

Buddy Garcia, *Chairman*
Larry R. Soward, *Commissioner*
Bryan W. Shaw, Ph.D., *Commissioner*
Mark R. Vickery, P.G., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 14, 2009

TO: Persons on the attached mailing list.

RE: NRG Texas Power LLC
TPDES Permit No. WQ0002430000

Decision of the Executive Director.

The executive director has made a decision that the above-referenced permit application meets the requirements of applicable law. **This decision does not authorize construction or operation of any proposed facilities.** Unless a timely request for contested case hearing or reconsideration is received (see below), the TCEQ executive director will act on the application and issue the permit.

Enclosed with this letter is a copy of the Executive Director's Response to Comments. A copy of the complete application, draft permit and related documents, including public comments, is available for review at the TCEQ Central office. A copy of the complete application, the draft permit, and executive director's preliminary decision are available for viewing and copying at the Gibbs Memorial Library, 305 East Rusk Street, Mexia, Limestone County, Texas; and at the Teague Public Library, 400 Main Street, Teague, Freestone County, Texas.

If you disagree with the executive director's decision, and you believe you are an "affected person" as defined below, you may request a contested case hearing. In addition, anyone may request reconsideration of the executive director's decision. A brief description of the procedures for these two requests follows.

How To Request a Contested Case Hearing.

It is important that your request include all the information that supports your right to a contested case hearing. You must demonstrate that you meet the applicable legal requirements to have your hearing request granted. The commission's consideration of your request will be based on the information you provide.

The request must include the following:

- (1) Your name, address, daytime telephone number, and, if possible, a fax number.
- (2) If the request is made by a group or association, the request must identify:
 - (A) one person by name, address, daytime telephone number, and, if possible, the fax number, of the person who will be responsible for receiving all communications and documents for the group; and
 - (B) one or more members of the group that would otherwise have standing to request a hearing in their own right. The interests the group seeks to protect must relate to the organization's purpose. Neither the claim asserted nor the relief requested must require the participation of the individual members in the case.
- (3) The name of the applicant, the permit number and other numbers listed above so that your request may be processed properly.
- (4) A statement clearly expressing that you are requesting a contested case hearing. For example, the following statement would be sufficient: "I request a contested case hearing."

Your request must demonstrate that you are an **"affected person."** An affected person is one who has a personal justiciable interest related to a legal right, duty, privilege, power, or economic interest affected by the application. Your request must describe how and why you would be adversely affected by the proposed facility or activity in a manner not common to the general public. For example, to the extent your request is based on these concerns, you should describe the likely impact on your health, safety, or uses of your property which may be adversely affected by the proposed facility or activities. To demonstrate that you have a personal justiciable interest, you must state, as specifically as you are able, your location and the distance between your location and the proposed facility or activities.

Your request must raise disputed issues of fact that are relevant and material to the commission's decision on this application. The request must be based on issues that were raised during the comment period. The request cannot be based solely on issues raised in comments that have been withdrawn. The enclosed Response to Comments will allow you to determine the issues that were raised during the comment period and whether all comments raising an issue have been withdrawn. The public comments filed for this application are available for review and copying at the Chief Clerk's office at the address below.

To facilitate the commission's determination of the number and scope of issues to be referred to hearing, you should: 1) specify any of the executive director's responses to comments that you dispute; and 2) the factual basis of the dispute. In addition, you should list, to the extent possible, any disputed issues of law or policy.

How To Request Reconsideration of the Executive Director's Decision.

Unlike a request for a contested case hearing, anyone may request reconsideration of the executive director's decision. A request for reconsideration should contain your name, address, daytime phone number, and, if possible, your fax number. The request must state that you are requesting reconsideration of the executive director's decision, and must explain why you believe the decision should be reconsidered.

Deadline for Submitting Requests.

A request for a contested case hearing or reconsideration of the executive director's decision must be **received by** the Chief Clerk's office no later than **30 calendar days** after the date of this letter. You may submit your request electronically at <http://www.tceq.state.tx.us/about/comments.html> or by mail to the following address:

LaDonna Castañuela, Chief Clerk
TCEQ, MC-105
P.O. Box 13087
Austin, Texas 78711-3087

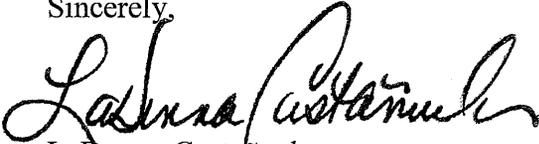
Processing of Requests.

