



# COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Permit No. VA0000248

Effective Date: June 10, 2015

Expiration Date: June 9, 2020

## AUTHORIZATION TO DISCHARGE UNDER THE VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM

AND

## THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act as amended and pursuant to the State Water Control Law and regulations adopted pursuant thereto, the following owner is authorized to discharge in accordance with the information submitted with the permit application, and with this permit cover page, and Parts I and II of this permit, as set forth herein.

Owner Name: US Army and BAE Systems Ordnance Systems Inc.  
Facility Name: Radford Army Ammunition Plant  
County: Montgomery County and Pulaski County  
Facility Location: Peppers Ferry Road (Route 114), Radford, Virginia

The owner is authorized to discharge to the following receiving stream:

Stream Name: New River  
River Basin: New River  
River Subbasin: NA  
Section: 2a  
Class: IV  
Special Standards: PWS, v

A handwritten signature in black ink, appearing to read "Jeffrey L. Hurst".

Jeffrey L. Hurst, Deputy Regional Director  
Blue Ridge Regional Office

June 10, 2015

Date

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - STORM EVENT MONITORING

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall serial number 004.

Such discharges shall be limited and monitored by the permittee as specified below:

| <u>EFFLUENT CHARACTERISTICS</u> | <u>DISCHARGE LIMITATIONS</u> |                | <u>MONITORING REQUIREMENTS</u> |                    |
|---------------------------------|------------------------------|----------------|--------------------------------|--------------------|
|                                 | <u>Minimum</u>               | <u>Maximum</u> | <u>Frequency</u>               | <u>Sample Type</u> |
| Flow (MG)                       | NA                           | NL             | 1/6 months                     | Estimate           |
| pH (SU)                         | 6.0                          | 9.0            | 1/6 months                     | Grab               |
| Nitrate/Nitrite as N (mg/l)     | NA                           | NL             | 1/6 months                     | Grab               |
| Sulfate (mg/l)                  | NA                           | NL             | 1/6 months                     | Grab               |

NL - No limitation, monitoring only

NA - Not applicable

2. In addition to the analytical results, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall total (in inches) of the storm event that generated the sampled runoff; and the duration between the storm event sampled and the end of the previous measurable storm event (a "measurable storm event" is defined as a storm event that results in an actual discharge from the site).
3. There shall be no discharge of floating solids or visible foam in other than trace amounts.
4. See Part I.B.3 for quantification levels and reporting requirements.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - STORM EVENT MONITORING

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall serial number 401.

Such discharges of treated coal pile runoff shall be limited and monitored at outfall 401 by the permittee as specified below:

| <u>EFFLUENT CHARACTERISTICS</u>       | <u>DISCHARGE LIMITATIONS</u> |                | <u>MONITORING REQUIREMENTS</u> |                    |
|---------------------------------------|------------------------------|----------------|--------------------------------|--------------------|
|                                       | <u>Minimum</u>               | <u>Maximum</u> | <u>Frequency</u>               | <u>Sample Type</u> |
| Flow (MG)                             | NA                           | NL             | 1/6 months                     | Estimate           |
| pH (SU)                               | 6.0                          | 9.0            | 1/6 months                     | Grab               |
| Total Suspended Solids <sup>(4)</sup> | NA                           | 50 mg/l        | 1/6 months                     | Grab               |

NL - No limitation, monitoring only

NA - Not applicable

2. In addition to the analytical results, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall total (in inches) of the storm event that generated the sampled runoff; and the duration between the storm event sampled and the end of the previous measurable storm event (a "measurable storm event" is defined as a storm event that results in an actual discharge from the site).
3. There shall be no discharge of floating solids or visible foam in other than trace amounts.
4. Any untreated overflow from facilities designed, constructed and operated to treat the volume of coal pile runoff which is associated with a 10 year, 24 hour rainfall event shall not be subject to the 50 mg/l limitation for total suspended solids.
5. See Part I.B.3 for quantification levels and reporting requirements.

A. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - Radford Army Ammunition Plant

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall serial number 402.

Such discharges of non-storm water shall be limited and monitored by the permittee as specified below:

| <u>EFFLUENT CHARACTERISTICS</u> | <u>DISCHARGE LIMITATION</u> |                       |                |                | <u>MONITORING REQUIREMENTS</u> |                    |
|---------------------------------|-----------------------------|-----------------------|----------------|----------------|--------------------------------|--------------------|
|                                 | <u>Monthly Average</u>      | <u>Weekly Average</u> | <u>Minimum</u> | <u>Maximum</u> | <u>Frequency</u>               | <u>Sample Type</u> |
| Flow (MGD)                      | NL                          | NA                    | NA             | NL             | 1/month                        | Estimate           |
| pH (SU)                         | NA                          | NA                    | 6.0            | 9.0            | 1/month                        | Grab               |
| Oxidized Nitrogen (mg/l)        | NL                          | NA                    | NA             | NL             | 1/month                        | Grab               |
| Sulfate (mg/l)                  | NL                          | NA                    | NA             | NL             | 1/month                        | Grab               |
| Temperature (°C)                | NA                          | NA                    | NA             | NL             | 1/month                        | Grab               |

NL - No limitation, monitoring only

NA - Not applicable

2. There shall be no discharge of floating solids or visible foam in other than trace amounts.
3. See Part I.B.3 for quantification levels and reporting requirements.

A. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS- Radford Army Ammunition Plant

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall serial number 005.

Such discharges of wastewater and non contact cooling water shall be limited and monitored by the permittee as specified below:

| <u>EFFLUENT CHARACTERISTICS</u>                   | <u>DISCHARGE LIMITATION</u> |                       | <u>MONITORING REQUIREMENTS</u> |                       |                  |                    |
|---|-----------------------------|-----------------------|--------------------------------|-----------------------|------------------|--------------------|
|   | <u>Monthly Average</u>      | <u>Weekly Average</u> | <u>Minimum</u>                 | <u>Maximum</u>        | <u>Frequency</u> | <u>Sample Type</u> |
| Flow (MGD)  | NL                          | NA                    | NA                             | NL                    | Continuous       | TIRE               |
| pH (SU) <sup>(2)</sup>                            | NA                          | NA                    | 6.0                            | 9.0                   | Continuous       | REC                |
| Biochemical Oxygen Demand, 5 day (mg/l)           | NA                          | NA                    | NA                             | NL                    | 1/Week           | 24 Hour Composite  |
| Sulfate   | 2100 mg/l 19000 kg/d        | NA                    | NA                             | 3000 mg/l 21000 kg/d  | 1/Week           | 24 Hour Composite  |
| Chemical Oxygen Demand (mg/l)                     | NL                          | NA                    | NA                             | NL                    | 1/Week           | 24 Hour Composite  |
| Oxidized Nitrogen (mg/l)                          | NL                          | NA                    | NA                             | NL                    | 1/Week           | 24 Hour Composite  |
| Total Suspended Solids (mg/l)                     | NL                          | NA                    | NA                             | NL                    | 1/Month          | 24 Hour Composite  |
| Temperature, intake, °C                           | NA                          | NA                    | NA                             | NL                    | Continuous       | REC                |
| Temperature, °C                                   | NA                          | NA                    | NA                             | NL                    | Continuous       | REC                |
| Heat rejected, BTU/day                            | NA                          | NA                    | NA                             | 518 x 10 <sup>6</sup> | 1/Day            | Calculated         |
| pH Total Excursion Time (min) <sup>(5)</sup>      | NA                          | NA                    | NA                             | 446                   | Continuous       | REC                |
| pH Individual Excursion Time (min) <sup>(5)</sup> | NA                          | NA                    | NA                             | 60                    | Continuous       | REC                |

NL - No limitation, monitoring only; NA - Not applicable; TIRE – Totalizing, Indicating, Recording Equipment

2. The discharge shall have a pH value between 6.0 and 9.0 at all times, except as noted in Part I.B.12, and shall be monitored continuously.
3. There shall be no discharge of floating solids or visible foam in other than trace amounts.
4. See Part I.B.3 for quantification levels and reporting requirements.
5. See Part I.B.12 for pH special condition. The number of individual excursions lasting more than 60 minutes shall be reported in the monthly report excursion column. Any pH measurement outside of the range 4.0 to 11.0 shall be reported as a violation.

A. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - Radford Army Ammunition Plant

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall serial number 006.

Such discharges of non-contact cooling water and raw water overflow shall be limited and monitored by the permittee as specified below:

| <u>EFFLUENT CHARACTERISTICS</u>                   | <u>DISCHARGE LIMITATION</u> |                       |                |                        | <u>MONITORING REQUIREMENTS</u> |                    |
|---|-----------------------------|-----------------------|----------------|------------------------|--------------------------------|--------------------|
|   | <u>Monthly Average</u>      | <u>Weekly Average</u> | <u>Minimum</u> | <u>Maximum</u>         | <u>Frequency</u>               | <u>Sample Type</u> |
| Flow (MGD)  | NL                          | NA                    | NA             | NL                     | Continuous                     | TIRE               |
| pH (SU) <sup>(2)</sup>                            | NA                          | NA                    | 6.0            | 9.0                    | Continuous                     | REC                |
| Biochemical Oxygen Demand, 5 day (mg/l)           | NA                          | NA                    | NA             | NL                     | 1/Month                        | 24 Hour Composite  |
| Chemical Oxygen Demand (mg/l)                     | NA                          | NA                    | NA             | NL                     | 1/Month                        | 24 Hour Composite  |
| Oxidized Nitrogen (mg/l)                          | NA                          | NA                    | NA             | NL                     | 1/Month                        | 24 Hour Composite  |
| Sulfate (mg/l)                                    | NA                          | NA                    | NA             | NL                     | 1/Month                        | 24 Hour Composite  |
| Temperature, °C                                   | NA                          | NA                    | NA             | NL                     | Continuous                     | REC                |
| Heat rejected, BTU/day                            | NA                          | NA                    | NA             | 5208 x 10 <sup>6</sup> | 1/Day                          | Calculated         |
| Acute Whole Effluent Toxicity <sup>(5)</sup>      | NA                          | NA                    | NA             | 1.0 TUa                | 1/3 Months                     | 24 Hour Composite  |
| pH Total Excursion Time (min) <sup>(6)</sup>      | NA                          | NA                    | NA             | 446                    | Continuous                     | REC                |
| pH Individual Excursion Time (min) <sup>(6)</sup> | NA                          | NA                    | NA             | 60                     | Continuous                     | REC                |

NL - No limitation, monitoring only; NA - Not applicable; TIRE - Totalizing, Indicating, Recording Equipment

2. The discharge shall have a pH value between 6.0 and 9.0 at all times, except as noted in Part I.B.12, and shall be monitored continuously.
3. There shall be no discharge of floating solids or visible foam in other than trace amounts.
4. See Part I.B.3 for quantification levels and reporting requirements.
5. See Part I.C, and Part I.D for additional TMP monitoring requirements.
6. See Part I.B.12 for pH special condition. The number of individual excursions lasting more than 60 minutes shall be reported in the monthly report excursion column. Any pH measurement outside of the range 4.0 to 11.0 shall be reported as a violation.

A. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - Radford Army Ammunition Plant

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall serial number 007.

Such discharges of nitrocellulose and nitric acid manufacturing wastewaters, boiler blowdown, non contact cooling water shall be limited and monitored by the permittee as specified below:

| EFFLUENT CHARACTERISTICS                          | DISCHARGE LIMITATION |      |                |      | MONITORING REQUIREMENTS |         |            |             |       |      |            |                   |
|---|----------------------|------|----------------|------|-------------------------|---------|------------|-------------|-------|------|------------|-------------------|
|   | Monthly Average      |      | Weekly Average |      | Minimum                 | Maximum | Frequency  | Sample Type |       |      |            |                   |
| Flow (MGD)  | NL                   |      | NA             |      | NA                      | NL      | Continuous | TIRE        |       |      |            |                   |
| pH (SU) <sup>(2)</sup>                            | NA                   |      | NA             |      | 6.0                     | 9.0     | Continuous | REC         |       |      |            |                   |
| pH Total Excursion Time (min) <sup>(6)</sup>      | NA                   |      | NA             |      | NA                      | 446     | Continuous | REC         |       |      |            |                   |
| pH Individual Excursion Time (min) <sup>(6)</sup> | NA                   |      | NA             |      | NA                      | 60      | Continuous | REC         |       |      |            |                   |
| Temperature (May - Oct)                           | NA                   |      | NA             |      | NA                      | 50 °C   | Continuous | REC         |       |      |            |                   |
| Temperature (Nov - April)                         | NA                   |      | NA             |      | NA                      | 35 °C   | Continuous | REC         |       |      |            |                   |
| Biochemical Oxygen Demand, 5 day                  | 24                   | mg/l | 233            | kg/d | NA                      | NA      | 64         | mg/l        | 621   | kg/d | 1/Week     | 24 Hour Composite |
| Total Suspended Solids                            | 40                   | mg/l | 388            | kg/d | NA                      | NA      | 80         | mg/l        | 1261  | kg/d | 1/Week     | 24 Hour Composite |
| Sulfate   | 2100                 | mg/l | 50000          | kg/d | NA                      | NA      | 3000       | mg/l        | 59000 | kg/d | 1/Week     | 24 Hour Composite |
| Oxidized Nitrogen                                 | NL                   | mg/l | 6000           | kg/d | NA                      | NA      | NL         | mg/l        | 10000 | kg/d | 1/Week     | 24 Hour Composite |
| Acute Whole Effluent Toxicity <sup>(3)</sup>      | NA                   |      | NA             |      | NA                      | NA      | 6.6 TUa    |             |       |      | 1/3 Months | 24 Hour Composite |
| Chemical Oxygen Demand, mg/l                      | NA                   |      | NA             |      | NA                      | NA      | NL         |             |       |      | 1/3 Months | 24 Hour Composite |
| Ammonia, as Nitrogen, mg/l                        | NA                   |      | NA             |      | NA                      | NA      | NL         |             |       |      | 1/3 Months | 24 Hour Composite |
| 2,4-Dinitrotoluene, mg/l                          | NA                   |      | NA             |      | NA                      | NA      | NL         |             |       |      | 1/3 Months | 24 Hour Composite |
| N-nitroso-diphenylamine, mg/l                     | NA                   |      | NA             |      | NA                      | NA      | NL         |             |       |      | 1/3 Months | 24 Hour Composite |
| Total Chromium                                    | NA                   | ug/l | 10.76          | kg/d | NA                      | NA      | NA         | ug/l        | 26.86 | kg/d | 1/3 Months | 24 Hour Composite |
| Total Copper                                      | NA                   | ug/l | 14.06          | kg/d | NA                      | NA      | NA         | ug/l        | 32.78 | kg/d | 1/3 Months | 24 Hour Composite |
| Total Lead  | NA                   | ug/l | 3.10           | kg/d | NA                      | NA      | NA         | ug/l        | 6.69  | kg/d | 1/3 Months | 24 Hour Composite |
| Total Nickel                                      | NA                   | ug/l | 16.39          | kg/d | NA                      | NA      | NA         | ug/l        | 38.60 | kg/d | 1/3 Months | 24 Hour Composite |
| Total Zinc  | NA                   | ug/l | 10.18          | kg/d | NA                      | NA      | NA         | ug/l        | 25.31 | kg/d | 1/3 Months | 24 Hour Composite |
| 2-Nitrophenol                                     | NA                   | ug/l | 0.63           | kg/d | NA                      | NA      | NA         | ug/l        | 2.24  | kg/d | 1/Year     | Grab              |
| 4-Nitrophenol                                     | NA                   | ug/l | 1.57           | kg/d | NA                      | NA      | NA         | ug/l        | 5.59  | kg/d | 1/Year     | Grab              |
| 1,1-Dichloroethane                                | NA                   | ug/l | 0.21           | kg/d | NA                      | NA      | NA         | ug/l        | 0.57  | kg/d | 1/Year     | Grab              |
| 1,2-Dichloroethane                                | NA                   | ug/l | 1.75           | kg/d | NA                      | NA      | NA         | ug/l        | 5.57  | kg/d | 1/Year     | Grab              |
| 1,2-trans-Dichloroethylene                        | NA                   | ug/l | 0.24           | kg/d | NA                      | NA      | NA         | ug/l        | 0.64  | kg/d | 1/Year     | Grab              |
| 1,1-Dichloroethylene                              | NA                   | ug/l | 0.21           | kg/d | NA                      | NA      | NA         | ug/l        | 0.58  | kg/d | 1/Year     | Grab              |

## A. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - Radford Army Ammunition Plant

## 1. Outfall 007 continued

| EFFLUENT CHARACTERISTICS   | DISCHARGE LIMITATION |      |       |      |                |    |         |      |         |      | MONITORING REQUIREMENTS |             |
|----------------------------|----------------------|------|-------|------|----------------|----|---------|------|---------|------|-------------------------|-------------|
|                            | Monthly Average      |      |       |      | Weekly Average |    | Minimum |      | Maximum |      | Frequency               | Sample Type |
| 1,2-Dichlorobenzene        | NA                   | ug/l | 1.90  | kg/d | NA             | NA | NA      | ug/l | 7.70    | kg/d | 1/Year                  | Grab        |
| 1,3-Dichlorobenzene        | NA                   | ug/l | 1.38  | kg/d | NA             | NA | NA      | ug/l | 3.69    | kg/d | 1/Year                  | Grab        |
| 1,4-Dichlorobenzene        | NA                   | ug/l | 1.38  | kg/d | NA             | NA | NA      | ug/l | 3.69    | kg/d | 1/Year                  | Grab        |
| 1,2-Dichloropropane        | NA                   | ug/l | 1.90  | kg/d | NA             | NA | NA      | ug/l | 7.70    | kg/d | 1/Year                  | Grab        |
| 1,3-Dichloropropylene      | NA                   | ug/l | 1.90  | kg/d | NA             | NA | NA      | ug/l | 7.70    | kg/d | 1/Year                  | Grab        |
| 2,4-Dimethylphenol         | NA                   | ug/l | 0.18  | kg/d | NA             | NA | NA      | ug/l | 0.46    | kg/d | 1/Year                  | Grab        |
| 2,4-Dinitrophenol          | NA                   | ug/l | 11.71 | kg/d | NA             | NA | NA      | ug/l | 41.61   | kg/d | 1/Year                  | Grab        |
| 4,6-Dinitro-o-cresol       | NA                   | ug/l | 0.76  | kg/d | NA             | NA | NA      | ug/l | 2.69    | kg/d | 1/Year                  | Grab        |
| 1,1,1-Trichloroethane      | NA                   | ug/l | 0.21  | kg/d | NA             | NA | NA      | ug/l | 0.57    | kg/d | 1/Year                  | Grab        |
| 1,1,2-Trichloroethane      | NA                   | ug/l | 0.31  | kg/d | NA             | NA | NA      | ug/l | 1.23    | kg/d | 1/Year                  | Grab        |
| 1,2,4-Trichlorobenzene     | NA                   | ug/l | 1.90  | kg/d | NA             | NA | NA      | ug/l | 7.70    | kg/d | 1/Year                  | Grab        |
| Acenaphthene               | NA                   | ug/l | 0.18  | kg/d | NA             | NA | NA      | ug/l | 0.46    | kg/d | 1/Year                  | Grab        |
| Acenaphthylene             | NA                   | ug/l | 0.18  | kg/d | NA             | NA | NA      | ug/l | 0.46    | kg/d | 1/Year                  | Grab        |
| Acrylonitrile              | NA                   | ug/l | 0.91  | kg/d | NA             | NA | NA      | ug/l | 1.72    | kg/d | 1/Year                  | Grab        |
| Anthracene                 | NA                   | ug/l | 0.18  | kg/d | NA             | NA | NA      | ug/l | 0.46    | kg/d | 1/Year                  | Grab        |
| Benzene                    | NA                   | ug/l | 0.55  | kg/d | NA             | NA | NA      | ug/l | 1.30    | kg/d | 1/Year                  | Grab        |
| Benzo(a)anthracene         | NA                   | ug/l | NL    | kg/d | NA             | NA | NA      | ug/l | NL      | kg/d | 1/Year                  | Grab        |
| 3,4-Benzofluoranthene      | NA                   | ug/l | 0.19  | kg/d | NA             | NA | NA      | ug/l | 0.47    | kg/d | 1/Year                  | Grab        |
| Benzo(a)pyrene             | NA                   | ug/l | NL    | kg/d | NA             | NA | NA      | ug/l | NL      | kg/d | 1/Year                  | Grab        |
| Benzo(k)fluoranthene       | NA                   | ug/l | NL    | kg/d | NA             | NA | NA      | ug/l | NL      | kg/d | 1/Year                  | Grab        |
| Bis(2-ethylhexyl)phthalate | NA                   | ug/l | 0.92  | kg/d | NA             | NA | NA      | ug/l | 2.50    | kg/d | 1/Year                  | Grab        |
| Carbon tetrachloride       | NA                   | ug/l | 1.38  | kg/d | NA             | NA | NA      | ug/l | 3.69    | kg/d | 1/Year                  | Grab        |
| Chlorobenzene              | NA                   | ug/l | 1.38  | kg/d | NA             | NA | NA      | ug/l | 3.69    | kg/d | 1/Year                  | Grab        |
| Chloroethane               | NA                   | ug/l | 1.07  | kg/d | NA             | NA | NA      | ug/l | 2.86    | kg/d | 1/Year                  | Grab        |
| Chloroform                 | NA                   | ug/l | 1.08  | kg/d | NA             | NA | NA      | ug/l | 3.15    | kg/d | 1/Year                  | Grab        |
| Chrysene                   | NA                   | ug/l | NL    | kg/d | NA             | NA | NA      | ug/l | NL      | kg/d | 1/Year                  | Grab        |
| Diethyl phthalate          | NA                   | ug/l | 0.45  | kg/d | NA             | NA | NA      | ug/l | 1.10    | kg/d | 1/Year                  | Grab        |
| Dimethyl phthalate         | NA                   | ug/l | 0.18  | kg/d | NA             | NA | NA      | ug/l | 0.46    | kg/d | 1/Year                  | Grab        |
| Di-n-butyl phthalate       | NA                   | ug/l | 0.19  | kg/d | NA             | NA | NA      | ug/l | 0.42    | kg/d | 1/Year                  | Grab        |
| Ethylbenzene               | NA                   | ug/l | 1.38  | kg/d | NA             | NA | NA      | ug/l | 3.69    | kg/d | 1/Year                  | Grab        |

A. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - Radford Army Ammunition Plant

1. Outfall 007 continued

| EFFLUENT CHARACTERISTICS           | DISCHARGE LIMITATION |      |       |      |                |    |         |    | MONITORING REQUIREMENTS |       |           |             |      |
|------------------------------------|----------------------|------|-------|------|----------------|----|---------|----|-------------------------|-------|-----------|-------------|------|
|                                    | Monthly Average      |      |       |      | Weekly Average |    | Minimum |    | Maximum                 |       | Frequency | Sample Type |      |
| Fluoranthene                       | NA                   | ug/l | 0.21  | kg/d | NA             | NA | NA      | NA | ug/l                    | 0.52  | kg/d      | 1/Year      | Grab |
| Fluorene                           | NA                   | ug/l | 0.18  | kg/d | NA             | NA | NA      | NA | ug/l                    | 0.46  | kg/d      | 1/Year      | Grab |
| Hexachlorobenzene                  | NA                   | ug/l | NL    | kg/d | NA             | NA | NA      | NA | ug/l                    | NL    | kg/d      | 1/Year      | Grab |
| Hexachlorobutadiene                | NA                   | ug/l | 1.38  | kg/d | NA             | NA | NA      | NA | ug/l                    | 3.69  | kg/d      | 1/Year      | Grab |
| Hexachloroethane                   | NA                   | ug/l | 1.90  | kg/d | NA             | NA | NA      | NA | ug/l                    | 7.70  | kg/d      | 1/Year      | Grab |
| Methyl Chloride                    | NA                   | ug/l | 1.07  | kg/d | NA             | NA | NA      | NA | ug/l                    | 2.86  | kg/d      | 1/Year      | Grab |
| Methylene Chloride                 | NA                   | ug/l | 0.35  | kg/d | NA             | NA | NA      | NA | ug/l                    | 1.65  | kg/d      | 1/Year      | Grab |
| Naphthalene                        | NA                   | ug/l | 0.18  | kg/d | NA             | NA | NA      | NA | ug/l                    | 0.46  | kg/d      | 1/Year      | Grab |
| Nitrobenzene                       | NA                   | ug/l | 21.69 | kg/d | NA             | NA | NA      | NA | ug/l                    | 45.18 | kg/d      | 1/Year      | Grab |
| Phenanthrene                       | NA                   | ug/l | 0.18  | kg/d | NA             | NA | NA      | NA | ug/l                    | 0.46  | kg/d      | 1/Year      | Grab |
| Phenol                             | NA                   | ug/l | 0.18  | kg/d | NA             | NA | NA      | NA | ug/l                    | 0.46  | kg/d      | 1/Year      | Grab |
| Pyrene                             | NA                   | ug/l | 0.19  | kg/d | NA             | NA | NA      | NA | ug/l                    | 0.47  | kg/d      | 1/Year      | Grab |
| Tetrachloroethylene                | NA                   | ug/l | 0.50  | kg/d | NA             | NA | NA      | NA | ug/l                    | 1.59  | kg/d      | 1/Year      | Grab |
| Toluene                            | NA                   | ug/l | 0.27  | kg/d | NA             | NA | NA      | NA | ug/l                    | 0.72  | kg/d      | 1/Year      | Grab |
| Total Cyanide                      | NA                   | ug/l | 4.07  | kg/d | NA             | NA | NA      | NA | ug/l                    | 11.64 | kg/d      | 1/Year      | Grab |
| Trichloroethylene                  | NA                   | ug/l | 0.25  | kg/d | NA             | NA | NA      | NA | ug/l                    | 0.67  | kg/d      | 1/Year      | Grab |
| Vinyl Chloride                     | NA                   | ug/l | NL    | kg/d | NA             | NA | NA      | NA | ug/l                    | NL    | kg/d      | 1/Year      | Grab |
| pH Total Excursion Time (min.)     | NA                   |      |       |      | NA             | NA | NA      | NA | ug/l                    | NL    | kg/d      | 1/Year      | Grab |
| pH Individual Excursion Tim (min.) | NA                   |      |       |      | NA             | NA | NA      | NA |                         | 446   |           | Continuous  | REC  |
|                                    |                      |      |       |      |                |    |         |    |                         | 60    |           | Continuous  | REC  |

NL - No limitation, monitoring only; NA - Not applicable; TIRE - Totalizing, Indicating, Recording Equipment

2. The discharge shall have a pH value between 6.0 and 9.0 at all times, except as noted in Part I.B.12.
3. See Part I.C and Part I.D for additional TMP monitoring requirements.
4. There shall be no discharge of floating solids or visible foam in other than trace amounts.
5. See Part I.B.3 for quantification levels and reporting requirements.
6. See Part I.B.12 for pH special condition. The number of individual excursions lasting more than 60 minutes shall be reported in the monthly report excursion column. Any pH measurement outside of the range 4.0 to 11.0 shall be reported as a violation.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS – Storm Event Monitoring

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall serial number 012.

Such discharges shall be limited and monitored by the permittee as specified below:

| <u>EFFLUENT CHARACTERISTICS</u> | <u>DISCHARGE LIMITATIONS</u> |                | <u>MONITORING REQUIREMENTS</u> |                    |
|---------------------------------|------------------------------|----------------|--------------------------------|--------------------|
|                                 | <u>Minimum</u>               | <u>Maximum</u> | <u>Frequency</u>               | <u>Sample Type</u> |
| Flow (MG)                       | NA                           | NL             | 1/6 months                     | Estimate           |
| pH (SU)                         | 6.0                          | 9.0            | 1/6 months                     | Grab               |
| Sulfate (mg/l)                  | NA                           | NL             | 1/6 months                     | Grab               |

NL - No limitation, monitoring only

NA - Not applicable

2. In addition to the analytical results, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall total (in inches) of the storm event that generated the sampled runoff; and the duration between the storm event sampled and the end of the previous measurable storm event (a "measurable storm event" is defined as a storm event that results in an actual discharge from the site).
3. There shall be no discharge of floating solids or visible foam in other than trace amounts.
4. See Part I.B.3 for quantification levels and reporting requirements.

A. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - Radford Army Ammunition Plant

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall serial number 014.

Such discharges of contaminated spring water shall be limited and monitored by the permittee as specified below:

| <u>EFFLUENT CHARACTERISTICS</u>        | <u>DISCHARGE LIMITATION</u> |                       |                |                | <u>MONITORING REQUIREMENTS</u> |                    |
|--|-----------------------------|-----------------------|----------------|----------------|--------------------------------|--------------------|
|  | <u>Monthly Average</u>      | <u>Weekly Average</u> | <u>Minimum</u> | <u>Maximum</u> | <u>Frequency</u>               | <u>Sample Type</u> |
| Flow (MGD)                             | NL                          | NA                    | NA             | NL             | 1/Month                        | Measure            |
| pH (SU)                                | NA                          | NA                    | 6.0            | 9.0            | 1/Month                        | Grab               |
| Biochemical Oxygen Demand, 5 day, mg/l | NA                          | NA                    | NA             | NL             | 1/Month                        | Grab               |
| Chemical Oxygen Demand, mg/l           | NA                          | NA                    | NA             | NL             | 1/Month                        | Grab               |
| Oxidized Nitrogen, mg/l                | NA                          | NA                    | NA             | NL             | 1/Month                        | Grab               |
| Sulfate, mg/l                          | NA                          | NA                    | NA             | NL             | 1/Month                        | Grab               |

NL - No limitation, monitoring only

NA - Not applicable

2. There shall be no discharge of floating solids or visible foam in other than trace amounts.
3. See Part I.B.3 for quantification levels and reporting requirements.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - STORM EVENT MONITORING

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall serial number 017.

Such discharges of storm water from the open burning ground shall be limited and monitored at outfall serial number 017 by the permittee as specified below:

| <u>EFFLUENT CHARACTERISTICS</u> | <u>DISCHARGE LIMITATIONS</u> |                | <u>MONITORING REQUIREMENTS</u> |                    |
|---------------------------------|------------------------------|----------------|--------------------------------|--------------------|
|                                 | <u>Minimum</u>               | <u>Maximum</u> | <u>Frequency</u>               | <u>Sample Type</u> |
| Flow (MG)                       | NA                           | NL             | 1/Year                         | Estimate           |
| pH (SU)                         | NL                           | NL             | 1/Year                         | Grab               |
| Total Suspended Solids (mg/l)   | NA                           | NL             | 1/Year                         | Grab               |
| Dissolved Copper (ug/l)         | NA                           | NL             | 1/Year                         | Grab               |
| Dissolved Lead (ug/l)           | NA                           | NL             | 1/Year                         | Grab               |
| Dissolved Zinc (ug/l)           | NA                           | NL             | 1/Year                         | Grab               |

NL - No limitation, monitoring only; NA - Not applicable

2. In addition to the analytical results, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall total (in inches) of the storm event that generated the sampled runoff; and the duration between the storm event sampled and the end of the previous measurable storm event (a "measurable storm event" is defined as a storm event that results in an actual discharge from the site).
3. See special conditions I.B.13 for additional requirements.
4. There shall be no discharge of floating solids or visible foam in other than trace amounts.
5. See Part I.B.3 for quantification levels and reporting requirements.

A. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS- Radford Army Ammunition Plant

1. During the period beginning with permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall serial number 026.

Such discharges of trickling filter plant effluent shall be limited and monitored by the permittee as specified below:

| <u>EFFLUENT CHARACTERISTICS</u>                        | <u>DISCHARGE LIMITATION</u> |                       |                |                  | <u>MONITORING REQUIREMENTS</u> |                        |
|--|-----------------------------|-----------------------|----------------|------------------|--------------------------------|------------------------|
|  | <u>Monthly Average</u>      | <u>Weekly Average</u> | <u>Minimum</u> | <u>Maximum</u>   | <u>Frequency</u>               | <u>Sample Type (2)</u> |
| Flow (MGD) <sup>(7)</sup>                              | NL                          | NA                    | NA             | NL               | Continuous                     | TIRE                   |
| pH, S.U.   | NA                          | NA                    | 6.0            | 9.0              | 1/Day                          | Grab                   |
| pH, influent, S.U.                                     | NA                          | NA                    | NL             | NL               | Continuous                     | REC                    |
| Biochemical Oxygen Demand,<br>5-day                    | 30 mg/l 114 kg/d            | NA                    | NA             | 45 mg/l 170 kg/d | 3 Days/Week                    | 8 Hour Composite       |
| Total Suspended Solids                                 | 30 mg/l 114 kg/d            | NA                    | NA             | 45 mg/l 170 kg/d | 3 Days/Week                    | 8 Hour Composite       |
| Total Residual Chlorine<br>(TRC) (mg/l) <sup>(3)</sup> | 0.087                       | NA                    | NA             | 0.10             | 1/Day                          | Grab                   |
| Ammonia, as N, mg/l                                    | 10.6                        | NA                    | NA             | 13.4             | 1/Week                         | 8 Hour Composite       |
| Oxidized Nitrogen, mg/l                                | NA                          | NA                    | NA             | NL               | 1/Month                        | 8 Hour Composite       |
| Sulfate, mg/l  | NA                          | NA                    | NA             | NL               | 1/Month                        | 8 Hour Composite       |
| Chemical Oxygen Demand, mg/l                           | NA                          | NA                    | NA             | NL               | 1/Month                        | 8 Hour Composite       |

NL - No limitation, monitoring only; NA - Not applicable; TIRE - Totalizing, Indicating, Recording Equipment

2. A 24 hour composite sample may be used as a substitute for an 8 hour composite sample.
3. See Part I.B.1 for additional TRC limitations and monitoring requirements.
4. There shall be no discharge of floating solids or visible foam in other than trace amounts.
5. See Part I.B.3 for quantification levels and reporting requirements.
6. At least 85% removal for BOD and TSS must be attained, based on monthly averages, for this effluent.
7. The design flow of this treatment facility is 1.00 MGD.

A. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS- Radford Army Ammunition Plant

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall serial number 028.

Such discharges of treated sanitary wastewater shall be limited and monitored by the permittee as specified below:

| <u>EFFLUENT CHARACTERISTICS</u>                     | <u>DISCHARGE LIMITATION</u> |                       |                |                   | <u>MONITORING REQUIREMENTS</u> |                                   |
|---|-----------------------------|-----------------------|----------------|-------------------|--------------------------------|-----------------------------------|
|   | <u>Monthly Average</u>      | <u>Weekly Average</u> | <u>Minimum</u> | <u>Maximum</u>    | <u>Frequency</u>               | <u>Sample Type</u> <sup>(2)</sup> |
| Flow (MGD) <sup>(7)</sup>                           | NL                          | NA                    | NA             | NL                | 3/Day                          | Estimate                          |
| pH, S.U.  | NA                          | NA                    | 6.0            | 9.0               | 1/Day                          | Grab                              |
| Biochemical Oxygen Demand, 5-day                    | 30 mg/l 7.9 kg/d            | NA                    | NA             | 45 mg/l 11.9 kg/d | 1/Month                        | 4 Hour Composite                  |
| Total Suspended Solids                              | 30 mg/l 7.9 kg/d            | NA                    | NA             | 45 mg/l 11.9 kg/d | 1/Month                        | 4 Hour Composite                  |
| Total Residual Chlorine (TRC) (mg/l) <sup>(3)</sup> | 0.10                        | NA                    | NA             | 0.10              | 1/Day                          | Grab                              |
| Oxidized Nitrogen, mg/l                             | NA                          | NA                    | NA             | NL                | 1/Month                        | 4 Hour Composite                  |
| Sulfate, mg/l                                       | NA                          | NA                    | NA             | NL                | 1/Month                        | 4 Hour Composite                  |
| Chemical Oxygen Demand, mg/l                        | NA                          | NA                    | NA             | NL                | 1/Month                        | 4 Hour Composite                  |

NL - No limitation, monitoring only; NA - Not applicable;

2. A 24 hour composite sample may be used as a substitute for a 4 hour composite sample.
3. See Part I.B.1 for additional TRC limitations and monitoring requirements.
4. There shall be no discharge of floating solids or visible foam in other than trace amounts.
5. See Part I.B.3 for quantification levels and reporting requirements.
6. At least 85% removal for BOD and TSS must be attained, based on monthly averages, for this effluent if flow is observed and facility is in operation.
7. The design flow of this treatment facility is 0.070 MGD.

A. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - Radford Army Ammunition Plant

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall serial number 029.

Such discharges of bioplant effluent shall be limited and monitored by the permittee as specified below:

| <u>EFFLUENT CHARACTERISTICS</u>                   | <u>DISCHARGE LIMITATION</u> |            |                       |                | <u>MONITORING REQUIREMENTS</u> |            |                  |                    |
|---|-----------------------------|------------|-----------------------|----------------|--------------------------------|------------|------------------|--------------------|
|   | <u>Monthly Average</u>      |            | <u>Weekly Average</u> | <u>Minimum</u> | <u>Maximum</u>                 |            | <u>Frequency</u> | <u>Sample Type</u> |
| Flow (MGD)  | NL                          |            | NA                    | NA             | NL                             |            | Continuous       | TIRE               |
| pH, S.U. <sup>(2)</sup>                           | NA                          |            | NA                    | 6.0            | 9.0                            |            | Continuous       | REC                |
| pH Total Excursion Time (min) <sup>(6)</sup>      | NA                          |            | NA                    | NA             | 446                            |            | Continuous       | REC                |
| pH Individual Excursion Time (min) <sup>(6)</sup> | NA                          |            | NA                    | NA             | 60                             |            | Continuous       | REC                |
| Biochemical Oxygen Demand, 5 day                  | 60 mg/l                     | 91.2 kg/d  | NA                    | NA             | 120 mg/l                       | 243.6 kg/d | 1/Week           | 24 Hour Composite  |
| Total Suspended Solids                            | NL mg/l                     | 149.1 kg/d | NA                    | NA             | NL mg/l                        | 484.2 kg/d | 1/Week           | 24 Hour Composite  |
| Sulfate   | NL mg/l                     | 3000 kg/d  | NA                    | NA             | NL mg/l                        | 6000 kg/d  | 1/Month          | 24 Hour Composite  |
| COD   | 200 mg/l                    | 319.3 kg/d | NA                    | NA             | 290 mg/l                       | 852.6 kg/d | 1/Week           | 24 Hour Composite  |
| Temperature                                       | NA                          |            | NA                    | NA             | NL °C                          |            | Continuous       | REC                |
| Heat Rejected, million BTU/day                    | NA                          |            | NA                    | NA             | 291                            |            | 1/Day            | Calculated         |
| Acute Whole Effluent Toxicity <sup>(3)</sup>      | NA                          |            | NA                    | NA             | 1 TUa                          |            | 1/3 Months       | 24 Hour Composite  |
| Oxidized Nitrogen, mg/l                           | NA                          |            | NA                    | NA             | NL                             |            | 1/Week           | 24 Hour Composite  |
| BOD, 5 day, influent, mg/l                        | NA                          |            | NA                    | NA             | NL                             |            | 1/Month          | 24 Hour Composite  |
| COD, influent, mg/l                               | NA                          |            | NA                    | NA             | NL                             |            | 1/Month          | 24 Hour Composite  |
| TSS, influent, mg/l                               | NA                          |            | NA                    | NA             | NL                             |            | 1/Month          | 24 Hour Composite  |
| N-nitroso-diphenylamine, ug/l                     | NA                          |            | NA                    | NA             | NL                             |            | 1/Year           | 24 Hour Composite  |

A. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - Radford Army Ammunition Plant

