



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 1  
5 Post Office Square, Suite 100  
BOSTON, MA 02109-3912

**CERTIFIED MAIL RETURN RECEIPT REQUESTED**

**JUN 24 2014**

Linda Cushman, District Chairman  
Androscoggin Valley Regional Refuse Disposal District (AVRRDD)  
P.O. Box 336  
Berlin, NH 03570

Re: Authorization to discharge under the Remediation General Permit (RGP) – 910000.  
Androscoggin Valley Regional Refuse Disposal District (AVRRDD) Treatment Plant site  
located at 15 Mt. Forist St., Berlin NH 03570, Coos County. Authorization #  
NHG910067

Dear Ms. Cushman:

Based on the review of a Notice of Intent (NOI) submitted CMA Engineers, Inc., on behalf of the AVRRDD for the site referenced above, the U.S. Environmental Protection Agency (EPA) hereby authorizes you, as the named Operator, to discharge in accordance with the provisions of the RGP at that site. Your authorization number is listed above.

The checklist enclosed with this RGP authorization indicates the pollutants which you are required to monitor. Also indicated on the checklist are the effluent limits, test methods and minimum levels (MLs) for each pollutant. Please note that the check list does not represent the complete requirements of the RGP. Operators must comply with all of the applicable requirements of this permit, including influent and effluent monitoring, narrative water quality standards, record keeping, and reporting requirements, found in Parts I and II, and Appendices I – VIII of the RGP. See EPA's website for the complete RGP and other information at: <http://www.epa.gov/region1/npdes/mass.html#dgp>.

Also, please note the following parameters have been included on the check list:

1. Parameters which you have marked "Believed Present" in the reported NOI, which include total suspended solids (TSS), total residual chlorine (TRC), and metals arsenic, nickel, zinc and iron.
2. Parameters tert-butyl alcohol (TBA) and total phenols, which your laboratory reports indicated there was insufficient sensitivity to detect this parameter at the minimum level established in Appendix VI of the RGP.

- Parameters total phosphorus, terpineol, biochemical oxygen demand (BOD), and ammonia, required on the existing NPDES Permit NH 0023523, are incorporated here on a monitoring only basis (without a limit) based on RGP provisions under Section C.2.d., which allows for additional discharge monitoring requirements. The parameters trivalent chromium, hexavalent chromium, copper, lead, mercury, and selenium, required on the March 2013 decommissioning closure plan on Page 8 table J of the individual permit NH0023523, are incorporated here based on Section C.2.c of the RGP.

Also, please note that the metals included on the checklist are dilution dependent pollutants and subject to limitations based on a dilution factor range (DFR), due to the ample dilution at the point of discharge (662.5) the DFR applicable for this pollutant is equal to the Ceiling Value DFR established in the RGP. (See the RGP Appendix IV for New Hampshire facilities). Therefore, the limit for arsenic 540 ug/L, cadmium of 260 ug/L, trivalent chromium of 1,710 ug/L, hexavalent chromium of 1,710 ug/L, copper of 2,070 ug/L, lead of 430 ug/L, mercury of 2.3 ug/L, nickel of 2,380 ug/L, selenium of 408 ug/L, zinc of 1,480 ug/L and iron of 5,000ug/L, shall not be exceeded in the discharge.

This general permit and authorization to discharge will expire on September 9, 2015. This project reportedly will terminate on December 31, 2014. You are required to submit a Notice of Termination (NOT) to the attention of the contact person indicated below within 30 days of project completion.

Thank you in advance for your cooperation in this matter. Please contact Victor Alvarez at 617-918-1572 or Alvarez.Victor@epa.gov, if you have any questions.

Sincerely,



Thelma Murphy, Chief  
Storm Water and Construction  
Permits Section

Enclosure

cc: Jeff Andrews, NHDES  
Paul Schmidt, CMA Engineers, Inc.  
Sharon Gauthier, Executive Director AVRRDD  
Sharon M. DeMeo, USEPA  
Joy Hilton, USEPA

**2010 Remediation General Permit  
Summary of Monitoring Parameters<sup>[1]</sup>**

|  |   |
|--|---|
| <b>NPDES Permit Number:</b>                | <b>NHG910067</b>  |
| Authorization Issued:                      | June, 2014  |
| Facility/Site Name:                        | AVRRDD Wastewater Treatment Plant   |
| Facility/Site Address:                     | 15 Mt. Forist Street, Berlin NH 03570   |
|  | Email address of owner: <a href="mailto:sgauthier@avrrdd.org">sgauthier@avrrdd.org</a> Phon:6037524388  |
| Legal Name of Operator:                    | AVRRDD  |
| Operator contact name, title, and Address: | Linda Cushman, Chairman of the District. The decommissioning will be supervised by Ms. Sharon Gauthier, Executive Director for the District (AVRRDD)  |
|  | Email: Same as the Owner  |
| Estimated Date of Completion:              | December 31, 2014   |
| Category and Sub-Category:                 | Category III Contaminated Construction Dewatering. Sub-category B. Known Contaminated Sites, and Category IV-Miscellaneous Related Discharges. Sub-category E. Short-term Contaminated dredging |
| Receiving Water:                           | Androscoggin River  |

**Monitoring & Limits are applicable if checked. All samples are to be collected as grab samples**

|   | <b>Parameter</b>  | <b>Effluent Limit/Method#/ML</b><br>(All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit) |
|---|---|---|
| ✓ | 1. Total Suspended Solids (TSS)   | 30 milligrams/liter (mg/l) **, 50 mg/l for hydrostatic testing **, Me#60.2/5mL  |
| ✓ | 2. Total Residual Chlorine (TRC) <sup>1</sup>                             | Freshwater = 11 ug/l ** Saltwater = 7.5 ug/l **/ Me#330.5/ML 20ug/L   |
|   | 3. Total Petroleum Hydrocarbons (TPH)                                     | 5.0 mg/l/ Me# 1664A/5.0mg/LmL   |
|   | 4. Cyanide (CN) <sup>2, 3</sup>   | Freshwater = 5.2 ug/l ** Saltwater = 1.0 ug/l **/ Me#335.4/ML 5ug/L   |
|   | 5. Benzene (B)  | 5ug/L /50.0 ug/l for hydrostatic testing only/ Me#8260C/ML 2 ug/L   |
|   | 6. Toluene (T)  | (limited as ug/L total BTEX)/ Me#8260C/ ML 2ug/L  |
|   | 7. Ethylbenzene (E)   | (limited as ug/L total BTEX) )/ Me#8260C/ ML 2ug/L  |
|   | 8. (m,p,o) Xylenes (X)  | (limited as ug/L total BTEX) )/ Me#8260C/ ML 2ug/L  |
|   | 9. Total Benzene, Toluene, Ethyl Benzene, and Xylenes (BTEX) <sup>4</sup> | 100 ug/l )/ Me#8260C/ ML 2ug/L  |

|   | <b>Parameter</b>  | <b>Effluent Limit/Method#/ML</b><br>(All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit) |
|---|---|---|
|   | 10. Ethylene Dibromide (EDB) (1,2- Dibromoethane)             | 0.05 ug/l/ Me#8260C/ ML 10ug/L  |
|   | 11. Methyl-tert-Butyl Ether (MtBE)                            | 70.0 ug/l /Me#8260C/ ML 10ug/L  |
| ✓ | 12. tert-Butyl Alcohol (TBA) (TertiaryButanol)                | Monitor Only (ug/L)/ Me#8260C/ ML 10ug/L  |
|   | 13. tert-Amyl Methyl Ether (TAME)                             | Monitor Only (ug/L) /Me#8260C/ ML 10ug/L  |
|   | 14. Naphthalene <sup>5</sup>                                  | 20 ug/l /Me#8260C/ ML 2ug/L   |
|   | 15. Carbon Tetrachloride                                      | 4.4 ug/l /Me#8260C/ ML 5ug/L  |
|   | 16. 1,2 Dichlorobenzene (o-DCB)                               | 600 ug/l /Me#8260C/ ML 5ug/L  |
|   | 17. 1,3 Dichlorobenzene (m-DCB)                               | 320 ug/l /Me#8260C/ ML 5ug/L  |
|   | 18. 1,4 Dichlorobenzene (p-DCB)                               | 5.0 ug/l /Me#8260C/ ML 5ug/L  |
|   | 18a. Total dichlorobenzene                                    | 763 ug/l - NH only /Me#8260C/ ML5ug/L   |
|   | 19. 1,1 Dichloroethane (DCA)                                  | 70 ug/l /Me#8260C/ ML 5ug/L   |
|   | 20. 1,2 Dichloroethane (DCA)                                  | 5.0 ug/l /Me#8260C/ ML 5ug/L  |
|   | 21. 1,1 Dichloroethene (DCE)                                  | 3.2 ug/l/Me#8260C/ ML 5ug/L   |
|   | 22. cis-1,2 Dichloroethene (DCE)                              | 70 ug/l /Me#8260C/ ML 5ug/L   |
|   | 23. Methylene Chloride  | 4.6 ug/l/Me#8260C/ ML 5ug/L   |
|   | 24. Tetrachloroethene (PCE)                                   | 5.0 ug/l /Me#8260C/ ML 5ug/L  |
|   | 25. 1,1,1 Trichloro-ethane (TCA)                              | 200 ug/l/Me#8260C/ ML 5ug/L   |
|   | 26. 1,1,2 Trichloro-ethane (TCA)                              | 5.0 ug/l /Me#8260C/ ML 5ug/L  |
|   | 27. Trichloroethene (TCE)                                     | 5.0 ug/l /Me#8260C/ ML 5ug/L  |
|   | 28. Vinyl Chloride (Chloroethene)                             | 2.0 ug/l /Me#8260C/ ML 5ug/L  |
|   | 29. Acetone   | Monitor Only (ug/L) /Me#8260C/ ML 50ug/L  |
|   | 30. 1,4 Dioxane   | Monitor Only /Me#1624C/ML50 ug/L  |
| ✓ | 31. Total Phenols   | 300 ug/l Me#420.1&420.2/ML 2 ug/L/ Me# 420.4 /ML50 ug/L   |
|   | 32. Pentachlorophenol (PCP)                                   | 1.0 ug/l /Me#8270D/ML5ug/L, Me#604 &625/ML10ug/L  |
|   | 33. Total Phthalates (Phthalate esters) <sup>6</sup>          | 3.0 ug/L ** /Me#8270D/ML5ug/L, Me#606/ML10ug/L & Me#625/ML5ug/L   |
|   | 34. Bis (2-Ethylhexyl) Phthalate [Di- (ethylhexyl) Phthalate] | 6.0 ug/l /Me#8270D/ML5ug/L, Me#606/ML10ug/L & Me#625/ML5ug/L  |
|   | 35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)      | 10.0 ug/l   |

|   | <u>Parameter</u>  | <u>Effluent Limit/Method#/ML</u><br>(All Effluent Limits are shown as Daily Maximum Limit, unless denoted by a **, in that case it will be a Monthly Average Limit) |
|---|---|---|
|   | a. Benzo(a) Anthracene <sup>7</sup>                       | 0.0038 ug/l /Me#8270D/ ML5ug/L, Me#610/ML5ug/L& Me#625/ML5ug/L  |
|   | b. Benzo(a) Pyrene <sup>7</sup>                           | 0.0038 ug/l /Me#8270D/ ML5ug/L, Me#610/ML5ug/L& Me#625/ML5ug/L  |
|   | c. Benzo(b)Fluoranthene <sup>7</sup>                      | 0.0038 ug/l /Me#8270D/ ML5ug/L, Me#610/ML5ug/L& Me#625/ML5ug/L  |
|   | d. Benzo(k)Fluoranthene <sup>7</sup>                      | 0.0038 ug/l /Me#8270D/ ML5ug/L, Me#610/ML5ug/L& Me#625/ML5ug/L  |
|   | e. Chrysene <sup>7</sup>                                  | 0.0038 ug/l /Me#8270D/ ML5ug/L, Me#610/ML5ug/L& Me#625/ML5ug/L  |
|   | f. Dibenzo(a,h)anthracene <sup>7</sup>                    | 0.0038 ug/l /Me#8270D/ ML5ug/L, Me#610/ML5ug/L& Me#625/ML5ug/L  |
|   | g. Indeno(1,2,3-cd) Pyrene <sup>7</sup>                   | 0.0038 ug/l /Me#8270D/ ML5ug/L, Me#610/ML5ug/L& Me#625/ML5ug/L  |
|   | 36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH) | 100 ug/l  |
|   | h. Acenaphthene   | X/Me#8270D/ML5ug/L,Me#610/ML5ug /L & Me#625/ML5ug/L   |
|   | i. Acenaphthylene   | X/Me#8270D/ML5ug/L,Me#610/ML5ug/L & Me#625/ML5ug/L  |
|   | j. Anthracene   | X/Me#8270D/ML5ug/L,Me#610/ML5ug/L & Me#625/ML5ug/L  |
|   | k. Benzo(ghi) Perylene                                    | X/Me#8270D/ML5ug/L,Me#610/ML5ug/L & Me#625/ML5ug/L  |
|   | l. Fluoranthene   | X/Me#8270D/ML5ug/L,Me#610/ML5ug/L & Me#625/ML5ug/L  |
|   | m. Fluorene   | X/Me#8270D/ML5ug/L,Me#610/ML5ug/L & Me#625/ML5ug/L  |
|   | n. Naphthalene <sup>5</sup>                               | 20 ug/l / Me#8270D/ ML5ug/L, Me#610/ML5ug/L & Me#625/ML5ug/L  |
|   | o. Phenanthrene   | X/Me#8270D/ML5ug/L,Me#610/ML5ug/L & Me#625/ML5ug/L  |
|   | p. Pyrene   | X/Me#8270D/ML5ug/L,Me#610/ML5ug/L & Me#625/ML5ug/L  |
|   | 37. Total Polychlorinated Biphenyls (PCBs) <sup>8,9</sup> | 0.000064 ug/L / Me# 608/ ML 0.5 ug/L  |
| ✓ | 38. Chloride  | Monitor only/Me# 300.0/ ML 0.1ug/L  |

|   | <b>Metal parameter</b>          | <b>Total Recoverable NH/Metal Limit<br/>H<sup>10</sup> = 25 mg/l<br/>CaCO<sub>3</sub>, Units = ug/l<br/>(11/12)</b> |                      | <b>Minimum level=ML</b> |    |
|---|---------------------------------|---|----------------------|-------------------------|----|
|   |                                 | <b>Freshwater Limits</b>  | <b>2206 dilution</b> |                         |    |
|   | 39. Antimony                    | 141   |                      | ML 10                   |    |
| ✓ | 40. Arsenic **                  |   | 540                  | ML                      | 20 |
| V | 41. Cadmium **                  | 0.8   |                      | ML                      | 10 |
| V | 42. Chromium III (trivalent) ** | 27.7  |                      | ML                      | 15 |
| V | 43. Chromium VI (hexavalent) ** | 11.4  |                      | ML                      | 10 |
| ✓ | 44. Copper **                   | 2.9   |                      | ML                      | 15 |
| ✓ | 45. Lead **                     | 0.5   |                      | ML                      | 20 |
| ✓ | 46. Mercury **                  | 0.9   |                      | ML                      | 02 |
| ✓ | 47. Nickel **                   | 16.1  |                      | ML                      | 20 |
| ✓ | 48. Selenium **                 | 5   |                      | ML                      | 20 |
| ✓ | 49. Silver                      | 0.4   |                      | ML                      | 10 |
| ✓ | 50. Zinc **                     | 37  |                      | ML                      | 15 |
| ✓ | 51. Iron                        | 1,000   |                      | ML 20                   |    |

|   | <b>Other Parameters</b>  | <b>Limit</b>                        |
|---|--|-------------------------------------|
| ✓ | <b>Phosphorous</b>   | Monitoring Only                     |
| ✓ | <b>Terpineol</b>   | Monitoring Only                     |
| ✓ | <b>BOD</b>   | Monitoring Only                     |
| ✓ | <b>Ammonia</b>   | Monitoring Only                     |
| ✓ | 52. Instantaneous Flow   | Site specific in CFS                |
| ✓ | 53. Total Flow   | Site specific in CFS                |
| ✓ | 54. pH Range for Class B Waters in NH  | 6.5-8.3; 1/Month/Grab <sup>13</sup> |
|   | 55. pH Range for Class SB Waters in NH   | 6.5-8; 1/Month/Grab <sup>13</sup>   |
|   | 56.  |                                     |
|   | 57. Daily maximum temperature - Warm water fisheries   | 83°F; 1/Month/Grab <sup>14</sup>    |
|   | 58. Daily maximum temperature - Cold water fisheries   | 68°F; 1/Month/Grab <sup>14</sup>    |
|   | 59.  |                                     |
|   | 60. Maximum Change in Temperature in NH- Any Class B water body- Warm Water                  | 5°F; 1/Month/Grab <sup>14</sup>     |
|   | 61. Maximum Change in Temperature in NH- Any Class B water body - Cold water and Lakes/Ponds | 3°F; 1/Month/Grab <sup>14</sup>     |

Footnotes:

<sup>1</sup> Although the maximum values for TRC are 11ug/l and 7.5 ug/l for freshwater, and saltwater respectively, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI (i.e., Method 330.5, 20 ug/l).