Timely requests for a contested case hearing or for reconsideration of the executive director's decision will be referred to the alternative dispute resolution director and set on the agenda of one of the commission's regularly scheduled meetings. Additional instructions explaining these procedures will be sent to the attached mailing list when this meeting has been scheduled.

How to Obtain Additional Information.

If you have any questions or need additional information about the procedures described in this letter, please call the Office of Public Assistance, Toll Free, at 1-800-687-4040.

Sincerely,



LaDonna Castañuela
Chief Clerk

LDC/ms

Enclosures

MAILING LIST
for
NRG Texas Power LLC
TPDES Permit No. WQ0002430000

FOR THE APPLICANT:

Ted Long
NRG Texas Power LLC
1301 McKinney Street, Suite 2300
Houston, Texas 77010

Bill Odom
NRG Texas Power LLC
RR 1, Box 85
Jewett, Texas 75846

PROTESTANTS/INTERESTED PERSONS:

Layla Mansuri
Environmental Integrity Project
1303 San Antonio Street, Suite 200
Austin, Texas 78701

Nakisha Nathan
Lowerre, Frederick, Perales, Allmon
& Rockwell
707 Rio Grande Street, Suite 200
Austin, Texas 78701

FOR THE EXECUTIVE DIRECTOR
via electronic mail:

Timothy Reidy, Staff Attorney
Texas Commission on Environmental Quality
Environmental Law Division MC-173
P.O. Box 13087
Austin, Texas 78711-3087

Monica Vallin-Baez, Technical Staff
Texas Commission on Environmental Quality
Water Quality Division MC-148
P.O. Box 13087
Austin, Texas 78711-3087

FOR OFFICE OF PUBLIC ASSISTANCE
via electronic mail:

Bridget Bohac, Director
Texas Commission on Environmental Quality
Office of Public Assistance MC-108
P.O. Box 13087
Austin, Texas 78711-3087

FOR PUBLIC INTEREST COUNSEL
via electronic mail:

Blas J. Coy, Jr., Attorney
Texas Commission on Environmental Quality
Public Interest Counsel MC-103
P.O. Box 13087
Austin, Texas 78711-3087

FOR THE CHIEF CLERK
via electronic mail:

LaDonna Castañuela
Texas Commission on Environmental Quality
Office of Chief Clerk MC-105
P.O. Box 13087
Austin, Texas 78711-3087

TEXAS
COMMISSION
ON ENVIRONMENTAL
QUALITY

PROPOSED RENEWAL OF TCEQ PERMIT NO. WQ0002430000

APPLICATION BY
NRG TEXAS POWER, L.L.C.

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BEFORE THE
TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY

2009 JUL 10 PM 4:09

CHIEF CLERKS OFFICE

EXECUTIVE DIRECTOR'S RESPONSE TO PUBLIC COMMENT

The Executive Director of the Texas Commission on Environmental Quality (the Commission or TCEQ) files this Response to Public Comment on NRG Texas Power, L.L.C.'s (Applicant) application to renew Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0002430000 and on the Executive Director's preliminary decision. As required by Title 30 of the Texas Administrative Code, Section 55.156, before a permit is issued, the ED prepares a response to all timely, relevant and material, or significant comments. The TCEQ's Office of the Chief Clerk received a timely comment letter from Eric Allmon on behalf of Public Citizen, SEED Coalition, Sierra Club (Lone Star Chapter), and Robertson County: Our Land Our Lives. This response addresses all such timely public comments received, whether or not withdrawn. If you need more information about this permit application or the wastewater permitting process, please call the TCEQ Office of Public Assistance at 1-800-687-4040. General information about the TCEQ can be found at our website at www.tceq.state.tx.us.

BACKGROUND

Description of Facility

The Applicant currently operates the Limestone Steam Electric Generating Station (Facility). The facility consists of two lignite/coal fired steam electric generating units. The Applicant has applied to the TCEQ for a renewal of its TPDES permit, which authorizes the discharge of low volume wastewater, cooling tower blowdown, lignite pile runoff, and bottom ash transport water at a daily maximum flow not to exceed 2,304,000 gallons per day (GPD) via Outfall 001; handling area runoff, washdown and bottom ash transport water, and low volume wastewater on an intermittent and flow variable basis via Outfall 002; bottom ash transport water, low volume wastewater and storm water runoff at a daily maximum flow not to exceed 510,000 GPD via Outfall 003; bottom ash transport water, low volume wastewater, and storm water runoff at a daily maximum flow not to exceed 432,000 GPD via Outfall 004; low volume wastewater, metal cleaning waste, bottom ash transport water, and utility wastewater at a daily maximum flow not to exceed 216,000 GPD via Outfall Number 005; treated domestic wastewater at a daily average flow not to exceed 60,000 GPD via Outfall Number 006; treated domestic wastewater at a daily average flow not to exceed 3,000 GPD via Outfall 007; and bottom

ash transport water and low volume wastewater at a daily maximum flow not to exceed 72,000 GPD via Outfall 008.

