

Application Type Renewal
Wastewater Type Sewage
Facility Type SFTF

**NPDES PERMIT FACT SHEET
INDIVIDUAL SFTF/SRSTP**

Application No. PA0035521
APS ID 1152920
Authorization ID 1553287

Applicant, Facility and Project Information

| | | | |
|---------------------------|---|------------------|---|
| Applicant Name | <u>PA DOT Maintenance & Operations Bureau</u> | Facility Name | <u>PA DOT Crawford County Maintenance Facility</u> |
| Applicant Address | <u>400 North Street 6th Floor Harrisburg, PA 17120</u> | Facility Address | <u>Rome Twp Satellite Maint Fac Centerville, PA 16404</u> |
| Applicant Contact | <u>Nicholaus Sahd</u> | Facility Contact | <u></u> |
| Applicant Phone | <u>(717) 886-5395</u> | Facility Phone | <u></u> |
| Client ID | <u>189304</u> | Site ID | <u>264140</u> |
| SIC Code | <u>9621</u> | Municipality | <u>Centerville Borough</u> |
| SIC Description | <u>Public Admin. - Regulation, Admin. Of Transportation</u> | County | <u>Crawford</u> |
| Date Application Received | <u>December 23, 2025</u> | WQM Required | <u>N/A</u> |
| Date Application Accepted | <u>December 30, 2025</u> | WQM App. No. | <u></u> |
| Project Description | <u>Renewal for a Single Residence Sewage Treatment Plant</u> | | |

Summary of Review

The permittee is applying for reissuance of Individual Permit **PA0035521** that will expire on June 30, 2026. This is a discharge into stream channel - Trib 54495 To Oil Creek. The average daily flow is projected to be 1000 GPD.

Act 14 notifications were submitted and received.

The existing facility consists of: A 1,600-gallon septic tank, followed by a 1,600-gallon septic/dosing tank w/bypass, which is then pumped to a 1,500 SF sand filter, followed by a 600-gallon chlorine contact tank with chlorine tablets.

AMR was received and appears to operate as designed.

There are 12 open violations in WMS for the subject Client ID (**189304**) as of December 30, 2025. 8 of the 12 violations are from WPC NPDES program while the remaining 4 are from the storage tanks program.

Public Participation

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-day period at DEP's discretion), which will be considered in making a final decision on the application. Any person may request or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania Bulletin* at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.

| Approve | Deny | Signatures | Date |
|---------|------|---|-------------------|
| x | | Adebayo Olude Adebayo Olude / Civil Engineer Trainee | December 30, 2025 |
| X | | Adam Olesnanik Adam Olesnanik, P.E. / Environmental Engineer Manager | February 13, 2026 |

Discharge and Stream Data – 2 - Receiving Waters and PWS

| Discharge, Receiving Waters and Water Supply Information | | | |
|--|---|------------------------------|-------------------------|
| Outfall No. | <u>001</u> | Design Flow (MGD) | <u>.001</u> |
| Latitude | <u>41° 43' 35.16"</u> | Longitude | <u>-79° 45' 53.08"</u> |
| Quad Name | <u>Centerville</u> | Quad Code | <u>41079F7</u> |
| Wastewater Description: <u>Sewage Effluent</u> | | | |
| Receiving Waters | <u>Unnamed Tributary to Oil Creek (CWF)</u> | Stream Code | <u>54495</u> |
| NHD Com ID | <u>100470675</u> | RMI | <u></u> |
| Drainage Area | <u>0.22</u> | Yield (cfs/mi ²) | <u>0.0392</u> |
| Q ₇₋₁₀ Flow (cfs) | <u>0.00863</u> | Q ₇₋₁₀ Basis | <u>USGS StreamStats</u> |
| Elevation (ft) | <u>1295</u> | Slope (ft/ft) | <u>-</u> |
| Watershed No. | <u>16-E</u> | Chapter 93 Class. | <u>CWF</u> |
| Existing Use | <u></u> | Existing Use Qualifier | <u></u> |
| Exceptions to Use | <u>-</u> | Exceptions to Criteria | <u>-</u> |
| Assessment Status | <u>Attaining Use(s)</u> | | |
| Cause(s) of Impairment | <u></u> | | |
| Source(s) of Impairment | <u></u> | | |
| TMDL Status | <u></u> | Name | <u></u> |
| Background/Ambient Data | | Data Source | |
| pH (SU) | <u>7</u> | Default - CWF | <u></u> |
| Temperature (°F) | <u>20</u> | Default | <u></u> |
| Hardness (mg/L) | <u>100</u> | Default | <u></u> |
| Other: | <u>-</u> | | <u>-</u> |
| Nearest Downstream Public Water Supply Intake | <u>Aqua Pennsylvania, Inc. - Emlenton</u> | | |
| PWS Waters | <u>Allegheny River</u> | Flow at Intake (cfs) | <u>1,376</u> |
| PWS RMI | <u>90.0</u> | Distance from Outfall (mi) | <u>>15miles</u> |

