

TULANE ENVIRONMENTAL LAW CLINIC

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Rc: Comments on Proposed Regulation WQ054-Triennial Review of Louisiana Water Quality Standards

Dear Doctor Schuerman,

Please consider the following comments regarding LDEQ's proposed changes to the state's water quality standards under the Triennial Review. The Tulane Environmental Law Clinic submits these comments on behalf of the Gulf Restoration Network (GRN), Louisiana Environmental Action Network (LEAN), and Mr. O'Neil Couvillion. GRN, LEAN, and Mr. Couvillion (collectively "Citizens") reserve the right to rely on all public comments submitted in this matter.

I. LDEQ SHOULD NOT ADOPT SOME OF ITS PROPOSED CHANGES TO THE WATER QUALITY STANDARDS.

A. LDEQ's revisions to its water quality criteria contain many instances where the criteria are less stringent than those promulgated by EPA.

LDEQ has proposed revisions to some of its water quality criteria. In many of these

instances, LDEQ proposes to adopt criteria appear to be less stringent than those promulgated by

Tulane Environmental Law Clinic

the EPA.¹ In all of these instances, LDEQ must offer support for this lessening of protection. In addition, where LDEQ proposes changing a criteria to make it less protective than the current LDEQ criteria, LDEQ must provide additional justification for why it is lowering the number. Lack of a justification renders these provisions arbitrary and capricious.

Attached is a chart which compares all of LDEQ's criteria to EPA's. See Exhibit 1. The chart identifies those instances where LDEQ proposes to change its existing criteria to make it less stringent. The following are instances where LDEQ has proposed changes to its water quality criteria, and the proposed changes are less protective than EPA's: 1) Cadmium- the CMC and CCC criteria for saltwater have been relaxed; 2) Cyanide- the human health criteria have both been relaxed, and the CCC criteria for freshwater has been relaxed. Note also that, although not a change, the CMC for cyanide is less stringent than EPA's; 3) Endrin-the human health criteria have both been relaxed, and the CMC and CCC for freshwater has been made less stringent; 4) Hexachlorocyclo-hexane- the human health criteria have both been relaxed; 5) toluene- the human health criteria have both been relaxed. May both been relaxed; and 6) trichloroethylene- the human health criteria for water and organisms has been relaxed.

Additionally, for ethylbenzene, though LDEQ has not proposed a change, its human health criteria are both less stringent than EPA's. Likewise, LDEQ has now incorporated a dioxin human health standard. However, this standard is not as protective as it should be, as it is not as protective as even the mid-range value from EPA's recommended criteria.

Last, there are dozens of pollutants for which LDEQ has not even adopted criteria.

B. The general policy stated in proposed § 1109.C negates the value of its previous language.

¹ LDEQ has not clearly specified a duration or frequency for most of its water quality criteria, particularly the toxics. Therefore, determining whether LDEQ's criteria are more or less stringent than EPA's requires making the assumption that LDEQ's duration and frequencies are the same as EPA's.

Section 1109.C currently provides: "Poor water quality will be viewed as a problem to be solved, not as an impediment to categorizing water bodies or assigning designated uses." LAC 33:IX.1109.C. This language sets a policy for the state that values clean water and elevates the intent to rectify waters suffering from poor water quality. It implies that the intended purpose of the section is the long term health of the state's water quality. By contrast, the proposed revision eliminates the positive policy statement, stripping the language to its bare essentials: "Some water bodies may qualify for water body exception classification." Proposed Regulation LAC 33:IX.1109.C. The proposed language neglects the importance of not using poor water quality as a means to excuse poor water quality. The original text should remain undisturbed.

C. LDEQ should retain the requirement that water body exception classifications will be made on a case-by-case basis.

In its proposed revisions to Section 1109 of the water quality standards, LDEQ proposes to remove the language that provides that water body exception classifications "will be made on a case by case basis." LAC 33:IX.1109(C). LDEQ should not remove this provision. In any situation where LDEQ seeks to reclassify a water body as one of the water body exception classifications, it is required by law to conduct a UAA. 40 C.F.R. §131.10(j)(1). Therefore, LDEQ could never designate a water body as an excepted use on anything other than a case-by-case basis. The language requiring a case-by-case determination therefore ensures that all water bodies are offered the same protections against lowering of water quality, and must be retained.

Even if LDEQ feels that this is something it does regardless, the regulations must reflect applicable law.

D. Proposed § 1109.C does not require that all water bodies be covered by general water quality criteria.

Proposed Section 1109.C allows water bodies classified as excepted uses to be exempted even from general criteria. "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*."² (Emphasis added.) The italicized language allows for the exemption of water bodies from all water quality criteria (both general and numeric) without any apparent justification.

Exempting water bodies from all general criteria is contrary to the Clean Water Act and federal regulations. Section 303(c)(2)(A) of the CWA states when a state engages in revision of its regulations the state is obligated to present water quality standards which "shall consist of the designated uses of the navigable waters...and the water quality criteria for such waters based upon such uses." This is echoed by the requirement in the federal regulations that water quality criteria must be "sufficient to protect the designated use." 40 CFR § 131.6(c). That those criteria be either numeric or narrative or both goes without saying. 40 CFR § 131.11(a) requires that "states must adopt those water criteria that protect the designated use. Such criteria must be based on sound scientific rationale and must contain sufficient parameters or constituents to protect the designated use." Additionally, 40 CFR § 131.11(b) requires that a state adopt either numeric or narrative water quality criteria for pollution control purposes. Neither the regulations nor the Clean Water Act allow a state to grant water bodies or streams a total exemption from all

² LDEQ regulations also use this phraseology in two unamended section of the regulations. Section 1109.C.1.a states: "The general criteria of these standards shall apply to all water bodies classified as intermittent streams *except where a particular stream is specifically exempted.*" (Emphasis added.) Likewise, section 1109.C.2.a does not require general criteria to be applied to all man-made water bodies: "The general criteria provided in LAC 33:IX.1113.B shall apply to all water bodies classified as man-made water bodies *except where a particular water body is specifically exempted.*" (Emphasis added.). The reasoning for eliminating this improper phrase is discussed above in the proposed regulations is applicable here without further discussion. The italicized phrase should be removed from both sections mentioned in this footnote.

water quality criteria. At the very least, where numeric criteria do not apply, general or narrative criteria are mandated.

