pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

**Southcentral Regional Office**
**CLEAN WATER PROGRAM**

| | | | |
|---|---|---|---|
| Application Type | **Renewal** | Application No. | **PA0009920** |
| Facility Type | **Industrial** | APS ID | **780559** |
| Major / Minor | **Major** | Authorization ID | **926487** |

# NPDES PERMIT FACT SHEET INDIVIDUAL INDUSTRIAL WASTE (IW) AND IW STORMWATER

## Applicant and Facility Information

| | | | |
|---|---|---|---|
| Applicant Name | **Constellation Energy Generation LLC** | Facility Name | **Constallation Three Mile Island Nuclear Station** |
| Applicant Address | PO Box 480 Route 441 South | Facility Address | PO Box 480 Route 441 South |
| | Middletown, PA 17057-0480 | | Middletown, PA 17057-0480 |
| Applicant Contact | T Haaf | Facility Contact | Scott Cogley |
| Applicant Phone | (717) 948-8881 | Facility Phone | |
| Client ID | 147686 | Site ID | 450833 |
| SIC Code | 4911 | Municipality | Londonderry Township |
| SIC Description | Trans. & Utilities - Electric Services | County | Dauphin |
| Date Application Received | May 3, 2012 | EPA Waived? | No |
| Date Application Accepted | May 8, 2012 | If No, Reason | Major Facility |

Purpose of Application .

## Summary of Review

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 |
|---|---|---|---|
| | | Nicholas Hong, P.E. / Environmental Engineering Specialist | April 3, 2023 |
| | | Daniel W. Martin, P.E. / Environmental Engineer Manager | |

**Discharge, Receiving Waters and Water Supply Information**

| | | | |
|---|---|---|---|
| Outfall No. | 004 | Design Flow (MGD) | 43 |
| Latitude | 40Âº 9' 9.28" | Longitude | -76Âº 43' 9.50" |
| Quad Name | | Quad Code | |
| Wastewater Description: | IW Process Effluent without ELG | | |
| Receiving Waters | Unnamed Tributary of Susquehanna River (WWF) | Stream Code | |
| NHD Com ID | 56406043 | RMI | |
| Drainage Area | | Yield (cfs/mi$^2$) | |
| $Q_{7-10}$ Flow (cfs) | | $Q_{7-10}$ Basis | |
| Elevation (ft) | | Slope (ft/ft) | |
| Watershed No. | 7-G | Chapter 93 Class. | WWF |
| Existing Use | | Existing Use Qualifier | |
| Exceptions to Use | | Exceptions to Criteria | |
| Assessment Status | Attaining Use(s) | | |
| Cause(s) of Impairment | | | |
| Source(s) of Impairment | | | |
| TMDL Status | Final | Name | Conewago Creek Watershed |

| Background/Ambient Data | | Data Source |
|---|---|---|
| pH (SU) | | |
| Temperature (°F) | | |
| Hardness (mg/L) | | |
| Other: | | |

| | | | |
|---|---|---|---|
| Nearest Downstream Public Water Supply Intake | | | |
| PWS Waters | | Flow at Intake (cfs) | |
| PWS RMI | | Distance from Outfall (mi) | |

Changes Since Last Permit Issuance:

Other Comments:

**Discharge, Receiving Waters and Water Supply Information**

| | | | |
|---|---|---|---|
| Outfall No. | 001 | Design Flow (MGD) | 43 |
| Latitude | 40Âº 9' 5.44" | Longitude | -76Âº 43' 9.82" |
| Quad Name | | Quad Code | |
| Wastewater Description: | IW Process Effluent without ELG | | |
| Receiving Waters | Unnamed Tributary of Susquehanna River (WWF) | Stream Code | |
| NHD Com ID | 56406043 | RMI | |
| Drainage Area | | Yield (cfs/mi$^2$) | |
| $Q_{7-10}$ Flow (cfs) | | $Q_{7-10}$ Basis | |
| Elevation (ft) | | Slope (ft/ft) | |
| Watershed No. | 7-G | Chapter 93 Class. | WWF |
| Existing Use | | Existing Use Qualifier | |
| Exceptions to Use | | Exceptions to Criteria | |
| Assessment Status | Attaining Use(s) | | |
| Cause(s) of Impairment | | | |
| Source(s) of Impairment | | | |
| TMDL Status | Final | Name | Conewago Creek Watershed |

| Background/Ambient Data | | Data Source |
|---|---|---|
| pH (SU) | | |
| Temperature (°F) | | |
| Hardness (mg/L) | | |
| Other: | | |

| | | | |
|---|---|---|---|
| Nearest Downstream Public Water Supply Intake | | | |
| PWS Waters | | Flow at Intake (cfs) | |
| PWS RMI | | Distance from Outfall (mi) | |

Changes Since Last Permit Issuance:

Other Comments:

**Discharge, Receiving Waters and Water Supply Information**

| | | | |
|---|---|---|---|
| Outfall No. | 003 | Design Flow (MGD) | 43 |
| Latitude | 40Âº 9' 7.43" | Longitude | -76Âº 43' 9.65" |
| Quad Name | | Quad Code | |
| Wastewater Description: | IW Process Effluent without ELG | | |
| Receiving Waters | Unnamed Tributary of Susquehanna River (WWF) | Stream Code | |
| NHD Com ID | 56406043 | RMI | |
| Drainage Area | | Yield (cfs/mi$^2$) | |
| $Q_{7-10}$ Flow (cfs) | | $Q_{7-10}$ Basis | |
| Elevation (ft) | | Slope (ft/ft) | |
| Watershed No. | 7-G | Chapter 93 Class. | WWF |
| Existing Use | | Existing Use Qualifier | |
| Exceptions to Use | | Exceptions to Criteria | |
| Assessment Status | Attaining Use(s) | | |
| Cause(s) of Impairment | | | |
| Source(s) of Impairment | | | |
| TMDL Status | Final | Name | Conewago Creek Watershed |

| Background/Ambient Data | | Data Source |
|---|---|---|
| pH (SU) | | |
| Temperature (°F) | | |
| Hardness (mg/L) | | |
| Other: | | |

| | | | |
|---|---|---|---|
| Nearest Downstream Public Water Supply Intake | | | |
| PWS Waters | | Flow at Intake (cfs) | |
| PWS RMI | | Distance from Outfall (mi) | |

Changes Since Last Permit Issuance:

Other Comments:

**Discharge, Receiving Waters and Water Supply Information**

| | | | |
|---|---|---|---|
| Outfall No. | 005 | Design Flow (MGD) | .3 |
| Latitude | 40Âº 9' 5.31" | Longitude | -76Âº 43' 9.83" |
| Quad Name | | Quad Code | |
| Wastewater Description: | IW Process Effluent without ELG | | |
| Receiving Waters | Unnamed Tributary of Susquehanna River (WWF) | Stream Code | |
| NHD Com ID | 56406043 | RMI | |
| Drainage Area | | Yield (cfs/mi$^2$) | |
| $Q_{7-10}$ Flow (cfs) | | $Q_{7-10}$ Basis | |
| Elevation (ft) | | Slope (ft/ft) | |
| Watershed No. | 7-G | Chapter 93 Class. | WWF |
| Existing Use | | Existing Use Qualifier | |
| Exceptions to Use | | Exceptions to Criteria | |
| Assessment Status | Attaining Use(s) | | |
| Cause(s) of Impairment | | | |
| Source(s) of Impairment | | | |
| TMDL Status | Final | Name | Conewago Creek Watershed |

| Background/Ambient Data | | Data Source |
|---|---|---|
| pH (SU) | | |
| Temperature (°F) | | |
| Hardness (mg/L) | | |
| Other: | | |

| | | | |
|---|---|---|---|
| Nearest Downstream Public Water Supply Intake | | | |
| PWS Waters | | Flow at Intake (cfs) | |
| PWS RMI | | Distance from Outfall (mi) | |

Changes Since Last Permit Issuance:

Other Comments:

**Discharge, Receiving Waters and Water Supply Information**

| | | | |
|---|---|---|---|
| Outfall No. | 007 | Design Flow (MGD) | 0 |
| Latitude | 40Âº 9' 5.31" | Longitude | -76Âº 43' 9.83" |
| Quad Name | | Quad Code | |
| Wastewater Description: | Stormwater | | |
| Receiving Waters | Unnamed Tributary of Susquehanna River (WWF) | Stream Code | |
| NHD Com ID | 56406043 | RMI | |
| Drainage Area | | Yield (cfs/mi$^2$) | |
| $Q_{7-10}$ Flow (cfs) | | $Q_{7-10}$ Basis | |
| Elevation (ft) | | Slope (ft/ft) | |
| Watershed No. | 7-G | Chapter 93 Class. | WWF |
| Existing Use | | Existing Use Qualifier | |
| Exceptions to Use | | Exceptions to Criteria | |
| Assessment Status | Attaining Use(s) | | |
| Cause(s) of Impairment | | | |
| Source(s) of Impairment | | | |
| TMDL Status | Final | Name | Conewago Creek Watershed |

| Background/Ambient Data | | Data Source |
|---|---|---|
| pH (SU) | | |
| Temperature (°F) | | |
| Hardness (mg/L) | | |
| Other: | | |

| | | | |
|---|---|---|---|
| Nearest Downstream Public Water Supply Intake | | | |
| PWS Waters | | Flow at Intake (cfs) | |
| PWS RMI | | Distance from Outfall (mi) | |

Changes Since Last Permit Issuance:

Other Comments:

**Discharge, Receiving Waters and Water Supply Information**

| | | | |
|---|---|---|---|
| Outfall No. | 006 | Design Flow (MGD) | 6 |
| Latitude | 40Âº 9' 13.30" | Longitude | -76Âº 43' 9.16" |
| Quad Name | | Quad Code | |
| Wastewater Description: | IW Process Effluent without ELG | | |
| Receiving Waters | Unnamed Tributary of Susquehanna River (WWF) | Stream Code | |
| NHD Com ID | 56406043 | RMI | |
| Drainage Area | | Yield (cfs/mi$^2$) | |
| $Q_{7-10}$ Flow (cfs) | | $Q_{7-10}$ Basis | |
| Elevation (ft) | | Slope (ft/ft) | |
| Watershed No. | 7-G | Chapter 93 Class. | WWF |
| Existing Use | | Existing Use Qualifier | |
| Exceptions to Use | | Exceptions to Criteria | |
| Assessment Status | Attaining Use(s) | | |
| Cause(s) of Impairment | | | |
| Source(s) of Impairment | | | |
| TMDL Status | Final | Name | Conewago Creek Watershed |

| Background/Ambient Data | | Data Source |
|---|---|---|
| pH (SU) | | |
| Temperature (°F) | | |
| Hardness (mg/L) | | |
| Other: | | |

| | | | |
|---|---|---|---|
| Nearest Downstream Public Water Supply Intake | | | |
| PWS Waters | | Flow at Intake (cfs) | |
| PWS RMI | | Distance from Outfall (mi) | |

Changes Since Last Permit Issuance:

Other Comments:

**Discharge, Receiving Waters and Water Supply Information**

| | | | |
|---|---|---|---|
| Outfall No. | 009 | Design Flow (MGD) | 0 |
| Latitude | 40Âº 8' 50.51" | Longitude | -76Âº 43' 7.27" |
| Quad Name | | Quad Code | |
| Wastewater Description: | IW Process Effluent without ELG | | |
| Receiving Waters | Unnamed Tributary of Susquehanna River (WWF) | Stream Code | |
| NHD Com ID | 56406549 | RMI | |
| Drainage Area | | Yield (cfs/mi$^2$) | |
| $Q_{7-10}$ Flow (cfs) | | $Q_{7-10}$ Basis | |
| Elevation (ft) | | Slope (ft/ft) | |
| Watershed No. | 7-G | Chapter 93 Class. | WWF |
| Existing Use | | Existing Use Qualifier | |
| Exceptions to Use | | Exceptions to Criteria | |
| Assessment Status | Not Assessed | | |
| Cause(s) of Impairment | | | |
| Source(s) of Impairment | | | |
| TMDL Status | | Name | |

| Background/Ambient Data | | Data Source |
|---|---|---|
| pH (SU) | | |
| Temperature (°F) | | |
| Hardness (mg/L) | | |
| Other: | | |

| | | | |
|---|---|---|---|
| Nearest Downstream Public Water Supply Intake | | | |
| PWS Waters | | Flow at Intake (cfs) | |
| PWS RMI | | Distance from Outfall (mi) | |

Changes Since Last Permit Issuance:

Other Comments:

**Discharge, Receiving Waters and Water Supply Information**

| | | | |
|---|---|---|---|
| Outfall No. | 010 | Design Flow (MGD) | 0 |
| Latitude | 40Âº 8' 42.12" | Longitude | -76Âº 43' 17.34" |
| Quad Name | | Quad Code | |
| Wastewater Description: | Stormwater | | |
| Receiving Waters | Unnamed Tributary of Susquehanna River (WWF) | Stream Code | |
| NHD Com ID | 56406549 | RMI | |
| Drainage Area | | Yield (cfs/mi$^2$) | |
| $Q_{7-10}$ Flow (cfs) | | $Q_{7-10}$ Basis | |
| Elevation (ft) | | Slope (ft/ft) | |
| Watershed No. | 7-G | Chapter 93 Class. | WWF |
| Existing Use | | Existing Use Qualifier | |
| Exceptions to Use | | Exceptions to Criteria | |
| Assessment Status | Not Assessed | | |
| Cause(s) of Impairment | | | |
| Source(s) of Impairment | | | |
| TMDL Status | | Name | |

| Background/Ambient Data | | Data Source |
|---|---|---|
| pH (SU) | | |
| Temperature (°F) | | |
| Hardness (mg/L) | | |
| Other: | | |

| | | | |
|---|---|---|---|
| Nearest Downstream Public Water Supply Intake | | | |
| PWS Waters | | Flow at Intake (cfs) | |
| PWS RMI | | Distance from Outfall (mi) | |

Changes Since Last Permit Issuance:

Other Comments:

**Discharge, Receiving Waters and Water Supply Information**

| | | | |
|---|---|---|---|
| Outfall No. | 011 | Design Flow (MGD) | 0 |
| Latitude | 40Âº 9' 12.31" | Longitude | -76Âº 43' 9.24" |
| Quad Name | | Quad Code | |
| Wastewater Description: | Stormwater | | |
| Receiving Waters | Unnamed Tributary of Susquehanna River (WWF) | Stream Code | |
| NHD Com ID | 56406043 | RMI | |
| Drainage Area | | Yield (cfs/mi$^2$) | |
| $Q_{7-10}$ Flow (cfs) | | $Q_{7-10}$ Basis | |
| Elevation (ft) | | Slope (ft/ft) | |
| Watershed No. | 7-G | Chapter 93 Class. | WWF |
| Existing Use | | Existing Use Qualifier | |
| Exceptions to Use | | Exceptions to Criteria | |
| Assessment Status | Attaining Use(s) | | |
| Cause(s) of Impairment | | | |
| Source(s) of Impairment | | | |
| TMDL Status | Final | Name | Conewago Creek Watershed |

| Background/Ambient Data | | Data Source |
|---|---|---|
| pH (SU) | | |
| Temperature (°F) | | |
| Hardness (mg/L) | | |
| Other: | | |

| | | | |
|---|---|---|---|
| Nearest Downstream Public Water Supply Intake | | | |
| PWS Waters | | Flow at Intake (cfs) | |
| PWS RMI | | Distance from Outfall (mi) | |

Changes Since Last Permit Issuance:

Other Comments:

**Discharge, Receiving Waters and Water Supply Information**

| | | | |
|---|---|---|---|
| Outfall No. | 101 | Design Flow (MGD) | |
| Latitude | 40Âº 9' 7.43" | Longitude | -76Âº 43' 9.65" |
| Quad Name | | Quad Code | |
| Wastewater Description: | | | |
| Receiving Waters | Unnamed Tributary of Susquehanna River (WWF) | Stream Code | |
| NHD Com ID | 56406043 | RMI | |
| Drainage Area | | Yield (cfs/mi$^2$) | |
| $Q_{7-10}$ Flow (cfs) | | $Q_{7-10}$ Basis | |
| Elevation (ft) | | Slope (ft/ft) | |
| Watershed No. | 7-G | Chapter 93 Class. | WWF |
| Existing Use | | Existing Use Qualifier | |
| Exceptions to Use | | Exceptions to Criteria | |
| Assessment Status | Attaining Use(s) | | |
| Cause(s) of Impairment | | | |
| Source(s) of Impairment | | | |
| TMDL Status | Final | Name | Conewago Creek Watershed |

| Background/Ambient Data | | Data Source |
|---|---|---|
| pH (SU) | | |
| Temperature (°F) | | |
| Hardness (mg/L) | | |
| Other: | | |

| | | | |
|---|---|---|---|
| Nearest Downstream Public Water Supply Intake | | | |
| PWS Waters | | Flow at Intake (cfs) | |
| PWS RMI | | Distance from Outfall (mi) | |

Changes Since Last Permit Issuance:

Other Comments:

**Discharge, Receiving Waters and Water Supply Information**

| | | | |
|---|---|---|---|
| Outfall No. | 401 | Design Flow (MGD) | |
| Latitude | 40Âº 9' 2.46" | Longitude | -76Âº 43' 10.07" |
| Quad Name | | Quad Code | |
| Wastewater Description: | | | |
| Receiving Waters | Unnamed Tributary of Susquehanna River (WWF) | Stream Code | |
| NHD Com ID | 56406043 | RMI | |
| Drainage Area | | Yield (cfs/mi$^2$) | |
| $Q_{7-10}$ Flow (cfs) | | $Q_{7-10}$ Basis | |
| Elevation (ft) | | Slope (ft/ft) | |
| Watershed No. | 7-G | Chapter 93 Class. | WWF |
| Existing Use | | Existing Use Qualifier | |
| Exceptions to Use | | Exceptions to Criteria | |
| Assessment Status | Attaining Use(s) | | |
| Cause(s) of Impairment | | | |
| Source(s) of Impairment | | | |
| TMDL Status | Final | Name | Conewago Creek Watershed |

| Background/Ambient Data | | Data Source |
|---|---|---|
| pH (SU) | | |
| Temperature (°F) | | |
| Hardness (mg/L) | | |
| Other: | | |

| | | | |
|---|---|---|---|
| Nearest Downstream Public Water Supply Intake | | | |
| PWS Waters | | Flow at Intake (cfs) | |
| PWS RMI | | Distance from Outfall (mi) | |

Changes Since Last Permit Issuance:

Other Comments:

**Discharge, Receiving Waters and Water Supply Information**

| | | | |
|---|---|---|---|
| Outfall No. | 501 | Design Flow (MGD) | |
| Latitude | 40Âº 9' 2.46" | Longitude | -76Âº 43' 10.07" |
| Quad Name | | Quad Code | |
| Wastewater Description: | | | |
| Receiving Waters | Unnamed Tributary of Susquehanna River (WWF) | Stream Code | |
| NHD Com ID | 56406043 | RMI | |
| Drainage Area | | Yield (cfs/mi$^2$) | |
| $Q_{7-10}$ Flow (cfs) | | $Q_{7-10}$ Basis | |
| Elevation (ft) | | Slope (ft/ft) | |
| Watershed No. | 7-G | Chapter 93 Class. | WWF |
| Existing Use | | Existing Use Qualifier | |
| Exceptions to Use | | Exceptions to Criteria | |
| Assessment Status | Attaining Use(s) | | |
| Cause(s) of Impairment | | | |
| Source(s) of Impairment | | | |
| TMDL Status | Final | Name | Conewago Creek Watershed |

| Background/Ambient Data | | Data Source |
|---|---|---|
| pH (SU) | | |
| Temperature (°F) | | |
| Hardness (mg/L) | | |
| Other: | | |

| | | | |
|---|---|---|---|
| Nearest Downstream Public Water Supply Intake | | | |
| PWS Waters | | Flow at Intake (cfs) | |
| PWS RMI | | Distance from Outfall (mi) | |

Changes Since Last Permit Issuance:

Other Comments:

**Discharge, Receiving Waters and Water Supply Information**

| | | | |
|---|---|---|---|
| Outfall No. | 701 | Design Flow (MGD) | |
| Latitude | 40Âº 9' 2.46" | Longitude | -76Âº 43' 10.07" |
| Quad Name | | Quad Code | |
| Wastewater Description: | | | |
| Receiving Waters | Unnamed Tributary of Susquehanna River (WWF) | Stream Code | |
| NHD Com ID | 56406043 | RMI | |
| Drainage Area | | Yield (cfs/mi$^2$) | |
| $Q_{7-10}$ Flow (cfs) | | $Q_{7-10}$ Basis | |
| Elevation (ft) | | Slope (ft/ft) | |
| Watershed No. | 7-G | Chapter 93 Class. | WWF |
| Existing Use | | Existing Use Qualifier | |
| Exceptions to Use | | Exceptions to Criteria | |
| Assessment Status | Attaining Use(s) | | |
| Cause(s) of Impairment | | | |
| Source(s) of Impairment | | | |
| TMDL Status | Final | Name | Conewago Creek Watershed |

| Background/Ambient Data | | Data Source |
|---|---|---|
| pH (SU) | | |
| Temperature (°F) | | |
| Hardness (mg/L) | | |
| Other: | | |

| | | | |
|---|---|---|---|
| Nearest Downstream Public Water Supply Intake | | | |
| PWS Waters | | Flow at Intake (cfs) | |
| PWS RMI | | Distance from Outfall (mi) | |

Changes Since Last Permit Issuance:

Other Comments:

**Discharge, Receiving Waters and Water Supply Information**

| | | | |
|---|---|---|---|
| Outfall No. | 008 | Design Flow (MGD) | 0 |
| Latitude | 40Âº 8' 57.28" | Longitude | -76Âº 43' 10.51" |
| Quad Name | | Quad Code | |
| Wastewater Description: | Stormwater | | |
| Receiving Waters | Unnamed Tributary of Susquehanna River (WWF) | Stream Code | |
| NHD Com ID | 56406043 | RMI | |
| Drainage Area | | Yield (cfs/mi$^2$) | |
| $Q_{7-10}$ Flow (cfs) | | $Q_{7-10}$ Basis | |
| Elevation (ft) | | Slope (ft/ft) | |
| Watershed No. | 7-G | Chapter 93 Class. | WWF |
| Existing Use | | Existing Use Qualifier | |
| Exceptions to Use | | Exceptions to Criteria | |
| Assessment Status | Attaining Use(s) | | |
| Cause(s) of Impairment | | | |
| Source(s) of Impairment | | | |
| TMDL Status | Final | Name | Conewago Creek Watershed |

| Background/Ambient Data | | Data Source |
|---|---|---|
| pH (SU) | | |
| Temperature (°F) | | |
| Hardness (mg/L) | | |
| Other: | | |

| | | | |
|---|---|---|---|
| Nearest Downstream Public Water Supply Intake | | | |
| PWS Waters | | Flow at Intake (cfs) | |
| PWS RMI | | Distance from Outfall (mi) | |

Changes Since Last Permit Issuance:

Other Comments:

| Treatment Facility Summary | | | | |
|---|---|---|---|---|
| **Treatment Facility Name:** Tmi Iw | | | | |
| **WQM Permit No.** | **Issuance Date** | | | |
| | | | | |
| | | | | |
| **Waste Type** | **Degree of Treatment** | **Process Type** | **Disinfection** | **Avg Annual Flow (MGD)** |
| Industrial | | | No Disinfection | |
| | | | | |
| | | | | |
| **Hydraulic Capacity (MGD)** | **Organic Capacity (lbs/day)** | **Load Status** | **Biosolids Treatment** | **Biosolids Use/Disposal** |
| | | | | |

Changes Since Last Permit Issuance:

Other Comments:

| Compliance History | |
|---|---|
| | |
| **Summary of DMRs:** | |
| **Summary of Inspections:** | |

Other Comments:

## Compliance History

**DMR Data for Outfall 001 (from March 1, 2022 to February 28, 2023)**

| Parameter | FEB-23 | JAN-23 | DEC-22 | NOV-22 | OCT-22 | SEP-22 | AUG-22 | JUL-22 | JUN-22 | MAY-22 | APR-22 | MAR-22 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow (MGD) Average Monthly | 10.4 | 11.3 | 20.6 | 11.0 | 17.4 | 11.0 | 16.6 | 13.5 | 7.8 | 9.1 | 14.4 | 14.4 |
| Flow (MGD) Daily Maximum | 29.5 | 29.5 | 34.4 | 22.8 | 29.5 | 13.0 | 28.5 | 15.1 | 8.5 | 14.4 | 14.4 | 14.4 |
| pH (S.U.) Minimum | 7.2 | 7.3 | 7.2 | 7.8 | 7.8 | 7.7 | 7.7 | 7.8 | 7.3 | 7.4 | 7.3 | 7.4 |
| pH (S.U.) Maximum | 7.5 | 7.4 | 7.3 | 7.9 | 7.9 | 7.7 | 7.9 | 7.9 | 7.5 | 7.6 | 7.5 | 7.6 |
| Free Available Chlorine (mg/L) Daily Maximum | GG | GG | GG | GG | GG | GG | GG | GG | GG | GG | GG | GG |
| TRO (mg/L) Daily Maximum | GG | GG | GG | GG | GG | GG | GG | GG | GG | GG | GG | GG |
| Temperature (ºF) Daily Maximum | 48 | 44 | 44 | 66 | 64 | 83 | 90 | 90 | 84 | 81 | 58 | 52 |
| TSS (mg/L) Average Monthly | 13 | 37 | 10 | 6 | 8 | 10 | 6 | 14 | 18 | 21 | 45 | 19 |
| TSS (mg/L) Daily Maximum | 20 | 52 | 15 | 6 | 11 | 14 | 6 | 15 | 18 | 25 | 46 | 21 |
| Hydrazine (mg/L) Instantaneous Maximum | GG | GG | GG | GG | GG | GG | GG | GG | GG | GG | GG | GG |
| Spectrus CT 1300 (mg/L) Daily Maximum | GG | GG | GG | GG | GG | GG | GG | GG | GG | GG | GG | GG |

**DMR Data for Outfall 101 (from March 1, 2022 to February 28, 2023)**

| Parameter | FEB-23 | JAN-23 | DEC-22 | NOV-22 | OCT-22 | SEP-22 | AUG-22 | JUL-22 | JUN-22 | MAY-22 | APR-22 | MAR-22 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow (MGD) Average Monthly | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.002 | 0.002 | 0.002 | 0.002 | 0.002 | 0.001 | 0.001 |
| Flow (MGD) Daily Maximum | 0.007 | 0.006 | 0.009 | 0.006 | 0.006 | 0.011 | 0.008 | 0.007 | 0.010 | 0.010 | 0.009 | 0.008 |
| CBOD5 (mg/L) Average Monthly | | | < 2 | | | < 2 | | | 3 | | | 4 |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TSS (mg/L)<br>Average Monthly | | | 7 | | | 15 | | | 9 | | | 19 |
| Fecal Coliform<br>(CFU/100 ml)<br>Geometric Mean | | | < 1 | | | < 1 | | | < 1 | | | 1 |
| Total Phosphorus<br>(mg/L)<br>Average Monthly | | | 0.1 | | | 0.2 | | | 0.2 | | | 0.1 |

**DMR Data for Outfall 701 (from March 1, 2022 to February 28, 2023)**

| Parameter | FEB-23 | JAN-23 | DEC-22 | NOV-22 | OCT-22 | SEP-22 | AUG-22 | JUL-22 | JUN-22 | MAY-22 | APR-22 | MAR-22 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Flow (MGD)<br>Average Monthly | | 0.019 | | 0.068 | | | 0.065 | | | 0.051 | | 0.060 |
| Flow (MGD)<br>Daily Maximum | | 0.038 | | 0.087 | | | 0.087 | | | 0.087 | | 0.107 |
| pH (S.U.)<br>Minimum | | 8.0 | | 8.0 | | | 8.1 | | | 8.0 | | 8.1 |
| pH (S.U.)<br>Maximum | | 8.0 | | 8.1 | | | 8.2 | | | 8.1 | | 8.2 |
| TSS (mg/L)<br>Average Monthly | | < 8 | | 5 | | | 5 | | | 7 | | 5 |
| TSS (mg/L)<br>Daily Maximum | | < 8 | | 5 | | | 5 | | | 8 | | 5 |
| Oil and Grease (mg/L)<br>Average Monthly | | | 5 | | | < 4 | | | < 4 | | | 15 |
| Oil and Grease (mg/L)<br>Daily Maximum | | | 5 | | | < 4 | | | < 4 | | | 15 |