- <sup>2</sup> Limits for cyanide are based on EPA's water quality criteria expressed as micrograms per liter. There is currently no EPA approved test method for free cyanide. Therefore, total cyanide must be reported.
- <sup>3</sup> Although the maximum values for cyanide are 5.2 ug/l and 1.0 ug/l for freshwater and saltwater, respectively, the compliance limits are equal to the minimum level (ML) of the Method 335.4 as listed in Appendix VI (i.e., 10 ug/l).
- <sup>4</sup> BTEX = sum of Benzene, Toluene, Ethylbenzene, and total Xylenes.
- <sup>5</sup> Naphthalene can be reported as both a purgeable (VOC) and extractable (SVOC) organic compound. If both VOC and SVOC are analyzed, the highest value must be used unless the QC criteria for one of the analyses is not met. In such cases, the value from the analysis meeting the QC criteria must be used.
- <sup>6</sup> The sum of individual phthalate compounds(not including the #34, Bis (2-Ethylhexyl) Phthalate . The compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI.
- Total values calculated for reporting on NOIs and discharge monitoring reports shall be calculated by adding the measured concentration of each constituent. If the measurement of a constituent is less than the ML, the permittee shall use a value of zero for that constituent. For each test, the permittee shall also attach the raw data for each constituent to the discharge monitoring report, including the minimum level and minimum detection level for the analysis.*
- <sup>7</sup> Although the maximum value for the individual PAH compounds is 0.0038 ug/l, the compliance limits are equal to the minimum level (ML) of the test method used as listed in Appendix VI.
- <sup>8</sup> In the November 2002 WQC, EPA has revised the definition of Total PCBs for aquatic life as total PCBs is the sum of all homologue, all isomer, all congener, or all "Oroclor analyses."Total values calculated for reporting on NOIs and discharge monitoring reports shall be calculated by adding the measured concentration of each constituent. If the measure of a constituent is less than the ML, the permittee shall use a value of zero for that constituent. For each test, the permittee shall also attach the raw data for each constituent to the discharge monitoring report, including the minimum level and minimum detection level for the analysis.
- <sup>9</sup>Although the maximum value for total PCBs is 0.000064 ug/l, the compliance limit is equal to the minimum level (ML) of the test method used as listed in Appendix VI (i.e., 0.5 ug/l for Method 608 or 0.00005 ug/l when Method 1668a is approved).
- <sup>10</sup> Hardness. Cadmium, Chromium III, Copper, Lead, Nickel, Silver, and Zinc are Hardness Dependent.
- <sup>11</sup> For a Dilution Factor (DF) from 1 to 5, metals limits are calculated using DF times the base limit for the metal. See Appendix IV. For example, iron limits are calculated using DF x 1,000ug/L (the iron base limit). Therefore DF is 1.5, the iron limit will be 1,500 ug/L; DF 2, then iron limit =1,000 x 2 =2,000 ug/L., etc. not to exceed the DF=5.
- <sup>12</sup> Minimum Level (ML) is the lowest level at which the analytical system gives a recognizable signal and acceptable calibration point for the analyte. The ML represents the lowest concentration at which an analyte can be measured with a known level of confidence. The ML is calculated by multiplying the laboratory-determined method detection limit by 3.18 (see 40 CFR Part 136, Appendix B).
- <sup>13</sup> pH sampling for compliance with permit limits may be performed using field methods as provided for in EPA test Method 150.1.
- <sup>14</sup> Temperature sampling per Method 170.1

NPDES Remediation General Permit  
Notice of Intent

*for*

Androscoggin Valley Regional  
Refuse Disposal District  
Wastewater Treatment Plant Decommissioning & Closure  
Berlin, NH

May 2014

*Prepared for:*

Androscoggin Valley Regional Refuse Disposal District  
15 Mt. Forest Street  
Berlin, NH 03570

*for Submittal to:*

US EPA  
5 Post Office Square, Suite 100  
Mail Code OEP06-4  
Boston, MA 02109-3912

NHDES Waste Management Division  
29 Hazen Drive  
Concord, NH 03301

*Prepared by:*

CMA Engineers, Inc.  
Civil and Environmental Engineers  
35 Bow Street  
Portsmouth, NH 03801

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*Androscoggin Valley Regional Refuse Disposal District*  
**NPDES Remediation General Permit**  
**AVRRDD Wastewater Treatment Plant Decommissioning & Closure**  
**Berlin, New Hampshire**  
**May 2014**

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**Remediation General Permit  
Appendix V****Notice of Intent (NOI)  
Suggested Forms & Instructions****I. Notice of Intent (NOI) Suggested Form and Instructions**

In order to be covered by the remediation general permit (RGP), applicants must submit a completed Notice of Intent (NOI) to EPA Region I and the appropriate state agency. The owner or operator, as defined by 40 CFR § 122.2, means the owner or operator of any “facility or activity” subject to regulation under the NPDES program.

The following are three general “operator” scenarios (variations on any of these three are possible, especially as the number of owners and contractors increases):

- ▶ *“Owner” as “Operator” - sole permittee.* The property owner designs the structures and control systems for the site, develops and implements the BMPP, and serves as general contractor (or has an on-site representative with full authority to direct day-to-day operations). Under the definition of operator, in this case, the “Owner” would be considered the “operator” and therefore the only party that needs permit coverage. Everyone else working on the site may be considered subcontractors and do not need to apply for permit coverage.
- ▶ *“Contractor” as “Operator” - sole permittee.* The property owner hires a company (e.g., a contractor) to design the project and oversee all aspects, including preparation and implementation of the BMPP and compliance with the permit (e.g., a “turnkey” project). Here, the contractor would likely be the only party needing a permit. Similarly, EPA expects that property owners hiring a contractor or consultant to perform groundwater remediation work (e.g., due to a leaking fuel oil tank) would come under this type of scenario. EPA believes that the contractor, being a professional in the industry, should be the responsible entity rather than the individual. The contractor is better equipped to meet the requirements of both applying for permit coverage and developing and properly implementing the plans needed to comply with the permit. However, property owners would also meet the definition of “operator” and require permit coverage in instances where they perform any of the required tasks on their personal properties.
- ▶ *“Owner” and “Contractor” as “Operators” - co-permittees.* The owner retains control over any changes to site plans, BMPPs, or wastewater conveyance or control designs, but the contractor is responsible for conducting and overseeing the actual activities (e.g., excavation, installation and operation of treatment train, etc.) and daily implementation of BMPP and other permit conditions. In this case, both parties need to apply for coverage.

Generally, a person would not be considered an “operator,” and subsequently would not need permit coverage, if: 1) that person is a subcontractor hired by, and under the supervision of, the owner or a general contractor (e.g., if the contractor directs the

subcontractor's activities on-site, it is probably not an operator); or 2) the person's activities would otherwise result in the need for coverage under the RGP but another operator has legally assumed responsibility for the impacts of project activities.

**A. Instructions for the Suggested Notice of Intent (NOI)** - At a minimum, the Notice of Intent must include the following for each individual facility or site. Additional information may be attached as needed.

**1. General facility/site information.**

- a) Provide the facility/site name, mailing address, and telephone and fax numbers. Provide the facility Standard Industrial Classification (SIC ) code(s), which can be found online at [http://www.osha.gov/pls/imis/sic\\_manual.html](http://www.osha.gov/pls/imis/sic_manual.html). Provide the site location, including longitude and latitude.
- b) Provide the facility/site owner's name, address, email address, telephone and fax numbers, if different from the site information. Indicate whether the owner is a Federal, State/Tribal, private, or other entity.
- c) Provide the site operator's (e.g., contractor's) name, mailing address, telephone and fax numbers, and email address if different from the owner's information.
- d) For the site for which the application is being submitted, indicate whether:
  - 1) a prior NPDES permit exclusion has been granted for the discharge (if so, provide the tracking number of the exclusion letter);
  - 2) a prior NPDES application (Form 1 & 2C – for reference, please visit [http://www.epa.gov/region1/npdes/epa\\_attach.html](http://www.epa.gov/region1/npdes/epa_attach.html)) has ever been filed for the discharge (if so, provide the tracking number and date that the application was submitted to EPA);
  - 3) the discharge is a “new discharge” as defined by 40 CFR 122.2; and
  - 4) for sites in Massachusetts, is the discharge covered under the Massachusetts Contingency Plan (MCP) 310 CMR 40.0000 and exempt from state permitting.
- e) Indicate whether there is any ongoing state permitting, licensing, or other action regarding the facility or site which is generating the discharge. If “yes,” provide any site identification number assigned by the state of NH or MA, any permit or license number assigned, and the state agency contact information (e.g. name, location, telephone no.).
- f) Indicate whether or not the facility is covered by other EPA permits including:
  - 1) the Multi-Sector General Permit (MSGP) <http://cfpub.epa.gov/npdes/stormwater/msgp.cfm>;
  - 2) the Final NPDES General Permit for Dewatering Activity Discharges in Massachusetts and New Hampshire <http://www.epa.gov/region1/npdes/dewatering.html>;
  - 3) the EPA Construction General Permit <http://cfpub.epa.gov/npdes/stormwater/cgp.cfm>;
  - 4) an individual NPDES permit; or
  - 5) any other water quality-related individual or general permit.If so, provide permit tracking number(s).
- g) Indicate if the site/facility discharge(s) to an Area of Critical Environmental Concern (ACEC), as shown on the tables and maps in Appendix I.

h) Based on the nature of the facility/site and any historical sampling data, the applicant must indicate which of the sub-categories within which the potential discharge falls.

**2. Discharge information.**

- a) Describe the discharge activities to be covered by the permit. Attach additional sheets as needed.
- b) Provide the following information about each discharge:
- 1) the number of discharge points;
  - 2) the maximum and average flow rate of the discharge in cubic feet per second. For the average flow magnitude, include the units and appropriate notation if this value is a calculated design value or estimate if technical/design information is not available;
  - 3) the latitude and longitude of each discharge with an accuracy of 100 feet (see EPA's siting tool at: [http://www.epa.gov/tri/report/siting\\_tool](http://www.epa.gov/tri/report/siting_tool) );
  - 4) the total volume of potential discharge (gal), only if hydrostatic testing;
  - 5) whether the discharge(s) is intermittent or seasonal and if ongoing.
- c) Provide the expected start and end dates of discharge (month/day/year).
- d) Attach a line drawing or flow schematic showing water flow through the facility including:
- 1) sources of intake water;
  - 2) contributing flow from the operation;
  - 3) treatment units; and
  - 4) discharge points and receiving waters(s).

**3. Contaminant information.**

In order to complete the NOI, the applicant will need to take a minimum of one sample of the untreated water and have it analyzed for the parameters applicable to the sub-category into which the discharge falls, as listed in Appendix III of the permit and selected in Part 1 of the NOI form, except as noted below.

Permittees shall provide additional sampling results with the NOI if such sampling already exists, or if the permittee has reason to believe the site contains additional contaminants not listed in Appendix III for that sub-category or contains additional contaminants not included in Appendix III.

The applicant may use historical data as a substitute for the new sample if the data was collected no more than 2 years prior to the "Submittal of the NOI" and if collected pursuant to:

- i. for sites in Massachusetts, 310 CMR 40.0000, the Massachusetts Contingency Plan ("Chapter 21E");
- ii. for sites in New Hampshire, New Hampshire's Title 50 RSA 485-A: Water Pollution and Waste Disposal or Title 50 RSA 485-C: Groundwater Protection Act;

a) Based on the analysis of the untreated influent, the applicant must indicate whether each listed chemical is believed present or believed absent in the potential discharge.

Based on the required sampling and analysis, the applicant must fill in the table, or provide a narrative description, with the following additional information for each chemical that is believed present (chemical that violate EPA's criteria limitations):

- 1) the number of samples taken (minimum of one sample for applicable parameters per Appendix III);
- 2) the type of sample (e.g. grab, composite, etc.);
- 3) the analytical method used, including the method number;
- 4) the minimum level (ML) of the method used (based on Appendix VI);
- 5) the maximum daily amount (concentration (ug/l) and mass (kg)) of each pollutant, based on the sampling data

lb/day (pounds per day) equals flow (in million gallons per day, MGD) times concentration in milligrams per liter (mg/l) times 8.34.

Example: 2.5 MGD x 30 mg/l TSS x 8.34 = 625.5 lb TSS/day

MGD = gallons per minute (gpm) x 0.00144

1 kg = 2.2 lbs

And;

- 6) the average daily amount (concentration and mass) of each pollutant, based on the sampling data.

If the results of any sampling indicate that pollutants exist in addition to those listed in Appendix III of the RGP of the permit, the applicant must also describe those contaminants on the NOI in boxes in section I.3.c.) on the line marked "Other," or use additional sheets as needed. Subsequently, EPA may require monitoring for such parameters or will decide if an individual permit is necessary.

c) Determination of Reasonable Potential and Allowable Dilution for Discharges of Metals:

If any *metals* are believed present in the potential discharge to freshwater<sup>1</sup>, the applicant must follow the procedures below to determine the dilution factor for each metal.

***Step 1: Initial Evaluation***

- 1) The applicant must evaluate all metals believed present in the discharge subject to this permit, including "naturally occurring" metals such as dissolved and/or total Iron. Applicants must enter the highest detected concentration of the metal at zero dilution in the "Maximum value" column of the NOI.
- 2) Based on the maximum concentration of each metal, the applicant must perform an initial evaluation assuming zero dilution in the receiving water. The applicant must compare the metals concentrations in the untreated (intake) waters to the effluent limits contained in Appendix III.

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<sup>1</sup>Dilution factors may be available for discharges to saline waters but only with approval of the flow modeling information from the State prior to the submission of the NOI.

- i. If potential discharges (untreated influent) with metals contain concentrations above the concentration limits listed in Appendix III, applicant must proceed to step 2.
- ii. If potential discharges (untreated influent) with metals contain concentrations below the concentrations listed in Appendix III, the applicant may skip step 2 and those metals will **not** be subject to permit limitations or monitoring requirements.

***Step 2: Calculation of Dilution Factor***

1) **For applicants in NH:** If a metal concentration in a potential discharge (untreated influent) to **freshwater** exceeds the limits in Appendix III with zero dilution, the applicant shall evaluate the potential concentration considering a dilution factor (DF) using the formula below. **For sites in New Hampshire, the applicant must contact NH DES to determine the 7Q10 and dilution factor.**

$$DF = [(Q_d + Q_s)/Q_d] \times 0.9$$

Where: **DF** = Dilution Factor  
**Q<sub>d</sub>** = Maximum flow rate of the discharge in cubic feet per second (cfs) (1.0 gpm = .00223 cfs)  
**Q<sub>s</sub>** = Receiving water 7Q10 flow, in cfs, where 7Q10 is the annual minimum flow for 7 consecutive days with a recurrence interval of 10 years  
**0.9** = Allowance for reserving 10% of the assets in the receiving stream as per Chapter ENV-Wq 1700, Surface Water Quality Regulations

i. Using the DF calculated from the formula above, the applicant must refer to the corresponding dilution range column in Appendix IV. The applicant then compares the maximum concentration of the metal entered on the NOI to the corresponding total recoverable metals limits listed in Appendix IV. Please note that for this reissuance the applicant will be permitted to determine a limit using any fraction within the 1-5 dilution factor range times the metal limit (for all regulated metals). For example: if the DF is 1.5, the Iron limit is 1,500 ug/L; if the DF is 1.5, the antimony limit is 8.4, etc. All limits above a dilution factor of 5 are maintained.

1. If a metal concentration in the potential discharge (untreated influent) is less than the corresponding limit in Appendix IV, the metal will **not** be subject to permit limitations or monitoring requirements.
2. If a metal concentration in the potential discharge (untreated influent) is equal to or exceeds the corresponding limit in Appendix IV, the applicant must reduce it in the effluent to a concentration below the applicable total recoverable metals limit in Appendix IV prior to discharge.

ii. In either case, the applicant must submit the results of this calculation as part of the NOI. EPA and NH DES will review the proposed effluent limitations for each metal and approve or disapprove the limits in the notification of coverage letter to the applicant.