The phrase at issue in the Louisiana regulations improperly grants LDEQ the power to disregard federal law and regulations by exempting certain water bodies from all water quality criteria. In order to comply with federal law and regulations, the phrase "except where a particular water body is specifically exempted" must be withdrawn.

E. Proposed § 1109.C improperly makes a use attainability analysis optional.

Proposed § 1109.C provides that "A use attainability analysis [(UAA)] *may be* conducted to gather data to justify a water body exception classification."³ (Emphasis added). This language fails to conform to EPA regulations, 40 CFR § 131.10(j).

EPA regulations indicate: "A State *must* conduct a use attainability analysis...whenever, (1) The state designates or has designated uses that do not include the uses specified in section 101(a)(2) of the [CWA] or (2) The state wishes to remove a designated use that is specified in section 101(a)(2) of the [CWA] or to adopt subcategories of uses specified in section 101(a)(2) of the [CWA] which require less stringent criteria." (Emphasis added). 40 CFR § 131.10(j). The regulations are explained by the EPA guidance: "If the state wishes to remove a designated use specified in section 101(a)(2) of the [CWA], the state must perform a use attainability analysis (see section 131.10(j))." <u>Water Quality Standards Handbook: Second Edition</u> (EPA-823-B-94-005) August 1994, Chapter 2, Page 8. In the case where the state seeks to exempt water bodies from regulation by assigning an excepted use, it has not designated a use consistent

³ LDEQ regulations also use this improper language in unamended §§ 1109.C.1.d and 1109.C.2.c. The reasoning for altering this language is discussed above is applicable here. In §§ 1109.C.1d and 1109.C.2.c, *may be* must be changed to *must*.

with § 101(a)(2) of the CWA, the state *must*, in accordance with the federal regulations, conduct a use attainability analysis.

LDEQ may respond that altering the language from *may* to *must* is unnecessary because the agency in fact completes a use attainability analysis in these situations anyway. That rationale is unconvincing for two reasons. First, the language of the CWA mandates that state agencies conduct this type of review. The language of the administrative regulation should mimic the federal regulation here to ensure that the state agency is following the terms of the federal law. As the state regulations are currently worded, LDEQ has improperly given itself the discretion whether or not to conduct the UAA. If for any reason, LDEQ stopped conducting UAAs in these situations, the state regulations would allow it. This is contrary to federal requirements. As required by EPA regulations, LDEQ must conduct UAAs in these situations.

Second, if the agency always conducts a UAA in these situations, then there should be no problem altering the language to conform to its actions and the mandate of federal regulations.

For Section 1109.C to conform to the CWA and the federal regulations, it must read, "A use attainability analysis *must* be conducted to gather data to justify a water body exception classification."

F. LDEQ should not remove the duration and frequency provisions applicable to the mercury water quality criterion for aquatic life protection.

LDEQ's proposed revisions include deleting footnote 11 to existing Table 1, currently entitled "Numerical Criteria for Specific Toxic Substances."⁴ This footnote provided duration and frequency parameters for the mercury water quality criteria for aquatic life protection

⁴ The proposed revisions divide the existing table 1 toxic substances into two different tables; mercury would be included in Table 1A of the proposed regulations. Regardless, no equivalent of existing footnote 11 is proposed for mercury in proposed Table 1A.

Specifically, it provided a 4-day duration and a no "more than once in a three-year period" frequency.

The lack of a duration and frequency for this water quality criterion is inconsistent with (and less protective than) EPA's aquatic life water quality criteria, which employs duration and frequency numbers. [cite these]. This is particularly problematic where, as here, mercury in fish is primarily a human health concern and the effects of fish consumption on human health may take considerably longer than 4 days of exposure.

Additionally, footnote 11 in the existing regulations was the only place where LDEQ used duration and frequency figures for any of the criteria. LDEQ should clearly provide the duration and frequency applicable to all water quality criteria, particularly toxics.

G. Man-made water body should not be defined in a way that can include manmade lakes and reservoirs.

In Section 1105, LDEQ proposes to add a definition for "man-made water body." LAC 33:IX.1105. This is for use in the portion of the regulations dealing with excepted uses, of which man-made water body is one. Because excepted uses are exempted from otherwise-applicable water quality criteria, it is important that they not be defined in an overly broad manner.

However, LDEQ's definition is not sufficiently tailored to the narrow category of water bodies that could qualify for this excepted use. Specifically, LDEQ's definition could include man-made lakes and reservoirs, which would not be the types of water bodies which would ever qualify as excepted uses, as they are used frequently for primary contact recreation. LDEQ should exclude these types of water bodies from this definition.

EPA Region 6 has itself commented to this effect, suggesting that LDEQ should exclude impounded water bodies from this definition. See Exhibit 2.

