

Jon Niermann, *Chairman*
Emily Lindley, *Commissioner*
Bobby Janecka, *Commissioner*
Kelly Keel, *Interim Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 17, 2023

TO: All interested persons.

RE: Bahamas Laguna Azure LLC
TPDES Permit No. WQ0016186001

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.** This decision will be considered by the commissioners at a regularly scheduled public meeting before any action is taken on this application unless all requests for contested case hearing or reconsideration have been withdrawn before that meeting.

Enclosed with this letter are instructions to view the Executive Director's Response to Public Comment (RTC) on the Internet. Individuals who would prefer a mailed copy of the RTC or are having trouble accessing the RTC on the website, should contact the Office of the Chief Clerk, by phone at (512) 239-3300 or by email at chiefclk@tceq.texas.gov. A complete copy of the RTC (including the mailing list), complete application, draft permit and related documents, including public comments, are available for review at the TCEQ Central Office. Additionally, a copy of the complete application, the draft permit, and executive director's preliminary decision are available for viewing and copying at C.F. Goodwin Public Library, 309 North Arch Street, Royse City, 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. The procedures for the commission's evaluation of hearing requests/requests for reconsideration are located in 30 Texas Administrative Code Chapter 55, Subchapter F. 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. Your hearing request 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.

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- (2) The name of the applicant, the permit number and other numbers listed above so that your request may be processed properly.
- (3) 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."
- (4) 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;
 - (B) the comments on the application submitted by the group that are the basis of the hearing request; and
 - (C) by name and physical address 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.

Additionally, 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 that were raised **by you** during the public comment period. The request cannot be based solely on issues raised in comments that you have withdrawn.

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 **your** comments that you dispute; 2) the factual basis of the dispute; and 3) list any disputed issues of law.

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 www.tceq.texas.gov/agency/decisions/cc/comments.html or by mail to the following address:

Laurie Gharis, 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 TCEQ's Alternative Dispute Resolution Program 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 Public Education Program, toll free, at 1-800-687-4040.

Sincerely,



Laurie Gharis
Chief Clerk

LG/erg

Enclosure

EXECUTIVE DIRECTOR'S RESPONSE TO PUBLIC COMMENT
for
Bahamas Laguna Azure LLC
TPDES Permit No. WQ0016186001

The Executive Director has made the Response to Public Comment (RTC) for the application by Bahamas Laguna Azure LLC for TPDES Permit No. WQ0016186001 available for viewing on the Internet. You may view and print the document by visiting the TCEQ Commissioners' Integrated Database at the following link:

<https://www.tceq.texas.gov/goto/cid>

In order to view the RTC at the link above, enter the TCEQ ID Number for this application (WQ0016186001) and click the "Search" button. The search results will display a link to the RTC.

Individuals who would prefer a mailed copy of the RTC or are having trouble accessing the RTC on the website, should contact the Office of the Chief Clerk, by phone at (512) 239-3300 or by email at chiefclk@tceq.texas.gov.

Additional Information

For more information on the public participation process, you may contact the Office of the Public Interest Counsel at (512) 239-6363 or call the Public Education Program, toll free, at (800) 687-4040.

A complete copy of the RTC (including the mailing list), the complete application, the draft permit, and related documents, including comments, are available for review at the TCEQ Central Office in Austin, Texas. Additionally, a copy of the complete application, the draft permit, and executive director's preliminary decision are available for viewing and copying at C.F. Goodwin Public Library, 309 North Arch Street, Royse City, Texas.



COMISIÓN DE CALIDAD AMBIENTAL DE TEXAS
Protegiendo a Texas reduciendo y previniendo la contaminación

17 de julio de 2023

TO: Todas las personas interesadas.

RE: Bahamas Laguna Azure LLC
TPDES Permiso No. WQ0016186001

Decisión del Director Ejecutivo.

El director ejecutivo ha tomado la decisión de que la solicitud de permiso mencionada anteriormente cumple con los requisitos de la ley aplicable. **Esta decisión no autoriza la construcción u operación de ninguna instalación propuesta.** Esta decisión será considerada por los comisionados en una reunión pública programada regularmente antes de que se tome cualquier medida sobre esta solicitud, a menos que todas las solicitudes de audiencia o reconsideración de casos impugnados hayan sido retiradas antes de esa reunión.

Se adjuntan a esta carta las instrucciones para ver en Internet la Respuesta del Director Ejecutivo al Comentario Público (RTC). Las personas que prefieran una copia por correo del RTC o que tengan problemas para acceder al RTC en el sitio web, deben comunicarse con la Oficina del Secretario Oficial, por teléfono al (512) 239-3300 o por correo electrónico a chiefclk@tceq.texas.gov. Una copia completa del RTC (incluida la lista de correo), la solicitud completa, el borrador del permiso y los documentos relacionados, incluidos los comentarios públicos, están disponibles para su revisión en la Oficina Central de TCEQ. Además, una copia de la solicitud completa, el borrador del permiso y la decisión preliminar del director ejecutivo están disponibles para ver y copiar en la Biblioteca Pública C.F. Goodwin, 309 North Arch Street, Royse City, Texas.

Si no está de acuerdo con la decisión del director ejecutivo y cree que es una "persona afectada" como se define a continuación, puede solicitar una audiencia de caso impugnado. Además, cualquier persona puede solicitar la reconsideración de la decisión del director ejecutivo. Los procedimientos para la evaluación de la comisión de las solicitudes de audiencia/solicitudes de reconsideración se encuentran en 30 Código Administrativo de Texas, Capítulo 55, Subcapítulo F. A continuación, se presenta una breve descripción de los procedimientos para estas dos solicitudes.

Cómo solicitar una audiencia de caso impugnado.

Es importante que su solicitud incluya toda la información que respalde su derecho a una audiencia de caso impugnado. Su solicitud de audiencia debe demostrar que cumple con los requisitos legales aplicables para que se le conceda su solicitud de audiencia. La consideración de la comisión de su solicitud se basará en la información que usted proporcione.

La solicitud debe incluir lo siguiente:

- (1) Su nombre, dirección, número de teléfono durante el día y, si es posible, un número de fax.
- (2) El nombre del solicitante, el número de permiso y otros números enumerados anteriormente para que su solicitud pueda procesarse adecuadamente.
- (3) Una declaración que exprese claramente que está solicitando una audiencia de caso impugnado. Por ejemplo, la siguiente declaración sería suficiente: "Solicito una audiencia de caso impugnado".
- (4) Si la solicitud es realizada por un grupo o asociación, la solicitud debe identificar:
 - (A) una persona por nombre, dirección, número de teléfono durante el día y, si es posible, el número de fax, de la persona que será responsable de recibir todas las comunicaciones y documentos para el grupo.;
 - (B) los comentarios sobre la solicitud presentada por el grupo que constituyen la base de la solicitud de audiencia; y
 - (C) por nombre y dirección física, uno o más miembros del grupo que de otro modo tendrían derecho a solicitar una audiencia por derecho propio. Los intereses que el grupo busca proteger deben estar relacionados con el propósito de la organización. Ni la reclamación alegada ni la reparación solicitada deben requerir la participación de los miembros individuales en el caso.

Además, su solicitud debe demostrar que usted es una **"persona afectada"**. Una persona afectada es aquella que tiene un interés justiciable personal relacionado con un derecho, deber, privilegio, poder o interés económico legal afectado por la solicitud. Su solicitud debe describir cómo y por qué se vería afectado negativamente por la instalación o actividad propuesta de una manera que no sea común al público en general. Por ejemplo, en la medida en que su solicitud se base en estas preocupaciones, debe describir el impacto probable en su salud, seguridad o usos de su propiedad que puedan verse afectados negativamente por la instalación o las actividades propuestas. Para demostrar que tiene un interés personal justiciable, debe indicar, tan específicamente como pueda, su ubicación y la distancia entre su ubicación y la instalación o actividades propuestas.

Su solicitud debe plantear cuestiones de hecho controvertidas que sean relevantes y materiales para la decisión de la comisión sobre esta solicitud que fueron planteadas **por usted** durante el período de comentarios públicos. La solicitud no puede basarse únicamente en cuestiones planteadas en los comentarios que haya retirado.

