Texas Commission on Environmental Quality

INTEROFFICE MEMORANDUM

To: Office of Chief Clerk Date: June 6, 2025

From: Michael Parr, Staff Attorney, Environmental Law Division

Subject: Transmittal of Documents for Administrative Record

Applicant:	Harris County Municipal Utility District No. 531
Proposed Permit No.:	WQ0016334001
Program:	Water Quality Division
TCEQ Docket No.:	2025-0116-MWD

In a contested case hearing, the administrative record includes copies of the public notices relating to the permit application, as well as affidavits of public notices filed by the applicant directly with the Office of the Chief Clerk (OCC). In addition, the record includes the following documents provided to the OCC by the Executive Director's (ED) staff. *See* 30 TAC § 80.118.

This transmittal serves to also request that the OCC transmit the attached items, together with the public notice documents, including the notice of hearing, to the State Office of Administrative Hearings.

Indicated below are the documents included with this transmittal:

1. The Fact Sheet and Draft Permit
2. The applicable Compliance History
3. The Executive Director's Response to Comments and Final Decision Letter

Sincerely,

Michael Parr II
Staff Attorney
Environmental Law Division

STATEMENT OF BASIS/TECHNICAL SUMMARY
AND EXECUTIVE DIRECTOR'S PRELIMINARY DECISION

DESCRIPTION OF APPLICATION

Applicant:	Harris County Municipal Utility District No. 531; Texas Pollutant Discharge Elimination System (TPDES) Permit No. WQ0016334001, EPA I.D. No. TX0144444
Regulated Activity:	Domestic Wastewater Permit
Type of Application:	New Permit
Request:	New Permit
Authority:	Federal Clean Water Act (CWA) § 402; Texas Water Code § 26.027; 30 Texas Administrative Code (TAC) Chapters 30, 305, 307, 309, 312, and 319; Commission policies; and United States Environmental Protection Agency (EPA) guidelines.

EXECUTIVE DIRECTOR RECOMMENDATION

The Executive Director has made a preliminary decision that this permit, if issued, meets all statutory and regulatory requirements. The draft permit includes an expiration date of **five years from the date of issuance**.

REASON FOR PROJECT PROPOSED

The applicant has applied to the Texas Commission on Environmental Quality (TCEQ) for a new permit to authorize the discharge of treated domestic wastewater at a daily average flow not to exceed 0.05 million gallons per day (MGD) in the Interim phase, and a daily average flow not to exceed 0.10 MGD in the Final phase. The proposed wastewater treatment facility will serve a subdivision in Harris County Municipal Utility District (MUD) No. 531.

PROJECT DESCRIPTION AND LOCATION

The Harris County MUD 531 Wastewater Treatment Facility 2 will be an activated sludge process plant operated in the complete mix mode. Treatment units in the Interim phase will include a bar screen, an aeration basin, a final clarifier, two sludge digesters, and a chlorine contact chamber. Treatment units in the Final phase will include a bar screen, two aeration basins, a final clarifier, two sludge digesters, and a chlorine contact chamber. The facility has not been constructed.

The draft permit authorizes the disposal of sludge at a TCEQ-authorized land application site, co-disposal landfill, wastewater treatment facility, or facility that further processes sludge.

The plant site will be located approximately 0.5 miles southwest of the intersection of Mueschke Road and Schiel Road, in Harris County, Texas 77433.

Outfall Location:

Outfall Number	Latitude	Longitude
001	30.008800 N	95.731700 W

The treated effluent will be discharged via pipe to a detention pond, thence through a series of pipes to a detention pond, thence to Schiel Road storm sewer, thence to a dry-bottom pond, thence to a ditch,

thence to Little Cypress Creek, thence to Cypress Creek in Segment No. 1009 of the San Jacinto River Basin. The unclassified receiving water uses are minimal aquatic life use for the detention ponds, dry-bottom pond, and the ditch, and high aquatic life use for Little Cypress Creek. The designated uses for Segment No. 1009 are primary contact recreation, public water supply, and high aquatic life use. The effluent limitations in the draft permit will maintain and protect the existing instream uses. 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. A Tier 2 review has preliminarily determined that no significant degradation of water quality is expected in Little Cypress Creek, which has been identified as having high aquatic life use. Existing uses will be maintained and protected. The preliminary determination can be reexamined and may be modified if new information is received.

Effluent limitations for the conventional effluent parameters (i.e., Five-Day Biochemical Oxygen Demand or Five-Day 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).

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 the TSWQS for pH when the discharge authorized is from a minor facility. This technology-based approach reasonably assures instream compliance with TSWQS criteria due to the relatively smaller discharge volumes authorized by these permits. This conservative assumption is based on TCEQ sampling conducted throughout the state which indicates that instream buffering quickly restores pH levels to ambient conditions. Similarly, this approach has been historically applied within EPA issued NPDES general permits where technology-based pH limits were established to be protective of water quality criteria.

The effluent limitations in the draft permit have been reviewed for consistency with the WQMP. The proposed effluent limitations are not contained in the approved WQMP. However, these limits will be included in the next WQMP update.

The discharge from this permit action is not expected to have an effect on any federal endangered or threatened aquatic or aquatic-dependent species or proposed species or their critical habitat. This determination is based on the United States Fish and Wildlife Service's (USFWS's) biological opinion on the State of Texas authorization of the TPDES (September 14, 1998; October 21, 1998, update). To make this determination for TPDES permits, 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. The determination is subject to reevaluation due to subsequent updates or amendments to the biological opinion. The permit does not require EPA review with respect to the presence of endangered or threatened species.

Segment No. 1009 is not currently listed on the state's inventory of impaired and threatened waters (the 2022 CWA § 303(d) list).

Total Maximum Daily Loads (TMDL) project *Fifteen Total Maximum Daily Loads for Indicator Bacteria in Watersheds Upstream of Lake Houston for Segment Numbers 1004E, 1008, 1008H, 1009, 1009C, 1009D, 1009E, 1010, and 1011* (TMDL Project No. 82) has been approved for this segment.

On April 6, 2011, the TCEQ adopted *Fifteen Total Maximum Daily Loads for Indicator Bacteria in Watersheds Upstream of Lake Houston*. The EPA approved the TMDL on June 29, 2011. The TMDL

addresses elevated levels of bacteria in nine classified and unclassified segments (Stewarts Creek - 1004E; Spring Creek - 1008; Willow Creek - 1008H; Cypress Creek - 1009; Faulkey Gully - 1009C; Spring Gully - 1009D; Little Cypress Creek - 1009E; Caney Creek - 1010; and Peach Creek - 1011) in this watershed. This project takes a watershed approach, so all assessment units in the TMDL segments and in several additional unclassified segments (Mill Creek - 1008A; Upper Panther Branch - 1008B; Lower Panther Branch - 1008C ; Metzler Creek - 1008D; Bear Branch - 1008E; Walnut Creek - 1008I; Brushy Creek - 1008J; Arnold Branch - 1008K; Mink Branch - 1008L; Sulphur Branch - 1008M; Dry Creek - 1009A; Dry Gully - 1009B; Mound Creek - 1009F; Dry Gully - 1009G; Dry Creek - 1010A; White Oak Creek - 1010B; and Spring Branch - 1010C) are also subject to this TMDL. The waste load allocation (WLA) for wastewater treatment facilities was established as the permitted flow for each facility multiplied by one-half the geometric mean criterion for bacteria. Future growth from existing or new permitted sources is not limited by these TMDLs as long as the sources do not exceed the limits of one-half the bacteria geometric mean criterion for *Escherichia coli* (*E. coli*). To ensure that effluent limitations for this discharge are consistent with the WLAs provided in the TMDL, a concentration based effluent limitation for *E. coli* of 63 colony-forming units (CFU) or most probable number (MPN) per 100 ml has been included in the draft permit.

SUMMARY OF EFFLUENT DATA

Self-reporting data is not available since the facility is not in operation.

DRAFT PERMIT CONDITIONS

The draft permit authorizes a discharge of treated domestic wastewater at an Interim volume not to exceed a daily average flow of 0.05 MGD, and a Final volume not to exceed a daily average flow of 0.10 MGD.

The effluent limitations in both phases of the draft permit, based on a 30-day average, are 10 mg/l five-day carbonaceous biochemical oxygen demand ($CBOD_5$), 15 mg/l total suspended solids (TSS), 3 mg/l ammonia-nitrogen (NH_3-N), 63 CFU or MPN of *E. coli* per 100 ml, and 4.0 mg/l minimum dissolved oxygen. 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.

On June 6, 2023, the permittee submitted sufficient evidence of legal restrictions prohibiting residential structures within the part of the buffer zone not owned by the permittee according to 30 TAC § 309.13(e)(3). The buffer zone is being met based on the Special Warranty Deed dated April 20, 2023, between AHV Shiel BFR Owner, LLC and Harris County Municipal Utility District No. 531. The permittee shall also comply with the requirements of 30 TAC § 309.13(a) through (d). See Attachment A.

The facility does not appear to receive significant industrial wastewater contributions. Permit requirements for pretreatment are based on TPDES regulations contained in 30 TAC Chapter 305, which references 40 Code of Federal Regulations (CFR) Part 403, "General Pretreatment Regulations for Existing and New Sources of Pollution" *[rev. Federal Register/ Vol. 70/ No. 198/ Friday, October 14, 2005/ Rules and Regulations, pages 60134-60798].* The permit includes specific requirements that establish responsibilities of local government, industry, and the public to implement the standards to control pollutants which pass through or interfere with treatment processes in publicly owned treatment works or which may contaminate the sewage sludge. This permit has appropriate pretreatment language for a facility of this size and complexity.

The draft permit includes Sludge Provisions according to the requirements of 30 TAC Chapter 312, Sludge Use, Disposal, and Transportation. The draft permit also authorizes the disposal of sludge at a TCEQ-authorized land application site, co-disposal landfill, wastewater treatment facility, or facility

that further processes sludge.

SUMMARY OF CHANGES FROM APPLICATION

None.

BASIS FOR DRAFT PERMIT

The following items were considered in developing the draft permit:

1. Application received on April 28, 2023, and additional information received on June 6, 2023.

2. The effluent limitations and conditions in the draft permit comply with EPA-approved portions of the 2018 Texas Surface Water Quality Standards (TSWQS), 30 TAC §§ 307.1 - 307.10, effective March 1, 2018; 2014 TSWQS, effective March 6, 2014; 2010 TSWQS, effective July 22, 2010; and 2000 TSWQS, effective July 26, 2000. The effluent limitations and conditions in the draft permit comply with the requirements in 30 TAC Chapter 311: Watershed Protection; Subchapter D: Water Quality Management within Lake Houston Watershed.

3. The effluent limitations in the draft permit meet the requirements for secondary treatment and the requirements for disinfection according to 30 TAC Chapter 309, Subchapter A: Effluent Limitations.

4. Interoffice Memoranda from the Water Quality Assessment Section of the TCEQ Water Quality Division. Interoffice Memorandum from the Pretreatment Team of the TCEQ Water Quality Division.

5. Consistency with the Coastal Management Plan: The facility is not located in the Coastal Management Program boundary.

6. *Procedures to Implement the Texas Surface Water Quality Standards* (IP), Texas Commission on Environmental Quality, June 2010, as approved by EPA, and the IP, January 2003, for portions of the 2010 IP not approved by EPA.

7. Texas 2022 Clean Water Act Section 303(d) List, Texas Commission on Environmental Quality, June 1, 2022; approved by the U.S. Environmental Protection Agency on July 7, 2022.

8. Texas Natural Resource Conservation Commission, Guidance Document for Establishing Monitoring Frequencies for Domestic and Industrial Wastewater Discharge Permits, Document No. 98-001.000-OWR-WQ, May 1998.

9. *Fifteen Total Maximum Daily Loads for Indicator Bacteria in Watersheds Upstream of Lake Houston for Segment Numbers 1004E, 1008, 1008H, 1009, 1009C, 1009D, 1009E, 1010, and 1011* (TMDL Project No. 82).

PROCEDURES FOR FINAL DECISION

When an application is declared administratively complete, the Chief Clerk sends a letter to the applicant advising the applicant to publish the Notice of Receipt of Application and Intent to Obtain Permit in the newspaper. In addition, the Chief Clerk instructs the applicant to place a copy of the application in a public place for review and copying in the county where the facility is or will be located. This application will be in a public place throughout the comment period. The Chief Clerk also mails this notice to any interested persons and, if required, to landowners identified in the permit application.

This notice informs the public about the application and provides that an interested person may file comments on the application or request a contested case hearing or a public meeting.
Once a draft permit is completed, it is sent, along with the Executive Director's preliminary decision, as contained in the technical summary or fact sheet, to the Chief Clerk. At that time, the Notice of Application and Preliminary Decision will be mailed to the same people and published in the same newspaper as the prior notice. This notice sets a deadline for making public comments. The applicant must place a copy of the Executive Director's preliminary decision and draft permit in the public place with the application.

Any interested person may request a public meeting on the application until the deadline for filing public comments. A public meeting is intended for the taking of public comment and is not a contested case proceeding.

After the public comment deadline, the Executive Director prepares a response to all significant public comments on the application or the draft permit raised during the public comment period. The Chief Clerk then mails the Executive Director's response to comments and final decision to people who have filed comments, requested a contested case hearing, or requested to be on the mailing list. This notice provides that if a person is not satisfied with the Executive Director's response and decision, they can request a contested case hearing or file a request to reconsider the Executive Director's decision within 30 days after the notice is mailed.

The Executive Director will issue the permit unless a written hearing request or request for reconsideration is filed within 30 days after the Executive Director's response to comments and final decision is mailed. If a hearing request or request for reconsideration is filed, the Executive Director will not issue the permit and will forward the application and request to the TCEQ Commissioners for their consideration at a scheduled Commission meeting. If a contested case hearing is held, it will be a legal proceeding similar to a civil trial in state district court.

If the Executive Director calls a public meeting or the Commission grants a contested case hearing as described above, the Commission will give notice of the date, time, and place of the meeting or hearing. If a hearing request or request for reconsideration is made, the Commission will consider all public comments in making its decision and shall either adopt the Executive Director's response to public comments or prepare its own response.

For additional information about this application, contact John Hearn at (512) 239-5239.

John Hearn

John Hearn
Municipal Permits Team
Wastewater Permitting Section (MC 148)

December 20, 2023
Date

TPDES PERMIT NO. WQ0016334001
[For TCEQ office use only - EPA I.D. No. TX0144444]

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
P.O. Box 13087
Austin, Texas 78711-3087

PERMIT TO DISCHARGE WASTES
under provisions of
Section 402 of the Clean Water Act
and Chapter 26 of the Texas Water Code

Harris County Municipal Utility District No. 531

whose mailing address is

3200 Southwest Freeway, Suite 2600
Houston, Texas 77027

is authorized to treat and discharge wastes from the Harris County MUD 531 Wastewater Treatment Facility 2, SIC Code 4952

located approximately 0.5 miles southwest of the intersection of Mueschke Road and Schiel Road, in Harris County, Texas 77433

via pipe to a detention pond, thence through a series of pipes to a detention pond, thence to Schiel Road storm sewer, thence to a dry-bottom pond, thence to a ditch, thence to Little Cypress Creek, thence to Cypress Creek in Segment No. 1009 of the San Jacinto River Basin

only according to effluent limitations, monitoring requirements, and other conditions set forth in this permit, as well as the rules of the Texas Commission on Environmental Quality (TCEQ), the laws of the State of Texas, and other orders of the TCEQ. The issuance of this permit does not grant to the permittee the right to use private or public property for conveyance of wastewater along the discharge route described in this permit. This includes, but is not limited to, property belonging to any individual, partnership, corporation, or other entity. Neither does this permit authorize any invasion of personal rights nor any violation of federal, state, or local laws or regulations. It is the responsibility of the permittee to acquire property rights as may be necessary to use the discharge route.

This permit shall expire at midnight, **five years from the date of issuance**.

ISSUED DATE:

For the Commission

INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS Outfall Number 001

1. During the period beginning upon the date of issuance and lasting through completion of expansion to the 0.10 million gallons per day (MGD) facility, the permittee is authorized to discharge subject to the following effluent limitations:

   The daily average flow of effluent shall not exceed 0.05 MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 139 gallons per minute.

Effluent Characteristic	Discharge Limitations				Min. Self-Monitoring Requirements	
	Daily Avg mg/l (lbs/day)	7-day Avg mg/l	Daily Max mg/l	Single Grab mg/l	Report Daily Avg. & Max. Single Grab Measurement Frequency	Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	Totalizing Meter
Carbonaceous Biochemical Oxygen Demand (5-day)	10 (4.2)	15	25	35	One/week	Grab
Total Suspended Solids	15 (6.3)	25	40	60	One/week	Grab
Ammonia Nitrogen	3 (1.3)	6	10	15	One/week	Grab
E. coli, colony-forming units or most probable number per 100 ml	63	N/A	N/A	200	One/quarter	Grab

2. 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), and shall be monitored five times per week by grab sample. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.

3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per month by grab sample.

4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.

5. Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.

6. The effluent shall contain a minimum dissolved oxygen of 4.0 mg/l and shall be monitored once per week by grab sample.

FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS Outfall Number 001

1. During the period beginning upon completion of expansion to the 0.10 million gallons per day (MGD) facility and lasting through the date of expiration, the permittee is authorized to discharge subject to the following effluent limitations:

   The daily average flow of effluent shall not exceed 0.10 MGD, nor shall the average discharge during any two-hour period (2-hour peak) exceed 278 gallons per minute.

Effluent Characteristic	Discharge Limitations				Min. Self-Monitoring Requirements	
	Daily Avg mg/l (lbs/day)	7-day Avg mg/l	Daily Max mg/l	Single Grab mg/l	Report Daily Avg. & Max. Single Grab Measurement Frequency	Sample Type
Flow, MGD	Report	N/A	Report	N/A	Continuous	Totalizing Meter
Carbonaceous Biochemical Oxygen Demand (5-day)	10 (8.3)	15	25	35	One/week	Grab
Total Suspended Solids	15 (13)	25	40	60	One/week	Grab
Ammonia Nitrogen	3 (2.5)	6	10	15	One/week	Grab
E. coli, colony-forming units or most probable number per 100 ml	63	N/A	N/A	200	One/month	Grab

2. 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), and shall be monitored five times per week by grab sample. An equivalent method of disinfection may be substituted only with prior approval of the Executive Director.

3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per month by grab sample.

4. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.

5. Effluent monitoring samples shall be taken at the following location(s): Following the final treatment unit.

6. The effluent shall contain a minimum dissolved oxygen of 4.0 mg/l and shall be monitored once per week by grab sample.