H. Impaired water bodies that are merged into other subsegments must maintain their impaired status.

In its proposed changes to Section 1123, Table 3, LDEQ in several instances rearranges water body subsegments, in some instances carving out a water body from one subsegment and including it in another. While we do not necessarily take issue with this, we believe LDEQ must insure that any water body that was listed as impaired under section 303(d)/305(b) maintains its impaired status after being moved to another subsegment.

II. LDEQ SHOULD REWRITE OR AMEND PORTIONS OF THE REGULATIONS IT HAS NOT PROPOSED TO CHANGE.

Those portions of the water quality standards which LDEQ does not propose to revise are still properly part of the triennial review. We maintain and exercise our right to comment on the entirety of the regulations that comprise the requirements for the triennial review.

A. The provisions of the regulations dealing with *excepted uses* contain errors.

1. Section 1109.C.1.a uses an ambiguous term – "desirable species" – that requires clarification.

The current language of LAC 33:IX.1109.C.1.a references "the propagation of *desirable species* of fish and wildlife." (Emphasis added.) The term "desirable species" is ambiguous. While desirable may mean indigenous, it has additional meanings that could, under an inappropriate interpretation, defeat the purposes of this section.

For instance, "desirable species" may be read to mean "game species" or "commercially valuable species." In this context, an invasive species which is ruinous to the natural environment but which retains an economic value is desirable. Thus, this impermissible interpretation could allow a non-native, ecologically disruptive species, such as carp, to be

included in the list of key species to be protected, given that they are desired as food fish by significant numbers of people.

This interpretation would be eliminated by altering the phrase to read consistently with the Clean Water Act: a "balanced indigenous population of shellfish, fish, and wildlife." 33 USC 1311, 1313, 1314, 1316, 1326, & 1330.

2. The language of Section 1109.C.1.b is inconsistent with the proposed regulations and undermined by its own language.

The description of intermittent streams in section 1109.C.1.b is inconsistent with the definition in the proposed regulations at section 1105. The proposed definition, to which we do not object, states that intermittent streams are those "that provide water flow continuously during some seasons of the year but little or no flow during the drier times of the year." Proposed Regulation at section 1105. By contrast, in the unrevised regulations intermittent streams are described as "[o]nly those streams which have seasonal no-flow conditions or *water levels that preclude primary contact recreation* and the propagation of desirable species of fish and wildlife..." (emphasis added) LAC 33:IX.1109.C.1.a. The two provisions are inconsistent because the new definition does not define intermittent streams relative achievement or nonachievement of a designated use, nor shout it. To clarify and remove the inconsistent language, the phrase "water levels that preclude primary contact recreation" should be removed.

Even if LDEQ does not recognize the inconsistency of section 1109.C.1 with the definition in the proposed regulation, the language in section 1109.C.1.b must still be revised. The first sentence of Section 1109.C.1.b essentially establishes a three part test that defines an intermittent stream: "An intermittent stream is defined as a water body in which natural conditions of flow, width, and depth preclude primary contact recreational water uses and the

propagation of a balanced population of aquatic biota." Thus an intermittent stream must be 1) naturally not perennial 2) unable to support primary contact recreation and 3) unable to support a balanced population of aquatic life. LAC 33:IX.1109.C.1.b.

The three-part test is undermined within the same section by the language: "such streams provide only an ephemeral, aquatic habitat which is not conducive to the establishment of a balanced population of aquatic biota or to recreational activities." LAC 33:IX.1109.C.1. Scientifically, a stream that exists in a relatively natural condition is considered biologically balanced. Thus, the phrase above is confusing, unnecessarily repetitive, and can easily be read to short-circuit the appropriate test in the first sentence. The entire phrase beginning with "such streams" and reproduced above should be removed to eliminate any confusing or negative effects on the appropriate test.

3. Section 1109.C.2.a fails to provide for the restoration of the physical integrity of the nation's waters.

Currently, the regulations define a man-made water body as, among other things, a "channelized stream created specifically and used primarily for drainage or conveyance of water." LAC 33:IX.1109.C.2.a. LDEQ therefore gives an exemption to channelized streams from numeric water quality standards (and potentially also from general water quality standards; *see*, LAC 33:IX.1109.C.2.a.

In the Clean Water Act, § 101(a), Congress expressed its intent that the nation's waterways be returned to their natural conditions: "The objective of this Act is to restore and maintain the chemical, *physical*, and biological integrity of the Nation's waters." (Emphasis added.) 33 USC § 1251. One measure of the physical nature of a waterway is its sinuosity. Only if a water body-specific UAA were done for a channelized stream, and that UAA

demonstrated that eventual restoration of the channel to something close to its original configuration were technologically infeasible or extraordinarily costly, should a channelized stream be categorized as man-made and therefore put in the excepted uses category, where less protection is offered.

B. Sections 1111.A & 1111.B defining primary and secondary contact recreation require clarification.

Currently, the Louisiana Administrative Code, 33:IX.1111.A & 1111.B, contain broad language about activities which define the desired use category in which a water body belongs. These generalizations should be refined and clarified.

Section 1111.A defines primary contact recreation as recreation in which water contact involves "prolonged or regular full-body contact with the water." LAC 33:IX.1111.A. Examples include "swimming, skiing, and diving." <u>Id.</u> Secondary contact recreation is defined as recreation in which contact with the water is "incidental or accidental." 33:IX.1111.B. Examples include "fishing, wading, and boating." <u>Id.</u>

While the examples provided are illustrative, they create uncertainty in situations where overlapping definitions exist. For instance, skiing could be water-skiing – a primary contract recreation activity – or jet-skiing – also properly a primary contact recreation activity, but which can be construed as boating, a secondary contact recreation activity. Other types of boating include kayaking and windsurfing.

