STATE OF LOUISIANA

COURT OF APPEAL

FIRST CIRCUIT

NUMBER 2010 CA 1640

IN THE MATTER OF:
GENERAL PERMIT FOR DISCHARGES FROM OIL & GAS EXPLORATION, DEVELOPMENT, & PRODUCTION FACILITIES, PERMIT NUMBER: LAG260000

Judgment Rendered: JUN 10 2011

* * * * * *

Appealed from the
Nineteenth Judicial District Court
In and for the Parish of East Baton Rouge
State of Louisiana
Suit Number 584,482

Honorable Kay Bates, Judge

* * * * * *

Stuart H. Smith Joanne M. Ryan New Orleans, LA	Counsel for Plaintiff/Appellant Louisiana Environmental Action Network (LEAN)
Herman Robinson Ann B. Hill Jackie Marve Claudia Rush Baton Rouge, LA	Counsel for Defendant/Appellee Louisiana Department of Environmental Quality
G. William Jarman M. Dwayne Johnson Esteban Herrera, Jr. Baton Rouge, LA	Counsel for Intervenor/Appellee Louisiana Mid-Continent Oil and Gas Association

* * * * * *

BEFORE: PARRO, GUIDRY, AND HUGHES, JJ.

GUIDRY, J.

The Louisiana Environmental Action Network (LEAN) appeals a judgment of the district court affirming a decision of the Louisiana Department of Environmental Quality (the LDEQ) to re-issue a National Pollutant Discharge Elimination System (NPDES)[1] permit for discharge of pollutants from oil and gas production into the territorial seas of Louisiana[2] as a Louisiana Pollutant Discharge Elimination System (LPDES)[3] permit. The permit, issued October 13, 2009, and effective January 1, 2010, governs the discharge of deck drainage; produced water; well treatment, completion, and workover fluids; treated sanitary and domestic waste; hydrostatic test wastewater; other miscellaneous discharges from oil and gas exploration, development, and production facilities located in the territorial seas of Louisiana; and the discharge of produced water to the territorial seas of Louisiana from oil and gas exploration, development, and production facilities located in the Outer Continental Shelf waters off the coast of Louisiana.

The original NPDES permit issued by the United States Environmental Protection Agency (EPA) in 1997 expired on December 3, 2002, but was administratively continued by the LDEQ, pending its review of the application for

---

[1] NPDES means the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of the Clean Water Act (33 U.S.C. §§ 1251-1387). 40 CFR § 122.2.

[2] As stated in the EPA's 1996 Environmental Impact Statement (EIS), the territorial seas of Louisiana are located between the ordinary low water line along the coast of Louisiana, which is in direct contact with the open sea extending seaward to a distance of three miles. The territorial seas are shallow waters measuring from a zero depth at the coastline to typically 25 to 50 feet deep at the outer limit, although the depth can be up to 130 feet near the mouth of the Mississippi River. See 33 U.S.C. § 1362(8) and LAC 33:IX.708.B.

[3] LPDES means those portions of the Louisiana Environmental Quality Act and the Louisiana Water Control Law and all regulations promulgated under their authority that are deemed equivalent to the NPDES under the Federal Water Pollution Control Act, otherwise known as the Clean Water Act, and for which Louisiana is the delegated authority. La. R.S. 30:2073(1).

renewal of the permit.[4] Opponents[5] to the permit contend that the testing and monitoring requirements for the discharge of produced water imposed in the permit are insufficient to adequately insure that environmental costs are being minimized or avoided as much as possible consistent with the public welfare.[6]

The Louisiana Constitution mandates that "[t]he natural resources of the state, including air and water, and the healthful, scenic, historic, and esthetic quality of the environment shall be protected, conserved, and replenished insofar as possible and consistent with the health, safety, and welfare of the people." La. Const. art. IX, §1. Moreover, applicable water quality regulations provide:

> No substances shall be present in the waters of the state or the sediments underlying said waters in quantities that alone or in combination will be toxic to human, plant, or animal life or significantly increase health risks due to exposure to the substances or consumption of contaminated fish or other aquatic life. The numerical criteria (LAC 33:IX.1113.C.6) specify allowable concentrations in water for several individual toxic substances to provide protection from the toxic effects of these substances.

