

**NPDES PERMIT NO. TX0052809
FACT SHEET**

FOR THE DRAFT NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
(NPDES) PERMIT TO DISCHARGE TO WATERS OF THE UNITED STATES

APPLICANT

Alabama-Coushatta Tribe of Texas Eastside WWTP
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ISSUING OFFICE

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PREPARED BY

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DATE PREPARED

March 21, 2023

PERMIT ACTION

Proposed reissuance of the current NPDES permit issued February 22, 2018, with an effective date of March 1, 2018, and an expiration date of February 28, 2023.

RECEIVING WATER – BASIN

Tombigbee Creek below Tombigbee Lake, thence to Bear Creek, thence to Big Sandy Creek, thence to Village Creek in Segment 0608 of the Neches River Basin

DOCUMENT ABBREVIATIONS

In the document that follows, various abbreviations are used. They are as follows:

| | |
|-------|--|
| 4Q3 | Lowest four-day average flow rate expected to occur once every three-years |
| BAT | Best available technology economically achievable |
| BCT | Best conventional pollutant control technology |
| BPT | Best practicable control technology currently available |
| BMP | Best management plan |
| BOD | Biochemical oxygen demand (five-day unless noted otherwise) |
| BPJ | Best professional judgment |
| CD | Critical dilution |
| CFR | Code of Federal Regulations |
| cfs | Cubic feet per second |
| COD | Chemical oxygen demand |
| COE | United States Corp of Engineers |
| CWA | Clean Water Act |
| DMR | Discharge monitoring report |
| ELG | Effluent limitation guidelines |
| EPA | United States Environmental Protection Agency |
| ESA | Endangered Species Act |
| FCB | Fecal coliform bacteria |
| F&WS | United States Fish and Wildlife Service |
| IP | Procedures to Implement the Texas Surface Water Quality Standards |
| mg/l | Milligrams per liter (one part per million) |
| ug/l | Micrograms per liter (one part per billion) |
| MGD | Million gallons per day |
| NPDES | National Pollutant Discharge Elimination System |
| ML | Minimum quantification level |
| O&G | Oil and grease |
| PFAS | per- and poly- fluoroalkyl substances |
| POTW | Publicly owned treatment works |
| RP | Reasonable potential |
| SIC | Standard industrial classification |
| s.u. | Standard units (for parameter pH) |
| SWQB | Surface Water Quality Bureau |
| TAC | Texas Administrative Code |
| TCEQ | Texas Commission on Environmental Quality |
| TSWQS | Texas Surface Water Quality Standards |
| TDS | Total dissolved solids |
| TMDL | Total maximum daily load |
| TRC | Total residual chlorine |
| TSS | Total suspended solids |
| UAA | Use attainability analysis |
| UV | Ultraviolet light |
| USFWS | United States Fish & Wildlife Service |
| USGS | United States Geological Service |
| WLA | Wasteload allocation |
| WET | Whole effluent toxicity |
| WQMP | Water Quality Management Plan |
| WWTP | Wastewater treatment plant |

I. CHANGES FROM THE PREVIOUS PERMIT

The changes made to the draft permit issued February 22, 2018, with an effective date of March 1, 2018, and an expiration date of February 28, 2023, are:

1. Segment specific standards for Segment 0608 is changed from pH of 6.0– 9.0 SU's to pH of 5.5 – 8.0 SU's based on the current Texas Water Quality Standards.
2. Daily maximum limit of 235 cfu/100ml has been changed to 399 cfu/100 ml based on the current Texas Water Quality Standards.
3. EPA has included the PFAS monitoring requirements based on the memo from EPA headquarters addressing PFAS discharges in NPDES Permits and through the Pretreatment Program and Monitoring Programs.
4. Added BOD/TSS 85% removal based on 40 CFR §133.102(a)
5. Added influent BOD₅ and TSS reporting requirements
6. Sanitary Sewer Overflows (SSOs), bypass and anticipated bypass events shall be electronically reported to EPA per 40 CFR 127.26(f).

II. APPLICANT LOCATION and ACTIVITY

As described in the application, the Eastside facility is located adjacent to and west of Park Road 56 in Polk County, Texas. The facility is on Alabama-Coushatta Tribal land. The discharge is into waters that are on Tribal land, and the closest downstream State waters are approximately 1.6 miles downstream from the point of discharge.



Under the Standard Industrial Classification Code 4952, the applicant operates a POTW with a design flow of 0.12 MGD for a population of 703 residents.

The operation described in the application consists of an extended aeration plant using two aeration vessels, an aerated sludge holding tank, a clarifier, a chlorine contact chamber and dechlorinating before discharging into Tombigbee Creek.

The effluent from the treatment plant is discharged from Outfall 001 located at Latitude 30° 42' 30" North, Longitude 94° 40' 45" West.

III. EFFLUENT CHARACTERISTICS

The facility is a minor discharge with a design flow of 0.12 MGD. A quantitative description of the discharge(s) described in the EPA Permit Application Form 2A submitted February 27, 2023, are presented below:

POLLUTANT TABLE - 1

| Parameter | Max (mg/l unless noted) | Avg (mg/l unless noted) |
|---|-------------------------------|-------------------------------|
| Flow, million gallons/day (MGD) | 0.05 | 0.04 |
| Temperature, winter, °F | 60.6 | 58.6 |
| Temperature, summer, °F | 83.7 | 81.3 |
| pH, minimum, standard units (su) | 6.8 | NA |
| pH, maximum, standard units (su) | 8.0 | NA |
| Biochemical Oxygen Demand, 5-day (BOD ₅) | 4.0 | 3.0 |
| Fecal Coliform (#bacteria/100 ml) | 5.0 | 2.0 |
| Total Suspended Solids (TSS) | 9.0 | 5.0 |
| Ammonia | 0.38 | 0.2 |
| Total Residual Chlorine (TRC) | 2.3 | 2.0 |
| Dissolved Oxygen (DO) | 8.8 | 7.9 |
| Total Kjeldahl Nitrogen | 3.7 | 3.6 |
| Nitrate plus Nitrite Nitrogen | 6.25 | 2.3 |
| Oil and Grease | 5.6 | 5.5 |
| Phosphorus | 5.4 | 4.6 |
| Total Dissolved Solids | 558 | 526 |