EPA has stated that primary contact recreational activities are those activities "involving the potential for ingestion of, or immersion in, water." <u>Water Quality Standards Handbook:</u> <u>Second Edition</u> (EPA-823-B-94-005) August 1994, § 2.1.3. Windsurfing and jet-skiing are activities that involve immersion in water. Therefore, these activities should be added to the

§1111.A list of primary contact recreation activities. To clarify § 1111.B, canoeing and ocean and freshwater flatwater kayaking should be added to secondary contact recreation.

C. Section 1111.C requires clarification.

The current language of section 1111.C needs clarification. It reads: "Water bodies that might qualify for the limited aquatic life and wildlife use subcategory include intermittent streams and man-made water bodies with characteristics including, but not limited to, irreversible hydrologic modification, anthropogenically and irreversibly degraded water quality, uniform channel morphology, lack of channel structure, uniform substrate, lack of riparian structure, and similar characteristics making the available habitat for aquatic life and wildlife suboptimal." LAC 33:IX.1111.C.

The above sentence should be modified to read "Water bodies that might quality for the limited aquatic life and wildlife use subcategory include intermittent streams and manmade water bodies with characteristics including, but not limited to, anthropogenic and irreversible: 1) hydrologic modification, 2) degraded water quality, 3) uniform channel morphology, 4) lack of channel structure, 5) uniform substrate, 6) lack of riparian structure, and 7) similar characteristics making available habitat for aquatic life and wildlife suboptimal."

The purpose of the suggested rewording is to make it very clear that "anthropogenic" and "irreversible" applies not just to hydrologic modification and water quality, but to all the other characteristics that are listed. If a water body naturally has relatively uniform channel morphology, lack of uniform substrate, or is lacking of certain types of riparian vegetation, then it should not be classified as "limited."

D. The antidegradation section requires implementation provisions.

1. Antidegradation is properly part of the triennial review.

Antidegradation is properly part of the triennial review, and LDEQ should include its antidegradation policy and implementation procedures in its triennial review. EPA Region 4 works under this premise, and it is the proper legal approach.⁵ 40 C.F.R. §131.20(a) provides that the triennial review is for the purpose of reviewing water quality standards. Antidegradation is part of the water quality standards. 40 CFR § 131.6(d). As such, antidegradation is open for public comment during the triennial review.

2. The regulations do not provide for Tier 1 implementation procedures.

In § 1119.C.2 LDEQ arguably provides a Tier 1 policy by stating that it will ensure that point and nonpoint source discharges will not interfere with existing uses, but the regulations fail to provide implementation procedures. The regulations do not provide *any* procedure for implementing the antidegradation policy stated in sections 33:IX 1109.A or 1119.

Federal regulations establish minimum requirements for state antidegradation policies and implementation methods. As a floor, the EPA requires that the current level of water quality necessary to maintain existing uses be protected. 40 CFR § 131.12(a)(1). This has become known as Tier 1 protection. The state regulations fail to meet this requirement, as they appear to create no Tier 1 implementation procedure. Instead, LDEQ refers to its existing discharge permit program, water quality standards program, water quality monitoring program, and enforcement activities as the mechanism by which it will ensure that existing water quality is maintained. LAC 33:IX.1119(B)(2). However, each of these programs are designed around designated uses, not existing uses. In order to comply with federal law, the Louisiana regulations must delineate a mechanism by which it will ensure that existing uses are maintained and protected.

⁵ Exhibit 3

3. LDEQ's Tier 2 policy permits degradation for "justifiable" instead of "important" social and economic development, lowers the burden for degrading Tier 2 waters, and fails to provide language to assure the highest statutory and regulatory requirements.

LDEQ regulations do not meet the federal requirements for Tier 2 waters. The regulations state that the "state may choose to allow lower water quality in waters that exceed the standards to … accommodate *justifiable* economic and/or social development…" (emphasis added). LAC 33:IX.1109.A.1. However, EPA regulations allow a state to lower water quality standards only if it is "*necessary* to accommodate *important* economic or social development." (emphasis added.) 40 CFR § 131.12. The words "important" and "justifiable" do not share the same meaning and should not be used as synonyms for one another. "Justifiable" is vague and renders the state regulation meaningless. All actions may be justified by explanation, but not all actions may be important. Thus, the state regulatory language does not offer the same protection as that of the federal regulations. There is no reason why LDEQ cannot or should not track the federal language.

Additionally, the LDEQ regulations alter the language of the federal regulations such that its burden for degrading these waters is effectively lowered when it provides that LDEQ may "choose" to allow lower water quality. Contrarily, EPA's language properly places emphasis on protection by stating that high quality waters "shall be maintained and protected" unless the state finds it "necessary" because of "important" interests. <u>Id.</u>

Furthermore, EPA regulations provide that, in the event that a state finds it necessary to lower water quality in these waters to accommodate important development, the state must assure that the highest statutory and regulatory requirements for all new and existing point

sources be achieved and that best management practices be put in place for nonpoint sources. 40 CFR § 131.12(a)(2). LDEQ omits this critical language altogether.

In order to comply with federal regulations, the state must change the language in § 1109.A.1. First, the state must change "justifiable" to "important." Second, the regulations must eliminate "choose to" and add "necessary," as it appears in the EPA regulation. Finally, LDEQ must add a section to address the assurances needed when water quality is lowered.