## Compliance History

## Development of Effluent Limitations

**Outfall No.** 004 **Design Flow (MGD)** 43
**Latitude** 40º 9' 10.00" **Longitude** -76º 43' 18.00"
**Wastewater Description:** IW Process Effluent without ELG

### Technology-Based Limitations

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

| Parameter | Limit (mg/l) | SBC | Federal Regulation | State Regulation |
|---|---|---|---|---|
| $CBOD_5$ | 25 | Average Monthly | 133.102(a)(4)(i) | 92a.47(a)(1) |
| | 40 | Average Weekly | 133.102(a)(4)(ii) | 92a.47(a)(2) |
| Total Suspended Solids | 30 | Average Monthly | 133.102(b)(1) | 92a.47(a)(1) |
| | 45 | Average Weekly | 133.102(b)(2) | 92a.47(a)(2) |
| pH | 6.0 – 9.0 S.U. | Min – Max | 133.102(c) | 95.2(1) |
| Fecal Coliform (5/1 – 9/30) | 200 / 100 ml | Geo Mean | - | 92a.47(a)(4) |
| Fecal Coliform (5/1 – 9/30) | 1,000 / 100 ml | IMAX | - | 92a.47(a)(4) |
| Fecal Coliform (10/1 – 4/30) | 2,000 / 100 ml | Geo Mean | - | 92a.47(a)(5) |
| Fecal Coliform (10/1 – 4/30) | 10,000 / 100 ml | IMAX | - | 92a.47(a)(5) |
| Total Residual Chlorine | 0.5 | Average Monthly | - | 92a.48(b)(2) |

Comments:

### Water Quality-Based Limitations

A "Reasonable Potential Analysis" (Attachment ) determined the following parameters were candidates for limitations:

The following limitations were determined through water quality modeling (output files attached):

| Parameter | Limit (mg/l) | SBC | Model |
|---|---|---|---|
| | | | |

Comments:

### Best Professional Judgment (BPJ) Limitations

Comments:

### Anti-Backsliding

## Development of Effluent Limitations

**Outfall No.** 001 **Design Flow (MGD)** 43
**Latitude** 40º 9' 8.00" **Longitude** -76º 43' 40.00"
**Wastewater Description:** IW Process Effluent without ELG

### Technology-Based Limitations

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

| Parameter | Limit (mg/l) | SBC | Federal Regulation | State Regulation |
|---|---|---|---|---|
| $CBOD_5$ | 25 | Average Monthly | 133.102(a)(4)(i) | 92a.47(a)(1) |
| | 40 | Average Weekly | 133.102(a)(4)(ii) | 92a.47(a)(2) |
| Total Suspended Solids | 30 | Average Monthly | 133.102(b)(1) | 92a.47(a)(1) |
| | 45 | Average Weekly | 133.102(b)(2) | 92a.47(a)(2) |
| pH | 6.0 – 9.0 S.U. | Min – Max | 133.102(c) | 95.2(1) |
| Fecal Coliform (5/1 – 9/30) | 200 / 100 ml | Geo Mean | - | 92a.47(a)(4) |
| Fecal Coliform (5/1 – 9/30) | 1,000 / 100 ml | IMAX | - | 92a.47(a)(4) |
| Fecal Coliform (10/1 – 4/30) | 2,000 / 100 ml | Geo Mean | - | 92a.47(a)(5) |
| Fecal Coliform (10/1 – 4/30) | 10,000 / 100 ml | IMAX | - | 92a.47(a)(5) |
| Total Residual Chlorine | 0.5 | Average Monthly | - | 92a.48(b)(2) |

Comments:

### Water Quality-Based Limitations

A "Reasonable Potential Analysis" (Attachment ) determined the following parameters were candidates for limitations:

The following limitations were determined through water quality modeling (output files attached):

| Parameter | Limit (mg/l) | SBC | Model |
|---|---|---|---|
| | | | |

Comments:

### Best Professional Judgment (BPJ) Limitations

Comments:

### Anti-Backsliding

## Development of Effluent Limitations

**Outfall No.** 003 **Design Flow (MGD)** 43
**Latitude** 40º 9' 10.00" **Longitude** -76º 43' 40.00"
**Wastewater Description:** IW Process Effluent without ELG

### Technology-Based Limitations

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

| Parameter | Limit (mg/l) | SBC | Federal Regulation | State Regulation |
|---|---|---|---|---|
| $CBOD_5$ | 25 | Average Monthly | 133.102(a)(4)(i) | 92a.47(a)(1) |
| | 40 | Average Weekly | 133.102(a)(4)(ii) | 92a.47(a)(2) |
| Total Suspended Solids | 30 | Average Monthly | 133.102(b)(1) | 92a.47(a)(1) |
| | 45 | Average Weekly | 133.102(b)(2) | 92a.47(a)(2) |
| pH | 6.0 – 9.0 S.U. | Min – Max | 133.102(c) | 95.2(1) |
| Fecal Coliform (5/1 – 9/30) | 200 / 100 ml | Geo Mean | - | 92a.47(a)(4) |
| Fecal Coliform (5/1 – 9/30) | 1,000 / 100 ml | IMAX | - | 92a.47(a)(4) |
| Fecal Coliform (10/1 – 4/30) | 2,000 / 100 ml | Geo Mean | - | 92a.47(a)(5) |
| Fecal Coliform (10/1 – 4/30) | 10,000 / 100 ml | IMAX | - | 92a.47(a)(5) |
| Total Residual Chlorine | 0.5 | Average Monthly | - | 92a.48(b)(2) |

Comments:

### Water Quality-Based Limitations

A "Reasonable Potential Analysis" (Attachment ) determined the following parameters were candidates for limitations:

The following limitations were determined through water quality modeling (output files attached):

| Parameter | Limit (mg/l) | SBC | Model |
|---|---|---|---|
| | | | |

Comments:

### Best Professional Judgment (BPJ) Limitations

Comments:

### Anti-Backsliding

## Development of Effluent Limitations

**Outfall No.** 005 **Design Flow (MGD)** .3
**Latitude** 40º 9' 6.00" **Longitude** -76º 43' 18.00"
**Wastewater Description:** IW Process Effluent without ELG

### Technology-Based Limitations

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

| Parameter | Limit (mg/l) | SBC | Federal Regulation | State Regulation |
|---|---|---|---|---|
| $CBOD_5$ | 25 | Average Monthly | 133.102(a)(4)(i) | 92a.47(a)(1) |
| | 40 | Average Weekly | 133.102(a)(4)(ii) | 92a.47(a)(2) |
| Total Suspended Solids | 30 | Average Monthly | 133.102(b)(1) | 92a.47(a)(1) |
| | 45 | Average Weekly | 133.102(b)(2) | 92a.47(a)(2) |
| pH | 6.0 – 9.0 S.U. | Min – Max | 133.102(c) | 95.2(1) |
| Fecal Coliform (5/1 – 9/30) | 200 / 100 ml | Geo Mean | - | 92a.47(a)(4) |
| Fecal Coliform (5/1 – 9/30) | 1,000 / 100 ml | IMAX | - | 92a.47(a)(4) |
| Fecal Coliform (10/1 – 4/30) | 2,000 / 100 ml | Geo Mean | - | 92a.47(a)(5) |
| Fecal Coliform (10/1 – 4/30) | 10,000 / 100 ml | IMAX | - | 92a.47(a)(5) |
| Total Residual Chlorine | 0.5 | Average Monthly | - | 92a.48(b)(2) |

Comments:

### Water Quality-Based Limitations

A “Reasonable Potential Analysis” (Attachment ) determined the following parameters were candidates for limitations:

The following limitations were determined through water quality modeling (output files attached):

| Parameter | Limit (mg/l) | SBC | Model |
|---|---|---|---|
| | | | |

Comments:

### Best Professional Judgment (BPJ) Limitations

Comments:

### Anti-Backsliding

## Development of Effluent Limitations

**Outfall No.** 007 **Design Flow (MGD)** 0
**Latitude** 40º 9' 6.00" **Longitude** -76º 43' 18.00"
**Wastewater Description:** Stormwater

### Technology-Based Limitations

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

| Parameter | Limit (mg/l) | SBC | Federal Regulation | State Regulation |
|---|---|---|---|---|
| $CBOD_5$ | 25 | Average Monthly | 133.102(a)(4)(i) | 92a.47(a)(1) |
| | 40 | Average Weekly | 133.102(a)(4)(ii) | 92a.47(a)(2) |
| Total Suspended Solids | 30 | Average Monthly | 133.102(b)(1) | 92a.47(a)(1) |
| | 45 | Average Weekly | 133.102(b)(2) | 92a.47(a)(2) |
| pH | 6.0 – 9.0 S.U. | Min – Max | 133.102(c) | 95.2(1) |
| Fecal Coliform (5/1 – 9/30) | 200 / 100 ml | Geo Mean | - | 92a.47(a)(4) |
| Fecal Coliform (5/1 – 9/30) | 1,000 / 100 ml | IMAX | - | 92a.47(a)(4) |
| Fecal Coliform (10/1 – 4/30) | 2,000 / 100 ml | Geo Mean | - | 92a.47(a)(5) |
| Fecal Coliform (10/1 – 4/30) | 10,000 / 100 ml | IMAX | - | 92a.47(a)(5) |
| Total Residual Chlorine | 0.5 | Average Monthly | - | 92a.48(b)(2) |