---

[4] Federal regulations suspended issuance of federal permits for activities subject to an approved state program under the NPDES of the federal Clean Water Act. See 40 CFR §123.1(d)(1). A memorandum of agreement between the LDEQ and the EPA transferred permit responsibility to the LDEQ upon assumption of the NPDES program by the LDEQ. Valid NPDES permits held by facilities became LPDES permits with an expiration date consistent with the original NPDES permit. See La. R.S. 30:2011(D)(11); LAC 33:IX.2301.D.1.

[5] In addition to LEAN, the Lake Pontchartrain Basin Foundation, the Oakville Community Action Group, the Gulf Restoration Network, the Sierra Club-Delta Chapter, the Louisiana Bayoukeeper, the Atchafalaya Basinkeeper, the Lower Mississippi Riverkeeper, and Oneil Couvillion also filed objections to the permit issued by the LDEQ.

[6] Specifically, LEAN asserts the following allegations on appeal of the district court's judgment affirming the decision of the LDEQ on judicial review:

1. The judgment is contrary to law because LDEQ's decision to issue the General Permit was in violation of its constitutional obligations as public trustee.

2. The [j]udgment is contrary to law because LDEQ's decision to issue the General Permit was in violation of the Clean Water Act and Louisiana water quality regulations anti-degradation policies.

3. The [j]udgment is contrary to law because LDEQ's factual findings in its basis for decision are not supported and sustainable by a preponderance of the evidence and thus the conclusions derived [therefrom] are arbitrary and capricious.

4. [The judgment] is contrary to law because [while] produced waters are generally exempt from the radiation regulations, the produced waters cause radium to accumulate in sediments which are not exempt from radiation regulations. Thus[,] LDEQ's inappropriate approval of the General Permit without requiring monitoring of aquatic organisms or sediments is thus contrary to state law.

LAC 33:IX.1113.B.5.

As has been routinely held since the Louisiana Supreme Court's landmark decision in Save Ourselves, Inc. v. Louisiana Environmental Control Commission, 452 So. 2d 1152 (La. 1984), a decision of the LDEQ must satisfy the issues of whether: (1) the potential and real adverse environmental effects of the proposed project have been avoided to the maximum extent possible; (2) a cost-benefit analysis of the environmental impact costs balanced against the social and economic benefits of the project demonstrate that the latter outweighs the former; and (3) there are no alternative projects or alternative sites or mitigating measures which would offer more protection to the environment than the proposed project without unduly curtailing non-environmental benefits to the extent applicable. See e.g. In re Belle Co., L.L.C., 00-0504, pp. 16-17 (La. App. 1st Cir. 6/27/01), 809 So. 2d 225, 238. Furthermore, as a public trustee, the LDEQ is duty-bound to demonstrate that it has properly exercised the discretion vested in it by making basic findings supported by evidence and ultimate findings that flow rationally from the basic findings; and it must articulate a rational connection between the facts found and the order, or in this case, the permit issued.[7] See Save Ourselves, Inc., 452 So. 2d at 1159-60.