IV. REGULATORY AUTHORITY/PERMIT ACTION

In November 1972, Congress passed the Federal Water Pollution Control Act establishing the NPDES permit program to control water pollution. These amendments established technology-based or end-of-pipe control mechanisms and an interim goal to achieve “water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for

recreation in and on the water”; more commonly known as the “swimmable, fishable” goal. Further amendments in 1977 of the CWA gave EPA the authority to implement pollution control programs such as setting wastewater standards for industry and established the basic structure for regulating pollutants discharges into the waters of the United States. In addition, it made it unlawful for any person to discharge any pollutant from a point source into navigable waters, unless a permit was obtained under its provisions. Regulations governing the EPA administered NPDES permit program are generally found at 40 CFR §122 (program requirements & permit conditions), §124 (procedures for decision making), §125 (technology-based standards) and §136 (analytical procedures). Other parts of 40 CFR provide guidance for specific activities and may be used in this document as required.

It is proposed that the permit be reissued for a 5-year term following regulations promulgated at 40 CFR §122.46(a). The current permit expired February 28, 2023. The application was received on February 17, 2023. Additional Permit application information was received on February 27, 2023, and the application was deemed administratively complete on February 28, 2023.

V. DRAFT PERMIT RATIONALE AND PROPOSED PERMIT CONDITIONS

A. OVERVIEW of TECHNOLOGY-BASED VERSUS WATER QUALITY STANDARDS-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Regulations contained in 40 CFR §122.44 require that NPDES permit limits are developed that meet the more stringent of either technology-based effluent limitation guidelines, numerical and/or narrative water quality standard-based effluent limits, or the previous permit.

Technology-based effluent limitations are established in the proposed draft permit for TSS and BOD₅. Water quality-based effluent limitations are established in the proposed draft permit for E. coli bacteria, DO, TRC and pH.

B. TECHNOLOGY-BASED EFFLUENT LIMITATIONS/CONDITIONS

Regulations promulgated at 40 CFR §122.44 (a) require technology-based effluent limitations to be placed in NPDES permits based on ELGs where applicable, on BPJ in the absence of guidelines, or on a combination of the two.

The facility is a POTW's that has technology-based ELG's established at 40 CFR Part 133, Secondary Treatment Regulation. Pollutants with ELG's established in this Chapter are BOD, TSS, percent removal for each and pH. BOD limits of 30 mg/l for the 30-day average, 45 mg/l for the 7-day average and 85% percent (minimum) removal are found at 40 CFR §133.102(a). TSS limits of 30 mg/l for the 30-day average, 45 mg/l for the 7-day average and 85% percent (minimum) removal are found at 40 CFR §133.102(b). ELG's for pH are between 6-9 s.u. and are found at 40 CFR §133.102(c). Regulations at 40 CFR §122.45(f)(1) require all pollutants limited in permits to have limits expressed in terms of mass such as pounds per day. Regulations at 30 TAC Section 309.1 (b), “Domestic Wastewater Effluent Limitations and Plant Siting,” Secondary Treatment, specifies more restrictive limitations for BOD and TSS. Table 1 of TAC

Section 309.4 lists that for domestic treatment plants using secondary treatment, limits for both BOD and TSS shall be 20 mg/l for the 30-day average, 30 mg/l for the 7-day average and a daily maximum of 45 mg/l. These limitations are more restrictive than those shown above in the technology-based section and while they are based on State of Texas requirements that do not apply to Tribal waters, they cannot be removed since that would constitute backsliding in accordance with 40 CFR §122.44(l). The BOD and TSS limitations are also protective of downstream State waters consistent with the requirements of 40 CFR 122.4(d). These limits are identical to those in the current permit and do not impose a new requirement on the facility. When determining mass limits for POTW’s, the plant’s design flow is used to establish the mass load. Mass limits are determined by the following mathematical relationship:

$$\text{Loading in lbs/day} = \text{pollutant concentration in mg/l} * 8.345 \text{ lbs/gal} * \text{design flow in MGD}$$

$$\text{TSS/BOD}_5 \text{ loading (lbs/day)} = 20 \text{ mg/l} * 8.345 \text{ lbs/gal} * 0.12 \text{ MGD} = 20 \text{ lbs/day}$$

The proposed permit will also establish the 85% established in 40 CFR Part 133, percent removal limits for TSS and BOD₅.

Summary of the Technology-Based Effluent Limits - 0.12 MGD design flow are shown below:

| EFFLUENT CHARACTERISTICS | DISCHARGE LIMITATIONS | | | | | |
|---------------------------------------|-----------------------|------------|-----------|---------------------|-------------|-----------|
| | lbs/Day | | | mg/L (unless noted) | | |
| Parameter | 30-Day Avg.. | 7-Day Avg. | Daily Max | 30-Day Avg. | 7-Day Avg. | Daily Max |
| Flow | N/A | N/A | N/A | Measure MGD | Measure MGD | |
| BOD ₅ effluent | 20 | 30 | 45 | 20 | 30 | 45 |
| BOD ₅ influent | --- | --- | | Report | --- | |
| BOD ₅ , % removal, minimum | --- | --- | | ≥ 85% (*) | --- | |
| TSS effluent | 20 | 30 | 45 | 20 | 30 | 45 |
| TSS influent | --- | --- | | Report | --- | --- |
| TSS, % removal, minimum | --- | --- | | ≥ 85% (*) | --- | |
| pH | N/A | N/A | | 6.0 – 9.0 s.u. | | |

(*) Percent removal is calculated using the following equation: (average monthly influent concentration – average monthly effluent concentration) ÷ average monthly influent concentration.