The treated effluent will be discharged via Outfalls 001, 003, and 006 to the original channel of Lynn Creek; via Outfalls 002, 007, and 008 to the relocated channel of Lynn Creek; via Outfalls 004 and 005 to unnamed tributaries of Lambs Creek; then from all outfalls to Lambs Creek; then to Lake Limestone in Segment No. 1252 of the Brazos River Basin. The unclassified receiving waters have no significant aquatic life use for Lambs Creek, Lynn Creek, and the unnamed tributaries of Lambs Creek. The designated uses for Segment No. 1252 are high aquatic life use, contact recreation, and public water supply. The facility is located adjacent to and west of Farm-to-Market Road 39, approximately 2.5 miles southeast of the City of Farrar, Limestone County, Texas.

Procedural Background

The permit renewal application was received on May 21, 2008 and declared administratively complete on June 4, 2008. The Notice of Receipt and Intent to Obtain a Water Quality Permit (NORI) was published on June 24, 2008 in the *Mexia Daily News* and on June 26, 2008 in the *Teague Chronicle*. The Notice of Application and Preliminary Decision for a Water Quality Permit (NAPD) was published on April 9, 2009 in the *Mexia Daily News*, April 15, 2009 in the *Jewett Messenger*, and on April 16, 2009 in the *Teague Chronicle*. The public comment period ended on May 11, 2009. This application was administratively complete on or after September 1, 1999; therefore, this application is subject to the procedural requirements adopted pursuant to House Bill 801 (76th Legislature, 1999).

COMMENTS AND RESPONSES

COMMENT 1: (Discharge from a New Unit)

Eric Allmon commented that the Applicant is seeking to construct a new coal-fired power plant at the facility, called "Limestone 3." Mr. Allmon stated that additional clarification is needed regarding whether any wastewater produced by the operation of Limestone 3 will be authorized to be discharged under the current permit; and if so, the application must be processed as a major amendment to the permit rather than a permit renewal.

RESPONSE 1:

The draft renewal permit does not authorize any discharge from Limestone 3. The Applicant filed a renewal application with the TCEQ on May 21, 2008. The Applicant requested a continuation of the same requirements and conditions of the existing permit, which expired on December 1, 2008. Pursuant to 30 TAC § 305.63(a)(4), the existing permit remains in full force and effect and will not expire until the Commission acts on the renewal application. The renewal application does not reference Limestone 3.

The renewal application describes the facility as consisting of two-lignite/coal fired steam electric generating units. Draft Permit Condition 4(a) states that the permittee is required to give the Executive Director notice of any planned physical alterations or additions to the permitted facility that would require a permit amendment. Also, Draft Permit Condition 4(d) requires that, before accepting or generating wastes that are not described in the permit application or that would result in a significant change in the quantity or quality of a permitted discharge, the permittee must report the proposed changes to the Commission and apply for a permit amendment reflecting any necessary changes in permit conditions; including effluent limitations not identified by the permit. Should the draft renewal permit be issued, the Applicant would be required to follow the appropriate permit amendment procedures before discharging from a new unit at the facility.

COMMENT 2: (Mixing Zones)

Eric Allmon commented that Other Requirement No. 9 in the existing permit establishes that there is no mixing zone for all the discharges authorized by the permit, while Other Requirement No. 6 of the draft renewal permit appears to allow a mixing zone at Outfall No. 7 and does not apply acute toxic criteria to the discharge at Outfall No. 7. Mr. Allmon stated that allowing a mixing zone and relaxing the applicable point to determine compliance with acute toxic criteria constitutes a relaxation of permit requirements, which should be processed as a major amendment to the permit rather than a permit renewal.

RESPONSE 2:

30 TEX. ADMIN. CODE § 307.3 defines “mixing zone” as the area contiguous to a discharge where mixing with receiving waters takes place and where specified criteria, as listed in 30 TEX. ADMIN. CODE § 307.8(b)(1), can be exceeded. Section 307.3 also provides that acute toxicity to aquatic organisms is not allowed in a mixing zone, and chronic toxicity to aquatic organisms is not allowed beyond a mixing zone. 30 TEX. ADMIN. CODE § 305.12 defines a “major amendment” to a permit as an amendment that changes a substantive term, provision, requirement, or a limiting parameter of a permit.