DEFINITIONS AND STANDARD PERMIT CONDITIONS

As required by Title 30 Texas Administrative Code (TAC) Chapter 305, certain regulations appear as standard conditions in waste discharge permits. 30 TAC § 305.121 - 305.129 (relating to Permit Characteristics and Conditions) as promulgated under the Texas Water Code (TWC) §§ 5.103 and 5.105, and the Texas Health and Safety Code (THSC) §§ 361.017 and 361.024(a), establish the characteristics and standards for waste discharge permits, including sewage sludge, and those sections of 40 Code of Federal Regulations (CFR) Part 122 adopted by reference by the Commission. The following text includes these conditions and incorporates them into this permit. All definitions in TWC § 26.001 and 30 TAC Chapter 305 shall apply to this permit and are incorporated by reference. Some specific definitions of words or phrases used in this permit are as follows:

1. Flow Measurements

    a. Annual average flow - the arithmetic average of all daily flow determinations taken within the preceding 12 consecutive calendar months. The annual average flow determination shall consist of daily flow volume determinations made by a totalizing meter, charted on a chart recorder and limited to major domestic wastewater discharge facilities with one million gallons per day or greater permitted flow.

    b. Daily average flow - the arithmetic average of all determinations of the daily flow within a period of one calendar month. The daily average flow determination shall consist of determinations made on at least four separate days. If instantaneous measurements are used to determine the daily flow, the determination shall be the arithmetic average of all instantaneous measurements taken during that month. Daily average flow determination for intermittent discharges shall consist of a minimum of three flow determinations on days of discharge.

    c. Daily maximum flow - the highest total flow for any 24-hour period in a calendar month.

    d. Instantaneous flow - the measured flow during the minimum time required to interpret the flow measuring device.

    e. 2-hour peak flow (domestic wastewater treatment plants) - the maximum flow sustained for a two-hour period during the period of daily discharge. The average of multiple measurements of instantaneous maximum flow within a two-hour period may be used to calculate the 2-hour peak flow.

    f. Maximum 2-hour peak flow (domestic wastewater treatment plants) - the highest 2-hour peak flow for any 24-hour period in a calendar month.

2. Concentration Measurements

    a. Daily average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar month, consisting of at least four separate representative measurements.

        i. For domestic wastewater treatment plants - When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values in the previous four consecutive month period consisting of at least four measurements shall be utilized as the daily average concentration.

ii. For all other wastewater treatment plants - When four samples are not available in a calendar month, the arithmetic average (weighted by flow) of all values taken during the month shall be utilized as the daily average concentration.

b. 7-day average concentration - the arithmetic average of all effluent samples, composite or grab as required by this permit, within a period of one calendar week, Sunday through Saturday.

c. Daily maximum concentration - the maximum concentration measured on a single day, by the sample type specified in the permit, within a period of one calendar month.

d. Daily discharge - the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in terms of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the sampling day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the average measurement of the pollutant over the sampling day.

The daily discharge determination of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the daily discharge determination of concentration shall be the arithmetic average (weighted by flow value) of all samples collected during that day.

e. Bacteria concentration (*E. coli* or Enterococci) - Colony Forming Units (CFU) or Most Probable Number (MPN) of bacteria per 100 milliliters effluent. The daily average bacteria concentration is a geometric mean of the values for the effluent samples collected in a calendar month. The geometric mean shall be determined by calculating the nth root of the product of all measurements made in a calendar month, where n equals the number of measurements made; or, computed as the antilogarithm of the arithmetic mean of the logarithms of all measurements made in a calendar month. For any measurement of bacteria equaling zero, a substituted value of one shall be made for input into either computation method. If specified, the 7-day average for bacteria is the geometric mean of the values for all effluent samples collected during a calendar week.

f. Daily average loading (lbs/day) - the arithmetic average of all daily discharge loading calculations during a period of one calendar month. These calculations must be made for each day of the month that a parameter is analyzed. The daily discharge, in terms of mass (lbs/day), is calculated as (Flow, MGD x Concentration, mg/l x 8.34).

g. Daily maximum loading (lbs/day) - the highest daily discharge, in terms of mass (lbs/day), within a period of one calendar month.

3. Sample Type

a. Composite sample - For domestic wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC § 319.9 (a). For industrial wastewater, a composite sample is a sample made up of a minimum of three effluent portions collected in a continuous 24-hour period or during the period of daily discharge if less than 24 hours, and combined in volumes proportional to flow, and collected at the intervals required by 30 TAC § 319.9 (b).

b. Grab sample - an individual sample collected in less than 15 minutes.

4. Treatment Facility (facility) - wastewater facilities used in the conveyance, storage, treatment, recycling, reclamation and/or disposal of domestic sewage, industrial wastes, agricultural wastes, recreational wastes, or other wastes including sludge handling or disposal facilities under the jurisdiction of the Commission.

5. The term "sewage sludge" is defined as solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in 30 TAC Chapter 312. This includes the solids that have not been classified as hazardous waste separated from wastewater by unit processes.

6. The term "biosolids" is defined as sewage sludge that has been tested or processed to meet Class A, Class AB, or Class B pathogen standards in 30 TAC Chapter 312 for beneficial use.

7. Bypass - the intentional diversion of a waste stream from any portion of a treatment facility.

MONITORING AND REPORTING REQUIREMENTS

1. Self-Reporting

Monitoring results shall be provided at the intervals specified in the permit. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall conduct effluent sampling and reporting in accordance with 30 TAC §§ 319.4 - 319.12. Unless otherwise specified, effluent monitoring data shall be submitted each month, to the Compliance Monitoring Team of the Enforcement Division (MC 224), by the 20th day of the following month for each discharge which is described by this permit whether or not a discharge is made for that month. Monitoring results must be submitted online using the NetDMR reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver. Monitoring results must be signed and certified as required by Monitoring and Reporting Requirements No. 10.

As provided by state law, the permittee is subject to administrative, civil and criminal penalties, as applicable, for negligently or knowingly violating the Clean Water Act (CWA); TWC §§ 26, 27, and 28; and THSC § 361, including but not limited to knowingly making any false statement, representation, or certification on any report, record, or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance, or falsifying, tampering with or knowingly rendering inaccurate any monitoring device or method required by this permit or violating any other requirement imposed by state or federal regulations.

2. Test Procedures

a. Unless otherwise specified in this permit, test procedures for the analysis of pollutants shall comply with procedures specified in 30 TAC §§ 319.11 - 319.12. Measurements, tests, and calculations shall be accurately accomplished in a representative manner.

b. All laboratory tests submitted to demonstrate compliance with this permit must meet the requirements of 30 TAC § 25, Environmental Testing Laboratory Accreditation and Certification.

3. Records of Results

a. Monitoring samples and measurements shall be taken at times and in a manner so as to

be representative of the monitored activity.

b. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use or biosolids and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR Part 503), monitoring and reporting records, including strip charts and records of calibration and maintenance, copies of all records required by this permit, records of all data used to complete the application for this permit, and the certification required by 40 CFR § 264.73(b)(9) shall be retained at the facility site, or shall be readily available for review by a TCEQ representative for a period of three years from the date of the record or sample, measurement, report, application or certification. This period shall be extended at the request of the Executive Director.

c. Records of monitoring activities shall include the following:

i. date, time and place of sample or measurement;

ii. identity of individual who collected the sample or made the measurement.

iii. date and time of analysis;

iv. identity of the individual and laboratory who performed the analysis;

v. the technique or method of analysis; and

vi. the results of the analysis or measurement and quality assurance/quality control records.

The period during which records are required to be kept shall be automatically extended to the date of the final disposition of any administrative or judicial enforcement action that may be instituted against the permittee.

4. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit using approved analytical methods as specified above, all results of such monitoring shall be included in the calculation and reporting of the values submitted on the approved self-report form. Increased frequency of sampling shall be indicated on the self-report form.

5. Calibration of Instruments

All automatic flow measuring or recording devices and all totalizing meters for measuring flows shall be accurately calibrated by a trained person at plant start-up and as often thereafter as necessary to ensure accuracy, but not less often than annually unless authorized by the Executive Director for a longer period. Such person shall verify in writing that the device is operating properly and giving accurate results. Copies of the verification shall be retained at the facility site and/or shall be readily available for review by a TCEQ representative for a period of three years.

6. Compliance Schedule Reports

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of the permit shall be submitted no later

than 14 days following each schedule date to the Regional Office and the Compliance Monitoring Team of the Enforcement Division (MC 224).

7. Noncompliance Notification

   a. In accordance with 30 TAC § 305.125(9) any noncompliance which may endanger human health or safety, or the environment shall be reported by the permittee to the TCEQ. Except as allowed by 30 TAC § 305.132, report of such information shall be provided orally or by facsimile transmission (FAX) to the Regional Office within 24 hours of becoming aware of the noncompliance. A written submission of such information shall also be provided by the permittee to the Regional Office and the Compliance Monitoring Team of the Enforcement Division (MC 224) within five working days of becoming aware of the noncompliance. For Publicly Owned Treatment Works (POTWs), effective December 21, 2025, the permittee must submit the written report for unauthorized discharges and unanticipated bypasses that exceed any effluent limit in the permit using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver. The written submission shall contain a description of the noncompliance and its cause; the potential danger to human health or safety, or the environment; the period of noncompliance, including exact dates and times; if the noncompliance has not been corrected, the time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.

   b. The following violations shall be reported under Monitoring and Reporting Requirement 7.a.:

      i. Unauthorized discharges as defined in Permit Condition 2(g).

      ii. Any unanticipated bypass that exceeds any effluent limitation in the permit.

      iii. Violation of a permitted maximum daily discharge limitation for pollutants listed specifically in the Other Requirements section of an Industrial TPDES permit.

   c. In addition to the above, any effluent violation which deviates from the permitted effluent limitation by more than 40% shall be reported by the permittee in writing to the Regional Office and the Compliance Monitoring Team of the Enforcement Division (MC 224) within 5 working days of becoming aware of the noncompliance.

   d. Any noncompliance other than that specified in this section, or any required information not submitted or submitted incorrectly, shall be reported to the Compliance Monitoring Team of the Enforcement Division (MC 224) as promptly as possible. For effluent limitation violations, noncompliances shall be reported on the approved self-report form.

8. In accordance with the procedures described in 30 TAC §§ 35.301 - 35.303 (relating to Water Quality Emergency and Temporary Orders) if the permittee knows in advance of the need for a bypass, it shall submit prior notice by applying for such authorization.

9. Changes in Discharges of Toxic Substances

   All existing manufacturing, commercial, mining, and silvicultural permittees shall notify the Regional Office, orally or by facsimile transmission within 24 hours, and both the Regional Office and the Compliance Monitoring Team of the Enforcement Division (MC 224) in

writing within five (5) working days, after becoming aware of or having reason to believe:

a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant listed at 40 CFR Part 122, Appendix D, Tables II and III (excluding Total Phenols) which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

   i. One hundred micrograms per liter (100 μg/L);

   ii. Two hundred micrograms per liter (200 μg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 μg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;

   iii. Five (5) times the maximum concentration value reported for that pollutant in the permit application; or

   iv. The level established by the TCEQ.

b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

   i. Five hundred micrograms per liter (500 μg/L);

   ii. One milligram per liter (1 mg/L) for antimony;

   iii. Ten (10) times the maximum concentration value reported for that pollutant in the permit application; or

   iv. The level established by the TCEQ.

10. Signatories to Reports

    All reports and other information requested by the Executive Director shall be signed by the person and in the manner required by 30 TAC § 305.128 (relating to Signatories to Reports).

11. All POTWs must provide adequate notice to the Executive Director of the following:

    a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to CWA § 301 or § 306 if it were directly discharging those pollutants;

    b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit; and

    c. For the purpose of this paragraph, adequate notice shall include information on:

       i. The quality and quantity of effluent introduced into the POTW; and

       ii. Any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

PERMIT CONDITIONS

1. General

    a. When the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in an application or in any report to the Executive Director, it shall promptly submit such facts or information.

    b. This permit is granted on the basis of the information supplied and representations made by the permittee during action on an application, and relying upon the accuracy and completeness of that information and those representations. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked, in whole or in part, in accordance with 30 TAC Chapter 305, Subchapter D, during its term for good cause including, but not limited to, the following:

        i. Violation of any terms or conditions of this permit;

        ii. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or

        iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

    c. The permittee shall furnish to the Executive Director, upon request and within a reasonable time, any information to determine whether cause exists for amending, revoking, suspending or terminating the permit. The permittee shall also furnish to the Executive Director, upon request, copies of records required to be kept by the permit.

2. Compliance

    a. Acceptance of the permit by the person to whom it is issued constitutes acknowledgment and agreement that such person will comply with all the terms and conditions embodied in the permit, and the rules and other orders of the Commission.

    b. The permittee has a duty to comply with all conditions of the permit. Failure to comply with any permit condition constitutes a violation of the permit and the Texas Water Code or the Texas Health and Safety Code, and is grounds for enforcement action, for permit amendment, revocation, or suspension, or for denial of a permit renewal application or an application for a permit for another facility.

    c. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

    d. The permittee shall 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.

    e. Authorization from the Commission is required before beginning any change in the permitted facility or activity that may result in noncompliance with any permit requirements.

    f. A permit may be amended, suspended and reissued, or revoked for cause in accordance

with 30 TAC §§ 305.62 and 305.66 and TWC§ 7.302. The filing of a request by the permittee for a permit amendment, suspension and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

g. There shall be no unauthorized discharge of wastewater or any other waste. For the purpose of this permit, an unauthorized discharge is considered to be any discharge of wastewater into or adjacent to water in the state at any location not permitted as an outfall or otherwise defined in the Other Requirements section of this permit.

h. In accordance with 30 TAC § 305.535(a), the permittee may allow any bypass to occur from a TPDES permitted facility which does not cause permitted effluent limitations to be exceeded or an unauthorized discharge to occur, but only if the bypass is also for essential maintenance to assure efficient operation.

i. The permittee is subject to administrative, civil, and criminal penalties, as applicable, under TWC §§ 7.051 - 7.075 (relating to Administrative Penalties), 7.101 - 7.111 (relating to Civil Penalties), and 7.141 - 7.202 (relating to Criminal Offenses and Penalties) for violations 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 a permit issued under the CWA § 402, or any requirement imposed in a pretreatment program approved under the CWA §§ 402 (a)(3) or 402 (b)(8).

3. Inspections and Entry

a. Inspection and entry shall be allowed as prescribed in the TWC Chapters 26, 27, and 28, and THSC § 361.

b. The members of the Commission and employees and agents of the Commission are entitled to enter any public or private property at any reasonable time for the purpose of inspecting and investigating conditions relating to the quality of water in the state or the compliance with any rule, regulation, permit or other order of the Commission. Members, employees, or agents of the Commission and Commission contractors are entitled to enter public or private property at any reasonable time to investigate or monitor or, if the responsible party is not responsive or there is an immediate danger to public health or the environment, to remove or remediate a condition related to the quality of water in the state. Members, employees, Commission contractors, or agents acting under this authority who enter private property shall observe the establishment's rules and regulations concerning safety, internal security, and fire protection, and if the property has management in residence, shall notify management or the person then in charge of his presence and shall exhibit proper credentials. If any member, employee, Commission contractor, or agent is refused the right to enter in or on public or private property under this authority, the Executive Director may invoke the remedies authorized in TWC § 7.002. The statement above, that Commission entry shall occur in accordance with an establishment's rules and regulations concerning safety, internal security, and fire protection, is not grounds for denial or restriction of entry to any part of the facility, but merely describes the Commission's duty to observe appropriate rules and regulations during an inspection.

4. Permit Amendment and/or Renewal

a. The permittee shall give notice to the Executive Director as soon as possible of any planned physical alterations or additions to the permitted facility if such alterations or additions would require a permit amendment or result in a violation of permit requirements. Notice shall also be required under this paragraph when:

   i. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in accordance with 30 TAC § 305.534 (relating to New Sources and New Dischargers); or

   ii. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations in the permit, nor to notification requirements in Monitoring and Reporting Requirements No. 9; or

   iii. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

b. Prior to any facility modifications, additions, or expansions that will increase the plant capacity beyond the permitted flow, the permittee must apply for and obtain proper authorization from the Commission before commencing construction.

c. The permittee must apply for an amendment or renewal at least 180 days prior to expiration of the existing permit in order to continue a permitted activity after the expiration date of the permit. If an application is submitted prior to the expiration date of the permit, the existing permit shall remain in effect until the application is approved, denied, or returned. If the application is returned or denied, authorization to continue such activity shall terminate upon the effective date of the action. If an application is not submitted prior to the expiration date of the permit, the permit shall expire and authorization to continue such activity shall terminate.

d. Prior to accepting or generating wastes which are not described in the permit application or which would result in a significant change in the quantity or quality of the existing discharge, the permittee must report the proposed changes to the Commission. The permittee must apply for a permit amendment reflecting any necessary changes in permit conditions, including effluent limitations for pollutants not identified and limited by this permit.

e. In accordance with the TWC § 26.029(b), after a public hearing, notice of which shall be given to the permittee, the Commission may require the permittee, from time to time, for good cause, in accordance with applicable laws, to conform to new or additional conditions.

f. If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under CWA § 307(a) for a toxic pollutant which is present in the discharge and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, this permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition. The permittee shall comply with effluent standards or prohibitions established under CWA § 307(a) for toxic pollutants within the time provided in the

regulations that established those standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

5. Permit Transfer

   a. Prior to any transfer of this permit, Commission approval must be obtained. The Commission shall be notified in writing of any change in control or ownership of facilities authorized by this permit. Such notification should be sent to the Applications Review and Processing Team (MC 148) of the Water Quality Division.

   b. A permit may be transferred only according to the provisions of 30 TAC § 305.64 (relating to Transfer of Permits) and 30 TAC § 50.133 (relating to Executive Director Action on Application or WQMP update).

6. Relationship to Hazardous Waste Activities

   This permit does not authorize any activity of hazardous waste storage, processing, or disposal that requires a permit or other authorization pursuant to the Texas Health and Safety Code.

7. Relationship to Water Rights

   Disposal of treated effluent by any means other than discharge directly to water in the state must be specifically authorized in this permit and may require a permit pursuant to TWC Chapter 11.

8. Property Rights

   A permit does not convey any property rights of any sort, or any exclusive privilege.

9. Permit Enforceability

   The conditions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

10. Relationship to Permit Application

    The application pursuant to which the permit has been issued is incorporated herein; provided, however, that in the event of a conflict between the provisions of this permit and the application, the provisions of the permit shall control.

11. Notice of Bankruptcy

    a. Each permittee shall notify the Executive Director, in writing, immediately following the filing of a voluntary or involuntary petition for bankruptcy under any chapter of Title 11 (Bankruptcy) of the United States Code (11 USC) by or against:

       i. the permittee;

       ii. an entity (as that term is defined in 11 USC, § 101(14)) controlling the permittee or listing the permit or permittee as property of the estate; or

       iii. an affiliate (as that term is defined in 11 USC, § 101(2)) of the permittee.

b. This notification must indicate:

i. the name of the permittee;

ii. the permit number(s);

iii. the bankruptcy court in which the petition for bankruptcy was filed; and

iv. the date of filing of the petition.

OPERATIONAL REQUIREMENTS

1. The permittee shall at all times ensure that the facility and all of its systems of collection, treatment, and disposal are properly operated and maintained. This includes, but is not limited to, the regular, periodic examination of wastewater solids within the treatment plant by the operator in order 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. Process control, maintenance, and operations records shall be retained at the facility site, or shall be readily available for review by a TCEQ representative, for a period of three years.

2. Upon request by the Executive Director, the permittee shall take appropriate samples and provide proper analysis in order to demonstrate compliance with Commission rules. Unless otherwise specified in this permit or otherwise ordered by the Commission, the permittee shall comply with all applicable provisions of 30 TAC Chapter 312 concerning sewage sludge or biosolids use and disposal and 30 TAC §§ 319.21 - 319.29 concerning the discharge of certain hazardous metals.