C. WATER QUALITY BASED LIMITATIONS

1. General Comments

Water quality- based requirements are necessary where effluent limits more stringent than technology-based limits are necessary to maintain or achieve federal or state water quality limits.

Under Section 301(b)(1)(C) of the CWA, discharges are subject to effluent limitations based on federal or state WQS. Effluent limitations and/or conditions established in the draft permit are in compliance with applicable State/Tribal WQS and applicable State/Tribal water quality management plans to assure that surface WQS of the receiving waters are protected and maintained or attained.

2. Implementation

The NPDES permits contain technology-based effluent limitations reflecting the best controls available. Where these technology-based permit limits do not protect water quality or the designated uses, additional water quality-based effluent limitations and/or conditions are included in the NPDES permits. State narrative and numerical water quality standards are used in conjunction with EPA criteria and other available toxicity information to determine the adequacy of technology-based permit limits and the need for additional water quality-based controls.

3. Final Effluent Limits – 0.12 MGD

| EFFLUENT CHARACTERISTICS POLLUTANT | DISCHARGE LIMITATIONS lbs/day, unless noted | | | DISCHARGE LIMITATIONS mg/L, unless noted (*1) | | | MONITORING REQUIREMENTS | |
|---------------------------------------|--|------------|------------|--|-----------|----------------|-------------------------|-------------------------|
| | 30-DAY AVG | 7-DAY AVG | DAILY MAX | 30-DAY AVG | 7-DAY AVG | DAILY MAX | MEASUREMENT FREQUENCY | SAMPLE TYPE |
| Flow | Report MGD | Report MGD | Report MGD | *** | *** | *** | Daily | Instantaneous |
| BOD ₅ Effluent | 20 | 30 | 45 | 20 | 30 | 45 | Once/Week | 24-Hr Composite |
| BOD ₅ influent | N/A | N/A | N/A | Report | N/A | N/A | Once/Month | 24-Hr Composite |
| BOD ₅ % Removal | ≥85% (*2) | N/A | N/A | N/A | N/A | N/A | Once/Month | Calculation |
| TSS Effluent | 20 | 30 | 45 | 20 | 30 | 45 | Once/Week | 24-Hr Composite |
| TSS Influent | N/A | N/A | N/A | Report | N/A | N/A | Once/Month | 24-Hr Composite |
| TSS % Removal | ≥85% (*2) | N/A | N/A | N/A | N/A | N/A | Once/Month | Calculation |
| <i>E. Coli</i> Bacteria (*3) | N/A | N/A | N/A | 126 cfu/100 ml | N/A | 399 cfu/100 ml | Once/Week | Grab |
| Total Residual Chlorine (TRC) | N/A | N/A | N/A | N/A | N/A | 19 µg/L | Once/Week | Instantaneous Grab (*4) |
| PFAS Analytes (*5) | N/A | N/A | N/A | N/A | N/A | Report, ng/L | Once/Permit Term | 24-Hr Composite |
| Influent PFAS Analytes (*5) | N/A | N/A | N/A | N/A | N/A | Report, ng/L | Once/Permit Term | 24-Hr Composite |
| PFAS Analytes for Sludge (*6) | N/A | N/A | N/A | N/A | N/A | Report, ng/g | Once/Permit Term | 24-Hr Composite (*7) |

| EFFLUENT CHARACTERISTICS | DISCHARGE LIMITATIONS Standard Units, unless noted | | MONITORING REQUIREMENTS | |
|--------------------------|---|---------|-------------------------|-------------------------|
| | POLLUTANT | MINIMUM | MAXIMUM | MEASUREMENT FREQUENCY |
| pH | 5.5 | 8.0 | Once/Week | Instantaneous Grab (*4) |
| Dissolved Oxygen | 2.0 mg/l | N/A | Once/Week | Instantaneous Grab (*4) |

Footnotes:

- *1 See **Appendix A of Part II** of the permit for minimum quantification limits.
- *2 Percent removal is calculated using the following equation: [(average monthly influent concentration – average monthly effluent concentration) / average monthly influent concentration] * 100.
- *3 Colony forming units (cfu) per 100 ml.
- *4 Regulations at 40 CFR Part 136 define “instantaneous grab” as analyzed within 15 minutes of collection. The effluent limitation for TRC is the instantaneous maximum and cannot be averaged for reporting purposes.
- *5 Report in nanograms per liter (ng/L). This reporting requirement for the 40 PFAS parameters takes effect on the effective date of the authorization to discharge under the permit. Until there is an analytical method approved in 40 CFR Part 136 for PFAS in wastewater, monitoring shall be conducted using Draft Method 1633. The draft Adsorbable Organic Fluorine CWA wastewater method 1621 can be used in conjunction with draft method 1633, if appropriate.
Additionally, report in NetDMR the results of all 40 PFAS analytes required to be tested as part of the method as shown in Appendix B of Part II. Any parameters that are removed from the method based on multi-lab validation of the method will not be required for reporting and the Permittee may report “NODI: 9” for any such parameters.
- *6 Report in nanograms per gram (ng/g). This reporting requirement for the 40 PFAS parameters takes effect on the effective date of the authorization to discharge under the permit. Until there is an analytical method approved in 40 CFR Part 136 for PFAS in sludge, monitoring shall be conducted using Draft Method 1633. The draft Adsorbable Organic Fluorine CWA wastewater method 1621 can be used in conjunction with draft method 1633, if appropriate.
Additionally, report in NetDMR the results of all 40 PFAS analytes required to be tested as part of the method, as shown in Appendix B of Part II. Any parameters that are removed from the method based on multi-lab validation of the method will not be required for reporting and the Permittee may report “NODI: 9” for any such parameters.
- *7. Sludge sampling shall be as representative as possible based on guidance found at <https://www.epa.gov/sites/production/files/2018-11/documents/potw-sludge-sampling-guidance-document.pdf>.