Other Requirement No. 9 in the existing permit reads, “There is no mixing zone established for discharges to an intermittent stream. Acute toxic criteria apply at the points of discharge.” Other Requirement No. 6 in the draft renewal permit reads, “There is no mixing zone established for discharges via Outfalls 001, 002, 003, 004, 005, and 008 to an intermittent stream. Acute toxic criteria apply at the point of discharge.”

Other Requirement No. 6 in the draft renewal permit does not create a mixing zone, nor does it alter the point where acute toxic criteria are applied. The listing of outfalls in Other Requirement No. 6 was done to clarify which outfalls underwent a mixing zone review. After reviewing Outfalls 001, 002, 003, 004, 005, and 008, the Executive Director determined that no mixing was taking place. Also, the *Procedures to*

Implement the Texas Surface Water Quality Standards provide that mixing zones are defined in domestic discharge permits with a flow of one million GPD or greater.¹ Outfall 006 discharges treated domestic wastewater at a daily average flow not to exceed 60,000 GPD, while Outfall 007 discharges treated domestic wastewater at a daily average flow not to exceed 3,000 GPD. Pursuant to the Implementation Procedures, a mixing zone review was not conducted for Outfalls 006 and 007. The listing of outfalls in Other Requirement No. 6 does not constitute a change in a substantive term, provision, requirement, or limiting parameter of a permit requiring a major amendment to the permit rather than a permit renewal.

COMMENT 3: (Effluent Limit for Selenium)

Eric Allmon commented that the daily average limit for Selenium at Outfall 002 is 0.0168 mg/L in the existing permit and 0.168 mg/L in the draft renewal permit. Mr. Allmon states that the relaxing this effluent limitation must be done through a major permit amendment rather than a renewal. Finally, Mr. Allmon stated that if the change is a typographical error, it should be corrected.

RESPONSE 3:

The daily average limit for Selenium at Outfall 002 of 0.168 mg/L in the draft renewal permit is a typographical error. The daily average limit for Selenium at Outfall 002 has been revised to read 0.0168 mg/L.

COMMENT 4: (Airborne Contaminants)

Eric Allmon commented that the draft renewal permit does not adequately account for contaminants entering the receiving water as a result of the deposition of airborne contaminants emitted from the facility.

RESPONSE:

The TPDES permitting process is limited to controlling the discharge of pollutants into water in the state and protecting the water quality of the state's rivers, lakes, and costal waters. Air quality issues are outside of the scope of normal evaluations for a wastewater discharge permit application. Air quality authorizations are required for all facilities in Texas that emit air contaminants. The Limestone Electric Generating Station is currently operated pursuant to State Air Quality Permit Number 8576 and Prevention of Significant Deterioration (PSD) Air Quality Permit PSD-TX-371M. For more information regarding air quality authorizations please contact the TCEQ Air Permits Division at (512) 239-1250 or you may consult the TCEQ website at http://www.tceq.state.tx.us/nav/permits/air_permits.html.

COMMENT 5: (Groundwater)

¹ RG-194, January 2003, p. 39.

Eric Allmon commented that the construction and operation of the facility as proposed in the draft renewal permit will have an adverse impact on groundwater, including impacts which violate 30 TAC §§ 309.12 and 319.27. Mr. Allmon also stated that the TCEQ is required to consider groundwater impacts in implementing the state's groundwater anti-degradation policy.

RESPONSE 5:

30 TEX. ADMIN. CODE § 309.12 deals with the site selection for wastewater treatment plants. Section 309.12 prohibits the Commission issuing a permit for a new facility or for the substantial change of an existing facility unless it finds that the proposed site, when evaluated in light of the proposed design, construction or operational features, minimizes possible contamination of surface water and groundwater. Since there have been no operational changes to the existing facility, Section 309.12 is not applicable to this renewal application. 30 TEX. ADMIN. CODE § 319.27 deals with general regulations to be incorporated into permits to control hazardous metals. Hazardous metals include arsenic, barium, cadmium, chromium, copper, lead, manganese, mercury, nickel, selenium, silver, and zinc.² 30 TEX. ADMIN. CODE § 319.22 prohibits the discharge of Selenium to inland water from exceeding the daily average of 0.05 mg/L, and the discharge of copper to inland water from exceeding the daily average of 0.5 mg/L. The final and interim effluent limitations for selenium in the draft renewal permit are well below the daily average of 0.05 mg/L, while the interim effluent limitation for copper is well below daily average of 0.5 mg/L. No analytical data is available for screening against water quality-based effluent limitations since the facility has not discharged for the last two years. The facility reuses the wastewater for cooling water systems, its Flue Gas Desulfurization (FGD) system, and/or bottom ash transport system. An interim three-year compliance period is included in the draft renewal permit for total selenium at Outfalls 001, 004, and 005, and total copper at Outfall 005, pursuant to 30 TEX. ADMIN. CODE § 307.2(f).

