.c of this Subsection. ~~Natural background conditions and proposed significant changes will be determined through use attainability analyses prior to the addition of any discharge.~~ A wastewater discharge may be proposed for an approved, designated naturally dystrophic water body only if the discharge will not by itself, or in conjunction with other discharges:

FOR: The department should amend LAC 33:IX.1109.C.3.d to clarify when a UAA is required for any new discharge.

AGAINST: The citation does not concern UAAs for any new discharge.

RESPONSE 27: The department maintains that 40 CFR 131.10(j) describes situations when a UAA is required.

The purpose of LAC 33:IX.1109.C.3.d is to describe the situation when a proposed wastewater discharge affects a naturally dystrophic water body in a wetland, whereas LAC 33:IX.1109.C.3.c does not specify wetlands. The department recognizes the opening sentence of LAC 33:IX.1109.C.3.d is misplaced and the citation can be rephrased for clarity. To improve clarity, the department will rephrase LAC 33:IX.1109.C.3.d as:

d. A wastewater discharge may be proposed for an approved, designated naturally dystrophic water body in a wetland only if the discharge will not by itself, or in conjunction with other discharges, cause inundation of the receiving area such that regeneration of characteristic vegetative species would be significantly reduced, will not significantly modify species composition of the receiving area, and will not increase biological succession of the receiving area above naturally occurring levels. Natural background conditions and proposed significant changes will be determined through use attainability analyses prior to the addition of any discharge. ~~A waste water discharge may be proposed for an approved, designated naturally dystrophic water body in a wetland only if the discharge will not by itself, or in conjunction with other discharges:~~

COMMENT 28: LCA submits that the first paragraph of proposed LAC 33:IX.1109.E.1 should be revised to read as follows:

1. The state may adopt a *WQS variance*, as defined in Section 1105 of this Chapter. The WQS variance is subject to the provisions of this Subsection and public participation requirements at 40 CFR 131.14 and is a water quality standard subject to EPA review and approval~~,~~ or disapproval under section 303(c) of the Clean Water Act.

FOR/AGAINST: The department agrees with the comment; no arguments are necessary

RESPONSE 28: The department concurs this comma is ungrammatical and will be removed from WQ097.

COMMENT 29: LCA submits that to be consistent with the corresponding federal regulation, 40 CFR 131.14(a)(3), proposed LAC 33:IX.1109.E. 1.a.iii should be changed to read as follows:

iii. Once the WQS variance is adopted by the state and approved by EPA, it shall be the applicable standard for purposes of the Clean Water Act under 40 CFR 131.21(d)-(e), for the following limited purposes of developing LPDES permit limits and requirements under federal regulations, where appropriate, consistent with Clause E.1.a~~d~~.i of this Subsection. The department also may use the approved WQS variance when issuing certifications under LAC 33:IX.Chapter 15.

FOR: The department should amend LAC 33:IX.1109.E.1.a.iii to harmonize with 40 CFR 131.14(a)(3).

AGAINST: The harmonization of LAC 33:IX.1109.E.3.1.a.iii with 40 CFR 131 131.14(a)(3) is unwarranted.

RESPONSE 29: The department recognizes two recommended changes to this citation. The first refers to parallel consistency between federal and state regulation related to the applicability of water quality standard variances for LDPES permits. The department concurs the recommended citation "Clause E.1.a.i" is more consistent than "Clause E.1.d.i". This citation will be corrected.

The second refers to the applicability of WQS variances to water quality certifications (WQCs). The department recognizes WQS variances as a regulatory mechanism designed for permit actions, such as LPDES permits. WQCs are not permit actions, and therefore WQS variances are not appropriate. In WQ097, the department omitted this clause because of this distinction.

COMMENT 30: 40 CFR 136.3 does not refer to Total PCBs or use the word "Aroclors," although it does reference the seven Aroclors by "PCB-[number]." LCA submits that Footnote 6 in Table 1 of LAC 33:IX.1113 should be revised to read as follows:

[6] Total refers to the sum of ~~the Aroclors as stated in 40 CFR 136.3.~~ Aroclor-1016 (CAS 12674-11-2), Aroclor-1221 (CAS 11104-28-2), Aroclor-1232 (CAS 11141-16-5), Aroclor-1242 (CAS 53469-21-9), Aroclor-1248 (CAS 12672-29-6), Aroclor-1254 (CAS 11097-69-1), and Aroclor-1260 (CAS 11096-82-5).

FOR: The department should amend footnote 6 in Table 1 of LAC 33:IX.1113 to clarify Total PCBs in reference to 40 CFR 136.3.

AGAINST: Amending footnote 6 in Table 1 of LAC 33:IX.1113 to clarify Total PCBs in reference to 40 CFR 136.3 in unwarranted.

RESPONSE 30: The department acknowledges 40 CFR 136.3 does not specifically use the terms Total PCBs or Aroclors. The department will accept this recommendation with one change to conform to 40 CFR 136.3; the department will substitute the word Aroclor with PCB. The footnote will read:

[6] Total refers to the sum of the Aroclor analyses: PCB-1016 (CAS 12674-11-2), PCB-1221 (CAS 11104-28-2), PCB-1232 (CAS 11141-16-5), PCB-1242 (CAS 53469-21-9), PCB-1248 (CAS 12672-29-6), PCB-1254 (CAS 11097-69-1), and PCB-1260 (CAS 11096-82-5) ~~as stated in 40 CFR 136.3~~.