1. Outfall 029 continued

|                            | <u>EFFLUENT CHARACTERISTICS</u> |                        |       |                       | <u>DISCHARGE LIMITATION</u> |                |    |                  | <u>MONITORING REQUIREMENTS</u> |      |        |      |
|----------------------------|---------------------------------|------------------------|-------|-----------------------|-----------------------------|----------------|----|------------------|--------------------------------|------|--------|------|
|                            |                                 | <u>Monthly Average</u> |       | <u>Weekly Average</u> | <u>Minimum</u>              | <u>Maximum</u> |    | <u>Frequency</u> | <u>Sample Type</u>             |      |        |      |
| 2,4-Dinitrotoluene         | NA                              | ug/l                   | 0.41  | kg/d                  | NA                          | NA             | NA | ug/l             | 1.04                           | kg/d | 1/Week | Grab |
| Acenaphthene               | NA                              | ug/l                   | 0.08  | kg/d                  | NA                          | NA             | NA | ug/l             | 0.21                           | kg/d | 1/Year | Grab |
| Acrylonitrile              | NA                              | ug/l                   | 0.35  | kg/d                  | NA                          | NA             | NA | ug/l             | 0.88                           | kg/d | 1/Year | Grab |
| Benzene                    | NA                              | ug/l                   | 0.13  | kg/d                  | NA                          | NA             | NA | ug/l             | 0.49                           | kg/d | 1/Year | Grab |
| Carbon tetrachloride       | NA                              | ug/l                   | 0.066 | kg/d                  | NA                          | NA             | NA | ug/l             | 0.13                           | kg/d | 1/Year | Grab |
| Chlorobenzene              | NA                              | ug/l                   | 0.055 | kg/d                  | NA                          | NA             | NA | ug/l             | 0.10                           | kg/d | 1/Year | Grab |
| 1,2,4-Trichlorobenzene     | NA                              | ug/l                   | 0.24  | kg/d                  | NA                          | NA             | NA | ug/l             | 0.51                           | kg/d | 1/Year | Grab |
| Hexachlorobenzene          | NA                              | ug/l                   | NL    | kg/d                  | NA                          | NA             | NA | ug/l             | NL                             | kg/d | 1/Year | Grab |
| 1,2-Dichloroethane         | NA                              | ug/l                   | 0.24  | kg/d                  | NA                          | NA             | NA | ug/l             | 0.77                           | kg/d | 1/Year | Grab |
| 1,1,1-Trichloroethane      | NA                              | ug/l                   | 0.077 | kg/d                  | NA                          | NA             | NA | ug/l             | 0.19                           | kg/d | 1/Year | Grab |
| Hexachloroethane           | NA                              | ug/l                   | 0.077 | kg/d                  | NA                          | NA             | NA | ug/l             | 0.19                           | kg/d | 1/Year | Grab |
| 1,1-Dichloroethane         | NA                              | ug/l                   | 0.080 | kg/d                  | NA                          | NA             | NA | ug/l             | 0.21                           | kg/d | 1/Year | Grab |
| 1,1,2-Trichloroethane      | NA                              | ug/l                   | 0.077 | kg/d                  | NA                          | NA             | NA | ug/l             | 0.19                           | kg/d | 1/Year | Grab |
| Chloroethane               | NA                              | ug/l                   | 0.38  | kg/d                  | NA                          | NA             | NA | ug/l             | 0.98                           | kg/d | 1/Year | Grab |
| Chloroform                 | NA                              | ug/l                   | 0.077 | kg/d                  | NA                          | NA             | NA | ug/l             | 0.16                           | kg/d | 1/Year | Grab |
| 2-Chlorophenol             | NA                              | ug/l                   | 0.11  | kg/d                  | NA                          | NA             | NA | ug/l             | 0.35                           | kg/d | 1/Year | Grab |
| 1,2-Dichlorobenzene        | NA                              | ug/l                   | 0.28  | kg/d                  | NA                          | NA             | NA | ug/l             | 0.59                           | kg/d | 1/Year | Grab |
| 1,3-Dichlorobenzene        | NA                              | ug/l                   | 0.11  | kg/d                  | NA                          | NA             | NA | ug/l             | 0.16                           | kg/d | 1/Year | Grab |
| 1,4-Dichlorobenzene        | NA                              | ug/l                   | 0.055 | kg/d                  | NA                          | NA             | NA | ug/l             | 0.10                           | kg/d | 1/Year | Grab |
| 1,1-Dichloroethylene       | NA                              | ug/l                   | 0.059 | kg/d                  | NA                          | NA             | NA | ug/l             | 0.091                          | kg/d | 1/Year | Grab |
| 1,2-trans-Dichloroethylene | NA                              | ug/l                   | 0.077 | kg/d                  | NA                          | NA             | NA | ug/l             | 0.19                           | kg/d | 1/Year | Grab |
| 2,4-Dichlorophenol         | NA                              | ug/l                   | 0.14  | kg/d                  | NA                          | NA             | NA | ug/l             | 0.41                           | kg/d | 1/Year | Grab |
| 1,2-Dichloropropane        | NA                              | ug/l                   | 0.55  | kg/d                  | NA                          | NA             | NA | ug/l             | 0.84                           | kg/d | 1/Year | Grab |
| 1,3-Dichloropropylene      | NA                              | ug/l                   | 0.10  | kg/d                  | NA                          | NA             | NA | ug/l             | 0.16                           | kg/d | 1/Year | Grab |
| 2,4-Dimethylphenol         | NA                              | ug/l                   | 0.066 | kg/d                  | NA                          | NA             | NA | ug/l             | 0.13                           | kg/d | 1/Year | Grab |
| 2,6-Dinitrotoluene         | NA                              | ug/l                   | 0.93  | kg/d                  | NA                          | NA             | NA | ug/l             | 2.34                           | kg/d | 1/Year | Grab |
| Ethylbenzene               | NA                              | ug/l                   | 0.11  | kg/d                  | NA                          | NA             | NA | ug/l             | 0.39                           | kg/d | 1/Year | Grab |
| Fluoranthene               | NA                              | ug/l                   | 0.091 | kg/d                  | NA                          | NA             | NA | ug/l             | 0.24                           | kg/d | 1/Year | Grab |
| Methylene Chloride         | NA                              | ug/l                   | 0.14  | kg/d                  | NA                          | NA             | NA | ug/l             | 0.32                           | kg/d | 1/Year | Grab |
| Methyl Chloride            | NA                              | ug/l                   | 0.31  | kg/d                  | NA                          | NA             | NA | ug/l             | 0.69                           | kg/d | 1/Year | Grab |
| Hexachlorobutadiene        | NA                              | ug/l                   | 0.073 | kg/d                  | NA                          | NA             | NA | ug/l             | 0.17                           | kg/d | 1/Year | Grab |
| Naphthalene                | NA                              | ug/l                   | 0.080 | kg/d                  | NA                          | NA             | NA | ug/l             | 0.21                           | kg/d | 1/Year | Grab |
| Nitrobenzene               | NA                              | ug/l                   | 0.099 | kg/d                  | NA                          | NA             | NA | ug/l             | 0.24                           | kg/d | 1/Year | Grab |
| 2-Nitrophenol              | NA                              | ug/l                   | 0.15  | kg/d                  | NA                          | NA             | NA | ug/l             | 0.25                           | kg/d | 1/Year | Grab |
| 4-Nitrophenol              | NA                              | ug/l                   | 0.26  | kg/d                  | NA                          | NA             | NA | ug/l             | 0.45                           | kg/d | 1/Year | Grab |
| 2,4-Dinitrophenol          | NA                              | ug/l                   | 0.26  | kg/d                  | NA                          | NA             | NA | ug/l             | 0.45                           | kg/d | 1/Year | Grab |
| 4,6-Dinitro-o-cresol       | NA                              | ug/l                   | 0.28  | kg/d                  | NA                          | NA             | NA | ug/l             | 1.01                           | kg/d | 1/Year | Grab |

## A. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - Radford Army Ammunition Plant

## 1. Outfall 029 continued

|                            | <u>EFFLUENT CHARACTERISTICS</u> |      |                       |      | <u>DISCHARGE LIMITATION</u> |                |      |       | <u>MONITORING REQUIREMENTS</u> |                    |       |
|----------------------------|---------------------------------|------|-----------------------|------|-----------------------------|----------------|------|-------|--------------------------------|--------------------|-------|
|                            | <u>Monthly Average</u>          |      | <u>Weekly Average</u> |      | <u>Minimum</u>              | <u>Maximum</u> |      |       | <u>Frequency</u>               | <u>Sample Type</u> |       |
| Phenol                     | NA                              | ug/l | 0.055                 | kg/d | NA                          | NA             | ug/l | 0.095 | kg/d                           | 1/Year             | Grab  |
| Bis(2-ethylhexyl)phthalate | NA                              | ug/l | 0.37                  | kg/d | NA                          | NA             | ug/l | 1.02  | kg/d                           | 1/Year             | Grab  |
| Di-n-butyl phthalate       | NA                              | ug/l | 0.099                 | kg/d | NA                          | NA             | ug/l | 0.20  | kg/d                           | 1/3 Months         | Grab  |
| Diethyl phthalate          | NA                              | ug/l | 0.29                  | kg/d | NA                          | NA             | ug/l | 0.74  | kg/d                           | 1/Year             | Grab  |
| Dimethyl phthalate         | NA                              | ug/l | 0.069                 | kg/d | NA                          | NA             | ug/l | 0.17  | kg/d                           | 1/Year             | Grab  |
| Benzo(a)anthracene         | NA                              | ug/l | NL                    | kg/d | NA                          | NA             | ug/l | NL    | kg/d                           | 1/Year             | Grab  |
| Benzo(a)pyrene             | NA                              | ug/l | NL                    | kg/d | NA                          | NA             | ug/l | NL    | kg/d                           | 1/Year             | Grab  |
| 3,4-Benzofluoranthene      | NA                              | ug/l | 0.084                 | kg/d | NA                          | NA             | ug/l | 0.22  | kg/d                           | 1/Year             | Grab  |
| Benzo(k)fluoranthene       | NA                              | ug/l | NL                    | kg/d | NA                          | NA             | ug/l | NL    | kg/d                           | 1/Year             | Grab  |
| Chrysene                   | NA                              | ug/l | NL                    | kg/d | NA                          | NA             | ug/l | NL    | kg/d                           | 1/Year             | Grab  |
| Acenaphthylene             | NA                              | ug/l | 0.080                 | kg/d | NA                          | NA             | ug/l | 0.21  | kg/d                           | 1/Year             | Grab  |
| Anthracene                 | NA                              | ug/l | 0.080                 | kg/d | NA                          | NA             | ug/l | 0.21  | kg/d                           | 1/Year             | Grab  |
| Fluorene                   | NA                              | ug/l | 0.080                 | kg/d | NA                          | NA             | ug/l | 0.21  | kg/d                           | 1/Year             | Grab  |
| Phenanthrene               | NA                              | ug/l | 0.080                 | kg/d | NA                          | NA             | ug/l | 0.21  | kg/d                           | 1/Year             | Grab  |
| Pyrene                     | NA                              | ug/l | 0.091                 | kg/d | NA                          | NA             | ug/l | 0.24  | kg/d                           | 1/Year             | Grab  |
| Tetrachloroethylene        | NA                              | ug/l | 0.080                 | kg/d | NA                          | NA             | ug/l | 0.20  | kg/d                           | 1/Year             | Grab  |
| Toluene                    | NA                              | ug/l | 0.095                 | kg/d | NA                          | NA             | ug/l | 0.29  | kg/d                           | 1/Year             | Grab  |
| Trichloroethylene          | NA                              | ug/l | 0.077                 | kg/d | NA                          | NA             | ug/l | 0.19  | kg/d                           | 1/Year             | Grab  |
| Vinyl Chloride             | NA                              | ug/l | NL                    | kg/d | NA                          | NA             | ug/l | NL    | kg/d                           | 1/Year             | Grab  |
| Total Chromium             | NA                              | ug/l | 4.05                  | kg/d | NA                          | NA             | ug/l | 10.1  | kg/d                           | 1/3 Months         | 24 HC |
| Total Copper               | NA                              | ug/l | 5.30                  | kg/d | NA                          | NA             | ug/l | 12.3  | kg/d                           | 1/3 Months         | 24HC  |
| Total Cyanide              | NA                              | ug/l | 1.53                  | kg/d | NA                          | NA             | ug/l | 4.38  | kg/d                           | 1/Year             | Grab  |
| Total Lead                 | NA                              | ug/l | 1.17                  | kg/d | NA                          | NA             | ug/l | 2.52  | kg/d                           | 1/3 Months         | 24 HC |
| Total Nickel               | NA                              | ug/l | 6.17                  | kg/d | NA                          | NA             | ug/l | 14.55 | kg/d                           | 1/3 Months         | 24 HC |
| Total Zinc                 | NA                              | ug/l | 3.83                  | kg/d | NA                          | NA             | ug/l | 9.54  | kg/d                           | 1/3 Months         | 24 HC |

NL - No limitation, monitoring only; NA - Not applicable; TIRE - Totalizing, Indicating, Recording Equipment

2. The discharge shall have a pH value between 6.0 and 9.0 at all times, except as noted in Part I.B.12.
3. See Part I.C and I.D for additional TMP monitoring requirements.
4. There shall be no discharge of floating solids or visible foam in other than trace amounts.
5. See Part I.C.3 for quantification levels and reporting requirements.
6. See Part I.B.12 for pH special condition. The number of individual excursions lasting more than 60 minutes shall be reported in the monthly report excursion column. Any pH measurement outside of the range 4.0 to 11.0 shall be reported as a violation.

A. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - Radford Army Ammunition Plant

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall serial number 291.

Such discharges of TNT or DNT manufacturing wastewater shall be limited and monitored by the permittee as specified below:

| <u>EFFLUENT CHARACTERISTICS</u> | <u>DISCHARGE LIMITATION</u> |               |                       |                | <u>MONITORING REQUIREMENTS</u> |                  |                    |         |
|---------------------------------|-----------------------------|---------------|-----------------------|----------------|--------------------------------|------------------|--------------------|---------|
|                                 | <u>Monthly Average</u>      |               | <u>Weekly Average</u> | <u>Minimum</u> | <u>Maximum</u>                 |                  |                    |         |
|                                 |                             |               |                       |                |                                | <u>Frequency</u> | <u>Sample Type</u> |         |
| Flow (MGD)                      | NL                          |               | NA                    | NA             | NL                             |                  | 1/D-Week           | Measure |
| TNT Nitrobodies                 | NL                          | mg/l 0.9 kg/d | NA                    | NA             | NL                             | mg/l 1.3 kg/d    | 1/D-Week           | Grab    |

NL - No limitation, monitoring only

NA - Not applicable

1/D-Week - Once per discharge week

2. Monitoring and limitations at this outfall apply only when the manufacturing area is active.
3. See Part I.B.3 for quantification levels and reporting requirements.

A. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - Radford Army Ammunition Plant

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall serial number 030.

Such discharges of stormwater and non-contact cooling water shall be limited and monitored by the permittee as specified below:

| <u>EFFLUENT CHARACTERISTICS</u>         | <u>DISCHARGE LIMITATION</u> |                       |                |                | <u>MONITORING REQUIREMENTS</u> |                    |
|---|-----------------------------|-----------------------|----------------|----------------|--------------------------------|--------------------|
|   | <u>Monthly Average</u>      | <u>Weekly Average</u> | <u>Minimum</u> | <u>Maximum</u> | <u>Frequency</u>               | <u>Sample Type</u> |
| Flow (MGD)                              | NL                          | NA                    | NA             | NL             | 1/Month                        | Estimate           |
| pH (SU)                                 | NA                          | NA                    | 6.0            | 9.0            | 1/Month                        | Grab               |
| Biochemical Oxygen Demand, 5 day (mg/l) | NA                          | NA                    | NA             | NL             | 1/Month                        | Grab               |
| Chemical Oxygen Demand (mg/l)           | NA                          | NA                    | NA             | NL             | 1/Month                        | Grab               |
| Oxidized Nitrogen (mg/l)                | NA                          | NA                    | NA             | NL             | 1/Month                        | Grab               |
| Sulfate (mg/l)                          | NA                          | NA                    | NA             | NL             | 1/Month                        | Grab               |
| Temperature, °C                         | NA                          | NA                    | NA             | NL             | 1/Month                        | Grab               |

NL - No limitation, monitoring only; NA - Not applicable

2. There shall be no discharge of floating solids or visible foam in other than trace amounts.
3. See Part I.B.3 for quantification levels and reporting requirements.
4. See Part I.D for TMP monitoring requirements.

A. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - Radford Army Ammunition Plant

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall serial number 999.

Such discharges shall be limited and monitored by the permittee at outfalls 402, 005, 006, 007, 014, 024, 026, 028, 029 and 030 and added arithmetically to form outfall 999 as specified below:

| <u>EFFLUENT CHARACTERISTICS</u>  | <u>DISCHARGE LIMITATION</u> |                       |                |                | <u>MONITORING REQUIREMENTS</u> |                    |
|----------------------------------|-----------------------------|-----------------------|----------------|----------------|--------------------------------|--------------------|
|                                  | <u>Monthly Average</u>      | <u>Weekly Average</u> | <u>Minimum</u> | <u>Maximum</u> | <u>Frequency</u>               | <u>Sample Type</u> |
| Biochemical Oxygen Demand, 5 day | 6700 kg/d                   | NA                    | NA             | 10000 kg/d     | 1/Month                        | Calculated         |
| Total Suspended Solids           | 6200 kg/d                   | NA                    | NA             | 9300 kg/d      | 1/Month                        | Calculated         |
| Chemical Oxygen Demand           | 14500 kg/d                  | NA                    | NA             | 22000 kg/d     | 1/Month                        | Calculated         |
| Sulfate                          | 50000 kg/d                  | NA                    | NA             | 75000 kg/d     | 1/Month                        | Calculated         |
| Oxidized Nitrogen                | 6600 kg/d                   | NA                    | NA             | 10000 kg/d     | 1/Month                        | Calculated         |
| Vinyl Chloride                   | 0.90 kg/d                   | NA                    | NA             | 1.36 kg/d      | 1/Year                         | Calculated         |
| Chrysene                         | 0.18 kg/d                   | NA                    | NA             | 0.26 kg/d      | 1/Year                         | Calculated         |
| Benzo(a)anthracene               | 0.18 kg/d                   | NA                    | NA             | 0.26 kg/d      | 1/Year                         | Calculated         |
| Benzo(a)pyrene                   | 0.18 kg/d                   | NA                    | NA             | 0.26 kg/d      | 1/Year                         | Calculated         |
| Benzo(k)fluoranthene             | 0.18 kg/d                   | NA                    | NA             | 0.26 kg/d      | 1/Year                         | Calculated         |
| Hexachlorobenzene                | 0.03 kg/d                   | NA                    | NA             | 0.04 kg/d      | 1/Year                         | Calculated         |

NL - No limitation, monitoring only

NA - Not applicable

2. There shall be no discharge of floating solids or visible foam in other than trace amounts.
3. See Part I.B.3 for quantification levels and reporting requirements.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - STORM EVENT MONITORING

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall serial number 031.

Such discharges shall be limited and monitored on a rotating basis by the permittee as specified below:

| <u>EFFLUENT CHARACTERISTICS</u> | <u>DISCHARGE LIMITATIONS</u> |                | <u>MONITORING REQUIREMENTS</u> |                    |
|---------------------------------|------------------------------|----------------|--------------------------------|--------------------|
|                                 | <u>Minimum</u>               | <u>Maximum</u> | <u>Frequency</u>               | <u>Sample Type</u> |
| Flow (MG)                       | NA                           | NL             | 1/6 Months                     | Estimate           |
| Oil and Grease (mg/l)           | NA                           | NL             | 1/6 Months                     | Grab               |
| Total Suspended Solids (mg/l)   | NA                           | NL             | 1/6 Months                     | Grab               |

2. In addition to the analytical results, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall total (in inches) of the storm event that generated the sampled runoff; and the duration between the storm event sampled and the end of the previous measurable storm event (a "measurable storm event" is defined as a storm event that results in an actual discharge from the site).
3. There shall be no discharge of floating solids or visible foam in other than trace amounts.
4. See Part I.B.3 for quantification levels and reporting requirements.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - STORM EVENT MONITORING

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall serial number 032.