Para facilitar la determinación por parte de la comisión del número y alcance de los asuntos que se remitirán a la audiencia, usted debe: 1) especificar cualquiera de las respuestas del director ejecutivo a **sus** comentarios que usted disputa; 2) la base fáctica de la disputa; y 3) enumerar cualquier cuestión de derecho en disputa.

Cómo solicitar la reconsideración de la decisión del Director Ejecutivo.

A diferencia de una solicitud de audiencia de caso impugnado, cualquier persona puede solicitar la reconsideración de la decisión del director ejecutivo. Una solicitud de reconsideración debe contener su nombre, dirección, número de teléfono durante el día y, si es posible, su número de fax. La solicitud debe indicar que está solicitando la reconsideración de la decisión del director ejecutivo, y debe explicar por qué cree que la decisión debe ser reconsiderada.

Fecha límite para la presentación de solicitudes.

La oficina del Secretario Oficial debe **recibir** una solicitud de audiencia de caso impugnado o reconsideración de la decisión del director ejecutivo a más tardar **30 días calendario** después de la fecha de esta carta. Puede enviar su solicitud electrónicamente a www.tceq.texas.gov/agency/decisions/cc/comments.html o por correo a la siguiente dirección:

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


Procesamiento de solicitudes.

Las solicitudes oportunas para una audiencia de caso impugnado o para la reconsideración de la decisión del director ejecutivo se remitirán al Programa de Resolución Alternativa de Disputas de TCEQ y se incluirán en la agenda de una de las reuniones programadas regularmente de la comisión. Las instrucciones adicionales que explican estos procedimientos se enviarán a la lista de correo adjunta cuando se haya programado esta reunión.

Cómo obtener información adicional.

Si tiene alguna pregunta o necesita información adicional sobre los procedimientos descritos en esta carta, llame al Programa de Educación Pública, al número gratuito, 1-800-687-4040.

Atentamente,



Laurie Gharis
Secretaria Oficial

LG/erg

Recinto

RESPUESTA DEL DIRECTOR EJECUTIVO AL COMENTARIO DEL PÚBLICO
para
Bahamas Laguna Azure LLC
TPDES Permiso No. WQ0016186001

El Director Ejecutivo ha puesto a disposición de Internet la respuesta al comentario público (RTC) para la solicitud de Bahamas Laguna Azure LLC del permiso de TPDES No. WQ0016186001. Puede ver e imprimir el documento visitando la Base de Datos Integrada de los Comisionados de TCEQ en el siguiente enlace:

<https://www.tceq.texas.gov/goto/cid>

Para ver el RTC en el enlace anterior, ingrese el número de identificación TCEQ para esta solicitud (WQ0016186001) y haga clic en el botón "Buscar". Los resultados de la búsqueda mostrarán un enlace al RTC.

Las personas que prefieran una copia por correo del RTC o que tengan problemas para acceder al RTC en el sitio web, deben comunicarse con la Oficina del Secretario Oficial, por teléfono al (512) 239-3300 o por correo electrónico a chiefclk@tceq.texas.gov.

Información adicional

Para obtener más información sobre el proceso de participación pública, puede comunicarse con la Oficina del Asesor de Interés Público al (512) 239-6363 o llamar al Programa de Educación Pública, al número gratuito, (800) 687-4040.

Una copia completa del RTC (incluida la lista de correo), la solicitud completa, el borrador del permiso y los documentos relacionados, incluidos los comentarios, están disponibles para su revisión en la Oficina Central de TCEQ en Austin, Texas. Además, una copia de la solicitud completa, el borrador del permiso y la decisión preliminar del director ejecutivo están disponibles para ver y copiar en la Biblioteca Pública C.F. Goodwin, 309 North Arch Street, Royse City, Texas.

MAILING LIST / LISTA DE CORREO
for / para
Bahamas Laguna Azure LLC
TPDES Permit No. WQ0016186001 / TPDES Permiso No. WQ0016186001

FOR THE APPLICANT /
PARA EL SOLICITANTE:

Laura Preston
LJA Engineering Inc.
6060 North Central Expressway, Suite 400
Dallas, Texas 75206

Meredith McCall
LJA Engineering Inc.
6060 North Central Expressway, Suite 400
Dallas, Texas 75206

INTERESTED PERSONS /
PERSONAS INTERESADAS:

See attached list.

FOR THE EXECUTIVE DIRECTOR / PARA
EL DIRECTOR EJECUTIVO
via electronic mail /
por correo electrónico:

Ryan Vise, Deputy Director
Texas Commission on Environmental
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External Relations Division
Public Education Program MC-108
P.O. Box 13087
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Michael T. Parr II, Staff Attorney
Texas Commission on Environmental
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Abdur Rahim, Technical Staff
Texas Commission on Environmental
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Water Quality Division MC-148
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Austin, Texas 78711-3087

FOR PUBLIC INTEREST COUNSEL /
PARA ABOGADOS DE INTERÉS PÚBLICO
via electronic mail /
por correo electrónico:

Garrett T. Arthur, Attorney
Texas Commission on Environmental
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FOR THE CHIEF CLERK /
PARA EL SECRETARIO OFICIAL
via electronic mail
por correo electrónico:

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Office of Chief Clerk MC-105
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KALISEK , LAUREN J
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AUSTIN TX 78701-2442

NEW TPDES PERMIT NO. WQ0016186001

APPLICATION BY
BAHAMAS LAGUNA AZURE LLC,
FOR TPDES PERMIT NO.
WQ0016186001

§
§
§
§

BEFORE
THE TEXAS COMMISSION
ON ENVIRONMENTAL
QUALITY

EXECUTIVE DIRECTOR'S RESPONSE TO PUBLIC COMMENT

I. INTRODUCTION

The Executive Director of the Texas Commission on Environmental Quality, or "TCEQ," files this Response to Public Comment on the application by Bahamas Laguna Azure LLC, for new Texas Pollutant Discharge Elimination System Permit number WQ0016186001, and on the Executive Director's preliminary decision on the application. Before a permit is issued, the Executive Director is required by Title 30 of the Texas Administrative Code, Section 55.156 to prepare a response to all timely, relevant, and material, or significant comments. The TCEQ's Office of the Chief Clerk, or "OCC," received timely comments from Jeffrey Hepler, Wes Crenshaw, North Texas Municipal Water District, and Royse City, a Texas Home Rule-municipality. This response addresses all comments received by the OCC in writing during the public comment period, or at a public meeting held by the OCC, whether withdrawn or not. If anyone needs more information about this permit application or the TPDES permitting process, please call the TCEQ's Public Education Program at 1-800-687-4040. General information about the TCEQ can be found on TCEQ's website at <http://www.tceq.texas.gov>.

A. *Terms, Acronyms, or Abbreviations Used in this Response to Comments*

- §: Section
- IH: Interstate Highway
- ED: TCEQ's Executive Director
- FM: Farm-to-Market Road
- DO: Dissolved Oxygen
- No.: Number
- WQ: Water Quality
- CCI: Comprehensive Compliance Investigation
- TSS: Total Suspended Solids
- EPA: United States Environmental Protection Agency
- LUE: Living Equivalent Unit
- SNC: Significant Noncompliance
- CFU: Colony Forming Units
- OCE: TCEQ's Office of Compliance and Enforcement
- ALU: Aquatic Life Use
- CCN: Certificate of Convenience and Necessity
- OCC: TCEQ's Office of the Chief Clerk
- MPN: Most Probable Number
- TWC: Texas Water Code