3. Domestic wastewater treatment facilities shall comply with the following provisions:

   a. The permittee shall notify the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, in writing, of any facility expansion at least 90 days prior to conducting such activity.

   b. The permittee shall submit a closure plan for review and approval to the Municipal Permits Team, Wastewater Permitting Section (MC 148) of the Water Quality Division, for any closure activity at least 90 days prior to conducting such activity. Closure is the act of permanently taking a waste management unit or treatment facility out of service and includes the permanent removal from service of any pit, tank, pond, lagoon, surface impoundment and/or other treatment unit regulated by this permit.

4. The permittee is responsible for installing prior to plant start-up, and subsequently maintaining, adequate safeguards 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.

5. Unless otherwise specified, the permittee shall provide a readily accessible sampling point and, where applicable, an effluent flow measuring device or other acceptable means by which effluent flow may be determined.

6. The permittee shall remit an annual water quality fee to the Commission as required by 30

TAC Chapter 21. Failure to pay the fee may result in revocation of this permit under TWC § 7.302(b)(6).

7. Documentation

   For all written notifications to the Commission required of the permittee by this permit, the permittee shall keep and make available a copy of each such notification under the same conditions as self-monitoring data are required to be kept and made available. Except for information required for TPDES permit applications, effluent data, including effluent data in permits, draft permits and permit applications, and other information specified as not confidential in 30 TAC §§ 1.5(d), any information submitted pursuant to this permit may be claimed as confidential by the submitter. Any such claim must be asserted in the manner prescribed in the application form or by stamping the words confidential business information on each page containing such information. If no claim is made at the time of submission, information may be made available to the public without further notice. If the Commission or Executive Director agrees with the designation of confidentiality, the TCEQ will not provide the information for public inspection unless required by the Texas Attorney General or a court pursuant to an open records request. If the Executive Director does not agree with the designation of confidentiality, the person submitting the information will be notified.

8. Facilities that generate domestic wastewater shall comply with the following provisions; domestic wastewater treatment facilities at permitted industrial sites are excluded.

   a. Whenever flow measurements for any domestic sewage treatment facility reach 75% of the permitted daily average or annual average flow for three consecutive months, the permittee must initiate engineering and financial planning for expansion and/or upgrading of the domestic wastewater treatment and/or collection facilities. Whenever the flow reaches 90% of the permitted daily average or annual average flow for three consecutive months, the permittee shall obtain necessary authorization from the Commission to commence construction of the necessary additional treatment and/or collection facilities. In the case of a domestic wastewater treatment facility which reaches 75% of the permitted daily average or annual average flow for three consecutive months, and the planned population to be served or the quantity of waste produced is not expected to exceed the design limitations of the treatment facility, the permittee shall submit an engineering report supporting this claim to the Executive Director of the Commission.

      If in the judgment of the Executive Director the population to be served will not cause permit noncompliance, then the requirement of this section may be waived. To be effective, any waiver must be in writing and signed by the Director of the Enforcement Division (MC 219) of the Commission, and such waiver of these requirements will be reviewed upon expiration of the existing permit; however, any such waiver shall not be interpreted as condoning or excusing any violation of any permit parameter.

   b. The plans and specifications for domestic sewage collection and treatment works associated with any domestic permit must be approved by the Commission and failure to secure approval before commencing construction of such works or making a discharge is a violation of this permit and each day is an additional violation until approval has been secured.

c. Permits for domestic wastewater treatment plants are granted subject to the policy of the Commission to encourage the development of area-wide waste collection, treatment, and disposal systems. The Commission reserves the right to amend any domestic wastewater permit in accordance with applicable procedural requirements to require the system covered by this permit to be integrated into an area-wide system, should such be developed; to require the delivery of the wastes authorized to be collected in, treated by or discharged from said system, to such area-wide system; or to amend this permit in any other particular to effectuate the Commission's policy. Such amendments may be made when the changes required are advisable for water quality control purposes and are feasible on the basis of waste treatment technology, engineering, financial, and related considerations existing at the time the changes are required, exclusive of the loss of investment in or revenues from any then existing or proposed waste collection, treatment or disposal system.

9. Domestic wastewater treatment plants shall be operated and maintained by sewage plant operators holding a valid certificate of competency at the required level as defined in 30 TAC Chapter 30.

10. For Publicly Owned Treatment Works (POTWs), the 30-day average (or monthly average) percent removal for BOD and TSS shall not be less than 85%, unless otherwise authorized by this permit.

11. Facilities that generate industrial solid waste as defined in 30 TAC § 335.1 shall comply with these provisions:

    a. Any solid waste, as defined in 30 TAC § 335.1 (including but not limited to such wastes as garbage, refuse, sludge from a waste treatment, water supply treatment plant or air pollution control facility, discarded materials, discarded materials to be recycled, whether the waste is solid, liquid, or semisolid), generated by the permittee during the management and treatment of wastewater, must be managed in accordance with all applicable provisions of 30 TAC Chapter 335, relating to Industrial Solid Waste Management.

    b. Industrial wastewater that is being collected, accumulated, stored, or processed before discharge through any final discharge outfall, specified by this permit, is considered to be industrial solid waste until the wastewater passes through the actual point source discharge and must be managed in accordance with all applicable provisions of 30 TAC Chapter 335.

    c. The permittee shall provide written notification, pursuant to the requirements of 30 TAC § 335.8(b)(1), to the Corrective Action Section (MC 127) of the Remediation Division informing the Commission of any closure activity involving an Industrial Solid Waste Management Unit, at least 90 days prior to conducting such an activity.

    d. Construction of any industrial solid waste management unit requires the prior written notification of the proposed activity to the Registration and Reporting Section (MC 129) of the Permitting and Registration Support Division. No person shall dispose of industrial solid waste, including sludge or other solids from wastewater treatment processes, prior to fulfilling the deed recordation requirements of 30 TAC § 335.5.

    e. The term "industrial solid waste management unit" means a landfill, surface impoundment, waste-pile, industrial furnace, incinerator, cement kiln, injection well,

container, drum, salt dome waste containment cavern, or any other structure vessel, appurtenance, or other improvement on land used to manage industrial solid waste.

f. The permittee shall keep management records for all sludge (or other waste) removed from any wastewater treatment process. These records shall fulfill all applicable requirements of 30 TAC § 335 and must include the following, as it pertains to wastewater treatment and discharge:

i. Volume of waste and date(s) generated from treatment process;
ii. Volume of waste disposed of on-site or shipped off-site;
iii. Date(s) of disposal;
iv. Identity of hauler or transporter;
v. Location of disposal site; and
vi. Method of final disposal.

The above records shall be maintained on a monthly basis. The records shall be retained at the facility site, or shall be readily available for review by authorized representatives of the TCEQ for at least five years.

12. For industrial facilities to which the requirements of 30 TAC § 335 do not apply, sludge and solid wastes, including tank cleaning and contaminated solids for disposal, shall be disposed of in accordance with THSC § 361.

TCEQ Revision 06/2020

SLUDGE PROVISIONS

The permittee is authorized to dispose of sludge or biosolids only at a Texas Commission on Environmental Quality (TCEQ) authorized land application site, co-disposal landfill, wastewater treatment facility, or facility that further processes sludge. **The disposal of sludge or biosolids by land application on property owned, leased or under the direct control of the permittee is a violation of the permit unless the site is authorized with the TCEQ. This provision does not authorize Distribution and Marketing of Class A or Class AB Biosolids. This provision does not authorize the permittee to land apply biosolids on property owned, leased or under the direct control of the permittee.**

SECTION I. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE OR BIOSOLIDS LAND APPLICATION

A. General Requirements

1. The permittee shall handle and dispose of sewage sludge or biosolids in accordance with 30 TAC § 312 and all other applicable state and federal regulations in a manner that protects public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present in the sludge or biosolids.

2. In all cases, if the person (permit holder) who prepares the sewage sludge supplies the sewage sludge to another person for land application use or to the owner or lease holder of the land, the permit holder shall provide necessary information to the parties who receive the sludge to assure compliance with these regulations.

3. The land application of processed or unprocessed chemical toilet waste, grease trap waste, grit trap waste, milk solids, or similar non-hazardous municipal or industrial solid wastes, or any of the wastes listed in this provision combined with biosolids, WTP residuals or domestic septage is prohibited unless the grease trap waste is added at a fats, oil and grease (FOG) receiving facility as part of an anaerobic digestion process.

B. Testing Requirements

1. Sewage sludge or biosolids shall be tested once during the term of this permit in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I [Toxicity Characteristic Leaching Procedure (TCLP)] or other method that receives the prior approval of the TCEQ for the contaminants listed in 40 CFR Part 261.24, Table 1. Sewage sludge or biosolids failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal. Following failure of any TCLP test, the management or disposal of sewage sludge or biosolids at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge or biosolids no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Registration Support Division and the Regional Director (MC Region 12) within seven (7) days after failing the TCLP Test.

The report shall contain test results, certification that unauthorized waste management has stopped, and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Permitting and Registration Support Division (MC 129), Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. This annual report shall be submitted to the TCEQ Regional Office (MC Region 12) and the Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30th of each year. The permittee must submit this annual report using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

2. Biosolids shall not be applied to the land if the concentration of the pollutants exceeds the pollutant concentration criteria in Table 1. The frequency of testing for pollutants in Table 1 is found in Section I.C. of this permit.

TABLE 1

Pollutant	Ceiling Concentration (Milligrams per kilogram)*
Arsenic	75
Cadmium	85
Chromium	3000
Copper	4300
Lead	840
Mercury	57
Molybdenum	75
Nickel	420
PCBs	49
Selenium	100
Zinc	7500

* Dry weight basis

3. Pathogen Control

All sewage sludge that is applied to agricultural land, forest, a public contact site, or a reclamation site must be treated by one of the following methods to ensure that the sludge meets either the Class A, Class AB or Class B biosolids pathogen requirements.

a. For sewage sludge to be classified as Class A biosolids with respect to pathogens, the density of fecal coliform in the sewage sludge must be less than 1,000 most probable number (MPN) per gram of total solids (dry weight basis), or the density of Salmonella sp. bacteria in the sewage sludge must be less than three MPN per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. In addition, one of the alternatives listed below must be met:

Alternative 1 - The temperature of the sewage sludge that is used or disposed shall be maintained at or above a specific value for a period of time. See 30 TAC § 312.82(a)(2)(A) for specific information;

Alternative 5 (PFRP) - Sewage sludge that is used or disposed of must be treated in one of the Processes to Further Reduce Pathogens (PFRP) described in 40 CFR Part 503, Appendix B. PFRP include composting, heat drying, heat treatment, and thermophilic aerobic digestion; or

Alternative 6 (PFRP Equivalent) - Sewage sludge that is used or disposed of must be treated in a process that has been approved by the U. S. Environmental Protection Agency as being equivalent to those in Alternative 5.

b. For sewage sludge to be classified as Class AB biosolids with respect to pathogens, the density of fecal coliform in the sewage sludge must be less than 1,000 MPN per gram of total solids (dry weight basis), or the density of *Salmonella* sp. bacteria in the sewage sludge be less than three MPN per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. In addition, one of the alternatives listed below must be met:

Alternative 2 - The pH of the sewage sludge that is used or disposed shall be raised to above 12 std. units and shall remain above 12 std. units for 72 hours.

The temperature of the sewage sludge shall be above 52° Celsius for 12 hours or longer during the period that the pH of the sewage sludge is above 12 std. units.

At the end of the 72-hour period during which the pH of the sewage sludge is above 12 std. units, the sewage sludge shall be air dried to achieve a percent solids in the sewage sludge greater than 50%; or

Alternative 3 - The sewage sludge shall be analyzed for enteric viruses prior to pathogen treatment. The limit for enteric viruses is less than one Plaque-forming Unit per four grams of total solids (dry weight basis) either before or following pathogen treatment. See 30 TAC § 312.82(a)(2)(C)(i-iii) for specific information. The sewage sludge shall be analyzed for viable helminth ova prior to pathogen treatment. The limit for viable helminth ova is less than one per four grams of total solids (dry weight basis) either before or following pathogen treatment. See 30 TAC § 312.82(a)(2)(C)(iv-vi) for specific information; or

Alternative 4 - The density of enteric viruses in the sewage sludge shall be less than one Plaque-forming Unit per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed. The density of viable helminth ova in the sewage sludge shall be less than one per four grams of total solids (dry weight basis) at the time the sewage sludge is used or disposed.

c. Sewage sludge that meets the requirements of Class AB biosolids may be classified a Class A biosolids if a variance request is submitted in writing that is supported by substantial documentation demonstrating equivalent methods for reducing odors and written approval is granted by the executive director. The executive director may deny the variance request or revoke that approved variance if it is determined that the variance may potentially endanger human health or the environment, or create nuisance odor conditions.

d. Three alternatives are available to demonstrate compliance with Class B biosolids

criteria.

Alternative 1

i. A minimum of seven random samples of the sewage sludge shall be collected within 48 hours of the time the sewage sludge is used or disposed of during each monitoring episode for the sewage sludge.

ii. The geometric mean of the density of fecal coliform in the samples collected shall be less than either 2,000,000 MPN per gram of total solids (dry weight basis) or 2,000,000 Colony Forming Units per gram of total solids (dry weight basis).

Alternative 2 - Sewage sludge that is used or disposed of shall be treated in one of the Processes to Significantly Reduce Pathogens (PSRP) described in 40 CFR Part 503, Appendix B, so long as all of the following requirements are met by the generator of the sewage sludge.

i. Prior to use or disposal, all the sewage sludge must have been generated from a single location, except as provided in paragraph v. below;

ii. An independent Texas Licensed Professional Engineer must make a certification to the generator of a sewage sludge that the wastewater treatment facility generating the sewage sludge is designed to achieve one of the PSRP at the permitted design loading of the facility. The certification need only be repeated if the design loading of the facility is increased. The certification shall include a statement indicating the design meets all the applicable standards specified in Appendix B of 40 CFR Part 503;

iii. Prior to any off-site transportation or on-site use or disposal of any sewage sludge generated at a wastewater treatment facility, the chief certified operator of the wastewater treatment facility or other responsible official who manages the processes to significantly reduce pathogens at the wastewater treatment facility for the permittee, shall certify that the sewage sludge underwent at least the minimum operational requirements necessary in order to meet one of the PSRP. The acceptable processes and the minimum operational and record keeping requirements shall be in accordance with established U.S. Environmental Protection Agency final guidance;

iv. All certification records and operational records describing how the requirements of this paragraph were met shall be kept by the generator for a minimum of three years and be available for inspection by commission staff for review; and

v. If the sewage sludge is generated from a mixture of sources, resulting from a person who prepares sewage sludge from more than one wastewater treatment facility, the resulting derived product shall meet one of the PSRP, and shall meet the certification, operation, and record keeping requirements of this paragraph.

Alternative 3 - Sewage sludge shall be treated in an equivalent process that has been approved by the U.S. Environmental Protection Agency, so long as all of the following requirements are met by the generator of the sewage sludge.

i. Prior to use or disposal, all the sewage sludge must have been generated from a

single location, except as provided in paragraph v. below;

ii. Prior to any off-site transportation or on-site use or disposal of any sewage sludge generated at a wastewater treatment facility, the chief certified operator of the wastewater treatment facility or other responsible official who manages the processes to significantly reduce pathogens at the wastewater treatment facility for the permittee, shall certify that the sewage sludge underwent at least the minimum operational requirements necessary in order to meet one of the PSRP. The acceptable processes and the minimum operational and record keeping requirements shall be in accordance with established U.S. Environmental Protection Agency final guidance;

iii. All certification records and operational records describing how the requirements of this paragraph were met shall be kept by the generator for a minimum of three years and be available for inspection by commission staff for review;

iv. The Executive Director will accept from the U.S. Environmental Protection Agency a finding of equivalency to the defined PSRP; and

v. If the sewage sludge is generated from a mixture of sources resulting from a person who prepares sewage sludge from more than one wastewater treatment facility, the resulting derived product shall meet one of the Processes to Significantly Reduce Pathogens, and shall meet the certification, operation, and record keeping requirements of this paragraph.

In addition to the Alternatives 1 – 3, the following site restrictions must be met if Class B biosolids are land applied:

i. Food crops with harvested parts that touch the biosolids /soil mixture and are totally above the land surface shall not be harvested for 14 months after application of biosolids.

ii. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after application of biosolids when the biosolids remain on the land surface for 4 months or longer prior to incorporation into the soil.

iii. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months after application of biosolids when the biosolids remain on the land surface for less than 4 months prior to incorporation into the soil.

iv. Food crops, feed crops, and fiber crops shall not be harvested for 30 days after application of biosolids.

v. Domestic livestock shall not be allowed to graze on the land for 30 days after application of biosolids.

vi. Turf grown on land where biosolids are applied shall not be harvested for 1 year after application of the biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn.

vii. Public access to land with a high potential for public exposure shall be restricted for 1 year after application of biosolids.

viii. Public access to land with a low potential for public exposure shall be restricted for 30 days after application of biosolids.

ix. Land application of biosolids shall be in accordance with the buffer zone requirements found in 30 TAC § 312.44.

4. Vector Attraction Reduction Requirements

All bulk sewage sludge that is applied to agricultural land, forest, a public contact site, or a reclamation site shall be treated by one of the following Alternatives 1 through 10 for vector attraction reduction.

Alternative 1 - The mass of volatile solids in the sewage sludge shall be reduced by a minimum of 38%.

Alternative 2 - If Alternative 1 cannot be met for an anaerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge anaerobically in the laboratory in a bench-scale unit for 40 additional days at a temperature between 30° and 37° Celsius. Volatile solids must be reduced by less than 17% to demonstrate compliance.

Alternative 3 - If Alternative 1 cannot be met for an aerobically digested sludge, demonstration can be made by digesting a portion of the previously digested sludge with percent solids of two percent or less aerobically in the laboratory in a bench-scale unit for 30 additional days at 20° Celsius. Volatile solids must be reduced by less than 15% to demonstrate compliance.

Alternative 4 - The specific oxygen uptake rate (SOUR) for sewage sludge treated in an aerobic process shall be equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis) at a temperature of 20° Celsius.

Alternative 5 - Sewage sludge shall be treated in an aerobic process for 14 days or longer. During that time, the temperature of the sewage sludge shall be higher than 40° Celsius and the average temperature of the sewage sludge shall be higher than 45° Celsius.

Alternative 6 - The pH of sewage sludge shall be raised to 12 or higher by alkali addition and, without the addition of more alkali shall remain at 12 or higher for two hours and then remain at a pH of 11.5 or higher for an additional 22 hours at the time the sewage sludge is prepared for sale or given away in a bag or other container.

Alternative 7 - The percent solids of sewage sludge that does not contain unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 75% based on the moisture content and total solids prior to mixing with other materials. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.

Alternative 8 - The percent solids of sewage sludge that contains unstabilized solids generated in a primary wastewater treatment process shall be equal to or greater than 90% based on the moisture content and total solids prior to mixing with other materials at the time the sludge is used. Unstabilized solids are defined as organic materials in sewage sludge that have not been treated in either an aerobic or anaerobic treatment process.

Alternative 9 -

i. Biosolids shall be injected below the surface of the land.

ii. No significant amount of the biosolids shall be present on the land surface within one hour after the biosolids are injected.

iii. When sewage sludge that is injected below the surface of the land is Class A or Class AB with respect to pathogens, the biosolids shall be injected below the land surface within eight hours after being discharged from the pathogen treatment process.

