



**pennsylvania**  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

# AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM DISCHARGE REQUIREMENTS FOR INDUSTRIAL WASTEWATER FACILITIES

**NPDES PERMIT NO: PA0008265  
Amendment No. 2**

In compliance with the provisions of the Clean Water Act, 33 U.S.C. Section 1251 *et seq.* ("the Act") and Pennsylvania's Clean Streams Law, as amended, 35 P.S. Section 691.1 *et seq.*,

**Roaring Spring Park LLC  
1654 King Street  
Enfield, CT 06082-6000**

is authorized to discharge from a facility known as **Appvion Inc.**, located in **Roaring Spring Borough, Blair County**, to **Frankstown Branch Juniata River and Halter Creek**, in Watershed(s) **11-A** in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts A, B and C hereof.

**THIS PERMIT SHALL BECOME EFFECTIVE ON**      **MARCH 1, 2017**  
**THIS PERMIT SHALL EXPIRE AT MIDNIGHT ON**      **FEBRUARY 28, 2022**

The authority granted by this permit is subject to the following further qualifications:

1. If there is a conflict between the application, its supporting documents and/or amendments and the terms and conditions of this permit, the terms and conditions shall apply.
2. Failure to comply with the terms, conditions or effluent limitations of this permit is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. (40 CFR 122.41(a))
3. A complete application for renewal of this permit, or notice of intent to cease discharging by the expiration date, must be submitted to DEP at least 180 days prior to the above expiration date (unless permission has been granted by DEP for submission at a later date), using the appropriate NPDES permit application form. (40 CFR 122.41(b), 122.21(d)(2))

In the event that a timely and complete application for renewal has been submitted and DEP is unable, through no fault of the permittee, to reissue the permit before the above expiration date, the terms and conditions of this permit, including submission of the Discharge Monitoring Reports (DMRs), will be automatically continued and will remain fully effective and enforceable against the discharger until DEP takes final action on the pending permit application. (25 Pa. Code §§ 92a.7(b), (c))

4. This NPDES permit does not constitute authorization to construct or make modifications to wastewater treatment facilities necessary to meet the terms and conditions of this permit.

**DATE PERMIT ISSUED**      02/23/2017      **ISSUED BY**      Maria D. Bebenek  
**DATE PERMIT AMENDMENT ISSUED**      10/08/2021      Maria D. Bebenek, P.E.  
**Environmental Program Manager**  
**Southcentral Regional Office**

**PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS**

I. A. For Outfall 001, Latitude 40° 22' 44.36", Longitude 78° 24' 57.16", River Mile Index 4.84, Stream Code 16061

Receiving Waters: Frankstown Branch Juniata River

Type of Effluent: IW Process Effluent with ELG

1. The permittee is authorized to discharge during the period from **March 1, 2017** through **February 28, 2022**.
2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

| Parameter  | Effluent Limitations                |               |                       |                 |               |                  | Monitoring Requirements                      |                      |
|--|-------------------------------------|---------------|-----------------------|-----------------|---------------|------------------|--|----------------------|
|  | Mass Units (lbs/day) <sup>(1)</sup> |               | Concentrations (mg/L) |                 |               |                  | Minimum <sup>(2)</sup> Measurement Frequency | Required Sample Type |
|  | Average Monthly                     | Daily Maximum | Minimum               | Average Monthly | Daily Maximum | Instant. Maximum |  |                      |
| Flow (MGD)   | Report                              | Report        | XXX                   | XXX             | XXX           | XXX              | Continuous                                   | Measured             |
| pH (S.U.)  | XXX                                 | XXX           | 6.0                   | XXX             | 9.0 Max       | XXX              | 1/day  | Grab                 |
| Dissolved Oxygen   | XXX                                 | XXX           | 5.0                   | XXX             | XXX           | XXX              | 1/day  | Grab                 |
| Color (Pt-Co Units)<br>Nov 1 - Apr 30                            | XXX                                 | XXX           | XXX                   | 220             | 440           | 550              | 1/day  | 24-Hr Composite      |
| Color (Pt-Co Units)<br>May 1 - Oct 31                            | XXX                                 | XXX           | XXX                   | 200             | 400           | 500              | 1/day  | 24-Hr Composite      |
| Temperature (deg F) (°F)<br>Effluent                             | XXX                                 | XXX           | XXX                   | Report          | Report        | XXX              | 1/day  | I-S                  |
| Temperature (deg F) (°F)<br>Upstream Monitoring                  | XXX                                 | XXX           | XXX                   | Report          | Report        | XXX              | 1/day  | I-S                  |
| Temperature (deg F) (°F)<br>Downstream Monitoring <sup>(3)</sup> | XXX                                 | XXX           | XXX                   | Report          | Report        | XXX              | 1/day  | I-S                  |
| Biochemical Oxygen Demand (BOD5)                                 | 1,009                               | 2,018         | XXX                   | 25              | 50            | 62               | 1/day  | 24-Hr Composite      |
| Chemical Oxygen Demand (COD) <sup>(4)</sup> Effluent             | XXX                                 | XXX           | XXX                   | Report          | Report        | XXX              | 1/quarter                                    | 24-Hr Composite      |
| Total Suspended Solids   | 1,211                               | 2,422         | XXX                   | 30.0            | 60.0          | 75               | 1/day  | 24-Hr Composite      |

Outfall 001 , Continued (from March 1, 2017 through February 28, 2022 )

| Parameter                           | Effluent Limitations                |                  |                       |                    |                  |                     | Monitoring Requirements                            |                            |
|-------------------------------------|-------------------------------------|------------------|-----------------------|--------------------|------------------|---------------------|--|----------------------------|
|                                     | Mass Units (lbs/day) <sup>(1)</sup> |                  | Concentrations (mg/L) |                    |                  |                     | Minimum <sup>(2)</sup><br>Measurement<br>Frequency | Required<br>Sample<br>Type |
|                                     | Average<br>Monthly                  | Daily<br>Maximum | Minimum               | Average<br>Monthly | Daily<br>Maximum | Instant.<br>Maximum |  |                            |
| Total Dissolved Solids              | Report                              | Report           | XXX                   | Report             | Report           | XXX                 | 1/week   | 24-Hr<br>Composite         |
| Ammonia-Nitrogen                    | 76.7                                | 153.4            | XXX                   | 1.9                | 3.8              | 4.8                 | 1/day  | 24-Hr<br>Composite         |
| Aluminum, Total                     | 56.5                                | 113.0            | XXX                   | 1.4                | 2.8              | 3.5                 | 1/quarter  | 24-Hr<br>Composite         |
| Sulfate, Total                      | Report                              | Report           | XXX                   | Report             | Report           | XXX                 | 1/week   | 24-Hr<br>Composite         |
| Chloride                            | Report                              | Report           | XXX                   | Report             | Report           | XXX                 | 1/week   | 24-Hr<br>Composite         |
| Bromide                             | Report                              | Report           | XXX                   | Report             | Report           | XXX                 | 1/week   | 24-Hr<br>Composite         |
| Adsorbable Organic Halides<br>(AOX) | 323                                 | 493              | XXX                   | Report             | Report           | XXX                 | 1/week   | 24-Hr<br>Composite         |

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

All composite sample types shall be collected at the Parshall flume at the treatment plant, and all grab and I-S sample types shall be collected at the J-Rator

**PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS**

I. B. For Outfall 101, Latitude 40° 20' 12.67", Longitude 78° 24' 20.37", River Mile Index N/A, Stream Code N/A

Receiving Waters: N/A

Type of Effluent: Bleach Plant effluent

1. The permittee is authorized to discharge during the period from **March 1, 2017** through **February 28, 2022**.
2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

| Parameter                                      | Effluent Limitations                |               |                       |                 |               |                  | Monitoring Requirements                      |                      |
|--|-------------------------------------|---------------|-----------------------|-----------------|---------------|------------------|--|----------------------|
|  | Mass Units (lbs/day) <sup>(1)</sup> |               | Concentrations (mg/L) |                 |               |                  | Minimum <sup>(2)</sup> Measurement Frequency | Required Sample Type |
|  | Average Monthly                     | Daily Maximum | Minimum               | Average Monthly | Daily Maximum | Instant. Maximum |  |                      |
| Flow (MGD) <sup>(6)</sup>                      | Report                              | Report        | XXX                   | XXX             | XXX           | XXX              | Continuous                                   | Measured             |
| Kappa Number (No.)                             | XXX                                 | XXX           | XXX                   | 20<br>Annl Avg  | Report        | XXX              | 1/week                                       | Grab                 |
| Color (Pt-Co Units)                            | XXX                                 | XXX           | XXX                   | Report          | Report        | XXX              | 1/day  | Grab                 |
| Chemical Oxygen Demand (COD) <sup>(4)(5)</sup> | XXX                                 | XXX           | XXX                   | Report          | Report        | XXX              | 1/quarter                                    | 24-Hr Composite      |
| Pentachlorophenol (µg/L)                       | XXX                                 | XXX           | XXX                   | XXX             | 5.0           | XXX              | 2/year                                       | 24-Hr Composite      |
| 2,3,4,6-Tetrachlorophenol (µg/L)               | XXX                                 | XXX           | XXX                   | XXX             | 2.5           | XXX              | 2/year                                       | 24-Hr Composite      |
| 2,3,7,8-Tetrachlorodibenzofuran (pg/L)         | XXX                                 | XXX           | XXX                   | XXX             | 31.9          | XXX              | 2/year                                       | 24-Hr Composite      |
| 2,3,7,8-Tetrachlorodibenzo-p-dioxin (pg/L)     | XXX                                 | XXX           | XXX                   | XXX             | 10            | XXX              | 2/year                                       | 24-Hr Composite      |
| 3,4,5-Trichlorocatechol (µg/L)                 | XXX                                 | XXX           | XXX                   | XXX             | 5.0           | XXX              | 2/year                                       | Grab-Composite       |
| 2,4,5-Trichlorophenol (µg/L)                   | XXX                                 | XXX           | XXX                   | XXX             | 2.5           | XXX              | 2/year                                       | 24-Hr Composite      |
| 3,4,6-Trichlorocatechol (µg/L)                 | XXX                                 | XXX           | XXX                   | XXX             | 5.0           | XXX              | 2/year                                       | 24-Hr Composite      |

Outfall 101 , Continued (from March 1, 2017 through February 28, 2022 )

| Parameter                      | Effluent Limitations                |               |                       |                 |               |                  | Monitoring Requirements                      |                      |
|--------------------------------|-------------------------------------|---------------|-----------------------|-----------------|---------------|------------------|--|----------------------|
|                                | Mass Units (lbs/day) <sup>(1)</sup> |               | Concentrations (mg/L) |                 |               |                  | Minimum <sup>(2)</sup> Measurement Frequency | Required Sample Type |
|                                | Average Monthly                     | Daily Maximum | Minimum               | Average Monthly | Daily Maximum | Instant. Maximum |  |                      |
| 3,4,5-Trichloroguaiacol (µg/L) | XXX                                 | XXX           | XXX                   | XXX             | 2.5           | XXX              | 2/year                                       | 24-Hr Composite      |
| 3,4,6-Trichloroguaiacol (µg/L) | XXX                                 | XXX           | XXX                   | XXX             | 2.5           | XXX              | 2/year                                       | 24-Hr Composite      |
| 4,5,6-Trichloroguaiacol (µg/L) | XXX                                 | XXX           | XXX                   | XXX             | 2.5           | XXX              | 2/year                                       | 24-Hr Composite      |
| 2,4,6-Trichlorophenol (µg/L)   | XXX                                 | XXX           | XXX                   | XXX             | 2.5           | XXX              | 2/year                                       | 24-Hr Composite      |
| Chloroform                     | 2.2                                 | 3.7           | XXX                   | Report          | Report        | XXX              | 1/week                                       | Grab                 |
| Tetrachlorocatechol (µg/L)     | XXX                                 | XXX           | XXX                   | XXX             | 5.0           | XXX              | 2/year                                       | 24-Hr Composite      |
| Tetrachloroguaiacol (µg/L)     | XXX                                 | XXX           | XXX                   | XXX             | 5.0           | XXX              | 2/year                                       | 24-Hr Composite      |
| Trichlorosyringol (µg/L)       | XXX                                 | XXX           | XXX                   | XXX             | 2.5           | XXX              | 2/year                                       | 24-Hr Composite      |

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Outfall 101

**PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS**

**I. C. Storm Water Outfalls 002 to 013 Effective Period: March 1, 2017 through February 28, 2022**

| Parameter      | Minimum Measuring Frequency | Sample Type (mg/l) | Benchmark Values* |
|----------------|-----------------------------|--------------------|-------------------|
| pH (S.U.)      | 1/6 months                  | Grab               | XXX               |
| COD            | 1/6 months                  | Grab               | 120               |
| TSS            | 1/6 months                  | Grab               | 100               |
| Oil and Grease | 1/6 months                  | Grab               | 30                |

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfalls 004, 008, 009 and 010

\* The benchmark values listed on the table are not effluent limitations, and exceedances do not constitute permit violations. However, if the permittee's sampling demonstrates exceedances of benchmark values for two consecutive monitoring periods, the permittee shall submit a corrective action plan within 90 days of the end of the monitoring period triggering the plan.

**PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS**

I. D. For Outfall 004, Latitude 40° 20' 24", Longitude 78° 24' 19.9", River Mile Index \_\_\_\_\_, Stream Code \_\_\_\_\_

Receiving Waters: Halter Creek

Type of Effluent: Stormwater

1. The permittee is authorized to discharge during the period from **March 1, 2017** through **February 28, 2022**.
2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

| Parameter                    | Effluent Limitations                |               |                       |               |               |                  | Monitoring Requirements                      |                      |
|------------------------------|-------------------------------------|---------------|-----------------------|---------------|---------------|------------------|--|----------------------|
|                              | Mass Units (lbs/day) <sup>(1)</sup> |               | Concentrations (mg/L) |               |               |                  | Minimum <sup>(2)</sup> Measurement Frequency | Required Sample Type |
|                              | Average Monthly                     | Daily Maximum | Minimum               | Daily Maximum | Daily Maximum | Instant. Maximum |  |                      |
| pH (S.U.)                    | XXX                                 | XXX           | XXX                   | Report        | XXX           | XXX              | 1/6 months                                   | Grab                 |
| Chemical Oxygen Demand (COD) | XXX                                 | XXX           | XXX                   | Report        | XXX           | XXX              | 1/6 months                                   | Grab                 |
| Total Suspended Solids       | XXX                                 | XXX           | XXX                   | Report        | XXX           | XXX              | 1/6 months                                   | Grab                 |
| Oil and Grease               | XXX                                 | XXX           | XXX                   | Report        | XXX           | XXX              | 1/6 months                                   | Grab                 |

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Outfall 004

**PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS**

I. E. For Outfall 008, Latitude 40° 20' 15.90", Longitude 78° 24' 22.70", River Mile Index \_\_\_\_\_, Stream Code \_\_\_\_\_

Receiving Waters: Halter Creek

Type of Effluent: Stormwater

1. The permittee is authorized to discharge during the period from **March 1, 2017** through **February 28, 2022**.
2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

| Parameter                    | Effluent Limitations                |               |                       |               |               |                  | Monitoring Requirements                      |                      |
|------------------------------|-------------------------------------|---------------|-----------------------|---------------|---------------|------------------|--|----------------------|
|                              | Mass Units (lbs/day) <sup>(1)</sup> |               | Concentrations (mg/L) |               |               |                  | Minimum <sup>(2)</sup> Measurement Frequency | Required Sample Type |
|                              | Average Monthly                     | Daily Maximum | Minimum               | Daily Maximum | Daily Maximum | Instant. Maximum |  |                      |
| pH (S.U.)                    | XXX                                 | XXX           | XXX                   | Report        | XXX           | XXX              | 1/6 months                                   | Grab                 |
| Chemical Oxygen Demand (COD) | XXX                                 | XXX           | XXX                   | Report        | XXX           | XXX              | 1/6 months                                   | Grab                 |
| Total Suspended Solids       | XXX                                 | XXX           | XXX                   | Report        | XXX           | XXX              | 1/6 months                                   | Grab                 |
| Oil and Grease               | XXX                                 | XXX           | XXX                   | Report        | XXX           | XXX              | 1/6 months                                   | Grab                 |

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Outfall 008



**PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS**

I. F. For Outfall 009, Latitude 40° 20' 6.20", Longitude 78° 24' 27.00", River Mile Index \_\_\_\_\_, Stream Code \_\_\_\_\_

Receiving Waters: Halter Creek

Type of Effluent: Stormwater

1. The permittee is authorized to discharge during the period from **March 1, 2017** through **February 28, 2022**.
2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

| Parameter                    | Effluent Limitations                |               |                       |               |               |                  | Monitoring Requirements                      |                      |
|------------------------------|-------------------------------------|---------------|-----------------------|---------------|---------------|------------------|--|----------------------|
|                              | Mass Units (lbs/day) <sup>(1)</sup> |               | Concentrations (mg/L) |               |               |                  | Minimum <sup>(2)</sup> Measurement Frequency | Required Sample Type |
|                              | Average Monthly                     | Daily Maximum | Minimum               | Daily Maximum | Daily Maximum | Instant. Maximum |  |                      |
| pH (S.U.)                    | XXX                                 | XXX           | XXX                   | Report        | XXX           | XXX              | 1/6 months                                   | Grab                 |
| Chemical Oxygen Demand (COD) | XXX                                 | XXX           | XXX                   | Report        | XXX           | XXX              | 1/6 months                                   | Grab                 |
| Total Suspended Solids       | XXX                                 | XXX           | XXX                   | Report        | XXX           | XXX              | 1/6 months                                   | Grab                 |
| Oil and Grease               | XXX                                 | XXX           | XXX                   | Report        | XXX           | XXX              | 1/6 months                                   | Grab                 |

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Outfall 009

**PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS**

I. G. For Outfall 010, Latitude 40° 20' 6.10", Longitude 78° 24' 27.70", River Mile Index \_\_\_\_\_, Stream Code \_\_\_\_\_

Receiving Waters: Halter Creek

Type of Effluent: Stormwater

1. The permittee is authorized to discharge during the period from **March 1, 2017** through **February 28, 2022**.
2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

| Parameter                    | Effluent Limitations                |               |                       |               |               |                  | Monitoring Requirements                      |                      |
|------------------------------|-------------------------------------|---------------|-----------------------|---------------|---------------|------------------|--|----------------------|
|                              | Mass Units (lbs/day) <sup>(1)</sup> |               | Concentrations (mg/L) |               |               |                  | Minimum <sup>(2)</sup> Measurement Frequency | Required Sample Type |
|                              | Average Monthly                     | Daily Maximum | Minimum               | Daily Maximum | Daily Maximum | Instant. Maximum |  |                      |
| pH (S.U.)                    | XXX                                 | XXX           | XXX                   | Report        | XXX           | XXX              | 1/6 months                                   | Grab                 |
| Chemical Oxygen Demand (COD) | XXX                                 | XXX           | XXX                   | Report        | XXX           | XXX              | 1/6 months                                   | Grab                 |
| Total Suspended Solids       | XXX                                 | XXX           | XXX                   | Report        | XXX           | XXX              | 1/6 months                                   | Grab                 |
| Oil and Grease               | XXX                                 | XXX           | XXX                   | Report        | XXX           | XXX              | 1/6 months                                   | Grab                 |

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Outfall 010

**PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS  
(Continued)**

Additional Requirements

The permittee may not discharge:

1. Floating solids, scum, sheen or substances that result in observed deposits in the receiving water. (25 Pa Code § 92a.41(c))
2. Oil and grease in amounts that cause a film or sheen upon or discoloration of the waters of this Commonwealth or adjoining shoreline, or that exceed 15 mg/l as a daily average or 30 mg/l at any time (or lesser amounts if specified in this permit). (25 Pa. Code § 92a.47(a)(7), § 95.2(2))
3. Substances in concentration or amounts sufficient to be inimical or harmful to the water uses to be protected or to human, animal, plant or aquatic life. (25 Pa Code § 93.6(a))
4. Foam or substances that produce an observed change in the color, taste, odor or turbidity of the receiving water, unless those conditions are otherwise controlled through effluent limitations or other requirements in this permit. For the purpose of determining compliance with this condition, DEP will compare conditions in the receiving water upstream of the discharge to conditions in the receiving water approximately 100 feet downstream of the discharge to determine if there is an observable change in the receiving water. (25 Pa Code § 92a.41(c))

Footnotes

- (1) When sampling to determine compliance with mass effluent limitations, the discharge flow at the time of sampling must be measured and recorded.
- (2) This is the minimum number of sampling events required. Permittees are encouraged, and it may be advantageous in demonstrating compliance, to perform more than the minimum number of sampling events.
- (3) Downstream monitoring shall be done at a representative compliance location from outfall 001
- (4) If EPA promulgates effluent limitations guidelines and standards for COD, the permit will be reopened and limitations included as appropriate.
- (5) The COD influent monitoring point is defined as the primary influent line. Which is at the bar screen at the treatment plant headworks, and the first and second stage bleach plant effluent
- (6) Flow is to be recorded as the combined daily flows of the first stage and second stage bleach plants

Supplemental Information

The effluent limitations for Outfall 001 were determined using an effluent discharge rate of 4.84 MGD.

**PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS**

I. H. For Outfall 001, Latitude 40° 22' 44.36", Longitude 78° 24' 57.16", River Mile Index 4.84, Stream Code 16061

Receiving Waters: Frankstown Branch Juniata River

Type of Effluent: IW Process Effluent with ELG

1. The permittee is authorized to discharge during the period from **March 1, 2017** through **February 28, 2022**.
2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

| Parameter                     | Effluent Limitations                |        |                       |                 |         |                  | Monitoring Requirements                      |                      |
|-------------------------------|-------------------------------------|--------|-----------------------|-----------------|---------|------------------|--|----------------------|
|                               | Mass Units (lbs/day) <sup>(1)</sup> |        | Concentrations (mg/L) |                 |         |                  | Minimum <sup>(2)</sup> Measurement Frequency | Required Sample Type |
|                               | Monthly                             | Annual | Monthly               | Monthly Average | Maximum | Instant. Maximum |  |                      |
| Ammonia--N                    | Report                              | Report | XXX                   | Report          | XXX     | XXX              | 1/day  | 24-Hr Composite      |
| Kjeldahl—N (Intake)           | Report                              | XXX    | XXX                   | Report          | XXX     | XXX              | 2/week                                       | 24-Hr Composite      |
| Kjeldahl--N                   | Report                              | XXX    | XXX                   | Report          | XXX     | XXX              | 2/week                                       | 24-Hr Composite      |
| Nitrate-Nitrite as N (Intake) | Report                              | XXX    | XXX                   | Report          | XXX     | XXX              | 2/week                                       | 24-Hr Composite      |
| Nitrate-Nitrite as N          | Report                              | XXX    | XXX                   | Report          | XXX     | XXX              | 2/week                                       | 24-Hr Composite      |
| Total Nitrogen (Intake)       | Report                              | Report | XXX                   | Report          | XXX     | XXX              | 1/month                                      | Calculation          |
| Total Nitrogen                | Report                              | Report | XXX                   | Report          | XXX     | XXX              | 1/month                                      | Calculation          |
| Total Phosphorus (Intake)     | Report                              | Report | XXX                   | Report          | XXX     | XXX              | 2/week                                       | 24-Hr Composite      |
| Total Phosphorus              | Report                              | Report | XXX                   | Report          | XXX     | XXX              | 2/week                                       | 24-Hr Composite      |
| Net Total Nitrogen            | Report                              | 61,666 | XXX                   | XXX             | XXX     | XXX              | 1/month                                      | Calculation          |
| Net Total Phosphorus          | Report                              | 7,367  | XXX                   | XXX             | XXX     | XXX              | 1/month                                      | Calculation          |

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

At intake for intake parameters and at Parshall flume for the rest of the parameters

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Footnotes:

- (1) See Part C for Chesapeake Bay Requirements.
- (2) This is the minimum number of sampling events required. Permittees are encouraged, and it may be advantageous in demonstrating compliance, to perform more than the minimum number of sampling events required.

## II. DEFINITIONS

*At Outfall (XXX)* means a sampling location in outfall line XXX below the last point at which wastes are added to outfall line (XXX), or where otherwise specified.

*Average* refers to the use of an arithmetic mean, unless otherwise specified in this permit. (40 CFR 122.41(l)(4)(iii))

*Best Management Practices (BMPs)* means schedules of activities, prohibitions of practices, maintenance procedures and other management practices to prevent or reduce the pollutant loading to surface waters of the Commonwealth. The term also includes treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. The term includes activities, facilities, measures, planning or procedures used to minimize accelerated erosion and sedimentation and manage stormwater to protect, maintain, reclaim, and restore the quality of waters and the existing and designated uses of waters within this Commonwealth before, during and after earth disturbance activities. (25 Pa. Code § 92a.2)

*Bypass* means the intentional diversion of waste streams from any portion of a treatment facility. (40 CFR 122.41(m)(1)(i))

*Calendar Week* is defined as the seven consecutive days from Sunday through Saturday, unless the permittee has been given permission by DEP to provide weekly data as Monday through Friday based on showing excellent performance of the facility and a history of compliance. In cases when the week falls in two separate months, the month with the most days in that week shall be the month for reporting.

*Clean Water Act* means the Federal Water Pollution Control Act, as amended. (33 U.S.C.A. §§ 1251 to 1387).

*Chemical Additive* means a chemical product (including products of disassociation and degradation, collectively "products") introduced into a waste stream that is used for cleaning, disinfecting, or maintenance and which may be detected in effluent discharged to waters of the Commonwealth. The term generally excludes chemicals used for neutralization of waste streams, the production of goods, and treatment of wastewater.