4. Water Quality Standards

The Alabama-Coushatta Tribe of Texas does not have EPA approved WQS. The discharge does have a reasonable potential to impact the State of Texas surface waters downstream from the point of discharge. As such, the effects of the downstream State of Texas WQS must be considered in the permit. The general criteria and numerical criteria which make up the stream standards are provided in the Texas Administrative Code (TAC), 30 TAC Sections 307.1 - 307.10, amended to be effective March 18, 2021. The State's WQS are also applied to be protective of the quality of waters within the jurisdiction of the Alabama-Coushatta Tribe of Texas.

The treated effluent is discharged to Tombigbee Creek below Tombigbee Lake thence to Bear Creek, thence to Big Sandy Creek, thence to Village Creek in Segment 0608 of the Neches River Basin. Tombigbee Creek below Tombigbee Lake has no significant aquatic uses. The designated uses for Segment 0608 are high aquatic life, primary contact recreation¹, and public water supply.

5. Permit Action - Water Quality-Based Limits

Regulations promulgated at 40 CFR §122.44(d) require limits in addition to, or more stringent than effluent limitation guidelines (technology based). State WQS that are more stringent than effluent limitation guidelines are as follows:

a. Bacteria

Segment specific standards for Segment 0608 require E. coli bacteria of 126 cfu/100 ml monthly geometric mean and 399 cfu/100 ml daily maximum. The limits for bacteria for daily maximum limits is changed from 235 cfu/100 ml based on the current water quality standards.

b. pH

Segment specific standards for Segment 0608 require pH to be between 5.5 – 8.0 SU's. The pollutant pH segment specific limitations of 6.0 – 8.0 are instream values. The dilution offered by the receiving waters will allow the technology-based limitations above, 6-9 SU's, to meet applicable WQS. The permit shall have pH limited to 5.5-8.0 SU's, based on the current Texas WQS.

c. Dissolved Oxygen

The initial receiving water, Tombigbee Creek, is an unclassified receiving water. It must maintain a minimum DO of 2.0 mg/l. Village Creek, the first classified receiving water, has a minimum DO requirement of 5.0 mg/l. The 24-hour minimum DO criterion for Segment 0608 is 2 mg/L, based on the most recent Texas WQS. The previous permit had a DO limitation of 2.0 mg/l, and this limit will be maintained in the draft permit.

d. Per- and Poly- Fluoroalkyl substances (PFAS)

As explained at <https://www.epa.gov/pfas>, PFAS are a group of synthetic chemicals that have been in use since the 1940s. PFAS are found in a wide array of consumer and industrial products. PFAS manufacturing and processing facilities, facilities using PFAS in production of other products, airports, and military installations can be contributors of PFAS releases into the air, soil, and water. Due to their widespread use and persistence in the environment, most people in the United States have been exposed to PFAS. Exposure to some PFAS above certain levels may increase risk of adverse health effects. EPA is collecting information to evaluate the potential impacts that discharges of PFAS from wastewater treatment plants may have on downstream drinking water, recreational and aquatic life uses.

Although the Texas Surface Water Quality Standards do not include numeric criteria for PFAS, the 2021 Texas Water Quality Standards narrative criterion for toxic substances at 307.4(d) states:

“Surface waters must not be toxic to man from ingestion of water, consumption of aquatic organisms, or contact with the skin, or to terrestrial or aquatic life.”

Since PFAS chemicals are persistent in the environment and may lead to adverse human health and environmental effects, the draft permit requires that the facilities conduct once per permit term influent, effluent, and sludge sampling for PFAS the first full calendar year after the effective date of the authorization to discharge under the permit.

The purpose of this monitoring and reporting requirement is to better understand potential discharges of PFAS from this facility and to inform future permitting decisions, including the potential development of water quality-based effluent limits on a facility-specific basis. EPA is authorized to require this monitoring and reporting by CWA § 308(a), which states:

“SEC. 308. (a) Whenever required to carry out the objective of this Act, including but not limited to (1) developing or assisting in the development of any effluent limitation, or other limitation, prohibition, or effluent standard, pretreatment standard, or standard of performance under this Act; (2) determining whether any person is in violation of any such effluent limitation, or other limitation, prohibition or effluent standard, pretreatment standard, or standard of performance; (3) any requirement established under this section; or (4) carrying out sections 305, 311, 402, 404 (relating to State permit programs), 405, and 504 of this Act—

(A) the Administrator shall require the owner or operator of any point source to (i) establish and maintain such records, (ii) make such reports, (iii) install, use, and maintain such monitoring equipment or methods (including where appropriate, biological monitoring methods), (iv) sample such effluents (in accordance with such methods, at such locations, at such intervals, and in such manner as the Administrator shall prescribe), and (v) provide such other information as he may reasonably require;”.

EPA notes that there is currently not an analytical method approved in 40 CFR Part 136 for PFAS. As stated in 40 CFR § 122.44(i)(1)(iv)(B), in the case of pollutants or pollutant parameters for which there are no approved methods under 40 CFR Part 136 or methods are not otherwise required under 40 CFR chapter I, subchapter N or O, monitoring shall be conducted according to a test procedure specified in the permit for such pollutants or pollutant parameters.

Therefore, the draft permit specifies that until there is an analytical method approved in 40 CFR Part 136 for PFAS, monitoring shall be conducted using Draft Method 1633.