- **CWA:** Clean Water Act
- **RWA:** Receiving Water Assessment
- **MGD:** Million Gallons per Day
- **WQD:** TCEQ's Water Quality Division
- **USGS:** The United States' Geological Survey agency
- **NORI:** Notice of Receipt & Intent to Obtain a Water Quality Permit
- **THSC:** Texas Health and Safety Code
- **NAPD:** Notice of Application & Preliminary Decision
- **NOPM:** Notice of Public Meeting
- ***E. coli:*** *Escherichia coli*-bacteria
- **NH₃-N:** Ammonia Nitrogen
- **CBOD₅:** Five-day Carbonaceous Biochemical Oxygen Demand
- **Limits:** Effluent Limitations/discharge limits
- **WWTF:** Wastewater Treatment Facility
- **WQMP:** State of Texas Water Quality Management Plan
- **TPDES:** Texas Pollutant Discharge Elimination System
- **USFWS:** United States' Fish and Wildlife Service
- **Outfall:** Discharge point/location
- **TSWQS:** Texas Surface Water Quality Standards – 30 TAC Chapter 307
- **30 TAC:** Title 30 of the Texas Administrative Code
- **Effluent:** Treated wastewater discharging out of WWTF
- **Influent:** Untreated wastewater flowing into a WWTF
- **DO limit:** Minimum Dissolved Oxygen Criterion
- **NTMWD:** North Texas Municipal Water District
- **WQ Uses:** A waterbody's designated WQ uses from Appendix A, TSWQS
- **Applicant:** Bahamas Laguna Azure LLC
- **217 Rules:** 30 TAC Chapter 217-Design Criteria for Domestic WWTFs
- **Discharge:** A flow of treated wastewater emanating from a WWTF
- **WQD staff:** TCEQ Staff from the Water Quality Division
- **Royse City:** The City of Royse City and its Mayor, Clay Ellis
- **TCEQ Rules:** Title 30 of the Texas Administrative Code
- **Commission:** Texas Commission on Environmental Quality
- **Tier I Review:** The TSWQS Tier I Antidegradation Review
- **Tier II Review:** The TSWQS Tier II Antidegradation Review
- **Modeling Team:** WQD's Water Quality Assessment Team
- **The Application:** Bahamas Laguna Azure LLC's application for a TPDES permit
- **Standards Team:** WQD's Water Quality Standards Implementation Team
- **Proposed permit:** Draft-TPDES permit No. WQ0016186001
- **Proposed facility:** The Applicant's proposed WWTF
- **Proposed discharge:** The discharge emanating from the proposed facility.
- **Appendix A, TSWQS:** Appendix A of 30 TAC § 307.10
- **CWA § 303(d) List:** Texas' inventory of threatened or impaired waterbodies listed in Clean Water Act § 303(d) for 2020.
- **TCEQ's IPs:** TCEQ's *Implementation Procedures for the Texas Surface*

II. BACKGROUND

A. *Application Request*

The Applicant applied for new TPDES Permit No. WQ0016186001 that authorizes the proposed discharge at a daily average flow limit of 0.125, 0.250, and 0.525 MGD in the proposed permit's Interim I, Interim II, and Final phases (respectively).

B. *Description of Facility and Discharge Route*

If the proposed permit is ultimately issued, the proposed facility will be located approximately two miles southeast of the intersection of FM-548 and IH-30 in Rockwall County, Texas 75189, and will be an activated sludge process plant operated in the Complete Mix mode. Treatment units for Interim Phase I consist of a bar screen, a final clarifier, a chlorine contact chamber, two aeration basins, and two sludge digesters. Interim Phase II units mirror that of Interim Phase I, but include two additional aeration basins and sludge digesters. Treatment units in the Final Phase consist of a bar screen, two final clarifiers, two chlorine contact chambers, five aeration basins, and five sludge digesters. Additionally, the proposed permit authorizes the disposal of sludge at any TCEQ-authorized land application site, co-disposal landfill, WWTF, or facility that further processes sludge.

The route of the proposed discharge is to an unnamed tributary, then Sabine Creek, then the South Fork Sabine River, and then to Lake Tawakoni in Segment No. 0507 of the Sabine River Basin.

C. *ED's Technical Review of an Application*

The basis for the ED's Technical Review of a TPDES permit application comes from the Texas Legislature's passage of Chapter 26 (Water Quality Control) of the TWC into law, which gives the TCEQ primary authority over WQ in Texas. Chapter 26 combines the TCEQ's WQ authority with federally delegated CWA regulatory authority for the TPDES program, which controls discharges of pollutants into Texas' surface waterbodies, otherwise defined by the TWC as "Water in the State." To implement TCEQ's WQ control regime, Chapter 26 grants the TCEQ the authority to issue permits (and amendments) for the discharge of waste or pollutants into, or adjacent to Water in the State, so long as the parameters established through the ED's Technical Review of the discharge, comply with the TWC, TCEQ rules, and the TSWQS. However, the TCEQ may refuse to issue a permit when the ED's Technical Review finds that issuing the permit would violate the provisions of any state or federal law or rules or regulations derived from those laws, or when it finds that issuing the permit would interfere with the TCEQ's WQ control regime.

Thus, the WQD staff performing the ED's Technical Review are responsible for evaluating a discharge's impacts on the receiving waterbodies and their designated WQ uses within the proposed discharge route starting at the outfall and providing proper limits to protect those WQ uses as the TSWQS require. To ensure compliance with the TSWQS, WQD staff follow the prescribed methodology in the TCEQ's IPs for drafting a permit, its limits, requirements, and conditions.

With a goal of maintaining a level of WQ sufficient to protect the existing WQ uses of the receiving surface waterbodies of the proposed discharge, WQD staff on the Standards and Modeling Teams review the application according to the TSWQS and the TCEQ's IPs and perform multiple WQ-specific analyses.

The first component of the ED's Technical Review involves the Standards Team reviewing, within the route of the proposed discharge, the classifications, designations, and descriptions of the receiving surface waterbodies in the state. Available information, or an RWA allows the Standards Team to determine the ALUs in the proposed discharge's area of impact and assign the corresponding DO limits specified in the TCEQ's IPs and the TSWQS (30 TAC § 307.5).

The designated WQ uses for Segment No. 0507, as stated in the 2018 TSWQS-Appendix A, are primary contact recreation, public water supply, and "high" ALU, with a corresponding DO criterion of 5.0 mg/L. The DO criterion for the unnamed tributary is 2.0 mg/L DO, whereas Sabine Creek and the South Fork Sabine River are both 3.0 mg/L DO. All three waterbodies have "limited" ALUs.

According to the TSWQS and the TCEQ's IPs, for every new discharge the Standards Team performs an Antidegradation Review of the proposed discharge into its receiving waterbodies, in this case, the unnamed tributary, Sabine Creek, South Fork Sabine River, and Lake Tawakoni in Segment No. 0507 of the Sabine River Basin.

The Standards Team reviewed the application in conformity with the TSWQS (30 TAC §§ 307.4 (h) and (l)) because the proposed discharge is directly to an unclassified water body (the unnamed tributary) and then performed a Tier I Review on the receiving waterbodies and determined that there is no expectation of impairment of existing WQ uses because the proposed discharge has limits designed to maintain numerical and narrative criteria to protect existing WQ uses.

Additionally, because the Standards Team's ALU determinations were "limited" for the unnamed tributary, Sabine Creek, and the South Fork Sabine River, the Standards Team's review did not find that any waterbodies with "exceptional," "high," or "intermediate" ALUs were present within the stream reach assessed, and no Tier II Review was required, nor performed. However, significant degradation of WQ is not expected in waterbodies with "exceptional," "high," or "intermediate" ALUs downstream of the proposed facility because the proposed permit's WQ-related effluent limitations, as established by the Modeling Team's DO analyses, will maintain and protect the existing instream uses.

The second component of the ED's Technical Review involves the Modeling Team performing WQ modeling runs, or DO analyses, using a mathematical model; in this case, an "uncalibrated QUAL-TX model." Conventional effluent limitations such as DO, CBOD₅, and NH₃-N are based on stream standards and waste load allocations for WQ-limited streams as established in the TSWQS and the WQMP.

Based on the Modeling Team's DO analyses, limits in all phases of the proposed permit of 10.0 mg/L CBOD₅, 3.0 mg/L NH₃-N, and 4.0 mg/L DO, based on a 30-day average, are predicted to be necessary to ensure that DO will be maintained above the criterion established by the Standards Team for the unnamed tributary, Sabine Creek, and the South Fork Sabine River (2.0, 3.0, 3.0 mg/L DO, respectively).

