

# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

March 8, 2022

TO: Persons on the attached mailing list.

RE: Dalasu 686 LP TPDES Permit No. WQ0016004001

# 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any action is taken on this application unless all requests for contested case hearing or reconsideration have been withdrawn before that meeting.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 is a copy of the Executive Director's Response to Comments. A copy of the complete application, draft permit and related documents, including public comments, is available for review at the TCEQ Central Office. A copy of the complete application, the draft permit, and executive director's preliminary decision are available for viewing and copying at the Austin Memorial Library, 220 South Bonham Avenue, Cleveland, 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.
- (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 <u>www.tceq.texas.gov/agency/decisions/cc/comments.html</u> 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.

Laurie Gharis

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Enclosure

#### MAILING LIST for Dalasu 686 LP TPDES Permit No. WQ0016004001

#### FOR THE APPLICANT:

Brett Beardsley, Manager Dalasu 686 LP 4545 Post Oak Place, Suite 225 Houston, Texas 77027

Jennifer Glaess, P.E., Project Manager Pape-Dawson Engineers, Inc. 10801 North MoPac Expressway Suite 200 Austin, Texas 78759

#### **INTERESTED PERSONS:**

Meyyappan Arunachalam Fort Montessori Academy 186 Betsy Lane Murphy, Texas 75094

Thomas M. Hill 1037 County Road 381 Cleveland, Texas 77328

Karen Price 335 Willow Wood Street Murphy, Texas 75094

FOR THE EXECUTIVE DIRECTOR via electronic mail:

Ryan Vise, Director Texas Commission on Environmental Quality External Relations Division Public Education Program MC-108 P.O. Box 13087 Austin, Texas 78711-3087 Stefanie Skogen, Staff Attorney Texas Commission on Environmental Quality Environmental Law Division MC-173 P.O. Box 13087 Austin, Texas 78711-3087

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# FOR PUBLIC INTEREST COUNSEL via electronic mail:

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

# FOR THE CHIEF CLERK via electronic mail:

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

#### **TPDES Permit No. WQ0016004001**

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Application from Dalasu 686 LP for new Texas Pollutant Discharge Elimination System Permit No. WQ0016004001

Before the Texas Commission
on Environmental Quality

#### **Executive Director's Response to Public Comment**

The Executive Director (ED) of the Texas Commission on Environmental Quality (TCEQ) files this Response to Public Comment on Dalasu 686 LP's application for new Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0016004001 and the ED's preliminary decision. As required by title 30, section 55.156 of the Texas Administrative Code (30 Tex. Admin. Code § 55.156), before a permit is issued, the ED prepares a response to all timely, relevant, and material, or significant comments. The Office of the Chief Clerk received timely comments from Meyyappan Arunachalam, Thomas M. Hill, and Karen Price. This response addresses all such timely public comments received, whether or not withdrawn. For 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 TCEQ can be found on TCEQ's website at <u>http://www.tceq.texas.gov</u>.

#### I. Background

#### (A) Facility Description

Dalasu 686 has applied to TCEQ for a new permit that would authorize the discharge of treated domestic wastewater at a daily average flow not to exceed 240,000 gallons per day (gpd) in the Interim I phase, 480,000 gpd in the Interim II phase, and 720,000 gpd in the Final phase. The Cleveland Municipal Utility District No. 2 Wastewater Treatment Facility will be an activated sludge process plant operated in the extended aeration mode. Treatment units in the Interim I phase will include one bar screen, three aeration basins, one final clarifier, two sludge digesters, and one chlorine contact chamber. Treatment units in the Interim II phase will include one bar screen, six aeration basins, two final clarifiers, four sludge digesters, and two chlorine contact chambers. Treatment units in the Final phase will include one bar screen, nine aeration basins, three final clarifiers, six sludge digesters, and three chlorine contact chambers. The proposed facility, which has not been constructed, will serve the Cleveland Tract residential development.