4. There is no Tier 2 implementation procedure.

The Tier 2 implementation procedure is nonexistent. An implementation procedure should address the method by which LDEQ will accomplish the antidegradation policy goals. At present, there are no requirements which LDEQ or permittees must follow in meeting the policy goals. The extent of the Tier 2 implementation procedures can be found at LAC 33:IX.1119(C), which states that for all activities which may impact water quality, "consideration is given to requirements of the policy." Other than this, LDEQ merely states that it will ensure that existing uses will not be interfered with. LAC 33:IX.1119(C)(2). And, at LAC 33:IX.1119(C), that designated uses and achievement of water quality standards will not be impacted.

Tier 2 goes far beyond protecting existing uses, and requires maintaining the quality of water in bodies that exceed the highest designated uses (which would mean they exceed the standards as well). Likewise, LDEQ's statement at LAC 33:IX.1119(C)(1) that it will conduct a use attainability analysis if the criteria or uses cannot be attained does not apply to Tier 2 situations, because here the criteria and uses not only can be attained, but are being exceeded.

One possible interpretation of what may be intended as LDEQ's Tier 2 implementation procedure is the statement in the policy section that "[a]ppropriate use attainability analyses will be required before any lowering of water quality will be allowed." LAC 33:IX.1109(A)(1).

This, however, is not the appropriate use of a Use Attainability Analysis (UAA). UAAs are discussed in EPA regulations at 40 C.F.R. §131.10(g) and (j). EPA provides that UAAs are the mechanism by which a state can remove a designated use which cannot be attained for one of several enumerated reasons. UAAs are studies which attempt to show that one of the enumerated factors is responsible for the water body failing to meet the designated use, and that it cannot be corrected. UAAs are not appropriate in an antidegradation context, however, particularly a Tier 2 context. Tier 2 waters are not failing to meet their designated uses; quite the opposite-they are exceeding their designated uses. Tier 2 protections are meant to ensure that these high quality waters stay at this level unless absolutely necessary to accommodate important economic or social development.

That LDEQ's antidegradation implementation procedures for Tier 2 protections are nonexistent is readily demonstrated by a look at any of the many states that have promulgated Tier 2 protection implementation procedures. There are many, but Illinois (35 Ill. Admin. Code §302.105) provides an example of an effective Tier 2 protection implementation procedure. For high quality waters, the antidegradation regulation requires that the state "assess any proposed increase in pollutant loading that necessitates a new, renewed or modified NPDES permit or any activity requiring a CWA § 401 certification..." 35 Ill. Admin. Code § 302.105(c)(2). The regulation continues by requiring that the assessment assure that "all technical and economically reasonable measures to avoid or minimize the extent of the proposed increase...have been incorporated...[and] the activity...will benefit the community at large." Id. at § 305.105(c)(2)(B).

The Illinois regulations also clearly and unequivocally explain the procedures for an antidegradation assessment. Id. at § 305.105(f). To highlight some: the permit application must

include an identification of the affected water body, identification of the proposed impacts on the affected water body, the purpose and benefits of the proposed activity, and an assessment of alternatives. Id. at § 305.105(f)(1). When making an assessment, alternatives may include, "[a]dditional treatment levels, including no discharge alternatives [or] [d]ischarge of waste to alternate locations, including publicly-owned treatment works and streams with greater assimilative capacity [or] [m]anufacturing practices that incorporate pollution prevention techniques." Id. at § 305.105(f)(1)(D).

The Illinois regulations present a highly detailed structure and method by which a high quality water (Tier 2) antidegradation assessment is conducted. This is the type of regulatory language that we urge LDEQ to adopt. Regardless, LDEQ must adopt language which constitutes a structured antidegradation assessment required of any permittee actively seeking to begin or expand discharges into Tier 2 water bodies. The assessment must require a discharger to prove that the discharge is necessary, and that it serves an important social or economic development interest.

5. Tier 3 protections lack a mechanism for nominating a water body as an outstanding natural resource water body.

LDEQ provides for Tier 3 protections, or protection of waters that constitute outstanding natural resources. LAC 33:IX.1119(C)(4). Applied properly, this section constitutes a wellcrafted Tier 3 antidegradation implementation plan. However, the language is not without ambiguity. In the last sentence of § 1119.C.4, LDEQ includes an ambiguous word in the phrase: "Existing discharges of treated sanitary wastewater may be allowed if no reasonable alternative discharge location is available or if the discharge existed before the designation as an outstanding natural resource water body..." If "existing" in this phrase means "at existing levels," then the

phrase is proper, but the language of the provision should be amended to include or clarify this meaning. However, if "existing" has some other meaning, then it would run a foul of the required Tier 3 protection promulgated by EPA (*See* 40 CFR § 131.12(a)(3)).

However, the Tier 3 protections lack a mechanism for nominating a water body as an "outstanding natural resource water body" under these provisions. LDEQ should provide for such a mechanism. LDEQ could model its Tier 3 designation and nomination procedures on the Kentucky procedures in 401 KAR 5:031.8

A mechanism for nominating an outstanding natural resource water body should include both an automatic inclusion provision and a permissible consideration provision. Waters to be automatically included should be those waters designated under the Federal Wild and Scenic Rivers Act, 16 USC § 1271 et seq., and waters that support endangered or threatened species under the Endangered Species Act of 1973, 16 USC § 1531 <u>et seq.</u> Additional waters could be those designated under the Louisiana Scenic Rivers Act, found at La. Rev. Stat. § 56:1840 <u>et</u> <u>seq.</u>, and waters funded by the Wildlife Habitat and Natural Heritage Trust under La. Rev. Stat. § 56:1923.