Coefficients and kinetics used in the model are a combination of site specific, standardized default, and estimated values. The proposed permit requires that the discharge's pH must be in the range of 6.0 to 9.0 standard units and includes limits of 15 mg/L TSS and 126 CFU/MPN/100 ml, based on a 30-day average. During the Interim I and II phases, the discharge must contain a total chlorine residual of at least 1.0 mg/L and must not exceed a total chlorine residual of 4.0 mg/L after a detention time of at least 20 minutes based on peak flow with required monitoring of five times per week by grab sample. During the Final Phase, the discharge must contain a total

chlorine residual of at least 1.0 mg/L after a detention time of at least 20 minutes based on peak flow and must be monitored daily by grab sample. The discharge must be dechlorinated to less than 0.1 mg/L total chlorine residual and must be monitored daily for total chlorine residual by grab sample after the dechlorination process.

The effluent limits and conditions in the proposed permit meet requirements for secondary treatment and disinfection according to 30 TAC Chapter 309 (Subchapter A: Effluent Limits) and comply with the TSWQS (30 TAC §§ 307.1-.10, *eff.* 3/1/2018), and the EPA-approved portions of the TSWQS (*eff.* 3/6/2014). In a case such as this, end-of-pipe compliance with pH limits between 6.0 and 9.0 standard units reasonably assures instream compliance with pH criteria in the TSWQS when the discharge authorized is from a minor facility and the unclassified waterbodies have “minimal” or “limited” ALUs. This technology-based approach reasonably assures instream compliance with TSWQS due to relatively smaller discharge volumes authorized by these permits. TCEQ sampling conducted throughout Texas indicating instream buffering quickly restores pH levels to ambient conditions, informs this conservative approach.

Segment No. 0507 is not currently listed on the CWA § 303(d) list; however, South Fork Sabine River (0507-G) is listed for bacteria in water from the confluence of Lake Tawakoni upstream to the confluence of Parker and Sabine Creeks (AU 0507G_01). The proposed facility is designed to provide adequate disinfection and, when operated properly, should not add to any bacterial impairments of the segment. Additionally, to ensure the proposed discharge meets the stream bacterial standard, the proposed permit includes an *E. coli* limit of 126 CFU/MPN per 100 ml.

The proposed permit is not expected to impact any federal endangered or threatened aquatic or aquatic dependent species or proposed species or their critical habitat. This expectation is based on the USFWS biological opinion on the State of Texas’ authorization of the TPDES program (September 14, 1998; October 21, 1998 (*update*)). To make this determination for TPDES permits, the TCEQ and EPA 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. This determination is subject to reevaluation due to subsequent updates or amendments to the biological opinion. With respect to the presence of endangered or threatened species, the proposed permit does not require EPA’s review.

Through the Technical Review, the WQD provides the proper limits to maintain and protect the existing instream uses. For that reason, the ED has determined that the proposed permit, if issued, meets all statutory and regulatory requirements and is protective of the environment, WQ, and human health. Considering the TCEQ’s WQ control regime, all determinations, reviews, or analyses related to the ED’s Technical Review of the application for the proposed permit can be reexamined and subsequently modified upon receipt of newer information or information that conflicts with the bases employed in the applicable review or analysis.

D. Procedural Background

The TCEQ received the application on July 1, 2022, and declared it administratively complete on August 10, 2022. The Applicant published the NORI in Rockwall County, Texas in English in the *Herald Banner* on August 25, 2022, and in Spanish in *Al-Dia* on August 24, 2022. The ED completed the technical review of the application on November 9, 2022, and prepared the proposed permit, which if approved, would establish the conditions under which the proposed facility must operate. The Applicant next published a combined NAPD and NOPM in Rockwall County, Texas in

English in the *Herald Banner* on March 10, 2023, and in Spanish in *Al-Dia* on March 8, 2023. The TCEQ's OCC held a public meeting for this application on April 13, 2023, with the public comment period ending at the close of that public meeting.

Because this application was received after September 1, 2015, and because it was declared administratively complete after September 1, 1999, it is subject to both the procedural requirements adopted pursuant to House Bill 801, 76th Legislature, 1999, and the procedural requirements and rules implementing Senate Bill 709, 84th Legislature, 2015, which are implemented by the Commission in its rules in 30 TAC Chapters 39, 50, and 55.

E. Access to Rules, Laws, and Records

- All administrative rules: Secretary of State Website: www.sos.state.tx.us
- TCEQ rules: Title 30 of the Texas Administrative Code: www.sos.state.tx.us/tac/ (select TAC Viewer on the right, then Title 30 Environmental Quality)
- Texas statutes: www.statutes.capitol.texas.gov
- TCEQ website: www.tceq.texas.gov (for downloadable rules in WordPerfect or Adobe PDF formats, select "Rules, Policy, & Legislation," then "Current TCEQ Rules," then "Download TCEQ Rules").
- Federal rules: Title 40 of the Code of Federal Regulations (C.F.R.) http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title40/40tab_02.tpl
- Federal environmental laws: <http://www.epa.gov/lawsregs/>
- **Environmental or citizen complaints may be filed electronically at:** <https://www.tceq.texas.gov/compliance/complaints/index.html> (select "use our online form") or by sending an email to the following address: complaint@TCEQ.Texas.gov.

Commission records for the Proposed facility are available for viewing and copying at TCEQ's main office in Austin at 12100 Park 35 Circle, Building F, 1st Floor in the OCC, for the current application until final action is taken). Some documents located at the OCC may also be found in the TCEQ Commissioners' Integrated Database at www.tceq.texas.gov/goto/cid.

The permit application has been available for viewing and copying at the C.F. Goodwin Public Library Public Library located at 309 North Arch Street, Royse City, Texas, since publication of the NORI. The final application, proposed permit, technical summary, and the ED's preliminary decision are now available for viewing and copying at the same location since publication of the combined NAPD and NOPM.

If individuals wish to file a complaint about the proposed facility concerning its compliance with the provisions of its permit or with TCEQ rules, the TCEQ's OCE should be contacted. Specifically, the DFW Regional Office (Region 4) in Fort Worth Texas, Texas may be contacted at (817) 588-5800 or the statewide toll-free number at 1-888-777-3186 to address potential permit violations. In addition, complaints may be filed electronically by using the methods described above at the seventh bullet under "Access to Rules, Laws, and Records." If an inspection by the TCEQ finds that the Applicant is not complying with all requirements of the proposed permit, or that the proposed facility is out of compliance with TCEQ rules, enforcement actions may arise.

III. COMMENTS AND RESPONSES

COMMENT 1:

Jeffrey Hepler, Wes Crenshaw, NTMWD, and Royce City all commented in opposition of the proposed facility, its location, and its discharge. Mr. Helper commented that because the Applicant has no history of doing business in Texas, and no connection to the State or Royce City, the TCEQ should deny the permit.

RESPONSE 1:

The ED acknowledges the comments in opposition to the proposed permit, the proposed facility, the proposed facility's location, and the concerns expressed by Mr. Helper about the Applicant's ties to Texas and Royce City.

However, the TCEQ is statutorily mandated by TWC § 26.028 (Action on Application) to begin processing applications for TPDES permits, when it receives the application, and to issue notices to the public of the TCEQ's processing of the application. Likewise, TWC § 26.027 makes clear that the TCEQ may issue permits for discharges into Water in the State through the ED's evaluation of TPDES permit applications using the information provided in the application and recommending permit issuance or denial, based on the application's compliance with the TWC, TCEQ rules, and the TSWQS (30 TAC Chapter 307).

The applicant is the entity that proposes the location of the WWTF, the discharge point, and the route for the proposed discharge, rather than the ED. Instead, the ED may only evaluate a location for a WWTF according to what is proposed in the application, the Location Standards of the TCEQ rules, and the impact of the discharge on the WQ uses of the receiving streams starting at the outfall. Likewise, the TCEQ's WQ authority does not include the ability to mandate a different location for a WWTF, if the location in the application complies with 30 TAC Chapter 309, Subchapter B (Location Standards), specifically 30 TAC § 309.13 pertaining to "Unsuitable Site Characteristics" for a discharge facility.

If an applicant were to revise its application with a different location and discharge route for a WWTF, the ED would reevaluate the new location and discharge route to make sure that the permit contains proper limits and conditions for the revised discharge route and location, which may require notice to additional landowners because of the new location and discharge route.