When reviewing a decision of the LDEQ, the court may affirm or remand the case for further proceedings. The court may also reverse or modify an agency decision if substantial rights of the appellant have been prejudiced because the administrative findings, inferences, conclusions, or decisions are: (1) in violation

[7] On review, an appellate court should not reverse a substantive decision of the LDEQ on its merits, unless it can be shown that the actual balance of costs and benefits that was struck was arbitrary or clearly gave insufficient weight to environmental protection. However, if the decision was reached procedurally, without individualized consideration and balancing of environmental factors conducted fairly and in good faith, it is the court's responsibility to reverse. The test for determining whether an action was arbitrary or capricious is whether the action taken was "without reason." Dow Chemical Co. Louisiana Operations Complex Cellulose and Light Hydrocarbons Plants, Part 70 Air Permit Major Modifications and Emission v. Reduction Credits, 03-2278, p. 8 (La. App. 1st Cir. 9/17/04), 885 So. 2d 5, 10, writ denied, 04-3005 (La. 2/18/05), 896 So. 2d 34.

of constitutional or statutory provisions; (2) in excess of the statutory authority of the agency; (3) made upon unlawful procedure; (4) affected by other error of law; (5) arbitrary or capricious or characterized by abuse of discretion or clearly unwarranted exercise of discretion; or (6) not supported and sustainable by a preponderance of the evidence as determined by the reviewing court. La. R.S. 49:964(G); see also La. R.S. 30:2050.21(F) (providing that the standard of review contained in La. R.S. 49:964(G) shall apply to an appeal of a final permit action).

The main concern raised in this matter is the fact that the permit does not provide for any direct testing of the sediments and marine life of the territorial seas to verify that no significant environmental impacts are being caused by produced water discharges. At the time the original NPDES permit was issued in 1997, there was no regulatory authorization of such discharges to the area of the territorial seas. However, at the time the LDEQ reviewed the NPDES permit for re-issuance as an LPDES permit, such regulated discharges had been allowed for several years under the existing NPDES permit. The LDEQ maintains that the imposition of effluent limitations, monitoring requirements, and toxicity testing adequately address bioaccumulation concerns. In replying to public comments raising concerns regarding the cumulative impact of discharges of produced water on the hypoxic zone,[8] marine organisms, and sediment quality,[9] the LDEQ issued the following responses:

> A. Bioaccumulation was one of the factors considered in the establishment of water quality criteria. The nature of the discharges included in the general permit coupled with technically sound permit limits provide reasonable assurance for compliance with water quality standards of the receiving water bodies.
>
> Produced water does not contain large amounts of oxygen demanding substances (mostly oil and grease and toxic pollutants), therefore limitations or monitoring requirements for biological

[8] The hypoxic zone is the area of low dissolved oxygen that forms in the shallow waters of the Gulf of Mexico from the Mississippi River Delta westward to near the Texas/Louisiana border.

[9] Specifically, these concerns were mainly raised in public comments 11, 14, 19, 26, 27, and 28.

oxygen demand, 5-day (BOD_5) are not included in the general permit for produced water. Produced water has not been attributed to the "dead zone." The dead zone is mostly attributed to a nutrient overload from the Mississippi River. A report published by John A. Veil, Todd A. Kimmell, and Abbey C. Rechner of the Environmental Assessment Division, Argonne National Laboratory, in August 2005[,] looked at the dead zone and considered the contribution of produced water. The report provided this information: "It is also important to consider that offshore platforms discharge to open ocean environments that are subject to wind and wave action. Discharges that are made anywhere near the surface will receive abundant reoxygenation due to the natural processes. More than half of the platforms identified as discharging produced water to the hypoxic zone discharge at or above the surface of the ocean. About 93% of those platforms discharge in the top 20 feet of the water column. This should provide effective mitigation for some of the oxygen-demanding pollutants. ..."

B. The provisions in the draft permit were developed primarily utilizing the Effluent Guidelines and New Source Performance Standards for the Offshore Subcategory of the Oil and Gas Extraction Point Source Category (*See* 40 CFR §435). Additional provisions based on state regulations were included to further protect the environment.

....