Such discharges shall be limited and monitored by the permittee as specified below:

| <u>EFFLUENT CHARACTERISTICS</u> | <u>DISCHARGE LIMITATIONS</u> |                | <u>MONITORING REQUIREMENTS</u> |                    |
|---------------------------------|------------------------------|----------------|--------------------------------|--------------------|
|                                 | <u>Minimum</u>               | <u>Maximum</u> | <u>Frequency</u>               | <u>Sample Type</u> |
| Flow (MG)                       | NA                           | NL             | 1/6 Months                     | Estimate           |
| Oil and Grease (mg/l)           | NA                           | NL             | 1/6 Months                     | Grab               |
| Total Suspended Solids (mg/l)   | NA                           | NL             | 1/6 Months                     | Grab               |

2. In addition to the analytical results, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall total (in inches) of the storm event that generated the sampled runoff; and the duration between the storm event sampled and the end of the previous measurable storm event (a "measurable storm event" is defined as a storm event that results in an actual discharge from the site).
3. There shall be no discharge of floating solids or visible foam in other than trace amounts.
4. See Part I.B.3 for quantification levels and reporting requirements.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - STORM EVENT MONITORING

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall serial number 041.

Such discharges shall be limited and monitored on a rotating basis by the permittee as specified below:

| <u>EFFLUENT CHARACTERISTICS</u> | <u>DISCHARGE LIMITATIONS</u> |                | <u>MONITORING REQUIREMENTS</u> |                    |
|---------------------------------|------------------------------|----------------|--------------------------------|--------------------|
|                                 | <u>Minimum</u>               | <u>Maximum</u> | <u>Frequency</u>               | <u>Sample Type</u> |
| Flow (MG)                       | NA                           | NL             | 1/3 Months                     | Estimate           |
| Oil and Grease (mg/l)           | NA                           | NL             | 1/3 Months                     | Grab               |
| Total Suspended Solids (mg/l)   | NA                           | NL             | 1/3 Months                     | Grab               |

2. In addition to the analytical results, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall total (in inches) of the storm event that generated the sampled runoff; and the duration between the storm event sampled and the end of the previous measurable storm event (a "measurable storm event" is defined as a storm event that results in an actual discharge from the site).
3. There shall be no discharge of floating solids or visible foam in other than trace amounts.
4. See Part I.B.3 for quantification levels and reporting requirements.
5. Monitoring shall be rotated among the outfalls designated as Zone G in the facility Fact Sheet.

A. FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - Radford Army Ammunition Plant

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall serial number 044.

Such discharges shall be limited and monitored by the permittee as specified below:

| <u>EFFLUENT CHARACTERISTICS</u> | <u>DISCHARGE LIMITATIONS</u> |                | <u>MONITORING REQUIREMENTS</u> |                    |
|---------------------------------|------------------------------|----------------|--------------------------------|--------------------|
|                                 | <u>Minimum</u>               | <u>Maximum</u> | <u>Frequency</u>               | <u>Sample Type</u> |
| Flow (MG)                       | NA                           | NL             | 1/6 Months                     | Estimate           |
| Oil and Grease (mg/l)           | NA                           | NL             | 1/6 Months                     | Grab               |
| Total Suspended Solids (mg/l)   | NA                           | NL             | 1/6 Months                     | Grab               |

2. In addition to the analytical results, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall total (in inches) of the storm event that generated the sampled runoff; and the duration between the storm event sampled and the end of the previous measurable storm event (a "measurable storm event" is defined as a storm event that results in an actual discharge from the site).
3. There shall be no discharge of floating solids or visible foam in other than trace amounts.
4. See Part I.B.3 for quantification levels and reporting requirements.
5. Monitoring shall occur at stormwater location 15C in Zone E as designated in the facility Fact Sheet.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - STORM EVENT MONITORING

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall serial number 050.

Such discharges shall be limited and monitored on a rotating basis by the permittee as specified below:

| <u>EFFLUENT CHARACTERISTICS</u> | <u>DISCHARGE LIMITATIONS</u> |                | <u>MONITORING REQUIREMENTS</u> |                    |
|---------------------------------|------------------------------|----------------|--------------------------------|--------------------|
|                                 | <u>Minimum</u>               | <u>Maximum</u> | <u>Frequency</u>               | <u>Sample Type</u> |
| Flow (MG)                       | NA                           | NL             | 1/6 Months                     | Estimate           |
| Oil and Grease (mg/l)           | NA                           | NL             | 1/6 Months                     | Grab               |
| Total Suspended Solids (mg/l)   | NA                           | NL             | 1/6 Months                     | Grab               |
| Nitrate/Nitrite (mg/l)          | NA                           | NL             | 1/6 Months                     | Grab               |

2. In addition to the analytical results, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall total (in inches) of the storm event that generated the sampled runoff; and the duration between the storm event sampled and the end of the previous measurable storm event (a "measurable storm event" is defined as a storm event that results in an actual discharge from the site).
3. There shall be no discharge of floating solids or visible foam in other than trace amounts.
4. See Part I.B.3 for quantification levels and reporting requirements.
5. Monitoring shall be rotated among the outfalls designated as Zone D in the facility Fact Sheet.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - STORM EVENT MONITORING

1. During the period beginning with the permit's effective date and lasting until the permit's expiration date, the permittee is authorized to discharge from outfall serial number 054.

Such discharges shall be limited and monitored on a rotating basis by the permittee as specified below:

| <u>EFFLUENT CHARACTERISTICS</u> | <u>DISCHARGE LIMITATIONS</u> |                | <u>MONITORING REQUIREMENTS</u> |                    |
|---------------------------------|------------------------------|----------------|--------------------------------|--------------------|
|                                 | <u>Minimum</u>               | <u>Maximum</u> | <u>Frequency</u>               | <u>Sample Type</u> |
| Flow (MG)                       | NA                           | NL             | 1/year                         | Estimate           |
| Total Suspended Solids (mg/l)   | NA                           | NL             | 1/year                         | Grab               |

2. In addition to the analytical results, the permittee shall provide the date and duration (in hours) of the storm event(s) sampled; rainfall total (in inches) of the storm event that generated the sampled runoff; and the duration between the storm event sampled and the end of the previous measurable storm event (a "measurable storm event" is defined as a storm event that results in an actual discharge from the site).
3. There shall be no discharge of floating solids or visible foam in other than trace amounts.
4. See Part I.B.3 for quantification levels and reporting requirements.
5. Monitoring shall be rotated among the outfalls designated as Zone C in the facility Fact Sheet.

**B. Special Conditions****1. Additional TRC Limitations and Monitoring Requirements at Outfall 026 and Outfall 028**

- a. In addition to the final effluent (after dechlorination) limitations in Part I.A for outfalls 026 and 028, the permittee shall monitor TRC at the outlet of each operating chlorine contact tank three times a day at 3 hour intervals by grab sample.
- b. For each outfall, no more than 9 samples for TRC taken at the outlet of each operating chlorine contact tank shall be less than 1.5 mg/l for any one calendar month. [DMR Code #157]
- c. No TRC sample collected at the outlet of any operating chlorine contact tank shall be less than 0.60 mg/l. [DMR Code #213]
- d. If dechlorination facilities exist the samples above shall be collected prior to dechlorination.
- e. If chlorine disinfection is not used, *E. coli* shall be limited and monitored by the permittee as specified below and this requirement, if applicable, shall substitute for the TRC requirements delineated elsewhere in Part I of this permit.

|                   | Monthly Average | Frequency                 | Sample Type |
|-------------------|-----------------|---------------------------|-------------|
| E.coli (N/100 ml) | 126*            | 5 Days/Week<br>10am – 4pm | Grab        |

\*Monthly Geometric Mean

2. **Notification Levels** - The permittee shall notify the Department as soon as they know or have reason to believe:
  - a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:
    - (1) One hundred micrograms per liter;
    - (2) Two hundred micrograms per liter for acrolein and acrylonitrile; five hundred micrograms per liter for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter for antimony;
    - (3) Five times the maximum concentration value reported for that pollutant in the permit application; or
    - (4) The level established by the Board.
  - b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:
    - (1) Five hundred micrograms per liter;
    - (2) One milligram per liter for antimony;
    - (3) Ten times the maximum concentration value reported for that pollutant in the permit application; or
    - (4) The level established by the Board.

**3. Compliance Reporting**

- a. The quantification levels (QL) shall be less than or equal to the following concentrations:

| <u>Effluent Parameter</u> | <u>Quantification Level</u> |
|---------------------------|-----------------------------|
| BOD5                      | 2 mg/l                      |
| COD                       | 10 mg/L                     |

|                            |           |
|----------------------------|-----------|
| TSS                        | 1.0 mg/l  |
| Chlorine                   | 0.10 mg/l |
| Oil & Grease               | 5.0 mg/L  |
| Ammonia-N                  | 0.20 mg/l |
| Sulfate                    | 1.0 mg/L  |
| Nitrate/Nitrite as N       | 0.5 mg/L  |
| Total Recoverable Cadmium  | 10 µg/L   |
| Total Recoverable Copper   | 3.0 µg/L  |
| Total Recoverable Nickel   | 10 µg/L   |
| Total Recoverable Zinc     | 10 µg/L   |
| Total Recoverable Chromium | 10 µg/L   |
| Total Recoverable Lead     | 10 µg/L   |
| 2,4-Dinitrotoluene         | 10 µg/L   |
| 2,6-Dinitrotoluene         | 10 µg/L   |
| 2-Chlorophenol             | 10 µg/L   |
| 2,4-Dichlorophenol         | 10 µg/L   |
| N-nitroso-diphenylamine    | 20 µg/L   |
| 2-Nitrophenol              | 20 µg/L   |
| 4-Nitrophenol              | 50 µg/L   |
| 1,1-Dichloroethane         | 10 µg/L   |
| 1,2-Dichloroethane         | 10 µg/L   |
| 1,2-trans-Dichloroethylene | 10 µg/L   |
| 1,1-Dichloroethylene       | 10 µg/L   |
| 1,2-Dichlorobenzene        | 10 µg/L   |
| 1,3-Dichlorobenzene        | 10 µg/L   |
| 1,4-Dichlorobenzene        | 10 µg/L   |
| 1,2-Dichloropropane        | 10 µg/L   |
| 1,3-Dichloropropylene      | 10 µg/L   |
| 2,4-Dimethylphenol         | 10 µg/L   |
| 2,4-Dinitrophenol          | 50 µg/L   |
| 4,6-Dinitro-o-cresol       | 50 µg/L   |
| 1,1,1-Trichloroethane      | 10 µg/L   |
| 1,1,2-Trichloroethane      | 10 µg/L   |
| 1,2,4-Trichlorobenzene     | 10 µg/L   |
| Acenaphthene               | 10 µg/L   |
| Acenaphthylene             | 10 µg/L   |
| Acrylonitrile              | 50 µg/L   |
| Anthracene                 | 10 µg/L   |
| Benzene                    | 10 µg/L   |
| Benzo(a)anthracene         | 10 µg/L   |
| 3,4-Benzofluoranthene      | 10 µg/L   |
| Benzo(a)pyrene             | 10 µg/L   |
| Benzo(k)fluoranthene       | 10 µg/L   |
| Bis(2-ethylhexyl)phthalate | 10 µg/L   |
| Carbon tetrachloride       | 10 µg/L   |
| Chlorobenzene              | 50 µg/L   |
| Chloroethane               | 10 µg/L   |
| Chloroform                 | 10 µg/L   |
| Chrysene                   | 10 µg/L   |
| Diethyl phthalate          | 10 µg/L   |
| Dimethyl phthalate         | 10 µg/L   |
| Di-n-butyl phthalate       | 10 µg/L   |
| Ethylbenzene               | 10 µg/L   |
| Fluoranthene               | 10 µg/L   |

|                     |         |
|---------------------|---------|
| Fluorene            | 10 µg/L |
| Hexachlorobenzene   | 10 µg/L |
| Hexachlorobutadiene | 10 µg/L |
| Hexachloroethane    | 10 µg/L |
| Methyl Chloride     | 50 µg/L |
| Methylene Chloride  | 20 µg/L |
| Naphthalene         | 10 µg/L |
| Nitrobenzene        | 10 µg/L |
| Phenanthrene        | 10 µg/L |
| Phenol              | 10 µg/L |
| Pyrene              | 10 µg/L |
| Tetrachloroethylene | 10 µg/L |
| Toluene             | 10 µg/L |
| Total Cyanide       | 20 µg/L |
| Trichloroethylene   | 10 µg/L |
| Vinyl Chloride      | 10 µg/L |
| TNT Nitrobenzenes   | 10 µg/L |

The QL is defined as the lowest concentration used to calibrate a measurement system in accordance with the procedures published for the method. It is the responsibility of the permittee to ensure that proper quality assurance/quality control (QA/QC) protocols are followed during the sampling and analytical procedures. QA/QC information shall be documented to confirm that appropriate analytical procedures have been used and the required QLs have been attained. The permittee shall use any method in accordance with Part II A of this permit.

b. Reporting

**Monthly Average** -- Compliance with the monthly average limitations and/or reporting requirements for the parameters listed in subsection a. of this permit condition shall be determined as follows: All concentration data below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as zero. All concentration data equal to or above the QL used for the analysis shall be treated as it is reported. An arithmetic average shall be calculated using all reported data for the month, including the defined zeros. This arithmetic average shall be reported on the Discharge Monitoring Report (DMR) as calculated. If all data are below the QL used for the analysis, then the average shall be reported as "<QL". If reporting for quantity is required on the DMR and the reported monthly average concentration is <QL, then report "<QL" for the quantity. Otherwise use the reported concentration data (including the defined zeros) and flow data for each sample day to determine the daily quantity and report the monthly average of the calculated daily quantities.

**Weekly Average** – Compliance with the weekly average limitations and/or reporting requirements for the parameters listed in subsection a. of this permit condition shall be determined as follows: All concentration data below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as zero. All concentration data equal to or above the QL used for the analysis shall be treated as reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, collected within each complete calendar week and entirely contained within the reporting month. The maximum value of the weekly averages thus determined shall be reported on the DMR. If all data are below the QL

used for the analysis, then the weekly average shall be reported as "<QL". If reporting for quantity is required on the DMR and the reported weekly average concentration is <QL, then report "<QL" for the quantity. . Otherwise use the reported concentration data (including the defined zeros) and flow data for each sample day to determine the daily quantity and report the maximum weekly average of the calculated daily quantities.

**Daily Maximum** - Compliance with the daily maximum limitations and/or reporting requirements for the parameters listed in subsection a. of this permit condition shall be determined as follows: All concentration data below the QL used for the analysis (QL must be less than or equal to the QL listed in a. above) shall be treated as zero. All concentration data equal to or above the QL used for the analysis shall be treated as reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, collected within each day during the reporting month. The maximum value of these daily averages thus determined shall be reported on the DMR as the Daily Maximum. If all data are below the QL used for the analysis, then the maximum value of the daily averages shall be reported as "<QL". If reporting for quantity is required on the DMR and the reported daily maximum is <QL, then report "<QL" for the quantity. Otherwise use the reported daily average concentrations (including the defined zeros) and corresponding daily flows to determine daily average quantities and report the maximum of the daily average quantities during the reporting month.

**Single Datum** - Any single datum required shall be reported as "<QL" if it is less than the QL used in the analysis (QL must be less than or equal to the QL listed in a. above). Otherwise the numerical value shall be reported.

- c. **Significant Digits** - The permittee shall report at least the same number of significant digits as the permit limit for a given parameter. Regardless of the rounding convention used by the permittee (i.e., 5 always rounding up or to the nearest even number), the permittee shall use the convention consistently, and shall ensure that consulting laboratories employed by the permittee use the same convention.
4. **EPA Industrial Reopener** -- This permit shall be modified, or alternatively revoked and reissued, to comply with any applicable effluent standard, limitation or prohibition for a pollutant which is promulgated or approved under Sections 307(a)(2) of the Clean Water Act, if the effluent standard or limitation or prohibition so promulgated or approved:
  - a. Is more stringent than any effluent limitation on the pollutant already in the permit; or
  - b. Controls any pollutant not limited in the permit.
5. **Storm Water Reopener** - This permit shall be modified or alternatively revoked and reissued to comply with or reflect any minimum treatment requirement, water quality standard or effluent limitation or other action approved by the Board with regard to storm water regulations.
6. **Sewage Sludge Reopener** -- The Board may promptly modify or revoke and reissue this permit if any applicable standard for sewage sludge use or disposal promulgated under Section 405(d) of the Clean Water Act is more stringent than any requirements for sludge use or disposal in this permit, or controls a pollutant or practice not limited in this permit.

7. **Nutrient Enriched Waters Reopener** - This permit may be modified or alternatively revoked and reissued to include new or alternative nutrient limitations and/or monitoring requirements should the Board adopt nutrient standards for the waterbody receiving the discharge or if a future water quality regulation or statute requires new or alternative nutrient control.
8. **Water Quality Criteria Reopener** – Should effluent monitoring indicate the need for any water quality-based limitations, this permit may be modified or alternatively revoked and reissued to incorporate appropriate limitations.
9. **Total Maximum Daily Load (TMDL) Reopener** - This permit shall be modified or alternatively revoked and reissued if any approved wasteload allocation procedure, pursuant to Section 303(d) of the Clean Water Act, imposes wasteload allocations, limits or conditions on the facility that are not consistent with the permit requirements.
10. **Requirements For Sewage Treatment Plants - Outfalls 026 and 028**
  - a. **95% Capacity Reopener** -- A written notice and a plan of action for ensuring continued compliance with the terms of this permit shall be submitted to DEQ Blue Ridge Regional Office when the monthly average flow influent to the sewage treatment plant reaches 95 percent of the design capacity authorized in this permit for each month of any three consecutive month period. The written notice shall be submitted within 30 days and the plan of action shall be received at the DEQ Blue Ridge Regional Office no later than 90 days from the third consecutive month for which the flow reached 95 percent of the design capacity. The plan shall include the necessary steps and a prompt schedule of implementation for controlling any current or reasonably anticipated problem resulting from high influent flows. Failure to submit an adequate plan in a timely manner shall be deemed a violation of this permit.
  - b. **Indirect Dischargers** -- The permittee shall provide adequate notice to the Department of the following:
    1. Any new introduction of pollutants into the sewage treatment works from an indirect discharger which would be subject to Section 301 or 306 of Clean Water Act and the State Water Control Law if it were directly discharging those pollutants; and
    2. Any substantial change in the volume or character of pollutants being introduced into the sewage treatment works by a source introducing pollutants into the treatment works at the time of issuance of this permit.

Adequate notice shall include information on (i) the quality and quantity of effluent introduced into the sewage treatment works, and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the treatment works.
  - c. **CTC, CTO Requirement** - The permittee shall, in accordance with the DEQ Sewage Collection and Treatment Regulation (9VAC 25-790), obtain a Certificate to Construct (CTC), and a Certificate to Operate (CTO) from the DEQ Office of Wastewater Engineering (for Water Quality Improvement Funded (WQIF) projects) or submitted by the design engineer and owner to the DEQ Blue Ridge Regional

Office water permit manager (for non WQIF projects) prior to constructing wastewater treatment works and operating the treatment works, respectively. Non-compliance with the CTC or CTO shall be deemed a violation of the permit.

- d. **Operation and Maintenance Manual Requirement** - The permittee shall maintain a current Operations and Maintenance (O&M) Manual for the treatment works that is in accordance with Virginia Pollutant Discharge Elimination System Regulations, 9VAC25-31 and (for sewage treatment plants) Sewage Collection and Treatment Regulations, 9 VAC 25-790.

The O&M Manual and subsequent revisions shall include the manual effective date and meet Part II.K.2 and Part II.K.4 Signatory Requirements of the permit. Any changes in the practices and procedures followed by the permittee shall be documented in the O&M Manual within 90 days of the effective date of the changes. The permittee shall operate the treatment works in accordance with the O&M Manual and shall make the O&M manual available to Department personnel for review during facility inspections. Within 30 days of a request by DEQ, the current O&M Manual shall be submitted to the DEQ Regional Office for review and approval.