Texas' WQ control regime, Chapter 26 of the TWC, does not, nor does TCEQ's regulatory authority, limit who can apply for a TPDES permit. The rules related to applications for TCEQ authorizations for business entities require registration to do business in Texas with the Texas Secretary of State. The TCEQ rules related to operating a WWTF, found at 30 TAC Chapter 30 (Occupational Licenses and Registrations), do not require an Applicant to have previous experience in operating a WWTF. Other Requirement No.1 of the proposed permit provides that the Applicant must employ or contract with one or more licensed WWTF operators, or companies specializing in Wastewater System operations, holding a valid license or registration according to the requirements of 30 TAC Chapter 30, specifically subchapter J (Wastewater Operators and Operations Companies).

COMMENT 2:

Jeffrey Helper commented that the proposed facility and its discharge will negatively affect human health, existing WQ, the environment, and wildlife.

RESPONSE 2:

The TCEQ takes the concerns and comments expressed by the public about protecting the State's rivers and lakes, human health, existing WQ, the environment, and animal, aquatic, terrestrial, and wildlife, into consideration in deciding whether to issue a TPDES permit.

Similarly, the ED carefully considers the health concerns of area residents, as well as those of the public when reviewing applications for wastewater discharge permits.

As mentioned above, the federal CWA, the TWC, and the TSWQS all contain WQ goals, standards, and requirements that any TPDES-permitted discharge, and its method of achieving that quality, must meet. Equally important, WQD staff evaluated the application as an authorization to discharge treated wastewater into Water in the State, which requires adherence to the same goals, standards, and requirements.

Chapter 26 of the TWC and TCEQ's WQ were written for the protection of human health, existing WQ, the environment, and animal, aquatic, terrestrial, and wildlife. Accordingly, the stated policy of both the TWC and the TSWQS is:

to maintain the quality of water in the state consistent with the public health and enjoyment, the propagation and protection of terrestrial and aquatic life, and the operation of existing industries, taking into consideration the economic development of the state; to encourage and promote the development and use of regional and area-wide waste collection, treatment, and disposal systems to serve the waste disposal needs of the citizens of the state; and to require the use of all reasonable methods to implement this policy.¹

The TSWQS is a primary mechanism for the TCEQ to protect human health, surface and groundwater quality, aquatic life, the environment, and specifically, the designated WQ uses of the receiving waters. The TSWQS require that discharges not cause surface waters to be toxic to aquatic life, terrestrial wildlife, livestock, or domestic animals, not degrade receiving waters, and not result in situations that impair existing, attainable, or designated uses. Similarly, the TPDES program mandates that TPDES-permitted discharges of treated effluent into Water in the State meet the requirements of the TSWQS. To ensure compliance with the TSWQS the ED follows the methodology outlined in the TCEQ's IPs.

As specified in the TCEQ's IPs methodologies, TPDES permits must maintain WQ in the state to preclude adverse toxic effects on human health resulting from contact recreation, consumption of aquatic organisms, consumption of drinking water, or any combination of the three. Additionally, the TSWQS require that TPDES-permitted discharges not cause surface waters to be toxic to aquatic life, terrestrial wildlife, livestock, or domestic animals, not degrade receiving waters, and not result in situations that impair existing, attainable, or designated uses.

The goal of WQD staff is to design permits that meet the TSWQS for the protection of existing uses of waterbodies, human health, existing WQ uses, the environment, and animal, aquatic, terrestrial, and wildlife. These standards include specific numeric and

¹ Texas Water Code § 26.003 and 30 TAC § 307.1.

narrative WQ criteria applicable to the waterbodies receiving the discharge. WQD staff designed the proposed permit to be protective of the uses of all water bodies that could be potentially affected by the proposed discharge.

To achieve the goal of supporting a level of WQ sufficient to protect existing uses of waterbodies, the proposed permit contains several WQ-specific parameters or requirements that limit the potential impact of the discharge on the receiving waters of the discharge route. The Applicant is required to build a wastewater collection system or treatment facility according to the plans and specifications approved by the ED and must ensure the proposed facility's plans and specifications meet all design requirements in the proposed permit. The proposed permit also requires the Applicant to "take all reasonable steps to minimize or prevent any discharge or sludge use or disposal or other permit violation that has a reasonable likelihood of adversely affecting human health."

WQD Staff determined that the proposed permit complies with the TSWQS, ensuring that the effluent discharged is protective of human health. This is because WQD Staff drafted the proposed permit with provisions ensuring the TSWQS are maintained, which ensures that the proposed discharge is protective of human health, existing WQ, the environment, and animal, aquatic, terrestrial, and wildlife. Because Waters in the State must be maintained to preclude adverse toxic effects on human health resulting from contact recreation, consumption of aquatic organisms, consumption of drinking water, or any combination of the three, WQD Staff must determine that the proposed permit's provisions ensure that the TSWQS will be maintained by the proposed discharge resulting in protection of human health, aquatic life, and the environment.

Likewise, the proposed permit's effluent limits will protect the WQ uses and WQ of the waterbodies in the route of the proposed discharge for the benefit of the aquatic life and terrestrial wildlife that depend on it. This is because the methodology outlined in the TCEQ IPs is designed to ensure that no source will be allowed to discharge any wastewater that: 1) results in instream aquatic toxicity; 2) causes a violation of an applicable narrative or numerical state water quality standard; 3) results in the endangerment of a drinking water supply; or 4) results in aquatic bioaccumulation that threatens human health.

Protecting WQ in the creeks and streams of the discharge route are the assigned ALUs themselves, which govern what WQ uses and criteria will apply to protect Segment No. 0507 and the creeks upstream of Segment No. 0507, their ALUs, and the aquatic life that dwell in them, as well as consumption by terrestrial wildlife. The proposed facility is a minor municipal facility that will discharge first to an unnamed tributary, which is unclassified and has a "limited" ALU, and then to Sabine Creek, then the South Fork Sabine River, both of which also have "limited" ALUs, and then to Lake Tawakoni in Segment No. 0507, which has a "high" ALU. Waterbodies, such as the unnamed tributary, Sabine Creek, and the South Fork Sabine River that support only "limited" ALUs still have criteria that protect both the aquatic life that live in the waterbodies and terrestrial wildlife that use the waterbodies as a source of water or food. To ensure that DO will be maintained above the criterion established by the Standards Team for the unnamed tributary, Sabine Creek, and the South Fork Sabine River (2.0, 3.0, 3.0 mg/L DO, respectively), the proposed discharge has a DO limit of 4.0 mg/L so that it can meet a DO criterion that supports an aquatic community with a "limited" ALUs (2.0 and 3.0 mg/l DO) but will not negatively affect waterbodies that support a "high" ALU, such as Lake Tawakoni (5.0 mg/L DO).

DO concentrations are critical for the health of waterbodies and protecting aquatic life so, to ensure protective discharge limits in the proposed permit, DO modeling analyses were performed to evaluate the potential instream DO impacts of discharges into surface waters by the Modeling Team. All discharge scenarios are different and are modeled as part of the ED's Technical review, with the DO-related components included to evaluate the potential overall impact on instream DO levels. Instream DO levels are affected by various factors, including potential direct DO impacts by oxygen-demanding constituents in the proposed discharge, such as CBOD₅, NH₃-N, and DO, which are the specific discharge limits determined by the DO modeling analyses.

WQD Staff designed the proposed permit to preclude degradation of WQ in Lake Tawakoni and Segment No. 0507 by including effluent limits and monitoring requirements designed to ensure protection of the waterbodies according to the TCEQ rules and procedures. Similarly, the proposed discharge will not cause degradation of WQ in waterbodies that exceed fishable/swimmable quality, such as Lake Tawakoni in Segment No. 0507. Fishable/swimmable waters are defined as waters that have quality sufficient to support propagation of indigenous fish, shellfish, terrestrial life, and recreation in or on the water. The proposed permit's effluent limits and conditions were derived from a rigorous technical review to ensure compliance with the TSWQS.

Similarly, the proposed permit was developed to protect human health, animal life, vegetation, and aquatic and terrestrial life according to the TSWQS, provided the Applicant operates and maintains the proposed facility according to TCEQ rules and the requirements in the proposed permit.