Comments:

### Water Quality-Based Limitations

A “Reasonable Potential Analysis” (Attachment ) determined the following parameters were candidates for limitations:

The following limitations were determined through water quality modeling (output files attached):

| Parameter | Limit (mg/l) | SBC | Model |
|---|---|---|---|
| | | | |

Comments:

### Best Professional Judgment (BPJ) Limitations

Comments:

### Anti-Backsliding

## Development of Effluent Limitations

**Outfall No.** 006 **Design Flow (MGD)** 6
**Latitude** 40º 9' 16.00" **Longitude** -76º 43' 41.00"
**Wastewater Description:** IW Process Effluent without ELG

### Technology-Based Limitations

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

| Parameter | Limit (mg/l) | SBC | Federal Regulation | State Regulation |
|---|---|---|---|---|
| $CBOD_5$ | 25 | Average Monthly | 133.102(a)(4)(i) | 92a.47(a)(1) |
| | 40 | Average Weekly | 133.102(a)(4)(ii) | 92a.47(a)(2) |
| Total Suspended Solids | 30 | Average Monthly | 133.102(b)(1) | 92a.47(a)(1) |
| | 45 | Average Weekly | 133.102(b)(2) | 92a.47(a)(2) |
| pH | 6.0 – 9.0 S.U. | Min – Max | 133.102(c) | 95.2(1) |
| Fecal Coliform (5/1 – 9/30) | 200 / 100 ml | Geo Mean | - | 92a.47(a)(4) |
| Fecal Coliform (5/1 – 9/30) | 1,000 / 100 ml | IMAX | - | 92a.47(a)(4) |
| Fecal Coliform (10/1 – 4/30) | 2,000 / 100 ml | Geo Mean | - | 92a.47(a)(5) |
| Fecal Coliform (10/1 – 4/30) | 10,000 / 100 ml | IMAX | - | 92a.47(a)(5) |
| Total Residual Chlorine | 0.5 | Average Monthly | - | 92a.48(b)(2) |

Comments:

### Water Quality-Based Limitations

A “Reasonable Potential Analysis” (Attachment ) determined the following parameters were candidates for limitations:

The following limitations were determined through water quality modeling (output files attached):

| Parameter | Limit (mg/l) | SBC | Model |
|---|---|---|---|
| | | | |

Comments:

### Best Professional Judgment (BPJ) Limitations

Comments:

### Anti-Backsliding

## Development of Effluent Limitations

**Outfall No.** 009 **Design Flow (MGD)** 0
**Latitude** 40º 8' 53.00" **Longitude** -76º 43' 19.00"
**Wastewater Description:** IW Process Effluent without ELG

### Technology-Based Limitations

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

| Parameter | Limit (mg/l) | SBC | Federal Regulation | State Regulation |
|---|---|---|---|---|
| $CBOD_5$ | 25 | Average Monthly | 133.102(a)(4)(i) | 92a.47(a)(1) |
| | 40 | Average Weekly | 133.102(a)(4)(ii) | 92a.47(a)(2) |
| Total Suspended Solids | 30 | Average Monthly | 133.102(b)(1) | 92a.47(a)(1) |
| | 45 | Average Weekly | 133.102(b)(2) | 92a.47(a)(2) |
| pH | 6.0 – 9.0 S.U. | Min – Max | 133.102(c) | 95.2(1) |
| Fecal Coliform (5/1 – 9/30) | 200 / 100 ml | Geo Mean | - | 92a.47(a)(4) |
| Fecal Coliform (5/1 – 9/30) | 1,000 / 100 ml | IMAX | - | 92a.47(a)(4) |
| Fecal Coliform (10/1 – 4/30) | 2,000 / 100 ml | Geo Mean | - | 92a.47(a)(5) |
| Fecal Coliform (10/1 – 4/30) | 10,000 / 100 ml | IMAX | - | 92a.47(a)(5) |
| Total Residual Chlorine | 0.5 | Average Monthly | - | 92a.48(b)(2) |

Comments:

### Water Quality-Based Limitations

A "Reasonable Potential Analysis" (Attachment ) determined the following parameters were candidates for limitations:

The following limitations were determined through water quality modeling (output files attached):

| Parameter | Limit (mg/l) | SBC | Model |
|---|---|---|---|
| | | | |

Comments:

### Best Professional Judgment (BPJ) Limitations

Comments:

### Anti-Backsliding

## Development of Effluent Limitations

**Outfall No.** 010 **Design Flow (MGD)** 0
**Latitude** 40º 8' 45.00" **Longitude** -76º 43' 21.00"
**Wastewater Description:** Stormwater

### Technology-Based Limitations

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

| Parameter | Limit (mg/l) | SBC | Federal Regulation | State Regulation |
|---|---|---|---|---|
| $CBOD_5$ | 25 | Average Monthly | 133.102(a)(4)(i) | 92a.47(a)(1) |
| | 40 | Average Weekly | 133.102(a)(4)(ii) | 92a.47(a)(2) |
| Total Suspended Solids | 30 | Average Monthly | 133.102(b)(1) | 92a.47(a)(1) |
| | 45 | Average Weekly | 133.102(b)(2) | 92a.47(a)(2) |
| pH | 6.0 – 9.0 S.U. | Min – Max | 133.102(c) | 95.2(1) |
| Fecal Coliform (5/1 – 9/30) | 200 / 100 ml | Geo Mean | - | 92a.47(a)(4) |
| Fecal Coliform (5/1 – 9/30) | 1,000 / 100 ml | IMAX | - | 92a.47(a)(4) |
| Fecal Coliform (10/1 – 4/30) | 2,000 / 100 ml | Geo Mean | - | 92a.47(a)(5) |
| Fecal Coliform (10/1 – 4/30) | 10,000 / 100 ml | IMAX | - | 92a.47(a)(5) |
| Total Residual Chlorine | 0.5 | Average Monthly | - | 92a.48(b)(2) |

Comments:

### Water Quality-Based Limitations

A "Reasonable Potential Analysis" (Attachment ) determined the following parameters were candidates for limitations:

The following limitations were determined through water quality modeling (output files attached):

| Parameter | Limit (mg/l) | SBC | Model |
|---|---|---|---|
| | | | |

Comments:

### Best Professional Judgment (BPJ) Limitations

Comments:

### Anti-Backsliding

## Development of Effluent Limitations

**Outfall No.** 011 **Design Flow (MGD)** 0
**Latitude** 40º 9' 15.00" **Longitude** -76º 43' 41.00"
**Wastewater Description:** Stormwater

### Technology-Based Limitations

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

| Parameter | Limit (mg/l) | SBC | Federal Regulation | State Regulation |
|---|---|---|---|---|
| $CBOD_5$ | 25 | Average Monthly | 133.102(a)(4)(i) | 92a.47(a)(1) |
| | 40 | Average Weekly | 133.102(a)(4)(ii) | 92a.47(a)(2) |
| Total Suspended Solids | 30 | Average Monthly | 133.102(b)(1) | 92a.47(a)(1) |
| | 45 | Average Weekly | 133.102(b)(2) | 92a.47(a)(2) |
| pH | 6.0 – 9.0 S.U. | Min – Max | 133.102(c) | 95.2(1) |
| Fecal Coliform (5/1 – 9/30) | 200 / 100 ml | Geo Mean | - | 92a.47(a)(4) |
| Fecal Coliform (5/1 – 9/30) | 1,000 / 100 ml | IMAX | - | 92a.47(a)(4) |
| Fecal Coliform (10/1 – 4/30) | 2,000 / 100 ml | Geo Mean | - | 92a.47(a)(5) |
| Fecal Coliform (10/1 – 4/30) | 10,000 / 100 ml | IMAX | - | 92a.47(a)(5) |
| Total Residual Chlorine | 0.5 | Average Monthly | - | 92a.48(b)(2) |

Comments:

### Water Quality-Based Limitations

A “Reasonable Potential Analysis” (Attachment ) determined the following parameters were candidates for limitations:

The following limitations were determined through water quality modeling (output files attached):

| Parameter | Limit (mg/l) | SBC | Model |
|---|---|---|---|
| | | | |

Comments:

### Best Professional Judgment (BPJ) Limitations

Comments:

### Anti-Backsliding

## Development of Effluent Limitations

**Outfall No.** 101 **Design Flow (MGD)** ____
**Latitude** 40º 9' 10.00" **Longitude** -76º 43' 40.00"
**Wastewater Description:**

### Technology-Based Limitations

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

| Parameter | Limit (mg/l) | SBC | Federal Regulation | State Regulation |
|---|---|---|---|---|
| $CBOD_5$ | 25 | Average Monthly | 133.102(a)(4)(i) | 92a.47(a)(1) |
| | 40 | Average Weekly | 133.102(a)(4)(ii) | 92a.47(a)(2) |
| Total Suspended Solids | 30 | Average Monthly | 133.102(b)(1) | 92a.47(a)(1) |
| | 45 | Average Weekly | 133.102(b)(2) | 92a.47(a)(2) |
| pH | 6.0 – 9.0 S.U. | Min – Max | 133.102(c) | 95.2(1) |
| Fecal Coliform (5/1 – 9/30) | 200 / 100 ml | Geo Mean | - | 92a.47(a)(4) |
| Fecal Coliform (5/1 – 9/30) | 1,000 / 100 ml | IMAX | - | 92a.47(a)(4) |
| Fecal Coliform (10/1 – 4/30) | 2,000 / 100 ml | Geo Mean | - | 92a.47(a)(5) |
| Fecal Coliform (10/1 – 4/30) | 10,000 / 100 ml | IMAX | - | 92a.47(a)(5) |
| Total Residual Chlorine | 0.5 | Average Monthly | - | 92a.48(b)(2) |