*Composite Sample* (for all except GC/MS volatile organic analysis) means a combination of individual samples (at least eight for a 24-hour period or four for an 8-hour period) of at least 100 milliliters (mL) each obtained at spaced time intervals during the compositing period. The composite must be flow-proportional; either the volume of each individual sample is proportional to discharge flow rates, or the sampling interval is proportional to the flow rates over the time period used to produce the composite. (EPA Form 2C)

*Composite Sample* (for GC/MS volatile organic analysis) consists of at least four aliquots or grab samples collected during the sampling event (not necessarily flow proportioned). A separate analysis should be performed for each sample and the results should be averaged.

*Daily Average Temperature* means the average of all temperature measurements made, or the mean value plot of the record of a continuous automated temperature recording instrument, either during a calendar day or during the operating day if flows are of a shorter duration.

*Daily Discharge* means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day. (25 Pa. Code § 92a.2, 40 CFR 122.2)

*Daily Maximum Discharge Limitation* means the highest allowable "daily discharge."

*Discharge Monitoring Report (DMR)* means the DEP or EPA supplied form(s) for the reporting of self-monitoring results by the permittee. (25 Pa. Code § 92a.2, 40 CFR 122.2)

**Estimated Flow** means any method of liquid volume measurement based on a technical evaluation of the sources contributing to the discharge including, but not limited to, pump capabilities, water meters and batch discharge volumes.

**Geometric Mean** means the average of a set of n sample results given by the nth root of their product.

**Grab Sample** means an individual sample of at least 100 mL collected at a randomly selected time over a period not to exceed 15 minutes. (EPA Form 2C)

**Hazardous Substance** means any substance designated under 40 CFR Part 116 pursuant to Section 311 of the Clean Water Act. (40 CFR 122.2)

**Hauled-In Wastes** means any waste that is introduced into a treatment facility through any method other than a direct connection to the wastewater collection system. The term includes wastes transported to and disposed of within the treatment facility or other entry points within the collection system.

**Immersion Stabilization** (i-s) means a calibrated device is immersed in the wastewater until the reading is stabilized.

**Instantaneous Maximum Effluent Limitation** means the highest allowable discharge of a concentration or mass of a substance at any one time as measured by a grab sample. (25 Pa. Code § 92a.2)

**Measured Flow** means any method of liquid volume measurement, the accuracy of which has been previously demonstrated in engineering practice, or for which a relationship to absolute volume has been obtained.

**Monthly Average Discharge Limitation** means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month. (25 Pa. Code § 92a.2)

**Municipal Waste** means garbage, refuse, industrial lunchroom or office waste and other material, including solid, liquid, semisolid or contained gaseous material resulting from operation of residential, municipal, commercial or institutional establishments and from community activities; and sludge not meeting the definition of residual or hazardous waste under this section from a municipal, commercial or institutional water supply treatment plant, waste water treatment plant or air pollution control facility. (25 Pa. Code § 271.1)

**Non-contact Cooling Water** means water used to reduce temperature which does not come in direct contact with any raw material, intermediate product, waste product (other than heat), or finished product.

**Residual Waste** means garbage, refuse, other discarded material or other waste, including solid, liquid, semisolid or contained gaseous materials resulting from industrial, mining and agricultural operations and sludge from an industrial, mining or agricultural water supply treatment facility, wastewater treatment facility or air pollution control facility, if it is not hazardous. The term does not include coal refuse as defined in the Coal Refuse Disposal Control Act. The term does not include treatment sludges from coal mine drainage treatment plants, disposal of which is being carried on under and in compliance with a valid permit issued under the Clean Streams Law. (25 Pa Code § 287.1)

**Severe Property Damage** means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 CFR 122.41(m)(1)(ii))

**Stormwater** means the runoff from precipitation, snow melt runoff, and surface runoff and drainage. (25 Pa. Code § 92a.2)

**Stormwater Associated With Industrial Activity** means the discharge from any conveyance that is used for collecting and conveying stormwater and that is directly related to manufacturing, processing, or raw materials storage areas at an industrial plant, and as defined at 40 CFR 122.26(b)(14) (i) - (ix) & (xi) and 25 Pa. Code § 92a.2.

*Total Dissolved Solids* means the total dissolved (filterable) solids as determined by use of the method specified in 40 CFR Part 136.

*Toxic Pollutant* means those pollutants, or combinations of pollutants, including disease-causing agents, which after discharge and upon exposure, ingestion, inhalation or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains may, on the basis of information available to DEP cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions, including malfunctions in reproduction, or physical deformations in these organisms or their offspring. (25 Pa. Code § 92a.2)



### III. SELF-MONITORING, REPORTING AND RECORDKEEPING

#### A. Representative Sampling

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity (40 CFR 122.41(j)(1)). Representative sampling includes the collection of samples, where possible, during periods of adverse weather, changes in treatment plant performance and changes in treatment plant loading. If possible, effluent samples must be collected where the effluent is well mixed near the center of the discharge conveyance and at the approximate mid-depth point, where the turbulence is at a maximum and the settlement of solids is minimized. (40 CFR 122.48, 25 Pa. Code § 92a.61)
2. Records Retention (40 CFR 122.41(j)(2))

Except for records of monitoring information required by this permit related to the permittee's sludge use and disposal activities which shall be retained for a period of at least 5 years, all records of monitoring activities and results (including all original strip chart recordings for continuous monitoring instrumentation and calibration and maintenance records), copies of all reports required by this permit, and records of all data used to complete the application for this permit shall be retained by the permittee for 3 years from the date of the sample measurement, report or application, unless a longer retention period is required by the permit. The 3-year period shall be extended as requested by DEP or the EPA Regional Administrator.

3. Recording of Results (40 CFR 122.41(j)(3))

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

- a. The exact place, date and time of sampling or measurements.
- b. The person(s) who performed the sampling or measurements.
- c. The date(s) the analyses were performed.
- d. The person(s) who performed the analyses.
- e. The analytical techniques or methods used; and the associated detection level.
- f. The results of such analyses.

4. Test Procedures

- a. Facilities that test or analyze environmental samples used to demonstrate compliance with this permit shall be in compliance with laboratory accreditation requirements of Act 90 of 2002 (27 Pa. C.S. §§ 4101-4113) and 25 Pa. Code Chapter 252, relating to environmental laboratory accreditation.
- b. Test procedures (methods) for the analysis of pollutants or pollutant parameters shall be those approved under 40 CFR Part 136 or required under 40 CFR Chapter I, Subchapters N or O, unless the method is specified in this permit or has been otherwise approved in writing by DEP. (40 CFR 122.41(j)(4), 122.44(i)(1)(iv))
- c. Test procedures (methods) for the analysis of pollutants or pollutant parameters shall be sufficiently sensitive. A method is sufficiently sensitive when 1) the method minimum level is at or below the level of the effluent limit established in the permit for the measured pollutant or pollutant parameter; or 2) the method has the lowest minimum level of the analytical methods approved under 40 CFR Part 136 or required under 40 CFR Chapter I, Subchapters N or O, for the measured pollutant or pollutant parameter; or 3) the method is specified in this permit or has been otherwise approved in writing by DEP for the measured pollutant or pollutant parameter. Permittees have the option of providing matrix or sample-specific minimum levels rather than the published levels. (40 CFR 122.44(i)(1)(iv))

5. Quality/Assurance/Control

In an effort to assure accurate self-monitoring analyses results:

- a. The permittee, or its designated laboratory, shall participate in the periodic scheduled quality assurance inspections conducted by DEP and EPA. (40 CFR 122.41(e), 122.41(i)(3))
- b. The permittee, or its designated laboratory, shall develop and implement a program to assure the quality and accurateness of the analyses performed to satisfy the requirements of this permit, in accordance with 40 CFR Part 136. (40 CFR 122.41(j)(4))

B. Reporting of Monitoring Results

1. The permittee shall effectively monitor the operation and efficiency of all wastewater treatment and control facilities, and the quantity and quality of the discharge(s) as specified in this permit. (40 CFR 122.41(e), 122.44(i)(1))
2. Discharge Monitoring Reports (DMRs) must be completed in accordance with DEP's published DMR Instructions (3800-FM-BPNPSM0463). DMRs are based on calendar reporting periods unless Part C of this permit requires otherwise. DMR(s) must be received by the agency(ies) specified in paragraph 3 below in accordance with the following schedule:
  - Monthly DMRs must be received within 28 days following the end of each calendar month.
  - Quarterly DMRs must be received within 28 days following the end of each calendar quarter, i.e., January 28, April 28, July 28, and October 28.
  - Semiannual DMRs must be received within 28 days following the end of each calendar semiannual period, i.e., January 28 and July 28.
  - Annual DMRs must be received by January 28, unless Part C of this permit requires otherwise.
3. The permittee shall complete all Supplemental Reporting forms (Supplemental DMRs) provided by DEP in this permit (or an approved equivalent), and submit the signed, completed forms as an attachment to the DMR(s). If the permittee elects to use DEP's electronic DMR (eDMR) system, one electronic submission may be made for DMRs and Supplemental DMRs. If paper forms are used, the completed forms shall be mailed to:

**Department of Environmental Protection**  
**Clean Water Program**  
909 Elmerton Avenue  
Harrisburg, PA 17110-8200

**NPDES Enforcement Branch (3WP42)**  
**Office of Permits**  
**Water Protection Division**  
**U.S. EPA - Region III**  
1650 Arch Street  
Philadelphia, PA 19103-2029

4. If the permittee elects to begin using DEP's eDMR system to submit DMRs required by the permit, the permittee shall, to assure continuity of business operations, continue using the eDMR system to submit all DMRs and Supplemental Reports required by the permit, unless the following steps are completed to discontinue use of eDMR:

- a. The permittee shall submit written notification to the regional office that issued the permit that it intends to discontinue use of eDMR. The notification shall be signed by a principal executive officer or authorized agent of the permittee.
  - b. The permittee shall continue using eDMR until the permittee receives written notification from DEP's Central Office that the facility has been removed from the eDMR system, and electronic report submissions are no longer expected.
5. The completed DMR Form shall be signed and certified by either of the following applicable persons, as defined in 25 Pa. Code § 92a.22:
- For a corporation - by a principal executive officer of at least the level of vice president, or an authorized representative, if the representative is responsible for the overall operation of the facility from which the discharge described in the NPDES form originates.
  - For a partnership or sole proprietorship - by a general partner or the proprietor, respectively.
  - For a municipality, state, federal or other public agency - by a principal executive officer or ranking elected official.

If signed by a person other than the above, written notification of delegation of DMR signatory authority must be submitted to DEP in advance of or along with the relevant DMR form. (40 CFR 122.22(b))

6. If the permittee monitors any pollutant at monitoring points as designated by this permit, using analytical methods described in Part A III.A.4. herein, more frequently than the permit requires, the results of this monitoring shall be incorporated, as appropriate, into the calculations used to report self-monitoring data on the DMR. (40 CFR 122.41(l)(4)(ii))

### C. Reporting Requirements

1. Planned Changes to Physical Facilities – The permittee shall give notice to DEP as soon as possible but no later than 30 days prior to planned physical alterations or additions to the permitted facility. A permit under 25 Pa. Code Chapter 91 may be required for these situations prior to implementing the planned changes. A permit application, or other written submission to DEP, can be used to satisfy the notification requirements of this section.

Notice is required when:

- a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b). (40 CFR 122.41(l)(1)(i))
  - b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are not subject to effluent limitations in this permit. (40 CFR 122.41(l)(1)(ii))
  - c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. (40 CFR 122.41(l)(1)(iii))
  - d. The planned change may result in noncompliance with permit requirements. (40 CFR 122.41(l)(2))
2. Planned Changes to Waste Stream – Under the authority of 25 Pa. Code § 92a.24(a), the permittee shall provide notice to DEP as soon as possible but no later than 45 days prior to any changes in the volume or pollutant concentration of its influent waste stream as a result of indirect discharges or hauled-in wastes, as specified in paragraphs 2.a. and 2.b., below. Notice shall be provided on the “Planned Changes to Waste Stream” Supplemental Report (3800-FM-BPNPSM0482), available on DEP’s website. The permittee shall provide information on the quality and quantity of waste introduced into the

facility, and any anticipated impact of the change on the quantity or quality of effluent to be discharged from the facility. The Report shall be sent via Certified Mail or other means to confirm DEP's receipt of the notification. DEP will determine if the submission of a new application and receipt of a new or amended permit is required.

a. Introduction of New Pollutants (25 Pa. Code § 92a.24(a))

New pollutants are defined as parameters that meet all of the following criteria:

- (i) Were not detected in the facilities' influent waste stream as reported in the permit application; and
- (ii) Have not been approved to be included in the permittee's influent waste stream by DEP in writing.