WQD staff, when evaluating this application, incorporated pertinent site-specific factors to reduce uncertainty and bolster confidence in the results of the analyses of the ED's Technical Review. The effluent or discharge limitations for some of the major constituents were evaluated with a mathematical model of the receiving waters, and results indicated that limits of 10 mg/L CBOD₅, 15 mg/L TSS, 3.0 mg/L NH₃-N, 126 CFU/MPN/100 ml *E. coli*, and 4.0 mg/L DO are required for the proposed facility to discharge to the receiving streams of the proposed discharge route.

Additional protection of human health in a TPDES permit comes from the rule in 30 TAC § 309.3(g)(1) (Disinfection), which requires disinfection of domestic wastewater into water in the state in a manner conducive to the protection of both public health and aquatic life. The rules do not mandate a specific method of disinfection, as a permittee may disinfect domestic wastewater through use of 1) chlorination, 2) ultra-violet light, or 3) an equivalent method of disinfection with prior approval from the ED. Whichever form is used, the design criteria for chemical disinfection by chlorine, including safety requirements, in 30 TAC Chapter 217, Subchapter K must be observed. Therefore, in accordance with the TCEQ rules (30 TAC § 309.3(g)(1)), the proposed permit requires the treated effluent to be disinfected prior to discharge in a manner conducive to protect both the public health and aquatic life.

For the proposed facility, the Applicant has chosen chlorine disinfection. Chlorination may be via gaseous, liquid, or tablet forms. Chlorine is one of the most practical and effective means of disinfection because it can kill disease-causing bacteria and nuisance organisms and can eliminate certain noxious odors during disinfection.² The discharge from the proposed facility, disinfected with chlorine, must contain a chlorine residual of at least 1.0 mg/L. The permit limit for maximum total

² U.S. EPA *Wastewater Technology Fact Sheet- Chlorine Disinfection* (EPA 832-F-99-062)

chlorine residual is 4.0 mg/L after a detention time of at least 20 minutes (based on peak flow), which must be monitored five times per week by grab sample.³

Relatedly, the TCEQ's issuance of a permit does not authorize injuries to other persons, their property, or an invasion of their property rights. Similarly, the proposed permit's provisions do not, nor the scope of TCEQ's regulatory jurisdiction, limit nearby landowners' ability to use a court of law's remedies for trespass, nuisance, or other causes of action from a TCEQ-authorized entity's activities, that may or do result in injury to property, animals, vegetation, or human health or welfare, or interfere with the use and enjoyment of their property.

Likewise, the Applicant has a duty to comply with all conditions of the proposed permit. Failure to comply with any permit condition is grounds for enforcement actions, permit amendments, revocations, suspensions, denial of a permit renewal applications, or even an application for a permit for another facility. This is because permit violations constitute violations of the permit and the TWC or the THSC.

If the proposed facility, its discharge, or the Applicant create any nuisance conditions, the TCEQ may be contacted to investigate if potential permit violations occurred by the methods described above on page five at the seventh bullet under "Access to Rules, Laws, and Records."

The TCEQ's OCE plays an important role in protecting human health because it ensures that the Applicant, its operator, and the proposed facility follow applicable state and federal regulations. The TCEQ Regional Office (Region 4) office is required to conduct a mandatory CCI at minor facilities (facilities with permitted flow less than 1 MGD) once every five fiscal years. Additional mandatory investigations can be required if the proposed facility is categorized as SNC. SNC is determined by the Compliance Monitoring Section of the TCEQ's OCE and is based on self-reported effluent violations.

COMMENT 3:

Jeffrey Helper commented that mistakes at the proposed facility will lead to spills causing contamination and negatively affecting the ability of the public to recreate in Lake Tawakoni and the Sabine River.

RESPONSE 3:

The ability of the public to recreate in the waters of Texas is given significant consideration in the review of an application for, and the decision to issue a wastewater discharge permit. All waterbodies in the state are considered as having primary contact recreational use, which includes activities that are presumed to involve a significant risk of ingestion of water. These activities are defined by the Texas Parks and Wildlife Code § 66.115, and unless otherwise specified in the TSWQS, these activities include wading by children, swimming, water skiing, diving, tubing, surfing, hand-fishing, and whitewater activities like kayaking, canoeing, and rafting.

The Tier 1 Antidegradation review conducted by the Standards Team during the ED's Technical review, indicates that the existing uses of the receiving streams, including primary contact recreation, will be maintained and protected from discharges made in compliance with the proposed permit.

³ Bahamas Laguna Azure LLC, Draft Permit, Effluent Limitations and Monitoring Requirements, p.2; *see also* 30 TEX. ADMIN. CODE § 309.3(g)(2)

Also protecting the recreational users of Lake Tawakoni and the Sabine River, and their primary contact recreational use, is the rule in 30 TAC § 309.3(g)(1) (Disinfection), which requires that disinfection of domestic wastewater must be protective of both public health and aquatic life. The rules do not mandate a specific method of disinfection, as a permittee may disinfect domestic wastewater through use of 1) chlorination, 2) ultra-violet light, or 3) an equivalent method of disinfection with prior approval from the ED. For the proposed facility, the Applicant has chosen chlorine disinfection. Chlorination may be via gaseous, liquid, or tablet forms; however, the design criteria for chemical disinfection by chlorine, including safety requirements, in 30 TAC Chapter 217, Subchapter K must be observed. Chlorine is the one of the most practical and effective means of disinfection because it can kill disease-causing bacteria and nuisance organisms and can eliminate certain noxious odors during disinfection.⁴ The discharge from the proposed facility, disinfected with chlorine, must contain a chlorine residual of at least 1.0 mg/L and the permit limit for maximum total chlorine residual is 4.0 mg/L after a detention time of at least 20 minutes (based on peak flow) and must be monitored five times per week by grab sample.⁵

The proposed permit was developed according to the TSWQS and the TCEQ IPs to be protective of WQ and maintain the recreational uses of the waterbodies in the route of the proposed discharge, provided that the Applicant operates and maintains the proposed facility according to TCEQ rules and the proposed permit's requirements.

It is the Applicant's responsibility to hire the appropriate operator and although any operator selected by the Applicant is required to operate and perform the appropriate maintenance according to the TCEQ rules and proposed permit, the Applicant is always required to ensure that the proposed facility and all its systems of collection, treatment, and disposal are properly operated and maintained.

According to 30 TAC § 30.350, the proposed permit requires the proposed facility to be operated by a chief operator or an operator holding a Category C license or higher (Figure: 30 TAC § 30.350(e)). The ED determines the level of operator required based on the treatment technology and the maximum permitted flow. A Class C operator must have a high school diploma (or equivalent), two years of work experience and 60 hours of training.

The proposed facility must be operated a minimum of five days a week by the licensed chief operator or an operator holding the required level of license or higher. In addition, the Applicant may contract with a licensed operator or operations company for the day-to-day operations of the proposed facility with a Class C license or higher.

With respect to a facility's operation and maintenance, the proposed permit describes the conditions under which the proposed facility must operate and has maintenance and operational safeguards intended to minimize the occurrence of operational mishaps, such as Operational Requirement No. 1 that requires the Applicant to ensure that the proposed facility and all its systems of collection, treatment, and disposal are always operated and maintained consistent with applicable TCEQ rules, including regular, periodic examination of wastewater solids within the proposed facility by the operator to maintain an appropriate quantity and quality of solids inventory as described in the various operator training manuals and according to accepted industry standards for process control.

⁴ U.S. EPA *Wastewater Technology Fact Sheet- Chlorine Disinfection* (EPA 832-F-99-062)

⁵ Bahamas Laguna Azure LLC, Draft Permit, Effluent Limitations and Monitoring Requirements, p.2; *see also* 30 TEX. ADMIN. CODE § 309.3(g)(2)

Compliance Condition 2(a) of the proposed permit requires the Applicant to tacitly acknowledge that acceptance of an issued permit is an agreement to comply with all the terms and conditions embodied in the permit, and the rules and other orders of the Commission. Compliance Condition 2(b) requires the Applicant to comply with all conditions of the proposed permit, and failure to do so constitutes a violation of the permit and the TWC or the THSC.