An Environmental Impact Statement (EIS) ... was completed on August 5, 1996. The territorial seas of Louisiana are high in energy and tend to be turbid and well-mixed because of the effects of the river discharges, waves and currents. Comprehensive biological assessments of the impacts of produced water discharges and bioaccumulation of toxic chemicals by marine organisms in the territorial seas of Louisiana have been conducted through the EIS and other studies. The EIS found that the discharges from the general permit would not cause impacts to be significantly greater than those resulting from a single discharge from different sources; or cause impacts cumulatively to cross an environmentally significant threshold. Other studies have taken fish tissue samples from reef fish located around oil and gas rigs in the territorial seas of Louisiana and found that these fish are less likely to have mercury in the tissue. Studies have shown that Radium is not a significant problem in fish in the territorial seas of Louisiana. Additionally, toxicity testing has been established in the general permit for [Outfall 002- produced water].... Toxicity testing records lethal and sub-lethal, such as reproduction and growth, effects of produced water and chemically treated seawater and freshwater on marine organisms.

....

The permit limitations, monitoring frequencies, and conditions were established in the permit to be protective of the environment. LDEQ

> included limitations for parameters not listed in the federal guidelines (See 40 CFR §435), such as Benzene, Total Lead, Total Phenol, and Total Thallium for Outfall 002 (Produced Water), because these pollutants were found to be the most problematic in produced water.
>
> ....
>
> The Development Document for Effluent Limitations Guidelines and New Source Performance Standards for the Offshore Subcategory of the Oil and Gas Extraction Point Source Category... and EIS ... researched numerous studies and conducted studies when developing the guidelines for the offshore subcategory at 40 CFR [§]435 and in drafting the 1995 NPDES permit. The limits in the general permit are consistent with 40 CFR §435, the previous permit[,] and other similar offshore permits.

In its "Basis for Decision," the LDEQ further maintained that:

> EPA completed an [EIS] ... on August 5, 1996.[10] The EIS found that the discharges from the general permit would not cause cumulative impacts to be significantly greater than those resulting from a single discharge from different sources; or cause impacts cumulatively to cross an environmentally significant threshold. The EIS further found that Radium is not a significant problem in fish in the territorial seas of Louisiana.

As stated, the LDEQ relied on *general* offshore studies that have shown that the discharge of produced water has had no significant environmental impact to support its decision to issue the LPDES permit without requiring any direct testing or studies of the impact of produced water discharges in the area of the territorial seas. Two reports submitted by the LDEQ to support its permitting decision discussed a study that examined the impact of produced water discharges on the hypoxic zone in the Gulf of Mexico. Those reports basically concluded that nutrient loading to the hypoxic zone from produced water discharges was insignificantly small as compared to the degree of nutrient loading from the Atchafalaya and Mississippi Rivers and the "predicted incremental impacts of

[10] The record contains a "Final Environmental Impact Statement" issued by the EPA that is dated June 1996. On the second page of that document, it is noted that comments on the Final EIS were due August 5, 1996.

produced water loads on dissolved oxygen conditions in the northern Gulf of Mexico ... were small."[11]

A third report titled "Findings of the Offshore Operators Committee Produced Water Bioaccumulation Study," presented at the Society of Petroleum Engineers International Conference on Health, Safety, and Environment in Oil and Gas Exploration and Production in June 1998, discussed the results of a three-year study conducted from 1994 to 1997, that assessed the "potential for bioaccumulation to marine organisms of selected target compounds associated with produced water, and to evaluate the human health risk to seafood consumers." The study involved measuring chemical concentrations in the edible tissues of marine organisms collected near 12 platforms discharging more than 4,600 barrels of produced water per day and comparing the results to the measurement of chemical concentrations in the edible tissues of marine organisms collected near 12 non-discharging platforms.

The target compounds measured were three volatile organics (benzene, toluene, and ethylbenzene), four semi-volatile organics (phenol, fluorene, benzo[a]pyrene, and bis(2-ethylhexyl)phthalate), three metals (arsenic, cadmium, and mercury), and two radionuclides (^{226}Radium and ^{228}Radium). Eleven species of fish, three species of mollusks, and one species of crustacean were collected for measurement in the study. The report concluded that based on the study, "it appears that produced water discharges into U.S. waters under the current regulatory requirements, do not pose an unacceptable risk to the environment or human consumers."

