EXECUTIVE DIRECTOR'S RESPONSE TO PUBLIC COMMENT for Civitas at Buda, LLC TPDES Permit No. WQ0016154001

The Executive Director has made the Response to Public Comment (RTC) for the application by Civitas at Buda, LLC for TPDES Permit No. WQ0016154001 available for viewing on the Internet. You may view and print the document by visiting the TCEQ Commissioners' Integrated Database at the following link: <u>https://www.tceq.texas.gov/goto/cid</u>

In order to view the RTC at the link above, enter the TCEQ ID Number for this application (WQ0016154001) 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 <u>chiefclk@tceq.texas.gov</u>.

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 the Buda Public Library, 405 East Loop Street, Suite 100, Buda, Texas.

RESPUESTA DEL DIRECTOR EJECUTIVO A LOS COMENTARIOS DEL PÚBLICO para Civitas at Buda, LLC TPDES Permiso No. WQ0016154001

El Director Ejecutivo ha puesto a disposición de Internet la respuesta al comentario público (RTC) para la solicitud de Civitas at Buda, LLC del permiso de TPDES No. WQ16154001. 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 (WQ0016154001) 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 <u>chiefclk@tceq.texas.gov</u>.

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 de la Buda, 405 East Loop Street, Suite 100, Buda, Texas.

MAILING LIST / LISTA DE CORREO for / para Civitas at Buda, LLC TPDES Permit No. WQ0016154001 / TPDES Permiso No. WQ0016154001

<u>FOR THE APPLICANT /</u> PARA EL SOLICITANTE:

Rahul Jain, Vice President Civitas at Buda, LLC 5599 San Felipe Street, Suite 565 Houston, Texas 77056

Janet Sims, Project Manager Mead & Hunt 8217 Shoal Creek Boulevard, Suite 203 Austin, Texas 78757

<u>INTERESTED PERSONS /</u> PERSONAS INTERESADAS:

Justin C. Adkins Guadalupe Blanco River Authority 933 East Court Street Seguin, Texas 78155

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

Ryan Vise, Deputy Director Texas Commission on Environmental Quality External Relations Division Public Education Program MC-108 P.O. Box 13087 Austin, Texas 78711-3087

Aubrey Pawelka, Staff Attorney Texas Commission on Environmental Quality Environmental Law Division MC-173 P.O. Box 13087 Austin, Texas 78711-3087 Deba Dutta, Technical Staff Texas Commission on Environmental Quality Water Quality Division MC-148 P.O. Box 13087 Austin, Texas 78711-3087

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

Garrett T. Arthur, Attorney Texas Commission on Environmental Quality Public Interest Counsel MC-103 P.O. Box 13087 Austin, Texas 78711-3087

FOR THE CHIEF CLERK / PARA EL SECRETARIO OFICIAL via electronic mail por correo electrónico:

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

TCEQ PERMIT NO. WQ0016154001

APPLICATION BY	§	BEFORE THE
CIVITAS AT BUDA, LLC	§	TEXAS COMMISSION
FOR TPDES PERMIT NO.	§	ON
WQ0016154001	§	ENVIRONMENTAL QUALITY

EXECUTIVE DIRECTOR'S RESPONSE TO PUBLIC COMMENT

The Executive Director (ED) of the Texas Commission on Environmental Quality (the Commission or TCEQ) files this Response to Public Comment on Civitas at Buda, LLC's application for a new Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0016154001 and the ED's preliminary decision on the application. As required by 30 Texas Administrative Code (TAC) Section 55.156, before this permit is issued, the Executive Director prepares a response to all timely, relevant and material, or significant comments. The Office of the Chief Clerk received timely written comments with requests for contested hearing from Justin C. Adkins on behalf of Guadalupe-Blanco River Authority (GBRA).

This response addresses all timely filed 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 Public Education Program at 1-800-687-4040. General information about the TCEQ can be found at our website at http://www.tceq.texas.gov.