2) **For applicants in MA:** If a metal concentration in a potential discharge (untreated influent) to **freshwater** exceeds the limits in Appendix III with zero dilution, the applicant must evaluate the potential concentration considering a dilution factor (DF) using the formula below.

$$DF = (Qd + Qs)/Qd$$

Where: **DF** = Dilution Factor  
**Qd** = Maximum flow rate of the discharge in cubic feet per second (cfs) (1.0 gpm = .00223 cfs)  
**Qs** = Receiving water 7Q10 flow (cfs) where 7Q10 is the minimum flow (cfs) for 7 consecutive days with a recurrence interval of 10 years

i. The applicant may estimate the 7Q10 for receiving water by using available information such as nearby USGS stream gauging stations directly or by application of certain “flow factors,” using historic streamflow publication information, calculations based on drainage area, information from state water quality offices, or other means. In many cases Massachusetts has calculated 7Q10 information using “flow factors” for a number of streams in the state. The source of the low flow value(s) used by the applicant must be included on NOI application form. Flow data can also be obtained from web applications such as the one located at: <http://ma.water.usgs.gov/streamstats/>.

ii. Using the DF calculated from the formula above, the applicant must refer to the corresponding dilution range column in Appendix IV. The applicant then shall compare the maximum concentration of each metal entered on the NOI to the corresponding total recoverable metals limit listed in Appendix IV. Please note that for this reissuance the applicant will be permitted to determine a limit using any fraction of the 0-5 of DF times the metal limit (for all regulated metals). For example: if the DF is 1.5, the Iron limit is 1,500 ug/L; if the DF is 1.5, the antimony limit is 8.4, etc. Not to exceed DF of 5.

1. If a metal concentration in the potential discharge (untreated influent) is less than the corresponding limit in Appendix IV, the metal will **not** be subject to permit limitations or monitoring requirements.

2. If a metal concentration in a potential discharge (untreated influent) is equal to or exceeds the corresponding limit in Appendix IV, the applicant must reduce it in the effluent to a concentration below the applicable total recoverable metals limit in Appendix IV prior to discharge.

iii. The applicant must submit the results of this calculation as part of the NOI. EPA (and MassDEP where the discharge is not covered by 310 CMR 40.0000) will review the proposed effluent limitations for each metal and approve or disapprove the limits in the notification of coverage letter to the applicant.

**4. Treatment system information.**

- a) Provide a written description of the treatment train and how the system will be set up for each discharge and attach a schematic of the proposed or existing treatment system(s).
- b) Identify each major treatment unit (e.g. frac tanks, filters, air stripper, liquid phase/vapor phase activated carbon, oil/water separators, etc.) by checking all that apply and describing any additional equipment not listed. Attach additional sheets as needed.
- c) Provide the proposed average and maximum flow rates (in gallons per minute, gpm) for the discharge and the design flow rates (in gpm) of the treatment system. Clearly identify the component of the treatment with the most limited flow, i.e., the part of the treatment train that establishes the design flow.
- d) Describe any chemical additives being used, or planned to be used, and attach MSDS sheets for each. EPA may request further information regarding the chemical composition of the additive, potential toxic effects, or other information to insure that approval of the use of the additive will not cause or contribute to a violation of State water quality standards. Approval of coverage under the RGP will constitute approval of the use of the chemical additive(s). If coverage of the discharge under the RGP has already been granted and the use of a chemical additive becomes necessary, the permittee must submit a Notice of Change (NOC).

**5. Receiving surface water(s) information.**

- a) Identify the discharge pathway by checking whether it is discharged: directly to the receiving water (river, stream, or brook), within the facility (e.g., through a sewer drain), to a storm drain, to a wetland, or other receiving body.
- b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters into which discharge will occur.
- c) Provide a detailed map(s) indicating the location of the site and outfall(s) to the receiving water(s):
  - 1) For multiple discharges, the discharges should be numbered sequentially.
  - 2) In the case of indirect dischargers (to municipal storm sewer, etc) the map(s) must be sufficient to indicate the location of the discharge to the indirect conveyance and the discharge to the state classified surface water. The map should also include the location and distance to the nearest sanitary sewer as well as the locus of nearby sensitive receptors (based on USGS topographical mapping), such as surface waters, drinking water supplies, and wetland areas.
- d) Provide the state water quality classification of the receiving water and the basin (for Massachusetts, the Surface Water Quality Standards (314 CMR 4.00) are available at <http://www.mass.gov/dep/water/laws/regulati.htm#wqual>) (for New Hampshire, contact the NH DES at (603) 271-2984).
- e) Specify the reported seven day-ten year low flow (7Q10) of the receiving water (see Section I.A.3) c. above). In New Hampshire, the 7Q10 must be provided by to the applicant by the New Hampshire Department of Environmental Services.

f) Indicate whether the receiving water is a listed 303(d) water quality impaired or limited water and if so, for which pollutants (see Section IX of the Fact Sheet for additional information).

For MA, the most updated integrated list of waters (CWA 303(d) and 305(b)) is available at <http://www.mass.gov/dep/water/resources/tmdls.htm#info>.

For NH, the most updated integrated list of waters (CWA 303(d) and 305(b)) is available at <http://des.nh.gov/organization/divisions/water/wmb/swqa/index.htm>.

Also, indicate if there is a final TMDL for any of the listed pollutants. For MA, final TMDLs can be found at: <http://www.mass.gov/dep/water/resources/tmdls.htm> and for NH, final TMDLs can be found at

<http://des.nh.gov/organization/divisions/water/wmb/tmdl/index.htm>. For more information, contact the states at: New Hampshire Department of Environmental Services, Watershed Management Bureau at 603-271-3503 or the Massachusetts Department of Environmental Protection at 508-767-2796 or 508-767-2873.

#### **6. ESA and NHPA Eligibility.**

As required in Parts I.A.4 and Appendix VII the operator of a site/facility must ensure that the potential discharge will not adversely affect endangered species, designated critical habitat, or national historic places that are in proximity to the potential discharge. If the potential discharge is to certain water bodies, the applicant must also submit a formal certification with the NOI that indicates the consultation, with the U.S. Fish and Wildlife Service and National Marine Fisheries Service (the Services), resulted in either a no jeopardy opinion or a written concurrence on a finding that the discharge is not likely to adversely affect any endangered species or critical habitat. Facilities should begin the consultation as early in the process as possible.

- a) Using the instructions in Appendix VII and information in Appendix II, indicate under which criterion listed you are eligible for coverage under this general permit.
- b) If you selected criterion D or F, indicate if consultation with the federal services has been completed or if it is underway.
- c) If consultation with the U.S. Fish and Wildlife Service and/or NOAA Fisheries Service was completed, indicate if a written concurrence finding that the discharge is "not likely to adversely affect" listed species or critical habitat was received.
- d) Attach documentation of ESA eligibility as described below and required in Appendix VII, Part I.C, Step 4.

*Criterion A - No federally-listed threatened or endangered species or federally-designated critical habitat are present: A copy of the most current county species list pages for the county(ies) where your site or facility and discharges are located. You must also include a statement on how you determined that no listed species or critical habitat are in proximity to your site or facility or discharge locations.*

*Criterion B - Section 7 consultation completed with the Service(s) on a prior project: A copy of the USFWS and/or NOAA Fisheries, as appropriate, biological opinion or concurrence on a finding of "unlikely to adversely effect" regarding the ESA Section 7 consultation.*

*Criterion C - Activities are covered by a Section 10 Permit: A copy of the USFWS and/or the NOAA Fisheries, as appropriate, letter transmitting the ESA Section 10 authorization.*

*Criterion D - Concurrence from the Service(s) that the discharge is "not likely to adversely affect" federally-listed species or federally-designated critical habitat (not including the four species of concern identified in Section I of Appendix I): A copy of the USFWS and/or the NOAA Fisheries, as appropriate, letter or memorandum concluding that the discharge is consistent with the general permit's "not likely to adversely affect" determination.*

*Criterion E - Activities are covered by certification of eligibility: A copy of the documents originally used by the other operator of your site or facility (or area including your site) to satisfy the documentation requirement of Criteria A, B, C or D.*

*Criterion F - Concurrence from the Service(s) that the discharge is "not likely to adversely affect" species of concern, as identified in Section I of Appendix I: A copy of the USFWS and/or the NOAA Fisheries, as appropriate, concurrence with the applicant's determination that the discharge is "not likely to adversely affect" listed species.*

e) Using the instructions in Appendix VII, identify which criterion listed in Part C makes you eligible for coverage under this general permit.

f) If Criterion 3 was selected, attach all written correspondence with the State or Tribal historic preservation officers, including any terms and conditions that outline measures the applicant must follow to mitigate or prevent adverse effects due to activities regulated by the RGP.

**7. Supplemental information.** Applicants should provide any supplemental information needed to meet the requirements of the permit, including any analytical data used to support the application, and any certification(s) required.

**8. Signature Requirements** - The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22, including 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, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*

**B. Suggested Form for Notice of Intent (NOI) for the Remediation General Permit**

**1. General facility/site information. Please provide the following information about the site:**

|   |  |  |  |
|---|--|--|--|
| a) Name of facility/site: AVRDD Wastewater Treatment Plant                        |  | Facility/site mailing address:   |  |
| Location of facility/site:<br>longitude: 44°27'35.42"N<br>latitude: 71°10'58.69"W |  | Facility SIC code(s):<br>4953  | Street:<br>P.O. Box 336<br>15 Mt. Forist St. |
| b) Name of facility/site owner:   |  | Town: Berlin   |  |
| Email address of facility/site owner:<br>sgauthier@avrdd.org                      |  | State:<br>NH   | Zip:<br>03570                                |
| Telephone no. of facility/site owner: (603) 752-3342                              |  | County:<br>Coos  |  |
| Fax no. of facility/site owner: (603) 752-4388                                    |  | Owner is (check one): 1. Federal <input type="radio"/> 2. State/Tribal <input type="radio"/> |  |
| Address of owner (if different from site):<br>Solid Waste District                |  | 3. Private <input type="radio"/> 4. Other <input checked="" type="radio"/> if so, describe:  |  |
| Street:   |  |  |  |
| Town:   |  | State:   | County:                                      |
| c) Legal name of operator:  |  | Operator telephone no.: (603) 752-3342   |  |
| AVRDD   |  | Operator fax no.: (603) 752-4388   |  |
| Operator contact name and title:<br>Sharon Gauthier                               |  | Operator email: sgauthier@avrdd.org  |  |
| Address of operator (if different from owner):                                    |  | Street: P.O. Box 336<br>15 Mt. Forist St.  |  |
| Town: Berlin  |  | State: NH  | Zip: 03570                                   |
|   |  | County: Coos   |  |

d) Check Y for "yes" or N for "no" for the following:

1. Has a prior NPDES permit exclusion been granted for the discharge? Y  N , if Y, number:

2. Has a prior NPDES application (Form I & 2C) ever been filed for the discharge? Y  N , if Y, date and tracking #:  NH0023523

3. Is the discharge a "new discharge" as defined by 40 CFR 122.2? Y  N

4. For sites in Massachusetts, is the discharge covered under the Massachusetts Contingency Plan (MCP) and exempt from state permitting? Y  N

e) Is site/facility subject to any State permitting, license, or other action which is causing the generation of discharge? Y  N

If Y, please list:

1. site identification # assigned by the state of NH or MA:  EPA Administrative Order Docket # 10-006

2. permit or license # assigned:

3. state agency contact information: name, location, and telephone number:

NHDES Compliance Engineer - Tracy Wood, (603) 271-1497

f) Is the site/facility covered by any other EPA permit, including:

1. Multi-Sector General Permit? Y  N , if Y, number:

2. Final Dewatering General Permit? Y  N , if Y, number:

3. EPA Construction General Permit? Y  N , if Y, number:

4. Individual NPDES permit? Y  N , if Y, number:  NH0023523

5. any other water quality related individual or general permit? Y  N , if Y, number:  NHGWP19909011-B-004

g) Is the site/facility located within or does it discharge to an Area of Critical Environmental Concern (ACEC)? Y  N

h) Based on the facility/site information and any historical sampling data, identify the sub-category into which the potential discharge falls.

| Activity Category                          | Activity Sub-Category   |
|--|---|
| I - Petroleum Related Site Remediation     | A. Gasoline Only Sites <input type="checkbox"/><br>B. Fuel Oils and Other Oil Sites (including Residential Non-Business Remediation Discharges) <input type="checkbox"/><br>C. Petroleum Sites with Additional Contamination <input type="checkbox"/> |
| II - Non Petroleum Site Remediation        | A. Volatile Organic Compound (VOC) Only Sites <input type="checkbox"/><br>B. VOC Sites with Additional Contamination <input type="checkbox"/><br>C. Primarily Heavy Metal Sites <input type="checkbox"/>  |
| III - Contaminated Construction Dewatering | A. General Urban Fill Sites <input type="checkbox"/><br>B. Known Contaminated Sites <input checked="" type="checkbox"/>   |

|  |   |
|--|---|
| <p>IV - Miscellaneous Related Discharges</p> | <p>A. Aquifer Pump Testing to Evaluate Formerly Contaminated Sites <input type="checkbox"/></p> <p>B. Well Development/Rehabilitation at Contaminated/Formerly Contaminated Sites <input type="checkbox"/></p> <p>C. Hydrostatic Testing of Pipelines and Tanks <input type="checkbox"/></p> <p>D. Long-Term Remediation of Contaminated Sumps and Dikes <input type="checkbox"/></p> <p>E. Short-term Contaminated Dredging Drain Back Waters (if not covered by 401/404 permit) <input checked="" type="checkbox"/></p> |
|--|---|

**2. Discharge information.** Please provide information about the discharge, (attaching additional sheets as necessary) including:

a) Describe the discharge activities for which the owner/applicant is seeking coverage:

Mechanical wastewater residual dewatering for the closure of the facility

b) Provide the following information about each discharge:

|  |               |   |  |  |  |      |      |
|--|---------------|---|--|--|--|------|------|
| 1) Number of discharge points:   | 1             | 2) What is the maximum and average flow rate of discharge (in cubic feet per second, ft <sup>3</sup> /s)? | Is maximum flow a design value? Y <input type="radio"/> N <input checked="" type="radio"/> | Is average flow a design value or estimate? estimate |  |      |      |
|  |               | Max. flow: 1.30 cfs   |  |  |  |      |      |
|  |               | Average flow (include units): 0.188 cfs   |  |  |  |      |      |
| 3) Latitude and longitude of each discharge within 100 feet:   |               |   |  |  |  |      |      |
| pt. 1: lat   | 44°27'27.70"N | long  | 71°11'5.59"W   | pt. 2: lat   |  | long |      |
| pt. 3: lat   |               | long  |  | pt. 4: lat   |  | long |      |
| pt. 5: lat   |               | long  |  | pt. 6: lat   |  | long |      |
| pt. 7: lat   |               | long  |  | pt. 8: lat   |  | long | etc. |
| 4) If hydrostatic testing, total volume of the discharge (gals): N/A   |               |   |  |  |  |      |      |
| 5) Is the discharge intermittent <input checked="" type="radio"/> or seasonal <input type="radio"/> ?  |               |   |  |  |  |      |      |
| Is discharge ongoing? Y <input type="radio"/> N <input checked="" type="radio"/>   |               |   |  |  |  |      |      |
| c) Expected dates of discharge (mm/dd/yy): start Jun 2, 2014 end Dec 31, 2014  |               |   |  |  |  |      |      |
| d) Please attach a line drawing or flow schematic showing water flow through the facility including:   |               |   |  |  |  |      |      |
| 1. sources of intake water, 2. contributing flow from the operation, 3. treatment units, and 4. discharge points and receiving waters(s) <small>See attached</small> |               |   |  |  |  |      |      |

**3. Contaminant information.**

a) Based on the sub-category selected (see Appendix III), indicate whether each listed chemical is believed present or believed absent in the potential discharge. Attach additional sheets as needed.

| Parameter *   | CAS Number                              | Believed Absent                     | Believed Present                    | # of Samples | Sample Type (e.g., grab) | Analytical Method Used (method #) | Minimum Level (ML) of Test Method | Maximum daily value  |           | Average daily value  |           |
|---|---|-------------------------------------|-------------------------------------|--------------|--------------------------|-----------------------------------|-----------------------------------|----------------------|-----------|----------------------|-----------|
|   |   |                                     |                                     |              |                          |                                   |                                   | concentration (ug/l) | mass (kg) | concentration (ug/l) | mass (kg) |
| 1. Total Suspended Solids (TSS)                               |   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 15           | Composite                | 2540B                             | <0.05                             | 40,800               | 823       | 13,000               | 119       |
| 2. Total Residual Chlorine (TRC)                              |   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 1            | Composite                | 4500CIG                           | <0.05                             |                      |           |                      |           |
| 3. Total Petroleum Hydrocarbons (TPH)                         |   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1            | Composite                | 624 & 625m                        |                                   |                      |           |                      |           |
| 4. Cyanide (CN)   | 57125                                   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1            | Composite                | 4500CNE                           | <0.02                             |                      |           |                      |           |
| 5. Benzene (B)  | 71432                                   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1            | Composite                | 624                               | <1                                |                      |           |                      |           |
| 6. Toluene (T)  | 108883                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1            | Composite                | 624                               | <1                                |                      |           |                      |           |
| 7. Ethylbenzene (E)   | 100414                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1            | Composite                | 624                               | <1                                |                      |           |                      |           |
| 8. (m,p,o) Xylenes (X)  | 108883;<br>106423;<br>95476;<br>1330207 | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1            | Composite                | 624                               | <1                                |                      |           |                      |           |
| 9. Total BTEX <sup>2</sup>                                    | n/a                                     | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1            | Composite                | 624                               | <5                                |                      |           |                      |           |
| 10. Ethylene Dibromide (EDB) (1,2-Dibromoethane) <sup>3</sup> | 106934                                  | <input type="checkbox"/>            | <input type="checkbox"/>            |              |                          |                                   |                                   |                      |           |                      |           |
| 11. Methyl-tert-Butyl Ether (MtBE)                            | 1634044                                 | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1            | Composite                | 624                               | <10                               |                      |           |                      |           |
| 12. tert-Butyl Alcohol (TBA) (Tertiary-Butanol)               | 75650                                   | <input type="checkbox"/>            | <input type="checkbox"/>            |              |                          |                                   |                                   |                      |           |                      |           |

\* Numbering system is provided to allow cross-referencing to Effluent Limits and Monitoring Requirements by Sub-Category included in Appendix III, as well as the Test Methods and Minimum Levels associated with each parameter provided in Appendix VI.