In October 2021, EPA published a PFAS Strategic Roadmap that described EPA's commitments to action for 2021 through 2024. This roadmap includes a commitment to issue new guidance recommending PFAS monitoring in both state-issued and federally-issued NPDES permits using EPA's recently published analytical method 1633. In anticipation of this guidance, EPA has included PFAS monitoring in the draft permit using draft analytical method 1633. The draft Adsorbable Organic Fluorine CWA wastewater method 1621 can be used in conjunction with draft method 1633, if appropriate.

Draft Method 1633 is currently a single lab-validated method. EPA anticipates the method will be multi-lab validated in 2023. If the PFAS monitoring requirement begins before Draft Method 1633 is multi-lab validated, the current single-lab validated Draft Method 1633 shall be used at that time, and then the multi-lab validated Draft Method 1633 shall be used once it is available.

e. Toxics

i. General Comments

The CWA in Section 301 (b) requires that effluent limitations for point sources include any limitations necessary to meet water quality standards. Federal regulations found at 40 CFR §122.44 (d) state that if a discharge poses the reasonable potential to cause an in-stream excursion above a water quality criteria, the permit must contain an effluent limit for that pollutant.

All applicable facilities are required to fill out appropriate sections of the Form 2A, 2S or 2E, to apply for an NPDES permit or reissuance of an NPDES permit. The new form is applicable not only to POTWs, but also to facilities that are similar to POTWs, but which do not meet the regulatory definition of "publicly owned treatment works" (like private domestics, or similar facilities on Federal property). The forms were designed and promulgated to "make it easier for permit applicants to provide the necessary information with their applications and minimize the need for additional follow-up requests from permitting authorities," per the summary statement in the preamble to the Rule. These forms became effective December 1, 1999, after publication of the final rule on August 4, 1999, Volume 64, Number 149, pages 42433 through 42527 of the FRL.

The facility is a minor POTW/POTW-like, which is not required to submit data for toxic pollutants listed in Tables C and D of Form 2A. There are no toxics that need to be placed in the draft permit except for those presented above.

ii. TRC

19µg/L is EPA's acute chlorine criteria and 11µg/L is EPA's chronic chlorine criteria. Limits must be protective of WQS, including narrative prohibitions on toxics in toxic amounts, per 40 CFR 122.4(d) and 122.44(d). Since the acute conditions do not allow dilution; the limit must be

met at end-of-pipe, but chronic standards do allow dilution, the permit shall use the most stringent WQS for the permit limit.

The critical dilution is 8%. The in-stream TRC concentration after allowing for dilution is: $11\mu\text{g/L} \div 0.08 = 137.5 \mu\text{g/L}$. Since this value is more than the $19 \mu\text{g/L}$ end-of-pipe acute standard, the $19 \mu\text{g/L}$ is more stringent and will be more protective. The draft permit shall establish the $19\mu\text{g/L}$ limit. However, TRC is toxic at measurable amounts, so in addition to the $19 \mu\text{g/L}$ chemical specific limitation, the narrative limit for TRC shall be "No Measurable." Hence, the effluent shall contain NO MEASURABLE TRC at any time. NO MEASURABLE will be defined as no quantifiable level of TRC as determined by any approved method established in 40 CFR 136 that is greater than the established MQL. The effluent limitation for TRC is the instantaneous maximum and cannot be averaged for reporting purposes. TRC shall be measured within fifteen (15) minutes of sampling. Current values on previous DMR's shows that the WWTP can comply with this new limit.

D. MONITORING FREQUENCY FOR LIMITED PARAMETERS

Regulations require permits to establish monitoring requirements to yield data representative of the monitored activity, 40 CFR §122.48(b), and to assure compliance with permit limitations, 40 CFR §122.44(i)(1). Sample frequency is based on the previous permit. BOD₅ effluent, TSS effluent, pH and DO are proposed to be monitored once per week. Flow is proposed to be monitored daily using instantaneous readings. Sample type for BOD₅ and TSS are 24-hour composite which is consistent with the previous permit. TRC, DO and pH shall be sampled using instantaneous grab. Regulations at 40 CFR §136 define instantaneous grab as being analyzed within 15-minutes of collection. E. coli shall continue to be monitored once per week by grab sample. PFAS shall be monitored once per permit term using 24-hour composite sample.

E. WHOLE EFFLUENT TOXICITY LIMITATIONS

Whole effluent toxicity (WET) testing, also known as biomonitoring, is required in permits where the potential exists for the effluent to cause toxicity in the receiving water (30 TAC §307.6(e)(2)(A) and 40 CFR 122.44(d)(1)(v)). The State requires WET testing for domestic wastewater facilities under certain conditions. Those conditions are either a final phase of their permit with a design flow of 1 MGD or greater, an approved pretreatment program with significant industrial users or the potential to cause toxicity in the receiving water. The permittee does not have any of these conditions; therefore, WET testing is not required in the draft permit.

VI. FACILITY OPERATIONAL PRACTICES

A. SEWAGE SLUDGE

The permittee shall use only those sewage sludge disposal or reuse practices that comply with the federal regulations established in 40 CFR Part 503 "Standards for the Use or Disposal of Sewage Sludge." The specific requirements in the permit apply as a result of the design flow of the facility, the type of waste discharged to the collection system, and the sewage sludge disposal or reuse practice utilized by the treatment works. Part 503 regulations are self-implementing,

which means that facilities must comply with them whether or not a sludge-only permit has been issued. Part IV of the draft permit contains sewage sludge permit requirements.

Sludge testing information will be retained by the permittee for a minimum of five (5) years as required in the record keeping requirements section of Part IV.

B. WASTEWATER POLLUTION PREVENTION REQUIREMENTS

The permittee shall institute programs directed towards pollution prevention. The permittee will institute programs to improve the operating efficiency and extend the useful life of the treatment system.