Effluent limits in all three phases of the draft permit, based on a thirty-day average, are 10 milligrams per liter (mg/L) five-day carbonaceous biochemical oxygen demand, 15 mg/L total suspended solids, 3 mg/L ammonia nitrogen, 63 colony-forming units (CFU) or most probable number (MPN) of *E. coli* per 100 milliliters (mL), and 4.0 mg/L minimum dissolved oxygen. The pH must be in the range of 6.0 to 9.0 standard units. For the Interim I and II phases, the effluent shall contain a total chlorine residual in the range of 1.0 to 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) and then be dechlorinated to less than 0.1 mg/L total chorine residual.

The wastewater treatment facility will be located approximately 2.06 miles southeast of Fostoria Road and Texas Highway 105 E and approximately 1.42 miles northeast of Fostoria Road and Morgan Cemetery Road, in Liberty County, Texas 77328. The treated effluent will be discharged to an unnamed tributary, thence to Red Gully, thence to East Fork San Jacinto River in Segment No. 1003 of the San Jacinto River Basin. The unclassified receiving water use is limited aquatic life use for the unnamed tributary and Red Gully. The designated uses for Segment No. 1003 are primary contact recreation, public water supply, and high aquatic life use.

# (B) Procedural Background

TCEQ received the application on May 25, 2021 and declared it administratively complete on August 24, 2021. The Notice of Receipt of Application and Intent to Obtain Water Quality Permit was published on September 2, 2021 in *The Vindicator*. ED staff completed the technical review of the application on October 7, 2021 and prepared a draft permit. The Notice of Application and Preliminary Decision for TPDES Permit for Municipal Wastewater was published on November 25, 2021 in *The Vindicator*. The public comment period ended on December 28, 2021. This application was administratively complete on or after September 1, 2015. Therefore, it is subject to the procedural requirements adopted pursuant to House Bill 801, 76th Legislature, 1999, and Senate Bill 709, 84th Legislature, 2015.

#### (C) Access to Rules, Statutes, and Records

- Secretary of State website for all Texas administrative rules: <u>http://www.sos.state.tx.us/texreg/index.shtml</u>
- TCEQ rules in title 30 of the Texas Administrative Code: <u>http://www.sos.state.tx.us/tac/index.shtml</u> (select "View the current *Texas Administrative Code*," then "Title 30 Environmental Quality")
- Texas statutes: <u>http://www.statutes.capitol.texas.gov</u>
- TCEQ website: <u>http://www.tceq.texas.gov</u>
- Federal rules in title 40 of the Code of Federal Regulations: <u>http://www.ecfr.gov</u>
- Federal environmental laws: <u>http://www.epa.gov/laws-regulations</u>

TCEQ records for this application are available for viewing and copying at TCEQ's main office in Austin, 12100 Park 35 Circle, Building F, First Floor (Office of the Chief Clerk), until TCEQ takes final action on the application. Some documents located at the Office of the Chief Clerk may also be located in the Commissioners' Integrated Database at <u>https://www14.tceq.texas.gov/epic/eCID/</u>. The application, draft permit, and Statement of Basis/Technical Summary and ED's Preliminary Decision are also available for viewing and copying at Austin Memorial Library, 220 South Bonham Avenue, Cleveland, Texas.

If you would like to file a complaint about the facility concerning its compliance with provisions of its permit or TCEQ rules, you may call the TCEQ Environmental Complaints Hot Line at 1-888-777-3186 or the TCEQ Region 12 Office directly at 1-713-

767-3500. Citizen complaints may also be filed by sending an email to <u>complaint@tceq.texas.gov</u> or online at the TCEQ website (select "Reporting," then "Make an Environmental Complaint"). If the facility is found to be out of compliance, it may be subject to an enforcement action.

#### **II.** Comments and Responses

#### **Comment 1**

Thomas H. Hill expressed concern that the discharge will contribute to flooding in the area, as Red Gully already floods with moderate rainfall, and asked what kind of study will be done to prevent this problem.