<sup>2</sup> BTEX = Sum of Benzene, Toluene, Ethylbenzene, total Xylenes.

<sup>3</sup> EDB is a groundwater contaminant at fuel spill and pesticide application sites in New England.

| Parameter *                       | CAS Number | Believed Absent                     | Believed Present         | # of Samples | Sample Type (e.g., grab) | Analytical Method Used (method #) | Minimum Level (ML) of Test Method | Maximum daily value  |           | Average daily value  |           |
|-----------------------------------|------------|-------------------------------------|--------------------------|--------------|--------------------------|-----------------------------------|-----------------------------------|----------------------|-----------|----------------------|-----------|
|                                   |            |                                     |                          |              |                          |                                   |                                   | concentration (ug/l) | mass (kg) | concentration (ug/l) | mass (kg) |
| 13. tert-Amyl Methyl Ether (TAME) | 9940508    | <input type="checkbox"/>            | <input type="checkbox"/> |              |                          |                                   |                                   |                      |           |                      |           |
| 14. Naphthalene                   | 91203      | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1            | Composite                | 625mod                            | <1                                |                      |           |                      |           |
| 15. Carbon Tetrachloride          | 56235      | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1            | Composite                | 624                               | <2                                |                      |           |                      |           |
| 16. 1,2 Dichlorobenzene (o-DCB)   | 95501      | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1            | Composite                | 625mod                            | <1                                |                      |           |                      |           |
| 17. 1,3 Dichlorobenzene (m-DCB)   | 541731     | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1            | Composite                | 625mod                            | <1                                |                      |           |                      |           |
| 18. 1,4 Dichlorobenzene (p-DCB)   | 106467     | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1            | Composite                | 625mod                            | <1                                |                      |           |                      |           |
| 18a. Total dichlorobenzene        |            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1            | Composite                | 625mod                            | <3                                |                      |           |                      |           |
| 19. 1,1 Dichloroethane (DCA)      | 75343      | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1            | Composite                | 624                               | <2                                |                      |           |                      |           |
| 20. 1,2 Dichloroethane (DCA)      | 107062     | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1            | Composite                | 624                               | <2                                |                      |           |                      |           |
| 21. 1,1 Dichloroethene (DCE)      | 75354      | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1            | Composite                | 624                               | <1                                |                      |           |                      |           |
| 22. cis-1,2 Dichloroethene (DCE)  | 156592     | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1            | Composite                | 624                               | <2                                |                      |           |                      |           |
| 23. Methylene Chloride            | 75092      | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1            | Composite                | 624                               | <5                                |                      |           |                      |           |
| 24. Tetrachloroethene (PCE)       | 127184     | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1            | Composite                | 624                               | <2                                |                      |           |                      |           |
| 25. 1,1,1 Trichloro-ethane (TCA)  | 71556      | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1            | Composite                | 624                               | <2                                |                      |           |                      |           |
| 26. 1,1,2 Trichloro-ethane (TCA)  | 79005      | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1            | Composite                | 624                               | <2                                |                      |           |                      |           |
| 27. Trichloroethene (TCE)         | 79016      | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1            | Composite                | 624                               | <2                                |                      |           |                      |           |

| Parameter *  | CAS Number | Believed Absent                     | Believed Present         | # of Samples | Sample Type (e.g., grab) | Analytical Method Used (method #) | Minimum Level (ML) of Test Method | Maximum daily value  |           | Average daily value  |           |
|--|------------|-------------------------------------|--------------------------|--------------|--------------------------|-----------------------------------|-----------------------------------|----------------------|-----------|----------------------|-----------|
|  |            |                                     |                          |              |                          |                                   |                                   | concentration (ug/l) | mass (kg) | concentration (ug/l) | mass (kg) |
| 28. Vinyl Chloride (Chloroethene)                            | 75014      | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1            | Composite                | 624                               | <2                                |                      |           |                      |           |
| 29. Acetone  | 67641      | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1            | Composite                | 624                               | <50                               |                      |           |                      |           |
| 30. 1,4 Dioxane  | 123911     | <input type="checkbox"/>            | <input type="checkbox"/> |              |                          |                                   |                                   |                      |           |                      |           |
| 31. Total Phenols  | 108952     | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1            | Composite                | 420.1                             | <50                               |                      |           |                      |           |
| 32. Pentachlorophenol (PCP)                                  | 87865      | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1            | Composite                | 625mod                            | <5                                |                      |           |                      |           |
| 33. Total Phthalates (Phthalate esters) <sup>4</sup>         |            | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1            | Composite                | 625mod                            | <17                               |                      |           |                      |           |
| 34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate] | 117817     | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1            | Composite                | 625mod                            | <5                                |                      |           |                      |           |
| 35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)     |            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |              |                          |                                   |                                   |                      |           |                      |           |
| a. Benzo(a) Anthracene                                       | 56553      | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1            | Composite                | 625mod                            | <1                                |                      |           |                      |           |
| b. Benzo(a) Pyrene   | 50328      | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1            | Composite                | 625mod                            | <1                                |                      |           |                      |           |
| c. Benzo(b)Fluoranthene                                      | 205992     | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1            | Composite                | 625mod                            | <1                                |                      |           |                      |           |
| d. Benzo(k)Fluoranthene                                      | 207089     | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1            | Composite                | 625mod                            | <1                                |                      |           |                      |           |
| e. Chrysene  | 21801      | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1            | Composite                | 625mod                            | <1                                |                      |           |                      |           |
| f. Dibenzo(a,h)anthracene                                    | 53703      | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1            | Composite                | 625mod                            | <1                                |                      |           |                      |           |
| g. Indeno(1,2,3-cd) Pyrene                                   | 193395     | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1            | Composite                | 625mod                            | <1                                |                      |           |                      |           |
| 36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)    |            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |              |                          |                                   |                                   |                      |           |                      |           |

<sup>4</sup>The sum of individual phthalate compounds.

| Parameter *                                | CAS Number  | Believed Absent                     | Believed Present                    | # of Samples | Sample Type (e.g., grab) | Analytical Method Used (method #) | Minimum Level (ML) of Test Method | Maximum daily value  |           | Average daily value  |           |
|--|---|-------------------------------------|-------------------------------------|--------------|--------------------------|-----------------------------------|-----------------------------------|----------------------|-----------|----------------------|-----------|
|  |   |                                     |                                     |              |                          |                                   |                                   | concentration (ug/l) | mass (kg) | concentration (ug/l) | mass (kg) |
| h. Acenaphthene                            | 83329   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1            | Composite                | 625mod                            | <1                                |                      |           |                      |           |
| i. Acenaphthylene                          | 208968  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1            | Composite                | 625mod                            | <1                                |                      |           |                      |           |
| j. Anthracene                              | 120127  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1            | Composite                | 625mod                            | <1                                |                      |           |                      |           |
| k. Benzo(ghi) Perylene                     | 191242  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1            | Composite                | 625mod                            | <1                                |                      |           |                      |           |
| l. Fluoranthene                            | 206440  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1            | Composite                | 625mod                            | <1                                |                      |           |                      |           |
| m. Fluorene                                | 86737   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1            | Composite                | 625mod                            | <1                                |                      |           |                      |           |
| n. Naphthalene                             | 91203   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1            | Composite                | 625mod                            | <1                                |                      |           |                      |           |
| o. Phenanthrene                            | 85018   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1            | Composite                | 625mod                            | <1                                |                      |           |                      |           |
| p. Pyrene                                  | 129000  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1            | Composite                | 625mod                            | <1                                |                      |           |                      |           |
| 37. Total Polychlorinated Biphenyls (PCBs) | 85687;<br>84742;<br>117840;<br>84662;<br>131113;<br>117817. | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1            | Composite                | 608                               | <2.1                              |                      |           |                      |           |
| 38. Chloride                               | 16887006  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |              |                          |                                   |                                   |                      |           |                      |           |
| 39. Antimony                               | 7440360   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1            | Composite                | 200.8                             | <1                                |                      |           |                      |           |
| 40. Arsenic                                | 7440382   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 1            | Composite                | 200.8                             | <1                                | 0.0005               |           |                      |           |
| 41. Cadmium                                | 7440439   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1            | Composite                | 200.8                             | <1                                |                      |           |                      |           |
| 42. Chromium III (trivalent)               | 16065831  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1            | Composite                | 200.8                             | <1                                |                      |           |                      |           |
| 43. Chromium VI (hexavalent)               | 18540299  | <input type="checkbox"/>            | <input type="checkbox"/>            |              |                          |                                   |                                   |                      |           |                      |           |
| 44. Copper                                 | 7440508   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1            | Composite                | 200.8                             | <1                                |                      |           |                      |           |
| 45. Lead                                   | 7439921   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1            | Composite                | 200.8                             | <1                                |                      |           |                      |           |
| 46. Mercury                                | 7439976   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1            | Composite                | 245.1                             | <0.4                              |                      |           |                      |           |
| 47. Nickel                                 | 7440020   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 1            | Composite                | 200.8                             | <1                                | 0.000485             | 8         |                      | 0.000485  |
| 48. Selenium                               | 7782492   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1            | Composite                | 200.8                             | <1                                |                      |           |                      |           |
| 49. Silver                                 | 7440224   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | 1            | Composite                | 200.8                             | <1                                |                      |           |                      |           |
| 50. Zinc                                   | 7440666   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 21           | Composite                | 200.8                             | <1                                | 0.145                | 8         |                      | 0.0182    |
| 51. Iron                                   | 7439896   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | 1            | Composite                | 200.8                             | <5                                | 0.0446               | 84        |                      | 0.0446    |
| Other (describe):                          |   | <input type="checkbox"/>            | <input type="checkbox"/>            |              |                          |                                   |                                   |                      |           |                      |           |

| Parameter * | CAS Number | Believed                 |                          | # of Samples | Sample Type (e.g., grab) | Analytical Method Used (method #) | Minimum Level (ML) of Test Method |           | Maximum daily value  |           | Average daily value |  |
|-------------|------------|--------------------------|--------------------------|--------------|--------------------------|-----------------------------------|-----------------------------------|-----------|----------------------|-----------|---------------------|--|
|             |            | Absent                   | Present                  |              |                          |                                   | concentration (ug/l)              | mass (kg) | concentration (ug/l) | mass (kg) |                     |  |
|             |            | <input type="checkbox"/> | <input type="checkbox"/> |              |                          |                                   |                                   |           |                      |           |                     |  |
|             |            | <input type="checkbox"/> | <input type="checkbox"/> |              |                          |                                   |                                   |           |                      |           |                     |  |

b) For discharges where metals are believed present, please fill out the following (attach results of any calculations):

|  |   |
|--|---|
| <p><i>Step 1:</i> Do any of the metals in the influent exceed the effluent limits in Appendix III (i.e., the limits set at zero dilution)? Y <input type="radio"/> N <input checked="" type="radio"/></p> <p><i>Step 2:</i> For any metals which exceed the Appendix III limits, calculate the dilution factor (DF) using the formula in Part I.A.3.c (step 2) of the NOI instructions or as determined by the State prior to the submission of this NOI. What is the dilution factor for applicable metals?</p> <p>Metal: _____ DF: _____</p> <p>Metal: _____ DF: _____</p> <p>Metal: _____ DF: _____</p> <p>Metal: _____ DF: _____</p> <p>Etc.</p> | <p>If yes, which metals?</p> <p>Look up the limit calculated at the corresponding dilution factor in Appendix IV. Do any of the metals in the influent have the potential to exceed the corresponding effluent limits in Appendix IV (i.e., is the influent concentration above the limit set at the calculated dilution factor)?</p> <p>Y <input type="radio"/> N <input type="radio"/> If Y, list which metals:</p> |
|--|---|

4. Treatment system information. Please describe the treatment system using separate sheets as necessary, including:

a) A description of the treatment system, including a schematic of the proposed or existing treatment system:

Existing wastewater residuals in the aeration lagoons and clarifiers will be dewatered by gravity or mechanical means. All residuals will be excavated from the clarifiers and emergency lagoon and consolidated in the aeration lagoons. Filtrate will be discharged into the secondary clarifier and pumped to the outfall. See attached for additional description.

b) Identify each applicable treatment unit (check all that apply):

|                                       |  |  |  |                                     |                                     |
|---------------------------------------|--|--|--|-------------------------------------|-------------------------------------|
| Frac. tank <input type="checkbox"/>   | Air stripper <input type="checkbox"/>    | Oil/water separator <input type="checkbox"/> | Equalization tanks <input checked="" type="checkbox"/> | Bag filter <input type="checkbox"/> | GAC filter <input type="checkbox"/> |
| Chlorination <input type="checkbox"/> | De-chlorination <input type="checkbox"/> | Other (please describe):                     |  |                                     |                                     |

c) Proposed average and maximum flow rates (gallons per minute) for the discharge and the design flow rate(s) (gallons per minute) of the treatment system:  
 Average flow rate of discharge  gpm Maximum flow rate of treatment system  gpm  
 Design flow rate of treatment system  gpm

d) A description of chemical additives being used or planned to be used (attach MSDS sheets):

Alum for pH buffer as needed.

5. Receiving surface water(s). Please provide information about the receiving water(s), using separate sheets as necessary:

|                                    |   |  |                                      |                                   |  |
|------------------------------------|---|--|--------------------------------------|-----------------------------------|--|
| a) Identify the discharge pathway: | Direct to receiving water <input checked="" type="checkbox"/> | Within facility (sewer) <input type="checkbox"/> | Storm drain <input type="checkbox"/> | Wetlands <input type="checkbox"/> | Other (describe): <input type="text"/> |
|------------------------------------|---|--|--------------------------------------|-----------------------------------|--|

b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters:  
 Androscoggin River - See Attached

c) Attach a detailed map(s) indicating the site location and location of the outfall to the receiving water:

- For multiple discharges, number the discharges sequentially.
- For indirect discharges, indicate the location of the discharge to the indirect conveyance and the discharge to surface water. The map should also include the location and distance to the nearest sanitary sewer as well as the locus of nearby sensitive receptors (based on USGS topographical mapping), such as surface waters, drinking water supplies, and wetland areas.

d) Provide the state water quality classification of the receiving water:

e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water:  cfs  
 Please attach any calculation sheets used to support stream flow and dilution calculations.

f) Is the receiving water a listed 303(d) water quality impaired or limited water? Y  N  If yes, for which pollutant(s)?

Is there a final TMDL? Y  N  If yes, for which pollutant(s)?

**6. ESA and NHPA Eligibility.**

Please provide the following information according to requirements of Permit Parts I.A.4 and I.A.5 Appendices II and VII.

- a) Using the instructions in Appendix VII and information on Appendix II, under which criterion listed in Part I.C are you eligible for coverage under this general permit?  
A  B  C  D  E  F
- b) If you selected Criterion D or F, has consultation with the federal services been completed? Y  N  Underway
- c) If consultation with U.S. Fish and Wildlife Service and/or NOAA Fisheries Service was completed, was a written concurrence finding that the discharge is "not likely to adversely affect" listed species or critical habitat received? Y  N
- d) Attach documentation of ESA eligibility as described in the NOI instructions and required by Appendix VII, Part I.C, Step 4.
- e) Using the instructions in Appendix VII, under which criterion listed in Part II.C are you eligible for coverage under this general permit?  
1  2  3
- f) If Criterion 3 was selected, attach all written correspondence with the State or Tribal historic preservation officers, including any terms and conditions that outline measures the applicant must follow to mitigate or prevent adverse effects due to activities regulated by the RGP.

**7. Supplemental information.**

Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit.

See Attached for a brief description of the project and supplemental information.