Changes Since Last Permit Issuance: Elevation was revised using Google Earth. Drainage Area and Q₇₋₁₀ Flow were revised using USGS StreamStats.

Other Comments: This SRSTP was designed where applicable in accordance with the SFTF Manual.

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (362-0400-001), SOPs and/or BPJ.

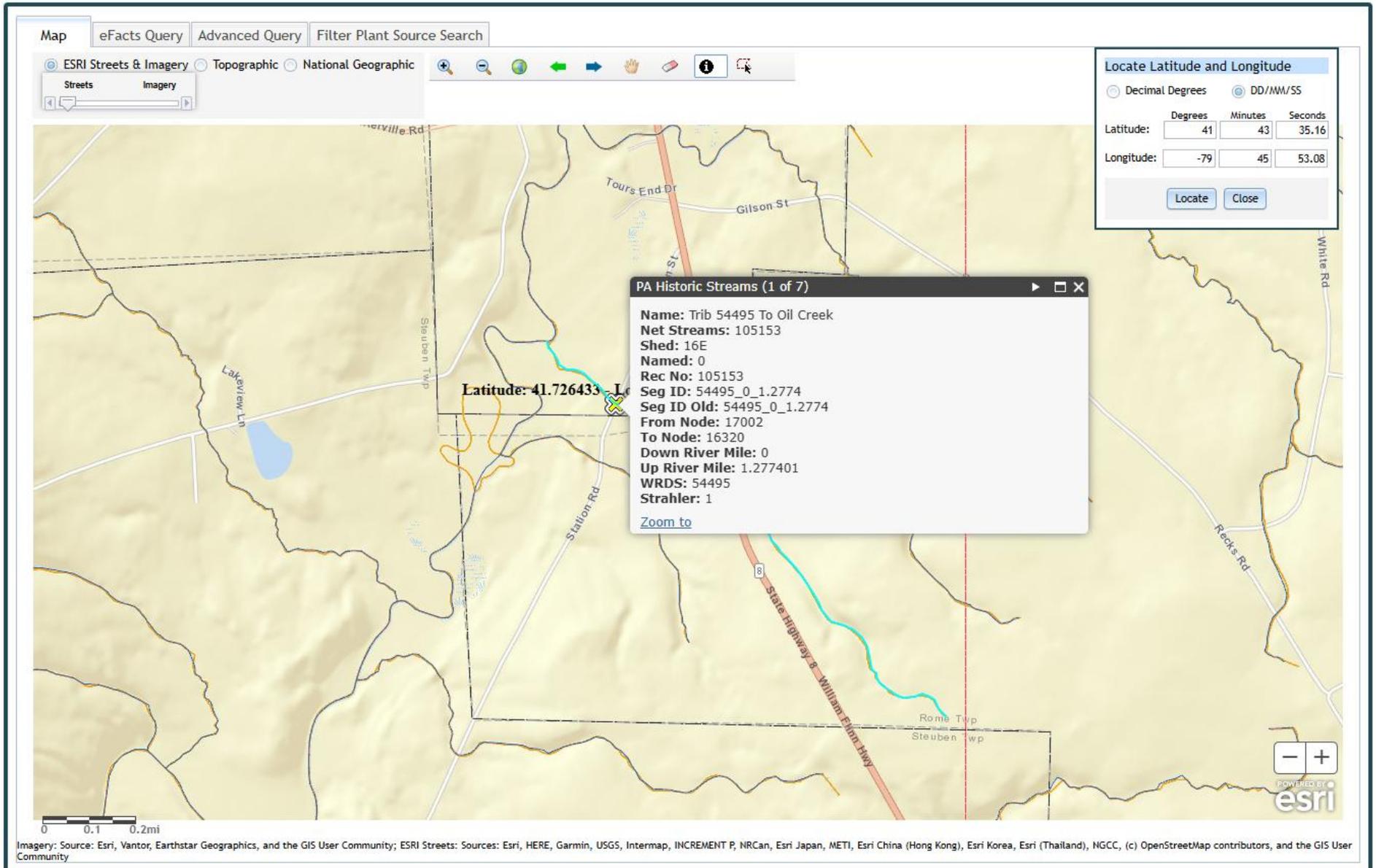
Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date.