C. INDUSTRIAL WASTEWATER CONTRIBUTIONS

The treatment plant has no non-categorical Significant Industrial User's (SIU) and no Categorical Industrial User's (CIU). The EPA has tentatively determined that the permittee will not be required to develop a full pretreatment program. However, general pretreatment provisions have been required. The facility is required to report to EPA, in terms of character and volume of pollutants any significant indirect dischargers into the POTW subject to pretreatment standards under §307(b) of the CWA and 40 CFR Part 403.

D. OPERATION AND REPORTING

The applicant is required to operate the treatment facility at maximum efficiency at all times; to monitor the facility's discharge on a regular basis; and report the results quarterly. The monitoring results will be available to the public.

The EPA promulgated a final rule in 2015 to modernize Clean Water Act reporting for municipalities, industries, and other facilities by converting to an electronic data reporting system. This final rule requires regulated entities to electronically report certain data required by the NPDES permit program instead of filing paper reports. The rule also requires that certain data be entered into EPA's national data system by NPDES Authorized States, Tribes, Territories, and Federal regulators. EPA regulations at 40 CFR 127.26(f) require that all NPDES permits issued on and after Monday, December 21, 2015, contain permit conditions requiring electronic reporting consistent with EPA electronic reporting regulations. These reports must contain the minimum set of NPDES program data identified in Appendix A, 40 CFR part 127. After December 21, 2016, the permittees are required to submit discharge monitoring reports (DMRs), including majors and minor POTWs/POTWS-like, and Sewage Sludge/Biosolids Annual Program Report.

By December 2025 or an alternative deadline established under 40 CFR 127.24 (e) or (f), the following reports must be submitted electronically (unless EPA directs otherwise, or the permittee received a waiver from electronic reporting): Pretreatment Program Annual Reports, and Sewer Overflow/Bypass Event Reports and Anticipated Bypass Notices.

The permittee may seek a waiver from electronic reporting to continue submitting reports on paper. To obtain an electronic reporting waiver, a permittee must first submit an electronic reporting waiver request to EPA Region 6. The waiver request should contain the following details: Facility name; NPDES permit number; Facility address; Name, address and contact information for the owner, operator, or duly authorized facility representative; and Brief written statement regarding the basis for claiming a waiver.

The region will either approve or deny this electronic reporting waiver request within 120 days. Permanent waivers from electronic reporting are only available to facilities owned or operated by members of religious communities that choose not to use certain technologies. The duration of a temporary waiver may not exceed 5 years, which is the normal period for an NPDES permit term. If a permittee wishes to continue coverage under a waiver from electronic reporting, they must re-apply for a new temporary waiver before the expiration of their existing waiver, even if this NPDES permit is administratively continued. Approved electronic reporting waivers are not transferrable, whether permanent or temporary, are not transferrable and the facility will need to re-apply for a waiver upon any change in facility ownership.

Permittees with an approved and effective electronic reporting waiver must use the forms or formats provided by the region. The permittee must sign and certify all submissions in accordance with the requirements of Part III of this permit (“Signatory Requirements”).

VII. 303(d) LIST

No waters within the jurisdiction of the Alabama-Coushatta Tribe of Texas are listed as impaired. Village Creek and Big Sandy Creek, Waterbody Segment Code No. 0608, are on the “2020 Texas 303(d) List.” Village Creek does not meet applicable WQS for mercury in edible tissue. The stream has been designated a Category 5c, meaning that additional data will be collected for one or more parameters before a management strategy is selected. The facility is a minor source and does not have the potential to discharge mercury. No additional permit limits have been proposed based on these listings, and the permit has a reopener clause that would allow the permit to be changed if at a later date the segment had a TMDL completed.

VIII. ANTIBACKSLIDING

The proposed permit is consistent with the requirements to meet antibacksliding provisions of the Clean Water Act, Section 402(o) and 40 CFR §122.44(l)(i)(A), which state in part that interim or final effluent limitations must be as stringent as those in the previous permit, unless material and substantial alterations or additions to the permitted facility occurred after permit issuance which justify the application of a less stringent effluent limitation. The proposed permit maintains the mass loading requirements of the previous permit for BOD and TSS. The remaining pollutants concentration limits are as restrictive as the previous permit.

IX. ENDANGERED SPECIES CONSIDERATIONS

According to the most recent county listing available at US Fish and Wildlife Service (USFWS), Southwest Region 2 website,

<https://ipac.ecosphere.fws.gov/location/NYR5O4OJM5FVXKXIGEDLVU4J4Y/resources>, two species in Polk County are listed as endangered. The red-cockaded woodpecker (*Picoides borealis*) and the Texas trailing phlox (*Phlox nivalis* ssp. *texensis*) are listed as endangered. Piping Plover (*Charadrius melodus*) and Red Knot (*Calidris Canutus rufa*) are threatened species that were not mentioned in the previous statement of basis ESA discussion.

Red Knot is a medium-sized shorebird and the largest of the "peeps" in North America, and one of the most colorful. It makes one of the longest yearly migrations of any bird, traveling 15,000 km (9,300 mile) from its Arctic breeding grounds to Tierra del Fuego in southern South America.

Their diet varies according to season; arthropods and larvae are the preferred food items at the breeding grounds, while various hard-shelled molluscs are consumed at other feeding sites at other times.

The Red Knot nests on the ground, near water, and usually inland. The nest is a shallow scrape lined with leaves, lichens and moss. Males construct three to five nest scrapes in their territories prior to the arrival of the females. The female lays three or more usually four eggs, apparently laid over the course of six days. Both parents incubate the eggs, sharing the duties equally. The incubation period last around 22 days.