The permittee shall provide notification of the introduction of new pollutants in accordance with paragraph 2 above. The permittee may not authorize the introduction of new pollutants until the permittee receives DEP's written approval.

b. Increased Loading of Approved Pollutants (25 Pa. Code § 92a.24(a))

Approved pollutants are defined as parameters that meet one or more of the following criteria:

- (i) Were detected in the facilities' influent waste stream as reported in the permittee's permit application; or
- (ii) Have been approved to be included in the permittee's influent waste stream by DEP in writing; or
- (iii) Have an effluent limitation or monitoring requirement in this permit.

The permittee shall provide notification of the introduction of increased influent loading (lbs/day) of approved pollutants in accordance with paragraph 2 above when (1) the cumulative increase in influent loading (lbs/day) exceeds 20% of the maximum loading reported in the permit application, or a loading previously approved by DEP, or (2) may cause an exceedance in the effluent of Effluent Limitation Guidelines (ELGs) or limitations in Part A of this permit, or (3) may cause interference or pass through at the facility, or (4) may cause exceedances of the applicable water quality standards in the receiving stream. Unless specified otherwise in this permit, if DEP does not respond to the notification within 30 days of its receipt, the permittee may proceed with the increase in loading. The acceptance of increased loading of approved pollutants may not result in an exceedance of ELGs or effluent limitations and may not cause exceedances of the applicable water quality standards in the receiving stream.

3. Reporting Requirements for Hauled-In Wastes

a. Receipt of Residual Waste

- (i) The permittee shall document the receipt of all hauled-in residual wastes (including but not limited to wastewater from oil and gas wells, food processing waste, and landfill leachate), as defined at 25 Pa. Code § 287.1, that are received for processing at the treatment facility. The permittee shall report hauled-in residual wastes on a monthly basis to DEP on the "Hauled In Residual Wastes" Supplemental Report (3800-FM-BPNPSM0450) as an attachment to the DMR. If no residual wastes were received during a month, submission of the Supplemental Report is not required.

The following information is required by the Supplemental Report. The information used to develop the Report shall be retained by the permittee for five years from the date of receipt and must be made available to DEP or EPA upon request.

- (1) The dates that residual wastes were received.
- (2) The volume (gallons) of wastes received.
- (3) The license plate number of the vehicle transporting the waste to the treatment facility.
- (4) The permit number(s) of the well(s) where residual wastes were generated, if applicable.
- (5) The name and address of the generator of the residual wastes.
- (6) The type of wastewater.

The transporter of residual waste must maintain these and other records as part of the daily operational record (25 Pa. Code § 299.219). If the transporter is unable to provide this information or the permittee has not otherwise received the information from the generator, the residual wastes shall not be accepted by the permittee until such time as the permittee receives such information from the transporter or generator.

- (ii) The following conditions apply to the characterization of residual wastes received by the permittee:
  - (1) If the generator is required to complete a chemical analysis of residual wastes in accordance with 25 Pa. Code § 287.51, the permittee must receive and maintain on file a chemical analysis of the residual wastes it receives. The chemical analysis must conform to the Bureau of Waste Management's Form 26R except as noted in paragraph (2), below. Each load of residual waste received must be covered by a chemical analysis if the generator is required to complete it.
  - (2) For wastewater generated from hydraulic fracturing operations ("frac wastewater") within the first 30 production days of a well site, the chemical analysis may be a general frac wastewater characterization approved by DEP. Thereafter, the chemical analysis must be waste-specific and be reported on the Form 26R.

b. Receipt of Municipal Waste

- (i) The permittee shall document the receipt of all hauled-in municipal wastes (including but not limited to septage and liquid sewage sludge), as defined at 25 Pa. Code § 271.1, that are received for processing at the treatment facility. The permittee shall report hauled-in municipal wastes on a monthly basis to DEP on the "Hauled In Municipal Wastes" Supplemental Report (3800-FM-BPNPSM0437) as an attachment to the DMR. If no municipal wastes were received during a month, submission of the Supplemental Report is not required.

The following information is required by the Supplemental Report:

- (1) The dates that municipal wastes were received.
  - (2) The volume (gallons) of wastes received.
  - (3) The BOD<sub>5</sub> concentration (mg/l) and load (lbs) for the wastes received.
  - (4) The location(s) where wastes were disposed of within the treatment facility.
- (ii) Sampling and analysis of hauled-in municipal wastes must be completed to characterize the organic strength of the wastes, unless composite sampling of influent wastewater is performed at a location downstream of the point of entry for the wastes.

4. Unanticipated Noncompliance or Potential Pollution Reporting

- a. Immediate Reporting - The permittee shall immediately report any incident causing or threatening pollution in accordance with the requirements of 25 Pa. Code §§ 91.33 and 92a.41(b).
- (i) If, because of an accident, other activity or incident a toxic substance or another substance which would endanger users downstream from the discharge, or would otherwise result in pollution or create a danger of pollution or would damage property, the permittee shall immediately notify DEP by telephone of the location and nature of the danger. Oral notification to the Department is required as soon as possible, but no later than 4 hours after the permittee becomes aware of the incident causing or threatening pollution.
  - (ii) If reasonably possible to do so, the permittee shall immediately notify downstream users of the waters of the Commonwealth to which the substance was discharged. Such notice shall include the location and nature of the danger.
  - (iii) The permittee shall immediately take or cause to be taken steps necessary to prevent injury to property and downstream users of the waters from pollution or a danger of pollution and, in addition, within 15 days from the incident, shall remove the residual substances contained thereon or therein from the ground and from the affected waters of this Commonwealth to the extent required by applicable law.
- b. The permittee shall report any noncompliance which may endanger health or the environment in accordance with the requirements of 40 CFR 122.41(l)(6). These requirements include the following obligations:
- (i) 24 Hour Reporting - The permittee shall orally report any noncompliance with this permit which may endanger health or the environment within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which must be reported within 24 hours under this paragraph:
    - (1) Any unanticipated bypass which exceeds any effluent limitation in the permit;
    - (2) Any upset which exceeds any effluent limitation in the permit; and
    - (3) Violation of the maximum daily discharge limitation for any of the pollutants listed in the permit as being subject to the 24-hour reporting requirement. (40 CFR 122.44(g))
  - (ii) Written Report - A written submission shall also be provided within 5 days of the time the permittee becomes aware of any noncompliance which may endanger health or the environment. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.
  - (iii) Waiver of Written Report - DEP may waive the written report on a case-by-case basis if the associated oral report has been received within 24 hours from the time the permittee becomes aware of the circumstances which may endanger health or the environment. Unless such a waiver is expressly granted by DEP, the permittee shall submit a written report in accordance with this paragraph. (40 CFR 122.41(l)(6)(iii))

5. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under paragraph C.4 of this section or specific requirements of compliance schedules, at the time DMRs are submitted, on the Non-Compliance Reporting Form (3800-FM-BPNPSM0440). The reports shall contain the information listed in paragraph C.4.b.(ii) of this section. (40 CFR 122.41(l)(7))

- D. Specific Toxic Pollutant Notification Levels (for Manufacturing, Commercial, Mining, and Silvicultural Direct Dischargers) - The permittee shall notify DEP as soon as it knows or has reason to believe the following: (40 CFR 122.42(a))
1. That any activity has occurred, or will occur, which would result in the discharge of any toxic pollutant which is not limited in this permit, if that discharge on a routine or frequent basis will exceed the highest of the following "notification levels": (40 CFR 122.42(a)(1))
    - a. One hundred micrograms per liter.
    - b. Two hundred micrograms per liter for acrolein and acrylonitrile.
    - c. Five hundred micrograms per liter for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol.
    - d. One milligram per liter for antimony.
    - e. Five times the maximum concentration value reported for that pollutant in this permit application.
    - f. Any other notification level established by DEP.
  2. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following "notification levels": (40 CFR 122.42(a)(2))
    - a. Five hundred micrograms per liter.
    - b. One milligram per liter for antimony.
    - c. Ten times the maximum concentration value reported for that pollutant in the permit application.
    - d. Any other notification level established by DEP.

**PART B**

**I. MANAGEMENT REQUIREMENTS**

A. Compliance

1. The permittee shall comply with all conditions of this permit. If a compliance schedule has been established in this permit, the permittee shall achieve compliance with the terms and conditions of this permit within the time frames specified in this permit. (40 CFR 122.41(a)(1))
2. The permittee shall submit reports of compliance or noncompliance, or progress reports as applicable, for any interim and final requirements contained in this permit. Such reports shall be submitted no later than 14 days following the applicable schedule date or compliance deadline. (25 Pa. Code § 92a.51(c), 40 CFR 122.47(a)(4))

B. Permit Modification, Termination, or Revocation and Reissuance

1. This permit may be modified, terminated, or revoked and reissued during its term in accordance with Title 25 Pa. Code § 92a.72 and 40 CFR 122.41(f).
2. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition. (40 CFR 122.41(f))
3. In the absence of DEP action to modify or revoke and reissue this permit, the permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time specified in the regulations that establish those standards or prohibitions. (40 CFR 122.41(a)(1))

C. Duty to Provide Information

1. The permittee shall furnish to DEP, within a reasonable time, any information which DEP may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. (40 CFR 122.41(h))
2. The permittee shall furnish to DEP, upon request, copies of records required to be kept by this permit. (40 CFR 122.41(h))
3. Other Information - Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to DEP, it shall promptly submit the correct and complete facts or information. (40 CFR 122.41(l)(8))

D. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes, but is not limited to, adequate laboratory controls including appropriate quality assurance procedures. This provision also includes the operation of backup or auxiliary facilities or similar systems that are installed by the permittee, only when necessary to achieve compliance with the terms and conditions of this permit. (40 CFR 122.41(e))

E. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge, sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment. (40 CFR 122.41(d))

F. Bypassing



1. Bypassing Not Exceeding Permit Limitations - The permittee may allow a bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions in paragraphs two, three and four of this section. (40 CFR 122.41(m)(2))
2. Other Bypassing - In all other situations, bypassing is prohibited and DEP may take enforcement action against the permittee for bypass unless:
  - a. A bypass is unavoidable to prevent loss of life, personal injury or "severe property damage." (40 CFR 122.41(m)(4)(i)(A))
  - b. There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance. (40 CFR 122.41(m)(4)(i)(B))
  - c. The permittee submitted the necessary notice required in F.4.a. and b. below. (40 CFR 122.41(m)(4)(i)(C))
3. DEP may approve an anticipated bypass, after considering its adverse effects, if DEP determines that it will meet the conditions listed in F.2. above. (40 CFR 122.41(m)(4)(ii))
4. Notice
  - a. Anticipated Bypass – If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least 10 days before the bypass. (40 CFR 122.41(m)(3)(i))
  - c. Unanticipated Bypass – The permittee shall submit oral notice of any other unanticipated bypass within 24 hours, regardless of whether the bypass may endanger health or the environment or whether the bypass exceeds effluent limitations. The notice shall be in accordance with Part A III.C.4.b.

## II. PENALTIES AND LIABILITY

### A. Violations of Permit Conditions

Any person violating Sections 301, 302, 306, 307, 308, 318 or 405 of the Clean Water Act or any permit condition or limitation implementing such sections in a permit issued under Section 402 of the Act is subject to civil, administrative and/or criminal penalties as set forth in 40 CFR 122.41(a)(2).

Any person or municipality, who violates any provision of this permit; any rule, regulation or order of DEP; or any condition or limitation of any permit issued pursuant to the Clean Streams Law, is subject to criminal and/or civil penalties as set forth in Sections 602, 603 and 605 of the Clean Streams Law.

### B. Falsifying Information

Any person who does any of the following:

- Falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit, or
- Knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit (including monitoring reports or reports of compliance or noncompliance)

Shall, upon conviction, be punished by a fine and/or imprisonment as set forth in 18 Pa.C.S.A § 4904 and 40 CFR 122.41(j)(5) and (k)(2).

C. Liability

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance pursuant to Section 309 of the Clean Water Act or Sections 602, 603 or 605 of the Clean Streams Law.

Nothing in this permit shall be construed to preclude the institution of any legal action or to relieve the permittee from any responsibilities, liabilities or penalties to which the permittee is or may be subject to under the Clean Water Act and the Clean Streams Law.

D. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (40 CFR 122.41(c))

**III. OTHER RESPONSIBILITIES**

A. Right of Entry

Pursuant to Sections 5(b) and 305 of Pennsylvania's Clean Streams Law, and Title 25 Pa. Code Chapter 92a and 40 CFR 122.41(i), the permittee shall allow authorized representatives of DEP and EPA, upon the presentation of credentials and other documents as may be required by law:

1. To enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit; (40 CFR 122.41(i)(1))
2. To have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit; (40 CFR 122.41(i)(2))
3. To inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this permit; and (40 CFR 122.41(i)(3))
4. To sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act or the Clean Streams Law, any substances or parameters at any location. (40 CFR 122.41(i)(4))

B. Transfer of Permits

1. Transfers by modification. Except as provided in paragraph 2 of this section, a permit may be transferred by the permittee to a new owner or operator only if this permit has been modified or revoked and reissued, or a minor modification made to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act. (40 CFR 122.61(a))
2. Automatic transfers. As an alternative to transfers under paragraph 1 of this section, any NPDES permit may be automatically transferred to a new permittee if:
  - a. The current permittee notifies DEP at least 30 days in advance of the proposed transfer date in paragraph 2.b. of this section; (40 CFR 122.61(b)(1))
  - b. The notice includes the appropriate DEP transfer form signed by the existing and new permittees containing a specific date for transfer of permit responsibility, coverage and liability between them; (40 CFR 122.61(b)(2))

- c. DEP does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue this permit, the transfer is effective on the date specified in the agreement mentioned in paragraph 2.b. of this section; and (40 CFR 122.61(b)(3))
  - d. The new permittee is in compliance with existing DEP issued permits, regulations, orders and schedules of compliance, or has demonstrated that any noncompliance with the existing permits has been resolved by an appropriate compliance action or by the terms and conditions of the permit (including compliance schedules set forth in the permit), consistent with 25 Pa. Code § 92a.51 (relating to schedules of compliance) and other appropriate DEP regulations. (25 Pa. Code § 92a.71)
3. In the event DEP does not approve transfer of this permit, the new owner or operator must submit a new permit application.

C. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege. (40 CFR 122.41(g))

D. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for a new permit. (40 CFR 122.41(b))

E. Other Laws

The issuance of this permit does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations.

**IV. ANNUAL FEES**

Permittees shall pay an annual fee in accordance with 25 Pa. Code § 92a.62. Annual fee amounts are specified in the following schedule and are due on each anniversary of the effective date of the most recent new or reissued permit. All flows identified in the schedule are annual average design flows. (25 Pa. Code 92a.62)

|   |          |
|---|----------|
| Minor IW Facility without ELG (Effluent Limitation Guideline) | \$500    |
| Minor IW Facility with ELG                                    | \$1,500  |
| Major IW Facility < 250 MGD (million gallons per day)         | \$5,000  |
| Major IW Facility ≥ 250 MGD                                   | \$25,000 |
| IW Stormwater Individual Permit                               | \$1,000  |
| CAAP (Concentrated Aquatic Animal Production Facility)        | \$0      |

As of the effective date of this permit, the facility covered by the permit is classified in the following fee category:  
**Major IW Facility <250 MGD.**

Invoices for annual fees will be mailed to permittees approximately three months prior to the due date. In the event that an invoice is not received, the permittee is nonetheless responsible for payment. Throughout a five year permit term, permittees will pay four annual fees followed by a permit renewal application fee in the last year of permit coverage. Permittees may contact the DEP at 717-787-6744 with questions related to annual fees. The fees identified above are subject to change in accordance with 25 Pa. Code § 92a.62(e).

Payment for annual fees shall be remitted to DEP at the address below by the anniversary date. Checks should be made payable to the Commonwealth of Pennsylvania.

PA Department of Environmental Protection  
Bureau of Point and Non-Point Source Management  
Re: Chapter 92a Annual Fee  
P.O. Box 8466  
Harrisburg, PA 17105-8466

**PART C**

**I. CHESAPEAKE BAY NUTRIENT REQUIREMENTS**

A. The Annual Net Total Nitrogen (TN) and Annual Net Total Phosphorus (TP) Mass Load effluent limitations (“Cap Loads”) in Part A of this permit are required in order to meet the downstream water quality standards of the State of Maryland, as required by 25 Pa. Code Chapter 92a, the federal Clean Water Act, and implementing regulations.

B. Definitions

**Annual Net Mass Load (lbs):** The sum of Monthly Total Mass Loads for one year beginning October 1<sup>st</sup> and ending September 30<sup>th</sup>, adjusted for credits sold and applied and offsets applied. Annual Net Mass Loads are compared to Cap Loads to determine compliance.

**Cap Load (lbs):** The mass load of a pollutant authorized by an NPDES permit. Cap Loads for TN and TP are implemented in NPDES permits by the establishment of Annual Net Mass Load limits. The term “Net” is used to recognize that Credits and Offsets may be used to comply with the limits. The Annual Net Mass Load must be less than or equal to the Cap Load to achieve compliance.

**Certification:** Written approval by DEP of a proposed pollutant reduction activity to generate credits before the credits are verified and registered to be used to comply with NPDES permit effluent limitations.

**Compliance Year:** The year-long period starting October 1<sup>st</sup> and ending September 30<sup>th</sup>. The Compliance Year will be named for the year in which it ends. For example, the period of October 1, 2015 through September 30, 2016 is compliance year 2016.

**Credit:** The tradable unit of compliance that corresponds with a unit of reduction of a pollutant as recognized by DEP which, when certified, verified and registered, may be used to comply with NPDES permit effluent limitations.

**Delivery Ratio:** A ratio that compensates for the natural attenuation of a pollutant as it travels in water before it reaches a defined compliance point.

**Offset:** The pollutant load reduction measured in pounds (lbs) that is created by an action, activity or technology which when approved by DEP may be used to comply with NPDES permit effluent limitations, conditions and stipulations under 25 Pa. Code Chapter 92a (relating to NPDES permitting, monitoring and compliance.) The offset may only be used by the NPDES permittee that DEP determines is associated with the load reduction achieved by the action, activity or technology.

**Registration:** An accounting mechanism used by DEP to track certified and verified credits before they may be used to comply with NPDES permit effluent limitations.

**Total Mass Load (lbs):**

**Monthly Total Mass Load** = The sum of the actual daily discharge loads for TN and TP (lbs/day) divided by the number of samples per month, multiplied by the number of days in the month in which there was a discharge. The daily discharge load for TN and TP (lbs/day) equals the average daily flow (MGD) on the day of sampling, multiplied by that day’s sample concentration for TN and TP (mg/l), multiplied by 8.34.

**Annual Total Mass Load** = The sum of the Monthly Total Mass Loads for one year beginning October 1<sup>st</sup> and ending September 30<sup>th</sup>.

**Total Nitrogen:** For concentration and load, Total Nitrogen is the sum of Total Kjeldahl-N (TKN) plus Nitrite-Nitrate as N (NO<sub>2</sub>+NO<sub>3</sub>-N), where TKN and NO<sub>2</sub>+NO<sub>3</sub>-N are measured in the same sample.

**Truing Period:** The time provided following each Compliance Year for a permittee to comply with Cap Loads through the application of Credits and Offsets. The Truing Period will start on October 1<sup>st</sup> and end on November 28<sup>th</sup> of the same calendar year, unless DEP extends this period. During this period, compliance for the specified year may be achieved by using registered Credits that were generated during that Compliance Year. For example, Credits that are used to achieve compliance in Compliance Year 2016 must have been generated during Compliance Year 2016. Approved Offsets that have been generated may also be applied during the Truing Period.

**Verification:** Assurance that the verification plan contained in a certification, permit or other approval issued by DEP has been implemented. Verification is required prior to registration of the credits for use in an NPDES permit to comply with NPDES permit effluent limitations.

C. Nutrient Credits

1. Credits may be used for compliance with the Cap Loads when authorized under 25 Pa. Code § 96.8 (Use of offsets and tradable credits from pollution reduction activities in the Chesapeake Bay Watershed), including amendments, updates and revisions thereto; in accordance with DEP's Phase 2 WIP Wastewater Supplement (see [www.depweb.state.pa.us/npdes-bay](http://www.depweb.state.pa.us/npdes-bay)); and in accordance with DEP's Phase 2 WIP Nutrient Trading Supplement (see [www.depweb.state.pa.us/nutrient\\_trading](http://www.depweb.state.pa.us/nutrient_trading)).
2. Where effluent limitations for TN and/or TP are established in Part A of the permit for reasons other than the Cap Load assigned for protection of the Chesapeake Bay ("local nutrient limits"), the permittee may purchase and apply credits for compliance with the Cap Load(s) only when the permittee has demonstrated that local nutrient limits have been achieved.
3. Where local nutrient limits are established in Part A of the permit, the permittee may sell any credits generated only after the permittee has demonstrated that local nutrient limits have been achieved and those credits have been verified in accordance with the procedures established in the Phase 2 WIP Nutrient Trading Supplement.

D. Use of Offsets for Compliance

1. Offsets can only be used by the permittee to comply with its Cap Loads. Offsets are not eligible for use as Credits.
2. Offsets must be approved by DEP in writing before they may be applied for compliance with Cap Loads.
3. Offsets that are approved under this permit are listed in Part A, Footnotes. These Offsets may be applied each Compliance Year toward compliance with the Cap Loads. The application of these Offsets must be reported on an annual basis. Additional Offsets may be approved throughout the permit term.
4. Offsets may be approved for the transfer of load between facilities owned by the same entity if (1) the facility receiving Offsets does not discharge to waters classified as impaired for nutrients and (2) the Delivery Ratios approved by DEP for TN or TP, as applicable, are the same. Delivery ratios for the facility authorized to discharge under this permit are listed in DEP's Phase 2 Watershed Implementation Plan (WIP) Wastewater Supplement, available at the following website:

[www.depweb.state.pa.us/npdes-bay](http://www.depweb.state.pa.us/npdes-bay)

Such Offsets may only be applied in the Compliance Year in which the transfer occurred, and are not cumulative.

5. Industrial facilities that withdraw water from the same stream or water body to which they discharge, and which have intake monitoring requirements in Part A of this permit, may claim Offsets for background nutrient loads of TN and/or TP if the Cap Loads do not include a deduction for background loads. To utilize the Offsets, the permittee must sample the intake and effluent on the same day, and determine mass loading using the actual

flow data for intake and effluent on that day. No Offsets shall be granted for intake nutrients associated with groundwater withdrawals.

#### E. Reporting Requirements

1. eDMR System – The permittee shall utilize DEP’s electronic Discharge Monitoring Report (eDMR) system to submit DMR data and Supplemental DMR forms. Unless the permittee is already using the eDMR system, within 30 days of permit issuance, the permittee shall submit the necessary Registration and Trading Partner Agreement forms to participate in eDMR, and begin using eDMR for submission of DMR data and Supplemental DMR forms when DEP notifies the permittee to begin doing so. The eDMR website is <http://www.dep.state.pa.us/edmr>. Use of eDMR shall continue unless the requirements of Part A III.B.3 are met.
2. DMRs – If a DMR is attached to this permit to report Monthly Total Mass Loads for nutrients, the permittee shall submit the DMR through the eDMR system on a monthly basis by the 28<sup>th</sup> day following the end of a month. In addition, the permittee shall submit Annual DMRs through the eDMR system to report Annual Total Mass Loads and Annual Net Mass Loads for nutrients by November 28<sup>th</sup> following each Compliance Year, unless DEP extends the Truing Period to a later date.
3. Supplemental Reports – The permittee shall utilize DEP’s Annual Chesapeake Bay Spreadsheet (“Spreadsheet”), available at [www.depweb.state.pa.us/npdes-bay](http://www.depweb.state.pa.us/npdes-bay), to record all nutrient concentrations and loads throughout the Compliance Year. The permittee shall also use the Spreadsheet to document all Credits sold and purchased and Offsets applied in order to calculate the facility’s Annual Net Mass Loads for TN and TP. The permittee shall submit the Spreadsheet through the eDMR system at the time the Annual DMR is submitted.

## II. OTHER REQUIREMENTS

- A. The approval herein given is specifically made contingent upon the permittee acquiring all necessary property rights by easement or otherwise, providing for the satisfactory construction, operation, maintenance or replacement of all structures associated with the herein approved discharge in, along, or across private property, with full rights of ingress, egress and regress.
- B. Collected screenings, slurries, sludges, and other solids shall be handled, recycled and/or disposed of in compliance with the Solid Waste Management Act (35 P.S. §§ 6018.101 – 6018.1003), 25 Pa. Code Chapters 287, 288, 289, 291, 295, 297, and 299 (relating to requirements for landfilling, impoundments, land application, composting, processing, and storage of residual waste), Chapters 261a, 262a, 263a, and 270a (related to identification of hazardous waste, requirements for generators and transporters, and hazardous waste, requirements for generators and transporters, and hazardous waste permit programs), federal regulation 40 CFR Part 257, The Clean Streams Law, and the Federal Clean Water Act and its amendments. Screenings collected at intake structures shall be collected and managed and not be returned to the receiving waters.

The permittee is responsible to obtain or assure that contracted agents have all necessary permits and approvals for the handling, storage, transport and disposal of solid waste materials generated as a result of wastewater treatment.

- C. The terms and conditions of Water Quality Management (WQM) permits that may have been issued to the permittee relating to discharge requirements are superseded by this NPDES permit unless otherwise stated herein.
- D. If the applicable standard or effluent guideline limitation relating to the application for Best Available Technology (BAT) Economically Achievable or to Best Conventional Technology (BCT) is developed by DEP or EPA for this type of industry, and if such standard or limitation is more stringent than the corresponding limitations of this permit (or if it controls pollutants not covered by this permit), DEP may modify or revoke and reissue the permit to conform with that standard or limitation.