I. Background

A. Description of Facility

Civitas at Buda, LLC has applied for a new TPDES Permit No. WQ0016154001 to authorize the discharge of treated domestic wastewater at a daily average flow not to exceed 0.125 million gallons per day (MGD) in the Interim I phase, 0.25 MGD in the Interim II phase, and 0.50 MGD in the Final phase. The proposed wastewater treatment facility (WWTF) will serve the residents of the Civitas at Buda development.

The effluent limitations in all three phases of the draft permit, based on a 30-day average, are 10 mg/l five-day carbonaceous biochemical oxygen demand (CBOD₅), 15 mg/l total suspended solids (TSS), 3 mg/l ammonia-nitrogen (NH₃-N), 1.0 mg/l Total Phosphorus (TP), 126 colony forming units (CFU) or most probable number (MPN) of *Escherichia coli* (*E. coli*) per 100 ml, and 4.0 mg/l minimum dissolved oxygen

(DO). For the Interim I and II phases, the effluent shall contain a total chlorine residual of at least 1.0 mg/l and shall not exceed a total chlorine residual of 4.0 mg/l after a detention time of at least 20 minutes based on peak flow. For the Final phase, the effluent shall 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). The permittee shall dechlorinate the chlorinated effluent to less than 0.1 mg/l total chlorine residual.

The Facility will be an activated sludge process plant operated in the conventional mode. Treatment units in the Interim I phase will include two aeration basins, a secondary clarifier, a sludge holding tank, and a chlorine contact chamber. Treatment units in the Interim II phase will include four aeration basins, two secondary clarifiers, two sludge holding tanks, and two chlorine contact chambers. Treatment units in the Final phase will include eight aeration basins, four secondary clarifiers, three sludge holding tanks, three chlorine contact chambers, and one dechlorination chamber. The facility has not been constructed.

The plant site will be located approximately 1 mile northeast of the intersection of County Road 107 and County Road 120, in Hays County, Texas 78610. The treated effluent will be discharged to Elm Creek, thence to Soil Conservation Service (SCS) Reservoir No. 16, thence to Elm Creek, thence to Plum Creek in Segment No. 1810 of the Guadalupe River Basin. The unclassified receiving water use is limited aquatic life use for Elm Creek. The designated uses for Segment No. 1810 are primary contact recreation, aquifer protection, and high aquatic life use.

In accordance with 30 Texas Administrative Code § 307.5 and the *TCEQ's Procedures to Implement the Texas Surface Water Quality Standards* (June 2010), an antidegradation review of the receiving waters was performed. A Tier 1 antidegradation review has preliminarily determined that existing water quality uses will not be impaired by this permit action. Numerical and narrative criteria to protect existing uses will be maintained. This review has preliminarily determined that no water bodies with exceptional, high, or intermediate aquatic life uses are present within the stream reach assessed; therefore, no Tier 2 degradation determination is required. No significant degradation of water quality is expected in water bodies with exceptional, high, or intermediate aquatic life uses downstream, and existing uses will be maintained and protected. The preliminary determination can be reexamined and may be modified if new information is received.

B. Procedural Background

The TCEQ received Civitas at Buda, LLC's application for a TPDES new permit on April 22, 2022, and declared it administratively complete on June 27, 2022. The Applicant published the Notice of Receipt and Intent to Obtain a Water Quality Permit (NORI) in English on June 29, 2022 in *Hays Free Press,* and in Spanish on June 30, 2022, in *El Mundo*. The application was determined technically complete on August 25, 2022. The Applicant published the Notice of Application and Preliminary Decision (NAPD) in English on May September 21, 2022, in *Hays Free Press,* and in Spanish on September 22, 2022 in *El Mundo*. The comment period for this application closed on October 24, 2022.

This application was filed on or after September 1, 2015; therefore, this application is subject to the procedural requirements adopted pursuant to House Bill (HB) 801, 76th Legislature (1999), and Senate Bill (SB) 709, 84th Legislature (2015), which are implemented by the Commission in its rules in 30 TAC Chapters 39, 50, and 55.