Alternative 10-

i. Biosolids applied to the land surface or placed on a surface disposal site shall be incorporated into the soil within six hours after application to or placement on the land.

ii. When biosolids that is incorporated into the soil is Class A or Class AB with respect to pathogens, the biosolids shall be applied to or placed on the land within eight hours after being discharged from the pathogen treatment process.

C. Monitoring Requirements

Toxicity Characteristic Leaching Procedure (TCLP) Test	- once during the term of this permit
PCBs	- once during the term of this permit

All metal constituents and fecal coliform or *Salmonella* sp. bacteria shall be monitored at the appropriate frequency shown below, pursuant to 30 TAC § 312.46(a)(1):

Amount of biosolids (*) metric tons per 365-day period	Monitoring Frequency
0 to less than 290	Once/Year
290 to less than 1,500	Once/Quarter
1,500 to less than 15,000	Once/Two Months
15,000 or greater	Once/Month

(*) *The amount of bulk biosolids applied to the land (dry wt. basis).*

Representative samples of sewage sludge shall be collected and analyzed in accordance with the methods referenced in 30 TAC § 312.7

Identify each of the analytic methods used by the facility to analyze enteric viruses, fecal coliforms, helminth ova, *Salmonella* sp., and other regulated parameters.

Identify in the following categories (as applicable) the sewage sludge or biosolids treatment process or processes at the facility: preliminary operations (e.g., sludge or biosolids grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.

Identify the nature of material generated by the facility (such as a biosolid for beneficial use or land-farming, or sewage sludge or biosolids for disposal at a monofill) and whether the material is ultimately conveyed off-site in bulk or in bags.

SECTION II. REQUIREMENTS SPECIFIC TO BULK SEWAGE SLUDGE FOR APPLICATION TO THE LAND MEETING CLASS A, CLASS AB or B BIOSOLIDS PATHOGEN REDUCTION AND THE CUMULATIVE LOADING RATES IN TABLE 2, OR CLASS B PATHOGEN REDUCTION AND THE POLLUTANT CONCENTRATIONS IN TABLE 3

For those permittees meeting Class A, Class AB or B pathogen reduction requirements and that meet the cumulative loading rates in Table 2 below, or the Class B pathogen reduction requirements and contain concentrations of pollutants below listed in Table 3, the following conditions apply:

A. Pollutant Limits

Table 2

Pollutant	Cumulative Pollutant Loading Rate (pounds per acre)*
Arsenic	36
Cadmium	35
Chromium	2677
Copper	1339
Lead	268
Mercury	15
Molybdenum	Report Only
Nickel	375
Selenium	89
Zinc	2500

Table 3

Pollutant	Monthly Average Concentration (milligrams per kilogram)*
Arsenic	41
Cadmium	39
Chromium	1200
Copper	1500
Lead	300
Mercury	17
Molybdenum	Report Only
Nickel	420
Selenium	36
Zinc	2800

*Dry weight basis

B. Pathogen Control

All bulk sewage sludge that is applied to agricultural land, forest, a public contact site, a reclamation site, shall be treated by either Class A, Class AB or Class B biosolids pathogen reduction requirements as defined above in Section I.B.3.

C. Management Practices

1. Bulk biosolids shall not be applied to agricultural land, forest, a public contact site, or a reclamation site that is flooded, frozen, or snow-covered so that the bulk biosolids enters a wetland or other waters in the State.

2. Bulk biosolids not meeting Class A biosolids requirements shall be land applied in a manner which complies with Applicability in accordance with 30 TAC §312.41 and the Management Requirements in accordance with 30 TAC § 312.44.

3. Bulk biosolids shall be applied at or below the agronomic rate of the cover crop.

4. An information sheet shall be provided to the person who receives bulk Class A or AB biosolids sold or given away. The information sheet shall contain the following information:

    a. The name and address of the person who prepared the Class A or AB biosolids that are sold or given away in a bag or other container for application to the land.

    b. A statement that application of the biosolids to the land is prohibited except in accordance with the instruction on the label or information sheet.

    c. The annual whole sludge application rate for the biosolids application rate for the biosolids that does not cause any of the cumulative pollutant loading rates in Table 2 above to be exceeded, unless the pollutant concentrations in Table 3 found in Section II above are met.

D. Notification Requirements

1. If bulk biosolids are applied to land in a State other than Texas, written notice shall be provided prior to the initial land application to the permitting authority for the State in which the bulk biosolids are proposed to be applied. The notice shall include:

    a. The location, by street address, and specific latitude and longitude, of each land application site.

    b. The approximate time period bulk biosolids will be applied to the site.

    c. The name, address, telephone number, and National Pollutant Discharge Elimination System permit number (if appropriate) for the person who will apply the bulk biosolids.

2. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the biosolids disposal practice.

E. Record Keeping Requirements

The documents will be retained at the facility site and/or shall be readily available for review by a TCEQ representative. The person who prepares bulk sewage sludge or a biosolids material shall develop the following information and shall retain the information at the facility site and/or shall be readily available for review by a TCEQ representative for a period

of five years. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC § 312.47 for persons who land apply.

1. The concentration (mg/kg) in the sludge of each pollutant listed in Table 3 above and the applicable pollutant concentration criteria (mg/kg), or the applicable cumulative pollutant loading rate and the applicable cumulative pollutant loading rate limit (lbs/ac) listed in Table 2 above.

2. A description of how the pathogen reduction requirements are met (including site restrictions for Class AB and Class B biosolids, if applicable).

3. A description of how the vector attraction reduction requirements are met.

4. A description of how the management practices listed above in Section II.C are being met.

5. The following certification statement:

   "I certify, under penalty of law, that the applicable pathogen requirements in 30 TAC § 312.82(a) or (b) and the vector attraction reduction requirements in 30 TAC § 312.83(b) have been met for each site on which bulk biosolids are applied. This determination has been made under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate the information used to determine that the management practices have been met. I am aware that there are significant penalties for false certification including fine and imprisonment."

6. The recommended agronomic loading rate from the references listed in Section II.C.3. above, as well as the actual agronomic loading rate shall be retained. The person who applies bulk biosolids shall develop the following information and shall retain the information at the facility site and/or shall be readily available for review by a TCEQ representative indefinitely. If the permittee supplies the sludge to another person who land applies the sludge, the permittee shall notify the land applier of the requirements for record keeping found in 30 TAC § 312.47 for persons who land apply:

   a. A certification statement that all applicable requirements (specifically listed) have been met, and that the permittee understands that there are significant penalties for false certification including fine and imprisonment. See 30 TAC § 312.47(a)(4)(A)(ii) or 30 TAC § 312.47(a)(5)(A)(ii), as applicable, and to the permittee's specific sludge treatment activities.

   b. The location, by street address, and specific latitude and longitude, of each site on which biosolids is applied.

   c. The number of acres in each site on which bulk biosolids are applied.

   d. The date and time biosolids are applied to each site.

   e. The cumulative amount of each pollutant in pounds/acre listed in Table 2 applied to each site.

   f. The total amount of biosolids applied to each site in dry tons.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

F. Reporting Requirements

The permittee shall report annually to the TCEQ Regional Office (MC Region 12) and Compliance Monitoring Team (MC 224) of the Enforcement Division, by September 30th of each year the following information. The permittee must submit this annual report using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

1. Identify in the following categories (as applicable) the sewage sludge or biosolids treatment process or processes at the facility: preliminary operations (e.g., sludge or biosolids grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.

2. Identify the nature of material generated by the facility (such as a biosolid for beneficial use or land-farming, or sewage sludge for disposal at a monofill) and whether the material is ultimately conveyed off-site in bulk or in bags.

3. Results of tests performed for pollutants found in either Table 2 or 3 as appropriate for the permittee's land application practices.

4. The frequency of monitoring listed in Section I.C. that applies to the permittee.

5. Toxicity Characteristic Leaching Procedure (TCLP) results.

6. PCB concentration in sludge or biosolids in mg/kg.

7. Identity of hauler(s) and TCEQ transporter number.

8. Date(s) of transport.

9. Texas Commission on Environmental Quality registration number, if applicable.

10. Amount of sludge or biosolids disposal dry weight (lbs/acre) at each disposal site.

11. The concentration (mg/kg) in the sludge of each pollutant listed in Table 1 (defined as a monthly average) as well as the applicable pollutant concentration criteria (mg/kg) listed in Table 3 above, or the applicable pollutant loading rate limit (lbs/acre) listed in Table 2 above if it exceeds 90% of the limit.

12. Level of pathogen reduction achieved (Class A, Class AB or Class B).

13. Alternative used as listed in Section I.B.3.(a. or b.). Alternatives describe how the pathogen reduction requirements are met. If Class B biosolids, include information on how site restrictions were met.

14. Identify each of the analytic methods used by the facility to analyze enteric viruses, fecal coliforms, helminth ova, *Salmonella* sp., and other regulated parameters.

15. Vector attraction reduction alternative used as listed in Section I.B.4.

16. Amount of sludge or biosolids transported in dry tons/year.

17. The certification statement listed in either 30 TAC § 312.47(a)(4)(A)(ii) or 30 TAC § 312.47(a)(5)(A)(ii) as applicable to the permittee's sludge or biosolids treatment activities, shall be attached to the annual reporting form.

18. When the amount of any pollutant applied to the land exceeds 90% of the cumulative pollutant loading rate for that pollutant, as described in Table 2, the permittee shall report the following information as an attachment to the annual reporting form.

    a. The location, by street address, and specific latitude and longitude.

    b. The number of acres in each site on which bulk biosolids are applied.

    c. The date and time bulk biosolids are applied to each site.

    d. The cumulative amount of each pollutant (i.e., pounds/acre) listed in Table 2 in the bulk biosolids applied to each site.

    e. The amount of biosolids (i.e., dry tons) applied to each site.

    The above records shall be maintained on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

SECTION III. REQUIREMENTS APPLYING TO ALL SEWAGE SLUDGE OR BIOSOLIDS DISPOSED IN A MUNICIPAL SOLID WASTE LANDFILL

A. The permittee shall handle and dispose of sewage sludge or biosolids in accordance with 30 TAC § 330 and all other applicable state and federal regulations to protect public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present. The permittee shall ensure that the sewage sludge or biosolids meets the requirements in 30 TAC § 330 concerning the quality of the sludge disposed in a municipal solid waste landfill.

B. If the permittee generates sewage sludge or biosolids and supplies that sewage sludge or biosolids to the owner or operator of a municipal solid waste landfill (MSWLF) for disposal, the permittee shall provide to the owner or operator of the MSWLF appropriate information needed to be in compliance with the provisions of this permit.

C. The permittee shall give 180 days prior notice to the Executive Director in care of the Wastewater Permitting Section (MC 148) of the Water Quality Division of any change planned in the sewage sludge or biosolids disposal practice.

D. Sewage sludge or biosolids shall be tested once during the term of this permit in accordance with the method specified in both 40 CFR Part 261, Appendix II and 40 CFR Part 268, Appendix I (Toxicity Characteristic Leaching Procedure) or other method, which receives the prior approval of the TCEQ for contaminants listed in Table 1 of 40 CFR § 261.24. Sewage sludge or biosolids failing this test shall be managed according to RCRA standards for generators of hazardous waste, and the waste's disposition must be in accordance with all applicable requirements for hazardous waste processing, storage, or disposal.

   Following failure of any TCLP test, the management or disposal of sewage sludge or biosolids at a facility other than an authorized hazardous waste processing, storage, or disposal facility shall be prohibited until such time as the permittee can demonstrate the sewage sludge or biosolids no longer exhibits the hazardous waste toxicity characteristics (as demonstrated by the results of the TCLP tests). A written report shall be provided to both the TCEQ Registration and Reporting Section (MC 129) of the Permitting and Registration Support Division and the Regional Director (MC Region 12) of the appropriate TCEQ field office within 7 days after failing the TCLP Test.

   The report shall contain test results, certification that unauthorized waste management has stopped, and a summary of alternative disposal plans that comply with RCRA standards for the management of hazardous waste. The report shall be addressed to: Director, Permitting and Registration Support Division (MC 129), Texas Commission on Environmental Quality, P. O. Box 13087, Austin, Texas 78711-3087. In addition, the permittee shall prepare an annual report on the results of all sludge toxicity testing. This annual report shall be submitted to the TCEQ Regional Office (MC Region 12) and the Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30 of each year.

E. Sewage sludge or biosolids shall be tested as needed, in accordance with the requirements of 30 TAC Chapter 330.

F. Record Keeping Requirements

   The permittee shall develop the following information and shall retain the information for five years.

1. The description (including procedures followed and the results) of all liquid Paint Filter Tests performed.

2. The description (including procedures followed and results) of all TCLP tests performed.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

G. Reporting Requirements

The permittee shall report annually to the TCEQ Regional Office (MC Region 12) and Compliance Monitoring Team (MC 224) of the Enforcement Division by September 30th of each year the following information. The permittee must submit this annual report using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

1. Identify in the following categories (as applicable) the sewage sludge or biosolids treatment process or processes at the facility: preliminary operations (e.g., sludge or biosolids grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.

2. Toxicity Characteristic Leaching Procedure (TCLP) results.

3. Annual sludge or biosolids production in dry tons/year.

4. Amount of sludge or biosolids disposed in a municipal solid waste landfill in dry tons/year.

5. Amount of sludge or biosolids transported interstate in dry tons/year.

6. A certification that the sewage sludge or biosolids meets the requirements of 30 TAC § 330 concerning the quality of the sludge disposed in a municipal solid waste landfill.

7. Identity of hauler(s) and transporter registration number.

8. Owner of disposal site(s).

9. Location of disposal site(s).

10. Date(s) of disposal.

The above records shall be maintained on-site on a monthly basis and shall be made available to the Texas Commission on Environmental Quality upon request.

SECTION IV. REQUIREMENTS APPLYING TO SLUDGE OR BIOSOLIDS TRANSPORTED TO ANOTHER FACILITY FOR FURTHER PROCESSING

These provisions apply to sludge or biosolids that is transported to another wastewater treatment facility or facility that further processes sludge or biosolids. These provisions are intended to allow transport of sludge or biosolids to facilities that have been authorized to accept sludge or biosolids. These provisions do not limit the ability of the receiving facility to determine whether to accept the sludge or biosolids, nor do they limit the ability of the receiving facility to request additional testing or documentation.

A. General Requirements

1. The permittee shall handle and dispose of sewage sludge or biosolids in accordance with 30 TAC Chapter 312 and all other applicable state and federal regulations in a manner that protects public health and the environment from any reasonably anticipated adverse effects due to any toxic pollutants that may be present in the sludge.

2. Sludge or biosolids may only be transported using a registered transporter or using an approved pipeline.

B. Record Keeping Requirements

1. For sludge or biosolids transported by an approved pipeline, the permittee must maintain records of the following:

   a. the amount of sludge or biosolids transported;

   b. the date of transport;

   c. the name and TCEQ permit number of the receiving facility or facilities;

   d. the location of the receiving facility or facilities;

   e. the name and TCEQ permit number of the facility that generated the waste; and

   f. copy of the written agreement between the permittee and the receiving facility to accept sludge or biosolids.

2. For sludge transported by a registered transporter, the permittee must maintain records of the completed trip tickets in accordance with 30 TAC § 312.145(a)(1)-(7) and amount of sludge or biosolids transported.

3. The above records shall be maintained on-site on a monthly basis and shall be made available to the TCEQ upon request. These records shall be retained for at least five years.

C. Reporting Requirements

The permittee shall report the following information annually to the TCEQ Regional Office (MC Region 12) and Compliance Monitoring Team (MC 224) of the Enforcement Division, by September 30th of each year. The permittee must submit this annual report using the online electronic reporting system available through the TCEQ website unless the permittee requests and obtains an electronic reporting waiver.

1. Identify in the following categories (as applicable) the sewage sludge or biosolids treatment process or processes at the facility: preliminary operations (e.g., sludge or biosolids grinding and degritting), thickening (concentration), stabilization, anaerobic digestion, aerobic digestion, composting, conditioning, disinfection (e.g., beta ray irradiation, gamma ray irradiation, pasteurization), dewatering (e.g., centrifugation, sludge drying beds, sludge lagoons), heat drying, thermal reduction, and methane or biogas capture and recovery.

2. the annual sludge or biosolids production;

3. the amount of sludge or biosolids transported;

4. the owner of each receiving facility;

5. the location of each receiving facility; and

6. the date(s) of disposal at each receiving facility.

TCEQ Revision 06/2020

OTHER REQUIREMENTS

1. The permittee shall employ or contract with one or more licensed wastewater treatment facility operators or wastewater system operations companies holding a valid license or registration according to the requirements of 30 TAC Chapter 30, Occupational Licenses and Registrations, and in particular 30 TAC Chapter 30, Subchapter J, Wastewater Operators and Operations Companies.

   This Category C facility must be operated by a chief operator or an operator holding a Class C license or higher. The facility must be operated a minimum of five days per week by the licensed chief operator or an operator holding the required level of license or higher. The licensed chief operator or operator holding the required level of license or higher must be available by telephone or pager seven days per week. Where shift operation of the wastewater treatment facility is necessary, each shift that does not have the on-site supervision of the licensed chief operator must be supervised by an operator in charge who is licensed not less than one level below the category for the facility.

2. The facility is not located in the Coastal Management Program boundary.

3. On June 6, 2023, the permittee submitted sufficient evidence of legal restrictions prohibiting residential structures within the part of the buffer zone not owned by the permittee according to 30 TAC § 309.13(e)(3). The buffer zone is being met based on the Special Warranty Deed dated April 20, 2023, between AHV Shiel BFR Owner, LLC and Harris County Municipal Utility District No. 531. The permittee shall also comply with the requirements of 30 TAC § 309.13(a) through (d). See Attachment A.

4. The permittee shall provide facilities for the protection of its wastewater treatment facility from a 100-year flood.

5. The permittee shall comply with 30 TAC § 311.36, which requires the permittees of all domestic wastewater treatment facilities discharging into the Lake Houston Watershed to install dual-feed chlorination systems capable of automatically changing from one cylinder to another if gaseous chlorination is used for disinfection.

6. In accordance with 30 TAC § 319.9, a permittee that has at least twelve months of uninterrupted compliance with its bacteria limit may notify the commission in writing of its compliance and request a less frequent measurement schedule. To request a less frequent schedule, the permittee shall submit a written request to the TCEQ Wastewater Permitting Section (MC 148) for each phase that includes a different monitoring frequency. The request must contain all of the reported bacteria values (Daily Avg. and Daily Max/Single Grab) for the twelve consecutive months immediately prior to the request. If the Executive Director finds that a less frequent measurement schedule is protective of human health and the environment, the permittee may be given a less frequent measurement schedule. For this permit, one/quarter may be reduced to one/six months in the Interim phase and one/month may be reduced to one/quarter in the Final phase. **A violation of any bacteria limit by a facility that has been granted a less frequent measurement schedule will require the permittee to return to the standard frequency schedule and submit written notice to the TCEQ Wastewater Permitting Section (MC 148).** The permittee may not apply for another reduction in measurement frequency for at least 24 months from the date of the last violation. The Executive Director may establish a more frequent measurement schedule if necessary to protect human health or the environment.