LDEQ should also consider waters for inclusion under a permissible consideration provision. Waters should be included if, one "the surface waters flow through or are bounded by state or federal forest land, or are of exceptional aesthetic, recreational, or ecological value or are within the boundaries of national, state, or local government parks, or are part of a unique geological or historical area recognized by state or federal designation," [or] two, "[t]he surface water is a component part of an undisturbed or relatively undisturbed watershed that can provide basic scientific data and possess outstanding water quality characteristics; or fulfill two (2) of the following criteria: (a) Support a diverse or unique native aquatic flora or fauna; (b) Possess

physical or chemical characteristics that provide an unusual and uncommon aquatic habitat; or (c) Provide a unique aquatic environment within a physiographic region." 401 KAR 5:031.8.1.b

Additionally, LDEQ should include a provision detailing who may nominate and propose additions and how the determination of designation is made. First, any person should be eligible to present a proposal to designate certain waters under this provision. That person should provide documents or information supporting the proposal that LDEQ may suggest in this section of the code. Those requirements should be general descriptive requirements that are not too onerous. Second, LDEQ should review the proposal and supporting documentation to determine whether the proposed waters qualify as outstanding state resource waters. LDEQ should issue a public decision indicating its reasoning.

E. LDEQ should not define a water quality standard the same as a water quality criteria.

In Section 1105, LDEQ defines "water quality standard" as a "numerical criterion . . . or general criterion" This definition is inconsistent with the Clean Water Act and EPA provisions and ultimately less protective. In Section 303(c)(2)(a) of the Clean Water Act, 33 U.S.C. §1313(c)(2)(a), Congress states that water quality standards shall consist of "the designated uses of the navigable waters involved and the water quality criteria for such waters based upon such uses." Thus, a water quality standard has two components: 1) a designated use, and 2) a water quality criterion.

This distinction is important because a state can change a designated use based on technical feasibility and economic or social impacts (see provisions in 40 C.F.R. §131.10(d),(g), and (h)), but can only change a water quality criterion based upon science (ie, by adopting site-specific criteria). The problem of incorrectly defining water quality standard is illustrated by

looking at LDEQ's definition of a UAA, which says that it can be used to revise water quality standards. LAC 33:IX.1105. It is true that a UAA can be used to revise designated uses, but since LDEQ defines water quality standards as criteria, this definition of a UAA is incorrect, as it cannot be used to revise criteria.

LDEQ should redefine "water quality standard" to make it consistent with the Clean Water Act and include both the designated use component and the water quality criteria component.

F. Some provisions in the water quality standards properly belong in other parts of the regulations.

In the portion of its regulations discussing water quality standards for excepted uses, LDEQ includes provisions which have nothing to do with water quality standards. Specifically, sections 1109.C.1.e and C.2.d, which are essentially identical, discuss under what conditions wastewater discharges will be allowed into water bodies classified with an excepted use designation. This issue properly belongs in the regulatory sections on LPDES permits, as it is a permitting issue. Likewise, section 1109.D.1 discusses compliance schedules to be incorporated into permits, and also properly belongs in the permitting sections of the regulations. Last, section 1109.I on sample collection and analytical procedures is a monitoring issue, not a water quality standard issue, and should be moved to the appropriate section of the regulations..

G. Provisions allowing for short-term exemptions from water quality criteria should be revised to only exempt certain permit provisions.

In section 1109.E, LDEQ allows for an exemption from any and all water quality standards for some short-term activities "that the state determines are necessary." LAC 33:IX.1109(E). This provision is written in much too broad and vague a manner to pass muster under the Clean Water Act. The LDEQ should provide the legal justification for allowing such an exemption. Additionally, if the intent of such an exemption is to provide a discharger-specific waiver from otherwise-applicable requirements, LDEQ should not and need not waive the underlying water quality criteria, but instead put a short-term waiver of the effluent limits into the permit. Otherwise, all sources to the applicable waterbody could increase their loads of the pollutants in question. This section should be changed to focus on permit conditions and removed from the water quality standard portion of the regulations to be placed into the permitting section.

H. LDEQ's definition of water quality criteria is incorrect.

In Section 1113.A.1 of the regulations, LDEQ describes water quality criteria as follows: "Water quality criteria describe stream uses." This is incorrect. Criteria and uses are not the same. Rather, water quality criteria describes the lowest level of water resource quality that is thought to be fully supportive of a given use. This provision should be deleted.

I. LDEQ has no enforceable language regulating the designation of naturally dystrophic water bodies.

In Section 1109.C.3 regarding the excepted use category of naturally dystrophic water bodies, LDEQ has no language similar to that for intermittent streams and man-made water bodies describing what water bodies under what circumstances will qualify for this excepted use. LDEQ merely provides that "[w]ater bodies shall be designated as *naturally dystrophic waters* and assigned appropriate water quality criteria according to the procedure in the departmentks (sic) current Water Quality Management Plan/Continuing Planning Process." LAC 33:IX.1109(C)(3). However, the volume of the water quality management plan that was

supposed to be promulgated to contain these provisions, Volume 9,⁶ does not exist. Therefore, the department has no enforceable rules regarding this often-used excepted use category. Any decision, then, to classify a water body under this provision is arbitrary and capricious.