The O&M manual shall detail the practices and procedures which will be followed to ensure compliance with the requirements of this permit. This manual shall include, but not necessarily be limited to, the following items, as appropriate:

- a. Permitted outfall locations and techniques to be employed in the collection, preservation, and analysis of effluent, storm water and sludge samples;
  - b. Procedures for measuring and recording the duration and volume of treated wastewater discharged;
  - c. Discussion of Best Management Practices, if applicable;
  - d. Procedures for handling, storing, and disposing of all sewage treatment plant wastes, fluids, and pollutants characterized in Part I.B.11 that will prevent these materials from reaching state waters. List type and quantity of wastes, fluids, and pollutants (e.g. chemicals) stored at the sewage treatment plant;
  - e. Discussion of treatment works design, treatment works operation, routine preventative maintenance of units within the treatment works, critical spare parts inventory and record keeping;
  - f. Plan for the management and/or disposal of waste solids and residues.
  - g. Hours of operation and staffing requirements for the plant to ensure effective operation of the treatment works and maintain permit compliance;
  - h. List of facility, local and state emergency contacts; and,
  - i. Procedures for reporting and responding to any spills/overflows/treatment works upsets.
- e. **Reliability Class** - The permitted Trickling Filter (Outfall 026) treatment works shall meet Reliability Class I.

11. **Materials Handling/Storage** -- Any and all product, materials, industrial wastes, and/or other wastes resulting from the purchase, sale, mining, extraction, transport, preparation, and/or storage of raw or intermediate materials, final product, by-product or wastes, shall be handled, disposed of, and/or stored in such a manner and consistent with Best Management Practices, so as not to permit a discharge of such product, materials, industrial wastes, and/or other wastes to State waters, except as expressly authorized.

12. **Excursion Time for pH** -- The total time limit for pH excursions of 7 hours and 26 minutes in any calendar month shall apply to the excursions for outfalls 005, 006, 007, and 029. The time limit of 60 minutes for an individual excursion shall also apply to these outfalls. The time limitations only apply to pH excursions outside the range of 6.0 to 9.0 and within the range 4.0 to 11.0. All excursions exceeding the range 4.0 to 11.0 are violations and shall be reported. After individual excursions exceeding 60 minutes or the 4.0 to 11.0 range the receiving stream shall be examined for evidence of environmental damage. Notification required by Part II of this permit shall include this information.
13. **Concept Engineering Report**
- a. A conceptual engineering report (CER) shall be submitted to the DEQ Regional Office at least 60 days prior to any modification of the storm water treatment unit discharging to Outfall 017 to ensure that the unit is properly designed and operated. The design should meet specifications in the *Virginia Erosion and Sediment Control Handbook*.
  - b. A CER shall be submitted at least 180 days prior to the planned discharge of previously unpermitted flows. The report shall present an evaluation of the effectiveness of each wastewater treatment facility. At a minimum, the report shall relate pertinent design parameters to hydraulic and organic loading; past, projected and mobilization production rates; VPDES permit limitations; and effluent toxicity. The permittee shall not reroute wastewater flows without prior approval from the Regional staff.
14. **Best Management Practices (BMP) Plan** – A Best Management Practices (BMP) plan for control of leaks, spills and storm water runoff from the facility shall be maintained as an enforceable part of the permit. The permittee shall amend the BMP plan whenever there is a change in the facility or operation of the facility which materially increases the potential to discharge significant amounts of pollutants or if the BMP plan proves to be ineffective in preventing the release of significant amounts of pollutants. Changes to the BMP plan shall be submitted for staff approval within 90 days of the effective date of the changes. Upon approval, the amended BMP plan becomes an enforceable part of the permit.
15. **Operations and Maintenance Manuals (Industrial)**- The permittee shall maintain a current Operations and Maintenance (O&M) Manual for the treatment works that is in accordance with Virginia Pollutant Discharge Elimination System Regulations, 9VAC25-31 and (for sewage treatment plants) Sewage Collection and Treatment Regulations, 9 VAC 25-790.
- The O&M Manual and subsequent revisions shall include the manual effective date and meet Part II.K.2 and Part II.K.4 Signatory Requirements of the permit. Any changes in the practices and procedures followed by the permittee shall be documented in the O&M Manual within 90 days of the effective date of the changes. The permittee shall operate the treatment works in accordance with the O&M Manual and shall make the O&M manual available to Department personnel for review during facility inspections. Within 30 days of a request by DEQ, the current O&M Manual shall be submitted to the DEQ Regional Office for review and approval.
- The O&M manual shall detail the practices and procedures which will be followed to ensure compliance with the requirements of this permit. This manual shall include, but not necessarily be limited to, the following items, as appropriate:
- a. Permitted outfall locations and techniques to be employed in the collection,

- preservation, and analysis of effluent, storm water and sludge samples;
    - b. Procedures for measuring and recording the duration and volume of treated wastewater discharged;
    - c. Discussion of Best Management Practices, if applicable;
    - d. Procedures for handling, storing, and disposing of all wastes, fluids, and pollutants characterized in Part I.B.11 that will prevent these materials from reaching state waters. List type and quantity of wastes, fluids, and pollutants (e.g. chemicals) stored at this facility;
    - e. Discussion of treatment works design, treatment works operation, routine preventative maintenance of units within the treatment works, critical spare parts inventory and record keeping;
    - f. Plan for the management and/or disposal of waste solids and residues.
    - g. Hours of operation and staffing requirements for the plant to ensure effective operation of the treatment works and maintain permit compliance;
    - h. List of facility, local and state emergency contacts; and,
    - i. Procedures for reporting and responding to any spills/overflows/treatment works upsets.
16. **Sewage Sludge Use and Disposal** - The permittee shall conduct all sewage sludge use or disposal activities in accordance with the Sludge Management Plan (SMP) approved with the issuance of this permit. Any proposed changes in the sewage sludge use or disposal practices or procedures followed by the permittee shall be documented and submitted for DEQ approval 90 days prior to the effective date of the changes. Upon approval, the revised SMP becomes an enforceable part of the permit. The permit may be modified or alternatively revoked and reissued to incorporate limitations or conditions necessitated by substantive changes in sewage sludge use or disposal practices.
17. **Licensed Operator Requirement** -- The permittee shall employ or contract at least one licensed wastewater works operator who holds a current wastewater license appropriate for the following permitted facilities.

| <u>Class of licensed operator</u> | <u>Facility (outfall)</u>       |
|-----------------------------------|---------------------------------|
| I                                 | Bioplant (029)                  |
| II                                | Waste Acid Neutralization (007) |
| II                                | Trickling filter STP (026)      |
| III                               | Imhoff STP(028)                 |

The license shall be issued in accordance with Title 54.1 of the Code of Virginia and the regulations of the Board for Waterworks and Wastewater Works Operators. The permittee shall notify the Department in writing whenever he is not complying, or has grounds for anticipating he will not comply with this requirement. The notification shall include a statement of reasons and a prompt schedule for achieving compliance.

18. **Cooling Water and Boiler Additives**
- a. If at any time during the life of the permit, the permittee decides to treat any noncontact cooling water unit(s) and/or boiler systems with chemical additives, the following requirements shall be satisfied. Thirty (30) days prior to implementing any chemical addition to the cooling water and/or boiler equipment, the permittee shall notify the DEQ Regional Office, in writing, of the following:

- 1) Chemical additives to be employed and their purpose. Provide a Material Safety Data Sheet (MSDS) for each proposed additive.
    - 2) Schedule of additive usage and,
    - 3) Wastewater treatment and/or retention to be provided during the use of additives.
  - b. Should the addition of treatment chemicals significantly alter the characteristics of the effluent from the cooling water unit(s) or if their usage becomes persistent or continuous, this permit shall be modified, or alternatively revoked and reissued to include appropriate limitations or conditions.
  - c. Concentrations of priority pollutants contained in chemicals added to cooling towers shall be non-detectable.
19. **Daily Inspections** -- Inspection of all continuous outfalls shall be performed daily and documented in a daily log. Unusual and unauthorized discharges shall be reported as detailed in Part II.G, Part II.H, and Part II.I of this permit.
20. **Thermal Mixing Zones** -- The application for reissuance of this permit shall state whether conditions used as a basis for thermal mixing zones have changed. Any changes should be explained and quantified, if possible.
21. **OCPSF Flows** - The permittee shall monitor process wastewater flows applicable to the Organic Chemicals, Plastics and Synthetic Fibers effluent. A report of the monthly OCPSF flows shall be submitted to the Blue Ridge Regional Office with the application for reissuance.
22. **New River PCB TMDL Requirements**
- a. **Pollutant Minimization Plan (PMP)** – A Total Maximum Daily Load (TMDL) for polychlorinated biphenyls (PCBs) on the New River is scheduled to be developed during in 2016. Monitoring data for PCBs previously generated by the permittee using EPA Method 1668 will be incorporated into that TMDL along with any additional data that may be voluntarily collected by the permittee. If the results of the PCB monitoring are above the wasteload allocation or other endpoint specified in an approved TMDL, the permittee shall prepare and submit to the DEQ Blue Ridge Regional Office for review and approval a Pollutant Minimization Plan (PMP) designed to investigate the location and potential reduction of sources of PCBs in the discharges. If required, the PMP shall be submitted within six months of an approved TMDL.

If required, the PMP shall detail the practices and procedures which will be followed to investigate the location and potential reduction of sources of PCBs in the discharges. This PMP shall include, but not necessarily be limited to, the following items, as appropriate:

- (1) Provide a facility contact for the contents of the PMP and any activities associated with the PMP;
- (2) Provide a proposed implementation schedule for minimization activities and prospective milestones;
- (3) Propose actions for known or probable sources;
- (4) Propose actions to find and control unknown sources;

- (5) Summarize any previous minimization activities;
  - (6) Present methods for measuring, demonstrating, and reporting progress;
    - (a) May include an evaluation of the total PCBs and/or PCB congener distribution in the initial source intake water and precipitation resulting in stormwater runoff to determine the net contributions of PCBs introduced from the facility.
    - (b) May include raw influent testing using either grab or composite samples.
    - (c) Alternative PCB test methods are acceptable provided analytical sensitivities are sufficient for detection and quantification.
    - (d) May perform further monitoring of the effluent to determine effectiveness of the reduction efforts and to reestablish a new baseline for PCBs in the discharges.
  - (7) Provide information on continuing assessment of progress, which may include establishment of criteria to evaluate whether the location and potential reduction of PCB sources has been addressed.
- b. **Pollutant Minimization Plan Annual Report** – If a PMP is required, an annual report shall be submitted to the DEQ Blue Ridge Regional Office for review and approval by February 10<sup>th</sup> for the previous year's PMP activities. An extension for a PMP report may be granted by the DEQ Blue Ridge Regional Office for reasons outside the control of the permittee (e.g. extensive delays in the TMDL development).

The annual report shall:

- (1) Summarize PMP achievement for investigating the location and potential reduction of sources of PCBs during the past calendar year;
  - (2) Address any revisions needed for the PMP for the coming year;
  - (3) Address material and process modifications, if applicable;
  - (4) Summarize measures taken to address known, probable, and potential sources; and
  - (5) Discuss incremental and cumulative changes from the baseline loading, if applicable.
- c. **Monitoring Data** – If a PMP is required and approved, the permittee shall monitor the discharge from outfall(s) and submit the data within 3 years from the approval of the PMP. These data shall be used to evaluate the progress of the PMP.
- (1) Monitoring and analysis shall be conducted according to the most current version of EPA Method 166, congener specific results as specified in the PCB Point Source Guidance Memo No. 09-2001 and/or any amendments. It is the responsibility of the permittee to ensure that proper QA/QC protocols are followed during the sample gathering and analytical procedures.
  - (2) The permittee shall collect a minimum of 1 wet weather sample for any required stormwater outfall and 1 dry weather sample for any process outfall according to the PCB Point Source Guidance Memo No. 09-2001, Appendix C (Sample Collection Methods for Effluent) and/or its amendments.
  - (3) Sampling shall be conducted according to the sampling protocol previously submitted and approved by the DEQ Blue Ridge Regional Office. Any changes to the protocol shall be submitted to the DEQ Blue Ridge Regional Office for review and approval prior to conducting sampling.
  - (4) The data shall be submitted according to Appendix E (Reporting Requirement for Analytical (PCB) Data Generated Using EPA Method 1668) of TMDL Guidance Memo No. 09-2001, Guidance for Monitoring Point Sources for TMDL Development Using Low-Level PCB Method 1668 and/or its amendments. GM09-2001, Appendix E, Attachment 2 indicates data are to be submitted directly to the TMDL Program at the DEQ's Central Office in Richmond. However, the data shall be submitted to DEQ's Blue Ridge Regional Office which will include the unadjusted and appropriately quantified individual PCB congener analytical results. Additionally, laboratory and field QA/QC documentation and results should be

reported. Total PCBs are to be computed as the summation of the reported, quantified congeners.

23. **Closure Plan**

If the permittee plans an expansion or upgrade to replace the existing treatment works, or if facilities are permanently closed, the permittee shall submit to the DEQ Regional Office a closure plan for the existing treatment works. The plan shall address the following information as a minimum: Verification of elimination of sources and/or alternate treatment scheme; treatment, removal and final disposition of residual wastewater and solids; removal/demolition/disposal of structures, equipment, piping and appurtenances; site grading, and erosion and sediment control; restoration of site vegetation; access control; fill materials; and proposed land use (post-closure) of the site. The plan should contain proposed dates for beginning and completion of the work. The plan must be approved by the DEQ prior to implementation. Once approved, the plan shall become an enforceable part of this permit and closure shall be implemented in accordance with the approved plan. No later than 14 calendar days following closure completion, the permittee shall submit to the DEQ Blue Ridge Regional Office written notification of the closure completion date and a certification of closure in accordance with the approved plan.

24. **Sludge Reopener**

The Board may promptly modify or revoke and reissue this permit if any applicable standard for sewage sludge use or disposal promulgated under Section 405(d) of the Clean Water Act is more stringent than any requirements for sludge use or disposal in this permit, or controls a pollutant or practice not limited in this permit.

25. **Section 316 Cooling Water Intake Structure Requirements**

If the facility meets the applicability requirements stated in 40 CFR 125.91(a), then the permittee shall submit to the DEQ Blue Ridge Office by **December 11, 2019** all applicable information described in 40 CFR§122.21(r)2 through 8 as follows:

- Source water physical data
- Cooling water intake structure data
- Source water baseline biological characterization data
- Cooling water system data
- Chosen methods of compliance with impingement mortality standard
- Existing entrainment performance studies
- Operational status

In accordance with 40 CFR 125.98(b)(1), nothing in this permit authorizes take for the purposes of a facility's compliance with the Endangered Species Act. The permit application identified the closed-cycle re-circulating cooling water system, variable speed pumps, and intake screens as interim Best Technology Available (BTA) for the cooling water intake. The permittee shall maintain BTA measures to minimize adverse impingement and entrainment (I&E) mortality and adverse impacts.

26. **Permit Application Requirement**

In accordance with Part II.M of the permit, a new and complete permit application shall be submitted for the reissuance of this permit by the following date: **December 12, 2019.**

**C. Whole Effluent Toxicity (WET) Limitations and Monitoring Requirements**

1.
  - a. The Whole Effluent Toxicity limitation of a maximum of 1.0 acute Toxicity Units (TU<sub>a</sub>) in Part I.A. is a final limit for outfall 029 commencing from the effective date of the permit and lasting until the permit expiration date.
  - b. The Whole Effluent Toxicity limitation of a maximum of 6.6 acute Toxicity Units (TU<sub>a</sub>) in Part I.A. is a final limit for outfall 007 commencing from the effective date of the permit and lasting until the permit expiration date.
  - c. The Whole Effluent Toxicity limitation of a maximum of 1.0 acute Toxicity Units (TU<sub>a</sub>) in Part I.A. is a final limit for outfall 006 commencing from the effective date of the permit and lasting until the permit expiration date.
2. In accordance with the schedule in Part I.C.5 below, the permittee shall conduct quarterly acute toxicity tests for the term of the permit using 24-hour flow-proportioned composite samples of final effluent from Outfalls 007 and 029. The acute tests shall be 48-hour static tests using *Ceriodaphnia dubia*. Once a year, tests shall be conducted using both *Ceriodaphnia dubia* and *Pimephales promelas*. The test which results in the lowest LC<sub>50</sub> or highest TU<sub>a</sub> for a particular outfall shall be reported on the DMR for that outfall for the month in which the tests were performed.

These acute tests shall be performed with a minimum of 5 dilutions, derived geometrically, for calculation of a valid LC<sub>50</sub> and corresponding acute Toxic Units (TU<sub>a</sub>). Express as TU<sub>a</sub> (Acute Toxic Units) by dividing 100/LC<sub>50</sub> for DMR reporting. One (1) copy of a detailed report concerning the conduct of the test shall accompany the results.

Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3. Tests in which control survival is less than 90% are not acceptable.

3. In accordance with the schedule in Part I.C.5 below, the permittee shall conduct quarterly acute toxicity tests for the term of the permit using 24-hour flow-proportioned composite samples of final effluent from Outfall 006. The acute multi-dilution NOAEC tests shall be 48-Hour Static Acute tests using *Pimephales promelas*.

These acute tests are to be conducted using 5 geometric dilutions of effluent with a minimum of 4 replicates, with 5 organisms in each. The NOAEC (No Observed Adverse Effect Concentration), as determined by hypothesis testing, shall be reported on the DMR converted to TU<sub>a</sub> (100/NOAEC). One (1) copy of a detailed report concerning the conduct of the test shall accompany the results. The LC<sub>50</sub> should also be determined and noted on the submitted report.

Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3. Tests in which control survival is less than 90% are not acceptable.

4. This permit may be modified or revoked and reissued to include pollutant specific limits in lieu of a WET limit should it be demonstrated that toxicity is due to specific parameters. Pollutant specific limits must control the toxicity of the effluent. Test procedures and

reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.

5. Reporting Schedule

- (1) The quarterly monitoring periods are January through March, April through June, July through September, and October through December. Test results must be reported on the DMR for that outfall for the month in which the tests were performed. The first quarterly monitoring period is July 1, 2015 through September 30, 2015.
- (2) The annual monitoring period is July through June. Test results must be reported on the DMR for that outfall for the month in which the tests were performed. The first annual monitoring period is July 1, 2015 through June 30, 2015.

D. Toxics Management Program

1. Biological Monitoring

- a. In accordance with the schedule in **Part I.D.2** below, the permittee shall conduct appropriate toxicity tests on 24-hour flow-proportioned composite samples of final effluent from Outfalls 005, 006, 007, 014 and 026, as well as Outfall 030 when non-contact cooling water is discharged.

Acute tests from Outfalls 005, 007, 014, 026, and 030 shall be 48-hour static tests, conducted in such a manner and with a minimum of 5 dilutions, derived geometrically, for calculation of a valid LC<sub>50</sub>. Acute tests from Outfall 006 shall be 48-hour static tests, conducted in such a manner and with a minimum of 5 geometric dilutions with a minimum of 4 replicates, with 5 organisms in each, for the determination of the NOAEC (No Observed Adverse Effect Concentration) by hypothesis testing.

The chronic tests shall be static renewal tests. The chronic *Ceriodaphnia dubia* test to be used is the Chronic 3-Brood Static Renewal Survival and Reproduction Test. The chronic *Pimephales promelas* test to be used is the Chronic 7-day Static Renewal Survival and Growth Tests. These chronic tests shall be conducted in such a manner and at sufficient dilutions (minimum of five dilutions, derived geometrically) to determine the "No Observed Effect Concentration" (NOEC) for survival and reproduction or growth. Results which cannot be quantified (i.e. a "less than" NOEC value) are not acceptable, and a retest must be performed. Express the test NOEC as TU<sub>C</sub> (Chronic Toxicity Units), by dividing 100/NOEC for DMR Reporting. Report the LC<sub>50</sub> at 48 hours and the IC<sub>25</sub> with the NOEC's in the test report.

The toxicity tests shall be performed as follows:

- (1) Outfall 005, 014, 026 and 028: The permittee shall perform annual acute tests alternating between using *Pimephales promelas* and *Ceriodaphnia dubia*.
- (2) Outfall 005 after oleum manufacture begins: Commencing within three months of the initial discharge of water from oleum manufacture, the permittee shall perform quarterly acute and chronic tests for a period of one year using *Pimephales promelas* and *Ceriodaphnia dubia*.