Comments:

### Water Quality-Based Limitations

A "Reasonable Potential Analysis" (Attachment ) determined the following parameters were candidates for limitations:

The following limitations were determined through water quality modeling (output files attached):

| Parameter | Limit (mg/l) | SBC | Model |
|---|---|---|---|
| | | | |

Comments:

### Best Professional Judgment (BPJ) Limitations

Comments:

### Anti-Backsliding

## Development of Effluent Limitations

**Outfall No.** 401 **Design Flow (MGD)** ____
**Latitude** 40º 9' 5.00" **Longitude** -76º 43' 40.00"
**Wastewater Description:**

### Technology-Based Limitations

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

| Parameter | Limit (mg/l) | SBC | Federal Regulation | State Regulation |
|---|---|---|---|---|
| $CBOD_5$ | 25 | Average Monthly | 133.102(a)(4)(i) | 92a.47(a)(1) |
| | 40 | Average Weekly | 133.102(a)(4)(ii) | 92a.47(a)(2) |
| Total Suspended Solids | 30 | Average Monthly | 133.102(b)(1) | 92a.47(a)(1) |
| | 45 | Average Weekly | 133.102(b)(2) | 92a.47(a)(2) |
| pH | 6.0 – 9.0 S.U. | Min – Max | 133.102(c) | 95.2(1) |
| Fecal Coliform (5/1 – 9/30) | 200 / 100 ml | Geo Mean | - | 92a.47(a)(4) |
| Fecal Coliform (5/1 – 9/30) | 1,000 / 100 ml | IMAX | - | 92a.47(a)(4) |
| Fecal Coliform (10/1 – 4/30) | 2,000 / 100 ml | Geo Mean | - | 92a.47(a)(5) |
| Fecal Coliform (10/1 – 4/30) | 10,000 / 100 ml | IMAX | - | 92a.47(a)(5) |
| Total Residual Chlorine | 0.5 | Average Monthly | - | 92a.48(b)(2) |

Comments:

### Water Quality-Based Limitations

A "Reasonable Potential Analysis" (Attachment ) determined the following parameters were candidates for limitations:

The following limitations were determined through water quality modeling (output files attached):

| Parameter | Limit (mg/l) | SBC | Model |
|---|---|---|---|
| | | | |

Comments:

### Best Professional Judgment (BPJ) Limitations

Comments:

### Anti-Backsliding

## Development of Effluent Limitations

**Outfall No.** 501 **Design Flow (MGD)** ____
**Latitude** 40º 9' 5.00" **Longitude** -76º 43' 40.00"
**Wastewater Description:**

### Technology-Based Limitations

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

| Parameter | Limit (mg/l) | SBC | Federal Regulation | State Regulation |
|---|---|---|---|---|
| $CBOD_5$ | 25 | Average Monthly | 133.102(a)(4)(i) | 92a.47(a)(1) |
| | 40 | Average Weekly | 133.102(a)(4)(ii) | 92a.47(a)(2) |
| Total Suspended Solids | 30 | Average Monthly | 133.102(b)(1) | 92a.47(a)(1) |
| | 45 | Average Weekly | 133.102(b)(2) | 92a.47(a)(2) |
| pH | 6.0 – 9.0 S.U. | Min – Max | 133.102(c) | 95.2(1) |
| Fecal Coliform (5/1 – 9/30) | 200 / 100 ml | Geo Mean | - | 92a.47(a)(4) |
| Fecal Coliform (5/1 – 9/30) | 1,000 / 100 ml | IMAX | - | 92a.47(a)(4) |
| Fecal Coliform (10/1 – 4/30) | 2,000 / 100 ml | Geo Mean | - | 92a.47(a)(5) |
| Fecal Coliform (10/1 – 4/30) | 10,000 / 100 ml | IMAX | - | 92a.47(a)(5) |
| Total Residual Chlorine | 0.5 | Average Monthly | - | 92a.48(b)(2) |

Comments:

### Water Quality-Based Limitations

A "Reasonable Potential Analysis" (Attachment ) determined the following parameters were candidates for limitations:

The following limitations were determined through water quality modeling (output files attached):

| Parameter | Limit (mg/l) | SBC | Model |
|---|---|---|---|
| | | | |

Comments:

### Best Professional Judgment (BPJ) Limitations

Comments:

### Anti-Backsliding

## Development of Effluent Limitations

**Outfall No.** 701 **Design Flow (MGD)** ____
**Latitude** 40º 9' 5.00" **Longitude** -76º 43' 40.00"
**Wastewater Description:**

### Technology-Based Limitations

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

| Parameter | Limit (mg/l) | SBC | Federal Regulation | State Regulation |
|---|---|---|---|---|
| $CBOD_5$ | 25 | Average Monthly | 133.102(a)(4)(i) | 92a.47(a)(1) |
| | 40 | Average Weekly | 133.102(a)(4)(ii) | 92a.47(a)(2) |
| Total Suspended Solids | 30 | Average Monthly | 133.102(b)(1) | 92a.47(a)(1) |
| | 45 | Average Weekly | 133.102(b)(2) | 92a.47(a)(2) |
| pH | 6.0 – 9.0 S.U. | Min – Max | 133.102(c) | 95.2(1) |
| Fecal Coliform (5/1 – 9/30) | 200 / 100 ml | Geo Mean | - | 92a.47(a)(4) |
| Fecal Coliform (5/1 – 9/30) | 1,000 / 100 ml | IMAX | - | 92a.47(a)(4) |
| Fecal Coliform (10/1 – 4/30) | 2,000 / 100 ml | Geo Mean | - | 92a.47(a)(5) |
| Fecal Coliform (10/1 – 4/30) | 10,000 / 100 ml | IMAX | - | 92a.47(a)(5) |
| Total Residual Chlorine | 0.5 | Average Monthly | - | 92a.48(b)(2) |

Comments:

### Water Quality-Based Limitations

A "Reasonable Potential Analysis" (Attachment ) determined the following parameters were candidates for limitations:

The following limitations were determined through water quality modeling (output files attached):

| Parameter | Limit (mg/l) | SBC | Model |
|---|---|---|---|
| | | | |

Comments:

### Best Professional Judgment (BPJ) Limitations

Comments:

### Anti-Backsliding

## Development of Effluent Limitations

**Outfall No.** 008 **Design Flow (MGD)** 0
**Latitude** 40º 8' 58.00" **Longitude** -76º 43' 19.00"
**Wastewater Description:** Stormwater

### Technology-Based Limitations

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

| Parameter | Limit (mg/l) | SBC | Federal Regulation | State Regulation |
|---|---|---|---|---|
| $CBOD_5$ | 25 | Average Monthly | 133.102(a)(4)(i) | 92a.47(a)(1) |
| | 40 | Average Weekly | 133.102(a)(4)(ii) | 92a.47(a)(2) |
| Total Suspended Solids | 30 | Average Monthly | 133.102(b)(1) | 92a.47(a)(1) |
| | 45 | Average Weekly | 133.102(b)(2) | 92a.47(a)(2) |
| pH | 6.0 – 9.0 S.U. | Min – Max | 133.102(c) | 95.2(1) |
| Fecal Coliform (5/1 – 9/30) | 200 / 100 ml | Geo Mean | - | 92a.47(a)(4) |
| Fecal Coliform (5/1 – 9/30) | 1,000 / 100 ml | IMAX | - | 92a.47(a)(4) |
| Fecal Coliform (10/1 – 4/30) | 2,000 / 100 ml | Geo Mean | - | 92a.47(a)(5) |
| Fecal Coliform (10/1 – 4/30) | 10,000 / 100 ml | IMAX | - | 92a.47(a)(5) |
| Total Residual Chlorine | 0.5 | Average Monthly | - | 92a.48(b)(2) |

Comments:

### Water Quality-Based Limitations

A "Reasonable Potential Analysis" (Attachment ) determined the following parameters were candidates for limitations:

The following limitations were determined through water quality modeling (output files attached):

| Parameter | Limit (mg/l) | SBC | Model |
|---|---|---|---|
| | | | |

Comments:

### Best Professional Judgment (BPJ) Limitations

Comments:

### Anti-Backsliding

## Whole Effluent Toxicity (WET)

For Outfall ___, ☐ **Acute** ☐ **Chronic** WET Testing was completed:

☐ For the permit renewal application (4 tests).
☐ Quarterly throughout the permit term.
☐ Quarterly throughout the permit term and a TIE/TRE was conducted.
☐ Other: ___

The dilution series used for the tests was: 100%, ___%, ___%, ___%, and ___%. The Target Instream Waste Concentration (TIWC) to be used for analysis of the results is: ___.