The Water Quality Division has determined that the draft permit has been developed in accordance with the Texas Surface Water Quality Standards, which ensure that the effluent discharge is protective of aquatic life, human health, and the environment. The review process for surface water quality is conducted by the Standards Implementation Team and Water Quality Assessment Team surface water modelers. The Water Quality Division has determined that if the surface water quality is protected, then the groundwater quality in the vicinity will not be impacted by the discharge.

TCEQ rules and Implementation Procedures mandate that the TCEQ's antidegradation policy applies to actions regulated under state and federal authority that would authorize the increase in pollution of water in the state.³ Since the permit action at issue is a permit renewal with no increases in pollutant loading, TCEQ rules do not require an antidegradation review to be performed.

² 30 TEX. ADMIN. CODE § 319.21(4) (West 2009).

³ 30 TEX. ADMIN. CODE § 307.5(a) (West 2009); Procedures to Implement the Texas Surface Water Quality Standards, RG-194, p. 23 (January 2003).

COMMENT 6: (Technology-Based Effluent Limitations)

Eric Allmon commented that the draft revised permit does not adequately incorporate technology-based effluent limitations as required by 30 TEX. ADMIN. CODE § 308.1, which incorporates 40 C.F.R. Part 125, Subpart A.

RESPONSE 6:

Technology-based effluent limitations are national standards that are developed by the U.S. Environmental Protection Agency (EPA) on an industry-by-industry basis, and are intended to represent the greatest pollutant reductions that are economically achievable for an industry. To develop these technology-based regulations, the EPA gathers information on a particular industry, identifies the best available technology that is economically achievable for that industry, and sets regulatory requirements based on the performance of that technology. The effluent guidelines do not require facilities to install a particular type of technology; however, the regulations do require facilities to achieve the regulatory standards that were developed based on a particular type of technology. The standards are then incorporated into NPDES permits issued by the states and the EPA.

The draft renewal permit was developed in accordance with 40 C.F.R. Part 423 (relating to Steam Electric Power Generating Point Source Category). 40 C.F.R. Part 423.12 establishes effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT), while 40 C.F.R. Part 423.13 establishes effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable (BAT). The effluent limitations contained in the draft renewal permit adequately incorporate the technology-based effluent limitations guidelines promulgated by the EPA. Finally, as part of the TCEQ's coordination efforts, the EPA was furnished with a copy of the draft renewal permit and given an opportunity to object to its issuance. The EPA did not register any objection to the issuance of the draft renewal permit.

COMMENT 7: (Maximum Flow Estimates)

Eric Allmon commented that the draft renewal permit allows the maximum flow at each outfall to be determined by estimates. Mr. Allmon stated that these requirements lack adequate specificity to be enforceable.

RESPONSE 7:

The facility reuses its wastewater for cooling water systems, its Flue Gas Desulfurization (FGD) system, and/or bottom ash transport system. Because any discharge from the facility is predicted to be intermittent, the Executive Director has determined that a daily maximum flow limit is appropriate and enforceable. In the permit

application, the permittee states the engineering practices used to estimate the discharges at each outfall which include weirs and pump curve data.

COMMENT 8: (Free Available Chlorine Effluent Limitation and Monitoring Requirement)

Eric Allmon commented that the effluent limit for free available chlorine at Outfall 001 only applies to cooling tower blowdown, and that the monitoring requirements for free available chlorine only apply when the cooling tower blowdown is being discharged from Outfall 001. Mr. Allmon stated that, given the mixed nature of the ultimate discharge, the effluent limitation for free available chlorine allows for inappropriate dilution of cooling tower blowdown water. Mr. Allmon also stated that it would be virtually impossible to distinguish between times when cooling tower water is being discharged from time when cooling tower water is not being discharged. Mr. Allmon suggested that the effluent limitation for free available chlorine should either apply at all times, or that there should be an internal monitoring and compliance point that specifically monitors cooling tower blowdown.