**8. Signature Requirements:** The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22, including 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, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*

|                       |  |
|-----------------------|--|
| Facility/Site Name:   | Androscoggin Valley Regional Refuse Disposal District (AVRRDD) Wastewater Treatment Plan |
| Operator signature:   |       |
| Printed Name & Title: | Linda Cushman, Chair   |
| Date:                 | 5/7/2014   |

**B. Submission of NOI to EPA** - All operators applying for coverage under this General Permit must submit a completed Notice of Intent (NOI) to EPA. Signed and completed NOI forms and attachments must be submitted to EPA-NE at:

U.S. Environmental Protection Agency  
5 Post Office Square, Suite 100  
Mail Code OEP06-4  
Boston, MA 02109-3912  
ATTN: Remediation General Permit NOI Processing

or electronically mailed to [NPDES.Generalpermits@epa.gov](mailto:NPDES.Generalpermits@epa.gov)

or faxed to the EPA Office at 617-918-0505

If filling out the suggested NOI form electronically on EPA's website, the signature page must be signed and faxed or mailed to EPA at the fax number and/or address listed above.

**1. Filing with the states** - A copy of any NOI form filed with EPA-NE must also be filed with state agencies. The state agency may elect to develop a state specific form or other information requirements.

a) **Discharges in Massachusetts** - In addition to the NOI, permit applicants must submit copies of the State Application Form BRPWM 12, Request for General Permit coverage for the RGP. The application form and the Transmittal Form for Permit Application and Payment may be obtained from the Massachusetts Department of Environmental Protection (MassDEP) website at [www.state.ma.us/dep](http://www.state.ma.us/dep). Municipalities are fee-exempt, but should send a copy of the transmittal form to that address for project tracking purposes. All applicants should keep a copy of the transmittal form and a copy of the application package for their records.

1) A copy of the NOI, the transmittal form, a copy of the check, and Form BRPWM 12 should be sent to:

Massachusetts Department of Environmental Protection  
Division of Watershed Management  
627 Main Street, 2<sup>nd</sup> floor  
Worcester, MA 01608

2) A copy of the transmittal form and the appropriate fee should be sent to:

Massachusetts Department of Environmental Protection  
P.O. Box 4062  
Boston, MA 02111

Please note: Applicants for discharges in Massachusetts should note that under 310 CMR 40.000, *as a matter of state law*, the general permit only applies to discharges that are **not** subject to the

Massachusetts Contingency Plan (MCP) and 310 CMR 40.000. Therefore, discharges subject to the MCP are not required to fill out and submit the State Application Form BRPWM 12 or pay the state fees. However, they must submit a NOI to EPA.

b) Discharges in New Hampshire - applicants must provide a copy of the Notice of Intent to:

New Hampshire Department of Environmental Services  
Water Division  
Wastewater Engineering Bureau  
P.O. Box 95  
Concord, New Hampshire 03302-0095.

2. Filing with Municipalities - A copy of the NOI must be submitted to the municipality in which the proposed discharge would be located.

## *Section 1*

# *General Facility Information*

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### BACKGROUND

This NPDES Remediation General Permit (RGP) Notice of Intent is for discharge of stormwater, groundwater, and wastewater residual filtrate during the decommissioning of the Androscoggin Valley Regional Refuse Disposal District's ('AVRRDD' or the 'District') wastewater treatment facility (referred to as the District WWTP; formerly referred to as the Burgess Wastewater Treatment Plant).

The Androscoggin Valley Regional Refuse Disposal District (the District) acquired the Mt. Carberry Landfill on December 30, 2002, from Fraser, NH LLC, which at the time operated pulp and paper mills in Berlin and Gorham, New Hampshire. As part of the District's purchase of the landfill, Fraser agreed to continue to accept and treat the leachate from the landfill at its Burgess Wastewater Treatment Plant (WWTP) in Berlin, NH. On March 27, 2006, Fraser notified the District that it was closing the pulp mill and would no longer be operating the Burgess WWTP. Ultimately, the District purchased the Burgess WWTP in October 2007 (referred to as the District WWTP herein).

On April 17, 2008, the District applied to the United States Environmental Protection Agency (US EPA) for the issuance of a National Pollutant Discharge Elimination System (NPDES) permit for the District WWTP to discharge wastewater to the Androscoggin River. On July 30, 2008, US EPA issued a Draft NPDES permit to the District (permit number NH0023523). The US EPA subsequently issued the final NPDES permit NH023523 which became effective on January 1, 2009, which provided for effluent limits based on treatment of the leachate from the Mt. Carberry Landfill.

Constructed in 1975, the District WWTP was designed to treat 20 million gallons per day (MGD) of wastewater flow from the pulp mill. After the Fraser pulp mill closed in 2006, the average daily flow to the District WWTP ranged from 0.5 to 1.5 MGD and was composed of landfill leachate and stormwater, and infiltration from the former mill site. The District WWTP was not designed specifically to treat only landfill leachate or the pollutants it typically contains which are regulated under the 2009 NPDES permit. As such, the District WWTP effluent could not regularly meet the effluent limits established in its NPDES permit.

In response to a US EPA issued Administrative Order (Docket Number 09-13: AO 09-13) to the District, on January 27, 2009, and amended administrative order, Docket Number 10-006 (AO 10-006), dated April 2, 2010, the District and its consultants evaluated options to bring the District WWTP in compliance with its NPDES permit.

Ultimately, it was decided to discontinue the flow of leachate to the District WWTP and instead divert leachate to the City of Berlin Water Pollution Control Facility (Berlin WPCF) for treatment and disposal. A new leachate gravity sewer and siphon force main to the Berlin WPCF was constructed in 2011. Leachate stopped flowing to the District WWTP on December 19,

2011 when the leachate sewer began operating. Similarly, stormwater flow from the former mill site stopped on November 29, 2011 after the sewer pipe inlet was capped with brick at the former mill site. From this date forward, no wastewaters were received at the District WWTP through either of its internal outfalls.

Wastewater residuals remain in the lagoons and clarifiers. Supplemental Order Schedule to AO-10-006 requires the removal residuals from the District WWTP's lagoons and clarifiers and stabilization of the facility.

### FACILITY DESCRIPTION

The District WWTP is situated on approximately 24.1 acres of land owned by the AVRDD. The WWTP is comprised of a 190-foot diameter primary clarifier, two aerated treatment lagoons, a 240-foot diameter secondary clarifier, an operations building, an HDPE-lined emergency lagoon, associated yard piping, an operations building, ancillary structures and an outfall structure on the eastern bank of the Androscoggin River, identified as Outfall 016 in the NPDES permit. The land to the east of the lagoons generally slopes uphill as this area is at the base of Mt. Carberry. The western slopes of the lagoons were constructed during the initial construction of the plant. A berm, varying in height from no net fill to 12 ft, was constructed to cover the influent main from the former pulp mill. The land on the western portion of the site generally slopes down to the west toward the Androscoggin River. Figure 1 is a USGS map showing the project location and outfall location.

After the pulp mill closed, the primary clarifier was hydraulically disconnected from the treatment process and all sludge handling equipment was turned off. Plant influent sources, which included flow from the pulp mill effluent pipe and landfill leachate sewer, were redirected and eliminated in 2011. The current contributing flow is from stormwater collected in the lagoons and clarifiers and from groundwater infiltration into the lagoons.

### DECOMMISSIONING CONTRACTOR

The District is the owner of the facility and currently contracts with Gorham Paper and Tissue, of Gorham, NH, for operations of the facility, which includes monitoring. The District plans to procure a general contractor for construction of the decommissioning project through a public procurement process. The selected contractor will serve as the operator of the work completed under the Remediation General Permit and will be required to comply with the terms of the RGP.

## *Section 2*

# *Discharge Information*

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Stormwater and groundwater infiltration flows by gravity through the treatment process as follows: groundwater infiltrates the clay lined aeration lagoons, once the lagoons fill, water flows through the lagoon outfall structure (one central and one at the north end of the northern lagoon), through a 30 inch diameter FRP underground pipe to the secondary clarifier, through a 30” diameter FRP underground sewer to the outfall structure. The facility outfall is a direct discharge to the Androscoggin River.

Outfall 016 is located on the eastern bank of the Androscoggin River in Berlin, NH. The coordinates are approximately 44°27'27.70"N and 71°11'6.59"W. Flow from groundwater infiltration and stormwater are currently discharged via the outfall under the NPDES permit, either through gravity flow or pumping. Effluent monitoring, per the facility's NPDES permit, is performed by collecting a 24-hour composite sample from the secondary clarifier. Discharge during closure construction, proposed to be performed under the Remediation General Permit, will be performed by pumping effluent through the outfall pipe using portable pumps from the lagoons and clarifiers. During previous pumping operations, flows have varied based on available pumps. In 2013, maximum daily flow was 1,400,000 gpd (1.30 cfs) and average daily flow was 121,800 gpd (0.188 cfs). Flows during closure construction are anticipated to be similar to previous pumping operations. Discharge will be required to remove the existing stormwater and groundwater stored in the lagoons and clarifiers in order to manage the remaining wastewater residuals, to remove filtrate from residuals during dewatering, and to continually manage liquid levels due to stormwater and groundwater infiltration during closure construction. Monitoring during dewatering will be performed in accordance with requirements under the Remediation General Permit. Figure 2, attached, is a schematic depicting flow through the facility.

### *Section 3*

## *Contaminant Information*

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The contaminant information is provided in Section 3 of the Notice of Intent form. The analytical data provided is from 2013 effluent monitoring as required by the Facility's NPDES permit and also from the facility's NPDES permit renewal application sampling. Data provided is representative of effluent which is the result of stormwater and groundwater infiltration. As noted in Section 2, effluent monitoring, per the facility's NPDES permit, is performed by collecting a 24-hour composite sample from the secondary clarifier.

Effluent quality data was collected previously when there was flow and included all but six (1,2-dibromoethane, tert-butyl alcohol, tert-amyl methyl ether, 1,4-dioxane, chloride, and chromium VI) of the required parameters for this RGP. The existing clarifiers and lagoons were pumped down in 2013 to better manage liquids and there currently is no effluent flow from the facility to monitor in order to supplement the previous data. Grab samples of these parameters were sampled on May 13, 2014 from the secondary clarifier, which was partially full of stormwater and groundwater infiltration. The results for the compounds listed above will be forwarded upon receipt of the laboratory results.

## *Section 4*

# *Treatment System Information*

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Components of the existing facility are described in Section 2.

Following the removal of the stormwater and groundwater in the lagoons and clarifiers, the remaining wastewater residuals will be disposed. The solids portion of the wastewater residuals, primarily comprised of dewatered sludge, removed during decommissioning will be disposed of at the Mt. Carberry Landfill, which is owned by the District. Onsite dewatering of the existing residuals is proposed. CMA Engineers will develop a performance specification that the Contractor selected for the decommissioning project will need to comply with to meet regulatory requirements, reduce the volume of residuals with effective dewatering, and minimize trucking to the landfill. These options may include:

- Air Dried-Gravity Dewatered Residuals – During the time the lagoon liquid levels were pumped down the residuals on the side slopes of the lagoons dried substantially when exposed to sunlight and wind. No objectionable odors were observed. Samples of the air-dried residuals collected from the side slopes were tested at the Gorham Paper & Tissue WWTP laboratory. The percent solids ranged from 26.4% near the liquid surface (one foot up the slope) to 48.3% near the top of the slope. These materials can be removed mechanically and loaded into properly sealed dump trucks without any additional dewatering. Residuals in the bottom of the lagoons where liquid cannot be readily pumped down may be mechanically removed and cast along the slopes of the lagoons to air dry on the side slopes.
- Mechanical Dewatering – Mobile mechanical dewatering equipment may be employed to provide for mechanical dewatering. Technologies could include filter presses, rotary vacuum filters, or centrifuges. Process flow may include use of a frac tank prior to discharge of the liquids and to provide for reuse of process water.
- Geotextile Dewatering tubes – Effluent from the dewatering tubes would be discharged to the lagoons or clarifiers and managed in accordance with the RGP. The tubes full of residuals would be disposed of in the Mt. Carberry landfill. Conformance with the District WWTP's current groundwater permit would be required if the selected Contractor opts to use this technology.

Filtrate from dewatering will be discharged into the secondary clarifier along with any stormwater or groundwater infiltration collected in the clarifiers or lagoons during closure construction. The secondary clarifier will provide settling. Effluent will be monitored for quality and pumped from the secondary clarifier. During 2013, pH was measured in excess of 9.0 SU as a result of an algae bloom in the secondary clarifier. Alum will be dosed to the effluent to provide pH buffer if needed.

The application requires identification of chemicals to be used. Other process chemicals other than Alum may be necessary if mechanical dewatering is necessary. The exact chemicals will be determined based on evaluations completed with the selected Contractor to provide for effective

dewatering. If this is required, the chemicals to be used will be submitted as a supplement to this application for coverage under the remediation general permit.

Proposed average and maximum effluent flows will be determined based upon pumps provided by the selected Contractor. Average and maximum flows are anticipated to be the similar to previous pumping operations as described in Section 2.

*Section 5*  
*Receiving Surface Waters*

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Existing outfall 016, which is shown on Figure 1, will be used for effluent discharge throughout closure construction. As indicated in Section 2, the outfall is located on the eastern bank of the Androscoggin River in Berlin, NH. In addition, refer to Figure 2, which is a schematic depicting flow through the facility.

The Androscoggin River is not a designated river. The Androscoggin River (Berlin) is included on the NHDES 2012 Final 303(d) List for threatened or impaired waters that require a TMDL. The Berlin impairment is for mercury. No TMDL is yet established.

*Section 6*  
*ESA and NHPA Eligibility*

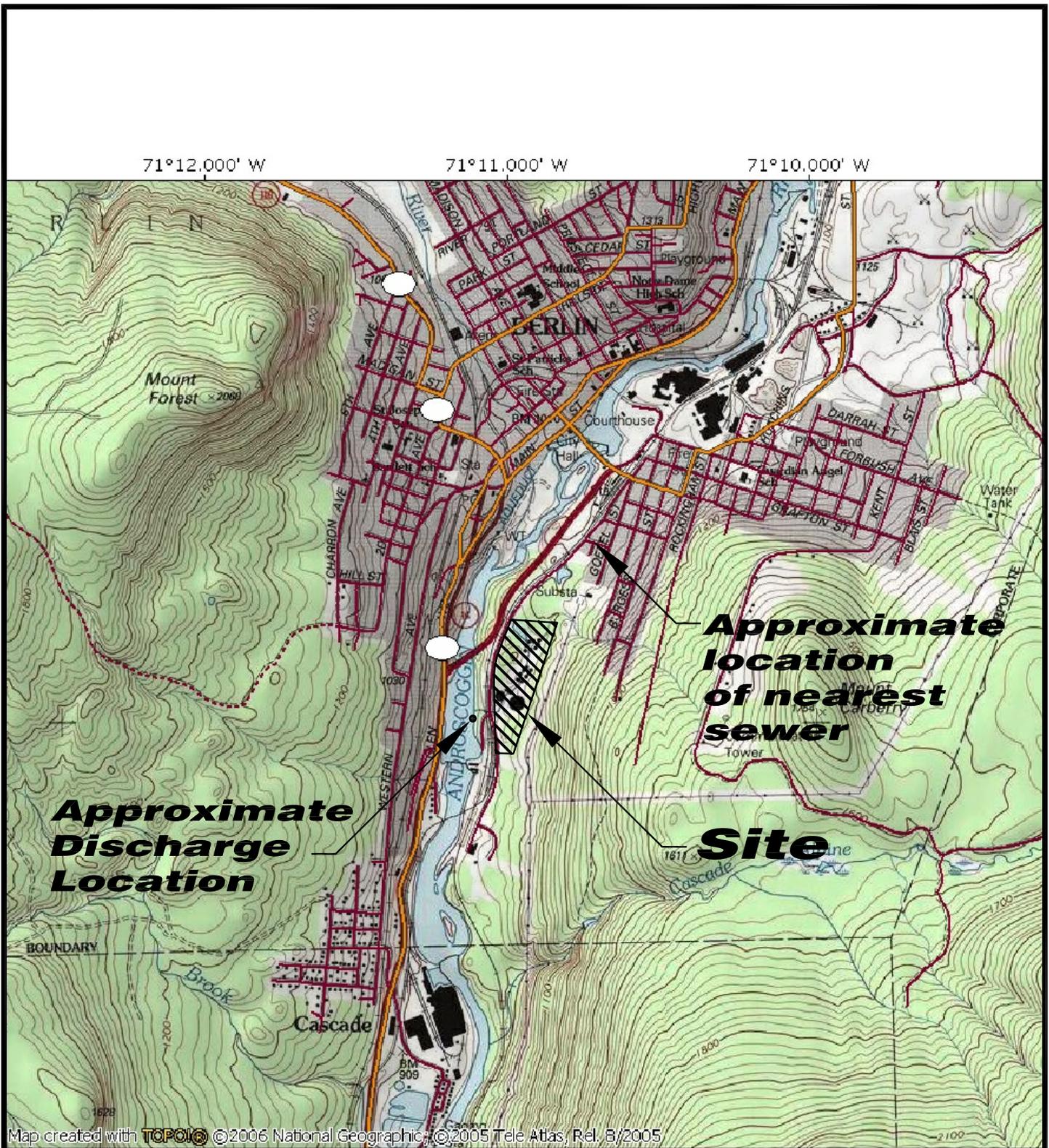
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Per RGP Appendix VII, Part I – Endangered Species Act Guidance, a query of the NH Natural Heritage Bureau was processed for rare species or exemplary natural communities. No rare species or exemplary natural communities were identified in the project area by the query and thus, the project meets permit eligibility criterion A under Part I.C. The NH Natural Heritage Bureau database results are included as Appendix B.