J. LDEQ's monitoring for bacteria in coastal waters does not provide optimal protection of public health and safety

1. LDEQ failed to implement the enterococci bacterial indicator, a method required by the EPA.

LDEQ incorrectly uses fecal coliform as its bacterial indicator. Fecal coliform has been determined to be a substandard bacterial indicator by the EPA.⁷ The latest scientific knowledge has established enterococci and E. coli as superior bacterial indicators.⁸ Under the Clean Water Act, the criteria for water quality must accurately reflect the latest scientific knowledge "on the kind and extent of all identifiable effects on health and welfare including, but not limited to, plankton, fish, shellfish, wildlife, plant life, shorelines, beaches, esthetics, and recreation which may be expected from the presence of pollutants in any body of water, including ground water."⁹ Louisiana is not in compliance with this provision.¹⁰ On November 16, 2004, EPA published a final rule that promulgated water quality standards for 21 states and territories that had not yet adopted the water quality criteria for bacteria that were as protective of human health as EPA's 1986 bacteria criteria.¹¹ Louisiana was included in the list of states that failed to comply.¹²

EPA recommended fecal coliform as bacterial indicators in 1976.¹³ Since then, the EPA conducted multi-site epidemiological studies that found that enterococci have a much higher

⁶ See LR 29:556 (April 2003).

⁷ See EPA, Ambient Water Quality Criteria for Bacteria, EPA440-5-84-002, at 8, 11 (1986).

⁸ See id; See also 40 C.F.R. § 131.41(c)(1) (2006).

⁹ 33 U.S.C 1313 §304(a)(1) (2006).

¹⁰See EPA, Implementing the Beach Act of 2000: Report to Congress, EPA-823-R-06-001, at 3.3 (2006).

¹¹ See Water Quality Standards for Coastal and Great Lakes Recreation Waters, 69 Fed. Reg. 67218 (November 16, 2004) (to be codified at 40 C.F.R. pt. 131).

 $^{^{12}}$ See *id.* at 63.

¹³ See EPA, Improved Enumeration Methods for Recreational Water Quality Indicators: Enterococci and Escherichia coli, EPA-821-R-97-004, at 1-2 (2000).

correlation with swimming associated gastroenteritis in both fresh and marine water environments than fecal coliform.¹⁴ In 1986, this resulted in EPA recommending the use of two new bacterial indicator organisms for recreational water quality assessment: Enterococci and E. coli.¹⁵ EPA promulgated the recommendation for these bacterial indicators as a requirement in a final rule that became effective December 16, 2004.¹⁶ However, two years later, LDEQ has still failed to adopt these required bacterial indicators. EPA stated in the final rule that "[s]tates and territories are encouraged to expeditiously revise their water quality standards to remove fecal coliform criteria as an indicator for primary contact recreation where it has been replaced by the new indicators in their implementation of the Clean Water Act."¹⁷ LDEQ should use this triennial review to come in compliance with the standard.

Furthermore, enterococci and E. coli reflect the latest scientific knowledge for identifying effects on health and welfare in freshwater and marine water, and, therefore, under the Clean Water Act are required bacterial indicators in state water quality programs.¹⁸ Louisiana's continued non-compliance with federal regulations puts its citizens at risk of coming into contact with harmful pathogens that could not adequately be detected by fecal coliform indicators.

2. LDEQ's monitoring schedule for bacterial pathogens is an ineffective means of assessing the water quality of public beaches.

LDEQ's standard for reviewing bacterial samples for violations of the bacterial water quality standard is woefully inadequate to protect public health. The regulations provide that no more than 25 percent of the <u>total</u> samples collected on a monthly or near monthly basis shall

¹⁴ See id.

¹⁵ See id.

¹⁶ See Water Quality Standards for Coastal and Great Lakes Recreation Waters, 69 Fed. Reg. 67218 (November 16, 2004) (to be codified at 40 C.F.R. pt. 131).

¹⁷ *Id.* at 67228,29.

¹⁸ 33 U.S.C 1313 §304(a)(1) (2006).

exceed a fecal coliform density of 400/100ml.¹⁹ The language describing the methodology to be used is vague, but it appears that the proper interpretation would result in four months of exceedances having to be recorded before it is considered as a violation. Under this interpretation, a monthly sample would never yield an exceedance of the standard regardless of that measurement because, for it to reach 25% of the "total" samples collected would require at least four consecutive months of samples. Ambiguous language could lead to measurements that fail to protect the designated use of public beaches. The Beach Act, Section 406(a) (2), states that monitoring and notification for coastal recreation water quality "shall be carried out as necessary for the protection of public health and safety."²⁰ A more stringent standard than the one proposed by LDEQ is needed to protect the public health of Louisiana citizens

EPA's judgment is that the monitoring requirements for various recreational activities are different.²¹ EPA recommends that sampling frequency be related to the intensity of use of the water body.²² More frequent sampling is required to verify the continued safety of the waters for swimming and to identify water quality changes which might impair the health of the public.²³ "Increasing the number of samples improves the accuracy of bacterial water quality estimates, and also improves the likelihood of correct decisions on whether to close or leave open a beach."²⁴

LDEQ has a duty under the Beach Act to protect public health. The standards and sampling schedule that it would like to implement undermines that duty and compromises the very public health protection that it is trying to achieve.

¹⁹ See La. Admin. Code tit. 33 §§§ 1113(c)(5) (2006).

 $^{^{20}}$ See also Clean Water Act 303(c)(2)(A) stating that the water quality standards shall"be such as to protect the public health or welfare, enhance the quality of water and serve the purposes of this chapter."

²¹ See EPA, Ambient Water Quality Criteria for Bacteria, EPA440-5-84-002, at 7 (1986).

²² See id.

²³ See id.

²⁴ *Id.* at 7-8.