#### **Response 1**

TCEQ's jurisdiction over the permitting process is established by the Texas Legislature and is limited to controlling the discharge of pollutants into and protecting the quality of water in the state. Pursuant to 30 Tex. Admin. Code ch. 309, subch. B, TCEQ has the authority to condition the issuance of a wastewater discharge permit on the selection of a site that minimizes certain nuisance conditions. However, TCEQ does not have the authority to address concerns about flooding when determining whether to grant a discharge permit application. For flooding concerns, the local flood plain administrator for the area of concern, Liberty County Flood Plain Administrator, can be contacted at 936-336-4560, or its website can be accessed at <u>https://www.co.liberty.tx.us/page/liberty.Licenses</u>. Additionally, the Federal Emergency Management Agency and Texas Water Development Board have programs that are designed to mitigate damage caused by flooding. More information is available on the Board's website at http://www.twdb.texas.gov/flood/index.asp.

The ED notes that the draft permit does not limit the ability of an individual to seek legal remedies against Dalasu 686 regarding any potential trespass, nuisance, or other cause of action in response to activities that may result in injury to human health or property or interfere with the normal use and enjoyment of property.

#### **Comment 2**

Thomas H. Hill asked what the environmental impact will be from discharging into a gully that flows into East Fork San Jacinto River.

#### **Response 2**

For domestic wastewater discharges, TCEQ protects water quality primarily through implementation of the Texas Surface Water Quality Standards (Standards), as described in TCEQ's *Procedures to Implement the Texas Surface Water Quality Standards* (IPs). The Standards enable TCEQ to protect surface water quality, groundwater, human health, aquatic life, and the receiving waters' designated uses. They include numeric and narrative water quality criteria used to protect the designated and assigned uses of receiving waters. For example, based on the determined aquatic life use, classified segments are assigned a numeric dissolved oxygen criterion that must be met to support the aquatic life use. TCEQ's Water Quality Assessment Team then performs a dissolved oxygen modeling analysis to ensure the permit's effluent limits and other requirements will support the dissolved oxygen criterion and, therefore, protect the aquatic life use. For this application, a dissolved oxygen modeling analysis was performed for the unnamed tributary, Red Gully, and East Fork San Jacinto River, and the effluent limits in the draft permit reflect the treatment levels necessary to comply with the water bodies' applicable dissolved oxygen criteria.<sup>1</sup> These effluent limits and other conditions in the draft permit also comply with the rules in 30 Tex. Admin. Code ch. 311, subch. D, which set certain requirements for discharges that occur within the Lake Houston watershed.

In addition to the Standards, the proposed discharge is subject to *Seven Total Maximum Daily Loads for Indicator Bacteria in Lake Houston, East Fork San Jacinto River, West Fork San Jacinto River, and Crystal Creek Watersheds, Segments 1002, 1003, 1004, and 1004D.* According to the report, discharges into the applicable water bodies must contain one-half the amount of bacteria that permittees are usually permitted to discharge under the Standards, which would be a daily average of 126 CFU or MPN of *E. coli* per 100 mL. This is why all three phases of the draft permit have a daily average bacteria limit of 63 CFU or MPN of *E. coli* per 100 mL. ED staff have determined that between the wastewater treatment facility's disinfection processes and its compliance with the draft permit's *E. coli* limits, the proposed discharge will not have a negative impact on the receiving waters' quality with regard to bacteria.

Under 30 Tex. Admin. Code § 307.5, ED staff must conduct an antidegradation review for new discharge permit applications. The review is conducted as prescribed by the IPs. All water bodies are subject to a Tier 1 review, in which ED staff determine if existing water quality uses will be impaired by a permit action. For this application, ED staff determined that the water bodies' uses will not be impaired if the draft permit is issued. Numerical and narrative criteria to protect existing uses will be maintained. Water bodies that have an intermediate, high, or exceptional aquatic life use are subject to a Tier 2 review, in which ED staff determine if water quality will be degraded, i.e., lowered by more than a de minimis extent. Here, ED staff concluded that no significant degradation of water quality is expected in East Fork San Jacinto River, which has a high aquatic life use. Existing uses will be maintained and protected. These determinations are preliminary and may be modified if new information is received.

As described in the 2020 Texas Integrated Report of Surface Water Quality— Water Bodies Evaluated, there are at least seven surface water quality monitoring stations on East Fork San Jacinto River. Water quality monitoring results reported in the Integrated Report include stations that are monitored by TCEQ and partner agencies. TCEQ performs periodic water quality monitoring in East Fork San Jacinto River to assess water quality trends and the river's general health. This data can be obtained from TCEQ or accessed online at

http://www.tceq.texas.gov/waterquality/monitoring/index.html.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> The dissolved oxygen criteria are 2 mg/L for the unnamed tributary, 3 mg/L for Red Gully, and 5 mg/L for East Fork San Jacinto River.