- E. The permittee shall optimize chlorine dosages used for disinfection or other purposes to minimize the concentration of Total Residual Chlorine (TRC) in the effluent, meet applicable effluent limitations, and reduce the possibility of adversely affecting the receiving waters. Optimization efforts may include an evaluation of wastewater characteristics, mixing characteristics, and contact times, adjustments to process controls, and maintenance of the disinfection facilities. If DEP determines that effluent TRC is causing adverse water quality impacts, DEP may reopen this permit to apply new or more stringent effluent limitations and/or require implementation of control measures or operational practices to eliminate such impacts.

Where the permittee does not use chlorine for primary or backup disinfection, but proposes the use of chlorine for cleaning or other purposes, the permittee shall notify DEP prior to initiating use of chlorine and monitor TRC concentrations in the effluent on each day in which chlorine is used. The results shall be submitted as an attachment to the DMR.

### III. WHOLE EFFLUENT TOXICITY (WET)

#### A. General Requirements

1. The permittee shall conduct Chronic WET tests as specified in this section. The permittee shall collect discharge samples and perform WET tests to generate data for the cladoceran, *Ceriodaphnia dubia* and data for the fathead minnow, *Pimephales promelas*.
2. Samples shall be collected at Outfall 001 in accordance with paragraph E.
3. The permittee shall perform testing using the following dilution series: 9%, 17%, 34%, 67%, and 100% effluent, with a control, where 34% is the facility-specific Target In-Stream Waste Concentration (TIWC).
4. The determination of whether a test endpoint passes or fails shall be made using DEP's WET Analysis Spreadsheet (available at [www.depweb.state.pa.us/wett](http://www.depweb.state.pa.us/wett)) by comparing replicate data for the control with replicate data for the TIWC dilution or any dilution greater than the TIWC.
5. The permittee shall submit only valid WET test results to DEP.

#### B. Test Frequency and Reporting

1. WET testing shall be conducted annually, at a minimum, during the period January 1 – December 31. Annual WET tests must be completed at least 6 months apart, and shall start in the year the permit becomes effective if the permit effective date is prior to October 1.
2. A complete WET test report shall be submitted to the DEP regional office that issued the permit within 45 days of test completion. A complete WET test report submission shall include the information contained in paragraph H, below. The permittee shall continue annual WET monitoring, at a minimum, during the permit renewal review period and during any period of administrative extension of this permit.
3. If a test failure is determined for any endpoint during annual monitoring, the permittee shall initiate a re-test for the species with the failure within 45 days of test completion. All endpoints for the species shall be evaluated in the re-test. The results of the re-test shall be submitted to the DEP regional office that issued the permit.
4. If a passing result is determined for all endpoints in a re-test, the permittee may resume annual monitoring.
5. If there is a failure for one or more endpoints in a re-test, the permittee shall initiate or continue quarterly WET testing for both species until there are four consecutive passing results for all endpoints. The results of all tests shall be submitted to the DEP regional office that issued the permit. In addition, the permittee shall initiate a Phase I Toxicity Reduction Evaluation (TRE) as specified in paragraph C, below.



6. The permittee shall attach the WET Analysis Spreadsheet for the latest four consecutive WET tests to the NPDES permit renewal application that is submitted to DEP at least 180 days prior to the permit expiration date.

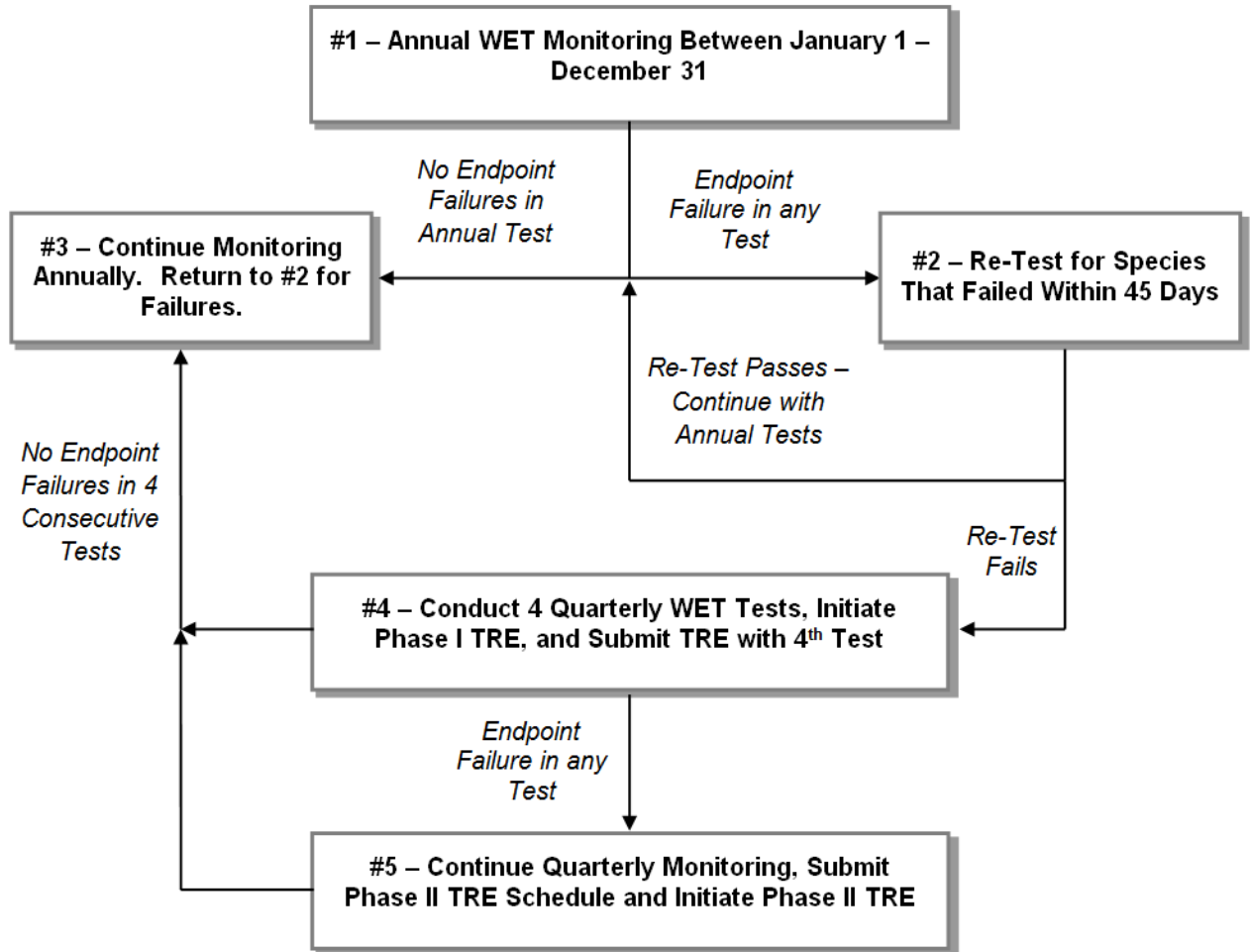
C. Phase I Toxicity Reduction Evaluation (TRE)

1. The Phase I TRE trigger is one WET endpoint failure followed by a re-test that confirms the failure for the same species. When the TRE process is triggered, quarterly WET testing shall be initiated for both species until there are four consecutive passing results for all endpoints. The Phase I TRE may include a Toxicity Identification Evaluation (TIE) if the permittee cannot immediately identify the possible causes of the effluent toxicity and the possible sources of the causative agents.
2. The permittee shall, within one year following the Phase I TRE trigger, submit a Phase I TRE report to the DEP regional office that issued the permit. The Phase I TRE shall be conducted in accordance with EPA's guidance, "Toxicity Reduction Evaluation for Municipal Wastewater Treatment Plants" (EPA/833B-99/002), "Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations" (EPA/600/2-88/070), and other relevant EPA guidance, as applicable. If a TIE is conducted as part of the Phase I TRE, it shall conform to EPA's guidance, "Methods for Aquatic Toxicity Identification Evaluations Phase I" (EPA/600/6-91/003), "Phase II" (EPA/600/R-92/080), "Phase III" (EPA/600/R-92/081) and other relevant EPA guidance. The Phase I TRE report shall be submitted with the fourth quarterly WET test report that is completed following the Phase I TRE trigger. The TRE shall include all activities undertaken to identify the cause(s) and source(s) of toxicity and any control efforts.
3. If all four quarterly WET tests produce passing results for all endpoints during the Phase I TRE process, performance of a Phase II TRE is not required, and annual WET testing in accordance with paragraph B.1 may resume.
4. If the four WET tests produce at least one failing result during the Phase I TRE process, the permittee shall continue quarterly WETT monitoring for both species and initiate a Phase II TRE in accordance with paragraph D. In this case, the Phase I TRE must include a schedule for completion of the Phase II TRE. The schedule must include interim milestones and a final completion date not to exceed two years from the initiation of the Phase II TRE. The permittee shall implement the Phase II TRE in accordance with the schedule unless DEP issues written approval to modify the schedule or cease performance of the Phase II TRE.
5. Re-tests during the TRE process are required for invalid tests but are optional and at the discretion of the permittee for valid tests. The results of all re-tests must be submitted to the DEP regional office that issued the permit along with the required elements in paragraph H.

D. Phase II Toxicity Reduction Evaluation (TRE)

1. The Phase II TRE trigger is one WET endpoint failure during performance of the Phase I TRE. A Phase II TRE, if required, shall conform to EPA's guidance, "Toxicity Reduction Evaluation for Municipal Wastewater Treatment Plants" (EPA/833B-99/002), "Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations" (EPA/600/2-88/070), and other relevant EPA guidance, as applicable. A Phase II TRE evaluates the possible control options to reduce or eliminate the effluent toxicity and the implementation of controls.
2. Once initiated, the Phase II TRE must continue until the source(s) of toxicity are controlled as evidenced by four consecutive WET test passing results for all endpoints, and a final TRE report must be submitted on or before the date specified in the schedule, unless otherwise approved by DEP in writing.
3. If four consecutive quarterly WET tests produce passing results for all endpoints during the Phase II TRE process, annual WET testing in accordance with paragraph B.1 may be initiated or resume.

An overview of the process described in paragraphs B, C and D is presented below:



E. Sample Collection

For each acute testing event, a 24-hour flow-proportioned composite sample shall be collected. For each chronic testing event, three 24-hour flow-proportioned, composite samples shall be collected over a seven day exposure period. The samples must be collected at a frequency of not greater than every two hours and must be flow-proportioned. The samples must be collected at the permit compliance sampling location. Samples must be analyzed within 36 hours from the end of the compositing period and must be placed on ice and held at  $\leq 6^{\circ}\text{C}$ . Refer to the sample handling and preservation regulations set forth in 40 CFR 136, 25 Pa. Code Chapter 252, The NELAC Institute (TNI) Standard, and the appropriate EPA methods.

F. Test Conditions and Methods

Laboratories must be accredited by the DEP Laboratory Accreditation Program in order to perform and report WET tests for NPDES permit compliance. Laboratories must be either State or NELAP accredited.

1. Acute tests shall be completed in accordance with EPA’s “Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms” (EPA-821-R-02-012, latest edition). Forty eight (48) hour static non-renewal tests shall be used.
2. Chronic tests shall be completed in accordance with EPA’s “Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms” (EPA-821-R-02-013, latest edition). Seven (7) day tests shall be used with renewal every 24 hours.

3. The quality assurance and control (QA/QC) requirements and test acceptability standards specified in EPA's test methods and the requirements set forth in 25 Pa Code Chapter 252 or the TNI Standard must be followed.
4. If the permittee or its accredited laboratory determines that QA/QC requirements and/or test acceptability standards have not been met, a re-test shall be initiated within 45 days. Original test data must be maintained by the laboratory and be submitted to DEP upon request. The justification for a re-test must be clearly documented and kept on file with the sample results.

#### G. Chemical Analyses

Chemical analyses must follow the requirements of the EPA methods and applicable State and/or Federal regulations.

1. Chemical analysis on effluent samples shall include pH, Conductivity, Total Alkalinity, Total Hardness, Total Residual Chlorine, Total Ammonia (Unionized Ammonia), Dissolved Oxygen and temperature. Chemical analyses as described in the EPA Methods (above) shall be performed for each sampling event, including each new batch of dilution water and each testing event.
2. In addition to the chemical analyses required above, those parameters listed in Part A of the NPDES permit for the outfall(s) tested shall be analyzed concurrently with the WET test by using the method(s) specified in the permit.