3. LDEQ is erroneously treating primary contact recreation water bodies with standards for secondary contact recreation.

Under the current Water Quality Standards, LDEQ treats primary contact recreation water bodies with standards for secondary contact recreation from November through April.²⁵ States must adopt those water quality criteria that protect the designated use.²⁶ Using the bacterial standards for secondary contact recreation for half of the year is a violation of the Clean Water Act and in direct conflict with Congress' intent to protect and maintain the designated use of water bodies. Primary contact recreation is a designated use for activities that involve or require prolonged body contact with the water, such as swimming, water skiing, tubing, snorkeling and skin diving. Changing the primary contact recreation bodies of water to secondary contact recreation based on a grouping of six months (November-April) could expose members of the public to unhealthy levels of bacteria that will be ingested through contact with the water. Maintaining the designated use and protecting the public will be compromised with the implementation of secondary contact recreation standards on water bodies at times of the year when they may still be used for primary contact recreation.

Louisiana is a sub-tropic environment, and like many other sub-tropic locales it has a generally warm climate. The average annual temperature ranges from 66 degrees Fahrenheit - 69 degrees Fahrenheit.²⁷ The winter months are generally mild with the coldest temperatures in January.²⁸ The warm climate impacts the amount of time people in this region spend outdoors recreating, and thus impacts the frequency of use of beaches/marine waters. In determining the appropriate standard the states have to account for the frequency of use. The sub-tropic climate

 ²⁵ See La. Admin. Code tit. 33 §§§ 1113(c)(5) (2006).
²⁶ 40 C.F.R § 131.11(a)(1) (2006).

²⁷See Louisiana's Climate, http://crt.louisiana.gov/tourism/climate.aspx

²⁸See id.

encourages Louisiana citizens to use primary contact recreation water bodies throughout the year. Swimmers, skiers, kayakers and the like may very well use these water bodies well into months like March, April, and November, and possibly other "winter" months. Under the antidegradation requirements, standards must be set, as a minimum, such that existing uses are protected. For LDEQ to declare all water bodies with applicable bacterial criteria to be secondary contact recreation for six months of the year, even though they are primary contact for the other six, is arbitrary and capricious in addition to being a violation of the antidegradation provisions. The need for adequate and consistent protection is constant throughout the year.

The use of secondary contact recreation standards could also impair the ability to monitor point source contributors. Measuring samples using these standards will allow higher levels of bacteria and other pathogens for half of the year. Are dischargers going to be allowed to "turn off" or circumvent their pollution control devices or stop performing best management practices for half of the year? There simply is apparently no logical rationale for implementing a laxer standard for half of the year. Applying the lesser standard for secondary contact recreation six months out of the year will also inhibit the ability to attain and *maintain* water bodies designated as primary contact recreation.

4. The Use Attainability Analysis definition erroneously neglects to require assessment of whether the deficiencies in the water body being studied can be remedied.

LDEQ describes the attainability analysis as "a structured scientific assessment of the factors (chemical, physical, biological, and economic) affecting the attainment of designated water uses in a water body."²⁹ Recommendations for the revision of water quality standards may be based upon a use attainability analysis.³⁰ LDEQ modeled its description of the use

³⁰ See 40 C.F.R. § 131.10 (2006).

attainability analysis after the description issued by the EPA. Unfortunately, both versions miss the mark of what Congress intended when it stated that the goals of the Clean Water Act are to "restore and maintain" the integrity of the waters. 33 U.S.C. §1251(a). In fact, in EPA's own regulations, the agency recognizes that when designated uses are not being attained, the analysis required, or UAA, to change the designated use must not only identify the factors affecting the nonattainment, but must also "demonstrate that attaining the designated use is not feasible." 40 C.F.R. §131.10(g). LDEQ's and the EPA's definition of use attainability analysis neglects to require a demonstration of infeasibility and is therefore invalid. Merely pinpointing the sources without analyzing what can be done is an incomplete analysis and defeats the broader purpose of the analysis, attaining and maintaining healthy water bodies by determining whether the water body can be restored.

K. Provisions for public participation in the triennial review process should be revised to allow for more dialogue with citizens.

In Section 1109.H.2, LDEQ provides that the state shall hold public hearings in connection with the triennial review of the water quality standards. However, the public hearing format which LDEQ uses is not conducive to citizen involvement and understanding. At LDEQ's public hearing on the triennial review, as with all of LDEQ's public hearings, the format is a large auditorium with one LDEQ employee calling the docket and listening to comments offered by speakers on the regulations at issue. No one is available to answer any questions or to explain anything, nor are any of the LDEQ personnel who are involved in the revision identified, if they are even present.

Water quality standards, particularly the criteria, are complicated provisions. Members of the general public, however, have a strong interest in the effect of these standards on their

enjoyment of the waters of the state for recreation and on their consumption of fish and shellfish that live in these waters. Therefore, LDEQ should adopt provisions that allow for public meetings that are more conducive to citizen involvement and understanding. One such approach would be to have meetings in more of a town hall format, where LDEQ employees explain the standards in terms that the citizens can understand and answer questions that the citizens may have. These meetings should take place in various places throughout the state, so that water bodies of localized interests could be the focus.

CONCLUSION

The triennial review process whereby LDEQ reviews and revises its water quality standards is a critically important one. Because the conditions of discharge permits are ultimately based on the water quality standards, these regulations drive the entire water program. While it made some changes in selected areas, LDEQ did not address critical necessary changes to its regulations. The most important of these was necessary changes to the antidegradation provisions. The lack of enforceable implementation procedures means that permits are written every day that lack antidegradation provisions. This cannot be allowed to continue. In other instances, vague or problematic provisions were allowed to remain.

Likewise, some of the changes LDEQ did make must be corrected to ensure compliance with the Clean Water Act and applicable EPA regulations as well as internal consistency. We request that DEQ adopt all of these changes.

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Respectfully submitted,

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