[11] Hypoxia occurs when nutrients enter a body of water and stimulate the growth of phytoplankton. As the phytoplankton dies, it falls to the bottom of the body of water where it is decomposed by microorganisms. The decomposition process consumes oxygen from bottom waters to create hypoxic conditions.

While the territorial seas are considered offshore waters, the LDEQ makes no mention of the fact that the territorial seas are of considerably less depth than offshore waters extending beyond the borders of the territorial seas that are the subject of the studies cited by the LDEQ. However, the EPA, in issuing the original NPDES permit, gave the following response to a comment suggesting that, based on the study conducted by the Offshore Operators Committee, monitoring for arsenic and benzene in produced water should be waived:[12]

> The Industry-wide Bioaccumulation Study has provided detailed information about bioaccumulative effects of produced water discharges at several offshore platforms; **however, none of those platforms are located in shallow water,[13] such as that which makes up a great percentage of the territorial seas off Louisiana. The potential for bioaccumulation is expected to be much greater in shallow water where the effluent receives less dilution, than it is in the deeper water examined under the Industry-wide Bioaccumulation Study. Therefore, the study did not provide information which can be applied to discharges authorized by this permit to ensure compliance with Ocean Discharge Criteria and water quality standards**. [Emphasis added.]

According to the EIS produced by the EPA in 1996, which supported the EPA's decision to issue the original NPDES permit, the ecosystem of the territorial seas of the Gulf of Mexico supports a variety of marine life, and the area is a part of a nationally important breeding, spawning, nursery, and feeding area for many types of finfish and shellfish. The EPA also expressed the following pronouncements in the EIS:

> EPA considers that additional data are required prior to making any regulatory proposals regarding naturally occurring radium in produced

[12] The commenter also suggested that "[a]ctual data on the edible tissue, as gathered by the bioaccumulation study, is a more direct measure for assessing the potential to impact human health."

[13] We note that the Offshore Operators Committee report, based on the study, states that two of the platform pairs (one a discharging platform and one a non-discharging platform) used in the bioaccumulation study were located in shallow waters less than 10 meters in depth. The report further noted that of the BTEX compounds (term used for benzene, toluene, ethylbenzene, and xylene-volatile aromatic compounds typically found in petroleum products) studied, only benzene was detected at a concentration above the practical quantification level (the lowest level that can reliably be achieved with specified limits of precision and accuracy during routine laboratory operations) in marine animal tissues. This detection was made in three specimens taken from two locations in shallow waters of depths less than 10 meters.

> water. Onshore disposal of oil and gas wastes contaminated with naturally occurring radioactivity is an ongoing concern which is beginning to be addressed through State regulatory programs.
>
> ....
>
> Public health and other impacts. EPA is studying the possibility that a public health risk exists due to consumption of finfish and shellfish that are exposed to produced water that may contain radionuclides; the general NPDES permit includes a requirement for radioactivity monitoring.
>
> ....
>
> Cumulative impacts. Impacts from discharges authorized by the proposed general NPDES permit are evaluated in combination with EPA's permits for coastal and outer continental shelf waters. At this time, EPA has not identified any aspect of the actions which the NPDES permit will authorize in the Territorial Seas which could interact with actions authorized in other ways, and which would either: cause impacts to be significantly greater than those resulting from the simple addition of the impacts from different sources; or cause impacts cumulatively to cross an environmentally significant threshold.

Although the EPA approved the present LPDES permit LAG260000, based on the foregoing statements, it appears some degree of follow-up testing was intended in the original NPDES permit.