#### H. WET Report Elements

WET test reports that are submitted to DEP must include the requirements identified in 25 Pa. Code § 252.401(j)(1) – (15) or in the TNI Standard, or equivalent, as well as the following information:

1. A general test description, including the origin and age of test organisms, dates and results of reference toxicant tests, light and temperature regimes, and other documentation that QA and test acceptability criteria as specified in EPA's methods and DEP's QA Summaries have been met.
2. A description of sample collection procedures and sampling location.
3. Name(s) of individual(s) collecting and transporting samples, including sample renewals, and the date(s) and time(s) of sample collection.
4. All chemical and physical data including laboratory quantitation limits and observations made on the species. The hardness shall be reported for each test condition.
5. Copies of raw data sheets and/or bench sheets with data entries and signatures.
6. When effluents are dechlorinated, dechlorination procedures must be described and if applicable a thiosulfate control used in addition to the normal dilution water control. If the thiosulfate control results are significantly different from the normal control, as determined using DEP's WET Analysis Spreadsheet, the thiosulfate control shall be used in the spreadsheet for comparison with the TIWC condition. The WET report must specify which control was used to determine whether the test result is pass or fail.
7. A description of all observations or test conditions that may have affected the test outcome.
8. Control charts for the species tested regarding age, temperature test range, mortality data and all reference toxicant tests.
9. A completed WET test summary report (3800-FM-BPNPSM0485).
10. A DEP WET Analysis Spreadsheet printout that provides control and TIWC replicate data and displays the outcome of the test (pass or fail) for each endpoint tested.

WETT reports shall be submitted to the DEP regional office that issued the permit and, for discharges to the Delaware River basin, the Delaware River Basin Commission (DRBC).

**IV. EFFLUENT LIMIT AT OR BELOW DETECTION LIMITS**

- A. For purposes of monitoring and reporting the following parameters, the Permittee shall use the reporting threshold equivalent to the Minimum Levels (ML). The ML is defined as the concentration in a sample equivalent to the concentration of the lowest calibration standard analyzed in a specific analytical procedure assuming that all the method-specified sample weights, volumes, and processing steps have been followed. As such, the permittee must conduct analyses in accordance with the method specified below and must utilize a standard equivalent to the concentration of the ML specified below:

| <u>Parameter</u>          | <u>Analytical Method</u> | <u>ML and Lowest Calibration Concentration</u> |
|---------------------------|--------------------------|--|
| 2,3,7,8-TCDD              | EPA 1613                 | 10.0 pg/l <sup>a</sup>                         |
| 2,3,7,8-TCDF              | EPA 1613                 | 10.0 pg/l <sup>a</sup>                         |
| Trichlorosyringol         | EPA 1653                 | 2.5 µg/l <sup>b</sup>                          |
| 3,4,5-Trichlorocatechol   | EPA 1653                 | 5.0 µg/l <sup>b</sup>                          |
| 3,4,6-Trichlorocatechol   | EPA 1653                 | 5.0 µg/l <sup>b</sup>                          |
| 3,4,5-Trichloroguaiacol   | EPA 1653                 | 2.5 µg/l <sup>b</sup>                          |
| 3,4,6-Trichloroguaiacol   | EPA 1653                 | 2.5 µg/l <sup>b</sup>                          |
| 4,5,6-Trichloroguaiacol   | EPA 1653                 | 2.5 µg/l <sup>b</sup>                          |
| 2,4,5-Trichlorophenol     | EPA 1653                 | 2.5 µg/l <sup>b</sup>                          |
| 2,4,6-Trichlorophenol     | EPA 1653                 | 2.5 µg/l <sup>b</sup>                          |
| Tetrachlorocatechol       | EPA 1653                 | 5.0 µg/l <sup>b</sup>                          |
| Tetrachloroguaiacol       | EPA 1653                 | 5.0 µg/l <sup>b</sup>                          |
| 2,3,4,6-Tetrachlorophenol | EPA 1653                 | 2.5 µg/l <sup>b</sup>                          |
| Pentachlorophenol         | EPA 1653                 | 5.0 µg/l <sup>b</sup>                          |
| AOX                       | EPA 1650                 | 20.0 µg/l <sup>b</sup>                         |

a - picograms per liter (1 x 10<sup>-12</sup>)  
b - micrograms per liter (1 x 10<sup>-6</sup>)

- B. For purposes of reporting on the discharge monitoring report, actual analytical results should be reported whenever possible. All analytical values at or above the ML shall be reported as the measured value. When results cannot be quantified, values below the ML shall be reported as "< ML".
- C. The permittee shall manage non-detect values and report statistical results to DEP in accordance with published DMR guidance (3800-BK-DEP3047 and 3800-FS-DEP4262). Where a mixed data set exists containing non-detect results and "detected" values (i.e., results greater than or equal to the ML), the ML shall be used for non-detect results to compute average statistical results.

**V. THERMAL EFFLUENT LIMITATIONS**

- A. Clean Water Act Section 316(a) Thermal Effluent Limits

The thermal effluent limitations in Part A of this permit are the result of a variance approved by the Department in 1998 under Section 316(a) of the Clean Water Act. The thermal limitation in the permit are less stringent thermal effluent limitations allowed under Section 316(a) of the Clean Water Act. The thermal effluent limitations were based on conclusions drawn from a 316(a) study that was previously demonstrated to support a balanced indigenous aquatic community in the Frankstown Branch of Juniata River.

An updated study is required for renewal of less stringent 316(a) thermal limits with the subsequent permit. Within 90 days after permit issuance, the permittee shall submit a study plan for a Section 316(a) demonstration to the Department for approval. The work plan must include at a minimum, mixing zone study, temperature monitoring, seasonal fish surveys and macro invertebrate surveys for

no less than two years. The work plan must be approved by the Department before the work commences. The final Section 316(a) demonstration report shall be submitted to the Department at least one year before permit expiration.

B. Temperature

This discharge shall not cause a change in the stream temperature at the downstream monitoring point by more than 2°F during any one hour.

## VI. CHEMICAL ADDITIVES

### A. Approved Chemical Additives List

1. The permittee is authorized to use chemical additives that are published on DEP's Approved Chemical Additives List (Approved List) (see [www.depweb.state.pa.us/chemicaladditives](http://www.depweb.state.pa.us/chemicaladditives)) subject to paragraphs A.2 and A.3, below.
2. The permittee may not discharge a chemical additive at a concentration that is greater than the water quality-based effluent limitation (WQBEL) for the chemical additive or, if applicable, a technology-based effluent limitation. If effluent limitations are not specified in Part A of this permit for the chemical additive, the permittee is responsible for determining the WQBEL and ensuring the WQBEL is not exceeded by restricting usage to an amount that will not cause an excursion above in-stream water quality standards.
3. If the permittee decides to use a chemical additive that is on DEP's Approved List and the use would either (1) constitute an increase in the usage rate specified in the NPDES permit application or previous notification to DEP or (2) constitute a new use, not identified in the NPDES permit application or otherwise no previous notification occurred, the permittee shall complete and submit the "Chemical Additives Notification Form" (3800-FM-BPNPSM0487) to the DEP regional office that issued the permit. The permittee may proceed to use the chemical additive as reported on the Form upon receipt by the DEP regional office.

### B. New Chemical Additives, Not on Approved Chemical Additives List

1. In the event the permittee wishes to use a chemical additive that is not listed on DEP's Approved List, the permittee shall submit the "New Chemical Additives Request Form" (3800-FM-BPNPSM0486) to DEP's Central Office, Bureau of Point and Non-Point Source Management (BPNPSM), Division of Planning and Permitting, Rachel Carson State Office Building, PO Box 8774, Harrisburg, PA 17105-8774, prior to use. A copy shall be submitted to the DEP regional office that issued the permit. The form must be completed in whole in order for BPNPSM to approve the chemical additive, and a Material Safety Data Sheet (MSDS) that meets the minimum requirements of 29 CFR 1910.1200(g) must be attached.
2. Following placement of the chemical additive on the Approved List, the permittee may submit the Chemical Additive Notification Form in accordance with paragraph A.3, above, to notify DEP of the intent to use the approved chemical additive. The permittee may proceed with usage when the new chemical has been identified on DEP's Approved List and following DEP's receipt of the Chemical Additives Notification Form.
3. The permittee shall restrict usage of chemical additives to the maximum usage rates determined and reported to DEP on Chemical Additives Notification Forms.

### C. Chemical Additives Usage Reporting Requirements

The "Chemical Additives Usage Form" (3800-FM-BPNPSM0439) shall be used to report the usage of chemical additives and shall be submitted as an attachment to the Discharge Monitoring Report (DMR) at the time the DMR is submitted.

- D. DEP may amend this permit to include WQBELs or otherwise control usage rates of chemical additives if there is evidence that usage is adversely affecting receiving waters, producing Whole Effluent Toxicity test failures, or is causing excursions of in-stream water quality standards.

**VII. REQUIREMENTS APPLICABLE TO STORMWATER OUTFALLS**

- I. The permittee is authorized to discharge non-polluting stormwater from its site, alone or in combination with other wastewaters, through the following outfalls:

| Outfall No. | Area Drained (Acreage) | Latitude      | Longitude     | Description  |
|-------------|------------------------|---------------|---------------|--|
| 002         | 2.0                    | 40° 20' 58.4" | 78° 24' 28.5" | Paved and stabilized Parking areas                     |
| 003         | 1.9                    | 40° 20' 24.2" | 78° 24' 25.5" | Paved and stabilized Parking areas                     |
| 004         | 1.9                    | 40° 20' 24"   | 78° 24' 19.9" | Paved and stabilized Parking areas                     |
| 005         | 1.9                    | 40° 20' 20.7" | 78° 24' 19.4" | Paved and stabilized areas                             |
| 006         | 1.6                    | 40° 20' 23.6" | 78° 24' 19.1" | Paved and stabilized Parking areas                     |
| 007         | 1.9                    | 40° 20' 9.9"  | 78° 24' 24.4" | Paved and stabilized areas                             |
| 008         | 3.0                    | 40° 20' 15.9" | 78° 24' 22.7" | Main shops, non-chemical receiving, site access road   |
| 009         | 24.6                   | 40° 20' 6.2"  | 78° 24' 27.0" | Woodyard and chipping operations                       |
| 010         | 3.8                    | 40° 20' 6.2"  | 78° 24' 27.5" | Lower Woodyard Trailer Storage & Stabilized gravel lot |
| 011         | 0.1                    | 40° 20' 6.1"  | 78° 24' 27.7" | Lower Woodyard Trailer Storage & Stabilized gravel lot |
| 012         | 2.8                    | 40° 20' 3.8"  | 78° 24' 27.3" | Lower Woodyard Trailer Storage & Stabilized gravel lot |
| 013         | 8.0                    | 40° 20' 2.4"  | 78° 24' 27"   | Woodyard and chipping operations                       |

Monitoring requirements and effluent limitations for these outfalls are specified in Part A of this permit, if applicable.

- J. Preparedness, Prevention and Contingency (PPC) Plan

The permittee must develop and implement a PPC Plan in accordance with 25 Pa. Code § 91.34 following the guidance contained in DEP's "Guidelines for the Development and Implementation of Environmental Emergency Response Plans" (DEP ID 400-2200-001), its NPDES-specific addendum and the minimum requirements below. For existing facilities, the PPC Plan must be developed prior to permit issuance. For new facilities, the PPC Plan must be submitted to DEP no later than prior to startup of facility operation.

1. The PPC Plan must identify all potential sources of pollutants that may reasonably be expected to affect the quality of stormwater discharges from the facility.
2. The PPC Plan must describe preventative measures and best management practices (BMPs) that will be implemented to reduce or eliminate pollutants from coming into contact with stormwater resulting from routine site activities and spills.
3. The PPC Plan must address actions that will be taken in response to on-site spills or other pollution incidents.

4. The PPC Plan must identify areas which, due to topography or other factors, have a high potential for soil erosion, and identify measures to limit erosion. Where necessary, erosion and sediment control measures must be developed and implemented in accordance with 25 Pa. Code Chapter 102 and DEP's "Erosion and Sediment Pollution Control Manual" (DEP ID 363-2134-008).
5. The PPC Plan must address security measures to prevent accidental or intentional entry which could result in an unintentional discharge of pollutants.
6. The PPC Plan must include a plan for training employees and contractors on pollution prevention, BMPs, and emergency response measures.
7. If the facility is subject to SARA Title III, Section 313, the PPC Plan must identify releases of "Water Priority Chemicals" within the previous three years. Water Priority Chemicals are those identified in EPA's "Guidance for the Determination of Appropriate Methods for the Detection of Section 313 Water Priority Chemicals" (EPA 833-B-94-001, April 1994). The Plan must include an evaluation of all activities that may result in the stormwater discharge of Water Priority Chemicals.
8. Spill Prevention Control and Countermeasure (SPCC) plans may be used to meet the requirements of this section if the minimum requirements are addressed.
9. The PPC Plan shall be evaluated and if necessary updated on an annual basis, at a minimum, and when one or more of the following occur:
  - a. The Plan fails in an emergency;
  - b. There is a change in design, industrial process, operation, maintenance, or other circumstances, in a manner that materially increases the potential for fires, explosions or releases of toxic or hazardous constituents; or which changes the response necessary in an emergency;
  - c. The list of emergency coordinators or equipment changes; or
  - d. When notified in writing by DEP.