- (3) Outfall 006: The permittee shall perform annual chronic tests using *Pimephales promelas*.
  - (4) Outfall 007: The permittee shall perform annual chronic tests using *C. dubia*.
  - (5) Outfall 030: Testing is to be performed when non-contact cooling water is being discharged. The permittee shall perform annual acute and chronic tests alternating between using *Pimephales promelas* for the acute test and *Ceriodaphnia dubia* for the chronic test, and using *Ceriodaphnia dubia* for the acute test and *Pimephales promelas* for the chronic test.
  - (6) The permittee may provide additional samples to address data variability. These data shall be reported and may be included in the evaluation of effluent toxicity. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 163.3.
- b. All applicable data will be evaluated for reasonable potential at the end of the permit term. Should evaluation of the data indicate a limit is needed, a WET limit and compliance schedule will be required.
  - c. Test procedures and reporting shall be in accordance with the WET testing methods cited in 40 CFR 136.3.
  - d. Tests in which control survival is less than 90% are not acceptable.
2. Reporting Schedule
- a. The permittee shall report the results with the DMR and supply one (1) copy of the toxicity test reports specified in this Toxics Management Program in accordance with the following schedule:
    - b. Reporting Schedule
      - (1) The quarterly monitoring periods are January through March, April through June, July through September, and October through December. Test results must be reported with the DMR for that outfall for the month in which the tests were performed. The first quarterly monitoring period is July 1, 2015 through September 30, 2015.
      - (2) The annual monitoring period is January through December. Test results must be reported with the DMR for that outfall for the month in which the tests were performed. The first annual monitoring period is January 1, 2016 through December 31, 2016.

## E. GENERAL STORM WATER MANAGEMENT

### 1. Stormwater Management Evaluation

- a. The Stormwater Pollution Prevention Plan (SWPPP), which is to be developed and maintained in accordance with Part I.E.3 through Part I.E.7 below, shall have a goal of reducing pollutants discharged from all the regulated industrial activity stormwater outfalls.

One goal of the SWPPP shall place emphasis on reducing, to the maximum extent practicable, the following pollutants in the outfalls noted below.

| <u>Outfall</u> | <u>Parameter</u>       | <u>Comparative Value</u> |
|----------------|------------------------|--------------------------|
| Outfall 014:   | BOD <sub>5</sub>       | 30 mg/l                  |
|                | COD                    | 120 mg/l                 |
| Outfall 017:   | Total Suspended Solids | 100 µg/l                 |
|                | Copper, dissolved      | 18 µg/l                  |
|                | Lead, dissolved        | 120 µg/l                 |
|                | Zinc, dissolved;       | 120 µg/l                 |
| Outfall 041:   | Total Suspended Solids | 100 µg/l                 |
|                | Oil and Grease         | 15 µg/l                  |
| Outfall 044:   | Total Suspended Solids | 100 µg/l                 |
|                | Oil and Grease         | 15 µg/l                  |
| Outfall 050:   | Total Suspended Solids | 100 µg/l                 |

- b. The effectiveness of the SWPPP will be evaluated via the required monitoring for all parameters listed in Part I.A of this permit for the regulated stormwater outfalls, including the specific pollutants noted above. Monitoring results that are above the comparative value for the specific pollutants above will justify the need to reexamine the effectiveness of the SWPPP and any control measures being utilized for the affected outfalls. In addition, the permittee shall amend the SWPPP whenever there is a change in the facility or its operation that materially increases the potential for activities to result in a discharge of significant amounts of pollutants.
- c. By **February 10<sup>th</sup>** of each year, the permittee shall submit to the DEQ Regional Office an annual report which includes the pollutant-specific data from all storm water outfalls along with a summary of any steps taken to modify either the SWPPP or any BMPs based on the monitoring data. Any steps to be taken to reduce the concentrations to below the DEQ screening criteria shall be included in this report. The first report is due on **February 10, 2016**.
- d. Reporting Schedule:

| <b>Period</b> | <b>Evaluation Periods</b> | <b>Report Submission Dates</b> |
|---------------|---------------------------|--------------------------------|
| Annual (1)    | 7/1/2015 – 12/31/2015     | 2/10/2016                      |
| Annual (2)    | 1/1/2016 - 12/31/2016     | 2/10/2017                      |
| Annual (3)    | 1/1/2017 - 12/31/2017     | 2/10/2018                      |
| Annual (4)    | 1/1/2018 - 12/31/2018     | 2/10/2019                      |
| Annual (5)    | 1/1/2019 - 12/31/2019     | 2/10/2020                      |

## 2. General Stormwater Special Conditions

### a. Sample Type

For all stormwater monitoring required in Part I.A or other applicable sections of this permit, a minimum of one grab sample shall be taken. Unless otherwise specified, all such samples shall be collected from the discharge resulting from a storm event that occurs at least 72 hours from the previously measurable storm event (a "measurable storm event" is defined as a storm event that results in an actual discharge from the site). The required 72 hour storm event interval is waived where the preceding measurable storm event did not result in a measurable discharge from the facility. The required 72 hour storm event interval may also be waived where the permittee documents that less than a 72 hour interval is representative for local storm events during the season when sampling is being conducted. The grab sample shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is impracticable, a grab sample can be taken during the first three hours of the discharge, and the permittee shall submit with the monitoring report a description of why a grab sample during the first 30 minutes was impracticable. If stormwater discharges associated with industrial activity commingle with process or non-process water, then where practicable, permittees must attempt to sample the stormwater discharge before it mixes with the nonstormwater discharge.

### b. Recording of Results

For each measurement or sample taken pursuant to the storm event monitoring requirements of this permit, the permittee shall record and report with the Discharge Monitoring Reports (DMRs) the following information:

- (1) The date and duration (in hours) of the storm event(s) sampled;
- (2) The rainfall measurements or estimates (in inches) of the storm event which generated the sampled discharge; and
- (3) The duration between the storm event sampled and the end of the previous measurable storm event.

### c. Sampling Waiver

When a permittee is unable to collect stormwater samples required in **Part I.A** or other applicable sections of this permit within a specified sampling period due to adverse climatic conditions, the permittee shall collect a substitute sample from a separate qualifying event in the next period and submit these data along with the data for the routine sample in that period.

Adverse weather conditions that may prohibit the collection of samples include weather conditions that create dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, electrical storms, etc.) or otherwise make the collection of a sample impracticable (drought, extended frozen conditions, etc.).

### d. Representative Discharges

If the facility has two or more outfalls that discharge substantially identical effluents, based on similarities of the industrial activities, significant materials, size of drainage areas, and stormwater management practices occurring within the drainage areas of the outfalls, the permittee may conduct monitoring on the effluent of just one of the outfalls and report that the observations also apply to the substantially identical outfall(s). The substantially identical outfalls monitoring provisions apply to quarterly visual monitoring, benchmark monitoring, and impaired waters monitoring. The substantially identical outfall monitoring provisions are not available for numeric effluent limits monitoring.

The permittee shall include the following information in the SWPPP:

- (1) The location of the outfalls;
- (2) Why the outfalls are expected to discharge substantially identical effluents, including evaluation of monitoring data, where available; and
- (3) Estimates of the size of the drainage area (in square feet) for each of the outfalls.

e. Quarterly Visual Examination of Stormwater Quality

- (1) The permittee shall perform and document a quarterly visual examination of a stormwater discharge associated with industrial activity from each outfall, except discharges exempted below. The examination(s) must be made at least once in each of the following three-month periods: January through March, April through June, July through September, and October through December. The visual examination shall be made during normal working hours, where practicable, and when considerations for safety and feasibility allow. If no storm event resulted in runoff from the facility during a monitoring quarter, the permittee is excused from visual monitoring for that quarter provided that documentation is included with the monitoring records indicating that no runoff occurred. The documentation must be signed and certified in accordance with Part II.K "Signatory Requirements" in "Conditions Applicable to All VPDES Permit" of this permit.
- (2) Visual examinations shall be made of samples collected in accordance with **Part I.E.2.a** (Sample Type). The examination shall document observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of stormwater pollution. The examination must be conducted in a well-lit area. No analytical tests are required to be performed on the samples.
- (3) The visual examination reports shall be maintained on-site with the Stormwater Pollution Prevention Plan (SWPPP). The report shall include the outfall location, the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the stormwater discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of

stormwater pollution), and probable sources of any observed stormwater contamination.

f. Authorized Nonstormwater Discharges

- (1) The following nonstormwater discharges are authorized by this permit:
  - (a) Discharges from fire fighting activities;
  - (b) Fire hydrant flushings;
  - (c) Potable water including water line flushings;
  - (d) Uncontaminated condensate from air conditioners, coolers, and other compressors and from the outside storage of refrigerated gases or liquids;
  - (e) Irrigation drainage;
  - (f) Landscape watering provided all pesticides, herbicides, and fertilizer have been applied in accordance with approved labeling;
  - (g) Pavement wash waters where no detergents are used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed);
  - (h) Routine external building wash down which does not use detergents;
  - (i) Uncontaminated groundwater or spring water;
  - (j) Foundation or footing drains where flows are not contaminated with process materials; and
  - (k) Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but NOT intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdown or drains).

g. Releases of Hazardous Substances or Oil in Excess of Reportable Quantities

The discharge of hazardous substances or oil in the stormwater discharge(s) from the facility shall be prevented or minimized in accordance with the stormwater pollution prevention plan for the facility. This permit does not authorize the discharge of hazardous substances or oil resulting from an on-site spill. This permit does not relieve the permittee of the reporting requirements of 40 CFR 110, 40 CFR 117 and 40 CFR 302 or § 62.1-44.34:19 of the Code of Virginia. Where a release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR 110, 40 CFR 117 or 40 CFR 302 occurs during a 24-hour period:

- (1) The permittee is required to notify the Department in accordance with

the requirements of **Part II.G** "Reports of Unauthorized Discharges" in "Conditions Applicable to All VPDES Permits" as soon as he or she has knowledge of the discharge;

- (2) Where a release enters a municipal separate storm sewer system (MS4), the permittee shall also notify the owner or the MS4; and
- (3) The stormwater pollution prevention plan required by this permit must be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan must be modified where appropriate.

h. Water Quality Protection

The discharges authorized by this permit shall be controlled as necessary to meet applicable water quality standards. DEQ expects that compliance with the conditions in this permit will control discharges as necessary to meet applicable water quality standards.

i. Corrective Actions

(1) Data Exceeding Benchmark Concentration Values

- (a) If the benchmark monitoring result exceeds the benchmark concentration value for that parameter, the permittee shall review the SWPPP and modify it as necessary to address any deficiencies that caused the exceedance. Revisions to the SWPPP shall be completed within 30 days after an exceedance is discovered. When control measures need to be modified or added (distinct from regular preventive maintenance of existing control measures described in **Part I.E.3.c** (Maintenance) implementation shall be completed before the next anticipated storm event if possible, but no later than 60 days after the exceedance is discovered, or as otherwise provided or approved by the DEQ Blue Ridge Regional Office. In cases where construction is necessary to implement control measures, the permittee shall include a schedule in the SWPPP that provides for the completion of the control measures as expeditiously as practicable, but no later than three years after the exceedances is discovered. Where a construction compliance schedule is included in the SWPPP, the plan shall include appropriate nonstructural and temporary controls to be implemented in the affected portion(s) of the facility prior to completion of the permanent control measure. Any control measure modifications shall be documented and dated, and retained with the SWPPP, along with the amount of time taken to modify the applicable control measures or implement additional control measures.

(b) Natural Background Pollutant Levels

If the concentration of a pollutant exceeds a benchmark concentration value, and the permittee determines that exceedance of the benchmark is attributable solely to the presence of that pollutant in the natural background, corrective action is not required provided that:

- (i) The concentration of the benchmark monitoring result is less than or equal to the concentration of that pollutant in the natural background;
  - (ii) The permittee documents and maintains with the SWPPP the supporting rationale for concluding that benchmark exceedances are in fact attributable solely to natural background pollutant levels. The supporting rationale shall include any data previously collected by the facility or others (including literature studies) that describe the levels of natural background pollutants in the facility's stormwater discharges, and
  - (iii) The permittee notifies the DEQ Blue Ridge Regional Office on the DMR that the benchmark exceedances are attributable solely to natural background pollutant levels. Natural background pollutants include those substances that are naturally occurring in soils or groundwater. Natural background pollutants do not include legacy pollutants from earlier activity on the facility's site or pollutants in run-on from neighboring sources which are not naturally occurring.
- (2) Corrective Actions. The permittee shall take corrective actions whenever:
- (a) Routine facility inspections, comprehensive site compliance evaluations, inspections by local, state, or federal officials, or any other process, observation or event result in a determination that modifications to the stormwater control measures are necessary to meet the permit requirements; or
  - (b) There is any exceedances of an effluent limitation (including coal pile runoff), or TMDL wasteload allocation, or a reduction required by a local ordinance established by a municipality to meet Chesapeake Bay TMDL requirements;
  - (c) The DEQ Blue Ridge Regional Office determines, or the permittee becomes aware, that the stormwater control measures are not stringent enough for the discharge to meet applicable water quality standards.

The permittee shall review the SWPPP and modify it as necessary to address any deficiencies. Revisions to the SWPPP

shall be completed within 30 days following the discovery of the deficiency. When control measures need to be modified or added (distinct from regular preventive maintenance of existing control measures described in Part I.E.3.c (Maintenance) implementation shall be completed before the next anticipated storm event if possible, but no later than 60 days after the deficiency is discovered, or as otherwise provided or approved by the DEQ Blue Ridge Regional Office. In cases where construction is necessary to implement control measures, the permittee shall include a schedule in the SWPPP that provides for the completion of the control measures as expeditiously as practicable, but no later than three years after the deficiency is discovered. Where a construction compliance schedule is included in the SWPPP, the plan shall include appropriate nonstructural and temporary controls to be implemented in the affected portion(s) of the facility prior to completion of the permanent control measure. The amount of time taken to modify a control measure or implement additional control measures shall be documented in the SWPPP.

Any corrective actions taken shall be documented and retained with the SWPPP. Report of corrective actions shall be signed in accordance with **Part II.K** (Signatory Requirements).

(3) **Follow-up Reporting**

If at any time monitoring results indicate that discharges from the facility exceed an effluent limitation or a TMDL wasteload allocation, or the DEQ Blue Ridge Regional Office determine that discharges from the facility are causing or contributing to an exceedances of a water quality standard, immediate steps shall be taken to eliminate the exceedances in accordance with the above **Part I.E.2.i(2)** (Corrective Actions). Within 30 calendar days of implementing the relevant corrective action(s), an exceedance report shall be submitted to the DEQ Blue Ridge Regional Office. The following information shall be included in the report: permit number, facility name, address and location; receiving water, monitoring data from this event; an explanation of the situation; description of what has been done and the intended actions (should the corrective actions not yet be complete) to further reduce pollutants in the discharge; and an appropriate contact name and phone number.

j. **Additional Requirements for Salt Storage**

Storage piles of salt or piles containing salt used for deicing or other commercial or industrial purposes shall be enclosed or covered to prevent exposure to precipitation. The permittee shall implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the pile. All salt storage piles shall be located on an impervious surface. All runoff from the pile, and/or runoff that comes in contact with salt, including under drain systems, shall be

collected and contained within a bermed basin lined with concrete or other impermeable materials, or within an underground storage tank(s), or within an above ground storage tank(s), or disposed of through a sanitary sewer (with the permission of the treatment facility). A combination of any or all of these methods may be used. In no case shall salt contaminated stormwater be allowed to discharge directly to the ground or to state waters.

### 3. Stormwater Pollution Prevention Plan

Refer to **Parts I.E.4 through I.E.7** for sector-specific stormwater management requirements.

A stormwater pollution prevention plan (SWPPP) for the facility was required to be developed and implemented under the previous permit. The existing stormwater pollution prevention plan shall be reviewed and modified, as appropriate, to conform to the requirements of this section. Permittees shall implement the provisions of the stormwater pollution prevention plan as a condition of this permit.

The stormwater pollution prevention plan requirements of this permit may be fulfilled, in part, by incorporating by reference other plans or documents such as a spill prevention control and countermeasure (SPCC) plan developed for the facility under Section 311 of the Clean Water Act or control measure programs otherwise required for the facility, provided that the incorporated plan meets or exceeds the plan requirements of **Part I.E.3.b** (Contents of the Plan). All plans incorporated by reference into the stormwater pollution prevention plan become enforceable under this permit. If a plan incorporated by reference does not contain all of the required elements of the SWPPP of **Part I.E.3.b**, the permittee shall develop the missing SWPPP elements and include them in the required plan.

#### a. Deadlines for Plan Preparation and Compliance

- (1) The facility shall review and update the SWPPP as expeditiously as practicable, but not later than 90 days from the effective date of the permit.
- (2) Measures That Require Construction. In cases where construction is necessary to implement measures required by the plan, the plan shall contain a schedule that provides compliance with the plan as expeditiously as practicable, but no later than 3 years after the effective date of this permit. Where a construction compliance schedule is included in the plan, the schedule shall include appropriate nonstructural and temporary controls to be implemented in the affected portion(s) of the facility prior to completion of the permanent control measure.

#### b. Contents of the Plan

The contents of the SWPPP shall comply with the requirements listed below and those in **Part I.E.4**. The plan shall include, at a minimum, the following items:

- (1) Pollution Prevention Team. The plan shall identify the staff individuals by name or title who comprise the facility's stormwater pollution prevention team. The pollution prevention team is responsible for assisting the facility or plant manager in developing, implementing, maintaining, revising, and ensuring compliance with the facility's

SWPPP. Responsibilities of each staff individual on the team shall be identified and listed.

- (2) Site Description. The SWPPP shall include the following:
- (a) Activities at the Facility. A description of the nature of the industrial activities at the facility.
  - (b) General Location Map. A general location map (e.g., USGS quadrangle or other map) with enough detail to identify the location of the facility and the receiving waters within one mile of the facility.
  - (c) Site Map. A site map identifying the following:
    - (i) The boundaries of the property and the size of the property (in acres);
    - (ii) The location and extent of significant structures and impervious surfaces (roofs, paved areas and other impervious areas);
    - (iii) Locations of all stormwater conveyances including ditches, pipes, swales, and inlets, and the directions of stormwater flow (use arrows to show which ways stormwater will flow);
    - (iv) Locations of all existing structural and source control measures, including best management practices (BMPs);
    - (v) Locations of all surface water bodies; including wetlands;
    - (vi) Locations of potential pollutant sources identified under **Part I.E.3.b(3)** (Summary of Potential Pollutant Sources);
    - (vii) Locations where significant spills or leaks identified under **Part I.E.3.b(4)** (Spills and Leaks) have occurred;
    - (viii) Locations of the following activities where such activities are exposed to precipitation: fueling stations; vehicles and equipment maintenance and cleaning areas; loading and unloading areas; locations used for the treatment; storage or disposal of wastes; liquid storage tanks; processing and storage areas; access roads, rail cars and tracks; transfer areas for substances in bulk; and machinery;
    - (ix) Locations of stormwater outfalls and an approximate outline of the area draining to each outfall, and location of municipal storm sewer systems, if the stormwater from the facility discharges to them;

- (x) Location and description of all nonstormwater discharges;
  - (xi) Location of any storage piles containing salt used for deicing or other commercial or industrial purposes;
  - (xii) Locations and sources of runoff to the site from adjacent property, where the runoff contains significant quantities of pollutants; and
  - (xiii) Locations of all stormwater monitoring points.
- (d) Receiving Waters and Wetlands. The name of all surface waters receiving discharges from the site, including intermittent streams, dry sloughs, and arroyos. Provide a description of wetland sites that may receive discharges from the facility. If the facility discharges through a municipal separate storm sewer system (MS4), identify the MS4 operator and the receiving water to which the MS4 discharges.
- (3) Summary of Potential Pollutant Sources. The plan shall identify each separate area at the facility where industrial materials or activities are exposed to stormwater. Industrial materials or activities include, but are not limited to: material handling equipment or activities, industrial machinery, raw materials, industrial production and processes, intermediate products, byproducts, final products, and waste products. Material handling activities include, but are not limited to: the storage, loading and unloading, transportation, disposal, or conveyance of any raw material, intermediate product, final product or waste product. For each separate area identified, the description shall include:
- (a) Activities in the Area. A list of the industrial activities exposed to stormwater (e.g., material storage, equipment fueling and cleaning, cutting steel beams);
  - (b) Pollutants. A list of the pollutant(s) or pollutant constituents (e.g., crankcase oil, zinc, sulfuric acid, cleaning solvents, etc.) associated with each industrial activity. The pollutant list shall include all significant materials handled, treated, stored, or disposed that have been exposed to stormwater in the three years prior to the date this SWPPP was prepared or amended. The list shall include any hazardous substances or oil at the facility.
- (4) Spills and Leaks. The SWPPP shall clearly identify areas where potential spills and leaks that can contribute pollutants to stormwater discharges can occur and their corresponding outfalls. The plan shall include a list of significant spills and leaks of toxic or hazardous pollutants that actually occurred at exposed areas, or that drained to a stormwater conveyance during the three-year period prior to the date this SWPPP was prepared or amended. The list shall be updated if significant spills or leaks occur in exposed areas of the facility during the term of the permit. Significant spills and leaks include, but are not limited to, releases of oil or hazardous substances in excess of reportable

quantities.

- (5) **Sampling Data.** The plan shall include a summary of existing stormwater discharge sampling data taken at the facility. The summary shall include, at a minimum, any data collected during the previous permit term.
- (6) **Stormwater Controls**
  - (a) Control measures shall be implemented for all the areas identified in **Part I.E.3.b(3)** (Summary of Potential Pollutant Sources) to prevent or control pollutants in stormwater discharges from the facility. Regulated stormwater discharges from the facility include stormwater run-on that commingles with stormwater discharges associated with industrial activity at the facility. The SWPPP shall describe the type, location and implementation of all control measures for each area where industrial materials or activities are exposed to stormwater. Selection of control measures shall take into consideration:
    - (i) That preventing stormwater from coming into contact with polluting materials is generally more effective, and less costly, than trying to remove pollutants from stormwater;
    - (ii) Control measures generally shall be used in combination with each other for most effective water quality protection;
    - (iii) Assessing the type and quantity of pollutants, including their potential to impact receiving water quality, is critical to designing effective control measures;
    - (iv) That minimizing impervious areas at the facility can reduce runoff and improve groundwater recharge and stream base flows in local streams (however, care must be taken to avoid ground water contamination);
    - (v) Flow attenuation by use of open vegetated swales and natural depressions can reduce in-stream impacts of erosive flows;
    - (vi) Conservation or restoration of riparian buffers will help protect streams from stormwater runoff and improve water quality; and
    - (vii) Treatment interceptors (e.g., swirl separators and sand filters) may be appropriate in some instances to minimize the discharge of pollutants.
  - (b) **Nonnumeric technology-based effluent limits.** The permittee shall implement the following types of control measures to prevent and control pollutants in the stormwater discharges from the facility, unless it can be demonstrated and documented that such controls are not relevant to the discharges (e.g., there are no

storage piles containing salt).

- (i) **Good Housekeeping.** The permittee shall keep clean all exposed areas of the facility that are potential sources of pollutants to stormwater discharges. Typical problem areas include areas around trash containers, storage areas loading docks, and vehicle fueling and maintenance areas. The plan shall include a schedule for regular pickup and disposal of waste materials, along with routine inspections for leaks and conditions of drums, tanks and containers.
- (ii) **Eliminating and Minimizing Exposure.** To the extent practicable manufacturing, processing and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operation) shall be located inside, or protected by a storm-resistant covering to prevent exposure to rain, snow, snowmelt, and runoff. Note: Eliminating exposure at all industrial areas may make the facility eligible for the "Conditional Exclusion for No Exposure" provision of 9 VAC 25-31-120 E, thereby eliminating the need to have a permit.
- (iii) **Preventive Maintenance.** The permittee shall have a preventive maintenance program that includes regular inspection, testing, maintenance and repairing of all industrial equipment and systems to avoid situations that could result in leaks, spill and other releases. This program is in addition to the specific control measure maintenance required under **Part I.E.3.c (Maintenance)**.
- (iv) **Spill Prevention and Response Procedures.** The plan shall describe the procedures that will be followed for preventing and responding to spills and leaks, including:
  - (A) Preventive measures such as barriers between material storage and traffic areas, secondary containment provisions, and procedures for material storage and handling;
  - (B) Response procedures including notification of appropriate facility personnel, emergency agencies, and regulatory agencies, and procedures for stopping, containing and cleaning up spills. Measures for cleaning up hazardous material spills or leaks shall be consistent with applicable RCRA regulations at 40 CFR Part 264 and 40 CFR Part 265. Employees who may cause, detect or respond to a spill or leak shall be trained in these procedures and have necessary spill response equipment available. If possible, one of these

individuals shall be a member of the Pollution Prevention Team;

- (C) Procedures for plainly labeling containers (e.g. "used oil," "spent solvents," "fertilizers and pesticides," etc.) that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur, and
  - (D) Contact information for individuals and agencies that must be notified in the event of a spill shall be included in the SWPPP, and in other locations where it will be readily available.
- (v) Routine Facility Inspections. Facility personnel who possess the knowledge and skills to assess conditions and activities that could impact stormwater quality at the facility, and who can also evaluate the effectiveness of control measures shall regularly inspect all areas of the facility where industrial materials or activities are exposed to stormwater. These inspections are in addition to, or as part of, the comprehensive site evaluation required under **Part I.E.3.d**. At least one member of the Pollution Prevention Team shall participate in the routine facility inspections.

The inspection frequency shall be specified in the plan based upon a consideration of the level of industrial activity at the facility, but shall be a minimum of quarterly unless more frequent intervals are specified elsewhere in the permit or written approval is received from the Department for less frequent intervals. At least once each calendar year the routine facility inspection shall be conducted during a period when a stormwater discharge is occurring.

Any deficiencies in the implementation of the SWPPP that are found shall be corrected as soon as practicable, but not later than within 30 days of the inspection, unless permission for a later date is granted in writing by the Director. The results of the inspections shall be documented in the SWPPP and shall include at a minimum:

- (A) The inspection date and time;
- (B) The name and signature of the inspector(s);
- (C) Weather information and a description of any discharges occurring at the time of the inspection;
- (D) Any previously unidentified discharges of

- pollutants from the site;
- (E) Any control measures needing maintenance or repairs;
  - (F) Any failed control measures that need replacement;
  - (G) Any incidents of noncompliance observed; and
  - (H) Any additional control measures needed to comply with the permit requirements.
- (vi) **Employee Training.** The permittee shall implement a stormwater employee training program for the facility. Employee training shall take place, at a minimum, once per calendar year. The stormwater employee training program shall include initial training for new hires. The SWPPP shall include a schedule for all types of necessary training and shall document all training sessions and the employees who received the training. Training shall be provided for all employees who work in areas where industrial materials or activities are exposed to stormwater, and for employees who are responsible for implementing activities identified in the SWPPP (e.g., inspectors, maintenance personnel, etc.). The training shall cover the components and goals of the SWPPP, and include such topics as spill response, good housekeeping, material management practices, control measure operation and maintenance, etc. The SWPPP shall include a summary of any training performed.
- (vii) **Sediment and Erosion Control.** The plan shall identify areas at the facility that, due to topography, land disturbance (e.g., construction, landscaping, site grading), or other factors, have a potential for soil erosion. The permittee shall identify and implement structural, vegetative, and stabilization control measures to prevent or control on-site and off-site erosion and sedimentation. Flow velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel if the flows would otherwise create erosive conditions.
- (viii) **Management of Runoff.** The plan shall describe the stormwater runoff management practices (i.e., permanent structural control measures) for the facility. These types of control measures are typically used to divert, infiltrate, reuse, or otherwise reduce pollutants in stormwater discharges from the site.

Structural control measures may require a separate permit under §404 of the CWA and the Virginia Water Protection Permit Program Regulation (9 VAC 25-210)

before installation begins.

- (ix) Dust Suppression and Vehicle Tracking of Industrial Materials. The permittee shall implement control measures to minimize the generation of dust and off-site tracking of raw, final, or waste materials. Stormwater collected on-site may be used for the purposes of dust suppression or for spraying stockpiles. Potable water and well water may also be used for this purpose. There shall be no direct discharge to surface waters from dust suppression activities or as a result of spraying stockpiles.

c. Maintenance

The SWPPP shall include a description of procedures and a regular schedule for preventive maintenance of all control measures, and shall include a description of the back-up practices that are in place should a runoff event occur while a control measure is off-line. The effectiveness of nonstructural control measures shall also be maintained by appropriate means (e.g., spill response supplies available and personnel trained, etc.).

All control measures identified in the SWPPP shall be maintained in effective operating condition and shall be observed at least annually during active operation (i.e. during a stormwater runoff event) to ensure that they are functioning correctly. Where discharge locations are inaccessible, nearby downstream locations shall be observed. The observations shall be documented in the SWPPP.

If site inspections required by **Part I.E.3.b(6)(b)(v)** (Routine Facility Inspections) or **Part I.E.3.d** (Comprehensive Site Compliance Evaluation) identify control measures that are not operating effectively, repairs or maintenance shall be performed before the next anticipated storm event. If maintenance prior to the next anticipated storm event is not possible, maintenance shall be scheduled and accomplished as soon as practicable. In the interim, back-up measures shall be employed and documented in the SWPPP until repairs or maintenance is complete. Documentation shall be kept with the SWPPP of maintenance and repairs of control measures, including the date(s) of regular maintenance, date(s) of discovery of areas in need of repair or replacement, and date(s) for repairs that the control measures returned to full function, and the justification for any extended maintenance or repair schedules.

d. Comprehensive Site Compliance Evaluation

The permittee shall conduct comprehensive site compliance evaluations at least once each calendar year. The evaluations shall be done by qualified personnel who possess the knowledge and skills to assess conditions and activities that could impact stormwater quality at the facility and who can also evaluate the effectiveness of control measures. The personnel conducting the evaluations may be either facility employees or outside personnel hired by the facility.

- (1) Scope of the Compliance Evaluation. Evaluations shall include all areas where industrial materials or activities are exposed to stormwater, as identified in **Part I.E.3.b(3)** (Summary of Potential Pollutant Sources). The personnel shall evaluate:
  - (a) Industrial materials, residue or trash that may have or could come into contact with stormwater;
  - (b) Leaks or spills from industrial equipment, drums, barrels, tanks or other containers that have occurred within the past three years;
  - (c) Off-site tracking of industrial or waste materials or sediment where vehicles enter or exit the site;
  - (d) Tracking or blowing of raw, final, or waste materials from areas of no exposure to exposed areas;
  - (e) Evidence of, or the potential for, pollutants entering the drainage system;
  - (f) Evidence of pollutants discharging to surface waters at all facility outfalls, and the condition of and around the outfall, including flow dissipation measures to prevent scouring;
  - (g) Review of stormwater related training performed, inspections completed, maintenance performed, quarterly visual examinations, and effective operation of control measures;
  - (h) Results of both visual and any analytical monitoring done during the past year shall be taken into consideration during the evaluation.
- (2) Based on the results of the evaluation, the SWPPP shall be modified as necessary (e.g., show additional controls on the map required by **Part I.E.3.b(2)(c)**; revise the description of controls required by **Part I.E.3.b(6)** to include additional or modified control measures designed to correct problems identified). Revisions to the SWPPP shall be completed within 30 days following the evaluation, unless permission for a later date is granted in writing by the Director. If existing control measures need to be modified or if additional control measures are necessary, implementation shall be completed before the next anticipated storm event, if practicable, but not more than 60 days after completion of the comprehensive site evaluation, unless permission for a later date is granted in writing by the Department;
- (3) Compliance Evaluation Report. A report shall be written summarizing the scope of the evaluation, name(s) of personnel making the evaluation, the date of the evaluation, and all observations relating to the implementation of the SWPPP, including elements stipulated in **Part I.E.3.d(1)(a)** through **(h)** above. Observations shall include such things

as: the location(s) of discharges of pollutants from the site; location(s) of previously unidentified sources of pollutants; location(s) of control measures that need to be maintained or repaired; location(s) of failed control measures that need replacement; and location(s) where additional control measures are needed. The report shall identify any incidents of noncompliance that were observed. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the SWPPP and this permit. The report shall be signed in accordance with **Part II.K “Signatory Requirements”** in “Conditions Applicable to all VPDES Permits” and maintained with the SWPPP.

- (4) Where compliance evaluation schedules overlap with routine inspections required under **Part I.E.3.b(6)(b)(v)** (Routine Facility Inspections), the annual compliance evaluation may be used as one of the routine inspections.

e. Signature and Plan Review

- (1) **Signature and Location.** The SWPPP including revisions to the SWPPP to document any corrective actions taken as required by **Part I.E.2(i)** (Corrective Actions) shall be signed in accordance with **Part II.K “Signatory Requirements”** in “Conditions Applicable to All VPDES Permits” dated and retained on-site at the facility covered by this permit in accordance with **Part II.B.2 “Records”** in “Conditions Applicable to All VPDES Permits.” All other changes to the SWPPP, and other permit compliance documentation, shall be signed and dated by the person preparing the change or documentation.
- (2) **Availability.** The permittee shall retain a copy of the current SWPPP, required by this permit at the facility, and it shall be immediately available to the Department, EPA, or the operator of an MS4 receiving discharges from the site at the time of an on-site inspection or upon request.
- (3) **Required Modifications.** The permittee shall modify the SWPPP whenever necessary to address any corrective actions required by **Part I.E.2(i)(1)** (Data Exceeding Benchmark Concentration Values) or **Part I.E.2(i)** (Corrective Actions). Changes to the SWPPP shall be made in accordance with the corrective action deadlines in **Part I.E.2(i)(1)** and **Part I.E.2(i)** and shall be signed and dated in accordance with **Part II.K “Signatory Requirements”** in “Conditions Applicable to all VPDES Permits”.

The Director may notify the permittee at any time that the SWPPP, control measures, or other components of the facility's stormwater program do not meet one or more of the requirements of this permit. The notification shall identify specific provisions of the permit that are not being met and may include required modifications to the stormwater program, additional monitoring requirements, and special reporting

requirements. The permittee shall make any required changes to the SWPPP within 60 days of receipt of such notification, unless permission for a later date is granted in writing by the Director, and shall submit a written certification to the Director that the requested changes have been made.

f. Maintaining an Updated SWPPP

- (1) The permittee shall amend the SWPPP, as appropriate whenever:
  - (a) There is construction or a change in design, operation, or maintenance at the facility that has a significant effect on the discharge, or the potential for the discharge of pollutants from the facility;
  - (b) Routine inspections or compliance evaluations determine that there are deficiencies in the control measures;
  - (c) Inspections by local, state, or federal officials determine that modifications to the SWPPP are necessary;
  - (d) There is a spill, leak, or other release at the facility; or
  - (e) There is an unauthorized discharge from the facility.
- (2) SWPPP modifications shall be made within 30 calendar days after discovery, observation, or event requiring a SWPPP modification. Implementation of new or modified control measures (distinct from regular preventive maintenance of existing control measures described in **Part I.E.3.b(6)(b)(iii)** (Preventative Maintenance) shall be initiated before the next storm event if possible, but no later than 60 days after discovery, or as otherwise provided or approved by the Director. The amount of time taken to modify a control measures or implement additional control measures shall be documented in the SWPPP.
- (3) If the SWPPP modification is based on a release or unauthorized discharge, include a description and date of the release, the circumstances leading to the release, actions taken in response to the release, and measures to prevent the recurrence of such releases. Unauthorized releases and discharges are subject to the reporting requirements of **Part II.G** "Reports of Unauthorized Discharges" in "Conditions Applicable to All Permits" of this permit.

4. **Sector Specific Stormwater Pollution Prevention Plan Requirements: Landfills, Land Application Sites, and Open Dumps (Sector L)**

In addition to the requirements in **Part I.E.3**, the SWPPP shall include, at a minimum, the following items:

a. Site Description

(1) Site Map

The site map shall identify where any of the following may be exposed to precipitation or surface runoff: active and closed landfill cells or trenches; active and closed land application areas; locations where open dumping is occurring or has occurred; locations of any known leachate springs or other areas where uncontrolled leachate may commingle with runoff; and leachate collection and handling systems.

(2) Summary of Potential Pollutant Sources

The SWPPP shall also include a description of potential pollutant sources associated with any of the following: fertilizer, herbicide and pesticide application; earth/soil moving; waste hauling and loading and unloading; outdoor storage of significant materials including daily, interim and final cover material stockpiles as well as temporary waste storage areas; exposure of active and inactive landfill and land application areas; uncontrolled leachate flows; and failure or leaks from leachate collection and treatment systems.

b. Stormwater Controls

(1) Preventive Maintenance Program

As part of the preventive maintenance program, the permittee shall maintain: all elements of leachate collection and treatment systems to prevent commingling of leachate with stormwater; and the integrity and final cover (including making repairs to the cover as necessary) to minimize the effects of settlement, sinking, and erosion.

(2) Routine Facility Inspections

(a) Inspections of Active Sites

Operating landfills, open dumps, and land application sites shall be inspected at least once every seven days. Qualified personnel shall inspect areas of landfills that have not yet been finally stabilized, active land application areas, areas used for storage of materials or wastes that are exposed to precipitation, stabilization and structural control measures, leachate collection and treatment systems, and locations where equipment and waste trucks enter and exit the site. Erosion and sediment control measures shall be observed to ensure they are operating correctly. For stabilized sites and areas where land application has been completed, or where the climate is seasonally arid (annual rainfall averages from 0 to 10 inches) or semi-arid (annual rainfall averages from 10 to 20 inches), inspections shall be conducted at least once every month.

(b) Inspections of Inactive Sites

Inactive landfills, open dumps, and land application sites shall be inspected at least quarterly. Qualified personnel shall inspect landfill (or open dump) stabilization and structural erosion control measures and leachate collection and treatment systems, and all closed land application areas.

(3) Recordkeeping and Internal Reporting Procedures

Landfill and open dump owners shall provide for a tracking system for the types of wastes disposed of in each cell or trench of a landfill or open dump. Land application site owners shall track the types and quantities of wastes applied in specific areas.

(4) Sediment and Erosion Control Plan

Landfill and open dump owners shall provide for temporary stabilization of materials stockpiled for daily, intermediate, and final cover. Stabilization practices to consider include, but are not limited to, temporary seeding, mulching, and placing geotextiles on the inactive portions of the stockpiles. Landfill and open dump owners shall provide for temporary stabilization of inactive areas of the landfill or open dump which have an intermediate cover but no final cover. Landfill and open dump owners shall provide for temporary stabilization of any landfill or open dumping areas which have received a final cover until vegetation has established itself. Land application site owners shall also stabilize areas where waste application has been completed until vegetation has been established.

(5) Comprehensive Site Compliance Evaluation

Areas contributing to a stormwater discharge associated with industrial activities at landfills, open dumps and land application sites shall be evaluated for evidence of, or the potential for, pollutants entering the drainage system.

5. **Sector Specific Stormwater Pollution Prevention Plan Requirements: Steam Electric Generating Facilities (Sector O)**

In addition to the requirements in **Part I.E.3**, the SWPPP shall include, at a minimum, the following items:

a. Site Description.

Site Map. The site map shall identify the locations of any of the following activities or sources that may be exposed to precipitation or surface runoff: storage tanks, scrap yards, general refuse areas; short and long term storage of general materials (including, but not limited to: supplies, construction materials, plant equipment, oils, fuels, used and unused solvents, cleaning materials, paint,

water treatment chemicals, fertilizer, and pesticides); landfills; construction sites; and stock pile areas (such as coal or limestone piles).

b. Stormwater Controls.

(1) Good Housekeeping Measures.

- (a) Fugitive Dust Emissions. The permittee shall describe and implement measures that prevent or minimize fugitive dust emissions from coal and ash handling areas. The permittee shall minimize off-site tracking of coal dust and ash. Control measures to consider include installing specially designed tires, or washing vehicles in a designated area before they leave the site, and controlling the wash water.
- (b) Delivery Vehicles. The plan shall describe measures that prevent or minimize contamination of stormwater runoff from delivery vehicles arriving on the plant site. At a minimum the permittee shall consider the following:
  - (i) Develop procedures for the inspection of delivery vehicles arriving on the plant site, and ensure overall integrity of the body or container; and
  - (ii) Develop procedures to deal with leakage and spillage from vehicles or containers.
- (c) Fuel Oil Unloading Areas. The plan shall describe measures that prevent or minimize contamination of precipitation or surface runoff from fuel oil unloading areas. At a minimum the permittee shall consider using the following measures, or an equivalent:
  - (i) Use of containment curbs in unloading areas;
  - (ii) During deliveries, having station personnel familiar with spill prevention and response procedures present to ensure that any leaks and spills are immediately contained and cleaned up; and
  - (iii) Use of spill and overflow protection (e.g., drip pans, drip diapers, or other containment devices placed beneath fuel oil connectors to contain potential spillage during deliveries or from leaks at the connectors).
- (d) Chemical Loading and Unloading Areas. The permittee shall describe and implement measures that prevent or minimize the contamination of precipitation or surface runoff from chemical loading and unloading areas. At a minimum the permittee shall consider using the following measures (or their equivalents):

- (i) Use of containment curbs at chemical loading and unloading areas to contain spills;
  - (ii) During deliveries, having station personnel familiar with spill prevention and response procedures present to ensure that any leaks or spills are immediately contained and cleaned up; and
  - (iii) Covering chemical loading and unloading areas, and storing chemicals indoors.
- (e) **Miscellaneous Loading and Unloading Areas.** The permittee shall describe and implement measures that prevent or minimize the contamination of stormwater runoff from loading and unloading areas. The permittee shall consider the following, at a minimum (or their equivalents):
- (i) covering the loading area;
  - (ii) grading, berming, or curbing around the loading area to divert run-on; or
  - (iii) locating the loading and unloading equipment and vehicles so that leaks are contained in existing containment and flow diversion systems.
- (f) **Liquid Storage Tanks.** The permittee shall describe and implement measures that prevent or minimize contamination of stormwater runoff from aboveground liquid storage tanks. At a minimum the permittee shall consider employing the following measures (or their equivalents):
- (i) Use of protective guards around tanks;
  - (ii) Use of containment curbs;
  - (iii) Use of spill and overflow protection; and
  - (iv) Use of dry cleanup methods.
- (g) **Large Bulk Fuel Storage Tanks.** The permittee shall describe and implement measures that prevent or minimize contamination of stormwater runoff from large bulk fuel storage tanks. At a minimum the permittee shall consider employing containment berms (or its equivalent). The permittee shall also comply with applicable state and federal laws, including Spill Prevention Control and Countermeasures (SPCC).
- (h) **Spill Reduction Measures.** The permittee shall describe and implement measures to reduce the potential for an oil or chemical

spill, or reference the appropriate section of their SPCC plan. The structural integrity of all aboveground tanks, pipelines, pumps and other related equipment shall be visually inspected as part of the routine facility inspection. All repairs deemed necessary based on the findings of the inspections shall be completed immediately to reduce the incidence of spills and leaks occurring from such faulty equipment.

- (i) Oil bearing Equipment in Switchyards. The permittee shall describe and implement measures to prevent or minimize contamination of surface runoff from oil bearing equipment in switchyard areas. The permittee shall consider the use of level grades and gravel surfaces to retard flows and limit the spread of spills, and the collection of stormwater runoff in perimeter ditches.
  - (j) Residue Hauling Vehicles. All residue hauling vehicles shall be inspected for proper covering over the load, adequate gate sealing and overall integrity of the container body. Vehicles without load coverings or adequate gate sealing, or with leaking containers or beds shall be repaired as soon as practicable.
  - (k) Ash Loading Areas. The permittee shall describe and implement procedures to reduce or control the tracking of ash and residue from ash loading areas. Where practicable, clear the ash building floor and immediately adjacent roadways of spillage, debris and excess water before departure of each loaded vehicle.
  - (l) Areas Adjacent to Disposal Ponds or Landfills. The permittee shall describe and implement measures that prevent or minimize contamination of stormwater runoff from areas adjacent to disposal ponds or landfills. The permittee shall develop procedures to:
    - (i) Reduce ash residue which may be tracked on to access roads traveled by residue trucks or residue handling vehicles; and
    - (ii) Reduce ash residue on exit roads leading into and out of residue handling areas.
  - (m) Landfills, Scrapyards, Surface Impoundments, Open Dumps, General Refuse Sites. The plan shall address and include appropriate control measures to minimize the potential for contamination of runoff from landfills, scrapyards, surface impoundments, open dumps and general refuse sites.
- (2) Comprehensive Site Compliance Evaluation. As part of the evaluation, qualified facility personnel shall inspect the following areas on a monthly basis: coal handling areas, loading and unloading areas, switchyards, fueling areas, bulk storage areas, ash handling areas, areas adjacent to disposal ponds and landfills, maintenance areas, liquid storage tanks, and long term and short term material storage areas.

6. **Sector Specific Stormwater Pollution Prevention Plan Requirements: Treatment Works (Sector T)**

In addition to the requirements in **Part I.E.3**, the SWPPP shall include, at a minimum, the following items:

a. Site Description.

- (1) **Site Map.** The site map shall identify where any of the following may be exposed to precipitation or surface runoff: grit, screenings and other solids handling, storage or disposal areas; sludge drying beds; dried sludge piles; compost piles; septage or hauled waste receiving station; and storage areas for process chemicals, petroleum products, solvents, fertilizers, herbicides and pesticides.
- (2) **Summary of Potential Pollutant Sources.** The plan shall include a description of the potential pollutant sources from the following activities, as applicable: grit, screenings and other solids handling, storage or disposal areas; sludge drying beds; dried sludge piles; compost piles; septage or hauled waste receiving station; and access roads and rail lines.

b. Stormwater Controls.

- (1) **Control measures.** In addition to the other control measures required by this permit, the following measures shall be considered: routing stormwater to the treatment works; or covering exposed materials (i.e., from the following areas: grit, screenings and other solids handling, storage or disposal areas; sludge drying beds; dried sludge piles; compost piles; septage or hauled waste receiving station).
- (2) **Inspections.** The following areas shall be included in all inspections: access roads and rail lines, grit, screenings and other solids handling, storage or disposal areas; sludge drying beds; dried sludge piles; compost piles; septage or hauled waste receiving station areas.
- (3) **Employee Training.** Employee training shall, at a minimum, address the following areas when applicable to a facility: petroleum product management; process chemical management; spill prevention and control; fueling procedures; general good housekeeping practices; proper procedures for using fertilizers, herbicides and pesticides.

7. **Sector Specific Stormwater Pollution Prevention Plan Requirements: Land Transportation and Warehousing (Sector P)**

In addition to the requirements in **Part I.E.3**, the SWPPP shall include, at a minimum, the following items:

a. Site Description.

Site Map. The site map shall identify the locations of any of the following activities and indicate whether the activities may be exposed to precipitation or surface runoff: fueling stations; vehicle and equipment maintenance or cleaning areas; storage areas for vehicle and equipment with actual or potential fluid leaks; loading and unloading areas; areas where treatment, storage or disposal of wastes occur; liquid storage tanks; processing areas; and storage areas.

b. Summary of Potential Pollutant Sources.

The plan shall describe and assess the potential for the following to contribute pollutants to stormwater discharges: on-site waste storage or disposal; dirt or gravel parking areas for vehicles awaiting maintenance; and fueling areas.

c. Stormwater Controls.

(1) Good Housekeeping.

- (a) Vehicle and Equipment Storage Areas. The storage of vehicles and equipment awaiting maintenance with actual or potential fluid leaks shall be confined to designated areas (delineated on the site map). The permittee shall consider the following measures (or their equivalents): the use of drip pans under vehicles and equipment; indoor storage of vehicles and equipment; installation of berms or dikes; use of absorbents; roofing or covering storage areas; and cleaning pavement surface to remove oil and grease.
- (b) Fueling Areas. The permittee shall describe and implement measures that prevent or minimize contamination of the stormwater runoff from fueling areas. The permittee shall consider the following measures (or their equivalents): covering the fueling area; using spill and overflow protection and cleanup equipment; minimizing stormwater run-on and runoff to the fueling area; using dry cleanup methods; and treating or recycling collected stormwater runoff.
- (c) Material Storage Areas. Storage vessels of all materials (e.g., for used oil or oil filters, spent solvents, paint wastes, hydraulic fluids) shall be maintained in good condition, so as to prevent contamination of stormwater, and plainly labeled (e.g., "used oil," "spent solvents," etc.). The permittee shall consider the following measures (or their equivalents): indoor storage of the materials; installation of berms and dikes around the areas, minimizing runoff of stormwater to the areas; using dry cleanup methods; and treating or recycling the collected stormwater runoff.
- (d) Vehicle and Equipment Cleaning Areas. The permittee shall describe and implement measures that prevent or minimize contamination of stormwater runoff from all areas used for vehicle and equipment cleaning. The permittee shall consider the

following measures (or their equivalents): performing all cleaning operations indoors; covering the cleaning operation; ensuring that all washwaters drain to a proper collection system (i.e., not the stormwater drainage system unless VPDES permitted); and treating or recycling the collected stormwater runoff.

- (e) Vehicle and Equipment Maintenance Areas. The permittee shall describe and implement measures that prevent or minimize contamination of the stormwater runoff from all areas used for vehicle and equipment maintenance. The permittee shall consider the following measures (or their equivalents): performing maintenance activities indoors; using drip pans; keeping an organized inventory of materials used in the shop; draining all parts of fluids prior to disposal; prohibiting wet clean up practices where the practices would result in the discharge of pollutants to stormwater drainage systems; using dry cleanup methods; treating or recycling collected stormwater runoff; and minimizing run-on and runoff of stormwater to maintenance areas.
  - (f) Locomotive Sanding (Loading Sand for Traction) Areas. The plan shall describe measures that prevent or minimize contamination of the stormwater runoff from areas used for locomotive sanding. The permittee shall consider the following measures (or their equivalents): covering sanding areas; minimizing stormwater run-on and runoff; or appropriate sediment removal practices to minimize the off-site transport of sanding material by stormwater.
- (2) Routine Facility Inspections. The following areas and activities shall be included in all inspections: storage area for vehicles and equipment awaiting maintenance; fueling areas; indoor and outdoor vehicle and equipment maintenance areas; material storage areas; vehicle and equipment cleaning areas; and loading and unloading areas.
- (3) Employee Training. Employee training shall take place, at a minimum, annually (once per calendar year). Employee training shall address the following, as applicable: used oil and spent solvent management; fueling procedures; general good housekeeping practices; proper painting procedures; and used battery management.

**CONDITIONS APPLICABLE TO ALL VPDES PERMITS**

**A. Monitoring.**

1. Samples and measurements required by this permit shall be taken at the permit designated or approved location and be representative of the monitored activity.
  - a. Monitoring shall be conducted according to procedures approved under Title 40 Code of Federal Regulations Part 136 or alternative methods approved by the U.S. Environmental Protection Agency, unless other procedures have been specified in this permit.
  - b. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will insure accuracy of measurements.
  - c. Samples taken shall be analyzed by a laboratory certified under 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.
2. Any pollutant specifically addressed by this permit that is sampled or measured at the permit designated or approved location more frequently than required by this permit shall meet the requirements in A 1 a through c above and the results of this monitoring shall be included in the calculations and reporting required by this permit.
3. Operational or process control samples or measurements shall not be taken at the designated permit sampling or measurement locations. Operational or process control samples or measurements do not need to follow procedures approved under Title 40 Code of Federal Regulations Part 136 or be analyzed in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

**B. Records.**

1. Records of monitoring information shall include:
  - a. The date, exact place, and time of sampling or measurements;
  - b. The individual(s) who performed the sampling or measurements;
  - c. The date(s) and time(s) analyses were performed;
  - d. The individual(s) who performed the analyses;
  - e. The analytical techniques or methods used; and
  - f. The results of such analyses.
2. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the Board.

**C. Reporting Monitoring Results.**

1. The permittee shall submit the results of the monitoring required by this permit not later than the 10th day of the month after the required monitoring period, unless another reporting schedule is specified elsewhere in this permit. Monitoring results shall be submitted to:

Virginia Department of Environmental Quality  
Blue Ridge Regional Office  
3019 Peters Creek Road  
Roanoke, VA 24019-2738

2. Monitoring results shall be reported on a Discharge Monitoring Report (DMR) or on forms provided, approved or specified by the Department.
3. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

D. Duty to Provide Information.

The permittee shall furnish to the Department, within a reasonable time, any information which the Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Board may require the permittee to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from his discharge on the quality of state waters, or such other information as may be necessary to accomplish the purposes of the State Water Control Law. The permittee shall also furnish to the Department upon request, copies of records required to be kept by this permit.

E. Compliance Schedule Reports.

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

F. Unauthorized Discharges.

Except in compliance with this permit, or another permit issued by the Board, it shall be unlawful for any person to:

1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances; or
2. Otherwise alter the physical, chemical or biological properties of such state waters and make them detrimental to the public health, or to animal or aquatic life, or to the use of such waters for domestic or industrial consumption, or for recreation, or for other uses.

G. Reports of Unauthorized Discharges.

Any permittee who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance into or upon state waters in violation of Part II F; or who discharges or causes or allows a discharge that may reasonably be expected to enter state waters in violation of Part II F, shall notify the Department of the discharge immediately upon discovery of the discharge, but in no case later than 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the Department, within five days of discovery of the discharge. The written report shall contain:

1. A description of the nature and location of the discharge;
2. The cause of the discharge;
3. The date on which the discharge occurred;
4. The length of time that the discharge continued;
5. The volume of the discharge;
6. If the discharge is continuing, how long it is expected to continue;

7. If the discharge is continuing, what the expected total volume of the discharge will be; and
8. Any steps planned or taken to reduce, eliminate and prevent a recurrence of the present discharge or any future discharges not authorized by this permit.

Discharges reportable to the Department under the immediate reporting requirements of other regulations are exempted from this requirement.

H. Reports of Unusual or Extraordinary Discharges.

If any unusual or extraordinary discharge including a bypass or upset should occur from a treatment works and the discharge enters or could be expected to enter state waters, the permittee shall promptly notify, in no case later than 24 hours, the Department by telephone after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse affects on aquatic life and the known number of fish killed. The permittee shall reduce the report to writing and shall submit it to the Department within five days of discovery of the discharge in accordance with Part II I 2. Unusual and extraordinary discharges include but are not limited to any discharge resulting from:

1. Unusual spillage of materials resulting directly or indirectly from processing operations;
2. Breakdown of processing or accessory equipment;
3. Failure or taking out of service some or all of the treatment works; and
4. Flooding or other acts of nature.

I. Reports of Noncompliance

The permittee shall report any noncompliance which may adversely affect state waters or may endanger public health.

1. An oral report shall be provided within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which shall be reported within 24 hours under this paragraph:
  - a. Any unanticipated bypass; and
  - b. Any upset which causes a discharge to surface waters.
2. A written report shall be submitted within 5 days and shall contain:
  - a. A description of the noncompliance and its cause;
  - b. 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
  - c. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The Board may waive the written report on a case-by-case basis for reports of noncompliance under Part II I if the oral report has been received within 24 hours and no adverse impact on state waters has been reported.

3. The permittee shall report all instances of noncompliance not reported under Parts II I 1 or 2, in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part II I 2.

NOTE: The immediate (within 24 hours) reports required in Parts II G, H and I shall be made to the Department's Regional Office at (540) 562-6700 (voice), (540) 562-6725 (fax) or online (<http://www.deq.virginia.gov/Programs/PollutionResponsePreparedness/MakingaReport.aspx>). For reports outside normal working hours (before 8:30 am and after 5:00 pm Monday through Friday and

anytime Saturday through Sunday), leave a message and this shall fulfill the immediate reporting requirement.

For emergencies, the Virginia Department of Emergency Management maintains a 24 hour telephone service at 1-800-468-8892.

J. Notice of Planned Changes.

1. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:
  - a. The permittee plans alteration or addition to any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:
    - (1) After promulgation of standards of performance under Section 306 of Clean Water Act which are applicable to such source; or
    - (2) After proposal of standards of performance in accordance with Section 306 of Clean Water Act which are applicable to such source, but only if the standards are promulgated in accordance with Section 306 within 120 days of their proposal;
  - b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations nor to notification requirements specified elsewhere in this permit; or
  - 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.
2. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

K. Signatory Requirements.

1. Applications. All permit applications shall be signed as follows:
  - a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

- b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
  - c. For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a public agency includes: (i) The chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
2. Reports, etc. All reports required by permits, and other information requested by the Board shall be signed by a person described in Part II K 1, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
- a. The authorization is made in writing by a person described in Part II K 1;
  - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and
  - c. The written authorization is submitted to the Department.
3. Changes to authorization. If an authorization under Part II K 2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part II K 2 shall be submitted to the Department prior to or together with any reports, or information to be signed by an authorized representative.
4. Certification. Any person signing a document under Parts II K 1 or 2 shall make the following certification:  
"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

L. Duty to Comply.

The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the State Water Control Law and the Clean Water Act, except that noncompliance with certain provisions of this permit may constitute a violation of the State Water Control Law but not the Clean Water Act. Permit noncompliance is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if this permit has not yet been modified to incorporate the requirement.

- M. Duty to Reapply.  
If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain a new permit. All permittees with a currently effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Board. The Board shall not grant permission for applications to be submitted later than the expiration date of the existing permit.
- N. Effect of a Permit.  
This permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of federal, state or local law or regulations.
- O. State Law.  
Nothing in this permit shall be construed to preclude the institution of any legal action under, or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any other state law or regulation or under authority preserved by Section 510 of the Clean Water Act. Except as provided in permit conditions on "bypassing" (Part II U), and "upset" (Part II V) nothing in this permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.
- P. Oil and Hazardous Substance Liability.  
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Sections 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.
- Q. 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 conditions of this permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of this permit.
- R. Disposal of solids or sludges.  
Solids, sludges or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering state waters.
- S. Duty to Mitigate.  
The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

T. Need to Halt or Reduce Activity not a Defense.

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

U. Bypass.

1. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. The permittee may allow any 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 of Parts II U 2 and U 3.
2. Notice
  - a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, prior notice shall be submitted, if possible at least ten days before the date of the bypass.
  - b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part II I.
3. Prohibition of bypass.
  - a. Bypass is prohibited, and the Board may take enforcement action against a permittee for bypass, unless:
    - (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
    - (2) There were 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 back-up 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; and
    - (3) The permittee submitted notices as required under Part II U 2.
  - b. The Board may approve an anticipated bypass, after considering its adverse effects, if the Board determines that it will meet the three conditions listed above in Part II U 3 a.

V. Upset.

1. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of Part II V 2 are met. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.
2. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - a. An upset occurred and that the permittee can identify the cause(s) of the upset;
  - b. The permitted facility was at the time being properly operated;
  - c. The permittee submitted notice of the upset as required in Part II I; and
  - d. The permittee complied with any remedial measures required under Part II S.
3. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

W. Inspection and Entry.

The permittee shall allow the Director, or an authorized representative, upon presentation of credentials and other documents as may be required by law, to:

1. 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;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and the State Water Control Law, any substances or parameters at any location.

For purposes of this section, the time for inspection shall be deemed reasonable during regular business hours, and whenever the facility is discharging. Nothing contained herein shall make an inspection unreasonable during an emergency.

X. Permit Actions.

Permits may be modified, revoked and reissued, or terminated for cause. 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.

Y. Transfer of permits.

1. Permits are not transferable to any person except after notice to the Department. Except as provided in Part II Y 2, a permit may be transferred by the permittee to a new owner or operator only if the 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 State Water Control Law and the Clean Water Act.
2. As an alternative to transfers under Part II Y 1, this permit may be automatically transferred to a new permittee if:
  - a. The current permittee notifies the Department at least 30 days in advance of the proposed transfer of the title to the facility or property;
  - b. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and
  - c. The Board does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part II Y 2 b.

Z. Severability.

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