Red-Knot birds have become threatened as a result of commercial harvesting of horseshoe crabs in the Delaware Bay which began in the early 1990s. Delaware Bay is a critical stopover point during spring migration; the birds refuel by eating the eggs laid by these crabs (with little else to eat in the Delaware Bay).

Red-cockaded Woodpeckers are birds with small woodpeckers with short, straight bills. Despite their name, they are largely black and white, with a large, bright-white cheek patch and a bold black malar stripe forming the lower border of the cheek. Males have a tiny, nearly invisible red streak ("cockade") at the upper border of the cheek. The back has strong horizontal black-and-white bars.

Red-cockaded Woodpeckers live in family groups and cooperate to raise young. They often forage in small groups and can be quite vocal. They excavate nest and roost cavities in living pine trees, pecking holes in the bark to keep a flow of sticky pitch around the nest cavity. This endangered species is a habitat specialist that is strongly tied to old-growth pine forests that burn frequently, leaving the understory mostly clear of younger pines and hardwoods. They were once common in vast tracts of longleaf pine; now they also occur in loblolly, slash, and some other pine stands in the southeastern pine flatwoods.

Many of the threats to listed threatened or endangered species are related to activities in Polk County are commercial harvesting of horseshoe crabs, habitat loss of the pine-forests, and land clearing for pasture establishment.

The Environmental Protection Agency has evaluated the potential effects of issuance of this permit upon listed endangered or threatened species. After review, EPA has determined that the issuance of this permit will have "no effect" on listed threatened and endangered species nor will

adversely modify designated critical habitat. EPA makes this determination based on the following:

1. No pollutants are identified by the permittee-submitted application at levels which might affect species habitat or prey species. Issuance of this permit is found to have no impact on the habitats of these species.

2. Based on information described above, EPA Region 6 has determined that discharges proposed to be authorized by the proposed permit will have no effect on the listed species in Polk County.

3. EPA made a no-effect determination in the previous permit and has received no information of any change in the environmental baseline,

The standard reopener clause in the permit will allow EPA to reopen the permit and impose additional limitations if it is determined that changes in species or knowledge of the discharge would require different permit conditions.

X. HISTORICAL and ARCHEOLOGICAL PRESERVATION CONSIDERATIONS

The reissuance of the permit should have no impact on historical and/or archeological sites since no construction activities are planned in the reissuance.