COMMENT 31: LCA suggests that the Department revise Footnote 7 in Table 1 of LAC 33:IX.1113 to include the CAS registry number for Endosulfan α (which is 959-98-8) and Endosulfan β (which is 33213-65-9).

FOR/AGAINST: The department agrees with the comment; no arguments are necessary.

RESPONSE 31: The department concurs with the recommendation and will add the CAS registry numbers for Endosulfan α and β of footnote 7 in Table 1 of LAC 33:IX.1113.

COMMENT 32: LCA suggests that the Department add a footnote to "Mercury" in Table 1A of LAC 33:IX.1113 which would read as follows:

[FN] Freshwater and saltwater mercury criteria are expressed in terms of the dissolved metal in the water column. Except as otherwise indicated, the standard was calculated by multiplying the previous water quality criteria by a conversion factor.

FOR: The department should add a footnote to Table 1A of LAC 33:IX.1113 to further describe mercury numeric criteria.

AGAINST: This footnote is appropriate for other dissolved metals numeric criteria listed in Table 1A of LAC 33:IX.1113, but unwarranted for

mercury.

RESPONSE 32: As part of the 2016 Triennial Review, the department reviewed LAC 33:IX.Chapter 11 for improvements. All of the toxic substances listed in Table 1A of LAC 33:IX.1113 currently have the footnote "c" which addresses dissolved metals numeric criteria expressed in terms of the dissolved metal in the water column; this footnote is reassigned "a" in WQ097. However, mercury is not expressed in terms of the dissolved metal in the water column, but in terms of residues in aquatic organisms; see footnote "e". Because mercury had conflicting footnotes, the department rectified this error by removing the erroneous footnote in WQ097.

COMMENT 33: LCA requests to know if and why the Department intended on adding drinking water supply (DWS) to the designated uses of water quality subsegment 060702 -- Lake Fausse Point and Dauterive Lake.

FOR/AGAINST: No arguments necessary; comment does not suggest amendment or change.

RESPONSE 33: As part of the 2016 Triennial Review, the department coordinated with the Aquifer Protection Section and Louisiana Department of Health's Safe Drinking Water Program to determine whether all subsegments used for drinking water have the DWS designated use. It was found that Subsegment 060702 (Lake Fausse Point and Dauterive Lake) is hydrologically connected to Subsegment 060601 (Charenton Canal) which already has the DWS designated use. Additionally, part of Subsegment 060702's subsegment boundary is located within approximately 100-feet of a drinking water intake for St. Mary Parish located in Subsegment 060601. Because it was found these two subsegments are not physically separated and possess the same water, the department determined the DWS designated use is appropriate for Subsegment 060702.

COMMENT 34: LCA requests to know if and why the Department intended to delete water quality subsegment 090207-5112 -- Morgan Bayou -- from headwaters near I-10 to Middle River.

FOR/AGAINST: No arguments necessary; comment does not suggest amendment or change.

RESPONSE 34: As part of the 2016 Triennial Review, subsegment numbers and boundaries were reviewed for accuracy and representation of water quality conditions. Subsegment 090207-5112 was found to be indistinct and redundant to adjoining Subsegment 090207 (Middle Pearl River and West Middle Pearl River). In WQ097, Subsegment 090207-5112 was consolidated into Subsegment 090207.

COMMENT 35: LCA requests to know if and why the Department intended to delete water quality subsegment 100903 -- Bayou Nantaches -- From Nantaches Lake to Red River.

FOR/AGAINST: No arguments necessary; comment does not suggest amendment or change.

RESPONSE 35: As part of the 2016 Triennial Review, subsegment numbers and boundaries were reviewed for accuracy and representation of water quality conditions. Subsegment 100903 was found to be indistinct and redundant to adjoining Subsegment 100902 (Nantaches Lake). In WQ097, Subsegment 100903 was consolidated into Subsegment 100902.

COMMENT 36: LCA requests to know the basis for the Department's addition of water quality subsegment 1015907 (sic, 101507) -- Old Saline Bayou-- From headwaters to control structure of Saline Bayou.

FOR/AGAINST: No arguments necessary; comment does not suggest amendment or change.

RESPONSE 36: As part of the 2016 Triennial Review, subsegment numbers and boundaries were reviewed for accuracy and representation of water quality conditions. It was found the water quality monitoring site for Subsegment 101505 (Larto Lake) was not representative of its entire subsegment, particularly the portion west of lake that is not hydrologically connected to it. In WQ097, Subsegment 100507 was created to characterize water quality in this unrepresented portion of the state.

Comment Summary Response & Concise Statement
2016 Triennial Review
LAC 33:IX. 1101, 1105, 1107, 1109, 1113, 1115, 1119, 1121, and 1123
Log Number WQ097

COMMENT #	SUGGESTED BY
01 – 02	Lisa Jordan, Tulane Environmental Law Clinic
03 – 14	Mike Schaub, US Environmental Protection Agency
15 – 16	Matthew Allen, Little Tchefuncte River Association
17 – 23	Matt Rota, Healthy Gulf
24 – 36	Tokesha Collins-Wright, Louisiana Chemical Association

Comments reflected in this document are repeated verbatim from the written submittal.

Total Commenters: 05
Total Comments: 36