7. Prior to construction of the treatment facility, the permittee shall submit to the TCEQ Wastewater Permitting Section (MC 148) a summary transmittal letter in accordance with the requirements in 30 TAC § 217.6(d). If requested by the Wastewater Permitting Section, the permittee shall submit plans and specifications and a final engineering design report which comply with 30 TAC Chapter 217,

Design Criteria for Domestic Wastewater Systems. The permittee shall clearly show how the treatment system will meet the permitted effluent limitations required on Pages 2 and 2a of this permit. A copy of the summary transmittal letter shall be available at the plant site for inspection by authorized representatives of the TCEQ.

8. Reporting requirements according to 30 TAC §§ 319.1-319.11 and any additional effluent reporting requirements contained in this permit are suspended from the effective date of the permit until plant startup or discharge from the facility described by this permit, whichever occurs first. The permittee shall provide written notice to the TCEQ Regional Office (MC Region 12) and the Applications Review and Processing Team (MC 148) of the Water Quality Division, as well as the Harris County Pollution Control Services Department, in writing at least forty-five days prior to plant startup or anticipated discharge, whichever occurs first, and prior to completion of each additional phase on Notification of Completion Form 20007.

CONTRIBUTING INDUSTRIES AND PRETREATMENT REQUIREMENTS

1. The following pollutants may not be introduced into the treatment facility:

   a. Pollutants which create a fire or explosion hazard in the publicly owned treatment works (POTW), including, but not limited to, waste streams with a closed-cup flash point of less than 140° Fahrenheit (60° Celsius) using the test methods specified in 40 CFR § 261.21;

   b. Pollutants which will cause corrosive structural damage to the POTW, but in no case shall there be discharges with a pH lower than 5.0 standard units unless the works are specifically designed to accommodate such discharges;

   c. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW, resulting in Interference;

   d. Any pollutant, including oxygen-demanding pollutants (e.g., biochemical oxygen demand), released in a discharge at a flow rate and/or pollutant concentration which will cause Interference with the POTW;

   e. Heat in amounts which will inhibit biological activity in the POTW, resulting in Interference, but in no case shall there be heat in such quantities that the temperature at the POTW treatment plant exceeds 104° Fahrenheit (40° Celsius) unless the Executive Director, upon request of the POTW, approves alternate temperature limits;

   f. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause Interference or Pass Through;

   g. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems; and

   h. Any trucked or hauled pollutants except at discharge points designated by the POTW.

2. The permittee shall require any indirect discharger to the treatment works to comply with the reporting requirements of Sections 204(b), 307, and 308 of the Clean Water Act, including any requirements established under 40 CFR Part 403 *[rev. Federal Register/ Vol. 70/ No. 198/ Friday, October 14, 2005/ Rules and Regulations, pages 60134-60798].*

3. The permittee shall provide adequate notification to the Executive Director, care of the Wastewater Permitting Section (MC 148) of the Water Quality Division, within 30 days subsequent to the permittee's knowledge of either of the following:

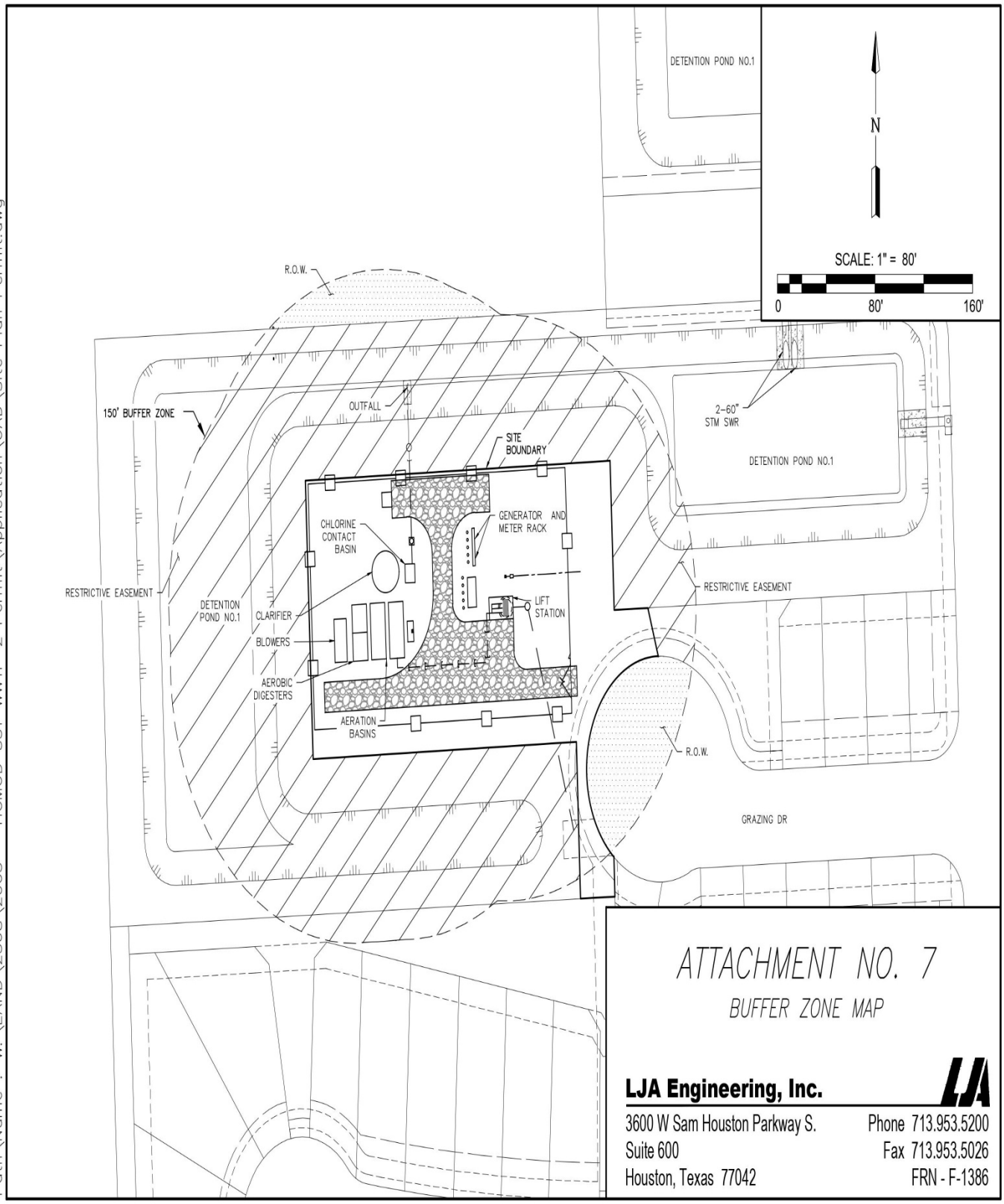
   a. Any new introduction of pollutants into the treatment works from an indirect discharger which would be subject to Sections 301 and 306 of the Clean Water Act if it were directly discharging those pollutants; and

   b. Any substantial change in the volume or character of pollutants being introduced into the treatment works by a source introducing pollutants into the treatment works at the time of issuance of the permit.

   Any notice shall include information on the quality and quantity of effluent to be introduced into the treatment works and any anticipated impact of the change on the quality or quantity of effluent to be discharged from the POTW.

Revised July 2007

Attachment A
WQ0016334001
Buffer Zone Map



Date\Time : Tue, 06 Jun 2023 - 5:29pm User Name : svelez
Path\Name : W:\LAND\2568\2005 - HCMUD 531 WWTP 2 Permit\Application\CAD\Site Plan Permit.dwg

The TCEQ is committed to accessibility.
To request a more accessible version of this report, please contact the TCEQ Help Desk at (512) 239-4357.

Compliance History Report

Compliance History Report for CN604577270, RN111731089, Rating Year 2023 which includes Compliance History (CH) components from September 1, 2018, through August 31, 2023.

Customer, Respondent, or Owner/Operator: CN604577270, Harris County Mud 531 **Classification:** SATISFACTORY **Rating:** 0.40

Regulated Entity: RN111731089, HARRIS COUNTY MUD 531 WWTP NO 2 **Classification:** UNCLASSIFIED **Rating:** -----

Complexity Points: 4 **Repeat Violator:** NO

CH Group: 08 - Sewage Treatment Facilities

Location: APPROXIMATELY 0.47 MILES W OF MUESCHKE RD & 0.26 MILES S OF SCHIEL RD HARRIS, TX, HARRIS COUNTY

TCEQ Region: REGION 12 - HOUSTON

ID Number(s):

WASTEWATER PERMIT WQ0016334001 **WASTEWATER** EPA ID TX0144444

Compliance History Period: September 01, 2018 to August 31, 2023 **Rating Year:** 2023 **Rating Date:** 09/01/2023

Date Compliance History Report Prepared: December 18, 2023

Agency Decision Requiring Compliance History: Permit - Issuance, renewal, amendment, modification, denial, suspension, or revocation of a permit.

Component Period Selected: April 28, 2018 to December 18, 2023

TCEQ Staff Member to Contact for Additional Information Regarding This Compliance History.

Name: PT **Phone:** (512) 239-3581

Site and Owner/Operator History:

1) Has the site been in existence and/or operation for the full five year compliance period? NO
2) Has there been a (known) change in ownership/operator of the site during the compliance period? NO

Components (Multimedia) for the Site Are Listed in Sections A - J

A. Final Orders, court judgments, and consent decrees:
N/A

B. Criminal convictions:
N/A

C. Chronic excessive emissions events:
N/A

D. The approval dates of investigations (CCEDS Inv. Track. No.):
N/A

E. Written notices of violations (NOV) (CCEDS Inv. Track. No.):
A notice of violation represents a written allegation of a violation of a specific regulatory requirement from the commission to a regulated entity. A notice of violation is not a final enforcement action, nor proof that a violation has actually occurred.

N/A

F. Environmental audits:
N/A

G. Type of environmental management systems (EMSs):

N/A

H. Voluntary on-site compliance assessment dates:
N/A

I. Participation in a voluntary pollution reduction program:
N/A

J. Early compliance:
N/A

Sites Outside of Texas:
N/A

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

December 3, 2024

TO: All interested persons.

RE: Harris County Municipal Utility District No. 531
TPDES Permit No. WQ0016334001

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 the Northwest Branch Library, 11355 Regency Green Drive, Cypress, 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 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
Harris County Municipal Utility District No. 531
TPDES Permit No. WQ0016334001

The Executive Director has made the Response to Public Comment (RTC) for the application by Harris County Municipal Utility District No. 531 for TPDES Permit No. WQ0016334001 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 (WQ0016334001) 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 Northwest Branch Library, 11355 Regency Green Drive, Cypress, Texas.

COMISIÓN DE CALIDAD AMBIENTAL DE TEXAS

Protegiendo a Texas reduciendo y previniendo la contaminación

3 de diciembre de 2024

TO: Todas las personas interesadas.

RE: Harris County Municipal Utility District No. 531
TPDES Permiso No. WQ0016334001

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 Northwest Branch Library, 11355 Regency Green Drive, Cypress, 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
Harris County Municipal Utility District No. 531
TPDES Permiso No. WQ0016334001

El Director Ejecutivo ha puesto a disposición de Internet la respuesta al comentario público (RTC) para la solicitud de Harris County Municipal Utility District No. 531 del permiso de TPDES No. WQ0016334001. 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 (WQ0016334001) 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 Northwest Branch Library, 11355 Regency Green Drive, Cypress, Texas.

MAILING LIST / LISTA DE CORREO
Harris County Municipal Utility District No. 531
TPDES No. WQ0016334001 / TPDES No. WQ0016334001

FOR THE APPLICANT /
PARA EL SOLICITANTE:

Paul White, President
Harris County MUD No. 531
3200 Southwest Freeway, Suite 2600
Houston, Texas 77027

Ashley Broughton, P.E.
LJA Engineering, Inc.
3600 West Sam Houston Parkway South
Suite 600
Houston, Texas 77042

Sarah Velez, P.E.
LJA Engineering, Inc.
3600 West Sam Houston Parkway South
Suite 600
Houston, Texas 77042

INTERESTED PERSONS /
PERSONAS INTERESADAS:

See attached list. / Ver lista adjunta.

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

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

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

John Hearn, Technical Staff
Texas Commission on Environmental Quality
Water Quality Division MC-148
P.O. Box 13087
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 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

ABEGGLEN , MATT
16226 KYLE CREST TRL
CYPRESS TX 77433-5861

ASHFORD , LAURA
20102 MISTY RIVER WAY
CYPRESS TX 77433-5793

ATKINSON , LISA K
20810 DURAND OAK CT
CYPRESS TX 77433-5717

AUGUSTIN , MR WARREN
20402 STONE FALLS CT
CYPRESS TX 77433-5763

BEE , PATTY
15711 TWISTING SPRINGS DR
CYPRESS TX 77433-5572

BRINKERHOFF , MRS BECKI FAIRFIELD
16318 KYLE CREST TRL
CYPRESS TX 77433-5860

BROWNE , MICHAEL
20639 ORANGE POPPY DR
CYPRESS TX 77433-2582

CALES , NIKOLE
20206 PRIM PINE CT
CYPRESS TX 77433-5859

CROCKETT , DAVID C
20327 WHISPERING WATER WAY
CYPRESS TX 77433-5774

ELY , WILLIAM
20715 ORANGE POPPY DR
CYPRESS TX 77433-2584

FAULK , RUSSELL
20807 GOLDEN SYCAMORE TRL
CYPRESS TX 77433-6072

FORE , DAWN
16314 KYLE CREST TRL
CYPRESS TX 77433-5860

GABINO , KRISTIN
20314 MISTY RIVER WAY
CYPRESS TX 77433-5797

GALLIA , GLENN & JENNIFER
16414 BASTON CREEK DR
CYPRESS TX 77433-5155

GAUDET , KAREN
20303 WHISPERING WATER WAY
CYPRESS TX 77433-5774

GEE , DIANA
16102 PEBBLE CREEK TRL
CYPRESS TX 77433-5405

GIBSON , JAIME
20743 CHAPPELL KNOLL DR
CYPRESS TX 77433-5512

GOINS , BILL
20322 LAKELAND FALLS DR
CYPRESS TX 77433-5727

GRISSOM , KEREN
16114 PEBBLE CREEK TRL
CYPRESS TX 77433-5405

GUSLER , JAY
20114 MISTY RIVER WAY
CYPRESS TX 77433-5793

HAWLEY , JESSICA
20906 REFUGE CREEK DR
CYPRESS TX 77433-3588

JONES , MRS CHARLENE
20434 SCENIC WOODS DR
CYPRESS TX 77433-6021

KWIATKOWSKI , DEVYN
16310 ROLLING VIEW TRL
CYPRESS TX 77433-5856

LALONDE , NATHAN
20827 S BLUE HYACINTH DR
CYPRESS TX 77433-6700

LEHMANNN , CORY
20211 TIMBERLINE TRL
CYPRESS TX 77433-5853

LLOYD , DANICA
16300 NORTHWEST FWY
JERSEY VILLAGE TX 77040-1916

MAJORS , DEBBIE S
19175 CYPRESS CHURCH RD
CYPRESS TX 77433-1442

MCCLURE , JOHN
NONE
20215 MISTY RIVER WAY
CYPRESS TX 77433-5796

MELCHER , CHARLES
20215 TIMBERLINE TRL
CYPRESS TX 77433-5853

MELCHER , SANDRA
20215 TIMBERLINE TRL
CYPRESS TX 77433-5853

MONACELLI , JASON PAUL
16319 ROLLING VIEW TRL
CYPRESS TX 77433-5856

MORRIS , JAY
16210 ROLLING VIEW TRL
CYPRESS TX 77433-5857

MORRIS JR , JULES M
16210 ROLLING VIEW TRL
CYPRESS TX 77433-5857

MORRIS , CADENCE R
16210 ROLLING VIEW TRL
CYPRESS TX 77433-5857

MULLINAX , JAY B
16227 KYLE CREST TRL
CYPRESS TX 77433-5862

NEWMAN , MARC
15218 HILLSIDE PARK WAY
CYPRESS TX 77433-5608

OGDEN , CHAD
STE 305
19707 IH 10 W
SAN ANTONIO TX 78257-1745

OLIVERSON , THE HONORABLE TOM STATE REPRESENTATIVE
TEXAS HOUSE OF REPRESENTATIVES DISTRICT 130
PO BOX 2910
AUSTIN TX 78768-2910

OLIVERSON , THE HONORABLE TOM STATE REPRESENTATIVE
TEXAS HOUSE OF REPRESENTATIVES DISTRICT 130
STE 201
11803 GRANT RD
CYPRESS TX 77429-4032

OLMOS , MARIE
16202 MORNING PINE TRL
CYPRESS TX 77433-5849

PAPPANO , MRS MARGARET
16215 MORNING PINE TRL
CYPRESS TX 77433-5851

PAPPANO , MR PHILLIP
16215 MORNING PINE TRL
CYPRESS TX 77433-5851

POWELL , JACK & TRISH
16127 CROOKED LAKE WAY N
CYPRESS TX 77433-5982

RAMIREZ , JENNIFER
21615 BROOKCHASE LOOP
CYPRESS TX 77433-5951

REARDON , BRANDON
20525 CYPRESSWOOD DR
CYPRESS TX 77433-4700

ROSE , BRIAN
20222 TIMBERLINE TRL
CYPRESS TX 77433-5852

ROSE , CAROL
20222 TIMBERLINE TRL
CYPRESS TX 77433-5852

SEKHARAN , MADHU
16614 RADIANT LILAC TRL
CYPRESS TX 77433-6365

SHORES , KATHY
15326 WOODLAND ORCHARD LN
CYPRESS TX 77433-5540

SOTO , GASTON
15803 PEBBLE CREEK TRL
CYPRESS TX 77433-5400

SOTO , JENNIFER
15803 PEBBLE CREEK TRL
CYPRESS TX 77433-5400

SWISHER , ERIC
16214 MORNING PINE TRL
CYPRESS TX 77433-5850

THIBERT , KELLY
15302 BENT TWIG WAY
CYPRESS TX 77433-4621

TOLEDANES , LISA
16819 GYPSY RED DR
CYPRESS TX 77433-6272

VAN WIE , TORY
20810 AUTUMN REDWOOD WAY
CYPRESS TX 77433-5548

VILLEGAS , DIEGO
20203 PRIM PINE CT
CYPRESS TX 77433-5859

WALLACE , BETH & WAYNE
16615 HAVASU DR
CYPRESS TX 77433-5146

WATSON , RUSS
20406 LAKELAND FALLS DR
CYPRESS TX 77433-5728

WEATHERSBY , LAURA (
15438 JUNIPER COVE CT
CYPRESS TX 77433-5702

WHATLEY , MR DARRIN E
16218 MORNING PINE TRL
CYPRESS TX 77433-5850

WHATLEY , MRS KIMBERLY LORRAINE
16218 MORNING PINE TRL
CYPRESS TX 77433-5850

WHITE , DR. LLOYD MICHAEL
PROF EMERITUS THE UNIVERSITY OF TEXAS AT AUSTIN
16318 KYLE CREST TRL
CYPRESS TX 77433-5860

WIENER , WHITNEY HOUGH
15834 HEARTWOOD WAY
CYPRESS TX 77433-6069

WILCOMB , DEIDRA
20918 HEARTWOOD OAK TRL
CYPRESS TX 77433-4648

WONG , NANCY L
20314 TIMBERLINE TRL
CYPRESS TX 77433-5854

WONG , PATRICK C
20314 TIMBERLINE TRL
CYPRESS TX 77433-5854

WOOD , DANNY & SHREE
16206 MORNING PINE TRL
CYPRESS TX 77433-5849

NEW TPDES PERMIT NO. WQ0016334001

APPLICATION BY HARRIS COUNTY MUNICIPAL UTILITY DISTRICT No. 531 FOR TPDES PERMIT No. WQ00163340001	**§**	**BEFORE THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY**

EXECUTIVE DIRECTOR'S RESPONSE TO PUBLIC COMMENTS

I. INTRODUCTION

The Executive Director (ED) of the Texas Commission on Environmental Quality ("TCEQ" or "Commission") files this Response to Public Comment on the application and on the ED's preliminary decision on the application, submitted by Harris County Municipal Utility District (MUD) No. 531 ("Applicant" or "MUD531") for new Texas Pollutant Discharge Elimination System Permit (TPDES) number (No.) WQ0016334001 ("the application and draft permit") and the construction of its accompanying Wastewater Treatment Facility (WWTF), the MUD531 WWTF No. 2 (proposed facility).