The project includes demolition of buildings and structures and historic buildings are not affected by discharge, thus, per RGP Appendix VII, Part II.C – Historic Properties, the project meets permit eligibility criterion 2.

## Figures

---



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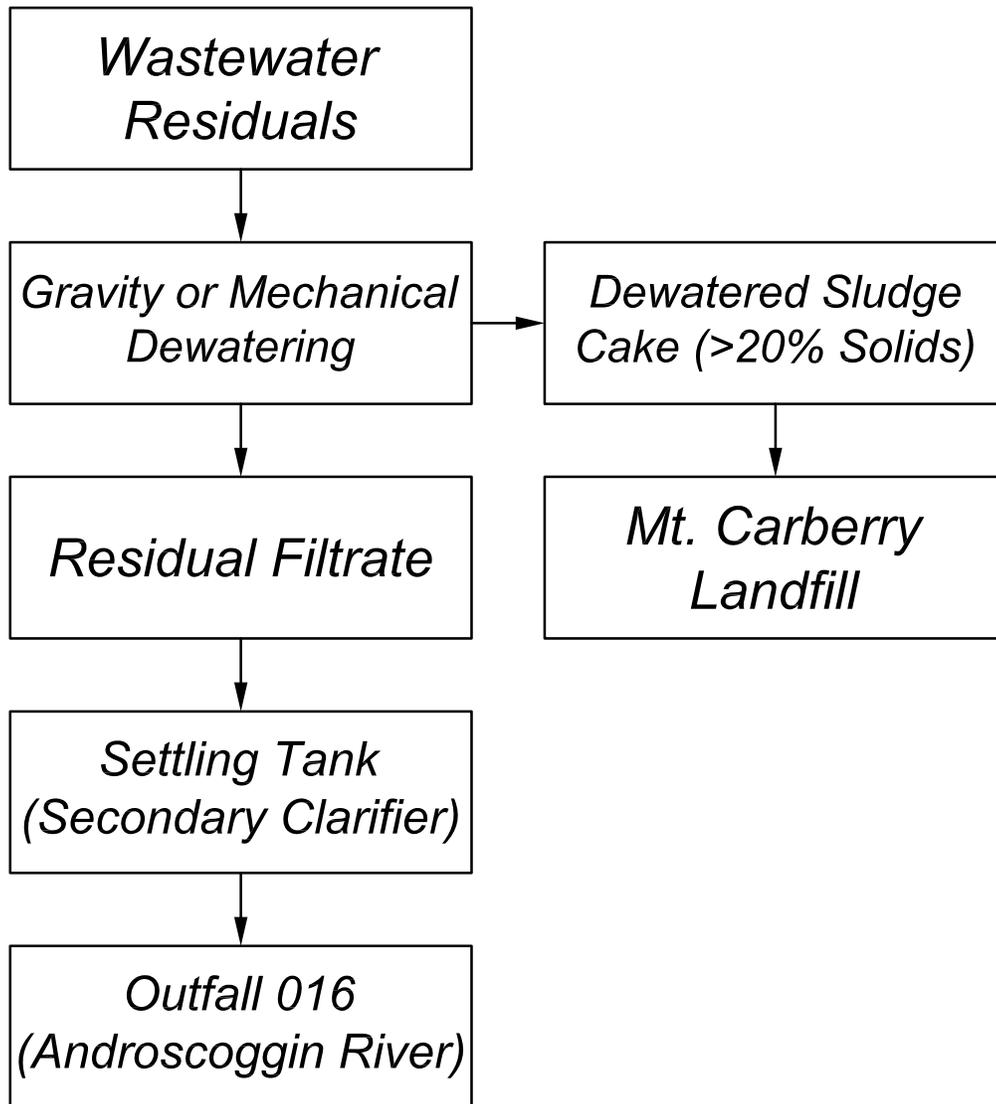
E-mail: [info@cmaengineers.com](mailto:info@cmaengineers.com)

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 Fax: 207/985-5520

**AVRRDD**  
**Wastewater Treatment Plan**  
**Berlin, NH**

**Figure 1 - Locus Map**

Scale: 1" = 2000'



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*AVRRDD, Berlin, NH  
 Wastewater Treatment Plan  
 Decommissioning & Closure*

*Flow & Residuals Processing Schematic*

*Figure 2*

## Appendix A

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AVRRDD WWTP Decommissioning Plans  
(Full – sized bound separately)

# Androscoggin Valley Regional Refuse Disposal District Wastewater Treatment Plant 2013 Decommissioning

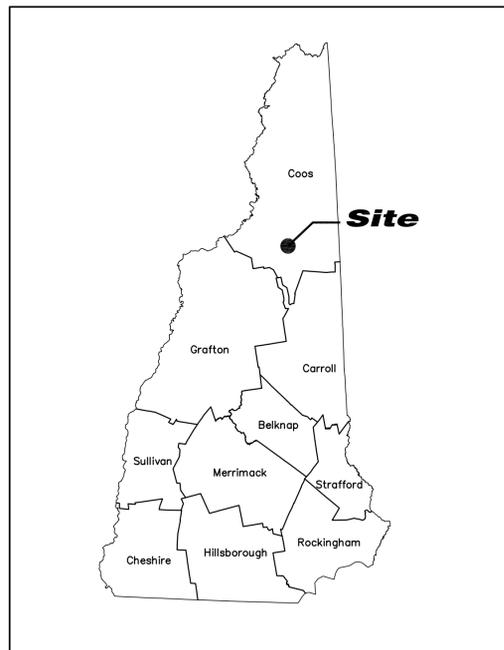
**Issued for Regulatory Review - March 2013**  
**Revised per EPA Comments - May 2014**

## Sheet Index

- SHEET 1 - EXISTING CONDITIONS PLAN
- SHEET 2 - DEMOLITION PLAN
- SHEET 3 - PROPOSED SITE PLAN
- SHEET 4 - SECTIONS & DETAILS
- SHEET 5 - EROSION CONTROL NOTES & DETAILS



**NOT FOR CONSTRUCTION**



**Locus Plan**

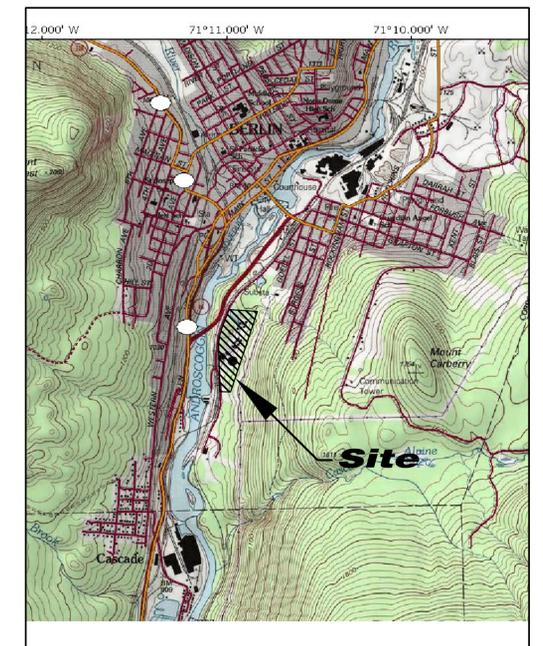
Prepared For:  
Androscoggin Valley Regional Refuse Disposal District  
15 Mt. Forist Street  
Berlin, New Hampshire 03570

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Fax: 603/627/0746

10 Free Street  
Second Floor  
Portland, Maine 04101  
Phone: 207/541-4223  
Fax: 207/541-4225



**Project Location**  
Not to Scale

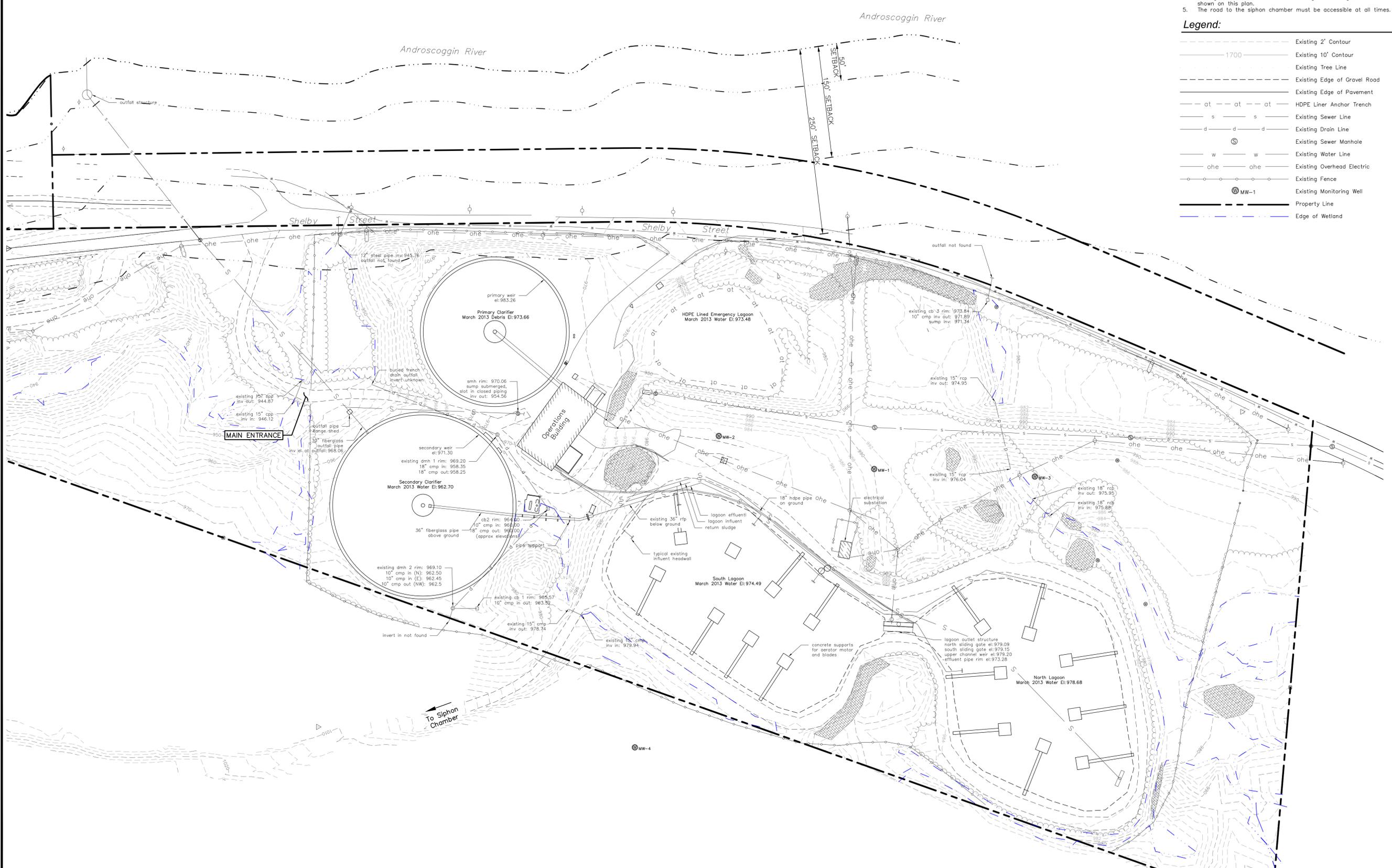


**General Notes:**

- Existing conditions and topography is from field survey performed on July 3, 2012 in the vicinity of the west entrance and in March 2013 for the rest of the property. Field survey was performed by York Land Services of Berlin, NH.
- Refer to Drawing Appendix A for additional original and redline drawings containing facility design information.
- Not all yard piping was located during survey. Contractor shall field confirm all features.
- Underground electric and controls wiring for the lagoons is not shown on this plan.
- The road to the siphon chamber must be accessible at all times.

**Legend:**

- Existing 2' Contour
- Existing 10' Contour
- Existing Tree Line
- Existing Edge of Gravel Road
- Existing Edge of Pavement
- HDPE Liner Anchor Trench
- Existing Sewer Line
- Existing Drain Line
- Existing Sewer Manhole
- Existing Water Line
- Existing Overhead Electric
- Existing Fence
- Existing Monitoring Well
- Property Line
- Edge of Wetland

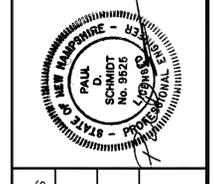


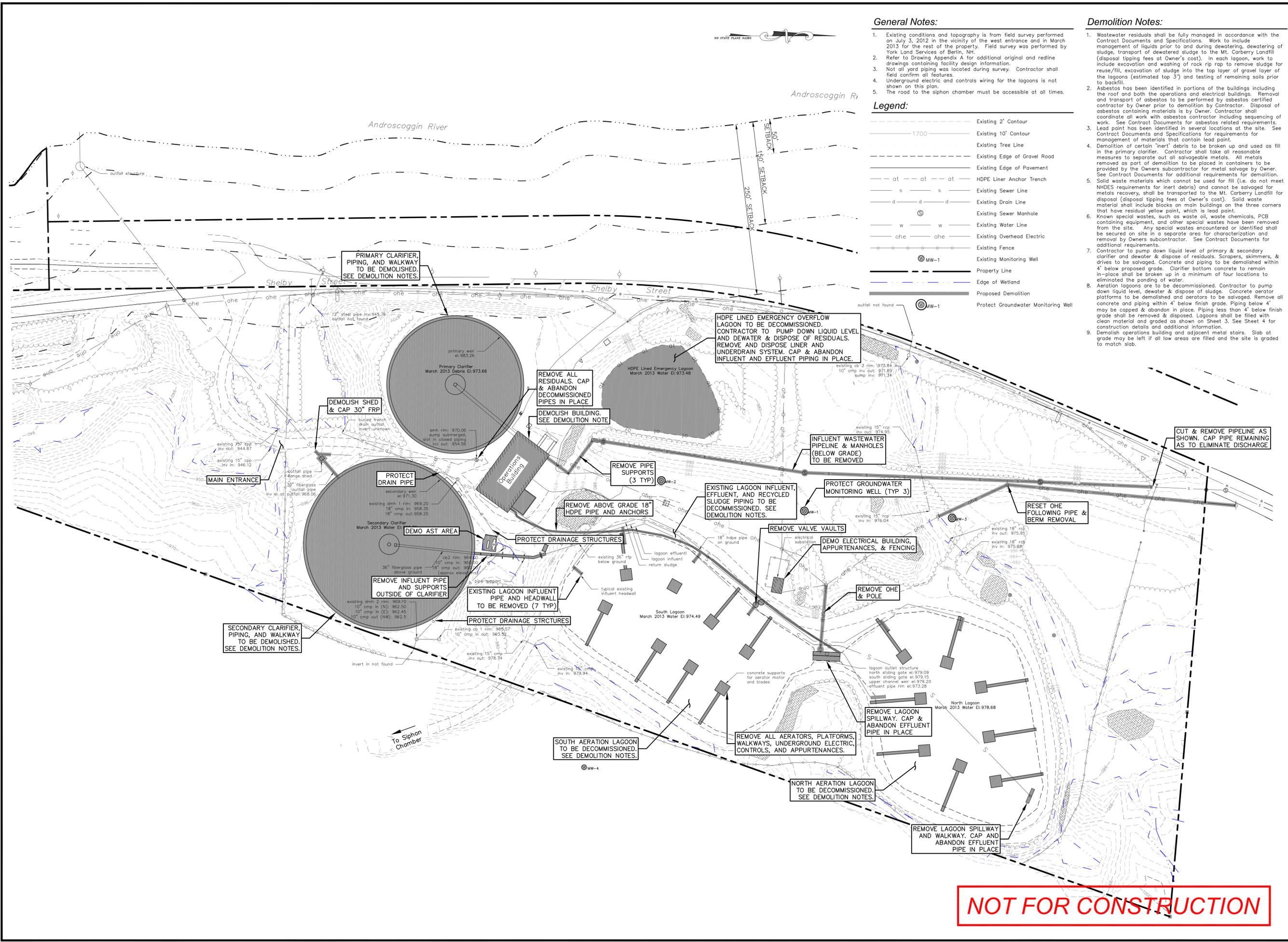
**NOT FOR CONSTRUCTION**

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| revision  | Revised per EPA Comments |                      |     |                          |                  |                 |   |
| date  | 5/14                     |                      |     |                          |                  |                 |   |
| by  | PDS                      |                      |     |                          |                  |                 |   |
| designed by:  | PDS/BEA/BWS              | drawn by:            | BWS | approved by:             | PDS              | scale: 1" = 60' |   |
| date:   | March 2013               | project no.:         | 819 | file name:               | 819-Demo-164.dwg |                 |   |
| Androscoggin Valley Regional Refuse Disposal District |                          | WWTP Decommissioning |     | Existing Conditions Plan |                  |                 |   |
| drawing no. 1   |                          | sheet: 1 of 5        |     |                          |                  |                 |   |

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**General Notes:**

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- Existing Edge of Pavement
- HDPE Liner Anchor Trench
- Existing Sewer Line
- Existing Drain Line
- Existing Sewer Manhole
- Existing Water Line
- Existing Overhead Electric
- Existing Fence
- Existing Monitoring Well
- Property Line
- Edge of Wetland
- Proposed Demolition
- Protect Groundwater Monitoring Well

**Demolition Notes:**

- Wastewater residuals shall be fully managed in accordance with the Contract Documents and Specifications. Work to include management of liquids prior to and during dewatering, dewatering of sludge, transport of dewatered sludge to the Mt. Carberry Landfill (disposal tipping fees at Owner's cost). In each lagoon, work to include excavation and washing of rock rip rap to remove sludge for reuse/fill, excavation of sludge into the top layer of gravel layer of the lagoons (estimated top 3') and testing of remaining soils prior to backfill.
- Asbestos has been identified in portions of the buildings including the roof and both the operations and electrical buildings. Removal and transport of asbestos to be performed by asbestos certified contractor by Owner prior to demolition by Contractor. Disposal of asbestos materials is by Owner. Contractor shall coordinate all work with asbestos contractor including sequencing of work. See Contract Documents for asbestos related requirements.
- Lead point has been identified in several locations at the site. See Contract Documents and Specifications for requirements for management of materials that contain lead point.
- Demolition of certain 'inert' debris to be broken up and used as fill in the primary clarifier. Contractor shall take all reasonable measures to separate out all salvageable metals. All metals removed as part of demolition to be placed in containers to be provided by the Owners subcontractor for metal salvage by Owner. See Contract Documents for additional requirements for demolition.
- Solid waste materials which cannot be used for fill (i.e. do not meet NHDES requirements for inert debris) and cannot be salvaged for metals recovery, shall be transported to the Mt. Carberry Landfill for disposal (disposal tipping fees at Owner's cost). Solid waste material shall include blocks on main buildings on the three corners that have residual yellow paint, which is lead paint.
- Known special wastes, such as waste oil, waste chemicals, PCB containing equipment, and other special wastes have been removed from the site. Any special wastes encountered or identified shall be secured on site in a separate area for characterization and removal by Owners subcontractor. See Contract Documents for additional requirements.
- Contractor to pump down liquid level of primary & secondary clarifier and dewater & dispose of residuals. Scrapers, skimmers, & drives to be salvaged. Concrete and piping to be demolished within 4' below proposed grade. Clarifier bottom concrete to remain in-place shall be broken up in a minimum of four locations to eliminated the ponding of water.
- Aeration lagoons are to be decommissioned. Contractor to pump down liquid level, dewater & dispose of sludge. Concrete aerator platforms to be demolished and aerators to be salvaged. Remove all concrete and piping within 4' below finish grade. Piping below 4' may be capped & abandon in place. Lagoons less than 4' below finish grade shall be removed & disposed. Lagoons shall be filled with clean material and graded as shown on Sheet 3. See Sheet 4 for construction details and additional information.
- Demolish operations building and adjacent metal stairs. Slab at grade may be left if all low areas are filled and the site is graded to match slab.

NOT FOR CONSTRUCTION

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| date  | 3/13  | 6/13 | 11/13 | 5/14 |  |  |  |
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|   | Revised per EPA Comments                            |      |       |      |  |  |  |
| <p style="font-size: 10px;">Lafayette Center<br/>Shelby Street Building<br/>Suite 208<br/>Kennebunk, ME<br/>207/985-8777<br/>www.cmaengineers.com</p> <p style="font-size: 10px;">55 So. Commercial Street<br/>Manchester, NH<br/>603/627-0708<br/>603/431-6196<br/>info@cmaengineers.com</p> |   |      |       |      |  |  |  |
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| drawn by:   | BWS   |      |       |      |  |  |  |
| approved by:  | PDS   |      |       |      |  |  |  |
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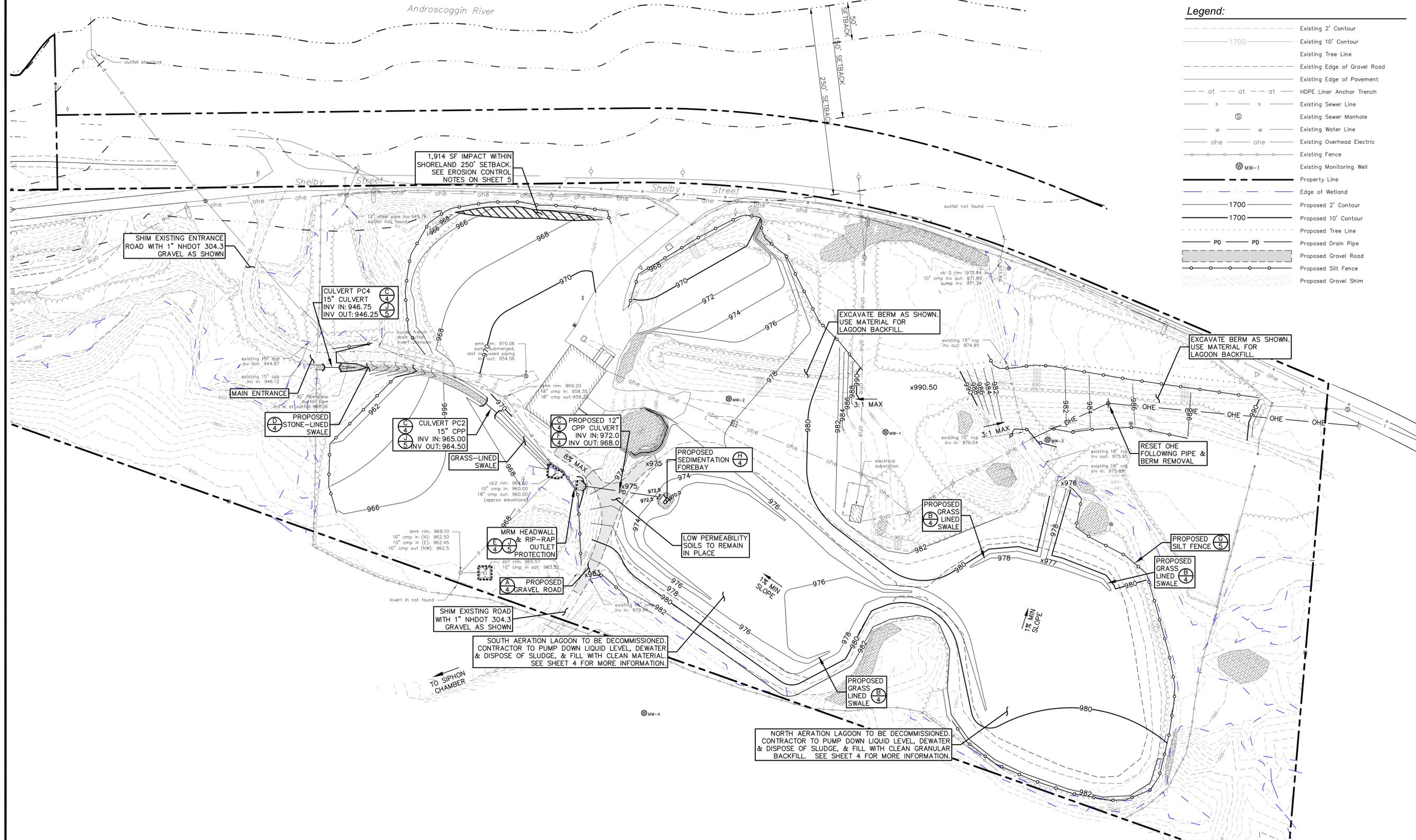


**Notes:**

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- Not all yard piping was located during survey. Contractor shall field confirm pipe locations prior to work.
- Refer to Drawing Appendix A for additional original and redline drawings containing facility design information.
- The road to the siphon chamber must be accessible at all times.
- See Sheet 5 for Erosion Control Notes.

**Legend:**

- Existing 2' Contour
- Existing 10' Contour
- - - Existing Tree Line
- - - Existing Edge of Gravel Road
- - - Existing Edge of Pavement
- - - at - - - at - - - at - - - HDPE Liner Anchor Trench
- - - s - - - s - - - Existing Sewer Line
- ⊙ Existing Sewer Manhole
- - - w - - - w - - - Existing Water Line
- - - ohe - - - ohe - - - Existing Overhead Electric
- - - Existing Fence
- ⊙ MW-1 Existing Monitoring Well
- - - Property Line
- - - Edge of Wetland
- Proposed 2' Contour
- Proposed 10' Contour
- - - Proposed Tree Line
- - - PD - - - PD - - - Proposed Drain Pipe
- - - Proposed Gravel Road
- - - Proposed Silt Fence
- - - Proposed Gravel Shim



| no. | revision  | date  | by  |
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| 1   | Issued for Regulatory Review - Not for Construction | 3/13  | PDS |
| 2   | Issued for NHDES AOT Review                         | 6/13  | PDS |
| 3   | Revised Per AOT Comments                            | 11/13 | PDS |
| 4   | Revised Per EPA Comments                            | 5/14  | PDS |
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| <p><b>CMA ENGINEERS</b><br/>         CIVIL/ENVIRONMENTAL ENGINEERS<br/>         Lafayette Center<br/>         Shaw Street Building<br/>         Suite 208<br/>         Kennebunk, ME<br/>         207985-8717<br/>         info@cmaengineers.com</p> | <p>55 So. Commercial Street<br/>         Portsmouth, NH<br/>         603/627-0708<br/>         603/431-6196<br/>         www.cmaengineers.com</p> |
|--|---|

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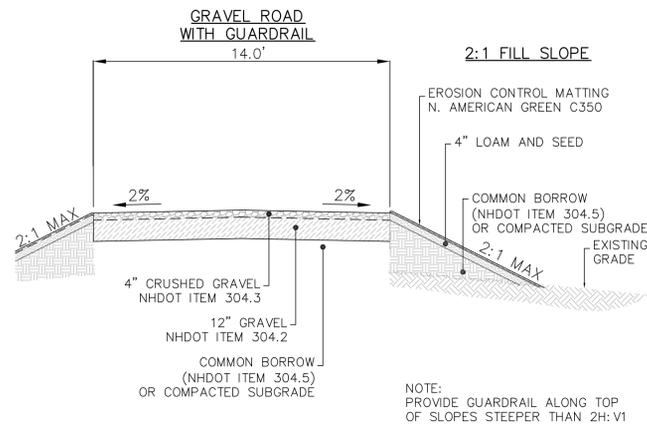
  

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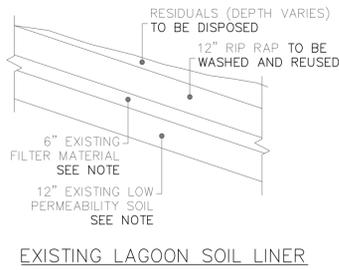
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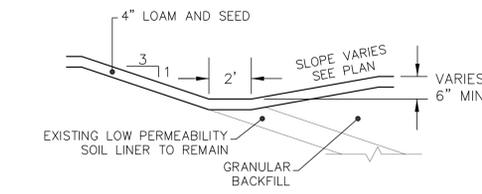
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A  
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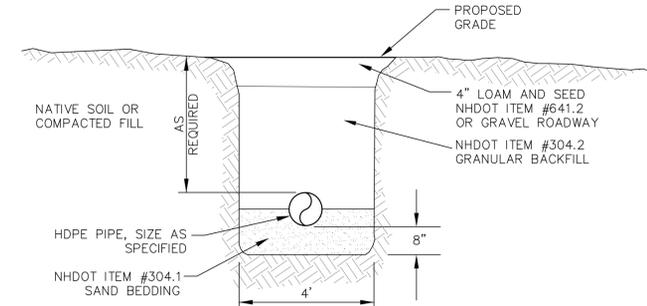


EXISTING LAGOON SOIL LINER

**NOTE:**  
ALL RESIDUALS ARE TO BE REMOVED, INCLUDING EXCAVATING INTO THE TOP LAYER OF GRAVEL FILTER MATERIAL (ESTIMATED TOP 3" OF FILTER MATERIAL). AFTER RESIDUALS ARE REMOVED, EXISTING SOILS SHALL BE TESTED PER THE SPECIFICATIONS TO CONFIRM MATERIALS TO REMAIN DO NOT EXCEED THE NHDES SOIL REMEDIATION STANDARDS. REMAINING SOILS SHALL BE LEFT IN PLACE IN AREAS TO RECEIVE BACKFILL. IN AREAS WITH NO BACKFILL, THE REMAINING GRAVEL AND LOW PERMEABILITY SHALL BE EXCAVATED AND USED AS BACKFILL WITHIN THE LAGOONS. RIP RAP TO BE WASHED PER THE SPECIFICATIONS AND REUSED.



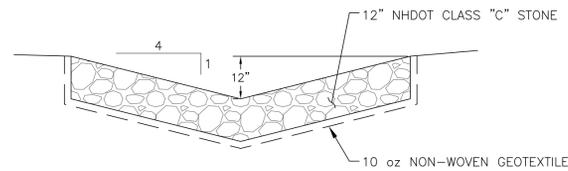
PROPOSED SWALE CONSTRUCTED ON SLOPE



**NOTES:**  
SEE DETAIL E THIS SHEET FOR PIPE INSTALLATION WITHIN LOW PERMEABILITY SOIL

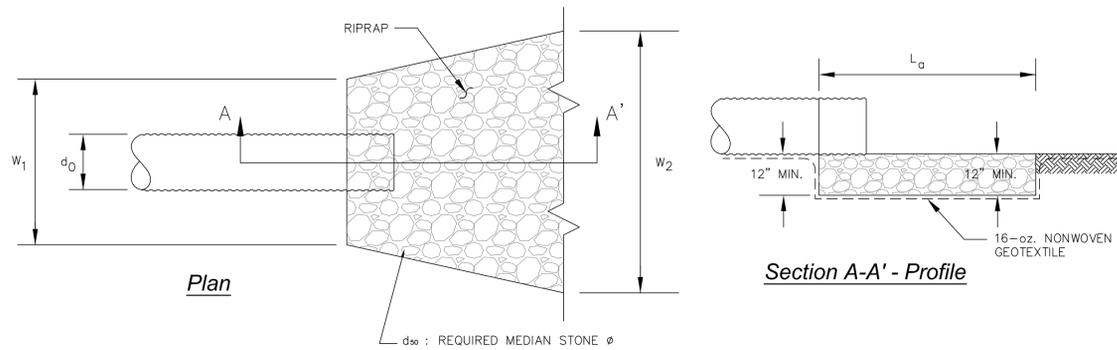
**Typical Pipe Trench**  
Not to Scale

C  
3



**Stone-Lined Swale**  
Not to Scale

D  
3

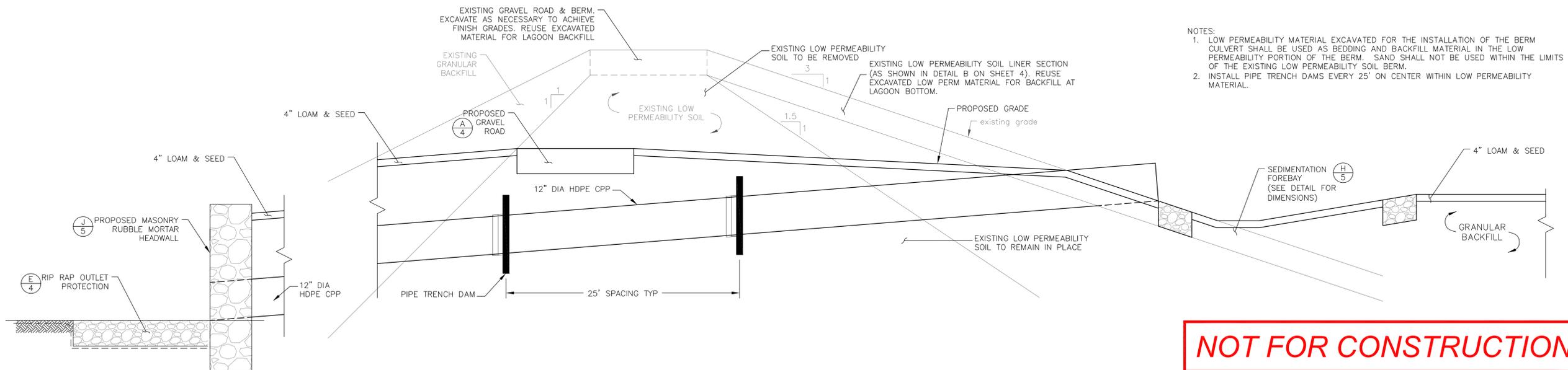


**NOTE:**  
1. IF A PROPOSED CULVERT IS DISCHARGING INTO A STONE LINED SWALE CONSISTING OF ADEQUATE STONE, NO CULVERT APRON IS NECESSARY

| Culvert | 25-Year Flow (cfs) | Do (inches) | Tw (inches) | La (ft) | w1 (ft) | w2 (ft) | Material Type |
|---------|--------------------|-------------|-------------|---------|---------|---------|---------------|
| PCI     | 3.31               | 18          | 5.40        | 3       | 5       | 8       | CLASS C       |

**Rip Rap Outlet Protection**  
Not to Scale

E  
3



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**Section**  
Not to Scale

F  
3

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| date     | 3/13  | 6/13                        | 11/13                    | 5/14                     |   |   |   |
| by       | PDS   | PDS                         | PDS                      | PDS                      |   |   |   |

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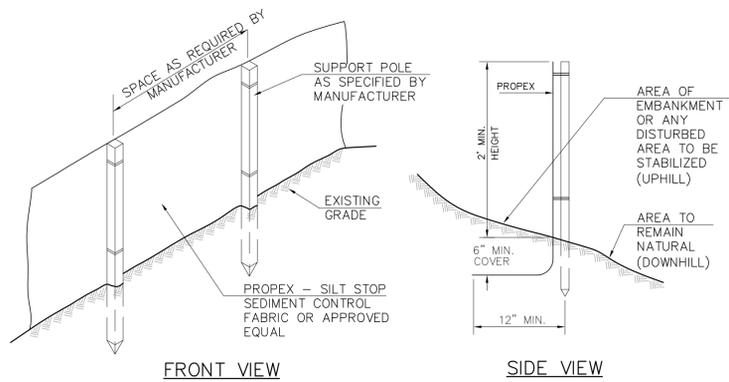
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 PAUL D. SCHMIDT  
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 PROFESSIONAL ENGINEER  
 LICENSE NO. 10000  
 CIVIL ENGINEERING

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 approved by: PDS  
 scale:

date: March 2013  
 project no: 819  
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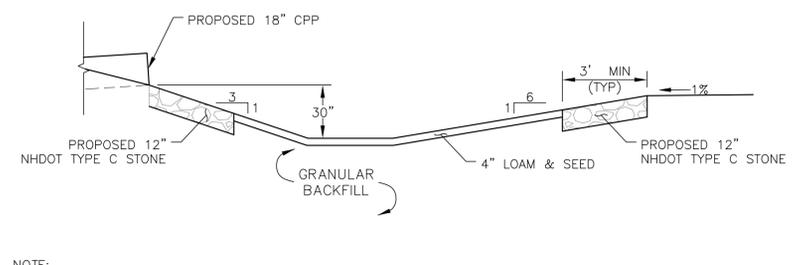
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**WWTP Decommissioning**  
**Sections & Details**

drawing no. 4  
 sheet: 4 of 5



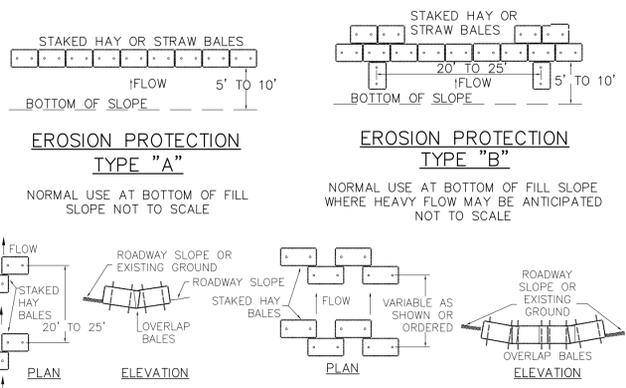
**FRONT VIEW**  
**SIDE VIEW**  
 NOTE:  
 AT A MINIMUM, SILT FENCE IS TO BE INSTALLED TO PROTECT WETLAND AREAS, WATERWAYS, EXISTING AND PROPOSED DRAINAGE FEATURES, SLOPES, LAWNS AND PLANTINGS ADJACENT TO THE WORK.

**Silt Fence**  
 Not to Scale G  
3



NOTE:  
 1. SEDIMENTATION FOREBAY SHALL BE CONSTRUCTED PRIOR TO SENDING STORMWATER TO PROPOSED CULVERT

**Sedimentation Forebay**  
 Not to Scale H  
3



**EROSION PROTECTION TYPE "A"**  
 NORMAL USE AT BOTTOM OF FILL SLOPE NOT TO SCALE

**EROSION PROTECTION TYPE "B"**  
 NORMAL USE AT BOTTOM OF FILL SLOPE WHERE HEAVY FLOW MAY BE ANTICIPATED NOT TO SCALE

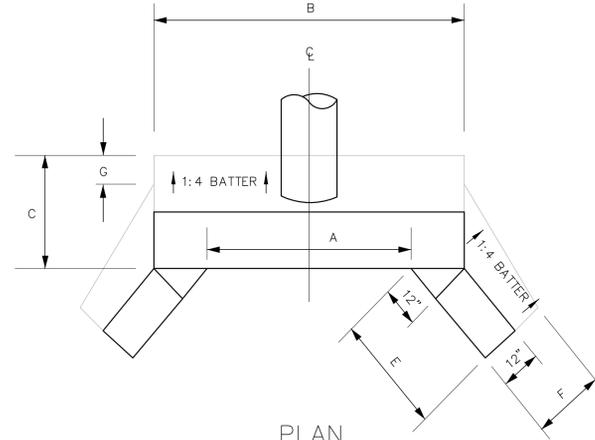
**EROSION PROTECTION TYPE "C"**  
 NORMAL USE IN NARROW DITCH SECTION NOT TO SCALE

**EROSION PROTECTION TYPE "D"**  
 NORMAL USE IN WIDE DITCH SECTION NOT TO SCALE

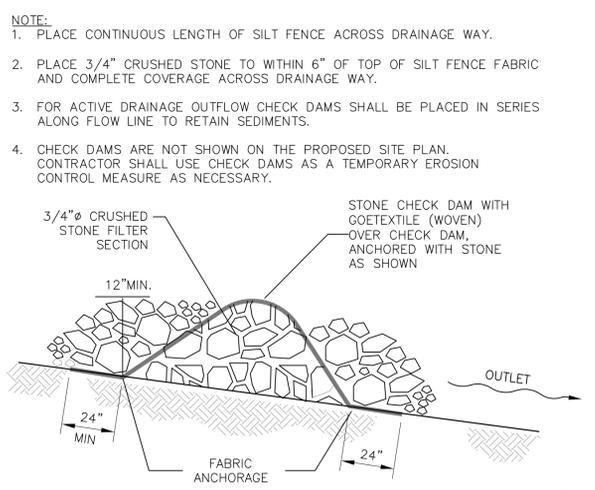
**Hay Bales**  
 Not to Scale I  
3

**Erosion Control Notes:**

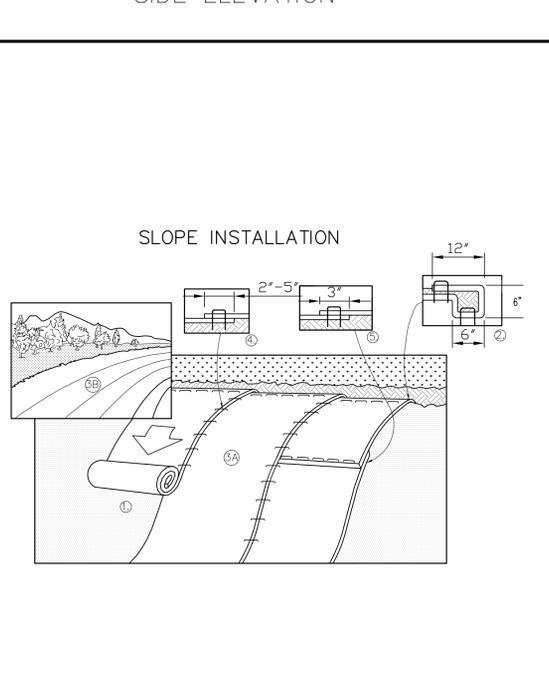
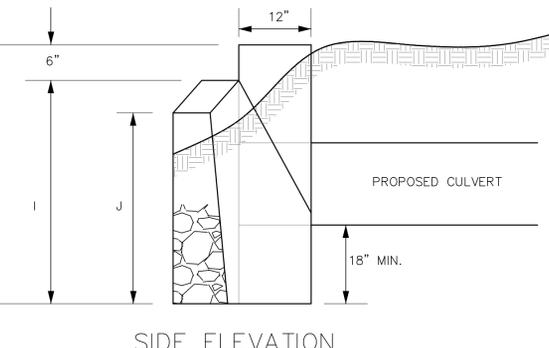
- PRIOR TO CONSTRUCTION AND THEREAFTER EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED AS NOTED. THE SMALLEST PRACTICAL AREA OF LAND SHOULD BE EXPOSED AT ANY ONE TIME DURING DEVELOPMENT. WHEN LAND IS EXPOSED DURING DEVELOPMENT, THE EXPOSURE SHOULD BE KEPT TO THE SHORTEST PRACTICAL PERIOD OF TIME. LAND SHOULD NOT BE LEFT EXPOSED DURING THE WINTER MONTHS.
- SEDIMENT AND DEBRIS SHALL BE REMOVED FOLLOWING EACH STORM EVENT.
- ALL DISTURBED AREAS AND SIDE SLOPES WHICH ARE FINISH GRADED WITH NO FURTHER CONSTRUCTION TO TAKE PLACE SHALL BE SEEDED AND MULCHED. ALL DISTURBED AREAS OUTSIDE LIMITS OF BUILDING, AND PAVEMENT SHALL BE STABILIZED WITH LOAM AND SEED. ALL SEED, LIME, AND FERTILIZER PROGRAMS SHALL CONFORM TO ALL APPLICABLE SECTIONS OF THE SPECIFICATIONS.
- ANY DISTURBED AREAS WHICH ARE TO BE LEFT TEMPORARILY, OR LONGER THAN TWO WEEKS AND WHICH WILL BE REGRADED LATER DURING CONSTRUCTION, SHALL BE TEMPORARILY SEEDED AND MACHINE STRAW MULCHED AT A RATE OF 1.5 TONS/ACRE. AVOID USE OF UNDISTURBED AREAS WHEREVER POSSIBLE DURING CONSTRUCTION. CONSTRUCTION TRAFFIC SHALL TRAVEL THE ROADBEDS OF EXISTING AND FUTURE ROADS AND SHALL BE LIMITED TO WITHIN THE LIMITS OF CONSTRUCTION NOTED ON THE PLANS.
- SILT FENCES SHALL BE MINIMUM OF 36 INCHES HIGH WITH THE BOTTOM OF THE CLOTH KEYED INTO THE GROUND (SEE DETAIL). POSTS SHALL BE OF WOOD OR STEEL. SILT FENCE SHALL BE INSTALLED & MAINTAINED WHERE SHOWN AND ADDITIONAL SILT FENCE ADDED AS REQUIRED BY THE ENGINEER PRIOR TO ANY ON-SITE GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL. IT SHOULD BE MAINTAINED DURING AND AFTER DEVELOPMENT TO REMOVE SEDIMENT FROM RUNOFF WATER AND FROM LAND UNDERGOING DEVELOPMENT. WHERE POSSIBLE NATURAL DRAINAGE WAYS SHOULD BE UTILIZED AND LEFT OPEN TO REMOVE CLEAN EXCESS SURFACE WATER. THE SILT FENCE IS TO BE MAINTAINED AND CLEANED UNTIL ALL SLOPES HAVE A HEALTHY STAND OF GRASS.
- EROSION CONTROL DEVICES SHOWN REPRESENT MINIMUM MEASURES REQUIRED FOR EROSION CONTROL. THE CONTRACTOR SHALL TAKE ANY AND ALL NECESSARY MEASURES TO PREVENT TRANSPORTATION OF SEDIMENT BEYOND THE WORK AREA.
- ALL SWALES SHALL BE STABILIZED PRIOR TO DIRECTING FLOW TO THEM.
- AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED, THE TEMPORARY EROSION CONTROL MEASURES ARE TO BE REMOVED AND ACCUMULATED SEDIMENT DISPOSED OFF IN A LOCATION DESIGNATED BY THE OWNER.
- WITHIN THE NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES COMPREHENSIVE SHORELAND PROTECTION ACT 250' BUFFER, ONLY LOW PHOSPHATE, SLOW RELEASE NITROGEN FERTILIZER OR LIMESTONE, MAY BE USED ON LAWNS OR AREAS WITH GRASS.
- ALL ROADWAYS BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
- ALL CUT AND FILL SLOPES SHALL BE SEEDED/LOAMED WITH 72 HOURS OF ACHIEVING FINISHED GRADE.
- ALL EROSION CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER EVERY 0.5" OF RAINFALL.
- THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT IN NO CASE SHALL EXCEED 5 ACRES AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED.
- AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:  
 -BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED  
 -A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED  
 -A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP RAP HAS BEEN INSTALLED  
 -EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED
- ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.
- TEMPORARY SEEDING SHALL BE PERENNIAL RYE GRASS, SPREAD 0.7 LB./ 1000 SQ. FT.
- WINTER CONSTRUCTION NOTES  
 -ALL PROPOSED VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS;  
 -ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS;  
 -AFTER NOVEMBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3.
- DETAILS J & K ON THIS SHEET ARE NOT SHOWN ON THE PROPOSED SITE PLAN. THESE DETAILS ARE FOR THE CONTRACTOR'S REFERENCE IN THE EVENT SUCH EROSION CONTROLS MEASURES ARE REQUIRED DURING ANY PART OF THE CONTRACT TO PREVENT THE TRANSPORT OF SEDIMENT OFF SITE AND TO STABILIZE THE SITE DURING AND FOLLOWING CONSTRUCTION.



**Masonry Rubble Mortar Headwall**  
 Not to Scale



**Check Dam**  
 Not to Scale K



**Erosion Control Matting**  
 Not to Scale

- SLOPE INSTALLATION SPECIFICATIONS**
- EROSION CONTROL BLANKETS SHALL BE AS MANUFACTURED BY NORTH AMERICAN GREEN OR APPROVED EQUAL.
  - PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
  - BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
  - ROLL THE BLANKETS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
  - THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
  - CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE BLANKET WIDTH.
  - IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.
  - INSTALL PRODUCT IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
  - THIS DETAIL IS NOT SHOWN ON THE PROPOSED SITE PLAN. CONTRACTOR SHALL USE EROSION CONTROL MATTING AS NECESSARY.

NOT FOR CONSTRUCTION

|     |   |   |          |      |       |
|-----|---|---|----------|------|-------|
| no. | 1 | Issued for Regulatory Review - Not For Construction | revision |      |       |
|     | 2 | Issued for NHDOS AOT Review                         |          | date | 3/13  |
|     | 3 | Revised Per AOT Comments                            |          |      | 6/13  |
|     | 4 | Revised Per EPA Comments                            |          |      | 11/13 |
|     | 5 |   |          |      | 5/14  |
|     | 6 |   |          |      |       |
|     | 7 |   |          |      |       |

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|-------------|----------------------|--------------|------------|--|
| date:       | March 2013           | designed by: | POSIBA/BWS |  |
| project no: | 819                  | drawn by:    | BWS        |  |
| file name:  | 819-Details-1404.dwg | approved by: | PDS        |  |
|             |                      | scale:       |            |  |

Androscoggin Valley Regional Refuse Disposal District  
 WWTP Decommissioning  
 Erosion Control Notes & Details

drawing no.  
5

sheet: 5 of 5

## Appendix B

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### NH Natural Heritage Bureau Results



## New Hampshire Natural Heritage Bureau

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**To:** Brad Sullivan  
35 Bow Street  
Portsmouth, NH 03801

**Date:** 4/26/2013

**From:** NH Natural Heritage Bureau

**Re:** Review by NH Natural Heritage Bureau of request dated 4/26/2013  
NHB File ID: NHB13-1283

Applicant: Sharon Gauthier

Location: Tax Map(s)/Lot(s): Map 117 Lot 32  
Berlin

**Project Description:** The Androscoggin Valley Regional Refuse Disposal District Wastewater Treatment Plant will be decommissioned and closed. Work is to include the closure of the aeration lagoons, emergency lagoon, select demolition of yard piping and potentially some buildings and other structures, and earth work in order to stabilize the site.

The NH Natural Heritage database has been checked for records of rare species and exemplary natural communities near the area mapped below. The species considered include those listed as Threatened or Endangered by either the state of New Hampshire or the federal government. We currently have no recorded occurrences for sensitive species near this project area.

A negative result (no record in our database) does not mean that a sensitive species is not present. Our data can only tell you of known occurrences, based on information gathered by qualified biologists and reported to our office. However, many areas have never been surveyed, or have only been surveyed for certain species. An on-site survey would provide better information on what species and communities are indeed present.

This report is valid through 4/25/2014.



MAP OF PROJECT BOUNDARIES FOR NHB FILE ID: NHB13-1283