C. Access to Rules, Laws and Records

Please consult the following websites to access the rules and regulations applicable to this permit:

- to access the Secretary of State website: <u>https://www.sos.state.tx.us</u>;
- for TCEQ rules in Title 30 of the Texas Administrative Code (TAC): <u>https://www.sos.state.tx.us/tac/</u> (select "View the current Texas Administrative Code" on the right, then "Title 30 Environmental Quality");
- for Texas statutes: <u>https://statutes.capitol.texas.gov/</u>
- to access the TCEQ website: <u>www.tceq.texas.gov</u> (for downloadable rules in Adobe PDF format, select "Rules" then "Download TCEQ Rules");
- for Federal rules in Title 40 of the Code of Federal Regulations: <u>www.ecfr.gov</u>; and
- for Federal environmental laws: <u>https://www.epa.gov/laws-regulations</u>.

Commission records on the Application and draft permit are available for viewing and copying and are located in Buda Public Library, 405 East Loop Street, Suite 100, Buda, Texas, and at TCEQ's main office in Austin, 12100 Park 35 Circle, Building F, 1st Floor (Office of the Chief Clerk).

II. Comments and Responses

Comment 1

Guadalupe-Blanco River Authority (GBRA) commented that the proposed effluent limitations are not protective of the water quality of the stream segments in this area.

Response 1

Effluent limitations for the conventional effluent parameters (i.e., Biochemical Oxygen Demand or Carbonaceous Biochemical Oxygen Demand, Ammonia Nitrogen, etc.) are based on stream standards and waste load allocations for water-quality limited streams as established in the Texas Surface Water Quality Standards (TSWQS) and the State of Texas Water Quality Management Plan (WQMP).

The treated effluent will be discharged to Elm Creek, thence to SCS Reservoir No. 16, thence to Elm Creek, thence to Plum Creek in Segment No. 1810 of the Guadalupe River Basin. The unclassified receiving water use is limited aquatic life use for Elm Creek. The designated uses for Segment No. 1810 are primary contact recreation, aquifer protection, and high aquatic life use. In accordance with 30 Texas Administrative Code § 307.5 and the *TCEQ's Procedures to Implement the Texas Surface Water Quality Standards* (June 2010), an antidegradation review of the receiving waters was performed. A Tier 1 antidegradation review has preliminarily determined that existing water quality uses will not be impaired by this permit action. Numerical and narrative criteria to protect existing uses will be maintained. This review has preliminarily determined that no water bodies with exceptional, high, or intermediate aquatic life uses are present within the stream reach assessed; therefore, no Tier 2 degradation determination is required. No significant degradation of water quality is expected in water bodies with exceptional, high, or intermediate aquatic life uses downstream, and existing uses will be maintained and protected.

Permittees are required to meet permit limits and conditions that are developed by TCEQ, in accordance with the TSWQS and Implementation Procedures, to protect designated and assigned uses, including aquatic life use. In this case, Elm Creek was assigned a limited aquatic life use and the associated 3.0 mg/l minimum DO criterion by the Standards Implementation Team.

The potential impact of the proposed discharge on instream dissolved oxygen levels is evaluated under hot and dry, low-flow summertime conditions, which are typically the most restrictive conditions in regard to dissolved oxygen levels. Critical low-flow, as defined in 30 TAC § 307.3(a)(16), is a "low-flow condition that consists of the seven-day, two-year flow (7Q2)," which is the lowest seven-day average discharge with a recurrence interval of two years. The criteria of the Texas Surface Water Quality Standards (30 TAC Chapter 307) are applicable even during critical low-flow, therefore critical low-flow is considered when evaluating the appropriate effluent limits for the proposed discharge.

The QUAL-TX model, in combination with a Continuously Stirred Tank Reactor (CSTR) model was performed for the evaluation of potential impacts of major oxygendemanding constituents on dissolved oxygen levels in the receiving waters. In order to ensure that dissolved oxygen modeling results and corresponding effluent limit recommendations 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 dry summertime conditions. Elm Creek was determined to be an intermittent stream with pools, with a limited aquatic life use. It was, therefore, modeled with a presumption of zero background streamflow, with the only flow present in Elm Creek at the point of outfall being that from the proposed discharge. Each proposed flow phase was modeled at its full proposed flow (0.125 MGD in the Interim I phase, 0.25 MGD in the Interim II phase, and 0.50 MGD in the Final phase). This combination of conditions is a conservative, worst-case scenario that is unlikely to occur. Based on model results, the proposed effluent limits of 10 mg/l $CBOD_5$, 3 mg/l NH₃-N and 4.0 mg/l DO for all three phases were predicted to be adequate to ensure that dissolved oxygen levels will be maintained above the criterion.