As required by the TCEQ administrative process and its rules for permits (TPDES permitting process), found in Title 30 of the Texas Administrative Code (30 TAC), section (§) 55.156, before a permit is issued, the ED responds to all timely, relevant, and material, or significant comments that addresses the comments received. The TCEQ's Office of the Chief Clerk ("TCEQ OCC") received timely comments on the application from Lisa Atkinson, Warren Augustin, Laura Ashford, Matt Abegglen, Patty Bee, Michael Browne, Becki Brinkerhoff, David Crockett, Nikole Cales, William Ely, Russell Faulk, Dawn Fore, Karen Gaudet, Diana Gee, Jay Gusler, Bill Goins, Jaime Gibson, Kristin Gabino, Keren Grissom, Jessica Hawley, Charlene Jones, Devyn Kwiatkowski, Cory Lehmannn, Debbie Majors, Jay Mullinax, John McClure, Jason Monacelli, Tom Oliverson, Marie Olmos, Brandon Reardon, Jennifer Ramirez, Madhu Sekharan, Kathy Shores, Eric Swisher, Lisa Toledanes, Kelly Thibert, Diego Villegas, Tory Van Wie, Whitney Wiener, Laura Weathersby, Deidra Wilcomb, Lloyd White, and Sandra & Charles Melcher, Cadence Morris, Jules & Jay Morris, Margaret & Phillip Pappano, Carol & Brian Rose, Jennifer & Gaston Soto, Kimberly & Darrin Whatley, Nancy & Patrick Wong, and Shree & Danny Wood. This response addresses all comments received, whether withdrawn.

II. ACCESS TO INFORMATION, LAWS, TCEQ RULES & RECORDS, AND REQUIRED NOTICES PROVIDED / PUBLISHED IN SPANISH & ENGLISH

For information about this permit application or the permitting process, please contact the TCEQ's Public Education Program at (800) 687-4040.

- www.tceq.texas.gov/agency/decisions/participation/permitting-participation

Additionally, TCEQ's community outreach initiatives, which aim to educate the public about pollution prevention and water conservation, can be found on the Take Care of Texas Program's website below.

- https://takecareoftexas.org/

For the "TCEQ Rules," otherwise known as Title 30 of the Texas Administrative Code, use the link below (select TAC Viewer, then Title 30 Environmental Quality).

- https://www.sos.texas.gov/tac/

The TCEQ Rules can also be accessed on the TCEQ's website below (for downloadable rules in WordPerfect or Adobe PDF formats, select "Rules, Policy, & Legislation," then "Current TCEQ Rules," then "Download TCEQ Rules").

- https://www.tceq.texas.gov

Texas Laws or Statutes, otherwise known as "Codes," can be accessed through the link below (select "Water Code" at the bottom).

- www.statutes.capitol.texas.gov

Federal rules or regulations and environmental laws can be accessed through the link to Title 40 of the Code of Federal Regulations (40 C.F.R.) and the United States Environmental Protection Agency's (EPA) website below.

- https://www.ecfr.gov/current/title-40
- https://www.epa.gov/laws-regulations

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 TCEQ's OCC, for the current application until final action is taken. Some documents located at the TCEQ's OCC may also be found in the TCEQ Commissioners' Integrated Database.

- www.tceq.texas.gov/goto/cid

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 Office of Compliance and Enforcement (OCE) should be contacted. Specifically, the TCEQ's Regional Office (Region 12) in Houston, Texas may be contacted at (713) 767-3500 or the statewide toll-free number at 1-888-777-3186 to address potential permit violations. In addition, complaints may be filed electronically through the link to the TCEQ's compliance website below or by sending an email to the "complaint" email address below. 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.

- https://www.tceq.texas.gov/compliance/complaints (select "use our online form") or
- complaint@TCEQ.Texas.gov.

El aviso de idioma alternativo en español está disponible en (Alternative language notice in Spanish is available at):

- https://www.tceq.texas.gov/permitting/wastewater/pending-permits/application-details#Document-Summary

III. ADMINISTRATIVE PROCEDURE FOR TPDES APPLICATIONS

The TPDES permitting process finds its roots in Administrative Law, which includes laws and legal principles for the transparent administration of both federal and state governmental; regulatory agencies consistent with the principle of "public participation in government." The TPDES permitting process requires essential notices of an application be provided to the public from the start of the process and through its completion for purposes of creating a record of the decision-making involved in a TPDES application, otherwise known as an application's "Administrative Record." An Administrative Record can be thought of as the documentation for a series of

procedurally relevant events for a TPDES application. The TPDES permitting process starts with the application's submittal and reaches completion when the Commission issues a Final Decision and Order on the application, all of which is documented through an administrative record.

The first notice provided to the public, referred to as the Notice of Receipt and Intent to Obtain a Water Quality Permit (NORI), occurs after the application is submitted to the TCEQ and the ED, after review, declares it "administratively complete." The TPDES permitting process requires the NORI to be published in a certain newspaper in the county of the proposed facility's location.

The second notice provided to the public, referred to as the Notice of Application and Preliminary Decision (NAPD), is to be published in the same certain newspaper as the NORI, and is required to be provided to the public after the ED completes her Technical Review (Tech Review) and prepares a draft permit.

During the ED's Tech review, to correct errors, acknowledge changes in the application, or to deliver other important details about the application to the public, the TPDES permitting process allows Applicants to publish a combined notice (CO-NORI-NAPD). As is the case with this application, a combined notice can be used to announce the date of a TCEQ public meeting (CO-NAPD-NOPM) instead of the Applicant publishing a separate Notice of Public Meeting (NOPM).

For this application the required notices were published in Harris County, Texas in English in *the Houston Chronicle* and in Spanish in *El Perico*. As documented in its administrative record, the application's relevant procedural history can be thought of as a timeline of the procedurally relevant events alluded to above.

Consistent with the concept of public participation in government, the TPDES permitting process includes a public comment period, which gives the opportunity for the public to comment on the application for thirty (30) days after publication of the NAPD or CO-NAPD-NOPM was published. Below is the timeline of procedural events relevant to this application.

- **04-28-2023**-Submittal of application.
- **06-21-2023**-Declared Administratively Complete.
- **07-06-2023**-Publicized by NORI in English and Spanish.
- **01-03-2024**-Declared Technically Complete and draft permit prepared.
- **05-01-2024**-Publicized by CO-NAPD-NOPM in English and Spanish.
- **06-03-2024**-TCEQ Public Meeting held at SPJST Lodge, 196 Jednota Cypress, Texas.
- **06-03-2024**-Public Comment period ended at the close of the Public Meeting.

The permit application has been available for viewing and copying at the Northwest Branch Library, Regency Green Drive, Cypress, Texas, since publication of the NORI. The final permit application, proposed permit, Fact Sheet/Technical Summary and the ED's preliminary decision have been available for viewing and copying at the same location since publication of the CO-NAPD-NOPM.

Because the application was received after September 1, 2015, and 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 TCEQ rules in 30 TAC Chapters 39, 50, and 55, which implement the procedural requirements of Senate Bill 709, 84th Legislature, 2015.

IV. BACKGROUND

Application Request

The Applicant applied for new TPDES Permit No. WQ0016334001 to authorize a discharge from the proposed facility of wastewater (WW) or "effluent," at a daily average flow not to exceed 0.05/ 0.10 million gallons per day (MGD) in the Interim and Final phases (respectively), referred to in the response as the "proposed discharge," which is subject to the effluent limitations (Limits) in the draft permit.

Description of Proposed Facility and Discharge Route

If the draft permit is ultimately issued and the proposed facility constructed, it will provide (residential) service within MUD531, and its location will be approximately 0.5 miles southwest of the intersection of Mueschke Road and Schiel Road, in Harris County, Texas 77433. In terms of WW treatment, the draft permit includes a bar screen for preliminary treatment in both the Interim and Final phases, and for secondary treatment the draft permit authorizes the proposed facility, which will be an activated sludge process plant, operated in the complete mix mode with secondary clarification. Treatment units across both of the permit's phases consist of a final claridier, two sludge digesters and a chlorine contact chamber. The difference in treatment units across the permit's two phases is one (1) aeration basin in the Interim Phase, and an additional aeration basin (2) in the Final Phase. Sludge generated at the proposed facility is authorized to be disposed of at a TCEQ-authorized land application site, co-disposal landfill, WWTF, or a facility that further processes sludge.

The route of the proposed discharge is first via pipe to a detention pond (approximately 1.6 acres), then through a series of pipes to another detention pond (approximately 6.0 acres), then to the Schiel Road storm sewer (approximately 0.8 miles), then to a dry-bottom pond & ditch (approximately 7.5 acres and 250 feet) then to Little Cypress Creek (greater than 7 miles) before entering Cypress Creek in Segment No. 1009 of the San Jacinto River Basin.

V. EXECUTIVE DIRECTOR'S TECHNICAL REVIEW

The basis for the ED's Technical Review of TPDES applications is the TCEQ's Water Quality Control (WQC) established by the Texas Legislature's passage of Chapter 26 (relating to Water Quality Control) of the Texas Water Code ("*Ch.26*" and "TWC") that gives the TCEQ primary authority over Water Quality (WQ), or control of WQ, in Texas. The TCEQ's WQC combines the WQ authority from *Ch.26* with federally delegated Clean Water Act (CWA) authority for the TPDES program, which controls discharges of pollutants into Texas' waterbodies, otherwise defined by the TWC as "Waters in the State" (WITS). The TPDES program requires the TCEQ, with EPA approval, to adopt and amend, from time to time, the Texas Surface Water Quality Standards (TSWQS), which are incorporated into TPDES permits by the ED through her staff in the Water Quality Division (WQD Staff) using the *TCEQ's Procedures to Implement the Texas Surface Water Quality Standards-June 2010* (IPs) (collectively "TSWQS & the IPs").

It is WQD staff that implement the TCEQ's WQC through the grant of authority from both the CWA and *Ch.26* to issue permits for discharges of waste or pollutants into, or adjacent to WITS if, after the ED's Tech Review, a draft permit complies with the measures and policies of the CWA, *Ch.26*, and the TSWQS & the IPs (collectively "WQ objectives") to achieve a specified level of effluent quality.

Through the ED's Tech review, WQD staff evaluate a TPDES application as an authorization to discharge to WITS and must determine that the provisions and

conditions established in a draft permit comply with WQ objectives. In the same way, the ED can recommend issuance or denial of an application based on whether the information contained in the application complies with those same WQ objectives. Through the ED's Tech review, WQD staff evaluate a TPDES application as an authorization to discharge to WITS and must determine that the provisions and conditions established in a draft permit comply with WQ objectives.

Not only is a TPDES-permitted discharge required to achieve a certain level of effluent quality while meeting other WQ objectives, a TPDES-permitted WWTF's method of achieving that quality must also meet certain standards to achieve WQ objectives. Just as the TSWQS & the IPs provide a roadmap for a TPDES permit's limits and conditions, the TCEQ's 217 rules (Design Criteria for WWTFs) provide a guide for identifying the types of treatment technology that can achieve the treatment levels required by applicable WQ objectives. Similarly, according to 30 TAC § 217.6(d), the draft permit requires the MUD531 to submit a summary transmittal letter of the proposed facility's plans and specifications to the WQD's Plans & Specifications Review Team (P&S Team) for approval. The Applicant must clearly show how the treatment system will meet the permitted limits required on Pages 2, 2a, and 2b of the draft permit. If more information is requested by the P&S Team, MUD531 must submit *final* plans and specs, and a Final Engineering Design Report which comply with the TCEQ's 217 rules. When reviewing submitted plans and specifications for a proposed facility, the P&S Team uses the TCEQ's 217 rules to ensure a proposed facility's design can adequately treat the effluent according to the limits in the draft permit.

Related to the TCEQ's WQC, the TSWQS, specifically the word "standards," is defined in TCEQ rules as desirable uses such as existing, attainable, designated, or presumed uses, referred to in this document as Water Quality-related uses (WQ uses),[1] and the necessary, narrative, and numerical WQ conditions to support and protect those WQ uses in WITS. Conversely, the TCEQ may refuse to issue a permit when the ED's Tech 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 TCEQ's WQC.

According to the TSWQS, WITS are assigned WQ uses known as site-specific uses, presumed sues, or "Designated Uses" (DUs) from Appendix A, D, or G of the TSWQS (30 TAC § 307.10).[2] Typical uses that may be designated for specific water bodies include domestic water supply, recreation categories, aquifer protection, and categories of Aquatic Life Uses (ALUs). The ALU category of a waterbody governs the Dissolved Oxygen (DO) criteria for that water body, which refers to the 24-hour minimum DO level required to support ALUs in WITS. DO concentrations are critical for the overall health of WITS, and in the case of ALUs, are necessary to protect aquatic life in WITS. ALUs are established numerical criteria for aquatic life that are highly dependent on desired uses, sensitivities of aquatic communities, and local physical and chemical characteristics. There are six subcategories of ALUs: minimal, limited, intermediate, high, and exceptional aquatic life and oyster waters.[3] Aquatic life use subcategories designated for segments listed in the TSWQS (30 TAC § 307.10-Appendix A) recognize the natural variability of aquatic community requirements and local environmental conditions. To maintain a level of WQ sufficient to protect the existing DUs of WITS in the route of a proposed discharge requires WQD staff on the Standards and Water Quality Assessment (WQA) Teams, when performing multiple WQ-specific analyses, to review data from the application and employ it according to the TSWQS & the IPs. This practice ensures compliance with the

[1] 30 TAC §§ 307.3(19), (50), and (66).
[2] *Id.*
[3] 30 TAC § 307.7 (b)(3).

TSWQS because WQD staff follow the prescribed methodology in the IPs when drafting TPDES permits.

The IPs is a regulatory guidance document written specifically for permits to comply with the TSWQS. Thus, WQD staff and the ED's Tech Review evaluate impacts of effluent discharges on the WQ uses of WITS in the route of a proposed discharge starting at the outfall, and then establishing appropriate limits to protect those WQ uses, as the TSWQS & the IPs require.

A. Texas Surface Water Quality Standards Review

The first WQ analysis required for all new and amended discharges by the TSWQS & the IPs, is an Antidegradation (Anti-Deg) Review of the discharge(s) proposed in an application. The Anti-Deg review is performed by the WQD staff on the "Standards Team" after reviewing and verifying the classifications, descriptions, and DUs of WITS in the route of the proposed discharge. To assess the impacts to WITS from the proposed discharge(s), the Standards Team assesses from the outfall to the end of the "Impact Zone," which is a certain distance from the outfall that corresponds to the volume of the discharge. However, the customary practice of the Standards Teams is to assess the first 3.0 miles of a stream or to the confluence with a classified segment, to ensure the discharge is thoroughly vetted.

Next, the Standards Team reviews the information from an application consistent with the provisions of the TSWQS (30 TAC Chapter 307). The Standards Team must determine the DUs, the ALUs, and then assign the corresponding DO criteria specified by the TSWQS & the IPs for the WITS in a proposed discharge route. The DUs of the WITS in the proposed discharge route were assigned according to the provisions of the TSWQS & the IPs (30 TAC § 307.10, Appendix A).

For this application, the Standards Team reviewed the application consistent with the provisions of the TSWQS that specifically address ALUs, DO, and the assessment of unclassified waters for ALUs (30 TAC §§ 307.4 (h) & (l)), as the proposed discharge is first to a series of detention pondsaZSZ and a dry-bottom pond & ditch, all of which are unclassified waterbodies. Application data enabled the Standards Team to determine the ALU designations and assign the corresponding DO criteria specified by the TSWQS & the IPs for the detention ponds and the dry-bottom pond & ditch.

The WQ uses for Cypress Creek (Segment No. 1009), as designated in Appendix A of the 2018 TSWQS are primary contact recreation, public water supply, and a "high" ALU designation with a corresponding DO criterion of 5.0 mg/L. The provisions of the TSWQS (30 TAC § 307.4 (h)) detail that waterbodies such as the detention ponds and the dry bottom pond and ditch are assigned a 3.0 mg/L DO criteria with a corresponding "minimal" ALU designation.

The Tier 1 Anti-Deg Review of the proposed discharge and its impact zone preliminarily determined that there is no expectation of impairment of existing WQ uses because the draft permit has limits and conditions designed to maintain numerical and narrative criteria to protect DUs of WITS in the discharge route.

Because the ALU designation for Little Cypress Creek is "high," the Tier 2 Anti-Deg review policy from the IPs apply and states that when WITS with "exceptional," "high," or "intermediate" ALU designations are identified within the impact zone of the discharge route, a Tier 2 Anti-Deg review was required.

The Tier 2 Anti-Deg Review preliminarily determined that no significant degradation of water quality is expected in Segment No. 1009 because the existing DUs will be maintained and protected by the limits and conditions of the draft permit.

The proposed discharge is not expected to negatively impact any federal endangered or threatened aquatic or aquatic dependent species or any proposed species or critical habitats. This determination is based on the United States Fish and Wildlife Service's (USFWS) biological opinion on the State of Texas' authorization of the TPDES permitting program (*eff.* 9/14/98; 10/21/98 *update*) from the United States Environmental Protection Agency (EPA). To make this determination for TPDES permits, 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.

B. Water Quality Assessment

To ensure protective limits in TPDES permits, the second analysis of the ED's Tech Review is what is known as Dissolved Oxygen (DO) modeling (DO modeling), which is performed by WQD staff on the "Water Quality Assessment Team" (WQA Team) using a mathematical model (Uncalibrated QUAL-TX model) to assess any impacts from a proposed discharge's interaction with WITS. The process for DO modeling first starts with the WQA Team reviewing the application's data against stream standards from the TSWQS applicable to WITS receiving the proposed discharge, as conventional limits like those for DO and Carbonaceous Biochemical Oxygen Demand ($CBOD_5$) are based on stream standards and Waste Load Allocations for WQ-limited streams, as established in the TSWQS and the Water Quality Management Plan of Texas (WQMP).

However, coefficients and kinetics used in DO modeling are based on site-specific, standardized default, and estimated values. The WQA Team, using data from the application and information from the TSWQS, evaluate a proposed discharge's effect on instream DO levels of WITS in the route of the proposed discharge using, in this case, an "Uncalibrated QUAL-TX model." Conventional limits such as those for Dissolved Oxygen (DO) and Carbonaceous Biochemical Oxygen Demand ($CBOD_5$) are based on stream standards and Waste Load Allocations (WLAs) for WQ-limited streams, as established in the TSWQS and the Water Quality Management Plan of Texas (WQMP). However, coefficients and kinetics used in the DO modeling are based on site-specific, standardized default, and estimated values.