Operational Requirement No. 4 makes the Applicant responsible for installing, prior to plant start-up, and subsequently maintaining adequate safety measures to prevent the discharge of untreated or inadequately treated wastes during electrical power failures by means of alternate power sources, standby generators, and/or retention of inadequately treated wastewater.

Operational Requirement No. 2 requires the Applicant, upon request by from the ED, to take appropriate samples and provide proper analysis to demonstrate compliance with Commission rules. Sampling, analysis, and reporting for compliance with provisions of the proposed permit must be performed by the Applicant according to the proposed permit's provisions on Monitoring and Reporting Requirements, the proposed permit's Definitions and Standard Permit Conditions, which are based on the TCEQ's rules found at 30 TAC §§ 319.4 - 319.12.

For instance, data from Discharge Monitoring Reports (DMRs) must be submitted each month to the TCEQ's Compliance Monitoring Team within the Office of Compliance and Enforcement and must be available for inspections by compliance investigators from the TCEQ Regional Office (Region 4) in Fort Worth, Texas.

Compliance Condition 2(d) requires the Applicant to take all reasonable steps to minimize or prevent any discharge or sludge use or disposal or other permit violation that has a reasonable likelihood of adversely affecting human health or the environment, and Compliance Condition 2(g) prohibits unauthorized discharges of wastewater or any other waste.

Lastly, Compliance Condition 2(i) ties all these proposed permit conditions together and allows them to function as intended because it subjects the Applicant to administrative, civil, and criminal penalties from Chapter 7 of the TWC (Enforcement), for violations of the proposed permit and TCEQ rules, including, but not limited to, negligently or knowingly violating the federal CWA §§ 301, 302, 306, 307, 308, 318, or 405, or any condition or limitation implementing any sections in the proposed permit issued under the CWA § 402, or any requirement imposed in proposed permit's pretreatment requirements approved under the CWA §§ 402(a)(3) or 402(b)(8).

These and other requirements in the proposed permit have historically been effective at keeping applicants informed as to conditions at the facility related to meeting the effluent limits, avoiding treatment system problems, and preventing unauthorized discharges of raw sewage.

If spills were to occur at the facility, it would be an unauthorized discharge in violation of the proposed permit for which an enforcement action can be brought by the TCEQ against the Applicant. However, spills are not expected to occur at the proposed facility if it is maintained and operated in accordance with TCEQ rules and the provisions in the proposed permit.

Additionally, according to the TCEQ rules any noncompliance which may endanger human health or safety, or the environment must be reported to the TCEQ by the Applicant and the report of noncompliance must be provided orally or by facsimile

transmission to the Regional Office (Region 4) within 24 hours of becoming aware of the noncompliance.⁶ A written submission of the report of noncompliance information must also be provided by the Applicant to the Regional Office (Region 4) *and* the Compliance Monitoring Team within five working days of becoming aware of the noncompliance. This includes any unanticipated bypass that exceeds any effluent limitation in the proposed permit, and any effluent violation which deviates from the permitted effluent limitation by more than 40% must be reported in writing to the TCEQ Regional Office (Region 4) in Fort Worth, Texas, and the Compliance Monitoring Team within five working days of becoming aware of the noncompliance by more than 40%. The written submission must describe the noncompliance, its cause; the potential danger to human health or safety or the environment; the period of noncompliance, including exact dates and times; the time the noncompliance is expected to continue if has not been corrected; and the steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.

COMMENT 4:

Royce City commented that the proposed permit's limits are inadequate for the discharge to comply with the TSWQS without more stringency, and nutrient limits for Total Phosphorus and Total Nitrogen.

RESPONSE 4:

As described above, the DO analyses performed by the Modeling Team produced the proposed limits of 10 mg/L CBOD₅, 3.0 mg/L NH₃-N, and 4.0 mg/L DO in all three flow phases, which are predicted to be adequate to maintain DO levels above the criteria stipulated by the Standards Team for the unnamed tributary, Sabine Creek, and the South Fork Sabine River (2.0, 3.0, and 3.0 mg/L DO, respectively).

The TCEQ's IPs contain nutrient screening procedures for wastewater permits and the results or values for the proposed discharge indicated a low concern for nutrient enrichment in the receiving waters, as the proposed facility will discharge initially to a heavily shaded intermittent stream with a muddy/sandy bottom for 0.91 miles and then to a heavily shaded, intermittent, sandy, or muddy stream with perennial pools and fairly turbid waters, which are stream conditions that are not typically conducive to the growth of nuisance-algae and not likely to lead to nutrient degradation due to the phosphorus inputs from a domestic wastewater discharge..

The TCEQ's IPs describe reasons why Phosphorus, instead of Nitrogen, is the key nutrient when considering nutrient impacts. These reasons include that Phosphorus is considered the more primary limiting nutrient in freshwater, Nitrogen can be fixed directly from the atmosphere by most of the noxious forms of blue-green algae, and that current waste treatment technologies make reducing Phosphorus more effective than reducing Nitrogen, as a means of limiting algal production. There has been substantially less data collection for Total Nitrogen in Texas, and it is uncommon to include Total Nitrogen as an effluent limit for a proposed discharge to surface freshwater waterbodies. For the above reasons, Total Phosphorus and Total Nitrogen limits or monitoring were not added as requirements in the proposed permit.

However, to ensure that the proposed discharge limits are conservative and protective under all conditions, the proposed discharge was evaluated under what are expected to be the most unfavorable of environmental conditions. Specifically hot and

⁶ 30 TAC § 305.125(9).

dry summertime conditions. Because the unnamed tributary was determined to be intermittent with a “limited” ALU, while Sabine Creek and South Fork Sabine River were classified as intermittent with pools and assigned a minimal ALU. As these waterbodies were determined to be “intermittent,” they were each modeled with a presumption of zero background streamflow (i.e., treated effluent was given no dilution), with the only flow present being from the proposed discharge. Each proposed flow phase was modeled at its full proposed volume (0.125, 0.25, and 0.525 MGD, Interim I, Interim II, and Final phases, respectively) at maximum effluent limit concentrations (10 mg/L CBOD₅, 3 mg/L NH₃-N, and 4.0 mg/L DO). This combination of conditions is a conservative, worst-case scenario that is unlikely to occur.

The DO model included the 1.7 km of the unnamed tributary to Sabine Creek, the 2.9 km of Sabine Creek to South Fork Sabine River, and 9.8 km downstream length of South Fork Sabine River. This discharge was modeled far enough downstream to include the bottom of the predicted ‘DO sag,’ where the lowest downstream DO concentrations resulting from the oxygen-demanding constituents present in the proposed discharge were predicted to occur. Model results indicate that this lowest predicted downstream DO concentration for each flow phase is *well above* the concentration required to demonstrate that the minimum DO criterion for the unnamed tributary, Sabine Creek, and the South Fork Sabine River (2.0, 3.0, 3.0 mg/L DO, respectively) will be met and maintained.

Oxygen-demanding constituents often have a larger and more prolonged downstream impact on DO levels in a water body than does the DO concentration of the discharge itself, which tends to have more of a localized impact. This highlights that the difference between a DO criterion and a DO limit is that the DO criteria apply to the waterbodies themselves, whereas DO limits are minimum concentration limits applicable to the proposed discharge and its Outfall and are included in the proposed permit to ensure that instream DO levels in the waterbodies downstream of the proposed discharge will meet the DO criteria applicable to those waterbodies. Consequently, a 4.0 mg/L DO limit may play a greater role in the impact of the overall DO-related “effluent set” on instream DO levels in the immediate receiving water (e.g., a creek with a 3 mg/L DO criterion) than it does in the impact on instream DO levels further downstream (e.g., a classified water body with a 5.0 mg/L DO criterion).

The results of the DO modeling analyses determined that the proposed effluent concentrations of 10 mg/L CBOD₅, 3 mg/L NH₃-N, and 4.0 mg/L minimum DO for each of the proposed flow phases (e.g. 0.125 MGD, 0.25 MGD, and 0.525 MGD) was adequate to ensure that instream DO levels will consistently be protected and maintained above the DO criteria assigned to the waterbodies within the discharge route, and therefore the aquatic life uses will be protected too.