**Summary of Four Most Recent Test Results**

*(NOTE – Enter results into one table, depending on which data analysis method was used).*

NOEC/LC50 Data Analysis

| Test Date | *Ceriodaphnia* Results (% Effluent) | | | *Pimephales* Results (% Effluent) | | | Pass? * |
|---|---|---|---|---|---|---|---|
| | NOEC Survival | NOEC Reproduction | LC50 | NOEC Survival | NOEC Growth | LC50 | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

** A "passing" result is that which is greater than or equal to the TIWC value.*

TST Data Analysis

*(NOTE – In lieu of recording information below, the application manager may attach the DEP WET Analysis Spreadsheet).*

| Test Date | *Ceriodaphnia* Results (Pass/Fail) | | *Pimephales* Results (Pass/Fail) | |
|---|---|---|---|---|
| | Survival | Reproduction | Survival | Growth |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

** A "passing" result is that in which the replicate data for the TIWC is not statistically significant from the control condition. This is exhibited when the calculated t value ("T-Test Result") is greater than the critical t value. A "failing" result is exhibited when the calculated t value ("T-Test Result") is less than the critical t value.*

Is there reasonable potential for an excursion above water quality standards based on the results of these tests? (*NOTE – In general, reasonable potential is determined anytime there is at least one test failure in the previous four tests).*

☐ **YES** ☐ **NO**

**Comments:** ___

**Evaluation of Test Type, IWC and Dilution Series for Renewed Permit**

Acute Partial Mix Factor (PMFa): ___ Chronic Partial Mix Factor (PMFc): ___

1. **Determine IWC – Acute (IWCa)**:

   $(Q_d \times 1.547) / ((Q_{7\text{-}10} \times PMFa) + (Q_d \times 1.547))$

[(Design Flow MGD x 1.547) / ((Q7-10 cfs x PMFa) + (Design Flow MGD x 1.547))] x 100 = **IWCa%**

Is IWCa < 1%? ☐ **YES** ☐ **NO** **(YES - Acute Tests Required OR NO - Chronic Tests Required)**

If the discharge is to the tidal portion of the Delaware River, indicate how the type of test was determined:

**Type of Test for Permit Renewal**:

**2a. Determine Target IWCa (If Acute Tests Required)**

**TIWCa =** IWCa / 0.3 = **%**

**2b. Determine Target IWCc (If Chronic Tests Required)**

$(Q_d \times 1.547) / (Q_{7\text{-}10} \times PMFc) + (Q_d \times 1.547)$

[(Design Flow MGD x 1.547) / ((Q7-10 cfs x PMFc) + (Design Flow MGD x 1.547))] x 100 = **TIWCc%**

**3. Determine Dilution Series**

*(NOTE – check Attachment C of WET SOP for dilution series based on TIWCa or TIWCc, whichever applies).*

Dilution Series = 100%, %, %, %, and %.

**WET Limits**

Has reasonable potential been determined? ☐ YES ☐ NO

Will WET limits be established in the permit? ☐ YES ☐ NO

If WET limits will be established, identify the species and the limit values for the permit (TU).

If WET limits will not be established, but reasonable potential was determined, indicate the rationale for not establishing WET limits:

## 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 | Daily Maximum | Instant. Maximum | | |
| Flow (MGD) | Report | Report Daily Max | XXX | XXX | XXX | XXX | Continuous | Recorded |
| pH (S.U.) | XXX | XXX | 6.0 | XXX | 9.0 Max | XXX | 2/month | Grab |
| Free Available Chlorine | XXX | XXX | XXX | XXX | 0.2 | 0.5 | 1/week | Grab |
| TRO | XXX | XXX | XXX | XXX | 0.14 | 0.17 | 1/week | Grab |
| Temperature (ºF) Oct 1 - Mar 31 | XXX | XXX | XXX | XXX | 110 | XXX | Continuous | Recorded |
| Temperature (ºF) Apr 1 - Sep 30 | XXX | XXX | XXX | XXX | 115 | XXX | Continuous | Recorded |
| TSS | XXX | XXX | XXX | Report | Report | XXX | 2/month | Grab |
| Hydrazine | XXX | XXX | XXX | XXX | XXX | 0.010 | 1/week | Grab |
| Spectrus CT 1300 | XXX | XXX | XXX | XXX | 0.1 | 0.3 | 1/week | Grab |

Compliance Sampling Location:

Other Comments:

## 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 003, 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 | Daily Maximum | Instant. Maximum | | |
| Flow (MGD) | Report | Report Daily Max | XXX | XXX | XXX | XXX | 1/day | Estimate |
| pH (S.U.) | XXX | XXX | 6.0 | XXX | 9.0 Max | XXX | 2/month | Grab |
| Free Available Chlorine | XXX | XXX | XXX | XXX | 0.2 | 0.5 | 1/week | Grab |
| TRO | XXX | XXX | XXX | XXX | 0.14 | 0.17 | 1/week | Grab |
| Temperature (ºF) Oct 1 - Mar 31 | XXX | XXX | XXX | XXX | 110 | XXX | 1/shift | I-S |
| Temperature (ºF) Apr 1 - Sep 30 | XXX | XXX | XXX | XXX | 115 | XXX | 1/shift | I-S |
| TSS | XXX | XXX | XXX | Report | Report | XXX | 2/month | Grab |
| Hydrazine | XXX | XXX | XXX | XXX | XXX | 0.010 | 1/week | Grab |
| Spectrus CT 1300 | XXX | XXX | XXX | XXX | 0.1 | 0.3 | 1/week | Grab |

Compliance Sampling Location:

Other Comments:

## 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 004, 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 | Daily Maximum | Instant. Maximum | | |
| Flow (MGD) | Report | Report Daily Max | XXX | XXX | XXX | XXX | 1/day | Estimate |
| pH (S.U.) | XXX | XXX | 6.0 | XXX | 9.0 Max | XXX | 2/month | Grab |
| Free Available Chlorine | XXX | XXX | XXX | XXX | 0.2 | 0.5 | 1/week | Grab |
| TRO | XXX | XXX | XXX | XXX | 0.14 | 0.17 | 1/week | Grab |
| Temperature (ºF) | XXX | XXX | XXX | XXX | Report | XXX | 1/shift | I-S |
| TSS | XXX | XXX | XXX | Report | Report | XXX | 2/month | Grab |
| Hydrazine | XXX | XXX | XXX | XXX | XXX | 0.010 | 1/week | Grab |
| Spectrus CT 1300 | XXX | XXX | XXX | XXX | 0.1 | 0.3 | 1/week | Grab |

Compliance Sampling Location:

Other Comments:

## 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 005, 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 | Daily Maximum | Instant. Maximum | | |
| Flow (MGD) | Report | Report Daily Max | XXX | XXX | XXX | XXX | 1/month | Estimate |
| pH (S.U.) | XXX | XXX | 6.0 | XXX | 9.0 Max | XXX | 2/month | Grab |
| TSS | XXX | XXX | XXX | 30 | 100 | XXX | 2/month | Grab |
| Oil and Grease | XXX | XXX | XXX | 15 | 20 | 30 | 2/month | Grab |

Compliance Sampling Location:

Other Comments:

## 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 101, 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 | Report Daily Max | XXX | XXX | XXX | XXX | Continuous | Recorded |
| CBOD5 | XXX | XXX | XXX | 25 | XXX | 50 | 1/quarter | 8-Hr Composite |
| TSS | XXX | XXX | XXX | 30 | XXX | 60 | 1/quarter | 8-Hr Composite |
| Fecal Coliform (CFU/100 ml) Oct 1 - Mar 31 | XXX | XXX | XXX | 2000 Geo Mean | XXX | XXX | 1/quarter | Grab |
| Fecal Coliform (CFU/100 ml) Apr 1 - Sep 30 | XXX | XXX | XXX | 200 Geo Mean | XXX | XXX | 1/quarter | Grab |
| Total Phosphorus | XXX | XXX | XXX | 2.0 | XXX | 4 | 1/quarter | 8-Hr Composite |

Compliance Sampling Location:

Other Comments:

## 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 401, 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 | Daily Maximum | Instant. Maximum | | |
| Flow (MGD) | Report | Report Daily Max | XXX | XXX | XXX | XXX | Continuous | Recorded |
| pH (S.U.) | XXX | XXX | 6.0 | XXX | 9.0 Max | XXX | 1/quarter | Grab |
| TSS | XXX | XXX | XXX | 30 | 100 | XXX | 1/quarter | Grab |
| Oil and Grease | XXX | XXX | XXX | 15 | 20 | 30 | 1/quarter | Grab |

Compliance Sampling Location:

Other Comments:

## 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 501, 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 | Daily Maximum | Instant. Maximum | | |
| Flow (MGD) | Report | Report Daily Max | XXX | XXX | XXX | XXX | 2/month | Calculation |
| pH (S.U.) | XXX | XXX | 6.0 | XXX | 9.0 Max | XXX | 2/month | Grab |
| TSS | XXX | XXX | XXX | 30 | 100 | XXX | 2/month | Grab |
| Oil and Grease | XXX | XXX | XXX | 15 | 20 | 30 | 1/quarter | Grab |

Compliance Sampling Location:

Other Comments:

## 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 701, 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 | Daily Maximum | Instant. Maximum | | |
| Flow (MGD) | Report | Report Daily Max | XXX | XXX | XXX | XXX | Continuous | Recorded |
| pH (S.U.) | XXX | XXX | 6.0 | XXX | 9.0 Max | XXX | 2/month | Grab |
| TSS | XXX | XXX | XXX | 30 | 100 | XXX | 2/month | Grab |
| Oil and Grease | XXX | XXX | XXX | 15 | 20 | 30 | 1/quarter | Grab |

Compliance Sampling Location:

Other Comments:

## 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 | Daily Maximum | Instant. Maximum | | |
| Flow (MGD) | Report | Report Daily Max | XXX | XXX | XXX | XXX | Continuous | Recorded |
| pH (S.U.) | XXX | XXX | 6.0 | XXX | 9.0 Max | XXX | 2/month | Grab |
| Free Available Chlorine | XXX | XXX | XXX | XXX | 0.2 | 0.5 | 1/week | Grab |
| TRO | XXX | XXX | XXX | XXX | 0.14 | 0.17 | 1/week | Grab |
| Temperature (ºF) Oct 1 - Mar 31 | XXX | XXX | XXX | XXX | 110 | XXX | Continuous | Recorded |
| Temperature (ºF) Apr 1 - Sep 30 | XXX | XXX | XXX | XXX | 115 | XXX | Continuous | Recorded |
| TSS | XXX | XXX | XXX | Report | Report | XXX | 2/month | Grab |
| Hydrazine | XXX | XXX | XXX | XXX | XXX | 0.010 | 1/week | Grab |
| Spectrus CT 1300 | XXX | XXX | XXX | XXX | 0.1 | 0.3 | 1/week | Grab |

Compliance Sampling Location:

Other Comments:

## 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 003, 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 | Daily Maximum | Instant. Maximum | | |
| Flow (MGD) | Report | Report Daily Max | XXX | XXX | XXX | XXX | 1/day | Estimate |
| pH (S.U.) | XXX | XXX | 6.0 | XXX | 9.0 Max | XXX | 2/month | Grab |
| Free Available Chlorine | XXX | XXX | XXX | XXX | 0.2 | 0.5 | 1/week | Grab |
| TRO | XXX | XXX | XXX | XXX | 0.14 | 0.17 | 1/week | Grab |
| Temperature (ºF) Oct 1 - Mar 31 | XXX | XXX | XXX | XXX | 110 | XXX | 1/shift | I-S |
| Temperature (ºF) Apr 1 - Sep 30 | XXX | XXX | XXX | XXX | 115 | XXX | 1/shift | I-S |
| TSS | XXX | XXX | XXX | Report | Report | XXX | 2/month | Grab |
| Hydrazine | XXX | XXX | XXX | XXX | XXX | 0.010 | 1/week | Grab |
| Spectrus CT 1300 | XXX | XXX | XXX | XXX | 0.1 | 0.3 | 1/week | Grab |

Compliance Sampling Location:

Other Comments:

## 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 004, 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 | Daily Maximum | Instant. Maximum | | |
| Flow (MGD) | Report | Report Daily Max | XXX | XXX | XXX | XXX | 1/day | Estimate |
| pH (S.U.) | XXX | XXX | 6.0 | XXX | 9.0 Max | XXX | 2/month | Grab |
| Free Available Chlorine | XXX | XXX | XXX | XXX | 0.2 | 0.5 | 1/week | Grab |
| TRO | XXX | XXX | XXX | XXX | 0.14 | 0.17 | 1/week | Grab |
| Temperature (ºF) | XXX | XXX | XXX | XXX | Report | XXX | 1/shift | I-S |
| TSS | XXX | XXX | XXX | Report | Report | XXX | 2/month | Grab |
| Hydrazine | XXX | XXX | XXX | XXX | XXX | 0.010 | 1/week | Grab |
| Spectrus CT 1300 | XXX | XXX | XXX | XXX | 0.1 | 0.3 | 1/week | Grab |

Compliance Sampling Location:

Other Comments:

## 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 005, 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 | Daily Maximum | Instant. Maximum | | |
| Flow (MGD) | Report | Report Daily Max | XXX | XXX | XXX | XXX | 1/month | Estimate |
| pH (S.U.) | XXX | XXX | 6.0 | XXX | 9.0 Max | XXX | 2/month | Grab |
| TSS | XXX | XXX | XXX | 30 | 100 | XXX | 2/month | Grab |
| Oil and Grease | XXX | XXX | XXX | 15 | 20 | 30 | 2/month | Grab |

Compliance Sampling Location:

Other Comments:

## 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 101, 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 | Report Daily Max | XXX | XXX | XXX | XXX | Continuous | Recorded |
| CBOD5 | XXX | XXX | XXX | 25 | XXX | 50 | 1/quarter | 8-Hr Composite |
| TSS | XXX | XXX | XXX | 30 | XXX | 60 | 1/quarter | 8-Hr Composite |
| Fecal Coliform (CFU/100 ml) Oct 1 - Mar 31 | XXX | XXX | XXX | 2000 Geo Mean | XXX | XXX | 1/quarter | Grab |
| Fecal Coliform (CFU/100 ml) Apr 1 - Sep 30 | XXX | XXX | XXX | 200 Geo Mean | XXX | XXX | 1/quarter | Grab |
| Total Phosphorus | XXX | XXX | XXX | 2.0 | XXX | 4 | 1/quarter | 8-Hr Composite |

Compliance Sampling Location:

Other Comments:

## 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 401, 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 | Daily Maximum | Instant. Maximum | | |
| Flow (MGD) | Report | Report Daily Max | XXX | XXX | XXX | XXX | Continuous | Recorded |
| pH (S.U.) | XXX | XXX | 6.0 | XXX | 9.0 Max | XXX | 1/quarter | Grab |
| TSS | XXX | XXX | XXX | 30 | 100 | XXX | 1/quarter | Grab |
| Oil and Grease | XXX | XXX | XXX | 15 | 20 | 30 | 1/quarter | Grab |

Compliance Sampling Location:

Other Comments:

## 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 501, 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 | Daily Maximum | Instant. Maximum | | |
| Flow (MGD) | Report | Report Daily Max | XXX | XXX | XXX | XXX | 2/month | Calculation |
| pH (S.U.) | XXX | XXX | 6.0 | XXX | 9.0 Max | XXX | 2/month | Grab |
| TSS | XXX | XXX | XXX | 30 | 100 | XXX | 2/month | Grab |
| Oil and Grease | XXX | XXX | XXX | 15 | 20 | 30 | 1/quarter | Grab |

Compliance Sampling Location:

Other Comments:

## 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 701, 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 | Daily Maximum | Instant. Maximum | | |
| Flow (MGD) | Report | Report Daily Max | XXX | XXX | XXX | XXX | Continuous | Recorded |
| pH (S.U.) | XXX | XXX | 6.0 | XXX | 9.0 Max | XXX | 2/month | Grab |
| TSS | XXX | XXX | XXX | 30 | 100 | XXX | 2/month | Grab |
| Oil and Grease | XXX | XXX | XXX | 15 | 20 | 30 | 1/quarter | Grab |

Compliance Sampling Location:

Other Comments:

| Tools and References Used to Develop Permit | |
|---|---|
| | |
| ☐ | WQM for Windows Model (see Attachment ) |
| ☐ | Toxics Management Spreadsheet (see Attachment ) |
| ☐ | TRC Model Spreadsheet (see Attachment ) |
| ☐ | Temperature Model Spreadsheet (see Attachment ) |
| ☐ | Water Quality Toxics Management Strategy, 361-0100-003, 4/06. |
| ☐ | Technical Guidance for the Development and Specification of Effluent Limitations, 362-0400-001, 10/97. |
| ☐ | Policy for Permitting Surface Water Diversions, 362-2000-003, 3/98. |
| ☐ | Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 362-2000-008, 11/96. |
| ☐ | Technology-Based Control Requirements for Water Treatment Plant Wastes, 362-2183-003, 10/97. |
| ☐ | Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 362-2183-004, 12/97. |
| ☐ | Pennsylvania CSO Policy, 385-2000-011, 9/08. |
| ☐ | Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03. |
| ☐ | Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 391-2000-002, 4/97. |
| ☐ | Determining Water Quality-Based Effluent Limits, 391-2000-003, 12/97. |
| ☐ | Implementation Guidance Design Conditions, 391-2000-006, 9/97. |
| ☐ | Technical Reference Guide (TRG) WQM 7.0 for Windows, Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen, Version 1.0, 391-2000-007, 6/2004. |
| ☐ | Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 391-2000-008, 10/1997. |
| ☐ | Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 391-2000-010, 3/99. |
| ☐ | Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 391-2000-011, 5/2004. |
| ☐ | Implementation Guidance for Section 93.7 Ammonia Criteria, 391-2000-013, 11/97. |
| ☐ | Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 391-2000-014, 4/2008. |
| ☐ | Implementation Guidance Total Residual Chlorine (TRC) Regulation, 391-2000-015, 11/1994. |
| ☐ | Implementation Guidance for Temperature Criteria, 391-2000-017, 4/09. |
| ☐ | Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 391-2000-018, 10/97. |
| ☐ | Implementation Guidance for Application of Section 93.5(e) for Potable Water Supply Protection Total Dissolved Solids, Nitrite-Nitrate, Non-Priority Pollutant Phenolics and Fluorides, 391-2000-019, 10/97. |
| ☐ | Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 391-2000-021, 3/99. |
| ☐ | Implementation Guidance for the Determination and Use of Background/Ambient Water Quality in the Determination of Wasteload Allocations and NPDES Effluent Limitations for Toxic Substances, 391-2000-022, 3/1999. |
| ☐ | Design Stream Flows, 391-2000-023, 9/98. |
| ☐ | Field Data Collection and Evaluation Protocol for Deriving Daily and Hourly Discharge Coefficients of Variation (CV) and Other Discharge Characteristics, 391-2000-024, 10/98. |
| ☐ | Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 391-3200-013, 6/97. |
| ☐ | Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07. |
| ☐ | SOP: |
| ☐ | Other: |