The effluent limitations in the draft permit will maintain and protect the existing instream uses and comply with the Texas Surface Water Quality Standards and 30 TAC §§ 307.1 - 307.10. The proposed draft permit includes effluent limitations and monitoring requirements to ensure that the proposed wastewater treatment plant meets water quality standards for the protection of surface water quality, even during periods of low flow, according to TCEQ rules and policies.

The Texas Surface Water Quality Standards (TSWQS) in 30 TAC Chapter 307 require that discharges may not degrade the receiving waters and may not result in situations that impair existing, attainable or designated uses, and that surface waters not be toxic to aquatic life, terrestrial wildlife, livestock, or domestic animals.

The ED has determined that the draft permit is in accordance with the Texas Surface Water Quality Standards, which ensures 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 effluent limits in the draft permit are set to maintain and protect the existing instream uses. The Executive Director determined that these uses should be protected if the facility is operated and maintained as required by the proposed permit and regulations. Additionally, the treated effluent will be disinfected prior to discharge to protect human health.

The ED has made a preliminary determination that the draft permit, if issued, meets all statutory and regulatory requirements.

Comment 2

GBRA stated that the proposed permit is inconsistent with goals of the Plum Creek Watershed Protection Plan (WPP) and best management practices (BMPs) which are established to reduce harmful nutrient loading of waterways in the Plum Creek Watershed.

Response 2

Plum Creek Watershed Protection Plan recommends effluent limitations of 5 mg/l CBOD₅, 5 mg/l TSS, 2 mg/l NH₃-N, and 1 mg/l of TP. However, the adoption is voluntary, and these limits are non-regulatory.

The effluent limitations in all three phases (the Interim I phase, the Interim II phase, and the Final phase) of the draft permit, based on a 30-day average, are 10 mg/l CBOD₅, 15 mg/l TSS, 3 mg/l NH₃-N, 1.0 mg/l TP, 126 CFU or MPN of *E. coli* per 100 ml, and 4.0 mg/l minimum DO. Note that a TP limit of 0.5 mg/l based on specific concerns for nitrate and TP at the segment, was included in the draft permit. The TP limit will also help control algal growth in the SCS reservoir.

The Water Quality Division has determined that the draft permit is in accordance with the Texas Surface Water Quality Standards, which ensures that the effluent discharge is protective of aquatic life, human health, and the environment. The ED has made a preliminary determination that the draft permit, if issued, meets all statutory and regulatory requirements, and the existing uses of the receiving water bodies should be protected if the facility is operated and maintained as required by the proposed permit and regulations.

Comment 3

GBRA mentioned that GBRA's Sunfield WWTF is located in the immediate proximity of the proposed Civitas WWTF, and Sunfield WWTF has the permitted capacity to provide wastewater services to Civitas.

Response 3

Per the information provided in the Civitas' permit application, a formal Service Extension Request for sewer service was sent to GBRA via certified mail on April 4, 2022. GBRA has indicated that their treatment facility has treatment capacity and GBRA is willing to accept the wastewater from the Civitas at Buda development. However, the preliminary evaluation to determine the feasibility of connecting to the GBRA system, which includes obtaining easements with reasonable routes for the pipeline and building the pipeline has indicated that constructing the proposed WWTF is less expensive than connecting to the GBRA system.

III. CHANGES MADE TO THE DRAFT PERMIT IN RESPONSE TO COMMENT

No changes to the draft permit have been made in response to public comment.

Respectfully submitted,

Texas Commission on Environmental Quality

Erin E. Chancellor Interim Executive Director

Charmaine Backens Acting Director, Office of Legal Services

Untrey Pawelba

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REPRESENTING THE EXECUTIVE DIRECTOR OF THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY