Stormwater Pollution Prevention Plan

For:

ARC Technologies, Inc.
37 South Hunt Road
Amesbury, Ma. 01913

Operator(s):

ARC Technologies, Inc.
37 South Hunt Road
Amesbury, Ma. 01913

Stormwater Manager and SWPPP Contact(s):

Denis Hamel
W.C. Cammett Engineering, Inc.
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Amesbury, MA 01913
Office Phone: (978) 388-2157
Office Fax: (978) 388-0428

SWPPP Preparation Date:

August 25, 2015

Estimated Project Dates:

Start of Construction – June 2016
Completion of Construction – July 2017

Job # 14061

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SECTION 1: SITE EVALUATION, ASSESSMENT, AND PLANNING

1.1 Project/Site Information

Project Information:

Project/Site Name: *ARC Technologies*

Project Street/Location: *29 & 37 South Hunt Road*

City: *Amesbury* State: *Ma.* Zip Code: *01913*

County or Similar Subdivision: *Essex*

Latitude/Longitude

Latitude:

1. *42° 50 ' 05 "* N (degrees, minutes, seconds)
2. _ _ ° _ _ . _ _ ' N (degrees, minutes, decimal)
3. _ _ . _ _ _ _ ° N (decimal)

Longitude:

1. *70 ° 57 '* 16" W (degrees, minutes, seconds)
2. _ _ ° _ _ . _ _ ' W (degrees, minutes, decimal)
3. _ _ . _ _ _ _ ° W (decimal)

Method for determining latitude/longitude:

☐ USGS topographic map (specify scale: *1:24,000*) ☐ EPA Web site ☐ GPS

☒ Other (please specify): Google Earth

Is the project located in Indian country? ☐ Yes ☒ No

If yes, name of Reservation, or if not part of a Reservation, indicate "not applicable." _____

Is this project considered a federal facility? ☐ Yes ☒ No

NPDES project or permit tracking number: _____

(This is the unique identifying number assigned to your project by your permitting authority after you have applied for coverage under the appropriate NPDES construction general permit.)

1.2 Contact Information/ Responsible Parties

Project Information:

Operator(s):
ARC Technologies
37 South Hunt Road
Amesbury, Ma. 01913
Phone: (978) 388-2993

Project Manager(s) or Site Supervisor(s):
Jay McPartland
McPartland Corporation
15 Evans Place
Amesbury, Ma. 01913
(978) 388-6733
Email: jay@wmdevelopment.com

Site Contractor:
McPartland Corporation
15 Evans Place
Amesbury, Ma. 01913
Office Phone: (978) 388-6733
Mobile: (978) 815-6869

Stormwater Manager and SWPPP Contact(s):
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Amesbury, MA 01913
Phone: (978) 388-2157
Fax: (978) 388-0428
Email: dhamel@cammett.com

Local Authority Contact(s):
Board of Health
9 School Street
Amesbury, Ma. 01913
Ph – 978-388-8134
Fx – 978-388-7874

Conservation Commission
City Hall – 62 Friend Street
Amesbury, Ma. 01913
Ph – 978-388-8110 x317
Fx – 978-388-6727

Department of Public Works
39 South Hunt Rd
Amesbury, Ma. 01913
Ph – 978-388-8116
Fx – 978-388-1769

Planning Board
City Hall - 62 Friend Street
Amesbury, Ma. 01913
Ph – 978-388-8110 x312
Fx – 978-388-6727

Inspectional Services
9 School Street
Amesbury, Ma. 01913
Ph – 978-388-8129
Fx – 978-388-7874

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Emergency 24 hour contact:
Jay McPartland – Site Project Manager (On-site Daily)
McPartland Corporation
Mobile Phone: (978) 818-6869

1.3 Nature and Sequence of Construction Activity

Project Information:

- The proposed project is the construction of a 68,928 SF addition to the existing building with associated parking, utilities, and stormwater management.

  Stormwater will be managed on-site utilizing the latest BMP Technology in accordance with Massachusetts DEP Stormwater Management Guidelines.

What is the function of the construction activity?

☐ Residential ☐ Commercial ☒ Industrial ☐ Road Construction

☐ Linear Utility

☐ Other (please specify):_____

Estimated Project Start Date: June 2016

Estimated Project Completion Date: July 2017

1.4 Soils, Slopes, Vegetation, and Current Drainage Patterns

Project Information:

Soil Type(s):

- Slopes on the Site range from 3 to 33%. Vegetation on the Site is primarily grass with areas of scrub shrub. Soils on the site are comprised of Windsor, a loamy sand, hydrologic group A; Hinkley, a loamy sand, hydrologic group A; and a Whately, silt loam, hydrologic group C.

Drainage Patterns

- Drainage patterns will generally remain unchanged between pre-development and post-development conditions.
- All stormwater flows overland to wetlands adjacent to the property.

1.5 Construction Site Estimates

Project Information:

The following are estimates of the construction site:

Construction Site Area to be disturbed	3.86 acres
Total Project Area	10.61 acres

Percentage impervious area of construction site before construction	0.0 %
Runoff coefficient before construction	31
Percentage impervious area after construction	41.2 %
Runoff coefficient after construction	65

1.6 Receiving Waters

Project Information:

Description of receiving waters:

Flow from the site flows to adjacent wetland system south of the site to an unnamed stream to the Merrimac River.

Description of storm sewer systems:

Culverts at South Hunt Road prior to the Merrimac River.

Description of impaired waters or waters subject to TMDLs: *Not Applicable*

1.7 Site Features and Sensitive Areas to be Protected

Project Information:

Description of unique features and measures to protect them:

- The site has wetland systems adjacent to the Site that will be protected utilizing temporary erosion control devices, stormwater controls and weekly monitoring during the construction process.

1.8 Potential Sources of Pollution

Project Information:

Potentials sources of sediment to stormwater runoff:

- Site clearing and grubbing
- Topsoil stripping and stockpiling
- Building, driveway and parking area grading operations
- Stormwater management grading operation
- Final site grading stabilization measures and landscaping
- Vehicle tracking

Potential pollutants and sources, other than sediment, to stormwater runoff:

POLLUTANT	*SOURCE*
Fertilizers	*Lawns/Landscaped Areas*
Pesticides	*Lawns/Landscaped Areas*
Petroleum Products	*Construction Equipment/Vehicles*
Solvents	*Building/Equipment Maintenance*
Asphalt	*Road Construction*
Construction Waste	*Site/Building Construction*
Sanitary Facilities	*Staging Area*

1.9 Endangered Species Certification

Project Information:

Are endangered or threatened species and critical habitats on or near the project area?

☐ Yes ☒ No

Describe how this determination was made: A review of the Massachusetts Natural Heritage Atlas 13th edition, October 1, 2008.

If yes, describe the species and/or critical habitat:

If yes, describe or refer to documentation which determines the likelihood of an impact on identified species and/or habitat and the steps taken to address that impact. (Note, if species are present on or near your project site, EPA strongly recommends that the site operator work closely with the appropriate field office of the U.S. Fish and Wildlife Service or National Marine Fisheries Service. Please contact a state or tribal official for concerns related to state or tribal listing of species.)

1.10 Historic Preservation

Project Information:

Are there any historic sites on or near the construction site?

☐ Yes ☒ No

- Describe how this determination was made:

  Review from Massachusetts Historical Commission on October 24, 2012.

- If yes, describe or refer to documentation which determines the likelihood of an impact on this historic site and the steps taken to address that impact.

1.11 Maps

Instructions:

- Attach at least two site maps. The first should show the undeveloped site and its current features. An additional map or maps should be created to show the developed site or the major phases of development, for more complicated sites.

These maps should include:

- ☐ Direction(s) of stormwater flow and approximate slopes before and after major grading activities
- ☐ Areas and timing of soil disturbance and areas that will not be disturbed
- ☐ Natural features to be preserved
- ☐ Locations of major structural and non-structural BMPs identified in the SWPPP
- ☐ Locations and timing of stabilization measures
- ☐ Locations of off-site material, waste, borrow, or equipment storage areas
- ☐ Locations of all waters of the U.S., including wetlands
- ☐ Locations where stormwater discharges to a surface water
- ☐ Locations of storm drain inlets
- ☐ Areas where final stabilization has been accomplished
- ☐ For more information, see SWPPP Guide, Chapter 3.C.

Project Information:

- Refer to Appendix for site maps.
  - EX-1
  - SP-1
  - GR-1
  - UT-1
  - DT-1,2
  - EC-1

SECTION 2: EROSION AND SEDIMENT CONTROL BMPS

Project Information:

2.1 Minimize Disturbed Area and Protect Natural Features and Soil:

a. BMP Measures – Erosion Control Devices

1. The erosion control devices and fencing will be installed prior to construction beginning on the project site.
2. These BMP measures will be inspected during the regular monitoring inspection required by the NPDES permit.
3. The site contractor shall be responsible for maintenance.

b. BMP Measure – Topsoil Preservation

1. Topsoil will be stripped and stockpiled.
2. The stockpiles will be located at least one-hundred feet from sensitive wetland resource areas and will be encircled with silt fence.
3. Topsoil stockpiles will be generated during the initial site grading activities, with silt fence installed upon the establishment of the stockpile.
4. The limits of the stockpiles will be inspected during the regular monitoring inspections required by the NPDES permit. Eroded areas around the stockpiles will be stabilized immediately with erosion controls if sediment transport is an issue.
5. The site contractor shall be responsible for maintenance.

2.2 Phase Construction Activity:

- Phase I

  The entire site will be constructed in one phase due to the small nature of the project.

2.3 Control Stormwater Flowing Onto And Through The Project:

a. BMP Measure – Porous Pavement

1. Porous pavement shall be installed in all areas as indicated on the site plans. The pavement shall be installed to the specific grades as detailed on the site plans.

2. The porous pavement shall not be installed until the entire tributary drainage areas are permanently stabilized to prevent sediment from entering the system.

3. The porous pavement will be inspected during regular monitoring inspections required by the NPDES permit.

4. The site contractor shall be responsible for maintenance.

b. BMP Measure – Infiltration Basin

1. The Infiltration Basin shall be installed where indicated on the site plans. The outlet structure and pipe shall be installed to the specific grades as detailed on the site plans.

2. The Infiltration Basin and outlet structure shall be inspected during the regular monitoring inspections required by the NPDES permit.

3. The site contractor shall be responsible for maintenance.

2.4 Stabilize Soils:

a BMP Measure – Temporary Stabilization

1. When construction ceases for more than 30 days in areas of exposed soils, temporary stabilization shall be established by hydroseeding, mulching or installing erosion control blankets in these areas. Seeding shall be completed during the growing season to ensure proper establishment of vegetation.

2. The hydroseeding and or mulching will be conducted in areas where construction has ceased for more than 30 days.

3. The stabilization of these areas will be inspected during the regular monitoring inspections required by the NPDES permit.

4. The site contractor shall be responsible for maintenance.

b. BMP Measure – Permanent Stabilization

1. When construction is completed for each portion of the site, permanent vegetation and landscaping shall be completed utilizing hydroseeding methods, sod installation and/or vegetative plantings to stabilize exposed soils.

2. Permanent stabilization shall be completed as soon as possible, but no later than 14 days after the construction phase is completed.

3. The stabilization of these areas will be inspected during the regular monitoring inspections required by the NPDES permit.

4. The site contractors will be responsible for maintenance.

2.5 Protect Slopes:

a. BMP Measures – Loam/Seed

1. Disturbed/regraded slopes shall be loamed and seeded upon completion to final grade.

2. Slopes will be inspected during the regular monitoring inspections required by the NPDES permit.

3. The site contractor shall be responsible for maintenance.

2.6 Establish Perimeter Controls and Sediment Barriers:

a. BMP Measure – Silt Sock

1. The silt sock shall be installed as indicated on the drawings and around the base of soil stockpile areas. The silt sock will be installed with wooden stakes placed approximately at six foot intervals.

2. The silt sock shall be installed before site grading and land disturbing activities begin.

3. The silt sock will be inspected during the regular monitoring inspections required by the NPDES permit; with sediment removed when 1/3 sock height is reached.

4. The site contractor shall be responsible for maintenance.

2.7 Retain Sediment On-Site and Control Dewatering Practices:

a. BMP Measure – Temporary Sediment Basin

1. Proposed sediment basin area will be in the area of the proposed Infiltration Basin as designated on site plans and will be utilized as temporary sediment basins during site development.

2. The sediment basin area will be constructed after installation of perimeter erosion control devices and prior to other site grading.

3. The sediment basin area will be inspected during the regular monitoring inspections required by the NPDES permit. Accumulated sediment in the basin shall be removed when the basin volume is ½ the original design volume. The outlet structure and embankments shall be repaired/upgraded as required.

4. The site contractor shall be responsible for maintenance.

2.8 Establish Stabilized Construction Exits:

a. BMP Measure – Stabilized Construction Exits

1. Stone bedding shall be installed at all construction exits from the site prior to existing paved areas. The stone bedding shall be a minimum 20 feet wide, 50 feet long and 6 inches thick. The stone shall be two inch crushed stone installed over a geotextile fabric.

2. The stone shall be installed prior to the beginning of construction and will remain in place until the initial course of pavement has been installed.

3. The stone shall be inspected during the regular monitoring inspection required by the NPDES permits. Additional stone shall be added to the exit as required to control tracking of sediment off-site. If the stone bedding no longer controls off-site tracking of sediment, the entire stone bedding shall be removed and replaced with clean stone.

4. The site contractor shall be responsible for maintenance.

2.9 Additional BMPs:

a. BMP Measure – Pavement Sweeping

1. Pavement sweeping will be conducted on the existing parking and access areas at the project construction entrance.

2. Pavement sweeping will occur as conditions dictate.

3. Collected sediment shall be disposed off-site at an approved landfill.

4. The site contractor shall be responsible for maintenance.

SECTION 3: GOOD HOUSEKEEPING BMPS

3.1 Good Housekeeping BMPs

Project Information:

a. Material Handling and Waste Management:

1. Dumpsters shall be provided on-site for disposal of trash and construction debris.

2. Dumpsters will be brought to the site at the start of construction, prior to the generation of solid waste materials.

3. Dumpsters will be inspected during the regular monitoring inspections required by the NPDES permit. Dumpsters will be emptied as necessary to control on-site solid waste.

4. The site contractor shall be responsible for maintenance.

b. Hazardous Waste

1. Hazardous waste materials shall be stored in a dry area protected from precipitation. Hazardous waste materials will be disposed of in accordance with local, state and federal regulations. Hazardous waste material shall not be disposed of in on-site dumpsters.

2. The hazardous waste storage area shall be developed prior to hazardous materials being stored on the site.

3. The storage area will be inspected during the regular monitoring inspections required by the NPDES permit. MSD sheets for all materials shall be located at the construction trailer.

4. The site contractor shall be responsible for maintenance.

c. Sanitary Facilities

1. Temporary sanitary facilities shall be provided on-site in convenient locations for construction personnel.

2. Temporary sanitary facilities shall be brought to the site at the start of construction.

3. The sanitary facilities shall be emptied at least once per week and at greater intervals dependent upon the use. Inspections will be conducted on a weekly basis for any evidence of leakage.

4. The site contractor shall be responsible for maintenance.

3.2 Establish Proper Building Material Staging Areas:

a. Building Material Staging Area

1. Staging areas shall be developed for storage of construction materials. Hazardous materials shall be stored in an area protected from precipitation.

2. Staging areas shall be developed prior to delivery to materials to the project site.

3. Storage areas shall be inspected during the regular monitoring inspections required by the NPDES permit.

4. The site contractor shall be responsible for maintenance.

3.3 Designate Washout Areas:

a. BMP Measure – Concrete Washout

1. Temporary concrete washout areas shall be constructed at locations identified on the site plans. The area will be constructed below grade approximately ten feet long, three feet deep and ten feet wide. The area will be lined with 10 mils thick plastic sheeting. Signage shall be provided identifying washout areas.

   Excess concrete and/or washout material from the concrete trucks shall be discharged to the washout area or disposed of off-site.

   Upon completion if need for the washout area, the hardened concrete shall be removed and disposed of, the area will be filled graded and stabilized.

2. The washout area will be constructed prior to the use of concrete materials.

3. The washout area will be inspected on a daily basis during concrete operations to ensure no tears in the plastic. The washout area must be cleaned out when the capacity of the area is reduced to 25% of available capacity.

4. Site contractor shall be responsible for maintenance.

3.4 Establish Proper Equipment/Vehicle Fueling and Maintenance Practices:

a. BMP Measure – Equipment/Vehicle Fueling and Maintenance

1. Construction equipment will be refueled on-site as required by a fuel delivery truck. Large quantities of fuel will not be stored on-site. Only minor vehicle/equipment maintenance will be conducted on-site, major repairs will be conducted off-site.

   Spill-cleanup materials and kits will be provided on-site at the materials storage area.

2. The above practices will be instituted at the start of on-site construction.

3. Construction equipment will be inspected on a weekly basis. Repairs will be made as necessary to fix leaks. Fuel storage area will be inspected during regular inspections as required by the NPDES permit.

4. Site contractor shall be responsible for maintenance.

3.5 Allowable Non-Stormwater Discharges and Control Equipment/Vehicle Washing:

a. BMP Measure – Vehicle Washing

1. There will be no vehicle washing on-site. All washing will be performed off-site.

3.6 Spill Prevention and Control Plan:

a. Spill Prevention Procedures

1. The project will contain no above ground or below ground fuel storage tanks. Equipment and vehicles will be refueled by a fuel delivery truck as required.

   Equipment/vehicle repairs and maintenance will occur offsite, except for minor repairs in order to minimize leaking fluids from vehicles and equipment.

   Hazardous materials will be stored in the staging area in proper containers and be protected from the weather.

   Spills will be contained and cleaned up immediately. All cleaning materials, rags, etc. shall be disposed of in a proper manner. Spill kits shall be provided on-site in areas easily accessible for personnel to access.

   MSD sheets for all materials will be retained on-site in the construction trailer.

2. The spill prevention procedures shall begin at the start of on-site construction.

3. Inspection and observation of these procedures will be conducted on a daily basis. Spills shall be immediately identified and the site supervisors shall be notified.

4. Project site supervisor will be responsible for implementation.

3.7 Any Additional BMPs:

a. Personnel Training

1. All construction personnel including general contractor, sub-contractors, etc. shall be informed of the Stormwater Pollution Prevention Plan, of its procedures and reporting methods.

Notices and information shall be posted on-site.

2. Notification of the SWPPP shall take place on-site at the start of construction and periodically during the construction period to update the plan.

3. Project site supervisor shall be responsible for confirming the procedures are followed on a daily basis.

4. Project site supervisor shall be responsible for implementation.

3.8 Allowable Non-Stormwater Discharge Management

a. Subgrade Protection and Dewatering Plan

The Site Subcontractor is required to maintain stable-dewatered subgrades for foundations, pavements, and other concerned areas during construction. Subgrade disturbance may be influenced by excavation methods, moisture, precipitation, groundwater control, and construction activities. It is understood that the site soils (sandy silt) are considered highly moisture sensitive and will become weak or soft if exposed to wet conditions and construction activities without mitigation measures. The shallow groundwater or perched water will further impact stability. The Site Subcontractor should take precautions to reduce subgrade disturbance. Such precautions may include diverting storm runoff away from construction areas, reducing traffic in sensitive areas, limiting the extent of exposed subgrades (especially if inclement weather is forecast), prompt backfilling of footings, and maintaining an effective dewatering plan.

The Site Subcontractor shall follow the below dewatering plan to properly protect the bearing subgrades and to protect the adjacent wetlands from contaminated, turbid non-stormwater related discharges:

1. A protective base of ¾ inch minus crushed stone (encased in a geotextile filter fabric such as Mirafi 140N or equal) may be placed at least 10 inches below and laterally beyond the footing limits. Crushed stone shall also be used as structural fill in wet areas. The stone base is to protect the site soils, facilitate any necessary dewatering, and provide a dry/stable base upon which to progress foundation construction. The stone base shall be placed immediately upon exposure and tamped with a plate compactor until exhibiting stable conditions. The protective stone shall be necessary if wet conditions are present during construction.

2. Wet conditions (groundwater table, perched water and/or storm water) will need to be temporarily controlled during construction to complete work in dry conditions and protect the structural integrity of the subgrade. The groundwater table or puddled storm water should be continuously maintained at least one foot below construction grade until backfilling is complete. The groundwater is expected to be controlled with conventional sumps and pumps.

The temporary sumps should be filtered with stone and fabric and extend at least 24 inches below construction grade. The footing trenches should have a positive slope towards the sumps. Adequate dewatering and storm water management are necessary for maintaining the competency of the site soils.

3. Stormwater is also expected to "puddle". The groundwater or puddled storm water are expected to be controlled with conventional filtered sumps and submersible pumps. An approximate 10 inch lift of ¾ inch minus crushed stone (protected with a geotextile filter fabric) should be placed atop the wet subgrades for protection and to facilitate temporary dewatering. The subgrade should slope towards the temporary sumps. The sumps shall extend at least 24 inches below the construction grade and filtered with drainage stone.

4. The bearing subgrade should ultimately be stable, dewatered, protected from frost, and compact throughout construction. Bearing subgrades that become weak or disturb due to wet conditions are considered unsuitable for structural support. The Site Contractor shall ultimately be responsible for the means and methods of temporary groundwater control, subgrade protection, and site stability during construction. An engineer shall be scheduled to review the foundation subgrade conditions and preparation during construction.

5. You are prohibited from discharging ground water or accumulated stormwater that is removed from excavations, trenches, foundations, vaults, or other similar points of accumulation, unless such waters are first effectively managed by appropriate controls. Examples of appropriate controls include, but are not limited to, sediment basins or sediment traps, sediment socks, dewatering tanks, tube settlers, weir tanks, or filtration systems (e.g. bag or sand filters) that are designed to remove sediment. However, uncontaminated, non-turbid dewatering water can be discharged without be routed to a control. You must meet the following requirements for dewatering activities.

    a. Do not discharge visible floating solids or foam;

    b. Use and oil-water separator or suitable filtration device (such as a cartridge filter) that is designed to remove oil, grease, or other products if dewatering water is found to contain these materials;

    c. To the extent feasible, utilize vegetated, upland areas of the site to infiltrate dewatering water before discharge. In no case will surface waters be considered part of the treatment area;

    d. At all points where dewatering water is discharged, design and constructed stormwater conveyance channels to avoid unstabilized areas on the site and to reduce erosion, unless infeasible. Minimize erosion of channels and their embankments, outlets, adjacent streambanks, slopes, and downstream waters during discharge conditions through the use of erosion controls and velocity dissipation

devices within and along the length of any constructed stormwater conveyance channel, and at any outlet to provide a non-erosive flow velocity;

e. With backwash water, either haul it way for disposal or return it to the beginning of the treatment process; and

f. Replace and clean the filter media used in dewatering devices when the pressure differential equals or exceeds the manufacturer's specifications.

g. Treatment chemical restrictions. There will be no use of treatment chemicals unless in an emergency. In an emergency it becomes necessary to use polymers, flocculants, or other treatment chemicals at your site, the Contractors shall reasonably comply to with the EPA's NPDES 2012 Construction General Permit requirements for the use of treatment chemicals.

b. Dust Control Watering

1. Watering to control dust will be implemented at the start of construction as weather conditions dictate. Specifically, during windy conditions, the site will be sprayed to control dust transport.

2. Site Contractor will be responsible for determining the frequency/necessity for spraying.

SECTION 4: SELECTING POST-CONSTRUCTION BMPs

4.0 Selecting Post-Construction BMP's

Project Information:

a. Snow Removal Management

1. Access drive and parking areas will be cleared and will be disposed in specific stockpile areas on site.
2. D-icing compounds to be utilized on-site shall consist of $CaCl_2$ and calcium magnesium acetate (CMA).
3. Property owner or owner's maintenance contractor will be responsible for the snow and de-icing operations.

b. Porous Pavement Management

1. Vacuum sweep the pavement on a monthly basis.
2. D-icing compounds to be utilized on-site shall consist of $CaCl_2$ and calcium magnesium acetate (CMA). No sanding will be allowed.
3. Property owner or owner's maintenance contractor will be responsible for scheduling the activity each year.

SECTION 5: INSPECTIONS and MAINTENANCE

5.1 Inspections

Project Information:

a. Inspection Personnel

1. Denis Hamel. CPESC, will be responsible for site inspections related to this SWPPP. Inspections will be completed once every seven days and after each rainfall event greater than 0.50".
2. Emily Fredette, E.I.T., will be responsible for site inspections when Denis Hamel is unavailable.

b. Qualifications

1. Denis Hamel is a certified professional in erosion and sediment. He has over twenty five years of experience with stormwater regulations and has prepared over fifteen SWPPP's for construction sites.
2. Emily Fredette is a registered Engineer-In-Training. She has gained experience with stormwater regulations and has conducted inspectional services at several other sites.

c. Inspection Schedule and Procedures

1. The inspection schedule will be inspections once every seven days and after each rainfall event greater than 0.50." The inspections will confirm the project site is complying with the projects SWPPP.

2. Corrective measures will be identified during site inspections by Mr. Hamel or Ms. Fredette, a report will be prepared and submitted to the site's project manager, Jay McPartland from McPartland Corporation, for implementing corrective measures within 24 hours. Refer to the appendix for sample inspection report.

Project Information:

5.2 *Maintenance of Controls*

a. Sediment Basin

Remove sediment when 25% of the volume is reached.

b. Temporary stabilization

Hydroseed disturbed areas as soon as grading is complete in each phase. Inspect weekly.

c. Silt Sock.

Maintain in good condition and remove sediment when 1/3 the height of the sock is reached.

d. Stabilized Construction Entrance

Maintain stone in good condition and replenish as necessary to retain sediment on site.

e. Concrete Washout Area

Maintain good condition and clean out when the capacity of the area is reduced to 25% of available capacity.

f. Goodhousekeeping BMP's

Maintain dumpsters, hazardous materials and sanitary facilities in clean, orderly fashion. Inspect during routine NPDES inspections.

5.3 Corrective Action Log

Project Name: ARC Technologies

Project Location: 37 South Hunt Road, Amesbury, MA

Owner: 37 Hunt Road LLC

DATE OF INSPECTION	INSPECTOR	BMP UPGRADE	CORRECTIVE ACTION

5.4 Pre-Development and Construction Phase Photographs

Project Name: ARC Technologies Inc.

Project Location: 37 South Hunt Road, Amesbury, MA 01913

Owner: 37 South Hunt Road LLC

Operator: ARC Technologies Inc.

See Appendix F

SECTION 6: Recordkeeping and Training

6.1 Recordkeeping

GRADING, CONSTRUCTION ACTIVITY, STABILIZATION LOG

Project Name: ARC Technologies Inc.

Project Location: 37 South Hunt Road, Amesbury, MA 01913

Owner: 37 South Hunt Road LLC

ACTIVITY DATE	DESCRIPTION OF ACTIVITY	DATE OF GRADING COMPLETION	DATE OF STABILIZATION	LOCATIONS

6.2 Log of Changes to the SWPPP

LOG OF CHANGES TO THE SWPPP

Project Name: ARC Technologies Inc.

Project Location: 37 South Hunt Road, MA 01913

Owner: 37 South Hunt Road LLC

CHANGE NUMBER	DESCRIPTION OF CHANGE	DATE OF CHANGE	CHANGE PREPARED BY

6.3 Training

Individual Responsible for Training:

- Denis Hamel, CPESC; W.C. Cammett Engineering, Inc.

Training Description:

Provide general training and awareness training for contractors and subcontractors on-site outlining BMP descriptions, maintenance requirements and illicit discharge prevention. Training to include notification process for informing appropriate parties when and where stormwater problems occur and mitigating measures to be undertaken.

Note all training sessions on Training Log in the Appendix.

SECTION 7: FINAL STABILIZATION

a. BMP Description – Seeding/Landscaping

1. Permanent vegetative cover will be established upon the completion of construction (i.e. site grading) within 14 days by hydroseeding. Hydroseeding and planting of landscape features shall occur during the growing season to ensure vegetation will establish prior to winter months.

   Loamed and seeded areas shall be protected from washout by mulching or other acceptable slope protection measures until vegetation begins to grow.

   Loaming and seeding shall be an on-going process to minimize areas of exposed soil conditions.

   After the areas of the site are stabilized, accumulated sediment and erosion control devices can be removed and disposed at an off-site location.

SECTION 8: CERTIFICATION AND NOTIFICATION

Project Information:

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 gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: Daniel P. Healey Jr. Title: President

Signature: Daniel P. Healey III Date: 8/26/15

SWPPP APPENDICES

Attach the following documentation to the SWPPP:

App A - General Location Map

App B - Site Maps and Details

App C - Copy of Construction General Permit

App D - Copy of NOI and acknowledgement letter from EPA/State (Insert Prior to Construction)

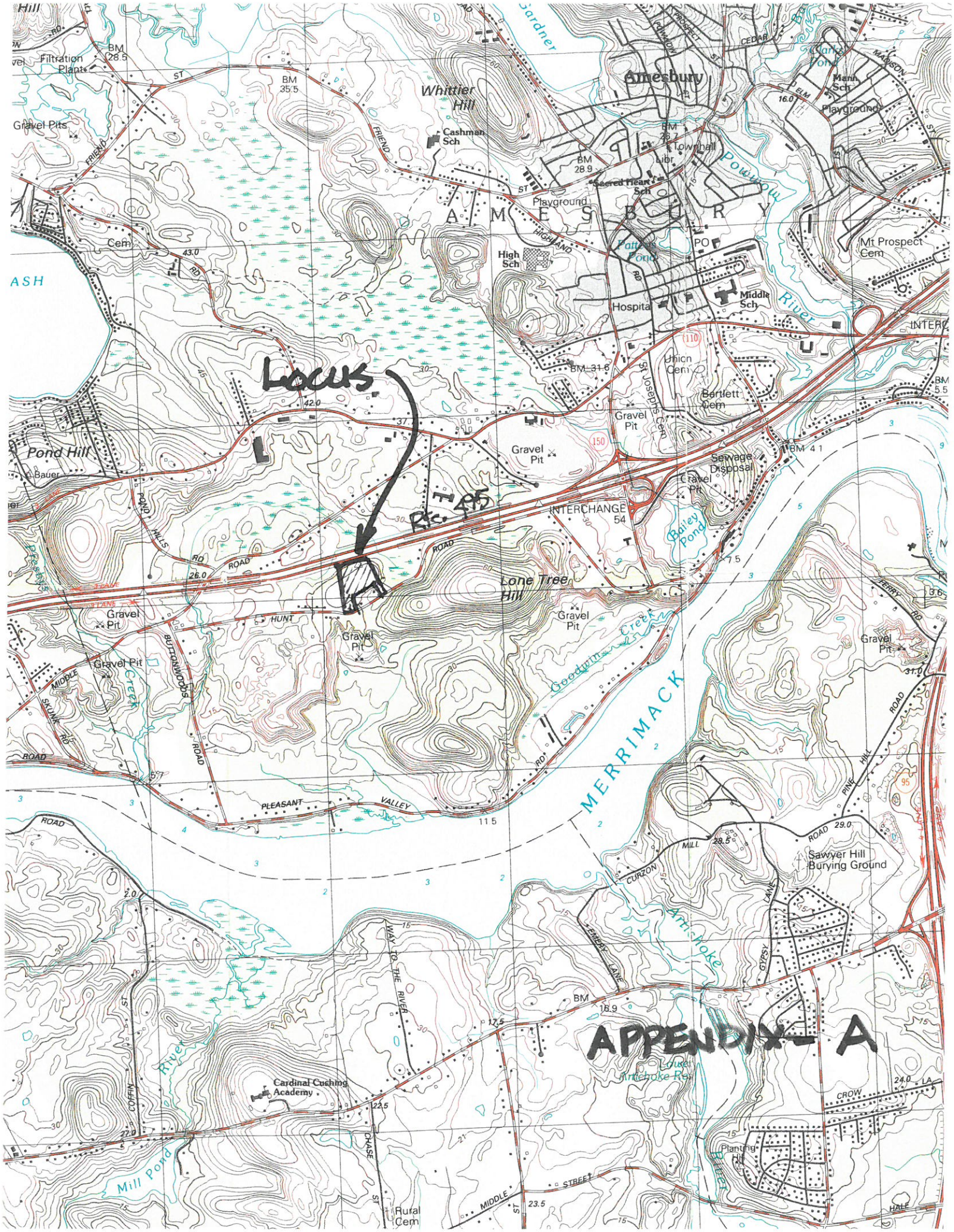
App E - Inspection Reports

App F – Pre-Development Photographs

App G – Project Permits

Appendix A

General Location Map


Locus
Rt. 495
A
Amesbury
Whittier Hill
Cashman Sch
Filtration Plant
Gravel Pits
Cem
Playground
High Sch
Townhall
Sacred Heart Sch
Pattens Pond
Hospital
Middle Sch
Mt Prospect Cem
Union Cem
Bartlett Cem
St Josephs Cem
Gravel Pit
Sewage Disposal
INTERCHANGE 54
Bailey Pond
Lone Tree Hill
Pond Hill
Bauer
Goodwin Creek
MERRIMACK
Sawyer Hill Burying Ground
Artichoke
Lower Artichoke Res
Cardinal Cushing Academy
Mill Pond
Rural Cem
Planting Hill
APPENDIX - A

Appendix B

Site Maps and Details

List of Drawings

Title Sheet	TI-1
Lot Consolidation Plan	PL-1
Existing Conditions	EX-1
Site Plan	SP-1
Grading Plan	GR-1
Utility Plan	UT-1
Erosion Control Plan	EC-1
Miscellaneous Details	DT-1, DT-2

Site Development Plans
Arc Technologies, Inc.
Amesbury, Ma.

I CERTIFY THAT THE PREPARATION OF THIS PLAN CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTRY OF DEEDS.

_____ _____
DATE

I CERTIFY THAT 20 DAYS HAVE ELAPSED SINCE PLANNING BOARD APPROVAL AND NO APPEAL HAS BEEN FILED IN THIS OFFICE.

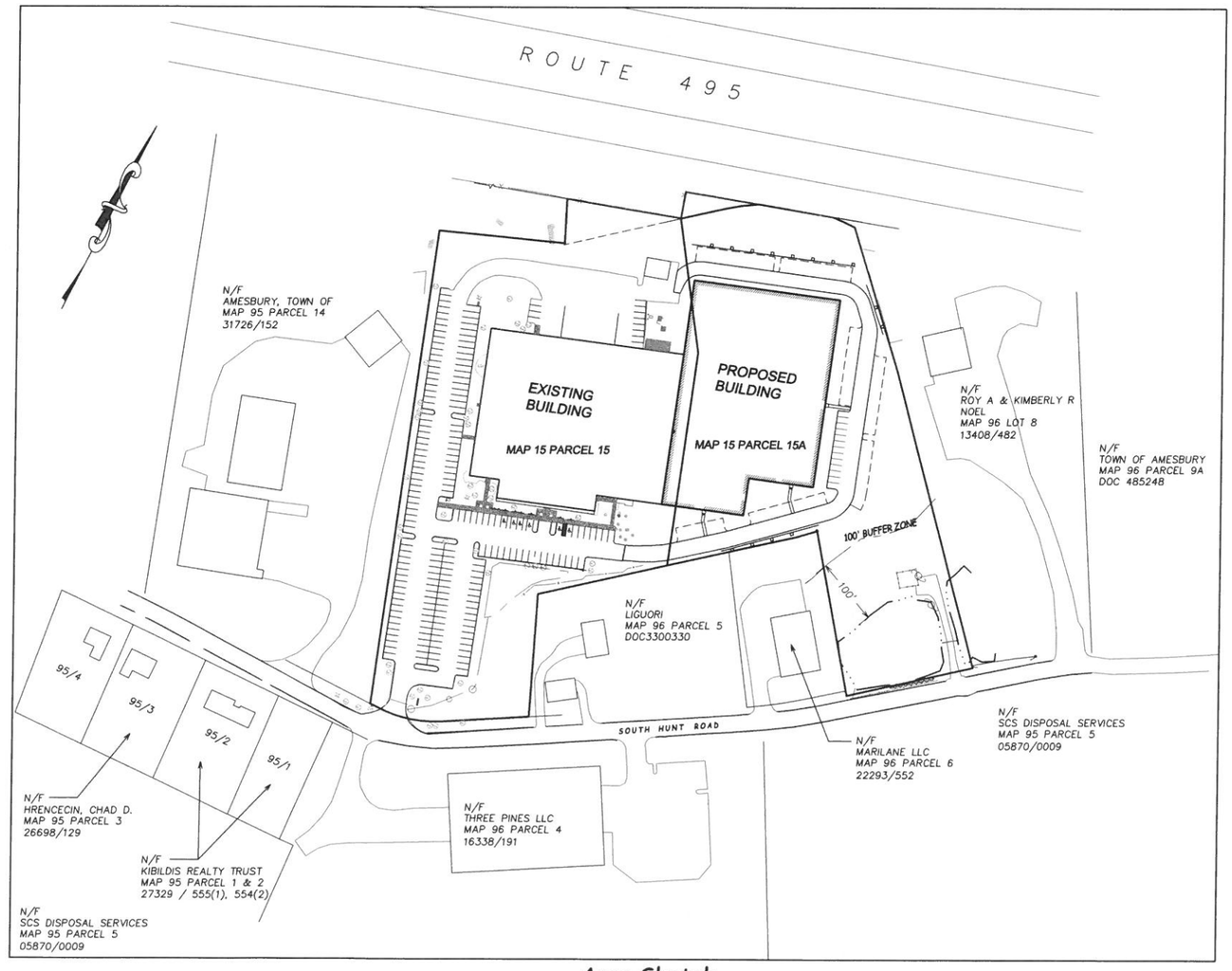
_____ _____
TOWN CLERK DATE

SITE PLAN APPROVED BY AMESBURY PLANNING BOARD TO THE FINDINGS AND CONDITIONS AS SET FORTH IN THE PLANNING BOARD DECISION DATED XXXXX AND TO BE RECORDED IN THE REGISTRY OF DEEDS.

_____
_____
_____
_____
_____
_____
_____
_____
DATE

Legend

Existing	Proposed
EXISTING CONTOURS	CONTOUR
SPOT GRADE	SPOT GRADE
WETLAND BOUNDARY / WETLAND FLAG	RIP-RAP
SIGN	EROSION CONTROL
LIGHT POLE	SIGN
FLARED END SECTION	LIGHT POLE
GUY WIRE	CATCH BASIN
UTILITY POLE	DRAIN MANHOLE
CATCH BASIN	FLARED END SECTION
DRAIN MANHOLE	SEWER MANHOLE
SEWER MANHOLE	FIRE HYDRANT
TELEPHONE MANHOLE	WATER VALVE
FIRE HYDRANT	GAS VALVE
WATER VALVE	DRAINAGE LINE
GAS VALVE	UNDERGROUND ELECTRIC, TELEPHONE, CABLE.
DRAINAGE LINE	SEWER LINE
UNDERGROUND ELECTRIC, TELEPHONE, CABLE.	SUBDRAIN
SEWER LINE	FOUNDATION DRAIN
WATER LINE	WATER LINE
GAS LINE	GAS LINE
OVERHEAD WIRE	OVERHEAD WIRE
WIRE FENCE	WIRE FENCE
CHAIN LINKED FENCE	CHAIN-LINKED FENCE
WOOD FENCE	WOOD FENCE
TREE LINE	EDGE OF PAVEMENT
STONE WALL	DETAIL SYMBOL
SHRUBS	CURBING
DECIDUIOUS TREE	BUILDING
CONIFEROUS TREE	IRON PIPE
SIDEWALK	MASSACHUSETTS HIGHWAY BOUND
BITUMINOUS CURBING	CONCRETE BOUND w/DRILL HOLE / GRANITE BOUND w/DRILL HOLE
GRANITE CURBING	GUARD RAIL
EDGE OF PAVEMENT	RETAINING WALL
BUILDING	SAW-CUT PAVEMENT
TEST PIT	
IRON PIPE	
MASSACHUSETTS HIGHWAY BOUND	
CONCRETE BOUND w/DRILL HOLE / GRANITE BOUND w/DRILL HOLE	
MAIL BOX	
CONCRETE SURFACE	
GUARD RAIL	



Area Sketch
Scale: 1"=100'

FOR REGISTRY USE ONLY

CAMMETT ENGINEERING
297 ELM STREET, AMESBURY, MA.
Phone: (978) 388-2157 Fax: (978) 388-0428
CONSULTING ENGINEERS & LAND SURVEYORS SINCE 1975
Visit us on the WEB at www.cammett.com

Sheet Title:
Title Sheet

Project Title:
Arc Technologies, Inc.
29 South Hunt Road
Amesbury, Ma.

Applicant:
Arc Technologies, Inc.
37 South Hunt Road
Amesbury, Ma.

Owner:
37 S. Hunt Road LLC
37 South Hunt Road
Amesbury, Ma.

REVISION

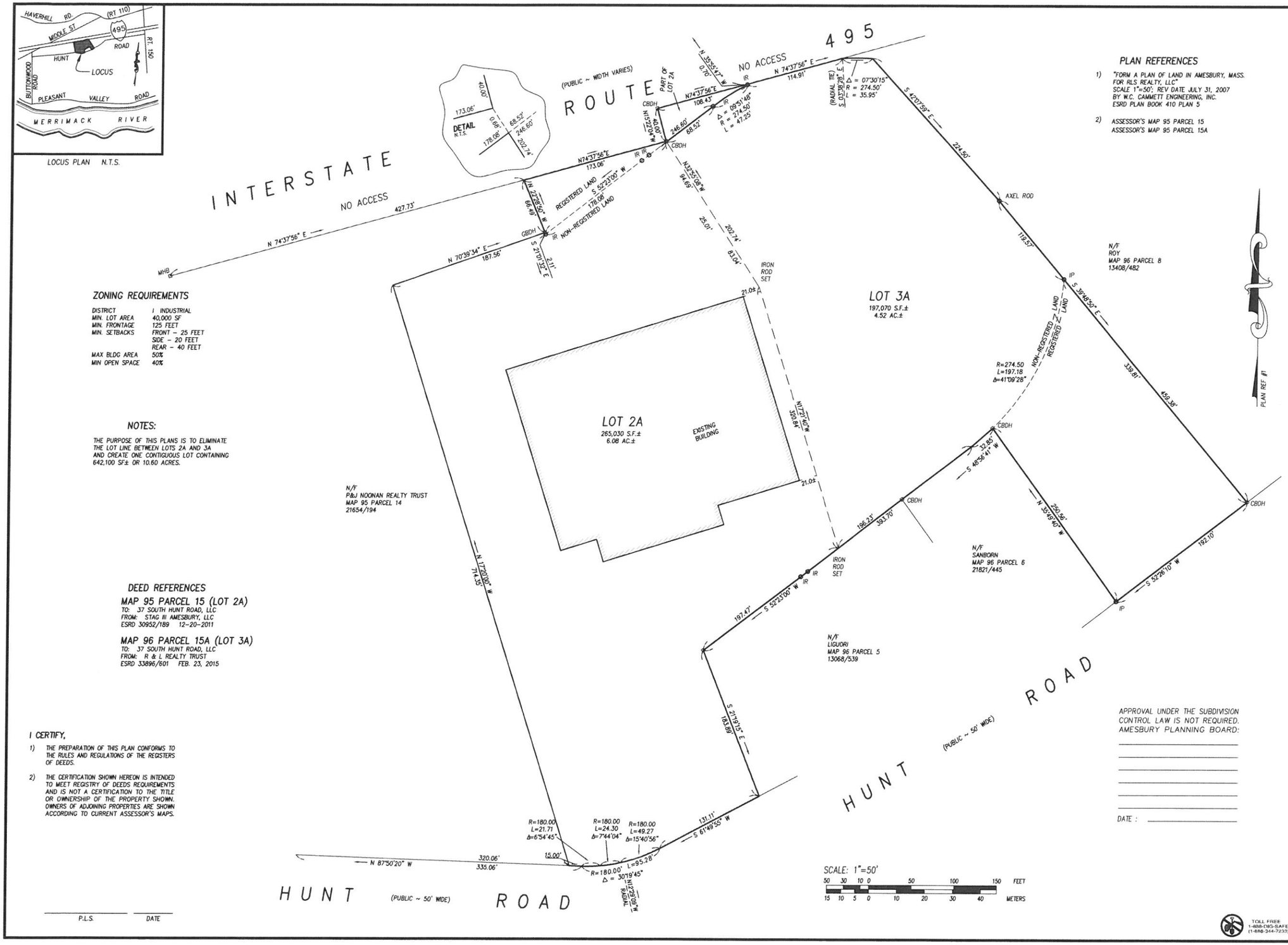
NO.	DATE	DESCRIPTION	BY

Date: _____

PROJ. MGR.:	D. Hamel
FIELD:	R. Brown, M. Michaud
DESIGN:	D. HAMEL
DRAWN:	D. HAMEL
CHECKED:	A. ROSCOE, W. CAMMETT
DATE:	08-24-2015
FILE:	K:\...\C3D\14061FE.dwg
FBK:	671
JOB #:	14061

SHEET TI-1

LOCUS PLAN N.T.S.



PLAN REFERENCES

1) "FORM A PLAN OF LAND IN AMESBURY, MASS. FOR RLS REALTY, LLC" SCALE 1"=50'; REV DATE JULY 31, 2007 BY W.C. CAMMETT ENGINEERING, INC. ESRD PLAN BOOK 410 PLAN 5

2) ASSESSOR'S MAP 95 PARCEL 15
ASSESSOR'S MAP 95 PARCEL 15A

ZONING REQUIREMENTS

DISTRICT	I INDUSTRIAL
MIN. LOT AREA	40,000 SF
MIN. FRONTAGE	125 FEET
MIN. SETBACKS	FRONT – 25 FEET SIDE – 20 FEET REAR – 40 FEET
MAX BLDG AREA	50%
MIN OPEN SPACE	40%

NOTES:

THE PURPOSE OF THIS PLANS IS TO ELIMINATE THE LOT LINE BETWEEN LOTS 2A AND 3A AND CREATE ONE CONTIGUOUS LOT CONTAINING 642,100 SF± OR 10.60 ACRES.

DEED REFERENCES

MAP 95 PARCEL 15 (LOT 2A)
TO: 37 SOUTH HUNT ROAD, LLC
FROM: STAG III AMESBURY, LLC
ESRD 30952/189 12-20-2011

MAP 96 PARCEL 15A (LOT 3A)
TO: 37 SOUTH HUNT ROAD, LLC
FROM: R & L REALTY TRUST
ESRD 33896/601 FEB. 23, 2015

I CERTIFY,

1) THE PREPARATION OF THIS PLAN CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS.

2) THE CERTIFICATION SHOWN HEREON IS INTENDED TO MEET REGISTRY OF DEEDS REQUIREMENTS AND IS NOT A CERTIFICATION TO THE TITLE OR OWNERSHIP OF THE PROPERTY SHOWN. OWNERS OF ADJOINING PROPERTIES ARE SHOWN ACCORDING TO CURRENT ASSESSOR'S MAPS.

P.L.S. _____ DATE _____

APPROVAL UNDER THE SUBDIVISION CONTROL LAW IS NOT REQUIRED.
AMESBURY PLANNING BOARD:

DATE : _____

TOLL FREE 1-888-DIG-SAFE (1-888-344-7233)

FOR REGISTRY USE ONLY

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Sheet Title:

LOT CONSOLIDATION PLAN

Project Title:

Arc Technologies, Inc.
29 South Hunt Road
Amesbury, Ma.

Applicant:

Arc Technologies, Inc.
37 South Hunt Road
Amesbury, Ma.

Owner:

37 S. Hunt Road LLC
37 South Hunt Road
Amesbury, Ma.

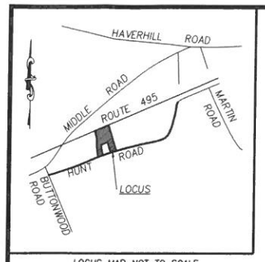
REVISION

NO.	DATE	DESCRIPTION	BY

Date: _____

PROJ. MGR.:	R. SMITH
FIELD:	
DESIGN:	
DRAWN:	R. SMITH
CHECKED:	W. CAMMETT
DATE:	08-27-15
FILE:	K:\...\14061 ANR PL.DWG
FB#:	
JOB #:	14061

SHEET PL-1



LOCUS MAP NOT TO SCALE

NRCS SOIL DATA

253A	HINCKLEY	HSC GROUP A
255A	WINDSOR	HSC GROUP A
257E	HINCKLEY	HSC GROUP A
720A	WHATELY	HSC GROUP C/D

NOTES:

1.) THE LOCATIONS OF EXISTING UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UTILITIES.

2.) THESE ARE THE EXISTING CONDITIONS AS OF JANUARY 21, 2015. THERE WAS WATER FROZEN IN INVERTS DURING FIELD SURVEY. THESE INVERT ELEVATIONS ARE MARKED WITH THE SYMBOL, ≈.

3.) WETLANDS DELINEATED BY BASBANES WETLAND CONSULTING ON NOVEMBER 14, 2014.

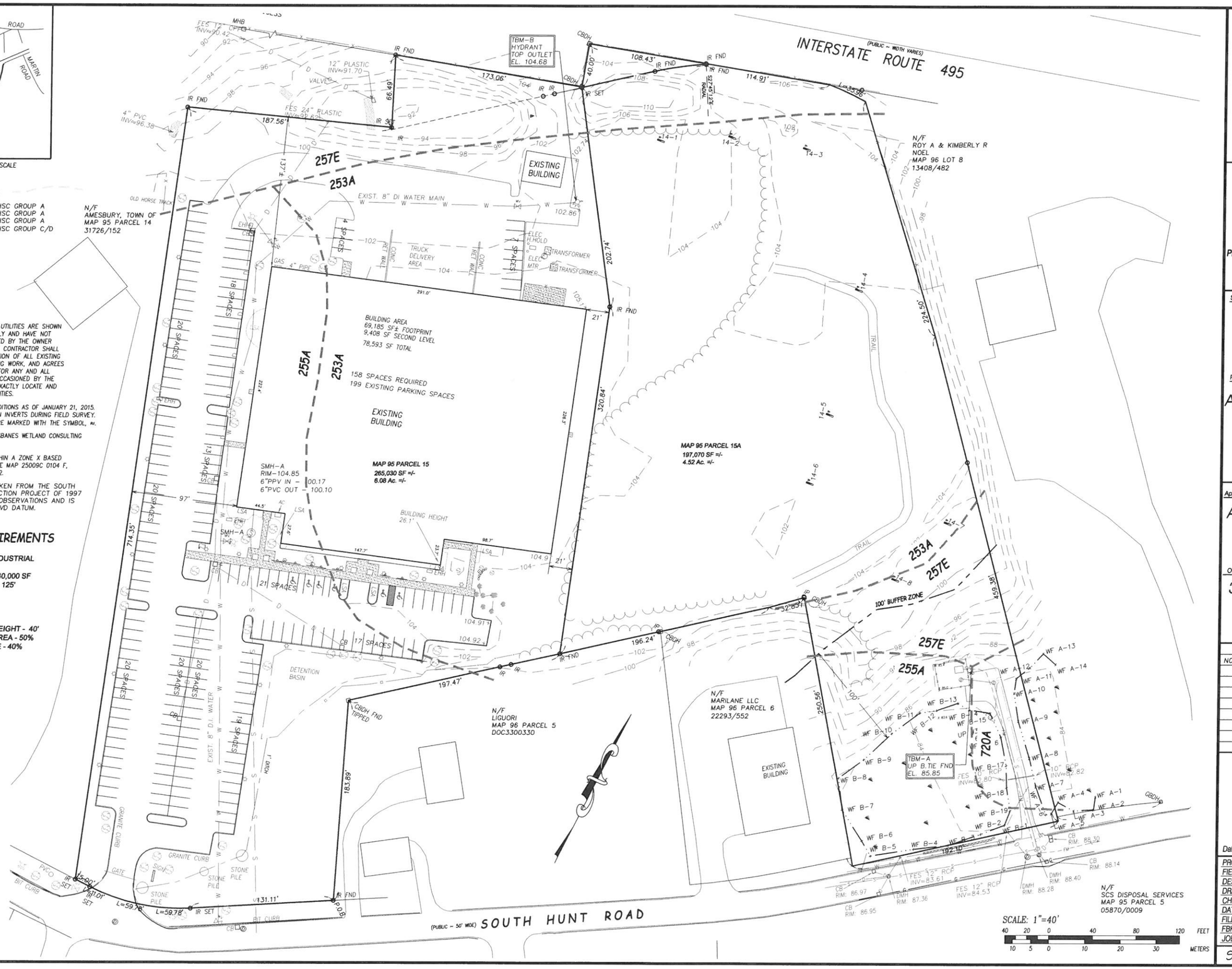
4.) THE PROJECT AREA LIES WITHIN A ZONE X BASED UPON FLOOD INSURANCE RATE MAP 25009C 0104 F, EFFECTIVE DATE JULY 3, 2012.

5.) ELEVATION DATUM IS TAKEN FROM THE SOUTH HUNT ROAD RECONSTRUCTION PROJECT OF 1997 AND IS BASED ON GPS OBSERVATIONS AND IS BASED ON THE 1929 NGVD DATUM.

ZONING REQUIREMENTS

ZONING DISTRICT - INDUSTRIAL

MINIMUM LOT AREA - 40,000 SF
MINIMUM FRONTAGE - 125'
MINIMUM YARDS -
FRONT - 25'
SIDE - 20'
REAR - 40'
MAXIMUM BUILDING HEIGHT - 40'
MAXIMUM BUILDING AREA - 50%
MINIMUM OPEN SPACE - 40%



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Sheet Title:

Existing Conditions

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29 South Hunt Road
Amesbury, Ma.

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Arc Technologies, Inc.
37 South Hunt Road
Amesbury, Ma.

Owner:

37 S. Hunt Road LLC
37 South Hunt Road
Amesbury, Ma.

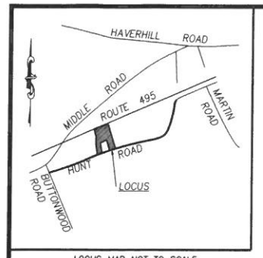
REVISION

NO.	DATE	DESCRIPTION	BY

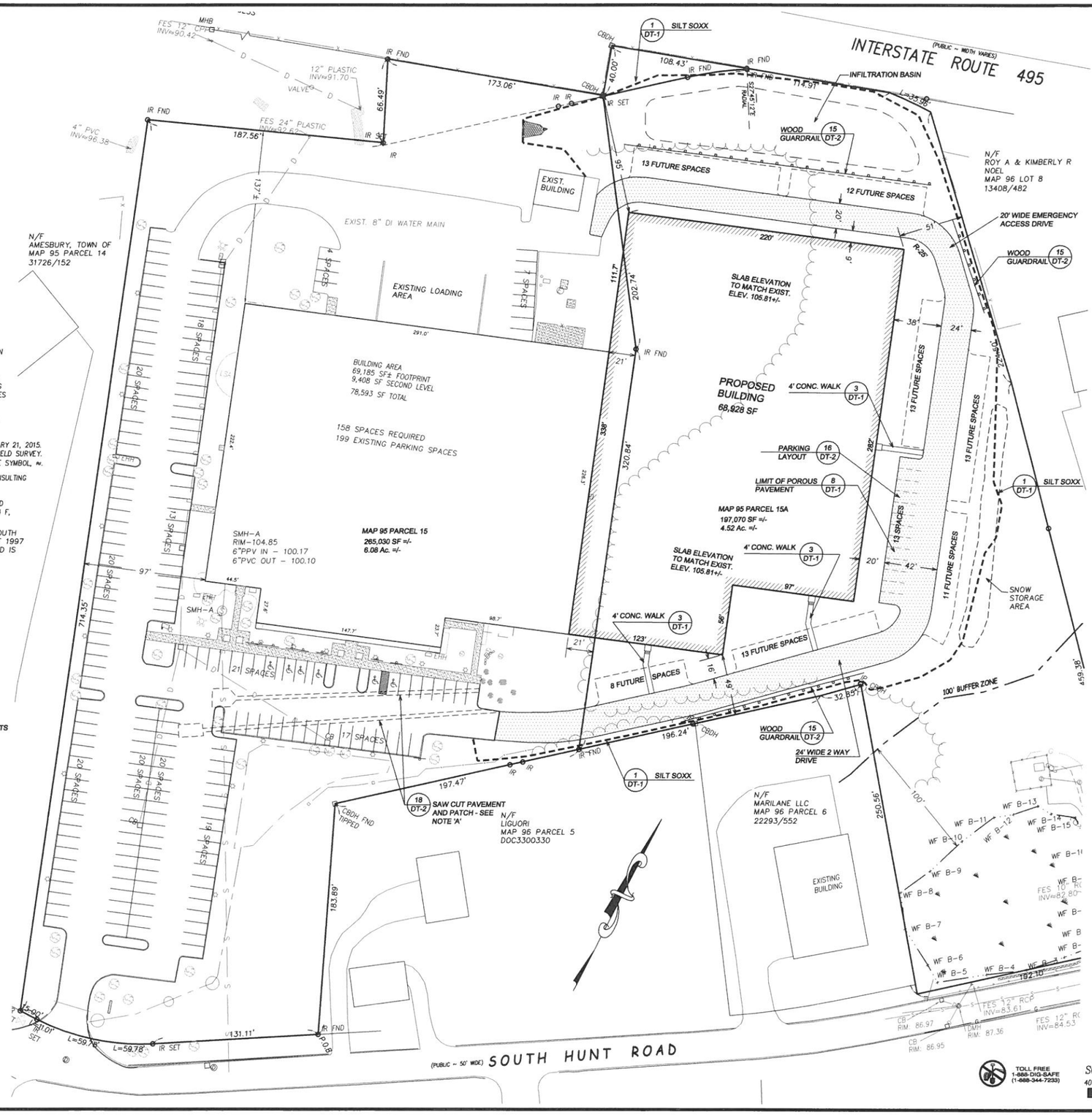
Date:

PROJ. MGR.:	D. Hamel
FIELD:	R. Brown, M. Michaud
DESIGN:	D. HAMEL
DRAWN:	D. HAMEL
CHECKED:	A. ROSCOE, W. CAMMETT
DATE:	08-24-2015
FILE:	K:\...\C3D\14061FE.dwg
FBK:	671
JOB #:	14061

SHEET EX-1



LOCUS MAP NOT TO SCALE



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NOTE 'A'

SAW CUT EXISTING PAVEMENT AND PATCH AS SHOWN ON PLAN AND ON DETAIL 18 SHEET DT-2. REMOVE AND RESET EXISTING CURBING AS NEEDED. REMOVE AND REPLANT / REPLACE ANY TREES OR SHRUBS AS MAY BE REQUIRED TO EXCAVATE TRENCH. REPAIR ANY EXISTING UTILITIES DAMAGED AS PART OF THE TRENCH EXCAVATION.
NOTIFY ENGINEER IMMEDIATELY IF CONFLICT EXISTS WITH EXISTING UTILITIES.

ZONING REQUIREMENTS

ZONING DISTRICT - INDUSTRIAL

MINIMUM LOT AREA - 40,000 SF
MINIMUM FRONTAGE - 125'
MINIMUM YARDS -
FRONT - 25'
SIDE - 20'
REAR - 40'
MAXIMUM BUILDING HEIGHT - 40'
MAXIMUM BUILDING AREA - 50%
MINIMUM OPEN SPACE - 40%

SITE PLAN APPROVED BY AMESBURY PLANNING BOARD TO THE FINDINGS AND CONDITIONS AS SET FORTH IN THE PLANNING BOARD DECISION DATED XXXXX AND TO BE RECORDED IN THE REGISTRY OF DEEDS.

DATE

I CERTIFY THAT THE PREPARATION OF THIS PLAN CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTRY OF DEEDS.

DATE

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TOWN CLERK DATE

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MINIMUM YARDS -
FRONT - 25'
SIDE - 20'
REAR - 40'
MAXIMUM BUILDING HEIGHT - 40'
MAXIMUM BUILDING AREA - 50%
MINIMUM OPEN SPACE - 40%

Site Data

MAX. BUILDING COVERAGE - 50%
MIN. OPEN SPACE - 40%

COMBINED SITE AREA = 462,095 SF

TOTAL BUILDING AREA - 138,113 SF
TOTAL OPEN SPACE - 196,132 SF

BUILDING COVERAGE PROVIDED - 30.0%
OPEN SPACE PROVIDED - 44.0%

PARKING REQUIRED :
1 SPACE / 500 SF OF GROSS FLOOR AREA

EXISTING BUILDING - FIRST FLOOR-69,185 SF
SECOND LEVEL-9,408 SF
TOTAL - 78,593 SF

PROPOSED BUILDING - TOTAL 68,928 SF

TOTAL GROSS FLOOR AREA - 147,521 SF

TOTAL PARKING REQUIRED:
147,521 / 500 = 295 SPACES

PARKING PROVIDED - EXISTING - 199 SPACES
PROPOSED - 13 SPACES
TOTAL - 212 SPACES

FUTURE PARKING - 83
TOTAL PARKING AVAILABLE - 295

LOADING REQUIRED

1 PER 20,000 SF OF GFA UP TO TWO SPACES
PLUS 1 ADDITIONAL FOR EACH 60,000 SF

GFA = 147,521 SF

LOADING PROVIDED - 6

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Sheet Title:

Site Plan

Project Title:

Arc Technologies, Inc.
29 South Hunt Road
Amesbury, Ma.

Applicant:

Arc Technologies, Inc.
37 South Hunt Road
Amesbury, Ma.

Owner:

37 S. Hunt Road LLC
37 South Hunt Road
Amesbury, Ma.

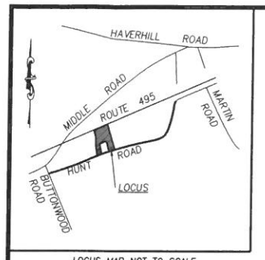
REVISION

NO.	DATE	DESCRIPTION	BY

Date:

PROJ. MGR.:	D. Hamel
FIELD:	R. Brown, M. Michaud
DESIGN:	D. HAMEL
DRAWN:	D. HAMEL
CHECKED:	A. ROSCOE, W. CAMMETT
DATE:	08-24-2015
FILE:	K:\...\C3D\14061FE.dwg
FBK:	671
JOB #:	14061

SHEET SP-1



LOCUS MAP NOT TO SCALE

NOTES:

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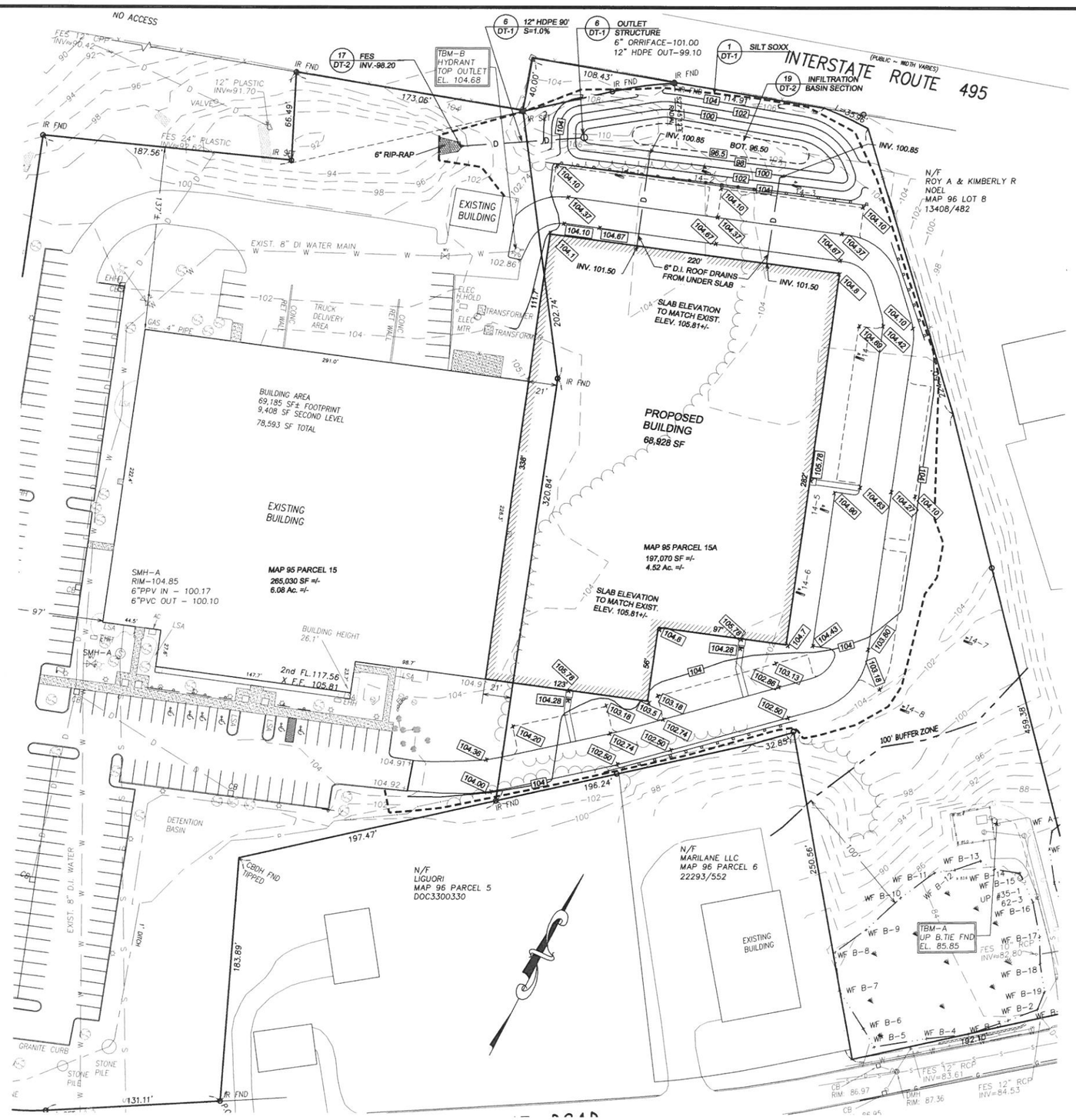

SITE PLAN APPROVED BY AMESBURY PLANNING BOARD TO THE FINDINGS AND CONDITIONS AS SET FORTH IN THE PLANNING BOARD DECISION DATED XXXXX AND TO BE RECORDED IN THE REGISTRY OF DEEDS.

DATE

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DATE

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TOWN CLERK DATE

TOLL FREE 1-888-DIG-SAFE (1-888-344-7233)

SCALE: 1"=40'

40 20 0 40 80 120 FEET

10 5 0 10 20 30 METERS

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Sheet Title:

Grading Plan

Project Title:

Arc Technologies, Inc.
29 South Hunt Road
Amesbury, Ma.

Applicant:

Arc Technologies, Inc.
37 South Hunt Road
Amesbury, Ma.

Owner:

37 S. Hunt Road LLC
37 South Hunt Road
Amesbury, Ma.

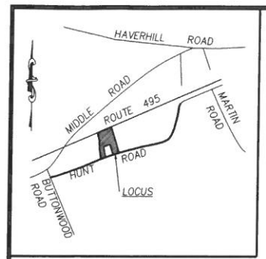
REVISION

NO.	DATE	DESCRIPTION	BY

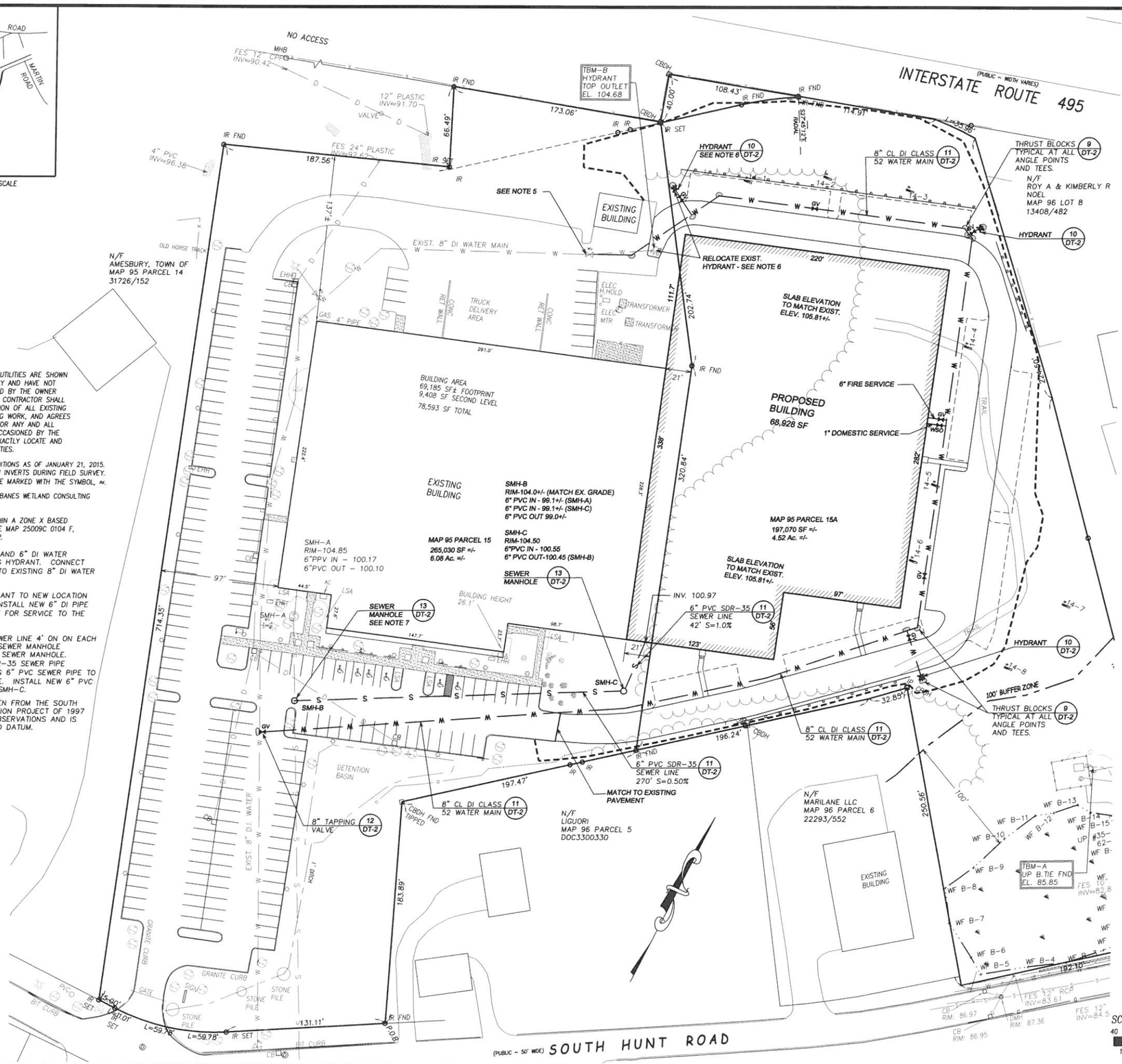
Date:

PROJ. MGR.:	D. Hamel
FIELD:	R. Brown, M. Michaud
DESIGN:	D. HAMEL
DRAWN:	D. HAMEL
CHECKED:	A. ROSCOE, W. CAMMETT
DATE:	08-24-2015
FILE:	K:\...\C3D\14061FE.dwg
FBK:	671
JOB #:	14061

SHEET GR-1



LOCUS MAP NOT TO SCALE



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4.) THE PROJECT AREA LIES WITHIN A ZONE X BASED UPON FLOOD INSURANCE RATE MAP 25009C 0104 F, EFFECTIVE DATE JULY 3, 2012.

5.) REMOVE EXISTING 6" GV AND 6" DI WATER SERVICE TO THE EXISTING HYDRANT. CONNECT NEW 8" DI WATER MAIN TO EXISTING 8" DI WATER MAIN.

6.) RELOCATE EXISTING HYDRANT TO NEW LOCATION SHOWN ON THE PLAN. INSTALL NEW 6" DI PIPE AND NEW 6" GATE VALVE FOR SERVICE TO THE RELOCATED HYDRANT.

7.) CUT EXISTING 6" PVC SEWER LINE 4' ON ON EACH SIDE OF THE PROPOSED SEWER MANHOLE LOCATION. INSTALL NEW SEWER MANHOLE. INSTALL NEW 6" PVC SDR-35 SEWER PIPE CONNECTING THE EXISTING 6" PVC SEWER PIPE TO THE NEW SEWER MANHOLE. INSTALL NEW 6" PVC SDR-35 SEWER LINE TO SMH-C.

8.) ELEVATION DATUM IS TAKEN FROM THE SOUTH HUNT ROAD RECONSTRUCTION PROJECT OF 1997 AND IS BASED ON GPS OBSERVATIONS AND IS BASED ON THE 1929 NGVD DATUM.

SITE PLAN APPROVED BY AMESBURY PLANNING BOARD TO THE FINDINGS AND CONDITIONS AS SET FORTH IN THE PLANNING BOARD DECISION DATED XXXXX AND TO BE RECORDED IN THE REGISTRY OF DEEDS.

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297 ELM STREET, AMESBURY, MA.
Phone: (978) 388-2157 Fax: (978) 388-0428
CONSULTING ENGINEERS & LAND SURVEYORS SINCE 1975
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Sheet Title:

Utility Plan

Project Title:

Arc Technologies, Inc.
29 South Hunt Road
Amesbury, Ma.

Applicant:

Arc Technologies, Inc.
37 South Hunt Road
Amesbury, Ma.

Owner:

37 S. Hunt Road LLC
37 South Hunt Road
Amesbury, Ma.

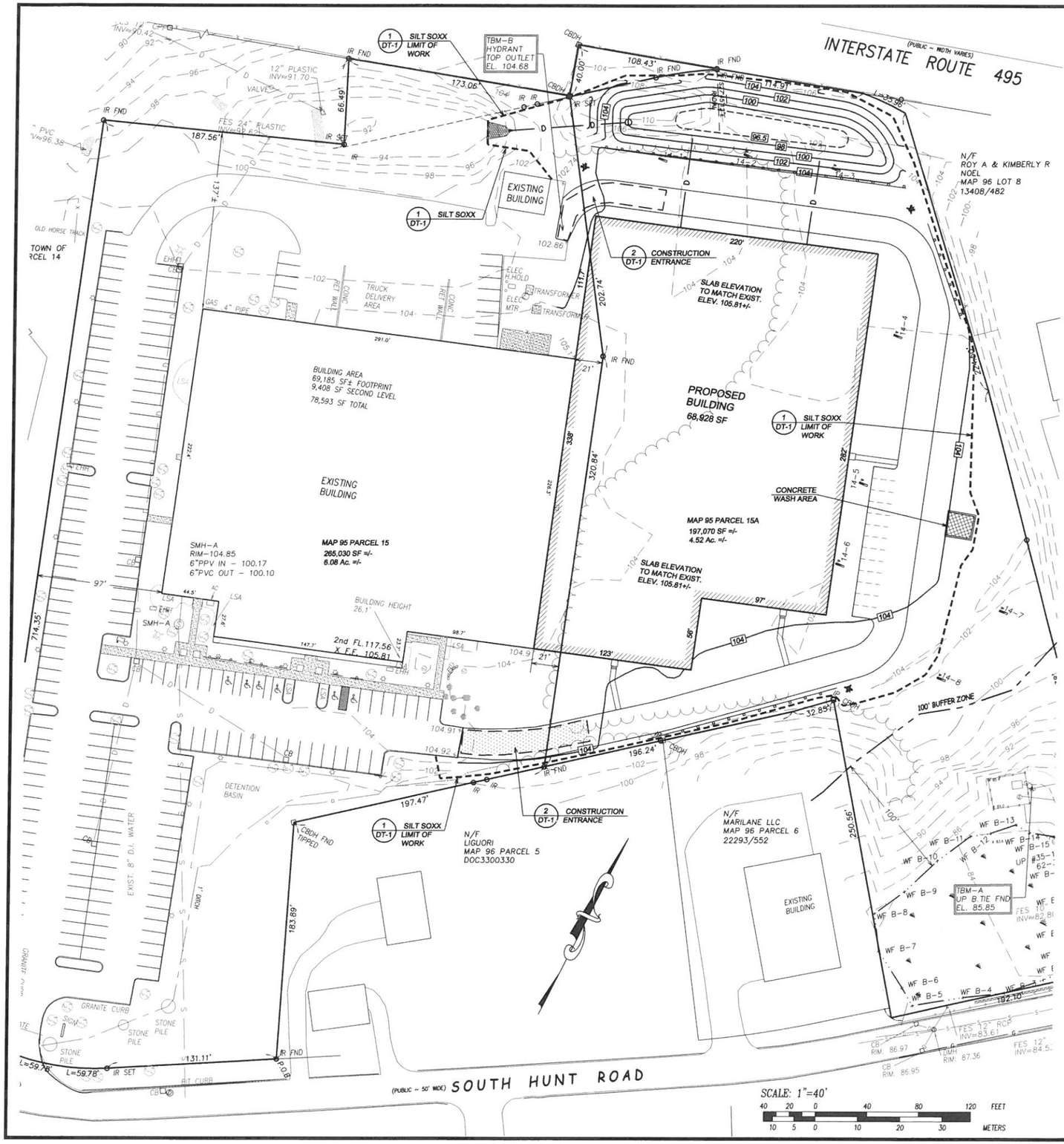
REVISION

NO.	DATE	DESCRIPTION	BY

Date:

PROJ. MGR.:	D. Hamel
FIELD:	R. Brown, M. Michaud
DESIGN:	D. HAMEL
DRAWN:	D. HAMEL
CHECKED:	A. ROSCOE, W. CAMMETT
DATE:	08-24-2015
FILE:	K:\...\C3D\14061PE.dwg
FBK:	671
JOB #:	14061

SHEET UT-1



I CERTIFY THAT THE PREPARATION OF THIS PLAN CONFORMS TO THE RULES AND REGULATIONS OF THE REGISTRY OF DEEDS.

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SITE PLAN APPROVED BY AMESBURY PLANNING BOARD TO THE FINDINGS AND CONDITIONS AS SET FORTH IN THE PLANNING BOARD DECISION DATED XXXXX AND TO BE RECORDED IN THE REGISTRY OF DEEDS.

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_____ DATE

GENERAL NOTES:

HAZARDOUS WASTE STORAGE AREAS AND SANITARY FACILITIES SHALL BE LOCATED OUTSIDE THE 100 FOOT BUFFER ZONES FROM REGULATED RESOURCE AREAS DURING CONSTRUCTION PHASE.

REMOVAL OF EROSION CONTROL SHOULD BE SUBJECT TO THE APPROVAL OF THE AMESBURY PLANNING BOARD AFTER ALL CONSTRUCTION RELATED ACTIVITIES ARE COMPLETE AND ALL AREAS OF THE SITE HAVE BEEN DEEMED AS STABILIZED BY THE AMESBURY PLANNING BOARD OR ITS DESIGNATED AGENT.

THE SITE CONTRACTOR SHALL SUBMIT A DEWATERING PLAN FOR APPROVAL BY THE AMESBURY PLANNING BOARD PRIOR TO THE START OF CONSTRUCTION. DEWATERING LOCATIONS SHALL BE SHOWN ON A SITE PLAN AS PART OF THIS DEWATERING PLAN.

NO MACHINERY WILL BE STORED WITHIN 100' OF ANY RESOURCE AREA, AND ALL MACHINERY WILL BE INSPECTED DAILY FOR LEAKY FLUIDS. CHEMICALS, FERTILIZERS, PESTICIDES, HERBICIDES, ETC. SHALL NOT BE USED OR STORED WITHIN 100' OF JURISDICTIONAL AREAS.
NO FUEL STORAGE WILL OCCUR ON-SITE.

CONTRUCTION SEQUENCE

INSTALL PERIMETER CONTROL (SILT SOXX) AND CONSTRUCTION ENTRANCE AS SHOWN ON THE PLANS PRIOR TO ANY EARTH MOVING ACTIVITY.

CLEAR AND GRUB THE SITE WITHIN THE LIMIT OF WORK AND DISPOSE OF UNSUITABLE MATERIALS OFF SITE.

STRIP TOPSOIL AND STOCKPILE WITHIN THE PERIMETER CONTROL LIMITS. ONLY RETAIN ENOUGH TOPSOIL TO USE FOR FINISH GRADING. REMOVE EXCESS TOPSOIL FROM SITE.

ROUGH GRADE SITE FOR THE BUILDING AREA, DRIVE AND PARKING AREAS AND A PORTION OF THE INFILTRATION BASIN AREA. TEMPORARILY DIRECT AS MUCH RUNOFF TO THE INFILTRATION BASIN AREA AS POSSIBLE. THE INFILTRATION BASIN AREA WILL BE USED AS A TEMPORARY SETTLING BASIN AND SHALL BE ONLY EXCAVATED TO ELEVATION 99.0 AT THIS TIME. EXCESS EARTH MATERIALS SHALL BE REMOVED FROM SITE.

EXCAVATE FOR BUILDING FOUNDATION. CONSTRUCT THE FOUNDATION AND USE THE CONCRETE WASHOUT AREA AS SHOWN ON THE PLANS.

INSTALL THE UTILITIES BELOW THE BUILDING SLAB. INSTALL GRAVEL BASE AND BUILDING SLAB.

CONSTRUCT THE BUILDING AND INSTALL WATER, SEWER, AND DRAINAGE SYSTEMS.

COMPLETE THE EXCAVATION AND OUTLET STRUCTURE FOR THE INFILTRATION BASIN. INSTALL THE OUTLET PIPE AND RIP-RAP. LOAM AND SEED THE SLOPES IMMEDIATELY AFTER THE GRADING IS COMPLETE.

FINE GRADE ALL AREAS AROUND BUILDING. INSTALL PLANTING BEDS AND LANDSCAPED AREAS. SPREAD TOPSOIL AND SEED LAWN AREAS. INSTALL CONCRETE SIDEWALKS.

DO NOT INSTALL POROUS PAVEMENT OR BASE UNTIL THE LANDSCAPED AREAS AND THE GRASS AREAS ARE ESTABLISHED. NO HEAVY DELIVERY TRUCKS, CRANES, CONCRETE TRUCKS, OR OTHER HEAVY VEHICLES ARE ALLOWED ON THE POROUS PAVEMENT FOR AT LEAST ONE MONTH AFTER INSTALLATION.

EXCAVATE FOR THE POROUS PAVEMENT BASE. INSTALL THE BASE AS PER DETAIL 8 ON SHEET DT-1. INSTALL POROUS PAVEMENT.
NOTE: DO NOT ALLOW PASSENGER VEHICLES TO DRIVE ON POROUS PAVEMENT AREAS FOR AT LEAST 1 WEEK AFTER INSTALLATION. PROTECT POROUS PAVEMENT FORM RUNOFF OF SILTY OR SANDY STORMWATER, OR VEHICLES WITH MUD OR DIRT ON THEIR TIRES. IF HEAVY VEHICLES ARE REQUIRED TO USE THE POROUS PAVEMENT AREA WITHIN THE FIRST MONTH, PLACE PLYWOOD OR OTHER PROTECTIVE SURFACE ON THE POROUS PAVEMENT, AND PROCEED WITH EXTREME CAUTION.

CONCRETE WASHOUT AREAS

TEMPORARY CONCRETE WASHOUT AREAS SHALL BE CONSTRUCTED AT LOCATIONS IDENTIFIED ON THE PLANS. THE AREA WILL BE CONSTRUCTED BELOW GRADE APPROXIMATELY TEN FEET LONG, THREE FEET DEEP, AND TEN FEET WIDE. THE AREA WILL BE LINED WITH 10 MILS THICK PLASTIC SHEETING. SIGNAGE SHALL BE PROVIDED IDENTIFYING WASHOUT AREAS.

EXCESS CONCRETE AND/OR WASHOUT MATERIAL FROM THE CONCRETE TRUCKS SHALL BE DISCHARGED TO THE WASHOUT AREA OR DISPOSED OF OFF SITE.

UPON COMPLETION IF NEEDED FOR THE WASHOUT AREA, THE HARDENED CONCRETE SHALL BE REMOVED AND DISPOSED OF, THE AREA WILL BE FILLED, GRADED, AND STABILIZED.

THE WASHOUT AREA WILL BE CONSTRUCTED PRIOR TO THE USE OF CONCRETE MATERIALS.

THE WASHOUT AREA WILL BE INSPECTED ON A DAILY BASIS DURING CONCRETE OPERATIONS TO ENSURE NO TEARS IN THE PLASTIC. THE WASHOUT AREA MUST BE CLEANED OUT WHEN THE CAPACITY OF THE AREA IS REDUCED OF 25% OF AVAILABLE CAPACITY.

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Erosion Control Plan

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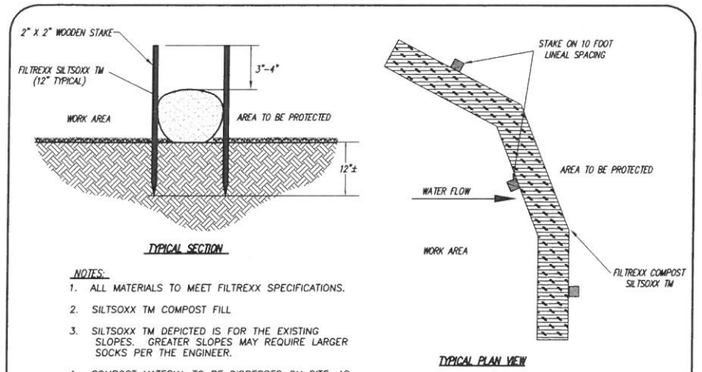
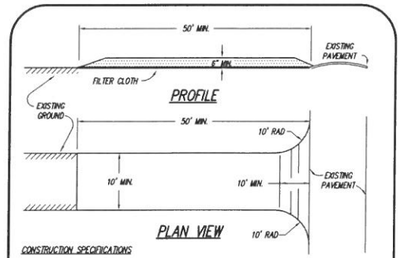


NOTES:

1. ALL MATERIALS TO MEET FILTREXX SPECIFICATIONS.
2. SILTSOXX TM COMPOST FILL
3. SILTSOXX TM DEPICTED IS FOR THE EXISTING SLOPES. GREATER SLOPES MAY REQUIRE LARGER SOCKS PER THE ENGINEER.
4. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER, AFTER SLOPES ARE STABILIZED.

1 FILTREXX SILTSOXX TM

NOT TO SCALE



CONSTRUCTION SPECIFICATIONS

1. STONE SIZE – USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH – AS REQUIRED, BUT NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
3. THICKNESS – NOT LESS THAN SIX (6) INCHES.
4. WIDTH – TEN (10) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. FILTER CLOTH – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. FILTER CLOTH WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENCE LOT.
6. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WASHING – WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

2 STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE

Soil Tests

Conducted By: Denis Hamel CPESC
WC Cammett Eng. Inc. Date: December 19, 2015

14-1 Elev. 103.4
0-7" Sandy Loam, 10YR 3/4 Friable – Medium
7"-32" Sand, 10YR 5/6 Friable – Coarse
32"-58" Sand, 10YR 3/4 Very Coarse – Massive
58"-120" Sand, 10YR 5/6 Coarse – Massive
No Ledge, SHWT None Found

14-2 Elev. 13.9
0-5" Sandy Loam, 10YR 3/4 Friable – Fine
5"-22" Loamy Sand, 10YR 5/6 Coarse
22"-26" Sand, 10YR 5/6 Fine
26"-44" Sand, 10YR 5/6 Coarse
44"-60" Sand-Gravel, 10YR 5/6 50% Stone-Very Coarse-massive
60"-120" Sand, 10YR 5/6 Coarse-Massive
No Ledge, SHWT None Found

14-3 Elev. 104.8
0-6" Fine Sandy Loam, 10YR 3/4 Friable
6"-24" Sand, 10YR 5/6 Friable-Coarse
24"-44" Sand, 10YR 3/4 Very Coarse-Massive
44"-96" Gravel, 10YR 5/6 50% Sotne, Very Coarse-Massive
96"-120" Sand, 10YR 5/6 10% Stone, Med. Massive
No Ledge, SHWT None Found

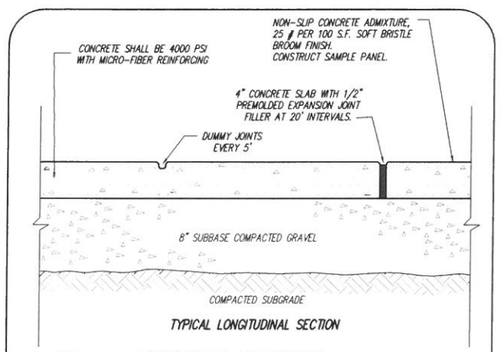
14-4 Elev. 103.6
0-5" Fine Sandy Loam, 10YR 3/4 Friable
5"-18" Loamy Sand, 10YR 5/6 Med.
18"-36" Sand, 10YR 5/6 Coarse
36"-72" Sand-Gravel, 10YR 5/6 5% Stone, Very Coarse
72"-120" Gravel, 10YR 5/6 20% Stone
No Ledge, SHWT None Found

14-5 Elev. 103.4
0-7" Fine Sandy Loam, 10YR 3/4 Friable
7"-22" Loamy Sand, 10YR 5/6 Friable
22"-40" Sand, 10YR 5/6 Friable-Coarse
40"-80" Sand-Gravel, 10YR 3/4 10% Stone, Very Coarse
80"-120" Sand, 10YR 5/6 5% Stone, Very Coarse-Massive
No Ledge, SHWT None Found

14-6 Elev. 102.8
0-8" Fine Sandy Loam, 10YR 3/4 Friable
8"-24" Loamy Sand, 10YR 5/6 Friable
24"-36" Sand, 10YR 5/6 Friable-Med.
36"-52" Sand-Gravel, 10YR 3/4 5 % Stone, Very Coarse-Massive
52"-56" Sand, 10YR 5/6 Friable-Coarse
56"-120" Sand-Gravel, 10YR 3/4 10% Stone, Very Coarse-Massive
No Ledge, SHWT None Found

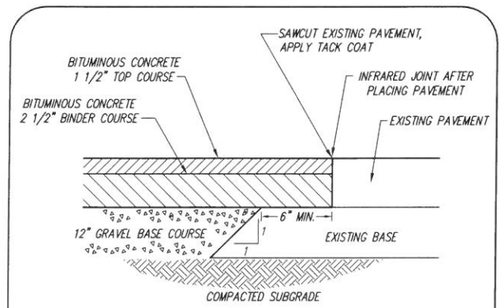
14-7 Elev. 101.2
0-3" Fine Sandy Loam, 10YR 3/4 Friable
3"-12" Loamy Sand, 10YR 5/6 Friable
12"-36" Sand, 10YR 5/6 Coarse
36" 78" Gravel, 10YR 3/4 10% Stone, Very Coarse
78"-120" Sand, 10YR 5/6 Coarse-Massive
No Ledge, SHWT None Found

14-8 Elev. 101.6
0-2" Fine Sandy Loam, 10YR 3/4 Friable
2"-6" Loamy Sand, 10YR 5/6 Coarse
6"-27" Sand, 10YR 5/6 Coarse
27"-40" Sand-Gravel, 10YR 5/6 5% Stone, Very Coarse
40"-120" Sand, 10YR 5/6 Coarse
No Ledge, SHWT None Found



3 CONCRETE SIDEWALK

N.T.S.



4 PAVEMENT MATCH

N.T.S.

GENERAL NOTES

UNLESS OTHERWISE SPECIFIED, ALL CONSTRUCTION MATERIALS SHALL COMPLY WITH MADOT STANDARD SPECIFICATIONS.

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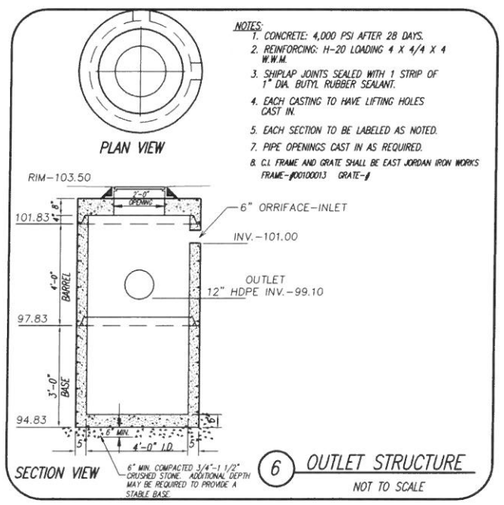
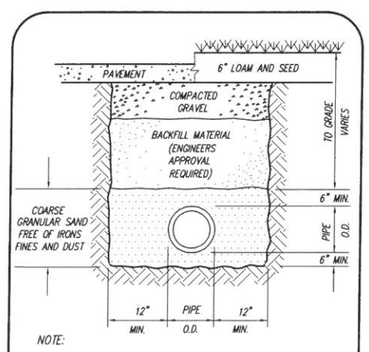


NOTES:

1. CONCRETE: 4,000 PSI AFTER 28 DAYS.
2. REINFORCING: H-20 LOADING 4 X 4/4 X 4 W.W.M.
3. SHIPLAP JOINTS SEALED WITH 1 STRIP OF 1" DIA. BUTYL RUBBER SEALANT.
4. EACH CASTING TO HAVE LIFTING HOLES CAST IN.
5. EACH SECTION TO BE LABELED AS NOTED.
7. PIPE OPENINGS CAST IN AS REQUIRED.
8. C.I. FRAME AND GRATE SHALL BE EAST JORDAN IRON WORKS FRAME-#00100013 GRATE-#

6 OUTLET STRUCTURE

NOT TO SCALE

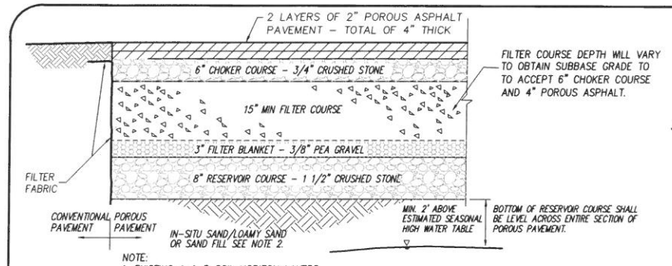


NOTE:

1. DRAIN PIPES TO BE HIGH DENSITY POLYETHYLENE (HDPE)
2. SEE SITE PLANS FOR PIPE SIZES.

7 DRAINAGE TRENCH

NOT TO SCALE



NOTE:
1. EXISTING A & B SOIL HORIZON LAYERS SHALL BE REMOVED BETWEEN ALL PAVEMENT AREAS TO THE C HORIZON.
2. SAND FILL TO BE PROVIDED ABOVE IN-SITU SAND/LOAMY SAND TO OBTAIN SUBGRADE ELEVATION TO ACCEPT 8" RESERVOIR COURSE.

CHOKER COURSE (AASHTO NO. 57)

SIEVE	PERCENT PASSING
1 1/2 IN.	100%
1 IN.	95%-100%
1/2 IN	25%-60%
NO. 4	0%-10%
NO. 8	0%-5%

95% COMPACTION

RESERVOIR COURSE (AASHTO NO. 3)

SIEVE	PERCENT PASSING
2 1/2 IN.	100%
2 IN.	90%-100%
1 1/2 IN.	35%-70%
1 IN.	0%-15%
1/2 IN.	0%-5%

95% COMPACTION

FILTER COURSE (MODIFIED NHDOT 304.1)

SIEVE	PERCENT PASSING
6 IN.	100%
NO. 4	70%-100%
NO. 200	0%-4%

95% COMPACTION

SAND FILL (IF REQUIRED, 310 CMR 15.255(3))

SIEVE	PERCENT PASSING
NO MATERIAL LARGER THAN 2". UP TO 45% BY WEIGHT MAY BE RETAINED ON THE #4 SIEVE. FOR THE FRACTION OF FILL PASSING THE #4 SIEVE, THE FOLLOWING SHALL APPLY:	
NO. 4	100%
NO. 50	10%-100%
NO. 100	0%-20%
NO. 200	0%-5%

95% COMPACTION

POROUS ASPHALT MIX

SIEVE	PERCENT PASSING
3/4 IN.	100%
1/2 IN.	85%-100%
3/8 IN.	55%-75%
NO. 4	10%-25%
NO. 8	5%-10%
NO. 200	2%-4%

BINDER CONTENT (AASHTO T164): 6-6.5%
FILTER CONTENT BY TOTAL MIXTURE MASS: 0.3% CELLULOSE OR 0.4% MINERAL
RUBBER SOLIDS (SBR) CONTENT BY WEIGHT OF BITUMEN: 1.5-3%
AIR VOID CONTENT: 16.0-22.0%
DRAINDOWN (ASTM D6390): ≤ 0.3%
RETAINED TENSILE STRENGTH (AASHTO 283): >20%
CANTABRO ABRASION TEST ON UNAGED SAMPLES: ≤20%
CANTABRO ABRASION TEST ON 7 DAY AGED SAMPLES: ≤30%

8 ACCESS DRIVE & PARKING SECTION POROUS PAVEMENT

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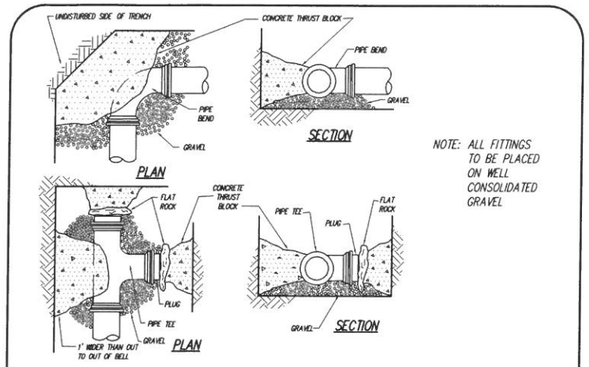
SHEET DT-1

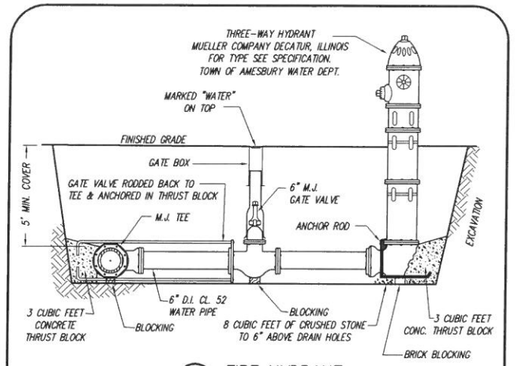


NOTE: ALL FITTINGS TO BE PLACED ON WELL CONSOLIDATED GRAVEL

1.) CONC. SHALL NOT INTERFERE WITH CONNECTION AT JOINT
2.) FITTING SHALL BE WRAPPED IN PLASTIC TO ALLOW FUTURE REMOVAL.
3.) MIN. 3000 PSI.

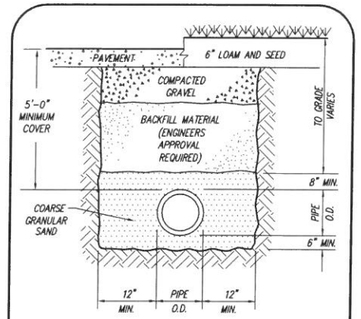
9 THRUST BLOCK PLACEMENT ON BENDS, TEES AND PLUGS

NOT TO SCALE



10 FIRE HYDRANT

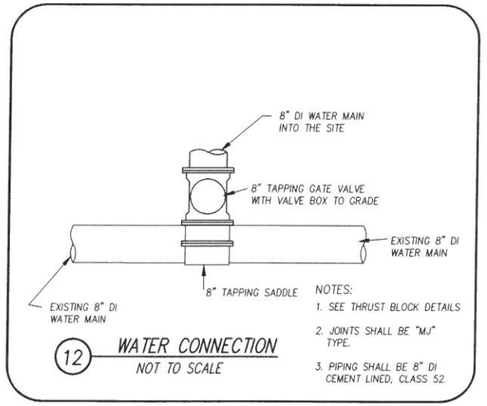
NOT TO SCALE



NOTE:
1. SEE SITE PLAN FOR PIPE SIZES AND SERVICE.
2. WATER PIPE TO BE DUCTILE IRON (D.I.) CLASS 52

11 WATER TRENCH

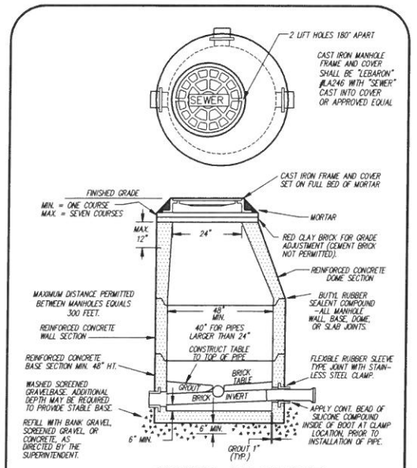
NOT TO SCALE



NOTES:
1. SEE THRUST BLOCK DETAILS
2. JOINTS SHALL BE "MJ" TYPE.
3. PIPING SHALL BE 8" DI CEMENT LINED, CLASS 52.

12 WATER CONNECTION

NOT TO SCALE



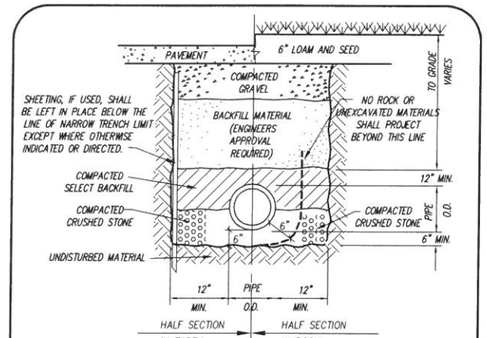
13 SEWER MANHOLE

NOT TO SCALE

MANHOLE TESTING

VACUUM TEST MANHOLE FOR LEAKAGE

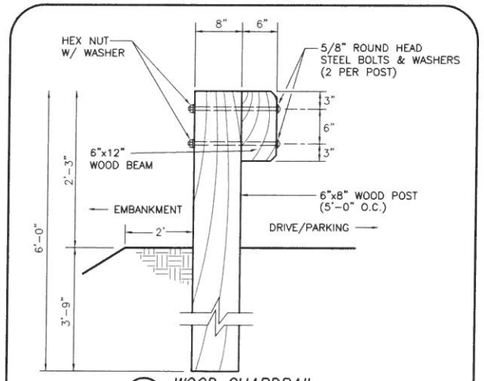
THE INITIAL VACUUM GAUGE TEST PRESSURE SHALL BE 10 INCHES Hg. THE MINIMUM TEST HOLD FOR A 1 INCH DROP TO 9 INCHES Hg SHALL BE NOT LESS THAN 2 MINUTES FOR MANHOLES LESS THAN 10 FEET DEEP, 2.5 MINUTES FOR MANHOLES 10 TO 15 FEET DEEP, AND 3 MINUTES FOR MANHOLES MORE THAN 15 FEET DEEP.



NOTE: SEWER PIPE TO BE 8" PVC SDR 35.

14 SEWER TRENCH

NOT TO SCALE



15 WOOD GUARDRAIL

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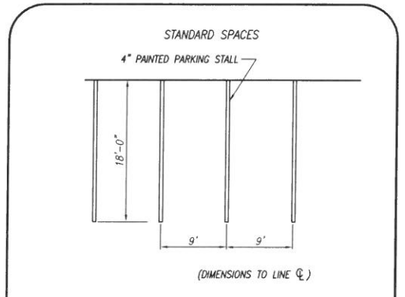
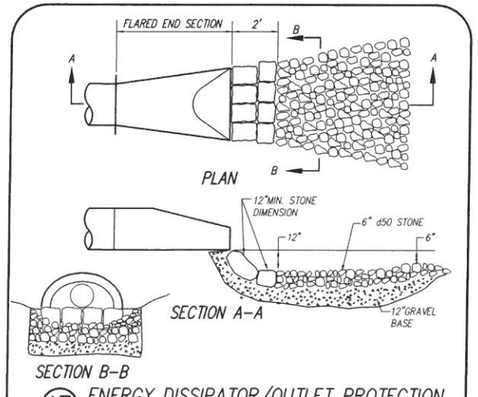


16 PARKING STALL LAYOUT

NOT TO SCALE

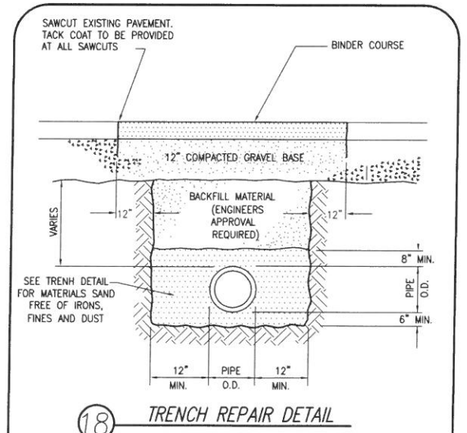


17 ENERGY DISSIPATOR/OUTLET PROTECTION

NOT TO SCALE

Maintenance

The outlet protection should be checked at least annually and after every major storm. If the rip-rap has been displaced, undermined or damaged, it should be repaired immediately. The channel immediately below the outlet should be checked to see that erosion is not occurring. The downstream channel should be kept clear of obstructions such as fallen trees, debris, and sediment that could change flow patterns and/or tailwater depths on the pipes. Repairs must be carried out immediately to avoid additional damage to the outlet protection apron.

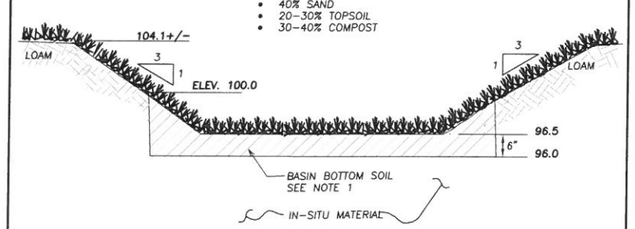


18 TRENCH REPAIR DETAIL

NOT TO SCALE

NOTE 1. THE SOIL MIX FOR THE INFILTRATION BASIN BOTTOM AREA PLANTING SOIL SHALL BE A MIXTURE OF SAND, TOPSOIL AND COMPOST AS FOLLOWS:

- 40% SAND
- 20-30% TOPSOIL
- 30-40% COMPOST



19 INFILTRATION BASIN CROSS SECTION

NOT TO SCALE

CAMMETT ENGINEERING
297 ELM STREET, AMESBURY, MA.
Phone: (978) 388-2157 Fax: (978) 388-0428
CONSULTING ENGINEERS & LAND SURVEYORS SINCE 1975
Visit us on the WEB at www.cammett.com

Sheet Title:

Misc. Details

Project Title:

Arc Technologies, Inc.
29 South Hunt Road
Amesbury, Ma.

Applicant:

Arc Technologies, Inc.
37 South Hunt Road
Amesbury, Ma.

Owner:

37 S. Hunt Road LLC
37 South Hunt Road
Amesbury, Ma.

REVISION

NO.	DATE	DESCRIPTION	BY

Date:

PROJ. MGR.:	D. Hamel
FIELD:	R. Brown, M. Michaud
DESIGN:	D. HAMEL
DRAWN:	D. HAMEL
CHECKED:	A. ROSCOE, W. CAMMETT
DATE:	08-24-2015
FILE:	K:\...\C3D\14061FE.dwg
FBK:	671
JOB #:	14061

SHEET DT-2

Appendix C

Copy of Construction General Permit

APPENDIX C

National Pollutant Discharge Elimination System
General Permit for Discharges from
Construction Activities

In compliance with the provisions of the Clean Water Act, 33 U.S.C. §1251 et. seq., (hereafter CWA or the Act), as amended by the Water Quality Act of 1987, P.L. 100-4, "operators" of construction activities (defined in Part 1.1.a and Appendix A) that meet the requirements of Part 1.1 of this National Pollutant Discharge Elimination System (NPDES) general permit, are authorized to discharge pollutants in accordance with the effluent limitations and conditions set forth herein. Permit coverage is required from the "commencement of earth-disturbing activities" (see Appendix A) until "final stabilization" (see Part 2.2).

This permit becomes effective on **February 16, 2012**. For the State of Idaho (except for Indian country), this permit becomes effective on **April 9, 2012**. For areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, this permit becomes effective on **April 13, 2012**. For projects located in the following areas, this permit becomes effective on **May 9, 2012**: Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin.

This permit and the authorization to discharge expire at midnight, **February 16, 2017**.

Signed and issued this 16th day of February, 2012

H. Curtis Spalding
Regional Administrator, Region 1

Signed and issued this 16th day of February, 2012

John Filippelli
Director, Division of Environmental Planning & Protection, Region 2

Signed and issued this 16th day of February, 2012

José C. Font
Acting Division Director, Carribbean Environmental Protection Division, Region 2, Caribbean Office

Signed and issued this 16th day of February, 2012

Catherine A. Libertz
Assistant Director, Water Protection Division, Region 3

Signed and issued this 16th day of February, 2012

James D. Giattina
Director, Water Protection Division, Region 4

Signed and issued this 16th day of February and 9th day of May, 2012

Tinka G. Hyde
Director, Water Division, Region 5

Signed and issued this 16th day of February, 2012

William K. Honker, P.E.
Acting Director, Water Quality Protection Division, Region 6

Signed and issued this 16th day of February, 2012

Karen Flournoy
Director, Wetlands and Pesticides Division, Region 7

Signed and issued this 16th day of February, 2012

Melanie L. Pallman
Acting Assistant Regional Administrator, Office of Partneships and Regulatory Assistance, Region 8

Signed and issued this 16th day of February, 2012

Nancy Woo
Deputy Director, Water Division, Region 9

Signed and issued this 16th day of February and 9th day of April, 2012

Michael J. Lidgard
Acting Director, Office of Water and Watersheds, Region 10

Signed and issued this 13th day of April, 2012

Christine Psyk
Associate Director, Office of Water and Watersheds, Region 10

The signatures are for the permit conditions in Parts 1 through 9 and Appendices A through K.

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1. HOW TO OBTAIN PERMIT COVERAGE UNDER THE CGP.

To be covered under this permit, you must meet the eligibility conditions and follow the requirements for applying for permit coverage in this Part.

1.1. ELIGIBILITY CONDITIONS REQUIRED OF ALL PROJECTS.

Only those projects that meet all of the following eligibility conditions may be covered under this permit:

a. You are an "operator" of the construction project for which discharges will be covered under this permit;

Note: For the purposes of this permit, an "operator" is any party associated with a construction project that meets either of the following two criteria:

1. *The party has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or*
2. *The party has day-to-day operational control of those activities at a project that are necessary to ensure compliance with the permit conditions (e.g., they are authorized to direct workers at a site to carry out activities required by the permit).*

Subcontractors generally are not considered operators for the purposes of this permit.

Note: Where there are multiple operators associated with the same project, all operators are required to obtain permit coverage. The following applies in these situations:

1. *If one operator has control over plans and specifications and a different operator has control over activities at the project site, they may divide responsibility for compliance with the terms of this permit as long as they develop a group SWPPP (see Part 7.1.1), which documents which operator has responsibility for each requirement of the permit.*
2. *If an operator only has operational control over a portion of a larger project (e.g., one of four homebuilders in a subdivision), the operator is responsible for compliance with all applicable effluent limits, terms, and conditions of this permit as it relates to the activities on their portion of the construction site, including protection of endangered species, critical habitat, and historic properties, and implementation of control measures described in the SWPPP in the areas under their control.*
3. *You must ensure either directly or through coordination with other permittees, that your activities do not render another party's pollutant discharge controls ineffective.*
4. *If the operator of a "construction support activity" (see Part 1.3.c) is different than the operator of the main construction site, that operator is also required to obtain permit coverage.*

b. Your project:

i. Will disturb 1 or more acres of land, or will disturb less than 1 acre of land but is part of a common plan of development or sale that will ultimately disturb 1 or more acres of land; or

ii. Your project's discharges have been designated by EPA as needing a permit under § 122.26(a)(1)(v) or § 122.26(b)(15)(ii);

c. Your project is located in an area where EPA is the permitting authority (see Appendix B);

d. Discharges from your project are not:

   i. Already covered by a different NPDES permit for the same discharge; or

   ii. In the process of having coverage under a different NPDES permit for the same discharge denied, terminated, or revoked.[1, 2]

e. You are able to demonstrate that you meet one of the criteria listed in Appendix D with respect to the protection of species that are federally-listed as endangered or threatened under the Endangered Species Act (ESA) or federally-designated critical habitat;

f. You have completed the screening process in Appendix E relating to the protection of historic properties and places; and

g. You have complied with all requirements in Part 9 imposed by the applicable state, Indian tribe, or territory in which your construction activities will occur.

1.2. ELIGIBILITY CONDITIONS THAT APPLY DEPENDING ON TYPE OF PROJECT.

You must also satisfy, if applicable, the conditions in Parts 1.2.1 through 1.2.4 in order to obtain coverage under this permit.

1.2.1. Eligibility for Emergency-Related Construction Activities.

If you are conducting earth-disturbing activities in response to a public emergency *(e.g., natural disaster, widespread disruption in essential public services)*, and the related work requires immediate authorization to avoid imminent endangerment to human health, public safety, or the environment, or to reestablish essential public services, you are authorized to discharge on the condition that a complete and accurate NOI is submitted within 30 calendar days after commencing earth-disturbing activities (see Table 1) establishing that you are eligible under this permit. You are also required to provide documentation in your SWPPP to substantiate the occurrence of the public emergency.

1.2.2. Water Quality Standards – Eligibility for New Sources.

If you are a "new source" (as defined in Appendix A), you are not eligible for coverage under this permit for discharges that EPA, prior to authorization under this permit, determines will cause, have the reasonable potential to cause, or contribute to an excursion above any applicable water quality standard. Where such a determination is made prior to authorization, EPA may notify you that an individual permit application is necessary in accordance with Part 1.4.5. However, EPA may authorize your coverage under this permit after you have included appropriate controls and implementation procedures designed to bring your discharge into compliance with water quality standards. In the absence of information demonstrating otherwise, EPA expects that compliance with the stormwater control requirements of this permit, including the requirements applicable to such discharges in Part 3.2, will result in discharges that will not cause, have the reasonable potential to cause, or contribute to an excursion above any applicable water quality standard.

---

[1] Parts 1.1.d.i and 1.1.d.ii do not include sites currently covered under the 2003 or 2008 CGPs, which are in the process of obtaining coverage under this permit, and sites covered under this permit, which are transferring coverage to a different operator.

[2] Notwithstanding a project being made ineligible for coverage under this permit because it falls under the description of Parts 1.1.d.i or 1.1.d.ii, above, EPA may waive the applicable requirement after specific review if it determines that coverage under this permit is appropriate.

1.2.3. Discharging to Waters with High Water Quality – Eligibility for New Sources.

If you are a "new source" (as defined in Appendix A), you are eligible to discharge to a Tier 2, Tier 2.5, or Tier 3 water only if your discharge will not lower the water quality of the applicable water. In the absence of information demonstrating otherwise, EPA expects that compliance with the stormwater control requirements of this permit, including the requirements applicable to such discharges in Part 3.3.2, will result in discharges that will not lower the water quality of the applicable water. See list of Tier 2, Tier 2.5, and Tier 3 waters in Appendix F.

Note: Your project will be considered to discharge to a Tier 2, Tier 2.5, or Tier 3 water if the first surface water to which you discharge is identified by a state, tribe, or EPA as a Tier 2, Tier 2.5, or Tier 3 water. For discharges that enter a storm sewer system prior to discharge, the first surface water to which you discharge is the waterbody that receives the stormwater discharge from the storm sewer system.

1.2.4. Use of Cationic Treatment Chemicals.

If you plan to use cationic treatment chemicals (as defined in Appendix A), you are ineligible for coverage under this permit, unless you notify your applicable EPA Regional Office in advance and the EPA office authorizes coverage under this permit after you have included appropriate controls and implementation procedures designed to ensure that your use of cationic treatment chemicals will not lead to a violation of water quality standards.

1.3. Types of Discharges Authorized Under the CGP.

The following is a list of discharges that are allowed under the permit provided that appropriate stormwater controls are designed, installed, and maintained:

a. Stormwater discharges, including stormwater runoff, snowmelt runoff, and surface runoff and drainage, associated with construction activity under 40 CFR § 122.26(b)(14) or § 122.26(b)(15)(i);

b. Stormwater discharges designated by EPA as needing a permit under 40 CFR § 122.26(a)(1)(v) or § 122.26(b)(15)(ii);

c. Stormwater discharges from construction support activities *(e.g., concrete or asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas, borrow areas)* provided:

   i. The support activity is directly related to the construction site required to have permit coverage for stormwater discharges;

   ii. The support activity is not a commercial operation, nor does it serve multiple unrelated construction projects;

   iii. The support activity does not continue to operate beyond the completion of the construction activity at the project it supports; and

   iv. Stormwater controls are implemented in accordance with Part 2 and, if applicable, Part 3, for discharges from the support activity areas.

d. The following non-stormwater discharges from your construction activity, provided that, with the exception of water used to control dust and to irrigate areas to be vegetatively stabilized, these discharges are not routed to areas of exposed soil on your site and you comply with any applicable requirements for these discharges in Part 2:

   i. Discharges from emergency fire-fighting activities;

ii. Fire hydrant flushings;

iii. Landscape irrigation;

iv. Water used to wash vehicles and equipment, provided that there is no discharge of soaps, solvents, or detergents used for such purposes;

v. Water used to control dust;

vi. Potable water including uncontaminated water line flushings;

vii. Routine external building washdown that does not use detergents;

viii. Pavement wash waters provided spills or leaks of toxic or hazardous materials have not occurred (unless all spill material has been removed) and where detergents are not used. You are prohibited from directing pavement wash waters directly into any surface water, storm drain inlet, or stormwater conveyance, unless the conveyance is connected to a sediment basin, sediment trap, or similarly effective control;

ix. Uncontaminated air conditioning or compressor condensate;

x. Uncontaminated, non-turbid discharges of ground water or spring water;

xi. Foundation or footing drains where flows are not contaminated with process materials such as solvents or contaminated ground water; and

xii. Construction dewatering water that has been treated by an appropriate control under Part 2.1.3.4; and

e. Discharges of stormwater listed above in Parts a, b, and c, or authorized non-stormwater discharges in Part d above, commingled with a discharge authorized by a different NPDES permit and/or a discharge that does not require NPDES permit authorization.

1.4. SUBMITTING YOUR NOTICE OF INTENT (NOI).

To be covered under this permit, you must submit to EPA a complete and accurate NOI prior to commencing construction activities. The NOI certifies to EPA that you are eligible for coverage according to Part 1.1 and 1.2, and provides information on your construction operation and discharge.

Note: All "operators" (as defined in Appendix A) associated with your construction project, who meet the Part 1.1 eligibility requirements, and who elect to seek coverage under this permit, are required to submit an NOI.

Note: There are two exceptions to the requirement to submit the NOI prior to the commencement of construction activities: (1) for emergency-related projects, and (2) for new projects scheduled to commence construction activities on or after February 16, 2012, but no later than March 1, 2012. [3] *For these two types of projects, the NOI*

[3] For new projects in the State of Idaho (except Indian country), if you are scheduled to commence construction activities on or after April 9, 2012, but no later than May 9, 2012, you must submit your NOI by no later than 30 calendar days after commencing earth-disturbing activities. For new projects in areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, if you are scheduled to commence construction activities on or after April 13, 2012, but no later than May 13, 2012, you must submit your NOI by no later than 30 calendar days after commencing earth-disturbing activities. For new projects in the following areas, if you are schedule to commence construction activities on or after May 9, 2012, but no later than June 8, 2012, you must submit your NOI by no later than 30 calendar days after commencing earth-disturbing activities: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin.

must be submitted within 30 calendar days after the commencement of earth-disturbing activities (see Part 1.4.2).

Note: You must complete the development of a Stormwater Pollution Prevention Plan (SWPPP) consistent with Part 7 prior to submitting your NOI for coverage under this permit.

1.4.1. How to Submit Your NOI.

You are required to use EPA's electronic NOI system, or "eNOI system", to prepare and submit your NOI. Go to www.epa.gov/npdes/stormwater/cgpenoi to access the eNOI system and file an NOI. If you have a problem with the use of the eNOI system, contact the EPA Regional Office that corresponds to the location of your site. If you are given approval by the EPA Regional Office to use a paper NOI, and you elect to use it, you must complete the form in Appendix J.

1.4.2. Deadlines for Submitting Your NOI and Your Official Date of Permit Coverage.

Table 1 provides the deadlines for submitting your NOI and your official start date of permit coverage, which differ depending on when you commence construction activities. The following terms are used in Table 1 to establish NOI deadlines:

a. New project – a construction project that commences construction activities on or after February 16, 2012, or or April 9, 2012 for the State of Idaho (except for Indian country), or April 13, 2012 for areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, or May 9, 2012 for projects located in the following areas: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin.

b. Existing project – a construction project that commenced construction activities prior to February 16, 2012, or April 9, 2012 for the State of Idaho (except for Indian country), or April 13, 2012 for areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, or May 9, 2012 for projects located in the following areas: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin.

c. New operator of a new or existing project – an operator that through transfer of ownership and/or operation replaces the operator of an already permitted construction project.

Table 1 NOI Submittal Deadlines and Official Start Date for Permit Coverage.

Type of Construction Project	Deadlines for Operators to Submit NOI	Official Start Date for Permit Coverage
New project	You must submit your NOI at least 14 calendar days prior to commencing earth-disturbing activities. Exception: If your project qualifies as an "emergency-related project" under Part 1.2.1, you must submit your NOI by no later than 30 calendar days after commencing	You are considered covered under this permit 14 calendar days after EPA has acknowledged receipt of your NOI on the Agency's website (www.epa.gov/npdes/stormwater/cgpnoisearch), unless EPA notifies you that your authorization has been delayed or denied. Exception: If your project qualifies as

Type of Construction Project	Deadlines for Operators to Submit NOI	Official Start Date for Permit Coverage
	earth-disturbing activities. Exception: If you are scheduled to commence construction activities on or after February 16, 2012, but no later than March 1, 2012, you must submit your NOI by no later than 30 calendar days after commencing earth-disturbing activities.[4]	an "emergency-related project" under Part 1.2.1, you are considered provisionally covered under the terms and conditions of this permit immediately, and fully covered 14 calendar days after EPA has acknowledged receipt of your NOI, unless EPA notifies you that your authorization has been delayed or denied. Exception: If you are scheduled to commence construction activities on or after February 16, 2012, but no later than March 1, 2012, you are considered provisionally covered under the terms and conditions of this permit immediately, and fully covered 14 calendar days after EPA has acknowledged receipt of your NOI, unless EPA notifies you that your authorization has been delayed or denied.[5]

[4] For new projects in the State of Idaho (except Indian country), if you are scheduled to commence construction activities on or after April 9, 2012, but no later than May 9, 2012, you must submit your NOI by no later than 30 calendar days after commencing earth-disturbing activities. For new projects in areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, if you are scheduled to commence construction activities on or after April 13, 2012, but no later than May 13, 2012, you must submit your NOI by no later than 30 calendar days after commencing earth-disturbing activities. For new projects located in the following areas, if you are scheduled to commence construction activities on or after May 9, 2012, but no later than June 8, 2012, you must submit your NOI by no later than 30 days after commencing earth-disturbing activities: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin.

[5] For new projects in the State of Idaho (except Indian country), if you are scheduled to commence construction activities on or after April 9, 2012, but no later than May 9, 2012, you are considered provisionally covered under the terms and conditions of this permit immediately, and fully covered 14 calendar days after EPA has acknowledged receipt of your NOI, unless EPA notifies you that your authorization has been delayed or denied. For new projects in areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, if you are scheduled to commence construction activities on or after April 13, 2012, but no later than May 13, 2012, you are considered provisionally covered under the terms and conditions of this permit immediately, and fully covered 14 calendar days after EPA has acknowledged receipt of your NOI, unless EPA notifies you that your authorization has been delayed or denied. For new projects located in the following areas, if you are scheduled to commence construction activities on or after May 9, 2012, but no later than June 8, 2012, you are considered provisionally covered under the terms and conditions of this permit immediately, and fully covered 14 calendar days after EPA has acknowledged receipt of your NOI, unless EPA notifies you that your authorization has been delayed or denied: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin.

Type of Construction Project	Deadlines for Operators to Submit NOI	Official Start Date for Permit Coverage
Existing project	You must submit your NOI by no later than May 16, 2012.[6] However, if you have not previously obtained coverage under an NPDES permit, you must submit your NOI immediately.	You are considered covered under this permit 14 calendar days after EPA has acknowledged receipt of your NOI on the Agency's website (www.epa.gov/npdes/stormwater/cgpnoisearch), unless EPA notifies you that your authorization has been delayed or denied.[7]
New operator of a new or existing project	You must submit your NOI at least 14 calendar days before the date the transfer to the new operator will take place.	You are considered covered under this permit 14 calendar days after EPA has acknowledged receipt of your NOI on the Agency's website (www.epa.gov/npdes/stormwater/cgpnoisearch), unless EPA notifies you that your authorization has been delayed or denied.

Note: If you have missed the deadline to submit your NOI, any and all discharges from your construction activities will continue to be unauthorized under the Clean Water Act until they are covered by this or a different NPDES permit. EPA may take enforcement action for any unpermitted discharges that occur between the commencement of earth-disturbing activities and discharge authorization.

Note: Discharges are not authorized if your NOI is incomplete or inaccurate or if you were never eligible for permit coverage.

1.4.3. Your Official End Date of Permit Coverage

Once covered under this permit, your coverage will last until the date that:

- You terminate permit coverage consistent with Part 8; or
- Your discharges are permitted under a different NPDES permit or a reissued or replacement version of this permit after expiring on February 16, 2017; or
- For existing projects that continue after this permit has expired, the deadline has passed for the submission of an NOI for coverage under a reissued or replacement version of this permit and you have failed to submit an NOI by the required deadline.

1.4.4. Continuation of Coverage for Existing Permittees After the Permit Expires.

If this permit is not reissued or replaced prior to the expiration date, it will be administratively continued in accordance with the Administrative Procedure Act and

[6] For existing projects located in the State of Idaho (except Indian country), NOIs must be submitted by no later than July 8, 2012. For existing projects located in areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, NOIs must be submitted by no later than July 12, 2012. For existing projects located in the following areas, NOIs must be submitted no later than August 7, 2012: the Fond Du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac Du Flambeau Band of Lake Superior Chippewa in Wisconsin.

[7] Note that if you are currently covered under the 2003 or 2008 CGP, this coverage continues until your coverage under this permit begins, provided you have submitted an NOI by the deadline.

remain in force and effect for discharges that were covered prior to expiration. If you were granted permit coverage prior to the expiration date, you will automatically remain covered by this permit until the earliest of:

- Your authorization for coverage under a reissued or replacement version of this permit following your timely submittal of a complete and accurate NOI requesting coverage under the new permit; or

  Note: If you fail to submit a timely NOI for coverage under the reissued or replacement permit, your coverage will terminate on the date that the NOI was due.

- Your submittal of a Notice of Termination; or
- Issuance or denial of an individual permit for the project's discharges; or
- A final permit decision by EPA not to reissue a general permit, at which time EPA will identify a reasonable time period for covered dischargers to seek coverage under an alternative general permit or an individual permit. Coverage under this permit will terminate at the end of this time period.

EPA reserves the right to modify or revoke and reissue this permit under 40 CFR 122.62 and 63, in which case you will be notified of any relevant changes or procedures to which you may be subject.

1.4.5. Procedures for Denial of Coverage.

Following your submittal of a complete and accurate NOI, you may be notified in writing by EPA that you are not covered, and that you must either apply for and/or obtain coverage under an individual NPDES permit or an alternate general NPDES permit. This notification will include a brief statement of the reasons for this decision and will provide application information. Any interested person may request that EPA consider requiring an individual permit under this paragraph.

If you are already a permittee with coverage under this permit, the notice will set a deadline to file the permit application, and will include a statement that on the effective date of the individual NPDES permit or alternate general NPDES permit, as it applies to you, coverage under this general permit will terminate. EPA may grant additional time to submit the application if you request it. If you are covered under this permit and fail to submit an individual NPDES permit application or an NOI for an alternate general NPDES permit as required by EPA, then the applicability of this permit to you is terminated at the end of the day specified by EPA as the deadline for application submittal. EPA may take appropriate enforcement action for any unpermitted discharge. If you submit a timely permit application, then when an individual NPDES permit is issued to you or you are provided with coverage under an alternate general NPDES permit, your coverage under this permit is terminated on the effective date of the individual permit or date of coverage under the alternate general permit.

1.5. REQUIREMENT TO POST A NOTICE OF YOUR PERMIT COVERAGE.

You must post a sign or other notice conspicuously at a safe, publicly accessible location in close proximity to the project site. At a minimum, the notice must include the NPDES Permit tracking number and a contact name and phone number for obtaining additional project information. The notice must be located so that it is visible from the public road that is nearest to the active part of the construction site, and it must use a font large enough to be readily viewed from a public right-of-way.

2. EFFLUENT LIMITATIONS APPLICABLE TO ALL DISCHARGES FROM CONSTRUCTION SITES

You are required to comply with the following effluent limitations in this Part for discharges from your site and/or from construction support activities (see Part 1.3.c).

Note: If your project is an "existing project" (see Part 1.4.2.b) or if you are a "new operator of an existing project" (see Part 1.4.2.c), and it is infeasible for you to comply with a specific requirement in this Part because (1) the requirement was not part of the permit you were previously covered under (i.e., the 2003 or 2008 CGP), and (2) because you are prevented from compliance due to the nature or location of earth disturbances that commenced prior to February 16, 2012 (or prior to April 9, 2012 for projects in the State of Idaho (except for Indian country), or prior to April 13, 2012 for projects in areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, or prior to May 9, 2012 for projects located in the following areas: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin), or because you are unable to comply with the requirement due to the manner in which stormwater controls have already been installed or were already designed prior to February 16, 2012 (or prior to April 9, 2012 for projects in the State of Idaho (except for Indian country), or prior to April 13, 2012 for projects in areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, or prior to May 9, 2012 for projects located in the following areas: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin), you are required to document this fact in your SWPPP and are waived from complying with that requirement. This flexibility applies only to the requirements in Parts 2.1, and 2.3.3 through 2.3.5 (except for Parts 2.3.3.1, 2.3.3.2b, 2.3.3.3c.i, and 2.3.3.4). This only applies to those portions of your site that have already commenced earth-disturbing activities or where stormwater controls implemented in compliance with the previous permit have already been installed.

Part 2 includes the following types of requirements:

- Erosion and Sediment Control Requirements (Part 2.1)
- Stabilization Requirements (Part 2.2)
- Pollution Prevention Requirements (Part 2.3)

2.1. EROSION AND SEDIMENT CONTROL REQUIREMENTS.

You must design, install, and maintain erosion and sediment controls that minimize the discharge of pollutants from earth-disturbing activities. To meet this requirement, you must comply with the following provisions.

2.1.1. General Requirements Applicable to All Construction Sites.

2.1.1.1 ***Area of Disturbance.*** You are required to minimize the amount of soil exposed during construction activities. You are also subject to the deadlines for temporarily and/or permanently stabilizing exposed portions of your site pursuant to Part 2.2.

2.1.1.2 ***Design Requirements.***

a. You must account for the following factors in designing your stormwater controls:

i. The expected amount, frequency, intensity, and duration of precipitation;

ii. The nature of stormwater runoff and run-on at the site, including factors such as expected flow from impervious surfaces, slopes, and site drainage features. If any stormwater flow will be channelized at your site, you must design stormwater controls to control both peak flowrates and total stormwater volume to minimize erosion at outlets and to minimize downstream channel and streambank erosion; and

iii. The range of soil particle sizes expected to be present on the site.

b. You must direct discharges from your stormwater controls to vegetated areas of your site to increase sediment removal and maximize stormwater infiltration, including any natural buffers established under Part 2.1.2.1, unless infeasible. Use velocity dissipation devices if necessary to prevent erosion when directing stormwater to vegetated areas.

2.1.1.3 ***Installation Requirements.***

a. **Complete installation of stormwater controls by the time each phase of earth-disturbance has begun, unless infeasible.** By the time earth-disturbing activities in any given portion of your site have begun, unless infeasible, you must install and make operational any downgradient sediment controls *(e.g., buffers or equivalent sediment controls, perimeter controls, exit point controls, storm drain inlet protection)* that control discharges from the initial site clearing, grading, excavating, and other land-disturbing activities.

Note: Where it is infeasible to install stormwater controls prior to the initial earth disturbance, it is EPA's expectation that it will be a rare circumstance that will prevent the operator from installing such controls immediately following the initial earth disturbance.

Following the installation of these initial controls, all other stormwater controls planned for this portion of your site and described in your SWPPP must be installed and made operational as soon as conditions on the site allow.

Note: The requirement to install stormwater controls prior to earth-disturbance for each phase of the project does not apply to the earth disturbance associated with the actual installation of these controls.

b. **Use good engineering practices and follow manufacturer's specifications.** You must install all stormwater controls in accordance with good engineering practices, including applicable design specifications.

Note: Design specifications may be found in manufacturer specifications and/or in applicable erosion and sediment control manuals or ordinances. Any departures from such specifications must reflect good engineering practice and must be explained in your SWPPP.

2.1.1.4 ***Maintenance Requirements.***

a. You must ensure that all erosion and sediment controls required in this Part remain in effective operating condition during permit coverage and are protected from activities that would reduce their effectiveness.

b. You must inspect all erosion and sediment controls in accordance with the applicable requirements in Part 4.1, and document your findings in accordance with Part 4.1.7. If you find a problem *(e.g., erosion and sediment controls need to be replaced, repaired, or maintained)*, you must make the necessary repairs or modifications in accordance with the following schedule:

i. Initiate work to fix the problem immediately after discovering the problem, and complete such work by the close of the next work day, if the problem does not require significant repair or replacement, or if the problem can be corrected through routine maintenance.

ii. When installation of a new erosion or sediment control or a significant repair is needed, you must install the new or modified control and make it operational, or complete the repair, by no later than 7 calendar days from the time of discovery where feasible. If it is infeasible to complete the installation or repair within 7 calendar days, you must document in your records why it is infeasible to complete the installation or repair within the 7-day timeframe and document your schedule for installing the stormwater control(s) and making it operational as soon as practicable after the 7-day timeframe. Where these actions result in changes to any of the stormwater controls or procedures documented in your SWPPP, you must modify your SWPPP accordingly within 7 calendar days of completing this work.

2.1.2. Erosion and Sediment Control Requirements Applicable to All Sites.

2.1.2.1 **Provide Natural Buffers or Equivalent Sediment Controls.** (These requirements only apply when a surface water is located within 50 feet of your project's earth disturbances).

Note: EPA does not consider stormwater control features (e.g., stormwater conveyance channels, storm drain inlets, sediment basins) to constitute "surface waters" for the purposes of triggering the requirement to comply with this Part.

Note: Areas that you do not own or that are otherwise outside your operational control may be considered areas of undisturbed natural buffer for purposes of compliance with this part.

You must ensure that any discharges to surface waters through the area between the disturbed portions of the property and any surface waters located within 50 feet of your site are treated by an area of undisturbed natural buffer and/or additional erosion and sediment controls in order to achieve a reduction in sediment load equivalent to that achieved by a 50-foot natural buffer. Refer to Appendix G (Buffer Guidance) for information to assist you in complying with this requirement, and to Part 2.1.2.1e for exceptions to this requirement.

a. **Compliance Alternatives.** You can comply with this requirement in one of the following ways:

i. Provide and maintain a 50-foot undisturbed natural buffer; or

Note: If your earth disturbances are located 50 feet or further from a surface water, then you have complied with this alternative.

ii. Provide and maintain an undisturbed natural buffer that is less than 50 feet and is supplemented by additional erosion and sediment controls, which in combination achieves the sediment load reduction equivalent to a 50-foot undisturbed natural buffer; or

iii. If it is infeasible to provide and maintain an undisturbed natural buffer of any size, you must implement erosion and sediment

controls that achieve the sediment load reduction equivalent to a 50-foot undisturbed natural buffer.

Note: For the compliance alternatives in Parts 2.1.2.1a.i and 2.1.2.1a.ii, you are not required to enhance the quality of the vegetation that already exists in the buffer, or provide vegetation if none exists (e.g., arid and semi-arid areas). You only need to retain and protect from disturbance the natural buffer that existed prior to the commencement of construction. Any preexisting structures or impervious surfaces are allowed in the natural buffer provided you retain and protect from disturbance the natural buffer area outside the preexisting disturbance. Similarly, for alternatives 2.1.2.1a.ii and 2.1.2.1a.iii, you are required to implement and maintain sediment controls that achieve the sediment load reduction equivalent to the undisturbed natural buffer that existed on the site prior to the commencement of construction. In determining equivalent sediment load reductions, you may consider naturally non-vegetated areas and prior disturbances. See Appendix G for a discussion of how to determine equivalent reductions.

You must document the compliance alternative you have selected in your SWPPP, and comply with the applicable additional requirements described in Parts 2.1.2.1b and 2.1.2.1c below.

The compliance alternative selected above must be maintained throughout the duration of permit coverage, except that you may select a different compliance alternative during your period of permit coverage, in which case you must modify your SWPPP to reflect this change.

b. **Additional Requirements for the Compliance Alternatives in Parts 2.1.2.1a.i and 2.1.2.1a.ii.** If you choose either of the compliance alternatives in Parts 2.1.2.1a.i or 2.1.2.1a.ii above, throughout your period of coverage under this permit, you must comply with the following additional requirements:

   i. Ensure that all discharges from the area of earth disturbance to the natural buffer are first treated by the site's erosion and sediment controls, and use velocity dissipation devices if necessary to prevent erosion caused by stormwater within the buffer;

   ii. Document in your SWPPP the natural buffer width retained on the property, and show the buffer boundary on your site plan; and

   iii. Delineate, and clearly mark off, with flags, tape, or other similar marking device all natural buffer areas.

c. **Additional Requirements for the Compliance Alternatives in Parts 2.1.2.1a.ii and 2.1.2.1a.iii.** If you choose either of the compliance alternatives in Parts 2.1.2.1a.ii and 2.1.2.1a.iii, you must document in your SWPPP the erosion and sediment control(s) you will use to achieve an equivalent sediment reduction, and any information you relied upon to demonstrate the equivalency.

d. **Additional Requirement for the Compliance Alternative in Part 2.1.2.1a.iii.** If you choose the compliance alternative in Part 2.1.2.1a.iii, you must also

include in your SWPPP a description of why it is infeasible for you to provide and maintain an undisturbed natural buffer of any size.

e. **Exceptions.**

i. If there is no discharge of stormwater to surface waters through the area between your site and any surface waters located within 50 feet of your site, you are not required to comply with the requirements in this Part. This includes situations where you have implemented control measures, such as a berm or other barrier, that will prevent such discharges.

ii. Where no natural buffer exists due to preexisting development disturbances *(e.g., structures, impervious surfaces)* that occurred prior to the initiation of planning for the current development of the site, you are not required to comply with the requirements in this Part, unless you will remove portions of the preexisting development.

Where some natural buffer exists but portions of the area within 50 feet of the surface water are occupied by preexisting development disturbances, you are required to comply with the requirements in this Part. For the purposes of calculating the sediment load reduction for either Part 2.1.2.1a.ii or 2.1.2.1a.iii above, you are not expected to compensate for the reduction in buffer function from the area covered by these preexisting disturbances. See Appendix G for further information on how to comply with the compliance alternatives in Part 2.1.2.1a.ii or 2.1.2.1a.iii above.

If during your project, you will disturb any portion of these preexisting disturbances, the area disturbed will be deducted from the area treated as natural buffer.

iii. For "linear construction projects" (see Appendix A), you are not required to comply with the requirements in this Part if site constraints (*e.g., limited right-of-way*) prevent you from meeting any of the compliance alternatives in Part 2.1.2.1a, provided that, to the extent practicable, you limit disturbances within 50 feet of the surface water and/or you provide supplemental erosion and sediment controls to treat stormwater discharges from earth disturbances within 50 feet of the surface water. You must also document in your SWPPP your rationale as to why it is infeasible for you to comply with the requirements in Part 2.1.2.1a, and describe any buffer width retained and/or supplemental erosion and sediment controls installed.

iv. For "small residential lot" construction (*i.e., a lot being developed for residential purposes that will disturb less than 1 acre of land, but is part of a larger residential project that will ultimately disturb greater than or equal to 1 acre*), you have the option of complying with the requirements in Appendix G (Part G.2.3).

v. The following disturbances within 50 feet of a surface water are exempt from the requirements in this Part:

- Construction approved under a CWA Section 404 permit; or
- Construction of a water-dependent structure or water access area *(e.g., pier, boat ramp, trail)*.

You must document in your SWPPP if any of the above disturbances will occur within the buffer area on your site.

2.1.2.2 ***Install Perimeter Controls.***

a. **Installation Requirements:** You must install sediment controls along those perimeter areas of your site that will receive stormwater from earth-disturbing activities.[8]

For linear projects with rights-of-way that restrict or prevent the use of such perimeter controls, you must maximize the use of these controls where practicable and document in your SWPPP why it is impracticable in other areas of the project.

b. **Maintenance Requirements:** You must remove sediment before it has accumulated to one-half of the above-ground height of any perimeter control.

2.1.2.3 ***Minimize Sediment Track-Out.*** You must minimize the track-out of sediment onto off-site streets, other paved areas, and sidewalks from vehicles exiting your construction site. To comply with this requirement, you must:

a. Restrict vehicle use to properly designated exit points;

b. Use appropriate stabilization techniques[9] at all points that exit onto paved roads so that sediment removal occurs prior to vehicle exit;

c. Where necessary, use additional controls[10] to remove sediment from vehicle tires prior to exit; and

d. Where sediment has been tracked-out from your site onto the surface of off-site streets, other paved areas, and sidewalks, you must remove the deposited sediment by the end of the same work day in which the track-out occurs or by the end of the next work day if track-out occurs on a non-work day. You must remove the track-out by sweeping, shoveling, or vacuuming these surfaces, or by using other similarly effective means of sediment removal. You are prohibited from hosing or sweeping tracked-out sediment into any stormwater conveyance (unless it is connected to a sediment basin, sediment trap, or similarly effective control), storm drain inlet, or surface water.

Note: EPA recognizes that some fine grains may remain visible on the surfaces of off-site streets, other paved areas, and sidewalks even after you have implemented sediment removal practices. Such "staining" is not a violation of Part 2.1.2.3.

2.1.2.4 **Control Discharges from Stockpiled Sediment or Soil.** For any stockpiles or land clearing debris composed, in whole or in part, of sediment or soil, you must comply with the following requirements:

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[8] Examples of perimeter controls include, but are not limited to, filter berms, silt fences, and temporary diversion dikes.

[9] Examples of appropriate stabilization techniques include the use of aggregate stone with an underlying geotextile or non-woven filter fabric, or turf mats.

[10] Examples of additional controls to remove sediment from vehicle tires include, but are not limited to, wheel washing, rumble strips, and rattle plates.

Note: For the purposes of this permit, sediment or soil stockpiles are defined as the storage for multiple days of soil or other sediment material to be used in the construction project.

a. Locate the piles outside of any natural buffers established under Part 2.1.2.1a and physically separated from other stormwater controls implemented in accordance with Part 2.1;

b. Protect from contact with stormwater (including run-on) using a temporary perimeter sediment barrier;[11]

c. Where practicable, provide cover or appropriate temporary stabilization to avoid direct contact with precipitation or to minimize sediment discharge;

d. Do not hose down or sweep soil or sediment accumulated on pavement or other impervious surfaces into any stormwater conveyance (unless connected to a sediment basin, sediment trap, or similarly effective control), storm drain inlet, or surface water; and

e. Unless infeasible, contain and securely protect from wind.

2.1.2.5 ***Minimize Dust.*** In order to avoid pollutants from being discharged into surface waters, to the extent feasible, you must minimize the generation of dust through the appropriate application of water or other dust suppression techniques.

2.1.2.6 ***Minimize the Disturbance of Steep Slopes.*** You must minimize the disturbance of "steep slopes" (see definition in Appendix A).

Note: The permit does not prevent or prohibit disturbance on steep slopes. For some projects, disturbance on steep slopes may be necessary for construction (e.g., a road cut in mountainous terrain). If a disturbance to steep slopes is required for the project, EPA would recognize that it is not economically achievable to avoid the disturbance to steep slopes. However, in cases where steep slope disturbances are required, minimizing the disturbances to steep slopes consistent with this requirement can be accomplished through the implementation of a number of standard erosion and sediment control practices, such as by phasing disturbances to these areas and using stabilization practices designed to be used on steep grades.

2.1.2.7 ***Preserve Topsoil.*** You must preserve native topsoil on your site, unless infeasible.

Note: Some projects may be designed to be highly impervious after construction, and therefore little or no vegetation is intended to remain. In these cases, preserving topsoil at the site would not be feasible. Some sites may not have space to stockpile topsoil on site for later use, in which case, it may also not be feasible to preserve topsoil.

Note: Stockpiling of topsoil at off-site locations, or transfer of topsoil to other locations, is an example of a practice that is consistent with the requirements in this Part.

2.1.2.8 ***Minimize Soil Compaction.*** In areas of your site where final vegetative stabilization will occur or where infiltration practices will be installed, you must either:

[11] Examples include berms, dikes, fiber rolls, silt fences, sandbag, gravel bags, or straw bale.

a. **Restrict vehicle / equipment use.** Restrict vehicle and equipment use in these locations to avoid soil compaction; or

b. **Use soil conditioning techniques.** Prior to seeding or planting areas of exposed soil that have been compacted, use techniques that condition the soils to support vegetative growth, if necessary and feasible.

2.1.2.9 ***Protect Storm Drain Inlets.*** If you discharge to any storm drain inlet that carries stormwater flow from your site directly to a surface water (and it is not first directed to a sediment basin, sediment trap, or similarly effective control), and you have authority to access the storm drain inlet, you must:

a. **Installation Requirements.** Install inlet protection measures[12] that remove sediment from your discharge prior to entry into the storm drain inlet.

Note: Inlet protection measures can be removed in the event of flood conditions or to prevent erosion.

b. **Maintenance Requirements.** Clean, or remove and replace, the protection measures as sediment accumulates, the filter becomes clogged, and/or performance is compromised. Where there is evidence of sediment accumulation adjacent to the inlet protection measure, you must remove the deposited sediment by the end of the same work day in which it is found or by the end of the following work day if removal by the same work day is not feasible.

2.1.3. Requirements Applicable Only to Sites Using These Specific Stormwater Controls.

You are required to comply with the following requirements if you will install any of the following stormwater controls at your site:

2.1.3.1 ***Constructed Stormwater Conveyance Channels.*** Design stormwater conveyance channels to avoid unstabilized areas on the site and to reduce erosion, unless infeasible. Minimize erosion of channels and their embankments, outlets, adjacent streambanks, slopes, and downstream waters during discharge conditions through the use of erosion controls and velocity dissipation devices[13] within and along the length of any constructed stormwater conveyance channel, and at any outlet to provide a non-erosive flow velocity.

2.1.3.2 ***Sediment Basins.*** If you install a sediment basin , you must comply with the following:

a. **Design requirements.**

i. Provide storage for either (1) the calculated volume of runoff from a 2-year, 24-hour storm (see Appendix H), or (2) 3,600 cubic feet per acre drained;

ii. When discharging from the sediment basin, utilize outlet structures that withdraw water from the surface in order to minimize the discharge of pollutants, unless infeasible;

[12] Examples of inlet protection measures include fabric filters, sandbags, concrete blocks, and gravel barriers.

[13] Examples of velocity dissipation devices include check dams, sediment traps, riprap, or grouted riprap at outlets.

Note: EPA believes that the circumstances in which it is infeasible to design outlet structures in this manner are rare. Exceptions may include areas with extended cold weather, where surface outlets may not be feasible during certain time periods (although it is expected that they would be used during other periods). If you have determined that it is infeasible to meet this requirement, you must provide documentation in your SWPPP to support your determination.

iii. Prevent erosion of (1) the sediment basin using stabilization controls *(e.g., erosion control blankets)*, and (2) the inlet and outlet using erosion controls and velocity dissipation devices; and

iv. Sediment basins must be situated outside of surface waters and any natural buffers established under Part 2.1.2.1a, and must be designed to avoid collecting water from wetlands.

b. **Maintenance requirements.** Keep in effective operating condition and remove accumulated sediment to maintain at least ½ of the design capacity of the sediment basin at all times.

2.1.3.3 ***Use of Treatment Chemicals.*** If you are using polymers, flocculants, or other treatment chemicals at your site, you must comply with the following minimum requirements:

a. **Use conventional erosion and sediment controls prior to and after the application of treatment chemicals.** Use conventional erosion and sediment controls prior to chemical addition to ensure effective treatment. Chemicals may only be applied where treated stormwater is directed to a sediment control *(e.g., sediment basin, perimeter control)* prior to discharge.

b. **Select appropriate treatment chemicals.** Chemicals must be selected that are appropriately suited to the types of soils likely to be exposed during construction and discharged to locations where chemicals will be applied, and to the expected turbidity, pH, and flow rate of stormwater flowing into the chemical treatment system or area.

c. **Minimize discharge risk from stored chemicals.** Store all treatment chemicals in leak-proof containers that are kept under storm-resistant cover and surrounded by secondary containment structures *(e.g., spill berms, decks, spill containment pallets)*, or provide equivalent measures, designed and maintained to minimize the potential discharge of treatment chemicals in stormwater or by any other means *(e.g., storing chemicals in covered area or having a spill kit available on site)*.

d. **Comply with state/local requirements.** Comply with relevant state and local requirements affecting the use of treatment chemicals.

e. **Use chemicals in accordance with good engineering practices and specifications of the chemical provider/supplier.** You must also use treatment chemicals and chemical treatment systems in accordance with good engineering practices, and with dosing specifications and sediment removal design specifications provided by the provider/supplier of the applicable chemicals, or document specific departures from these practices or specifications and how they reflect good engineering practice.

f. **Ensure proper training.** Ensure that all persons who handle and use treatment chemicals at the construction site are provided with appropriate, product-specific training. Among other things, the training must cover proper dosing requirements.

g. **Comply with additional requirements for the approved use of cationic chemicals.** If you have been authorized to use cationic chemicals at your site pursuant to Part 1.2.4, and the authorization is conditioned on your compliance with additional requirements necessary to ensure that the use of such chemicals will not cause an exceedance of water quality standards, you are required to comply with all such requirements.

h. **Provide proper SWPPP documentation.** You must include documentation in your SWPPP consistent with Parts 7.2.6.9 and 7.2.10.2 on the specific chemicals and chemical treatment systems you will use, and how you will comply with the requirements in this Part.

2.1.3.4 ***Dewatering Practices.*** You are prohibited from discharging ground water or accumulated stormwater that is removed from excavations, trenches, foundations, vaults, or other similar points of accumulation, unless such waters are first effectively managed by appropriate controls.[14] Uncontaminated, non-turbid dewatering water can be discharged without being routed to a control.

You must also meet the following requirements for dewatering activities:

a. **Discharge requirements.**

i. Do not discharge visible floating solids or foam;

ii. Use an oil-water separator or suitable filtration device (such as a cartridge filter) that is designed to remove oil, grease, or other products if dewatering water is found to contain these materials;

iii. To the extent feasible, utilize vegetated, upland areas of the site to infiltrate dewatering water before discharge. In no case will surface waters be considered part of the treatment area;

iv. At all points where dewatering water is discharged, comply with the velocity dissipation requirements of Part 2.1.3.1;

v. With backwash water, either haul it away for disposal or return it to the beginning of the treatment process; and

vi. Replace and clean the filter media used in dewatering devices when the pressure differential equals or exceeds the manufacturer's specifications.

b. **Treatment chemical restrictions.** If you are using polymers, flocculants, or other treatment chemicals to treat dewatering water, you must comply with the requirements in Parts 2.1.3.3.

2.2. STABILIZATION REQUIREMENTS.

You are required to stabilize exposed portions of your site in accordance with the requirements of this Part.

[14] Examples of appropriate controls include, but are not limited to, sediment basins or sediment traps, sediment socks, dewatering tanks, tube settlers, weir tanks, or filtration systems (e.g., bag or sand filters) that are designed to remove sediment.

Note: For the purposes of this permit, "exposed portions of your site" means areas of exposed soil that are required to be stabilized. Note that EPA does not expect that temporary or permanent stabilization measures to be applied to areas that are intended to be left unvegetated or unstabilized following construction (e.g., dirt access roads, utility pole pads, areas being used for storage of vehicles, equipment, or materials).

2.2.1. Deadlines for Initiating and Completing Stabilization.

2.2.1.1 ***Deadline to Initiate Stabilization.*** You must initiate soil stabilization measures immediately whenever earth-disturbing activities have permanently or temporarily ceased on any portion of the site.

Note: Earth-disturbing activities have permanently ceased when clearing and excavation within any area of your construction site that will not include permanent structures has been completed.

Note: Earth-disturbing activities have temporarily ceased when clearing, grading, and excavation within any area of the site that will not include permanent structures will not resume (i.e., the land will be idle) for a period of 14 or more calendar days, but such activities will resume in the future.

The 14 calendar day timeframe above begins counting as soon as you know that construction work on a portion of your site will be temporarily ceased. In circumstances where you experience unplanned or unanticipated delays in construction due to circumstances beyond your control (e.g., sudden work stoppage due to unanticipated problems associated with construction labor, funding, or other issues related to the ability to work on the site; weather conditions rendering the site unsuitable for the continuation of construction work) and you do not know at first how long the work stoppage will continue, your requirement to immediately initiate stabilization is triggered as soon as you know with reasonable certainty that work will be stopped for 14 or more additional calendar days. At that point, you must comply with Parts 2.2.1.1 and 2.2.1.2.

Note: For the purposes of this permit, EPA will consider any of the following types of activities to constitute the initiation of stabilization:

1. *prepping the soil for vegetative or non-vegetative stabilization;*
2. *applying mulch or other non-vegetative product to the exposed area;*
3. *seeding or planting the exposed area;*
4. *starting any of the activities in # 1 – 3 on a portion of the area to be stabilized, but not on the entire area; and*
5. *finalizing arrangements to have stabilization product fully installed in compliance with the applicable deadline for completing stabilization in Parts 2.2.1.2 and 2.2.1.3.*

This list of examples is not exhaustive.

Note: The term "immediately" is used to define the deadline for initiating stabilization measures. In the context of this provision, "immediately" means as soon as practicable, but no later than the end of the next work day, following the day when the earth-disturbing activities have temporarily or permanently ceased.

2.2.1.2 ***Deadline to Complete Stabilization Activities.*** As soon as practicable, but no later than 14 calendar days after the initiation of soil stabilization measures consistent with Part 2.2.1.1[15], you are required to have completed:

[15] EPA may determine, based on an inspection carried out under Part 4.2 and corrective actions required under Part 5.3, that the level of sediment discharge on the site makes it necessary to require a faster schedule for completing stabilization. For instance, if sediment discharges from an area of exposed soil

a. For vegetative stabilization, all activities[16] necessary to initially seed or plant the area to be stabilized; and/or

b. For non-vegetative stabilization, the installation or application of all such non-vegetative measures.

2.2.1.3 ***Exceptions to the Deadlines for Initiating and Completing Stabilization.***

a. *Deadlines for projects occurring in arid or semi-arid areas, or drought-stricken areas.* These requirements apply if (1) your site is located in an arid area, a semi-arid area, or a drought-stricken area, as these terms are defined in Appendix A, (2) construction will occur during the seasonally dry period or during a period in which drought is predicted to occur, and (3) you are using vegetative cover for temporary or permanent stabilization. You may also comply with the deadlines in Part 2.2.1.1 instead. The deadlines for these types of projects are as follows:

i. Immediately initiate, and within 14 calendar days of a temporary or permanent cessation of work in any portion of your site complete, the installation of temporary non-vegetative stabilization measures to the extent necessary to prevent erosion;

ii. As soon as practicable, given conditions or circumstances on your site, complete all activities necessary to initially seed or plant the area to be stabilized; and

iii. If construction is occurring during the seasonally dry period, indicate in your SWPPP the beginning and ending dates of the seasonally dry period and your site conditions. You must also include the schedule you will follow for initiating and completing vegetative stabilization.

b. *Deadlines for projects that are affected by circumstances beyond the control of the permittee that delay the initiation and/or completion of vegetative stabilization as required in Parts 2.2.1.1 and/or 2.2.1.2.* If you are unable to meet the deadlines in Parts 2.2.1.1and/or 2.2.1.2 due to circumstances beyond your control[17], and you are using vegetative cover for temporary or permanent stabilization, you may comply with the following stabilization deadlines instead:

i. Immediately initiate, and within 14 calendar days complete, the installation of temporary non-vegetative stabilization measures to prevent erosion;

ii. Complete all soil conditioning, seeding, watering or irrigation installation, mulching, and other required activities related to the planting and initial establishment of vegetation as soon as conditions or circumstances allow it on your site; and

that is required to be stabilized are compromising the performance of existing stormwater controls, EPA may require stabilization to correct this problem.

[16] For example, such activities might include, but are not limited to, soil conditioning, application of seed or sod, planting of seedlings or other vegetation, application of fertilizer, and, as deemed appropriate, watering.

[17] Examples include problems with the supply of seed stock or with the availability of specialized equipment, unsuitability of soil conditions due to excessive precipitation and/or flooding.

Note: You are required to have stabilized the exposed portions of your site consistent with Part 2.2.2 prior to terminating permit coverage under Part 8.2.

iii. Document the circumstances that prevent you from meeting the deadlines required in Parts 2.2.1.1and/or 2.2.1.2 and the schedule you will follow for initiating and completing stabilization.

c. *Deadlines for sites discharging to sensitive waters.* For any portion of the site that discharges to a sediment or nutrient-impaired water (see Part 3.2) or to a water that is identified by your state, tribe, or EPA as Tier 2, Tier 2.5, or Tier 3 for antidegradation purposes (see Part 3.3), you are required to complete the stabilization activities specified in Parts 2.2.1.2a and/or 2.2.1.2b within 7 calendar days after the temporary or permanent cessation of earth-disturbing activities.

Note: If you qualify for the deadlines for initiating and completing stabilization in Part 2.2.1.3a or b, you may comply with the stabilization deadlines in Part 2.2.1.3a or b for any portion of your site that discharges to a sensitive water.

2.2.2. Criteria for Stabilization.

To be considered adequately stabilized, you must meet the criteria below depending on the type of cover you are using, either vegetative or non-vegetative.

2.2.2.1 ***Vegetative Stabilization.***

a. ***For all sites, except those located in arid or semi-arid areas or on agricultural lands.***

i. If you are vegetatively stabilizing any exposed portion of your site through the use of seed or planted vegetation, you must provide established uniform vegetation *(e.g., evenly distributed without large bare areas)*, which provides 70 percent or more of the density of coverage that was provided by vegetation prior to commencing earth-disturbing activities. You should avoid the use of invasive species;

ii. For final stabilization, vegetative cover must be perennial; and

iii. Immediately after seeding or planting the area to be vegetatively stabilized, to the extent necessary to prevent erosion on the seeded or planted area, you must select, design, and install non-vegetative erosion controls that provide cover *(e.g., mulch, rolled erosion control products)* to the area while vegetation is becoming established.

b. ***For sites located in arid or semi-arid areas, or drought-stricken areas.*** If you are located in an arid or semi-arid area, or a drought-stricken area, as these terms are defined in Appendix A, you are considered to have completed final stabilization if both of the following criteria are met:

i. The area you have seeded or planted must within 3 years provide established vegetation that covers 70 percent or more of the density of vegetation prior to commencing earth-disturbing activities; and

ii. In addition to seeding or planting the area to be vegetatively stabilized, to the extent necessary to prevent erosion on the seeded

or planted area, you must select, design, and install non-vegetative erosion controls that provide cover for at least 3 years without active maintenance by you.

c. ***For sites located on land used for agriculture.*** Disturbed areas on land used for agricultural purposes *(e.g., pipelines across crop or range land, staging areas for highway construction)* that are restored to their pre-construction agricultural use are not subject to these final stabilization criteria. Areas disturbed that were not previously used for agricultural activities, and areas that are not being returned to preconstruction agricultural use, must meet the conditions for stabilization in this Part.

2.2.2.2 ***Non-Vegetative Stabilization.*** If you are using non-vegetative controls to stabilize exposed portions of your site, or if you are using such controls to temporarily protect areas that are being vegetatively stabilized, you must provide effective non-vegetative cover[18] to stabilize any such exposed portions of your site.

2.3. POLLUTION PREVENTION REQUIREMENTS.

You are required to design, install, and maintain effective pollution prevention measures in order to prevent the discharge of pollutants. Consistent with this requirement, you must:

- Eliminate certain pollutant discharges from your site (see Part 2.3.1);
- Properly maintain all pollution prevention controls (see Part 2.3.2); and
- Comply with pollution prevention standards for pollutant-generating activities that occur at your site (see Part 2.3.3).

These requirements apply to all areas of your construction site and any and all support activities covered by this permit consistent with Part 1.3.c.

2.3.1. Prohibited Discharges.

You are prohibited from discharging the following from your construction site:

2.3.1.1 Wastewater from washout of concrete, unless managed by an appropriate control as described in Part 2.3.3.4;

2.3.1.2 Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials, unless managed by an appropriate control as described in Part 2.3.3.4;

2.3.1.3 Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance;

2.3.1.4 Soaps, solvents, or detergents used in vehicle and equipment washing; and

2.3.1.5 Toxic or hazardous substances from a spill or other release.

2.3.2. General Maintenance Requirements.

You must ensure that all pollution prevention controls installed in accordance with this Part remain in effective operating condition and are protected from activities that would reduce their effectiveness. You must inspect all pollutant-generating activities and

[18] For temporary stabilization, examples of temporary non-vegetative stabilization methods include, but are not limited to, hydromulch and erosion control blankets. For final stabilization, examples of permanent non-vegetative stabilization methods include, but are not limited to, riprap, gabions, and geotextiles.

pollution prevention controls in accordance with your inspection frequency requirements in Parts 4.1.2 or 3.2.2.1 to avoid situations that may result in leaks, spills, and other releases of pollutants in stormwater discharges to receiving waters, and must document your findings in accordance with Part 4.1.7. If you find that controls need to be replaced, repaired, or maintained, you must make the necessary repairs or modifications in accordance with the following:

2.3.2.1 Initiate work to fix the problem immediately after discovering the problem, and complete such work by the close of the next work day, if the problem does not require significant repair or replacement, or if the problem can be corrected through routine maintenance.

2.3.2.2 When installation of a new pollution prevention control or a significant repair is needed, you must install the new or modified control and make it operational, or complete the repair, by no later than 7 calendar days from the time of discovery. If it is infeasible to complete the installation or repair within 7 calendar days, you must document in your records why it is infeasible to complete the installation or repair within the 7 calendar day timeframe and document your schedule for installing the stormwater control(s) and making it operational as soon as practicable after the 7 calendar day timeframe. Where these actions result in changes to any of the pollution prevention controls or procedures documented in your SWPPP, you must modify your SWPPP accordingly within 7 calendar days of completing this work.

2.3.3. Pollution Prevention Standards.

You are required to comply with the pollution prevention standards in this Part if you conduct any of the following activities at your site or at any construction support activity areas covered by this permit (see Part 1.3.c):

- Fueling and maintenance of equipment or vehicles;
- Washing of equipment and vehicles;
- Storage, handling, and disposal of construction materials, products, and wastes; and
- Washing of applicators and containers used for paint, concrete, or other materials.

The pollution prevention standards are as follows:

2.3.3.1 ***Fueling and Maintenance of Equipment or Vehicles***. If you conduct fueling and/or maintenance of equipment or vehicles at your site, you must provide an effective means of eliminating the discharge of spilled or leaked chemicals, including fuel, from the area where these activities will take place.[19]

To comply with the prohibition in Part 2.3.1.3, you must:

a. If applicable, comply with the Spill Prevention Control and Countermeasures (SPCC) requirements in 40 CFR 112 and Section 311 of the CWA;

b. Ensure adequate supplies are available at all times to handle spills, leaks, and disposal of used liquids;

[19] Examples of effective controls include, but are not limited to, locating activities away from surface waters and stormwater inlets or conveyances, providing secondary containment *(e.g., spill berms, decks, spill containment pallets)*and cover where appropriate, and/or having spill kits readily available.

c. Use drip pans and absorbents under or around leaky vehicles;

d. Dispose of or recycle oil and oily wastes in accordance with other federal, state, tribal, or local requirements;

e. Clean up spills or contaminated surfaces immediately, using dry clean up measures where possible, and eliminate the source of the spill to prevent a discharge or a furtherance of an ongoing discharge; and

f. Do not clean surfaces by hosing the area down.

2.3.3.2 ***Washing of Equipment and Vehicles.***

a. You must provide an effective means of minimizing the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other types of washing;[20] and

b. To comply with the prohibition in Part 2.3.1.4, for storage of soaps, detergents, or solvents, you must provide either (1) cover (*e.g., plastic sheeting or temporary roofs*) to prevent these detergents from coming into contact with rainwater, or (2) a similarly effective means designed to prevent the discharge of pollutants from these areas.

2.3.3.3 ***Storage, Handling, and Disposal of Construction Products, Materials, and Wastes.*** You must minimize the exposure to stormwater of any of the products, materials, or wastes specified below that are present at your site by complying with the requirements in this Part.

Note: These requirements do not apply to those products, materials, or wastes that are not a source of stormwater contamination or that are designed to be exposed to stormwater.

To ensure you meet this requirement, you must:

a. *For building products*[21]: In storage areas, provide either (1) cover (*e.g., plastic sheeting or temporary roofs*) to prevent these products from coming into contact with rainwater, or (2) a similarly effective means designed to prevent the discharge of pollutants from these areas.

b. *For pesticides, herbicides, insecticides, fertilizers, and landscape materials:*

   i. In storage areas, provide either (1) cover (e.g., *plastic sheeting or temporary roofs*) to prevent these chemicals from coming into contact with rainwater, or (2) a similarly effective means designed to prevent the discharge of pollutants from these areas; and

   ii. Comply with all application and disposal requirements included on the registered pesticide, herbicide, insecticide, and fertilizer label.

c. *For diesel fuel, oil, hydraulic fluids, other petroleum products, and other chemicals:*

[20] Examples of effective controls include, but are not limited to, locating activities away from surface waters and stormwater inlets or conveyances and directing wash waters to a sediment basin or sediment trap, using filtration devices, such as filter bags or sand filters, or using other similarly effective controls.

[21] Some examples of building products that are typically stored at construction sites include, but are not limited to, asphalt sealants, copper flashing, roofing materials, adhesives, concrete admixtures.

i. To comply with the prohibition in Part 2.3.1.3, store chemicals in water-tight containers, and provide either (1) cover *(e.g., plastic sheeting or temporary roofs)* to prevent these containers from coming into contact with rainwater, or (2) a similarly effective means designed to prevent the discharge of pollutants from these areas *(e.g., spill kits)*, or provide secondary containment *(e.g., spill berms, decks, spill containment pallets)*; and

ii. Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly. Do not clean surfaces or spills by hosing the area down. Eliminate the source of the spill to prevent a discharge or a continuation of an ongoing discharge.

d. *For hazardous or toxic waste*[22]*:*

i. Separate hazardous or toxic waste from construction and domestic waste;

ii. Store waste in sealed containers, which are constructed of suitable materials to prevent leakage and corrosion, and which are labeled in accordance with applicable Resource Conservation and Recovery Act (RCRA) requirements and all other applicable federal, state, tribal, or local requirements;

iii. Store all containers that will be stored outside within appropriately-sized secondary containment *(e.g., spill berms, decks, spill containment pallets)* to prevent spills from being discharged, or provide a similarly effective means designed to prevent the discharge of pollutants from these areas *(e.g., storing chemicals in covered area or having a spill kit available on site)*;

iv. Dispose of hazardous or toxic waste in accordance with the manufacturer's recommended method of disposal and in compliance with federal, state, tribal, and local requirements; and

v. Clean up spills immediately, using dry clean-up methods where possible, and dispose of used materials properly. Do not clean surfaces or spills by hosing the area down. Eliminate the source of the spill to prevent a discharge or a furtherance of an ongoing discharge.

e. *For construction and domestic waste*[23]: Provide waste containers *(e.g., dumpster or trash receptacle)* of sufficient size and number to contain construction and domestic wastes. In addition, you must:

(1) On work days, clean up and dispose of waste in designated waste containers; and

(2) Clean up immediately if containers overflow.

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[22] Examples of hazardous or toxic waste that may be present at construction sites include, but are not limited to, paints, solvents, petroleum-based products, wood preservatives, additives, curing compounds, acids.

[23] Examples of construction and domestic waste include, but are not limited to, packaging materials, scrap construction materials, masonry products, timber, pipe and electrical cuttings, plastics, styrofoam, concrete, and other trash or building materials.

f. *For sanitary waste:* Position portable toilets so that they are secure and will not be tipped or knocked over.

2.3.3.4 **Washing of Applicators and Containers used for Paint, Concrete, or Other Materials.** To comply with the prohibition in Parts 2.3.1.1 and 2.3.1.2, you must provide an effective means of eliminating the discharge of water from the washout and cleanout of stucco, paint, concrete, form release oils, curing compounds, and other construction materials. To comply with this requirement, you must:

a. Direct all washwater into a leak-proof container or leak-proof pit. The container or pit must be designed so that no overflows can occur due to inadequate sizing or precipitation;

b. Handle washout or cleanout wastes as follows:

i. Do not dump liquid wastes in storm sewers;

ii. Dispose of liquid wastes in accordance with applicable requirements in Part 2.3.3.3; and

iii. Remove and dispose of hardened concrete waste consistent with your handling of other construction wastes in Part 2.3.3.3; and

c. Locate any washout or cleanout activities as far away as possible from surface waters and stormwater inlets or conveyances, and, to the extent practicable, designate areas to be used for these activities and conduct such activities only in these areas.

2.3.4. Emergency Spill Notification.

You are prohibited from discharging toxic or hazardous substances from a spill or other release, consistent with Part 2.3.1.5. Where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302 occurs during a 24-hour period, you must notify the National Response Center (NRC) at (800) 424-8802 or, in the Washington, DC metropolitan area, call (202) 267-2675 in accordance with the requirements of 40 CFR Part 110, 40 CFR Part 117, and 40 CFR Part 302 as soon as you have knowledge of the discharge. You must also, within 7 calendar days of knowledge of the release, provide a description of the release, the circumstances leading to the release, and the date of the release. State, tribal, or local requirements may necessitate additional reporting of spills or discharges to local emergency response, public health, or drinking water supply agencies.

2.3.5. Fertilizer Discharge Restrictions.

You are required to minimize discharges of fertilizers containing nitrogen or phosphorus. To meet this requirement, you must comply with the following requirements:

2.3.5.1 Apply at a rate and in amounts consistent with manufacturer's specifications, or document departures from the manufacturer specifications where appropriate in Part 7.2.7.2 of the SWPPP;

2.3.5.2 Apply at the appropriate time of year for your location, and preferably timed to coincide as closely as possible to the period of maximum vegetation uptake and growth;

2.3.5.3 Avoid applying before heavy rains that could cause excess nutrients to be discharged;

2.3.5.4 Never apply to frozen ground;

2.3.5.5 Never apply to stormwater conveyance channels with flowing water; and

2.3.5.6 Follow all other federal, state, tribal, and local requirements regarding fertilizer application.

3. WATER QUALITY-BASED EFFLUENT LIMITATIONS.

3.1. GENERAL EFFLUENT LIMITATION TO MEET APPLICABLE WATER QUALITY STANDARDS

Your discharge must be controlled as necessary to meet applicable water quality standards. You must also comply with any additional requirements that your state or tribe requires you to meet in Part 9.