DO levels are affected by various factors, including potential direct DO impacts by oxygen-demanding constituents in a proposed discharge, such as DO, $CBOD_5$ and Ammonia Nitrogen (NH_3-N), which are the specific limits established in the draft permit by the WQA Team's DO modeling. The limit for Total Suspended Solids (TSS) is based on the TCEQ rules at 30 TAC § 309.4 (Table 1, Limits for Domestic WWTFs).

The draft permit includes the following proposed limits and monitoring requirements. All flows, except the two-hour peak flow, are expressed in million gallons per day (MGD). The two-hour (2-hr) peak flow is expressed in gallons per minute (gpm). All pH values are expressed in standard units (SU). Concentration values are expressed in milligrams per liter (mg/L). Mass-based values are expressed as pounds per day (lbs/day). Bacteria values are expressed in colony-forming units (CFU) or most probable number (MPN) per 100 milliliters (CFU or MPN/100 mL).

Table 1. Interim Phase Limits: Outfall 001

Parameter Pollutant	Daily	Average	7-day Average	Daily Maximum	Single Grab
	lbs/day	mg/L	mg/L	mg/L	mg/L
$CBOD_5$	4.2	10	15	25	35
NH_3-N	1.3	3	6	10	15
TSS	6.3	15	25	40	60
E. coli	63		N/A	N/A	200
pH	6.0-9.0				
Flow-MGD	0.05				

Table 2. Interim Phase Effluent Limits: Outfall 001

Parameter Pollutant	Daily	Average	7-day Average	Daily Maximum	Single Grab
	lbs/day	mg/L	mg/L	mg/L	mg/L
$CBOD_5$	8.3	10	15	25	35
NH_3-N	2.5	3	6	10	15
TSS	13	15	25	40	60
E. coli	63		N/A	N/A	200
pH	6.0-9.0				
Flow-MGD	0.10				

Although Segment No. 1009 is not currently listed on the state's inventory of impaired and threatened waters, known as the "2022 CWA § 303(d) list," the Total Maximum Daily Load (TMDL) project, *Fifteen Total Maximum Daily Loads for Indicator Bacteria in Watersheds Upstream of Lake Houston for Segment Numbers 1004E, 1008, 1008H, 1009, 1009C, 1009D, 1009E, 1010, and 1011* (TMDL Project No. 82), was approved for Segment no. 1009 when it was adopted by the TCEQ on April 6, 2011, and approved by the EPA on June 29, 2011. A TMDL is a scientifically derived target for WQ that informs permitting authorities on the greatest amount of a particular substance that can be added to a water body without compromising its health. TMDL Project No. 82 addresses elevated levels of bacteria in nine classified and unclassified segments in the San Jacinto River Basin.

A waste load allocation (WLA), the sum of pollutant loads from regulated sources (WWTFs and stormwater permits), was set for WWTFs at the permitted flow for each facility multiplied by one-half the geometric mean criterion for bacteria. Growth from permitted, existing or new sources is not limited by TMDL Project No. 82 if sources do not exceed the limits of one-half the bacteria geometric mean criterion for *E. coli*.

For more information about TCEQ's TMDL Program or TMDL Project No. 82, please visit the TCEQ website at the links below.

- https://www.tceq.texas.gov/waterquality/tmdl
- https://www.tceq.texas.gov/downloads/water-quality/tmdl/houston-galveston-recreational-42/82-lake-houston-tmdl-adopted.pdf
- https://www.tceq.texas.gov/downloads/water-quality/tmdl/houston-galveston-recreational-42/82a-lake-houston-tmdl-addendum-one.pdf

Ensuring the limitations for the proposed discharge are consistent with the WLAs provided in the TMDL, a concentration based effluent limit of 63 colony-forming units (CFU)/ most probable number per 100 mL (MPN) for *E. coli* was added to the draft permit.

C. Disinfection and Other limits

During all phases of the draft permit, the effluent must be monitored five times per week by grab sample, be disinfected using chlorine (CI), contain a CI residual based on peak flow, of at least 1.0 mg/l, and must not exceed a total CI residual of 4.0 mg/after a detention time of at least 20 minutes.

D. Other Data and the Executive Director's Final Decision.

In consideration of the TCEQ's WQC data-centric approach, all determinations, reviews, or analyses related to the ED's Tech Review of this application 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.

As the above describes staff from the WQD provide appropriate limits to maintain and protect the existing instream uses through the ED's Tech Review, and for those reasons, the ED has determined that the draft permit, if issued, meets all statutory and regulatory requirements and is protective of the environment, WQ, and human health.

VI. COMMENTS AND RESPONSES

COMMENT 1:

Debbie Majors commented with concerns about the exact discharge route.

RESPONSE 1:

As stated above, the route of the proposed discharge is first via pipe to a detention pond (approximately 1.6 acres), then through a series of pipes to another detention pond (approximately 6.0 acres), then to the Schiel Road storm sewer (approximately 0.8 miles), then to a dry-bottom pond & ditch (approximately 7.5 acres and 250 feet), then to Little Cypress Creek (greater than 7 miles) before entering Cypress Creek in Segment No. 1009 of the San Jacinto River Basin.

The first two detention ponds listed in the discharge route are on MUD531 property. The discharge then enters the storm sewer on the north side of the property at certain geographic coordinates (30.0125 N, -95.7311 W). The proposed discharge will continue through the storm sewer for just under a mile until it empties out into a dry-bottom pond at certain geographic coordinates (30.0186 N, -95.7248 W). The proposed discharge then empties into a ditch for a short distance and into Little Cypress Creek at certain geographic coordinates (30.0203 N, -95.7238 W).

COMMENT 2:

Sekharan Madhu, Debbie Majors, and Shree and Danny Guy Wood expressed concern regarding the appropriate notification to affected landowners. Additionally, Sekharan Madhu commented expressing concern regarding the information MUD531 has disclosed to the public during this permitting process.

RESPONSE 2:

While it is unclear to the ED what specific public disclosures by MUD531 are problematic, the ED notes that TPDES applications are public records, and all information needed to review an application and draft a protective permit is also public record. As noted above, the TCEQ's Public Notice rules require applicants to make available, for public inspection and copying, the permit application, the ED's preliminary decision, and

the draft permit, all of which have been available for viewing and copying at the Northwest Branch Library, 11355 Regency Green Drive, Cypress, Texas.

Related to notifications to landowners, the TCEQ is statutorily mandated by TWC § 26.028 (Action on Application) to issue notice to the public of the TCEQ's receipt of a TPDES application and the start of the ED's processing of that application. The TCEQ's rules for notice of TPDES applications are found in 30 TAC Chapter 39 (Public Notice) and require applicants to provide notice to the public of the submission of a TPDES application through two specific methods.

As discussed above, the initial notice is the NORI. After the ED declares the application "administratively complete," the TCEQ CCO mails this declaration, along with a copy of the NORI, to the Applicant.[9] Then, no later than 30 days after the ED declared the application administratively complete, applicants must publish the NORI in the newspaper that has the largest circulation in the county where the proposed facility or discharge is located and, in each county or municipality affected by the discharge.[4] The Applicant must also make a copy of the administratively complete application available for viewing by the public in a specified location within the county in which the facility is located.[5]

The second method requires Applicants, using county deed records, to identify all landowners adjacent to a proposed facility and its discharge route for a certain distance, referred to as "adjacent landowners," and then include a list of those adjacent landowners along with a map identifying the property boundaries of landowners surrounding an applicants' property and the property boundaries of all landowners surrounding the proposed outfall and discharge route, on both sides, for one full stream mile downstream of the outfall. The map must depict the adjacent landowners' locations relative to the proposed facility and discharge route and must be submitted with the adjacent landowners list as part of the application materials required for TPDES applications. The TCEQ's CCO maintains a list of all individuals that commented or requested to be added to the mailing list for the application ("Interested Persons" list), and then uses it, along with the adjacent landowners list, to mail the NORI out to the public, which is referred to as "mailed notice" of an application.

Then after the ED has completed her Tech Review of an application and declared it "Technically Complete," the TCEQ's CCO mails the second notice, the NAPD, to an applicant who then must publish it in the same newspaper as the NORI, while the TCEQ's CCO mails the NAPD to the Interested Persons list and Adjacent Landowners list.

For this application, two public notices were mailed to the public and published in a newspaper according to the TCEQ Public Notice rules. The NORI was published in English on July 6, 2023, in the *Houston Chronicle;* and in Spanish on July 6, 2023, in *El Perico.* The CO-NAPD-NOPM was published in English on May 1, 2024, in the *Houston Chronicle* and in Spanish on May 2, 2024, in *El Perico.*

This application was processed according to the TCEQ's Public Notice rules, and landowners were notified up to 1.0 miles downstream of the proposed outfall.

COMMENT 2:

Cadence Morris, Sekharan Madhu, Brian Rose, Jules & Jay Morris, Jay Gusler, William Ely, Patty Bee, Jaime Gibson, Jennifer Ramirez, Kristin Gabino, Jay Mullinax, Tory Van Wie, Nikole Cales, Shree & Danny Wood, Dawn Fore, Lloyd White, Margaret & Phillip Pappano, John McClure, Becki Brinkerhoff, Laura Ashford, Jason Monacelli, Jennifer & Gaston Soto,

[4] 30 TAC § 39.551(b)(1).
[5] 30 TAC § 39.405(g).

Sandra & Charles Melcher, Karen Gaudet, and Marie Olmos all commented opposing the location for the proposed facility.

RESPONSE 2:

The ED acknowledges the comments in opposition to the proposed facility's location. However, applicants are the entity that proposes the location of a WWTF, like the proposed facility, rather than the ED. Likewise, the TCEQ's WQC does not include the authority 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 MUD531 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.

COMMENT 3:

Sekharan Madh, Carol & Brian Rose, Kathy Shores, Jennifer Ramirez, Warren Augustin, Lloyd White, Jennifer & Gaston Soto, and Kimberly & Darrin Whatley commented about the proposed discharge's effects on surface water quality and human health.

RESPONSE 3:

The ED acknowledges these comments and the significance of protecting human health, surface water quality (WQ), and the WQ uses of WITS, and gives that significance due consideration in deciding whether to issue a TPDES permit. Similarly, the ED always considers the health of area residents, as well as those of the public when reviewing applications for wastewater discharge permits. As discussed above and below, the ED's Tech review of TPDES applications also considers surface water quality as it relates to protecting human health and all animal life.

As detailed above in the section describing the ED's Tech review, the CWA, *Ch.26*, and the TSWQS & the IPs contain WQ objectives that TPDES permits, and their methods of achieving that quality, must meet. Equally important, WQD staff evaluated the application as an authorization to discharge to WITS, which requires adherence to those same WQ objectives. In the same way, *Ch.26* and the TSWQS & the IPs were all created for the protection of human health, existing surface and groundwater quality, the environment, the health of aquatic and animal life, and specifically, existing, attainable and designated WQ uses of WITS:

> *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.*[6]

To fulfill the WQ objectives referenced above and to ensure permits are protective of the receiving water uses, including consumption of fish and shellfish, the TCEQ has established numerical criteria in the TSWQS for the protection of aquatic life and for the protection of human health.[7]

[6] Texas Water Code § 26.003 and 30 TAC § 307.1.
[7] 30 TAC § 307.6(c)(1), Table 1; 30 TAC § 307.6(d)(1), Table 2.

The TSWQS is a primary mechanism for the TCEQ to implement its WQC to achieve WQ objectives, such as protection of human health, existing surface and groundwater quality, the environment, the health of aquatic and animal life, and specifically, the existing, designated WQ uses of WITS, which involves not only meeting and maintaining numerical criteria but also narrative WQ conditions. The TSWQS require discharges not cause WITS to be toxic to any form of life, not degrade WITS, and not result in impairments of existing, attainable, or designated WQ uses. Similarly, TCEQ's WQC mandates discharges adhere to the TSWQS by use of the IPs for drafting TPDES permits. The focus of the IPs is for WQD staff to draft permits with provisions to meet the requirements of the TSWQS, namely the specific numeric and narrative WQ criteria just described that are applicable to WITS receiving a discharge, which protects existing WQ uses of WITS, human health, the environment, and the health of aquatic and animal life. WQD staff designed the proposed permit to be protective of the WQ uses of all WITS that could be potentially affected by the proposed discharge. In other words, to achieve the goal of supporting a level of WQ sufficient to protect existing WQ uses of WITS, the proposed permit was drafted to preclude degradation of WQ in Cypress Creek (Segment No. 1009) with effluent limits, monitoring requirements, and conditions designed to ensure protection of WITS according to the TSWQS & the IPs.

Protecting WQ in WITS receiving the proposed discharge are the assigned ALUs themselves, which govern what WQ uses and criteria will apply to protect Cypress Creek (Segment No. 1009) and the creeks upstream of Segment No. 1009, 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 a detention pond, which is unclassified and has a "minimal" ALU designation, as is the same for the dry-bottom pond and ditch. WITS, such as these that support only "minimal" ALUs still have criteria protecting 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 limit established by the Standards Team for the detention pond and dry-bottom pond and ditch (2.0 mg/L DO), the proposed permit requires a DO limit or concentration of 4.0 mg/L to meet a DO criteria that supports an aquatic community with a "minimal" ALU designation but will not negatively affect WITS that support a "high" ALU designations, such as Little Cypress Creek and Cypress Creek in Segment No. 1009 that require 5.0 mg/L DO.

According to the IPs, "Minimal" ALUs fall under a Tier I Antidegradation Review, that evaluates all pollution that may cause an impairment of existing WQ uses. This ensures that those WQ uses are not impaired by increases in pollution loading, as the numerical and narrative criteria necessary to protect existing WQ uses will be maintained because the primary focus of the TSWQS & the IPs and WQD Staff performing the ED's Tech Review is DO, which is critical for the overall health and WQ of WITS.

The draft permit also contains several water quality-specific parameters or requirements that limit the potential impact on WITS receiving the proposed discharge. This is because the proposed permit's effluent limits and conditions were derived from a rigorous, data-centric technical review to ensure compliance with the TSWQS. As stated above, the proposed permit's limits 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, 3.0 mg/L NH3-N, and a 4.0 mg/L DO concentration are required for the proposed facility to discharge up to 0.10 MGD to the WITS receiving the proposed discharge. These limits are consistent with the WQMP, and while they are not contained in the approved WQMP, the limits will be included in the next WQMP update. The draft permit's effluent set also satisfies the requirements of the Lake Houston Watershed Rule.

WQD staff, when preparing the draft permit, also incorporated pertinent site-specific factors to reduce uncertainty and bolster confidence in the results of the ED's Tech Review. For example, the Applicant is required to build a collection system and WWTF 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 and the 30 TAC Chapter 217 rules. The draft permit requires the Applicant to "take all reasonable steps to minimize or prevent any discharge or sludge use or disposal or other permit violation reasonably likely to adversely affect human health." WQD Staff determined that the proposed permit complies with the TSWQS, ensuring that the proposed discharge is protective of human health. This is because the ED followed the methodologies outlined in the IPs for drafting the proposed permit, which specify that TPDES permits must maintain WITS 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. The methodologies were specifically designed to ensure no source will be allowed to discharge WW that: 1) results in instream aquatic toxicity; 2) causes a violation of an applicable narrative or numerical standard in the TSWQS; 3) results in the endangerment of a drinking water supply; or 4) results in aquatic bioaccumulation that threatens human health. Accordingly, human health impacts from the proposed discharge are unlikely to occur, as the Applicant is only authorized to discharge according to the limitations, monitoring requirements, and other conditions of the proposed permit.

Human health is protected by the TCEQ rules in 30 TAC § 309.3(g)(1) (Disinfection), which requires disinfection of WW or effluent prior to discharges to WITS in a manner conducive to the protection of public health. The TCEQ's Disinfection rules, implemented though provisions in a TPDES permit, protect human health with bacteria limits to ensure that the proposed discharge meets the stream bacterial standard of the TSWQS. The draft permit not only includes bacteria limits, but also monitoring requirements to verify proper disinfection. TCEQ's Disinfection rules do not mandate a specific method of disinfection, as an applicant may disinfect domestic WW through use of 1) chlorination (CI), 2) UV, or 3) an equivalent method of disinfection with prior approval from the ED. Whichever form is used, the design criteria for the disinfection system, including safety requirements, must follow the requirements of the 217 rules, specifically Subchapters K or L (Chemical or UV disinfection, *respectively*).

Subchapter K specifies the disinfection requirements for CI systems such as sizing, configuration, dosage, system details, controls, cleaning, safety, and minimum replacement parts for the CI disinfection units. Most importantly for protection of human health, the 217 rules require all disinfection systems to have a backup power system capable of providing sufficient power to operate continuously during outages.

In this case, the Applicant chose chemical disinfection using CI in all phases of the proposed permit. Chlorination may be via gaseous, liquid, or tablet forms. CI 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.[8] Thus, the proposed discharge, when disinfected with CI, must contain a CI residual of at least 1.0 mg/L. The permit limit for maximum total CI 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.[9]

[8] U.S. EPA *Wastewater Technology Fact Sheet- Chlorine Disinfection* (EPA 832-F-99-062).
[9] HCMUD No. 531 Draft Permit, Effluent Limitations and Monitoring Requirements, p.2; *see also* 30 TEX. ADMIN. CODE § 309.3(g)(2).

For protection of human health, the only chemical addition to the treatment process is Cl for disinfection purposes. Other than the permit limitation for maximum total Cl, no other chemical treatment was indicated in the application. Moreover, conventional domestic WW does not typically contain toxic contaminates in measurable quantities that might result in toxic effects in the receiving waters unless there are significant industrial users contributing to the waste stream. The proposed facility will receive WW from residential users and will not be accepting industrial WW. Therefore, the ED does not anticipate that there will be any industrial wastewater, insecticides, and banned chemicals not allowed to be disposed of and routed to a WWTF; therefore, hazardous liquids and harmful chemicals are not expected to be discharged into the collection system and enter the treatment system of the proposed facility. Additionally, Minor municipal facilities with conventional domestic sewage do not typically contain toxic compounds in measurable quantities that may result in toxic effects in the receiving streams, unless there are significant industrial users contributing wastewater. Therefore, human health and water quality will be protected if the Applicant operates the proposed facility consistent with TCEQ's rules and the terms and conditions of the draft permit.

COMMENT 4:

Sekharan Madh, Brian Rose, Kathy Shores, Jennifer Ramirez, Warren Augustin, Lloyd White, Carol Rose, Jennifer Soto, Gaston Soto, Kimberly Whatley, and Darrin Whatley commented about the proposed discharge's effects on animal and wildlife.

RESPONSE 4:

The draft permit was developed to protect all 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 draft permit. The TSWQS require that TPDES-permitted discharges not cause surface waters to be toxic to aquatic life, terrestrial wildlife, livestock, or other animal life. not degrade receiving waters, and not result in situations that impair existing, attainable, or designated WQ uses. Likewise, the proposed permit's effluent limits will protect the WQ uses and the WQ of the WITS receiving the proposed discharge for the benefit of the aquatic and terrestrial wildlife that depend on it. This is because WQD Staff, during the ED's Tech Review, must verify that the proposed permit's limits, conditions, and provisions will ensure that the TSWQS will be maintained by the proposed discharge, which provides protection for aquatic, terrestrial, and wildlife.