The LPDES permit does provide for regular monitoring and reporting of discharges. Most of the effluents monitored and reported have established effluent limitations mandated under state and federal water quality standards. Monitoring and reporting of those substances with established effluent limitations under state and federal guidelines is understandably needed to ensure compliance with the guidelines; however, with regard to radium, it appears something more would be required to determine if the amounts of radium being discharged, as documented by monitoring and reporting requirements, are having any environmental impact, as there are no effluent limitations provided for that substance.

More interestingly, the evidence submitted by the LDEQ appears to buttress the assertion advocated by the opponents to the permit that there should be a

requirement for some type of follow-up direct bio-monitoring of the effects of the discharges. The reports the LDEQ submitted describing the results of the produced water hypoxia and bioaccumulation studies all reference the fact that the studies were conducted *as a requirement for the issuance and re-issuance* of NPDES General Permit GMG 290000 (for discharges from offshore oil and gas operations in the western portion of the Outer Continental Shelf of the Gulf of Mexico) by the EPA. Thus, there is precedent for mandating such follow up testing and studies as a part of the permitting process.

In a letter to the LDEQ dated January 16, 2009, the United States Department of the Interior, Fish, and Wildlife Service submitted comments regarding the permit LAG260000. In the letter, the agency stated that "[f]ederally listed species that are known to occur in [the] discharge area include endangered West Indian manatee (*Trichechus manatus*), threatened Gulf sturgeon (*Acipenser oxyrhynchus desotoi*) and its critical habitat, as well as endangered and threatened sea turtles." In regard to the West Indian manatee, the agency concurred in the LDEQ's determination that issuance of LAG260000 "is not likely to adversely affect any federally listed species or their critical habitats in Louisiana." As for the endangered and threatened sea turtles, the agency advised that "[t]he National Marine Fisheries Service ... is responsible for aquatic marine threatened or endangered species" and informed the LDEQ of whom to contact for information concerning the turtles. However, in regard to the Gulf sturgeon, the agency stated the following:

> The primary constituent elements essential for the conservation of Gulf sturgeon are those habitat components that support feeding, resting, sheltering, reproduction, migration, and physical features necessary for maintaining the natural processes that support those habitat components; those elements should be considered when determining potential project impacts. The primary constituent elements for Gulf sturgeon critical habitat include:
> ....

- water quality, including temperature, salinity, pH, hardness, turbidity, oxygen content, and other chemical characteristics, necessary for normal behavior, growth, and viability of all life stages;
- sediment quality, including texture and other chemical characteristics, necessary for normal behavior, growth, and viability of all life stages;

....

... Should issuance of the draft permit directly or indirectly affect the Gulf sturgeon or its critical habitat in Louisiana, further consultation with [the National Marine Fisheries Service] will be necessary.

In a document titled "Produced Water Permit Explained," the LDEQ gives the following rationale for why it does not provide for additional follow-up testing or studies of the effects of the discharge of produced water in the territorial seas of Louisiana:

> It is important to note the receiving body of water for produced water is the Gulf of Mexico. The open waters of the Gulf, along with the environmental influences of currents, tides, wind and water depth, allow for the produced water to be assimilated into the environment. *As the result of past [LDEQ] studies*, which showed that produced water was not easily assimilated when discharged in coastal and inshore habitats, the department banned the discharge of produced water in coastal and inshore habitats.
>
> There have been no studies *brought to [the LDEQ's] attention* that details adverse [effects] related to discharging produced water into the open waters of the Gulf.
>
> ....
>
> *If* [the LDEQ] had information that showed the discharge of produced water into the Gulf would cause adverse effect on human health or the environment, then the department would take the necessary actions needed to offer the appropriate protection as it did when it banned the discharge of produced water in [coastal] and inshore habitats back in the 1990s. [Emphasis added.]

As the LDEQ notes, it conducted actual studies of the effect of produced water discharges in coastal and inshore habitats and discovered that produced water was not easily assimilated when discharged in coastal and inshore habitats. As a consequence, the LDEQ banned the discharge of produced water in coastal and inshore habitats.

We certainly agree with the LDEQ's assertion that the permit contains several requirements and restrictions to help diminish and guard against unreasonable degradation[14] of the environment by the permitted activity. However, reviewing the evidence presented and relied on by the LDEQ, it appears the LDEQ reached the decision to issue the LPDES permit procedurally, without individualized consideration or a fair balancing of environmental factors.

In the case of In re West Pearl River Navigation Project, 94-2260 (La. App. 1st Cir. 6/23/95), 657 So. 2d 640, writ denied, 95-2049 (La. 11/17/95), 663 So. 2d 720, this court reversed a decision of the LDEQ to issue a revised water quality certification to the United States Army Corps of Engineers, because there was "insufficient evidence in the record" for the agency to conclude that the proposed activity would pose no environmental problems or threats to water quality. The court reasoned that the LDEQ could not verify that water quality standards would be met based on the toxic testing of sediment samples from only five of the twenty-one proposed dredging sites. In re West Pearl River Navigation Project, 94-2260 at 5, 657 So. 2d at 642. The court remanded the action to the LDEQ to analyze sediments from all of the proposed dredging sites to ensure that state water quality standards would be met if the permit were issued.

Pursuant to the criteria listed in LAC 33:IX.6307.C, a LPDES permit can be issued, even though the state administrative authority has insufficient information to determine that there will be no unreasonable degradation of the marine

[14] See LAC 33:IX.6303, which defines "unreasonable degradation of the marine environment" as:

> 1. significant adverse changes in ecosystem diversity, productivity and stability of the biological community within the area of discharge and surrounding biological communities;
>
> 2. threat to human health through direct exposure to pollutants or through consumption of exposed aquatic organisms; or
>
> 3. loss of esthetic, recreational, scientific or economic values which is unreasonable in relation to the benefit derived from the discharge.

environment pursuant to LAC 33:IX.6305; however, one of the criteria listed in LAC 33:IX.6307.C for issuance of a permit under such circumstances is that the permit must comply with all of the conditions established in paragraph D of LAC 33:IX.6307. One of the conditions listed in LAC 33:IX.6307.D is that the permit shall "specify a monitoring program, which is sufficient to assess the impact of the discharge on water, sediment, and biological quality **including, where appropriate, analysis of the bioaccumulative and/or persistent impact on aquatic life of the discharge**[.]" LAC 33:IX.6307.D,2 (emphasis added). See also LAC 33:IX.6309 (which provides that the state administrative authority may require an applicant to provide pertinent information, including "analysis of the location where pollutants are sought to be discharged, including the biological community").

Based on the record before us, we find that LEAN has borne its burden of showing that the evidence relied on by the LDEQ does not support its determination by a preponderance of the evidence that the proposed permit has minimized or avoided potential and real adverse environmental impacts to the maximum extent. Instead, it appears the LDEQ abused its discretion in failing to address the potential environmental impacts identified by the EPA in issuing the initial NPDES permit, since the evidence submitted has not been shown to support the LDEQ's basic finding that the discharge of produced water *to the territorial seas* of Louisiana will cause no significant bioaccumulative impacts.

CONCLUSION

Accordingly, we find the LDEQ abused its discretion in issuing LPDES permit LAG260000 without providing for some type of direct testing or bio-monitoring requirements to verify that the discharge of produced water to the area of the territorial seas of Louisiana causes no significant environmental impacts. We therefore remand this matter to the LDEQ with instructions to modify

the permit in a manner consistent with this opinion, such that the permitting decision will suitably evaluate whether the existing monitoring and testing requirements adequately insure that the environmental costs of discharging produced water directly into the territorial seas of Louisiana are being minimized or avoided as much as possible consistent with the public welfare. All costs of this appeal in the amount of $1,538.82 are assessed against the Louisiana Department of Environmental Quality.

REMANDED WITH INSTRUCTIONS.