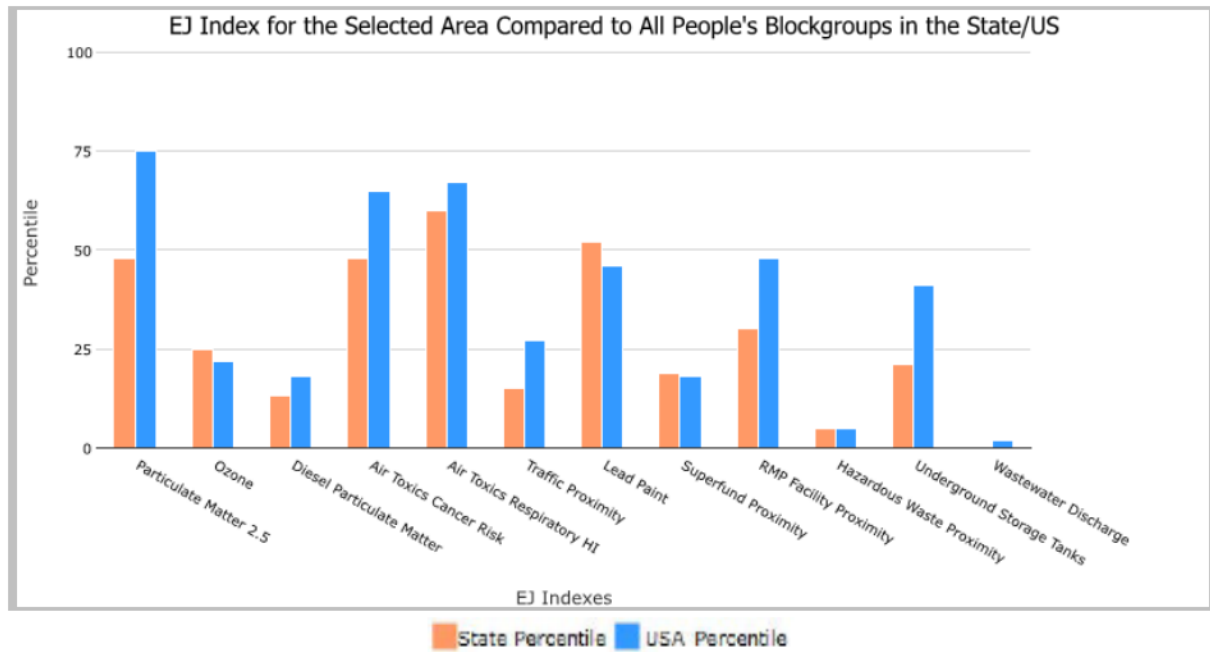
XI ENVIRONMENTAL JUSTICE

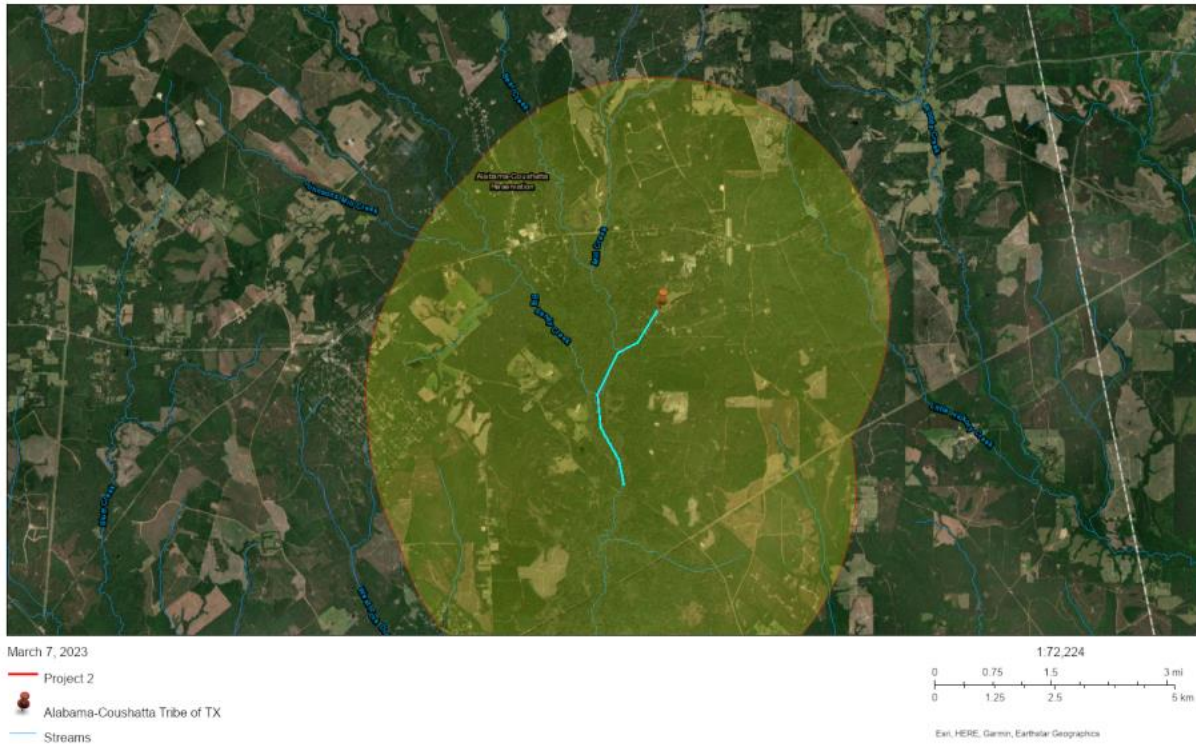
Executive Order 13985, *Advancing Racial Equity and Supporting for Underserved Communities through the Federal Government* signed on January 20, 2021, directs each federal agency to “make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities.” The EPA strives to enhance the ability of overburdened communities to participate fully and meaningfully in the permitting process for EPA-issued permits, including NPDES permits. “Overburdened” communities can include minority, low-income, tribal, and indigenous populations or communities that potentially experience disproportionate environmental harms and risks. As part of an agency-wide effort, the EPA Region 6 will consider prioritizing enhanced public involvement opportunities for EPA-issued permits that may involve activities with significant public health or environmental impacts on already overburdened communities. For more information, please visit <http://www.epa.gov/ejscreen>.

As part of the Permit development process, the EPA conducted a screening analysis to determine whether this Permit action could affect overburdened communities. The EPA used EJSscreen 2.1, a nationally consistent geospatial tool that contains demographic and environmental data for the United States at the Census block group level. This tool is used to identify Permits for which enhanced outreach may be warranted.

The study area was chosen at the proposed 001 discharge, 5-miles downstream path following the flow from the Tombigbee Lake thence to Bear Creek thence to Sandy Creek. A 3-mile buffer around the path was selected to study the area. The population of the study area is 1,361 persons aged 5 and above. No EJ Indexes score for the state percentile of the facility was above the 80th percentile (80%). Furthermore, the ACS summary report indicates that 66% of the population in Alabama-Coushatta study areas are white and 25% are American Indian. Also, 90% of the population speak only English at home. These results indicate that all the percentiles are well below the 80 percentile and most of the population speak English at home. From the EJSCREEN guidelines and trainings, this area will not be a concern for Environmental Justice issues at this time.

****Photos below****





XII. PERMIT REOPENER

The permit may be reopened and modified during the life of the permit if State Water Quality Standards are promulgated or revised. In addition, if the State amends a TMDL, this permit may be reopened to establish effluent limitations for the parameter(s) to be consistent with that TMDL. Modification of the permit is subject to the provisions of 40 CFR §124.5.

XIII. VARIANCE REQUESTS

No variance requests have been received.

XIV. COMPLIANCE HISTORY

A review of the DMR during the last permit cycle revealed that the facility was in violations of permit limits for E. coli during the reporting periods from March 31, 2018, through October 31, 2019. TSS effluent limit violations was from July 31, 2018, through August 31, 2019. There was also BOD5 effluent violations from February 28, 2019, through July 30, 2019.

XV. CERTIFICATION

The facility is located on tribal land. The tribe does not have EPA approved WQS. The EPA will do the permit certification consistent with 40 CFR §124.53. A draft permit and draft public notice will be sent to the District Engineer, Corps of Engineers; to the Regional Director of the U.S. Fish and Wildlife Service and to the National Marine Fisheries Service prior to the publication of that notice.

XVI. FINAL DETERMINATION

The public notice describes the procedures for the formulation of final determinations.

XVII. ADMINISTRATIVE RECORD

The following information was used to develop the proposed permit:

A. APPLICATION(s)

EPA NPDES application Forms 2A and 2S were received on February 17, 2023. Additional Permit application information was received on February 27, 2023, and the application was deemed administratively complete on February 28, 2023.

B. 40 CFR CITATIONS

Citations to 40 CFR as of August 2, 2017.
Sections 122, 124, 125, 133, 136

C. STATE OF TEXAS REFERENCES

Texas Surface Water Quality Standards, 30 TAC Sections 307.1 - 307.10, amended to be effective March 18, 2021

State of Texas 303(d) List for Assessed Stream and River Reaches, EPA-approved on July 7, 2022.