<sup>&</sup>lt;sup>2</sup> The link to the Surface Water Quality Data Viewer is at the bottom of the webpage. To properly view the data, the ED recommends saving the .txt file and then importing it into an

#### **Comment 3**

Meyyappan Arunachalam and Karen Price expressed concern regarding odors that could be produced by the proposed wastewater treatment facility.

#### **Response 3**

All wastewater treatment facilities have the potential to generate odors. To help prevent such odors from becoming a nuisance, 30 Tex. Admin. Code § 309.13(e) requires domestic treatment facilities to meet buffer zone requirements for the abatement and control of nuisance odor by complying with one of three options: 1) ownership of the buffer zone area; 2) restrictive easements from the adjacent property owners for any part of the buffer zone not owned by the applicant; or 3) providing nuisance odor control. According to the application, Dalasu 686 intends to comply with the requirement to abate and control nuisance odor by ownership of the buffer zone area, i.e., by locating the treatment units at least 150 feet from its property line. This requirement was incorporated into the draft permit at Other Requirement No. 3.

In addition, the wastewater treatment facility will be an activated sludge process plant operated in the extended aeration mode. This type of wastewater treatment technology has a high efficiency of ammonia nitrogen removal during the wastewater treatment process, which will help reduce any odors at the treatment facility. Between the buffer zones and treatment technology, nuisance odor is not expected to occur as a result of the permitted activities at the facility if Dalasu 686 operates the facility in compliance with TCEQ rules and the terms and conditions of the draft permit.

If any odor issue is detected by nearby residents, they can contact TCEQ using the contact information listed above in section I(C). Noncompliance with the permit may result in an enforcement action against Dalasu 686.

#### **Comment 4**

Meyyappan Arunachalam expressed concern that chemicals used at the wastewater treatment facility could be harmful to children.

#### **Response 4**

As mentioned in the previous response, the wastewater treatment facility will be an activated sludge process plant operated in the extended aeration mode. The treatment process in all phases of the draft permit will consist of wastewater flowing through a bar screen, aeration basin, final clarifier, sludge digester, and chlorine contact chamber. The only chemical addition to the treatment process will be chlorine for disinfection purposes. No other chemical treatment was indicated in the application.<sup>3</sup>

Under 30 Tex. Admin. Code § 309.3(g)(1), the disinfection of domestic

Excel spreadsheet. For more information, clicking on the Help icon on the Surface Water Quality Web Reporting Tool webpage leads to a user guide.

<sup>&</sup>lt;sup>3</sup> Dalasu 686 LP Permit Application, Domestic Technical Report 1.0 § 2.

wastewater must be protective of public health, but the rule does not require a specific method of disinfection. According to the rule, "Any appropriate process may be considered and approved on a case-by-case basis." For this facility, Dalasu 686 has chosen chlorine disinfection, the most common disinfection method. This is why chlorine will be added as part of the treatment process. However, the amount of chlorine that remains in the effluent following disinfection is limited by the draft permit. This is achieved in the Interim I and II phases by requiring the total chlorine residual in the effluent to be at least 1.0 mg/L and no more than 4.0 mg/L after a detention time of at least twenty minutes.<sup>4</sup> For the Final phase, the total chlorine residual must be at least 1.0 mg/L after a detention time of at least twenty minutes, and the wastewater must then be dechlorinated to a maximum total chlorine residual of 0.1 mg/L. Dalasu 686 must monitor these limits five times per week in the Interim I and II phases and daily in the Final phase. These chlorine residual requirements will help ensure the wastewater effluent is protective of human health.

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

The ED did not make any changes to the draft permit in response to public comment.

Respectfully submitted,

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Toby Baker Executive Director

Charmaine Backens, Director Environmental Law Division

Stefanie Skogen

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<sup>&</sup>lt;sup>4</sup> See 30 Tex. ADMIN. CODE § 309.3(g)(2) (detention time and chlorine residual requirements).