RESPONSE 8:

As previously mentioned, the draft renewal permit was developed in accordance with 40 C.F.R. Part 423 (relating to Steam Electric Power Generating Point Source Category). The effluent limitations contained in the draft renewal permit for free available chlorine at Outfall 001 are consistent with the federal technology-based guidelines for free available chlorine at 40 C.F.R. Part 423.12 (effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT)) and 40 C.F.R. Part 423.13 (effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable (BAT)). Specifically, these limits are required for discharges of cooling tower blowdown and apply after treatment.

In addition to these technology-based effluent limits and as an additional protection against any chlorine toxicity to the receiving stream, the draft renewal permit also requires whole effluent biomonitoring at Outfall 001 to assess whether the effluent has the potential to cause toxic conditions in the receiving stream. The Executive Director does not anticipate inappropriate dilution to occur at Outfall 001, nor does the Executive Director anticipate that the permittee would have any difficulty determining when cooling tower blowdown water is being discharged from Outfall 001.

COMMENT 9: (Sampling at Outfall 002)

Eric Allmon commented that sampling at Outfall 002 is only required during normal working hours when discharge occurs. Mr. Allmon stated that sampling should not be limited to discharges occurring during normal working hours, as contamination is equally dangerous to the receiving stream at all times of day.

RESPONSE 9:

Handling area runoff, washdown and bottom ash transport water, and low volume wastewater are discharged at Outfall 002 on an intermittent and flow variable basis. The wastewater is either collected in a sedimentation pond and routed to an equalization pond before being discharged, or is reused in the facility's Flue Gas Desulfurization (FGD) system. As such, the Executive Director has determined that the sampling requirements at Outfall 002 contained in the draft renewal permit are sufficient to protect water quality.

COMMENT 10: (Antidegradation)

Eric Allmon commented that the construction and operation of the facility as proposed in the draft renewal permit will violate TCEQ's Tier 1 antidegradation requirements, because it will impair the existing uses of the receiving waters. Mr. Allmon also stated that a proper Tier 2 antidegradation analysis had not been performed, and that it had not been shown that the proposed discharge would nor result in a more than *de minimis* lowering of water quality in the receiving waters.

RESPONSE 10:

As previously mentioned, TCEQ rules and Implementation Procedures mandate that the TCEQ's antidegradation policy applies to actions regulated under state and federal authority that would authorize the increase in pollution of water in the state.⁴ Since the permit action at issue is a permit renewal with no increases in pollutant loading, TCEQ rules do not require an antidegradation review to be performed.

COMMENT 11: (General and Numeric Criteria)

Eric Allmon commented that there has not been demonstration that the discharges authorized by the draft permit will not result in a violation of the general and numeric criteria that make up the stream standards set forth in 30 TEX. ADMIN. CODE §§ 307.1 – 307.10.

RESPONSE 11:

The Texas Surface Water Quality Standards (TSWQS) specify narrative and general criteria for the protection of aquatic life and human health in water in the state. The draft permit includes effluent provisions designed to ensure the effluent meets the TSWQS, including narrative criteria to protect and maintain the aesthetics, aquatic life, and habitat. The dissolved oxygen modeling analysis is performed to ensure that the numeric criteria for the dissolved oxygen stream standards in the receiving waters will not be violated.

⁴ 30 TEX. ADMIN. CODE § 307.5(a) (West 2009); Procedures to Implement the Texas Surface Water Quality Standards, RG-194, p. 23 (January 2003).

Because the facility has not discharged in two years, no effluent data was available for screening against the numeric toxic criteria. However, the draft permit contains a provision requiring the permittee to sample and analyze their effluent when discharge commences and to submit this data to the agency. When this occurs, the data will be screened against the applicable criteria and the permit reopened if the data shows that additional effluent limits are required.

COMMENT 12: (Thermal Impacts on Receiving Waters)

Eric Allmon commented that the Applicant has failed to address thermal impacts on receiving waters. Mr. Allmon stated that the Applicant has failed to demonstrate compliance with 30 TEX. ADMIN. CODE § 307.4(f) (relating to Surface Water Temperature).

RESPONSE 12:

30 TEX. ADMIN. CODE § 307.4(f) mandates that the temperature of surface water in the state be maintained so as not to interfere with the reasonable use of such waters. Section 307.4(f) establishes temperature criteria, expressed as a maximum temperature differential from ambient conditions, for certain types of waterbodies. Section 307.4(f) states that additional temperature criteria (expressed as maximum temperatures) for classified segments are specified in Appendix A of 30 TEX. ADMIN. CODE § 307.10.

Cooling towers are used to remove waste heat from effluent before it is discharged. The draft renewal permit authorizes the discharge of cooling tower blowdown at Outfall 001 at a daily maximum temperature of 93°F. Outfall 001 discharges to the original channel of Lynn Creek, then to Lambs Creek, then to Lake Limestone in Segment No. 1252 of the Brazos River Basin. Appendix A of 30 TEX. ADMIN. CODE § 307.10 establishes the maximum temperature criterion for Lake Limestone at 90 °F. The Executive Director does not anticipate that the temperature of the discharge from Outfall 001 will exceed applicable temperature criteria or interfere with the reasonable use of the receiving waters.

COMMENT 13: (Monitoring Requirements)

Eric Allmon commented that the draft renewal permit does not include adequate monitoring requirements to ensure compliance with the terms of the permit, protection of the receiving waters, and compliance with the requirements of 30 TEX. ADMIN. CODE CHAPTER 319.

RESPONSE:

The draft renewal permit was developed in accordance with the Texas Surface Water Quality Standards. These standards are designed to maintain the quality of water in the state and to be protective of human health and the environment. The proposed discharge will be monitored pursuant to the conditions set out in the "Monitoring and

Reporting Requirements” section of the draft permit and 30 TEX. ADMIN. CODE CHAPTER 319.

COMMENT 14: (Dilution)

Eric Allmon commented that the draft renewal permit allows levels of some contaminants produced at the facility to be reduced merely by means of dilution, in violation of 30 TEX. ADMIN. CODE § 319.24.

RESPONSE:

SUBCHAPTER B of 30 TEX. ADMIN. CODE CHAPTER 319 deals with general regulations to be incorporated into permits to control hazardous metals. Hazardous metals include arsenic, barium, cadmium, chromium, copper, lead, manganese, mercury, nickel, selenium, silver, and zinc.⁵ 30 TEX. ADMIN. CODE § 319.22 establishes allowable concentrations of hazardous metals for discharges to inland waters, while 30 TEX. ADMIN. CODE § 319.23 establishes allowable concentrations of hazardous metals for discharges to tidal waters. 30 TEX. ADMIN. CODE § 319.24 prohibits permittees from attaining an allowable concentration of hazardous metals through dilution in lieu of treatment.

The draft renewal permit requires that samples be taken after final treatment and prior to mixing with other water; therefore, no dilution of the samples will occur. Additionally, the final and interim effluent limitations for selenium and copper contained in the draft renewal permit are well below the concentrations established by 30 TEX. ADMIN. CODE § 319.22.

COMMENT 15: (Cooling Water Intake Structures)

Eric Allmon commented that the draft renewal permit has not been shown to meet the requirements of SUBCHAPTER I of 30 TEX. ADMIN. CODE CHAPTER 308 (Criteria Applicable to Cooling Water Intake Structures Under Clean Water Act, § 316(b)). Mr. Allmon stated that intake structures at the site have the potential to have significant impacts that should be fully addressed prior to issuance of the draft renewal permit. Mr. Allmon also stated that the Applicant had not demonstrated compliance with 30 TEX. ADMIN. CODE § 308.91(1) – (10).

RESPONSE 15:

SUBCHAPTER I of 30 TEX. ADMIN. CODE CHAPTER 308 establishes requirements that apply to the location, design, construction, and capacity of cooling water intake structures at new facilities. Since the permit action at issue is a permit renewal at an existing facility, SUBCHAPTER I of 30 TEX. ADMIN. CODE CHAPTER 308 is not applicable.

COMMENT 16: (Domestic Wastewater)

⁵ 30 TEX. ADMIN. CODE § 319.21(4) (West 2009).

Eric Allmon commented that Outfalls 006 and 007 involve the discharge of treated domestic wastewater. Mr. Allmon stated that the Applicant has not demonstrated that the proposed discharge meets the applicable requirements of 30 TEX. ADMIN. CODE CHAPTER 309.

RESPONSE 16:

The draft renewal permit was developed in accordance with 30 TEX. ADMIN. CODE CHAPTER 309. 30 TEX. ADMIN. CODE § 309.3 requires domestic wastewater to achieve secondary treatment before being discharged. In order to achieve secondary treatment, domestic wastewater must meet the following effluent set: 20 mg/L 5-day biochemical oxygen demand (BOD₅), 20 mg/L total suspended solids (TSS), and 2.0 mg/L minimum dissolved oxygen (DO). The effluent limits in the draft renewal permit for Outfalls 006 and 007 are 10 mg/L BOD₅, 15 mg/L TSS, and 4.0 mg/L minimum DO. Furthermore, the effluent limits for Outfalls 006 and 007 in the draft renewal permit are consistent with the requirements of 30 TEX. ADMIN. CODE § 309.3(c), which requires that any discharge made within five miles upstream of a reservoir or lake ... which may be used as a source for public drinking water supply shall achieve, at a minimum, Effluent Set 2 in § 309.4... ." Effluent Set 2 (enhanced secondary treatment) in § 309.4 stipulates effluent limitations for domestic treatment plants of 10 mg/L BOD₅, 15 mg/L TSS, and 4.0 mg/L minimum DO. The Executive Director has determined that the effluent limits contained in the draft renewal permit are consistent with 30 TEX. ADMIN. CODE CHAPTER 309.

COMMENT 17: (Endangered and Threatened Species)

Eric Allmon commented that no demonstration had been made that the facility will not have adverse impacts on endangered and threatened species. Mr. Allmon stated that the TCEQ should consider the impact that impoundments at the facility will have on migratory birds.

RESPONSE 17:

The discharge from the facility is not expected to have an effect on any federal endangered or threatened aquatic or aquatic dependent species, proposed species, or their critical habitat. This determination is based on the United States Fish and Wildlife Service's (USFWS) biological opinion on the State of Texas' authorization to administer the Texas Pollutant Discharge Elimination System (TPDES; September 14, 1998; October 21, 1998 update). To make this determination for TPDES permits, the TCEQ only considered aquatic or aquatic dependent species occurring in watersheds of critical concern or high priority as listed in Appendix A of the USFWS biological opinion.

COMMENT 18: (Coastal Management Program)

Eric Allmon commented that the draft renewal permit has not been demonstrated to be consistent with the regulations of the Coastal Coordination Council. Mr. Allmon

also commented that the issuance of the draft renewal permit is not consistent with the applicable Coastal Management Program goals and policies.

RESPONSE 18:

One of the goals of the Texas Coastal Management Program is to coordinate agency and subdivision decision-making affecting Coastal Natural Resource Areas (CNRA) by establishing clear, objective policies for the management of CNRAs.⁶ A CNRA is a coastal barrier, coastal historic area, coastal preserve, coastal shore area, coastal wetland, critical dune area, critical erosion area, gulf beach, hard substrate reef, oyster reef, submerged land, special hazard area, submerged aquatic vegetation, tidal sand or mud flat, water of the open Gulf of Mexico, or water under tidal influence that is located within the Coastal Zone.⁷ The Coastal Zone is defined by 31 Tex. Admin. Code § 503.1. 31 TEX. ADMIN. CODE § 505.11 sets out an exclusive list of proposed individual agency actions that may adversely affect a CNRA and that therefore must be consistent with Coastal Management Program goals and policies. Before issuing a wastewater discharge permit for a facility that is located within the Coastal Zone, the TCEQ is required to review the issuance of wastewater discharge permits for consistency with Coastal Management Program goals and policies.⁸ The facility that is the subject of this permitting action is not located within the Coastal Zone, therefore this renewal is not subject to the Coastal Management Program.

⁶ 31 TEX. ADMIN. CODE § 501.12(6) (West 2009).

⁷ 31 TEX. ADMIN. CODE § 501.3(a)(5) (West 2009); *Also see* TEX. NAT. RES. CODE § 33.203(1) (West 2009).

⁸ 31 TEX. ADMIN. CODE § 505.11(a)(6)(A) (West 2009).

CHANGES MADE TO THE DRAFT PERMIT IN RESPONSE TO COMMENT

In response to public comment, the Executive Director has corrected a typographical error in the draft renewal permit. The daily average limit for Selenium at Outfall 002, which read "0.168 mg/L," has been revised to read "0.0168 mg/L."

Respectfully submitted,
Texas Commission on Environmental
Quality

Mark R. Vickery, P.G.
Executive Director

Robert Martinez, Director
Environmental Law Division

By 
Timothy J. Reidy, Staff Attorney
Environmental Law Division
State Bar No. 24058069
P.O. Box 13087, MC 173
Austin, Texas 78711-3087
Telephone No. (512) 239-0969
Facsimile No. (512) 239-0606
REPRESENTING THE EXECUTIVE
DIRECTOR OF THE TEXAS
COMMISSION ON ENVIRONMENTAL
QUALITY

CERTIFICATE OF SERVICE

I certify that on July 10, 2009 the "Executive Director's Response to Public Comment" for Permit No. WQ0002430000 was filed with the Texas Commission on Environmental Quality's Office of the Chief Clerk.



Timothy J. Reidy, Staff Attorney
Environmental Law Division
State Bar No. 24058069

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