| Parameter | Effluent Limitations | | | | | | Monitoring Requirements | |
|-----------------------------|-------------------------------------|----------------|-----------------------|-----------------|---------|------------------|--|----------------------|
| | Mass Units (lbs/day) ⁽¹⁾ | | Concentrations (mg/L) | | | | Minimum ⁽²⁾ Measurement Frequency | Required Sample Type |
| | Average Monthly | Average Weekly | Minimum | Average Monthly | Maximum | Instant. Maximum | | |
| Flow (MGD) | Report | XXX | XXX | XXX | XXX | XXX | 1/month | Estimate |
| pH (S.U.) | XXX | XXX | 6.0 | XXX | 9.0 | XXX | 1/month | Grab |
| TRC | XXX | XXX | XXX | 0.5 | XXX | 1.2 | 1/month | Grab |
| BOD5 | XXX | XXX | XXX | 10.0 | XXX | 20.0 | 1/month | Grab |
| TSS | XXX | XXX | XXX | 10.0 | XXX | 20.0 | 1/month | Grab |
| Fecal Coliform (CFU/100 ml) | XXX | XXX | XXX | 200 Geo Mean | XXX | XXX | 1/month | Grab |

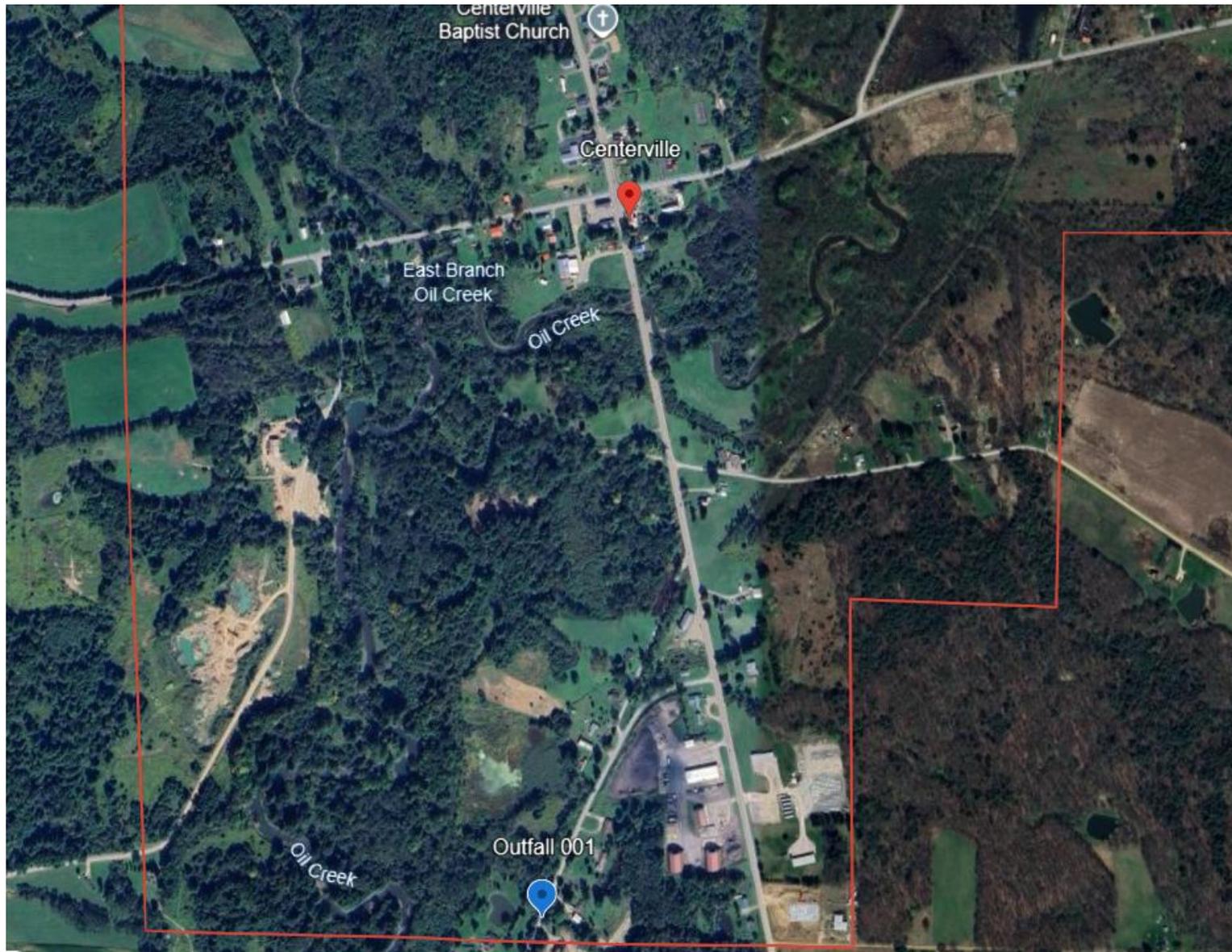
Compliance Sampling Location: Outfall 001, after disinfection