All updates must be kept on-site and be made available to DEP upon request.

#### C. Minimum Required BMPs

In addition to BMPs identified in the PPC Plan, the permittee shall implement the following minimum BMPs relating to stormwater pollution prevention:

1. If applicable, post-construction stormwater BMPs that are required under 25 Pa. Code Chapter 102 must be maintained.
2. For industrial facilities, the BMPs in the applicable Appendix to the NPDES PAG-03 General Permit for Discharges of Stormwater Associated with Industrial Activities that is currently in effect.
3. For POTWs, all of the following:
  - a. Manage sludge in accordance with all applicable permit requirements.
  - b. Store chemicals in secure and covered areas on impervious surfaces away from storm drains.
  - c. For new facilities and upgrades, design wastewater treatment facilities to avoid, to the maximum extent practicable, stormwater commingling with sanitary wastewater, sewage sludge, and biosolids.
  - d. Efficiently use herbicides for weed control. Where practicable, use the least toxic herbicide that will achieve pest management objectives. Do not apply during windy conditions.

- e. Do not wash parts or equipment over impervious surfaces that wash into storm drains.
- f. Implement infiltration techniques, including infiltration basins, trenches, dry wells, porous pavement, etc., wherever practicable.

D. Annual Inspection and Compliance Evaluation

- 1. The permittee shall conduct an annual inspection of each outfall identified in paragraph A and record the results on the "Annual Inspection Form for NPDES Permits for Discharges of Stormwater Associated with Industrial Activities" (3800-PM-WSFR0083v). The permittee shall submit a copy of the completed and signed Annual Inspection Form to DEP at the address provided in Part A III.B.3 of this permit by January 28 of each year.
- 2. Areas contributing to a stormwater discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. BMPs in the PPC Plan and required by this permit shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of this permit or whether additional control measures are needed.

E. Stormwater Sampling Requirements

If stormwater sampling is required in Part A of this permit, the following requirements apply:

- 1. The permittee shall record stormwater sampling event information on the "Additional Information for the Reporting of Stormwater Discharge Monitoring" form (3800-PM-WSFR0083t) and submit the form as an attachment to the DMR.
- 2. All samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inch in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The 72-hour storm interval is waived when the preceding storm did not yield a measurable discharge, or if the permittee is able to document that a less than 72-hour interval is representative for local storm events during the sample period.
- 3. Grab samples shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is not possible, a grab sample can be taken during the first hour of the discharge, in which case the discharger shall provide an explanation of why a grab sample during the first 30 minutes was not possible.

**VIII. BEST MANAGEMENT PRACTICES (BMPs)**

A. Specialized Definitions

- (1) Action Level: A daily pollutant loading that when exceeded triggers investigative or corrective action. Mills determine action levels by a statistical analysis of six months of daily measurements collected at the mill. For example, the lower action level may be the 75th percentile of the running seven-day averages (that value exceeded by 25 percent of the running seven-day averages) and the upper action level may be the 90th percentile of the running seven-day averages (that value exceeded by 10 percent of the running seven-day averages).
- (2) Equipment Items in Spent Pulping Liquor, Soap, and Turpentine Service: Any process vessel, storage tank, pumping system, evaporator, heat exchanger, recovery furnace or boiler, pipeline, valve, fitting, or other device that contains, processes, transports, or comes into contact with pulping liquor, soap, or turpentine (sometimes referred to as "equipment items.")



- (3) Immediate Process Area: The location at the mill where pulping, screening, knotting, pulp washing, pulping liquor concentration, pulping liquor processing, and chemical recovery facilities are located, generally the battery limits of the aforementioned processes. "Immediate process area" includes spent pulping liquor storage and spill control tanks located at the mill, whether or not they are located in the immediate process area.
- (4) Intentional Diversion: The planned removal of spent pulping liquor, soap, or turpentine from equipment items in spent pulping liquor, soap, or turpentine service by the mill for any purpose including, but not limited to, maintenance, grade changes, or process shutdowns.
- (5) Mill: The owner or operator of a direct or indirect discharging pulp, paper, or paperboard manufacturing facility subject to this section.
- (6) Senior Technical Manager: The person designated by the mill manager to review the BMP Plan. The senior technical manager shall be the chief engineer at the mill, the manager of pulping and chemical recovery operations, or other such responsible person designated by the mill manager who has knowledge of and responsibility for pulping and chemical recovery operations.
- (7) Soap: The product of reaction between the alkali in kraft pulping liquor and fatty acid portions of the wood, which precipitate out when water is evaporated from the spent pulping liquor.
- (8) Spent Pulping Liquor: For kraft and soda mills "spent pulping liquor" means black liquor that is used, generated, stored, or processed at any point in the pulping and chemical recovery processes. For sulfite mills "spent pulping liquor" means any intermediate, final, or used chemical solution that is used, generated, stored, or processed at any point in the sulfite pulping and chemical recovery processes (e.g., ammonium-, calcium-, magnesium-, or sodium-based sulfite liquors).
- (9) Turpentine: A mixture of terpenes, principally pinene, obtained by the steam distillation of pine gum recovered from the condensation of digester relief gases from the cooking of softwoods by the kraft pulping process (sometimes referred to as sulfate turpentine).
- (10) The Kappa number is a measurement of standard potassium permanganate solution that a pulp will consume. It indicates the lignin content of the pulp.

**B. Requirement to Implement Best Management Practices**

The permittee must implement the following Best Management Practices (BMPs) identified in 40 CFR Part 430.03(c)

- (1) The permittee must return spilled or diverted spent pulping liquors, soap, and turpentine to the process to the maximum extent practicable as determined by the mill, recover such materials outside the process, or discharge spilled or diverted material at a rate that does not disrupt the receiving wastewater treatment system.
- (2) The permittee must maintain their program that serves to identify and repair leaking equipment items. This program includes:
  - (i) Regular visual inspections (e.g., once per day) of process areas with equipment items in spent pulping liquor, soap, and turpentine service;
  - (ii) Immediate repairs of leaking equipment items, when possible. Leaking equipment items that cannot be repaired during normal operations must be identified, temporary means for mitigating the leaks must be provided, and the leaking equipment items repaired during the next maintenance outage;

- (iii) Identification of conditions under which production will be curtailed or halted to repair leaking equipment items or to prevent pulping liquor, soap, and turpentine leaks and spills; and
  - (iv) A means for tracking repairs over time to identify those equipment items where upgrade or replacement may be warranted based on frequency and severity of leaks, spills, or failures.
- (3) The permittee must operate continuous, automatic monitoring systems that the mill determines are necessary to detect and control leaks, spills, and intentional diversions of spent pulping liquor, soap, and turpentine. These monitoring systems should be integrated with the mill process control system and may include, e.g., high level monitors and alarms on storage tanks; process area conductivity (or pH) monitors and alarms; and process area sewer, process wastewater, and wastewater treatment plant conductivity (or pH) monitors and alarms.
- (4) The permittee must maintain their program of initial and refresher training of operators, maintenance personnel, and other technical and supervisory personnel who have responsibility for operating, maintaining, or supervising the operation and maintenance of equipment items in spent pulping liquor, soap, and turpentine service. The refresher training must be conducted at least annually and the training program must be documented.
- (5) The permittee must prepare a brief report that evaluates each spill of spent pulping liquor, soap, or turpentine that is not contained at the immediate process area and any intentional diversion of spent pulping liquor, soap, or turpentine that is not contained at the immediate process area. The report must describe the equipment items involved, the circumstances leading to the incident, the effectiveness of the corrective actions taken to contain and recover the spill or intentional diversion, and plans to develop changes to equipment and operating and maintenance practices as necessary to prevent recurrence. Discussion of the reports must be included as part of the annual refresher training.
- (6) The permittee must maintain their program to review any planned modifications to the pulping and chemical recovery facilities and any construction activities in the pulping and chemical recovery areas before these activities commence. The purpose of such review is to prevent leaks and spills of spent pulping liquor, soap, and turpentine during the planned modifications, and to ensure that construction and supervisory personnel are aware of possible liquor diversions and of the requirement to prevent leaks and spills of spent pulping liquors, soap, and turpentine during construction.
- (7) The permittee must maintain secondary containment (i.e., containment constructed of materials impervious to pulping liquors) for spent pulping liquor bulk storage tanks equivalent to the volume of the largest tank plus sufficient freeboard for precipitation. An annual tank integrity testing program, if coupled with other containment or diversion structures, may be substituted for secondary containment for spent pulping liquor bulk storage tanks.
- (8) The permittee must maintain secondary containment for turpentine bulk storage tanks.
- (9) The permittee must maintain curbing, diking or other means of isolating soap and turpentine processing and loading areas from the wastewater treatment facilities.
- (10) The mill must conduct wastewater monitoring to detect leaks and spills, to track the effectiveness of the BMPs, and to detect trends in spent pulping liquor losses. Such monitoring must be performed in accordance with paragraph F.

C. Amendment of BMP Plan

- (1) The permittee must amend its BMP Plan whenever there is a change in mill design,

construction, operation, or maintenance that materially affects the potential for leaks or spills of spent pulping liquor, turpentine, or soap from the immediate process areas.

- (2) The permittee must complete a review and evaluation of the BMP Plan five years after the first BMP Plan is prepared and, once every five years thereafter. As a result of this review and evaluation, the permittee must amend the BMP Plan within three months of the review if the mill determines that any new or modified management practices and engineered controls are necessary to reduce significantly the likelihood of spent pulping liquor, soap, and turpentine leaks, spills, or intentional diversions from the immediate process areas, including a schedule for implementation of such practices and controls

D. Review and Certification of BMP Plan

The BMP Plan, and any amendments, must be reviewed by the senior technical manager at the mill and approved and signed by the mill manager. Any person signing the BMP Plan or its amendments must certify to the Department under penalty of law that the BMP Plan (or its amendments) has been prepared in accordance with good engineering practices and in accordance with the Pulp, Paper, and Paperboard Regulations.

E. Record Keeping Requirements

- (1) The permittee must maintain on its premises a complete copy of the current BMP Plan and the records specified in paragraph F.(2) (below) and must make such BMP Plan and records available to the Department for review upon request.
- (2) The mill must maintain the following records for three years from the date they are created:
  - (i) Records tracking the repairs performed in accordance with the repair program described in paragraph B.(2);
  - (ii) Records of initial and refresher training conducted in accordance with paragraph B.(4);
  - (iii) Reports prepared in accordance with paragraph B.(5) of this section; and
  - (iv) Records of monitoring required by paragraphs B.(10) and F.

F. Monitoring, Corrective Action, and Reporting Requirements

- (1) The permittee must conduct daily monitoring of the influent to the wastewater treatment system for the purpose of detecting leaks and spills, tracking the effectiveness of the BMPs, and detecting trends in spent pulping liquor losses.
  - (i) The permittee conducted two six- month monitoring programs, and established action Levels, for the purpose of defining wastewater treatment system influent characteristics that will trigger requirements to initiate investigations on BMP effectiveness and to take corrective action.
  - (ii) The Action Levels of the treatment plant are currently set as follows:

|                    |              |
|--------------------|--------------|
| Lower Action Level | 294PCU (95%) |
| Upper Action Level | 376PCU (99%) |
  - (iii) Action levels developed must be revised using six months of monitoring data after any change in mill design, construction, operation, or maintenance that materially affects the potential for leaks or spills of spent pulping liquor, soap, or turpentine from the immediate process areas.

- (iv) Monitoring locations. For direct dischargers, monitoring must be conducted at the point influent enters the wastewater treatment system. For the purposes of this requirement, the permittee may select alternate monitoring point(s) in order to isolate possible sources of spent pulping liquor, soap, or turpentine from other possible sources of organic wastewaters that are tributary to the wastewater treatment facilities (e.g., bleach plants, paper machines and secondary fiber operations).
- (2) Whenever monitoring results exceed the lower action level for the period of time specified in the BMP Plan, the permittee must conduct an investigation to determine the cause of such exceedance. Whenever monitoring results exceed the upper action level for the period of time specified in the BMP Plan, the permittee must complete corrective action to bring the wastewater treatment system influent mass loading below the lower action level as soon as practicable.
- (3) Although exceedances of the action levels will not constitute a violation, failure to take the actions required by paragraph F.(2) as soon as practicable will be a violation.
- (4) The permittee must report to the Department the results of the daily monitoring conducted pursuant to paragraph F.(1). Such reports must include a summary of the monitoring results, the number and dates of exceedances of the applicable action levels, and brief descriptions of any corrective actions taken to respond to such exceedances. Submission of such reports shall be at a frequency of once per year.