COMMENT 5:

Royse City commented that WQD staff’s memorandum, dated August 11, 2022, misstates the legal threshold for the Tier II Review that the application is subject to.

RESPONSE 5:

The WQD staff’s technical memorandum dated August 11, 2022, was superseded by the technical memorandum dated December 6, 2022, and is enclosed below.

As discussed above and because the Standards Team’s ALU determinations were “limited” for the unnamed tributary, Sabine Creek, and the South Fork Sabine River, the

Standards Team's review did not find that any waterbodies with "exceptional," "high," or "intermediate" ALUs were present within the stream reach assessed and no Tier II Review was required, nor performed.

According to the TCEQ's IPs, "Limited" ALUs fall under a Tier I Antidegradation Review, which evaluates all pollution that could cause an impairment of existing uses and ensures that existing WQ uses are not impaired by increases in pollution loading. The numerical and narrative criteria necessary to protect existing uses will be maintained because the primary focus of WQD Staff performing the ED's Technical review, the TSWQS, and the TCEQ's IPs, is DO.

The Tier II Review covers all pollution that could cause degradation of WQ where existing WQ exceeds levels necessary to support propagation of fish, shellfish, terrestrial life, and recreation in and on the water, otherwise known as fishable/swimmable quality. The Tier II Review ensures that where WQ exceeds the normal range of fishable/swimmable criteria, such WQ will be maintained unless lowering it is necessary for important economic or social development, generally applies to waterbodies that have existing, designated, or presumed uses of primary/secondary contact recreation and either "intermediate," "high," or "exceptional" ALUs.

COMMENT 6:

Royce City and NTMWD commented that the proposed permit and facility are inconsistent with the Regionalization policy of Texas. Wes Crenshaw and Royce City commented that the Commission should deny the application because it fails to demonstrate any "need" for the proposed facility, the Applicant incorrectly asserted that there is no collection lines or WWTFs within a three-mile radius that have capacity and are willing to serve the area proposed to be served in the application, and that the Applicant's proposed service area is within Royce City's Sewer CCN No. 20813, which gives Royce City the exclusive right to provide retail sewer service to the same area.

RESPONSE 6:

Texas' Regionalization policy does not require denial of a TPDES application on the basis that there is a WWTF, or a collection system, located within three miles of a proposed facility. According to TWC § 26.081, the State's policy is to "encourage and promote the development and use of regional and area-wide waste collection, treatment, and disposal systems to serve the waste disposal needs of the citizens of the state and to prevent pollution and maintain and enhance the quality of the water in the state," otherwise known as "Regionalization."

TWC § 26.0282 provides that "in considering the issuance, amendment, or renewal of a permit to discharge waste, the Commission may deny or alter the terms and conditions of the proposed permit, amendment, or renewal based on consideration of need, including the expected volume and quality of the influent and the availability of existing or proposed area wide or regional waste collection, treatment, and disposal systems not designated as area wide or regional disposal systems by Commission Order. This section is expressly directed to the control and treatment of conventional pollutants normally found in domestic wastewater."

Texas' Regionalization policy is implemented through the TPDES application's Domestic Technical Report 1.0 and Domestic Technical Report 1.1. In sections 1 of both technical reports the Applicant must provide the design flow and estimated construction start date of each phase, estimated start dates for effluent disposal, and

justification for any phase beyond the facility's initial phase, among other information regarding the Applicant's proposed flows.

For evaluating the need for each of the proposed facility's phases, Domestic Technical Report 1.0 requires the Applicant to justify its proposed flows in the form of LUEs or Equivalent Dwelling Units, which are standard units of water quantity/demand furnished to a single-family residential unit and are defined as the typical flow that would be produced by a single-family residence located in a typical subdivision, with the assumption that 3.5 people live in a residence.

The Applicant submitted capacity calculations that in the second half of year 1, the planned development will have reached 350 LUEs at 300 gallons per LUE, and 0.105 MGD in total. In the first half of year 2, the planned development will have 750 LUEs with a total of 0.225 MGD, and then at the end of year 3, the planned development will have 1,750 LUEs with a total of 0.525 MGD. This information is also necessary so that the Applicant can plan for expansion of the proposed facility because whenever flow measurements for the proposed facility reach 75% of the permitted daily average or annual average flow for three consecutive months, the Applicant must initiate engineering and financial planning for expansion or upgrading the proposed facility. Whenever the flow reaches 90% of the permitted daily average or annual average flow for three consecutive months, the Applicant must obtain authorization from the TCEQ to commence construction of the necessary additional treatment or collection facilities. These two rules are known as the "75/90 rules."⁷

Related to the evaluation of need for the proposed facility, Domestic Technical Report 1.1 requires the Applicant to contact existing, permitted WWTFs within a three-mile radius of the proposed facility; however, a WWTF located within three miles of a proposed facility is not an automatic basis to deny an application or to compel the Applicant to connect to that WWTF.

The purpose of contacting existing, permitted WWTFs is to determine whether those WWTFs have the capacity and are willing to expand to accept the volume of wastewater proposed by the Applicant. If the other WWTFs are willing to provide service and accept the proposed flows, an analysis of expenditures is required showing the cost to connect to one of those permitted WWTFs within three miles, as opposed to the cost of the proposed facility or expansion. Finally, Applicants are required to provide copies of all correspondence with the owners of the existing WWTFs within three miles regarding connecting to their systems.

Similarly, the TPDES application requires the Applicant to provide justification and the same cost analysis of expenditures to connect to an existing WWTF if any portion of the proposed service area is inside another utility's CCN area. When applicants provide economic justifications demonstrating that connecting to the other utility's WWTF will be cost-prohibitive, or if a collection system within three miles of the proposed facility does not have the capacity or is unwilling to accept the additional wastewater, the ED will approve the application as it relates to Regionalization.

The ED's staff uses all information submitted by applicants to evaluate whether the Commission should grant the application and, if so, whether each of the proposed phases should be incorporated into a permit. According to the information submitted by the Applicant, on March 3, 2022, the Applicant sent a request to Mr. Dario Lopez,

⁷ 30 TEX. ADMIN. CODE § 305.126(a).

Director of Public Works for Royce City through USA Professional Services Group, Inc. for water and sanitary sewer services for its proposed development, which is located within the Royce City Water CCN No. 12827 and the Royce City Sewer CCN No. 20813. On June 23, 2022, the Applicant mailed certified letters requesting service to four public wastewater systems (NTMWD, the City of Fate Water Utilities, Camden Park Municipal Utility District of Rockwall County, and Royce City) that all have WWTFs within a three-mile radius of the proposed facility. Only NTMWD responded, on June 27, 2022, that its WWTF has sufficient capacity to serve the proposed development. On June 30, 2023, the Applicant submitted a cost analysis that indicated it was cost-prohibitive to connect to NTMWD's wastewater collection system.

According to the Applicant, there are no other wastewater treatment facilities located within a three-mile radius of the proposed facility that are willing to provide service. Because WQD staff rely on the representations made in the application during its review of permit applications, applicants are required to certify the accuracy of the information submitted and the application must be signed by a responsible party under penalty of law, and General Permit Condition No. 1(b) states that the proposed permit is granted based on the information supplied and representations made by the Applicant during the processing of the application and the permitting process and relying upon the accuracy and completeness of that information and those representations, the WQD staff concluded that the proposed permit is consistent with Texas' Regionalization policy.

IV. CHANGES MADE TO THE PERMIT IN RESPONSE TO COMMENT

- No changes to the proposed permit were made in response to comment.

Respectfully submitted,

Texas Commission on Environmental Quality

Kelly Keel, Interim Executive Director

Erin Chancellor, Director
Office of Legal Services

Charmaine Backens, Deputy Director
Environmental Law Division



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REPRESENTING THE EXECUTIVE DIRECTOR
OF THE TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY

V. CERTIFICATE OF SERVICE

I certify that on July 14, 2023, the Executive Director's Response to Public Comment for Permit No. WQ0016186001 was filed with the Texas Commission on Environmental Quality's Office of the Chief Clerk.

A handwritten signature in black ink, reading "Michael T. Parr II". The signature is written in a cursive style with a horizontal line extending from the end of the name.

Michael T. Parr II, Staff Attorney
State Bar No. 24062936