Other Comments: Flow is monitor only based on Chapter 92a.61. The limits for BOD5, Total Suspended Solids, and Fecal Coliforms are technology- based on Chapter 92a.47. The calculated TRC limits of 0.5mg/L as seen in the TRC spreadsheet is the same in the current permit and the instantaneous maximum limit of 1.6mg/L is less stringent than the current permit. Therefore, the limits will be retained.

Attachment 1
eMAP – Receiving Streams Information



Attachment 2
Google Earth – Site Imagery



**Attachment 3
StreamStats**

StreamStats Report

Region ID:

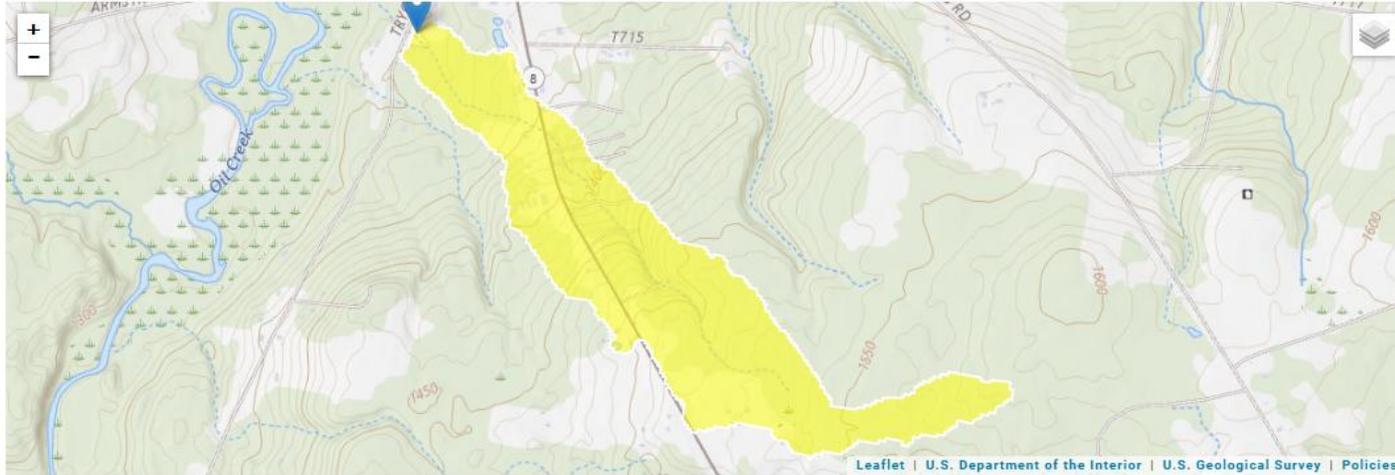
PA

Clicked Point (Latitude, Longitude):

41.72631, -79.76450

Time:

2025-12-30 10:45:23 -0500



StreamStats Update

Starting with version 4.30.0, the StreamStats application uses services that were redeveloped with open-source software components. Users may observe minor variations in computed results when compared to those from previous versions. These differences are expected and do not reflect errors in the underlying data or analytical methods. Users are advised to consider these potential variations when interpreting or comparing results generated across different versions of StreamStats. Please email streamstats@usgs.gov with any questions or concerns. A full list of changes can be found at <https://www.usgs.gov/streamstats/news/streamstats-data-updates-open-source-code-release>.