WQD Staff determined that the proposed discharge will be consistent with the TSWQS, which validates that it is protective of animal, aquatic, terrestrial, and wildlife. WQD Staff's determination is possible because WQD Staff drafted the proposed permit with provisions that safeguard compliance with the TSWQS. For example, the proposed permit contains additional protection for animal, aquatic, terrestrial, and wildlife through the conditions related to the rule in 30 TAC § 309.3(g)(1) (Disinfection), which requires the effluent to be disinfected prior to discharge in a manner conducive to protect, aquatic, terrestrial, and wildlife.

For more information related to the protection of and the health of wildlife, the Texas Parks and Wildlife Department (TPWD) is the state agency that oversees and protects wildlife and their habitat and can be contacted by calling 1-800-792-1112 or by mail at 4200 Smith School Road, Austin, Texas 78744. The TPWD was sent notice of the application and did not express any opposition to the draft permit.

COMMENT 5:

Cadence Morris, Sekharan Madhu, Jay Morris, Jay Gusler, Shree and Danny Guy Wood, Dawn Fore, Lloyd White, and Jules Morris commented that the applicant has not fulfilled the regionalization policy of Texas.

RESPONSE 5:

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 reside within a residence.

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.

WQD staff use 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.

Relevant to this application, there are ten existing WWTFs or collection systems within a three-mile radius of the proposed facility' location. MUD531 submitted certified copies of letters sent to the ten existing facilities on April 5, 2023, requesting information about capacity to accept the proposed discharge. April 17, 2023, MUD531 received response letters informing of a lack of capacity for the proposed discharge. Four letters were received back from the notified facilities by April 17, 2023. As of September 4, 2024, the remaining six facilities have not responded.

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. Likewise, General Permit Condition No. 1(b) states that the draft permit is granted based on the information supplied and representations made by the Applicant during the processing of the application and the permitting process. Relying upon the accuracy and completeness of the application information and the representations of MUD531, WQD staff concluded that the draft permit is consistent with Texas' Regionalization policy.

COMMENT 6:

Sekharan Madhu and Brian Rose commented about compliance and enforcement for the draft permit including unauthorized discharges from the proposed facility and their reporting requirements.

William Ely commented, asking whether it is legal for MUD531 to begin construction of the proposed facility prior to issuance of the draft permit.

RESPONSE 6:

It is a violation of state law (TWC § 26.027(c)) to commence construction of a WWTF before the TCEQ has issued a permit to authorize the discharge of waste from that WWTF, except with the approval of the **C**ommission**.**

Additionally, before MUD531 can begin construction of the proposed facility, the TCEQ's Chapter 217 rules require MUD531, after the permit is issued, to submit engineering plans and specifications for review and approval by a licensed Professional Engineer in the WQD's Plans and Specifications Review Team (P&S Team).

Related to compliance and enforcement, the TCEQ's Office of Compliance and Enforcement plays an important role in protecting human health and the environment because it ensures that the Applicant, its operator, and the proposed facility follow applicable state and federal regulations. OCE's Region 12 is required to conduct a mandatory Comprehensive Compliance Investigation 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 classified as Significantly Non-Complaint (SNC). SNC is determined by the Compliance Monitoring Section of the TCEQ's OCE and is based on self-reported effluent violations.

TPDES-permitted facilities' compliance with the law, applicable rules and regulations, and the draft permit's limits and conditions are continually monitored through what is known as a "Compliance History" (CH). A CH can include multimedia compliance-related components about the site under review and enforcement orders, consent decrees, court judgments, criminal convictions, chronic excessive emissions events, investigations, notices of violations, audits and violations disclosed under the Audit Act, environmental management systems, voluntary on-site compliance assessments, voluntary pollution reduction programs and early compliance. A CH is created for (1) an applicant, the owner or operator of a WWTF, which can be an individual, a company, governmental agency, or several other kinds of entities, and (2) the site or facility. The Owner-Operator rating and classification is the average of the ratings for all sites an applicant owns or operates.

According to the TCEQ rules, found in 30 TAC Chapter 60 (Compliance History), during the ED's Tech review, WQD staff review the CH for the five-year period prior to the date the application was received by the TCEQ. of an applicant for the company or entity, and the proposed site for the five-year period prior to the date the application was received by the TCEQ, which for permit applications received after September 1, 2002, include a rating for both an Applicant and a proposed or existing site with classifications and ratings including:

1. ***High Performer classification***, a rating of fewer than 0.10 points, considered to have an above-satisfactory compliance record.
2. ***Satisfactory Performer classification***, a rating between 0.10 points to 55 points and is considered to generally comply with environmental regulations.
3. ***Unsatisfactory performer classification***, has a rating above 55 points and is considered to perform below minimal acceptable performance standards established by the commission.

Related to the CH review performed by WQD staff for this Application, the Applicant and site were rated and classified pursuant to 30 TAC Chapter 60, the application was received after September 1, 2002, the ED reviewed the compliance history for both the Applicant and site for the five-year period before the TCEQ received the permit application (12/27/2022), and as an existing entity in the TCEQ's CH database, the Applicant has a classification and rating that corresponds with 'Satisfactory Performer' (4.0 points). There is no site rating, as the proposed facility has not been constructed.

The draft permit was also developed according to the TSWQS & the IPs to be protective of the WQ objectives referenced above, provided that MUD531, through its Operator, runs and maintains the proposed facility according to TCEQ rules and the draft permit's requirements.

Moreover, the TCEQ issues permits that describe the conditions under which the proposed facility must operate. All WWTFs must be designed, operated, and maintained consistent with the provisions of applicable TCEQ rules. These provisions require that a facility is properly operated and always maintained. Operational Requirement No. 9, requires that domestic WWTFs be operated and maintained by sewage plant operators

holding a valid certificate of competency at the required level as defined by 30 TAC Chapter 30. Likewise, Other Requirement No.1 of the draft permit requires MUD531 to employ or contract with one or more licensed WWTF operators or WW system operations companies holding a valid license or registration according to the requirements of 30 TAC Chapter 30 (Occupational Licenses and Registrations), and in particular 30 TAC Chapter 30, Subchapter J (Wastewater Operators and Operations Companies). While it is MUD531's responsibility to hire the appropriate operator, and although any operator selected by MUD531 is required to operate and maintain the proposed facility according to the TCEQ rules and draft permit, ultimately it is MUD531 who is required to ensure the proposed facility and all its systems of collection, treatment, and disposal are always 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. The Applicant may also 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.

Operational Requirement No. 8(b), requires that the proposed facility's plans and specifications must be approved by the P&S Team, and failure to secure approval before commencing construction or making a discharge is a violation of the draft permit and each day is an additional violation until approval has been secured. The P&S Team ensures that the plant design can adequately treat the proposed discharge according to the limits in the proposed permit.

Related to ensuring the proposed facility is compliant with applicable TCEQ rules, the TCEQ's 217 rules identify types of treatment technology that can achieve the treatment levels required in the proposed permit. Similarly, Other Requirement No. 6 of the proposed permit requires MUD531 to submit a summary transmittal letter of the proposed facility's plans and specifications according to 30 TAC § 217.6(d) to the WQD's P&S Team. If requested by the P&S Team, MUD531 must submit final plans and specifications, *and* a final engineering design report which comply with the TCEQ's 217 rules. MUD531 must clearly show how the treatment system will meet the permitted limits required on Pages 2, 2a, and 2b of the draft permit. The P&S Team's review ensures that the design and operation of the proposed facility can adequately treat the domestic WW according to the limits in the draft permit during.

Related to spills, if the proposed facility is maintained and operated in accordance with TCEQ rules and the provisions in the draft permit, spills are not expected to occur because the draft 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. For example, Operational Requirement No. 1 requires MUD531 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 WW 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. Operational Requirement No. 4 makes MUD531 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 WW.

Operational Requirement No. 2 requires MUD531, 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 draft permit must be performed by the Applicant according to the draft permit's provisions on Monitoring and Reporting Requirements, the draft permit's Definitions and Standard Permit Conditions, which are based on the TCEQ's rules found at 30 TAC §§ 319.4 - 319.12. Data from Discharge Monitoring Reports (DMRs) must be submitted each month to the TCEQ's Compliance Monitoring Team within the OCE and must be available for inspections by compliance investigators from OCE's Region 12.

Compliance Condition 2(a) of the draft permit requires the MUD531 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 MUD531 to comply with all conditions of the draft permit, and failure to do so constitutes a violation of the permit and the TWC or the Texas Health and Safety Code. Compliance Condition 2(d) requires the MUD531 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 WW or any other waste.

Lastly, Compliance Condition 2(i) ties all these draft permit conditions together and allows them to function as intended because it subjects MUD531 to administrative, civil, and criminal penalties from Chapter 7 of the TWC (Enforcement), for violations of the draft 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).

If spills were to occur at the proposed facility, any spill would be an unauthorized discharge in violation of the draft permit's Compliance Condition 2(g) for which an enforcement action can be brought by TCEQ against MUD531.

Area residents are protected by the fact that MUD531 can only discharge according to the limits, monitoring requirements, and other conditions listed in the draft permit. The draft permit also requires MUD531 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.

The draft permit also requires MUD531 to report any unauthorized discharge to TCEQ within 24 hours.[10] According to 30 TAC § 305.125(9), any noncompliance which may endanger human health or safety, or the environment shall be reported by the Applicant to the TCEQ. Except as allowed by 30 TAC § 305.132, the report of noncompliance must be provided orally or by facsimile transmission to the OCE (Region

[10] HCMUD No. 531 Draft Permit, Monitoring and Reporting Requirements, Item 7, p. 7.

12) within 24 hours of becoming aware of the noncompliance. A written submission of the report of noncompliance information must also be provided by MUD531 to the Compliance Monitoring Team of the Enforcement Division of the OCE within five working days of becoming aware of the noncompliance. The written submission must contain a description of the noncompliance and its cause; the potential danger to human health or safety or the environment; the period of noncompliance, including exact dates and times; if the noncompliance has not been corrected, the time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance, and to mitigate its adverse effects.

Additionally, the TCEQ's OCE conducts routine inspections of facilities to ensure compliance with applicable authorizations and that all authorizations are obtained properly. Any observance of complaints about discharges from the facility can be reported for investigation to OCE's Region 12 at (713) 767-3500, by using the statewide toll-free number at (888)-777-3186, or the electronic methods described in Section II.

These and other requirements in the draft permit are designed to prevent unauthorized discharges of raw sewage and have historically been effective at keeping applicants informed as to conditions at the WWTF for meeting treatment limits, avoiding treatment system problems, and preventing unauthorized discharges of raw sewage.

COMMENT 7:

Cadence Morris, Brian Rose, Jay Morris, Jay Gusler, Bill Goins, William Ely, Jessica Hawley, Whitney Hough Wiener, Kathy Shores, Russell Faulk, Jaime Gibson, Jennifer Ramirez, Kristin Gabino, Lisa Toledanes, David Crockett, Tory Van Wie, Warren Augustin, Nikole Cales, Shree and Danny Guy Wood, Dawn Fore, Jules Morris, Cory Lehmannn, John McClure, Laura Ashford, Charles Melcher, Sandra Melcher, Karen Gaudet, Diana Gee, and Kimberly & Darrin Whatley commented about nuisance odors from the proposed facility and the draft permit's buffer zone requirements.

RESPONSE 7:

Instances of foul odors from a discharge of effluent can exist when there are insufficient levels of DO concentrations in the effluent. To prevent odors from occurring the number of oxygen-demanding constituents must be controlled, as maintaining an adequate DO concentration in the early stages of WW treatment helps to minimize sulfide generation, which is the most common cause of odor. The proposed effluent limits, specifically the minimum DO limit, restrict the number of oxygen-demanding constituents and are set at levels to significantly reduce the odors in the effluent being discharged and prevent degradation of the receiving waters.

However, all WWTFs have the potential to generate odors. The treatment process proposed by the Applicant supplies oxygen in the air, "aeration," into the effluent for biodegradation of organic contaminants in the effluent, and oxygen converts the sulfide compounds into odorless sulfates.

To control and abate odors, the TCEQ rules require domestic WWTFs to meet buffer zone requirements for the abatement and control of nuisance odor according to 30 TAC § 309.13(e), which provides options for applicants to satisfy the nuisance odor abatement and control requirements. Additionally, nuisance-odor controls have been incorporated into the proposed permit according to 30 TAC § 309.13(e) of the TCEQ's rules, which require domestic WWTFs 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, MUD531 intends to comply with the requirement to abate and control nuisance of odor by legal restrictions prohibiting the construction of residences within the buffer zone. This requirement is incorporated in the draft permit. These legal restrictions include a Special Warranty Deed between AHV Shiel BFR Owner, LLC, the landowner of the site of the proposed facility, and MUD531 in accord with 30 TAC § 309.13(e)(3). Therefore, nuisance odor is not expected to occur because of the permitted activities at the facility if the permittee operates the facility in compliance with TCEQ's rules and the terms and conditions of the draft permit.

Additionally, information about the proposed facility from the application indicates that the proposed facility will be an activated sludge process plant operated in the complete mix mode. The activated sludge process is the most frequently used biological WW treatment process for treating domestic WW, and the use of the complete mix mode has been known to produce highly treated effluent with low biosolids production. When properly treated by the proposed WW treatment process, the effluent is not expected to have offensive odors.

COMMENT 8:

Sekharan Madhu commented about per- and polyfluoroalkyl substances (PFAS) in the proposed discharge.

RESPONSE 8:

The TCEQ has not developed or proposed, nor has the EPA approved numeric criteria for PFAS chemicals for inclusion in the TSWQS.

The EPA continues to work to develop nationally recommended criteria to protect human health from ingestion of drinking water and consuming fish. Early drafts of national aquatic life criteria for PFAS chemicals, specifically Perfluorooctanoic acid (PFOA) and Perfluorooctane Sulfonic Acid (PFOS), published by EPA in May 2022, focused on acute and chronic criteria for freshwaters for protecting aquatic life with chronic criteria expressed as tissue-based concentrations to protect aquatic life from PFOA and PFOS bioaccumulation.

Currently, PFAS criteria for wastewater discharges has not been finalized by the EPA. However, for Clean Water Act purposes, when the PFAS criteria are established, adopted, and incorporated into the TSWQS by the TCEQ, the criteria can be implemented through the applicable wastewater permits issued by TCEQ.

COMMENT 9:

William Ely, Diego Villegas, Jessica Hawley, Whitney Wiener, Kathy Shores, Charlene Jones, Russell Faulk, Jaime Gibson, Kristin Gabino, Lisa Toledanes, Kelly Thibert, Nikole Cales, Dawn Fore, Lloyd White, Phillip Pappano, Cory Lehmannn, John McClure, Laura Ashford, Karen Gaudet, Matt Abegglen, Brandon Reardon, Keren Grissom, Diana Gee, Sandra & Charles Melcher, Cadence, Jules & Jay Morris, Carol & Brian Rose, Jennifer & Gaston Soto, Kimberly & Darrin Whatley, Shree & Danny Wood and Nancy & Patrick Wong commented about property values, noise, light pollution, traffic and aesthetics.

Michael Browne expressed concerns regarding flooding caused by the discharge.

RESPONSE 9:

The ED acknowledges the significance of these comments; however, there are certain concerns of citizens that the TCEQ cannot address as part of the review for TPDES permit application. TPDES permits establish terms and conditions that are intended to provide water quality pollution control. Similarly, the ED encourages the participation of all citizens in the environmental permitting process; however, the scope of the TCEQ's jurisdiction in a TPDES application is limited to the issues set out by statute.

While the Texas Legislature has given the TCEQ the responsibility to protect Water Quality (WQ), and TWC § 26.027 authorizes the TCEQ to issue permits to control the disposal of wastes or pollutants adjacent to state waters and to protect the WQ of the state's rivers, lakes and coastal waters; and while the proposed permit establishes terms and conditions that are intended to provide WQ pollution control, which focuses on controlling the disposal of pollutants adjacent to water in the state, the ED through the WQD has no jurisdiction in its determination of whether to issue a water quality permit, to address property values, visual aesthetics, light pollution, and flooding or erosion, if water quality is maintained. The TCEQ also does not have authority to require or enforce any noise abatement measures, as they are normally enacted by cities or counties and enforced by local law enforcement authorities. Rather, the ED is limited to controlling the disposal of pollutants into WITS and protecting the WQ of WITS.

Although the TCEQ does not have jurisdiction to regulate flooding in the context of a TPDES permit, to the extent that a concern over flooding also involves WQ, applicants are always required to comply with all the numeric and narrative effluent limitations and other conditions in draft permits, including during flooding conditions. Likewise, draft permits include effluent limits and other requirements that applicants must meet even during rainfall events and periods of flooding. According to the application, the proposed facility will be located above the 100-year flood plain. For additional protection, the draft permit includes Other Requirement No. 4, which requires MUD531 to provide protection for the facility against a 100-year flood event.

For flooding concerns, members of the public may contact the Harris County Floodplain Administrator's office by calling (713) 274-3842 8:00 a.m. – 5:00 p.m., Monday through Friday, sending an email to:

- darrell.hahn@hcpid.org, permitsinfo@hcpid.org, or through visiting the following:
- https://www.eng.hctx.net/permits/Floodplain-Management

Additionally, the TCEQ Resource Protection Team can be contacted for aid in identifying and contacting the appropriate county officials or offices, by calling (512) 239-4600 8:00 a.m. – 5:00 p.m., Monday through Friday, or by sending an email to:

- wcp@tceq.texas.gov.

Additionally, the Federal Emergency Management Agency has programs designed to mitigate damage caused by flooding, that can be found at the following website:

- www.fema.gov/floodplain-management

Additionally, 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 does the scope of TCEQ's regulatory jurisdiction, limit

nearby landowners' ability to use a court of law's remedies if anyone experiences nuisance conditions or any other suspected incidents of noncompliance with the permit or TCEQ rules. A draft permit does not limit an affected individual's ability to seek legal remedies against applicants for any potential trespass, nuisance, or other causes of action in response to activities that may result in injury to human health or property or that interfere with the normal use and enjoyment of property.

Members of the public may contact local authorities to inquire if there are any applicable, local (e.g., city or county), light pollution ordinances around the proposed facility. For noise pollution and personal safety or security concerns, the public may contact local law enforcement or the Harris County Sheriff's Office at 713-221-6000.

VII. CHANGES MADE TO THE DRAFT PERMIT IN RESPONSE TO COMMENTS

No changes were made to the draft permit in response to public comments received.

Respectfully submitted,

Texas Commission on Environmental Quality

Kelly Keel, Executive Director

Phillip Ledbetter, Director
Office of Legal Services

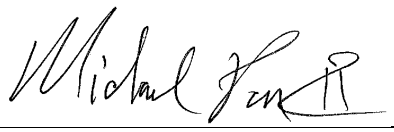
Charmaine Backens, Deputy Director
Environmental Law Division

Michael T. Parr II, Staff Attorney
Environmental Law Division
State Bar No. 24062936
P.O. Box 13087, MC 173
Austin, Texas 78711 3087
Telephone No. 512-239 0611
Facsimile No. 512-239-0626

REPRESENTING THE EXECUTIVE DIRECTOR
OF THE TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY

VIII. CERTIFICATE OF SERVICE

I certify that on November 21, 2024, the Executive Director's Response to Public Comment for TPDES Permit No. WQ0016334001 was filed with the Texas Commission on Environmental Quality's Office of the Chief Clerk.



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