+ Collapse All

➤ Basin Characteristics

| Parameter Code | Parameter Description | Value | Unit |
|----------------|---|--------|--------------|
| DRNAREA | Area that drains to a point on a stream | 0.22 | square miles |
| ELEV | Mean Basin Elevation | 1461.9 | feet |
| PRECIP | Mean Annual Precipitation | 45 | inches |

TRC_CALC

| TRC EVALUATION | | | | | |
|---|---|-------------------------------|-----|--------------------------------------|---------------------|
| Input appropriate values in A3:A9 and D3:D9 | | | | | |
| 0.00863 | = Q stream (cfs) | | 0.5 | = CV Daily | |
| 0.001 | = Q discharge (MGD) | | 0.5 | = CV Hourly | |
| 30 | = no. samples | | 1 | = AFC_Partial Mix Factor | |
| 0.3 | = Chlorine Demand of Stream | | 1 | = CFC_Partial Mix Factor | |
| 0 | = Chlorine Demand of Discharge | | 15 | = AFC_Criteria Compliance Time (min) | |
| 0.5 | = BAT/BPJ Value | | 720 | = CFC_Criteria Compliance Time (min) | |
| 0 | = % Factor of Safety (FOS) | | | =Decay Coefficient (K) | |
| Source | Reference | AFC Calculations | | Reference | CFC Calculations |
| TRC | 1.3.2.iii | WLA_afc = 1.799 | | 1.3.2.iii | WLA_cfc = 1.746 |
| PENTOXSD TRG | 5.1a | LTAMULT_afc = 0.373 | | 5.1c | LTAMULT_cfc = 0.581 |
| PENTOXSD TRG | 5.1b | LTA_afc = 0.670 | | 5.1d | LTA_cfc = 1.015 |
| Source | Effluent Limit Calculations | | | | |
| PENTOXSD TRG | 5.1f | AML_MULT = 1.231 | | | |
| PENTOXSD TRG | 5.1g | AVG MON LIMIT (mg/l) = 0.500 | | BAT/BPJ | |
| | | INST MAX LIMIT (mg/l) = 1.635 | | | |
| WLA_afc | $(.019/e^{-k \cdot AFC_tc}) + [(AFC_Yc \cdot Qs \cdot .019 / Qd \cdot e^{-k \cdot AFC_tc}) \dots + Xd + (AFC_Yc \cdot Qs \cdot Xs / Qd)] \cdot (1 - FOS / 100)$ | | | | |
| LTAMULT_afc | $EXP((0.5 \cdot LN(cvh^2 + 1)) - 2.326 \cdot LN(cvh^2 + 1)^{0.5})$ | | | | |
| LTA_afc | wla_afc * LTAMULT_afc | | | | |
| WLA_cfc | $(.011/e^{-k \cdot CFC_tc}) + [(CFC_Yc \cdot Qs \cdot .011 / Qd \cdot e^{-k \cdot CFC_tc}) \dots + Xd + (CFC_Yc \cdot Qs \cdot Xs / Qd)] \cdot (1 - FOS / 100)$ | | | | |
| LTAMULT_cfc | $EXP((0.5 \cdot LN(cvd^2 / no_samples + 1)) - 2.326 \cdot LN(cvd^2 / no_samples + 1)^{0.5})$ | | | | |
| LTA_cfc | wla_cfc * LTAMULT_cfc | | | | |
| AML_MULT | $EXP(2.326 \cdot LN((cvd^2 / no_samples + 1)^{0.5}) - 0.5 \cdot LN(cvd^2 / no_samples + 1))$ | | | | |
| AVG MON LIMIT | MIN(BAT_BPJ, MIN(LTA_afc, LTA_cfc) * AML_MULT) | | | | |
| INST MAX LIMIT | 1.5 * ((av_mon_limit / AML_MULT) / LTAMULT_afc) | | | | |