In the absence of information demonstrating otherwise, EPA expects that compliance with the conditions in this permit will result in stormwater discharges being controlled as necessary to meet applicable water quality standards. If at any time you become aware, or EPA determines, that your discharge is not being controlled as necessary to meet applicable water quality standards, you must take corrective action as required in Part 5.2.1, and document the corrective actions as required in Part 5.2.2 and Part 5.4.

EPA will also impose additional water quality-based limitations on a site-specific basis, or require you to obtain coverage under an individual permit, if information in your NOI, or from other sources indicates that your discharges are not controlled as necessary to meet applicable water quality standards. This includes situations where additional controls are necessary to comply with a wasteload allocation in an EPA established or approved TMDL.

3.2. DISCHARGE LIMITATIONS FOR IMPAIRED WATERS

If you discharge to a surface water that is impaired for (1) sediment or a sediment-related parameter, such as total suspended solids (TSS) or turbidity, and/or (2) nutrients, including impairments for nitrogen and/or phosphorus, you are required to comply with the requirements in Part 3.2.2.

Note: For the purposes of this Part, "impaired waters" are waters identified as impaired on the appropriate CWA Section 303(d) list, or waters with an EPA-approved or established TMDL. Your construction site will be considered to discharge to an impaired water if the first surface water to which you discharge is identified by a state, tribe, or EPA pursuant to Section 303(d) of the CWA as not meeting an applicable water quality standard, or is included in an EPA-approved or established total maximum daily load (TMDL). For discharges that enter a storm sewer system prior to discharge, the first surface water to which you discharge is the waterbody that receives the stormwater discharge from the storm sewer system.

If you discharge to an impaired water that is impaired for a parameter other than a sediment-related parameter or nutrients, EPA will inform you if any additional limits or controls are necessary for your discharge to be controlled as necessary to meet water quality standards, including for it to be consistent with the assumptions of any available wasteload allocation in any applicable TMDL, or if coverage under an individual permit is necessary in accordance with Part 1.4.5.

If during your coverage under a previous permit, you were required to install and maintain stormwater controls specifically to meet the assumptions and requirements of an EPA-approved or established TMDL (for any parameter) or to otherwise control your discharge to meet water quality standards, you must continue to implement such controls as part of this permit.

3.2.1. Identify If You Discharge To An Impaired Water.

If you discharge to an impaired water, you must provide the following information in your NOI:

- A list of all impaired waters to which you discharge;
- The pollutant(s) for which the surface water is impaired; and

- Whether a TMDL has been approved or established for the waters to which you discharge.

3.2.2. Requirements for Discharges to Sediment or Nutrient-Impaired Waters.

If you discharge to a surface water that is impaired for (1) sediment or a sediment-related parameter *(e.g., total suspended solids (TSS) or turbidity)* and/or (2) nutrients *(e.g., nitrogen and/or phosphorus)*, including impaired waters for which a TMDL has been approved or established for the impairment, you are required to comply with the following stormwater control requirements, which supplement the requirements applicable to your site in other corresponding parts of the permit

3.2.2.1 ***Frequency of Site Inspection.*** You must conduct inspections at the frequency specified in Part 4.1.3.

3.2.2.2 ***Deadline to Complete Stabilization.*** You must comply with the deadlines for completing site stabilization as specified in Part 2.2.1.3c.

3.2.2.3 ***State and Tribal Requirements.*** You must comply with any additional state or tribal impairment-related requirements included in Part 9.

EPA will also impose additional water quality-based limitations on a site-specific basis, or require you to obtain coverage under an individual permit, if it is determined that the controls in the Part will not be sufficient to control discharges consistent with the assumptions and requirements of an applicable wasteload allocation of an approved or established TMDL or to prevent the site from contributing to the impairment.

3.3. DISCHARGES TO WATERS IDENTIFIED AS TIER 2, TIER 2.5, OR TIER 3.

3.3.1. Identify if You Discharge to a Tier 2, Tier 2.5, or Tier 3 Water.

If you discharge to a water identified by a state, tribe, or EPA as Tier 2, Tier 2.5, or Tier 3 water, you must provide on your NOI a list of waters identified as Tier 2, Tier 2.5, or Tier 3 to which you discharge. See Appendix F for a list of Tier 2 and 3 waters.

Note: For the purposes of this permit, you are considered to discharge to a Tier 2, Tier 2.5, or Tier 3 water if the first surface water to which you discharge is identified by a state, tribe, or EPA as Tier 2, Tier 2.5, or Tier 3. Tiers 2, 2.5 and 3 refer to waters either identified by the state as high quality waters or Outstanding National Resource Waters under 40 CFR §131.12(a)(2) and (3). For discharges that enter a storm sewer system prior to discharge, the surface water to which you discharge is the first surface water that receives the stormwater discharge from the storm sewer system.

3.3.2. Requirements for New Projects Discharging to Tier 2, Tier 2.5, or Tier 3 Waters.

For new projects, if you will discharge to a Tier 2, Tier 2.5, or Tier 3 water, you are required to comply with the requirements in Parts 4.1.3 (inspection frequencies) and 2.2.1.3c (stabilization deadlines), and, if applicable, Part 9 (relevant state or tribal requirements). In addition, on a case-by-case basis, EPA may notify operators of such new projects or operators of existing projects with increased discharges that additional analyses, stormwater controls, or other permit conditions are necessary to comply with the applicable antidegradation requirements, or notify you that an individual permit application is necessary in accordance with Part 1.4.5.

4. INSPECTIONS.

4.1. SITE INSPECTIONS.

4.1.1. Person(s) Responsible for Inspecting Site.

The person(s) inspecting your site may be a person on your staff or a third party you hire to conduct such inspections. You are responsible for ensuring that the person who conducts inspections is a "qualified person."

Note: A "qualified person" is a person knowledgeable in the principles and practice of erosion and sediment controls and pollution prevention, who possesses the skills to assess conditions at the construction site that could impact stormwater quality, and the skills to assess the effectiveness of any stormwater controls selected and installed to meet the requirements of this permit.

4.1.2. Frequency of Inspections.

At a minimum, you must conduct a site inspection in accordance with one of the two schedules listed below, unless you are subject to Part 4.1.3 or Part 4.1.4:

4.1.2.1 At least once every 7 calendar days; or

4.1.2.2 Once every 14 calendar days and within 24 hours of the occurrence of a storm event of 0.25 inches or greater. To determine if a storm event of 0.25 inches or greater has occurred on your site, you must either keep a properly maintained rain gauge on your site, or obtain the storm event information from a weather station that is representative of your location. For any day of rainfall during normal business hours that measures 0.25 inches or greater, you must record the total rainfall measured for that day in accordance with Part 4.1.7.1d.

Note: Inspections are only required during the project's normal working hours.

Note: You are required to specify in your SWPPP which schedule you will be following.

Note: "Within 24 hours of the occurrence of a storm event" means that you are required to conduct an inspection within 24 hours once a storm event has produced 0.25 inches, even if the storm event is still continuing. Thus, if you have elected to inspect bi-weekly in accordance with Part 4.1.2.2 and there is a storm event at your site that continues for multiple days, and each day of the storm produces 0.25 inches or more of rain, you are required to conduct an inspection within 24 hours of the first day of the storm and within 24 hours after the end of the storm.

4.1.3. Increase in Inspection Frequency for Sites Discharging to Sensitive Waters.

For any portion of the site that discharges to a sediment or nutrient-impaired water (see Part 3.2) or to a water that is identified by your state, tribe, or EPA as Tier 2, Tier 2.5, or Tier 3 for antidegradation purposes (see Part 3.3), instead of the inspection frequency specified in Part 4.1.2, you must conduct inspections in accordance with the following inspection frequencies:

4.1.3.1 Once every 7 calendar days; and

4.1.3.2 Within 24 hours of the occurrence of a storm event of 0.25 inches or greater. To determine if a storm event of 0.25 inches or greater has occurred on your site, you must either keep a properly maintained rain gauge on your site, or obtain the storm event information from a weather station that is representative of your location. For any day of rainfall during normal business hours that

measures 0.25 inches or greater, you must record the total rainfall measured for that day in accordance with Part 4.1.7.1d.

Note: Inspections are only required during the project's normal working hours.

Note: "Within 24 hours of the occurrence of a storm event" means that you are required to conduct an inspection within 24 hours once a storm event has produced 0.25 inches, even if the storm event is still continuing. Thus, if there is a storm event at your site that continues for multiple days, and each day of the storm produces 0.25 inches or more of rain, you are required to conduct an inspection within 24 hours of the first day of the storm and within 24 hours after the end of the storm.

Note: If you qualify for any of the reduced inspection frequencies in Part 4.1.4, you may conduct inspections in accordance with Part 4.1.4 for any portion of your site that discharges to a sensitive water.

4.1.4. Reductions in Inspection Frequency.

Your inspection frequency may be reduced as follows:

4.1.4.1 ***For Stabilized Areas.*** You may reduce the frequency of inspections to once per month in any area of your site where the stabilization steps in Parts 2.2.1.2a and 2.2.1.2b have been completed. If construction activity resumes in this portion of the site at a later date, the inspection frequency immediately increases to that required in Parts 4.1.2 or 4.1.3, if applicable. You must document the beginning and ending dates of this period in your records.

4.1.4.2 ***For Arid, Semi-Arid, or Drought-Stricken Areas.*** You may reduce the frequency of inspections to once per month and within 24 hours of the occurrence of a storm event of 0.25 inches or greater if your site is located in an arid, semi-arid, or drought-stricken area, as these terms are defined in Appendix A, and construction is occurring during the seasonally dry period or during a period in which drought is predicted to occur. You must document that you are using this reduced schedule and the beginning and ending dates of the seasonally dry period in your SWPPP. To determine if a storm event of 0.25 inches or greater has occurred on your site, you must either keep a properly maintained rain gauge on your site, or obtain the storm event information from a weather station that is representative of your location. For any day of rainfall during normal business hours that measures 0.25 inches or greater, you must record the total rainfall measured for that day in accordance with Part 4.1.7.1d.

Note: Inspections are only required during the project's normal working hours.

Note: "Within 24 hours of the occurrence of a storm event" means that you are required to conduct an inspection within 24 hours once a storm event has produced 0.25 inches, even if the storm event is still continuing. Thus, if there is a storm event at your site that continues for multiple days, and each day of the storm produces 0.25 inches or more of rain, you are required to conduct an inspection within 24 hours of the first day of the storm and within 24 hours after the end of the storm.

4.1.4.3 ***For Frozen Conditions.***

a. If you are suspending earth-disturbing activities due to frozen conditions, you may temporarily suspend inspections on your site until thawing conditions (see Appendix A) begin to occur if:

i. Runoff is unlikely due to continuous frozen conditions that are likely to continue at your site for at least 3 months based on historic seasonal averages. If unexpected weather conditions (such as above freezing temperatures or rain on snow events) make discharges likely, you must immediately resume your regular inspection frequency as described in Parts 4.1.2 or 4.1.3, if applicable;

ii. Land disturbances have been suspended; and

iii. All disturbed areas of the site have been temporarily or permanently stabilized in accordance with Part 2.2.

b. If you are still conducting earth-disturbing activities during frozen conditions, you may reduce your inspection frequency to once per month if:

i. Runoff is unlikely due to continuous frozen conditions that are likely to continue at your site for at least 3 months based on historic seasonal averages. If unexpected weather conditions (such as above freezing temperatures or rain on snow events) make discharges likely, you must immediately resume your regular inspection frequency as described in Parts 4.1.2 or 4.1.3 if applicable; and

ii. Except for areas in which you are actively conducting earth-disturbing activities, disturbed areas of the site have been temporarily or permanently stabilized in accordance with Part 2.2.

You must document the beginning and ending dates of this period in your SWPPP.

4.1.5. Areas that Need to Be Inspected. During your site inspection, you must at a minimum inspect the following areas of your site:

4.1.5.1 All areas that have been cleared, graded, or excavated and that have not yet completed stabilization consistent with Part 2.2;

4.1.5.2 All stormwater controls (including pollution prevention measures) installed at the site to comply with this permit;

4.1.5.3 Material, waste, borrow, or equipment storage and maintenance areas that are covered by this permit;

4.1.5.4 All areas where stormwater typically flows within the site, including drainageways designed to divert, convey, and/or treat stormwater;

4.1.5.5 All points of discharge from the site; and

4.1.5.6 All locations where stabilization measures have been implemented.

You are not required to inspect areas that, at the time of the inspection, are considered unsafe to your inspection personnel.

4.1.6. Requirements for Inspections. During your site inspection, you must at a minimum:

4.1.6.1 Check whether all erosion and sediment controls and pollution prevention controls are installed, appear to be operational, and are working as intended to minimize pollutant discharges. Determine if any controls need to be replaced, repaired, or maintained in accordance with Parts 2.1.1.4 and 2.3.2;

4.1.6.2 Check for the presence of conditions that could lead to spills, leaks, or other accumulations of pollutants on the site;

4.1.6.3 Identify any locations where new or modified stormwater controls are necessary to meet the requirements of Parts 2 and/or 3;

4.1.6.4 At points of discharge and, if applicable, the banks of any surface waters flowing within your property boundaries or immediately adjacent to your property, check for signs of visible erosion and sedimentation *(i.e., sediment deposits)* that have occurred and are attributable to your discharge; and

4.1.6.5 Identify any and all incidents of noncompliance observed.

4.1.6.6 If a discharge is occurring during your inspection, you are required to:

a. Identify all points of the property from which there is a discharge;

b. Observe and document the visual quality of the discharge, and take note of the characteristics of the stormwater discharge, including color, odor, floating, settled, or suspended solids, foam, oil sheen, and other obvious indicators of stormwater pollutants; and

c. Document whether your stormwater controls are operating effectively, and describe any such controls that are clearly not operating as intended or are in need of maintenance.

4.1.6.7 Based on the results of your inspection, initiate corrective action under Part 5.

4.1.7. Inspection Report.

4.1.7.1 ***Requirement to Complete Inspection Report.*** You must complete an inspection report within 24 hours of completing any site inspection. Each inspection report must include the following:

a. The inspection date;

b. Names and titles of personnel making the inspection;

c. A summary of your inspection findings, covering at a minimum the observations you made in accordance with Part 4.1.6;

d. If you are inspecting your site at the frequency specified in Part 4.1.2.2, Part 4.1.3, or Part 4.1.4.2, and you conducted an inspection because of rainfall measuring 0.25 inches or greater, you must include the applicable rain gauge or weather station readings that triggered the inspection; and

e. If you have determined that it is unsafe to inspect a portion of your site, you must describe the reason you found it to be unsafe and specify the locations that this condition applied to.

4.1.7.2 ***Signature Requirements.*** Each inspection report must be signed in accordance with Appendix I, Part I.11 of this permit.

4.1.7.3 ***Recordkeeping Requirements.*** You are required to keep a current, copy of all inspection reports at the site or at an easily accessible location, so that it can be made available at the time of an onsite inspection or upon request by EPA. For purposes of this permit, your inspection reports may be kept electronically if the records are:

a. In a format that can be read in a similar manner as a paper record;

b. Legally dependable with no less evidentiary value than their paper equivalent; and

c. Accessible to the inspector during an inspection to the same extent as a paper copy stored at the site would be, if the records were stored in paper form.

Note: See Section IX.1.7 of the Fact Sheet for a discussion on ways to ensure that electronic records satisfy this requirement. See Appendix I, Part I.11.5 for requirements relating to electronic signature of these documents.

All inspection reports completed for this Part must be retained for at least 3 years from the date that your permit coverage expires or is terminated.

4.2. INSPECTIONS BY EPA.

You must allow EPA, or an authorized representative of the EPA, to conduct the following activities at reasonable times:

4.2.1. Enter onto areas of your site, including any construction support activity areas covered by this permit (see Part 1.3.c), and onto locations where records are kept under the conditions of this permit;

4.2.2. Access and copy any records that must be kept under the conditions of this permit;

4.2.3. Inspect your construction site, including any construction support activity areas covered by this permit (see Part 1.3.c) and any stormwater controls installed and maintained at the site; and

4.2.4. Sample or monitor for the purpose of ensuring compliance.

5. CORRECTIVE ACTIONS.

5.1. "CORRECTIVE ACTIONS" DEFINED.

Corrective actions are actions you take in compliance with this Part to:

- Repair, modify, or replace any stormwater control used at the site;
- Clean up and properly dispose of spills, releases, or other deposits; or
- Remedy a permit violation.

5.2. REQUIREMENTS FOR TAKING CORRECTIVE ACTION.

You must complete the following corrective actions in accordance with the deadlines specified in this Part. In all circumstances, you must immediately take all reasonable steps to minimize or prevent the discharge of pollutants until a permanent solution is installed and made operational, including cleaning up any contaminated surfaces so that the material will not discharge in subsequent storm events.

Note: In this context, the term "immediately" requires construction operators to, on the same day a condition requiring corrective action is found, take all reasonable steps to minimize or prevent the discharge of pollutants until a permanent solution is installed and made operational. However, if the problem is identified at a time in the work day when it is too late to initiative corrective action, the initiation of corrective action must begin on the following work day.

5.2.1. For any of the following conditions on your site, you must install a new or modified control and make it operational, or complete the repair, by no later than 7 calendar days from the time of discovery. If it is infeasible to complete the installation or repair within 7 calendar days, you must document in your records why it is infeasible to complete the installation or repair within the 7 calendar day timeframe and document your schedule for installing the stormwater control(s) and making it operational as soon as practicable after the 7-day timeframe.

5.2.1.1 A required stormwater control was never installed, was installed incorrectly, or not in accordance with the requirements in Parts 2 and/or 3; or

5.2.1.2 You become aware that the stormwater controls you have installed and are maintaining are not effective enough for the discharge to meet applicable water quality standards or applicable requirements in Part 3.1. In this case, you must notify your EPA Regional Office by the end of the next work day. You are required to submit your notification through EPA's electronic NOI system, or "eNOI", at www.epa.gov/npdes/cgpenoi; or

5.2.1.3 One of the prohibited discharges in Part 2.3.1 is occurring or has occurred.

5.2.2. Where your corrective actions result in changes to any of the stormwater controls or procedures documented in your SWPPP, you must modify your SWPPP accordingly within 7 calendar days of completing corrective action work.

5.3. CORRECTIVE ACTION REQUIRED BY EPA.

You must comply with any corrective actions required by EPA as a result of permit violations found during an inspection carried out under Part 4.2.

5.4. CORRECTIVE ACTION REPORT.

For each corrective action taken in accordance with this Part, you must complete a corrective action report, which includes the applicable information in Parts 5.4.1 and 5.4.2. Note that these reports must be maintained in your records but do not need to be provided to EPA except upon request.

5.4.1. Within 24 hours of discovering the occurrence of one of the triggering conditions in Part 5.2.1 at your site, you must complete a report of the following:

5.4.1.1 Which condition was identified at your site;

5.4.1.2 The nature of the condition identified; and

5.4.1.3 The date and time of the condition identified and how it was identified.

5.4.2. Within 7 calendar days of discovering the occurrence of one of the triggering conditions in Part 5.2.1 at your site, you must complete a report of the following:

5.4.2.1 Any follow-up actions taken to review the design, installation, and maintenance of stormwater controls, including the dates such actions occurred;

5.4.2.2 A summary of stormwater control modifications taken or to be taken, including a schedule of activities necessary to implement changes, and the date the modifications are completed or expected to be completed; and

5.4.2.3 Notice of whether SWPPP modifications are required as a result of the condition identified or corrective action.

5.4.3. **Signature Requirements.** Each corrective action report must be signed and certified in accordance with Appendix I, Part I.11 of this permit.

5.4.4. **Recordkeeping Requirements.** You are required to keep a current copy of all corrective action reports at the site or at an easily accessible location, so that it can be made available at the time of an onsite inspection or upon request by EPA. For purposes of this permit, your corrective action reports may be kept electronically if the records are:

5.4.4.1 In a format that can be read in a similar manner as a paper record;

5.4.4.2 Legally dependable with no less evidentiary value than their paper equivalent; and

5.4.4.3 Accessible to the inspector during an inspection to the same extent as a paper copy stored at the site would be, if the records were stored in paper form.

Note: See Section IX.1.7 of the Fact Sheet for a discussion on ways to ensure that electronic records satisfy this requirement. See Appendix I, Part I.11.5 for requirements relating to electronic signature of these documents.

All corrective action reports completed for this Part must be retained for at least 3 years from the date that your permit coverage expires or is terminated.

6. STAFF TRAINING REQUIREMENTS.

Prior to the commencement of earth-disturbing activities or pollutant-generating activities, whichever occurs first, you must ensure that the following personnel understand the requirements of this permit and their specific responsibilities with respect to those requirements:

- Personnel who are responsible for the design, installation, maintenance, and/or repair of stormwater controls (including pollution prevention measures);
- Personnel responsible for the application and storage of treatment chemicals (if applicable);
- Personnel who are responsible for conducting inspections as required in Part 4.1.1; and
- Personnel who are responsible for taking corrective actions as required in Part 5.

Notes: (1) If the person requiring training is a new employee, who starts after you commence earth-disturbing or pollutant-generating activities, you must ensure that this person has the proper understanding as required above prior to assuming particular responsibilities related to compliance with this permit.

(2) For emergency-related construction activities, the requirement to train personnel prior to commencement of earth-disturbing activities does not apply, however, such personnel must have the required training prior to NOI submission.

You are responsible for ensuring that all activities on the site comply with the requirements of this permit. You are not required to provide or document formal training for subcontractors or other outside service providers, but you must ensure that such personnel understand any requirements of the permit that may be affected by the work they are subcontracted to perform.

At a minimum, personnel must be trained to understand the following if related to the scope of their job duties (e.g., only personnel responsible for conducting inspections need to understand how to conduct inspections):

- The location of all stormwater controls on the site required by this permit, and how they are to be maintained;
- The proper procedures to follow with respect to the permit's pollution prevention requirements; and
- When and how to conduct inspections, record applicable findings, and take corrective actions.

7. STORMWATER POLLUTION PREVENTION PLAN (SWPPP).

7.1. GENERAL REQUIREMENTS.

7.1.1. Requirement to Develop a SWPPP Prior to Submitting Your NOI.

All operators associated with a construction project to be covered under this permit must develop a SWPPP.

Note: You have the option of developing a group SWPPP where you are one of several operators who will be engaged in construction activities at your site. For instance, if both the owner and the general contractor of the construction site are permitted, the owner may be the party responsible for SWPPP development, and the general contractor can choose to use this same SWPPP, as long as the SWPPP addresses the general contractor's scope of construction work and obligations under this permit.

You are required to develop your site's SWPPP prior to submitting your NOI. At a minimum, your SWPPP must include the information required in Part 7.2 and as specified in other parts of the permit. [24] You must also update the SWPPP as required in Part 7.4.

Note: If your project is an "existing project" (see Part 1.4.2.b) or if you are a new operator of an existing project" (see Part 1.4.2.c), and it is infeasible for you to comply with a specific requirement in this Part or in Parts 2.1, and 2.3.3 through 2.3.5 (except for Parts 2.3.3.1, 2.3.3.2b, 2.3.3.3c.i, and 2.3.3.4) because (1) the provision was not part of the permit you were previously covered under (i.e., the 2003 or 2008 CGP), and (2) because you are prevented from compliance due to the nature or location of earth disturbances that commenced prior to February 16, 2012 (or prior to April 9, 2012 for projects in the State of Idaho (except for Indian country), or prior to April 13, 2012 for projects in areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, or prior to May 9, 2012 for projects located in the following areas: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin), or because you are unable to comply with the requirement due to the manner in which stormwater controls have already been installed or were already designed prior to February 16, 2012 (or prior to April 9, 2012 for projects in the State of Idaho (except for Indian country), or prior to April 13, 2012 for projects in areas in the State of Washington (except for Indian country) subject to construction activity by a Federal Operator, or prior to May 9, 2012 for projects located in the following areas: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin), you are required to include documentation of the reasons why it is infeasible for you to meet the specific requirement, and then you may be waived from complying with this requirement. You must include a separate justification why it is infeasible for you to meet each of the applicable requirements.

If you prepared a SWPPP for coverage under a previous version of this NPDES permit, you must review and update your SWPPP to ensure that this permit's requirements are addressed prior to submitting your NOI.

7.2. SWPPP CONTENTS.

Your SWPPP must include the following information, at a minimum.

[24] The SWPPP does not establish the effluent limits that apply to your site's discharges; these limits are established in this permit in Parts 2 and 3.

7.2.1. Stormwater Team.

Each operator, or group of multiple operators, must assemble a "stormwater team," which is responsible for overseeing the development of the SWPPP, any later modifications to it, and for compliance with the requirements in this permit.

The SWPPP must identify the personnel (by name or position) that are part of the stormwater team, as well as their individual responsibilities. Each member of the stormwater team must have ready access to an electronic or paper copy of applicable portions of this permit, the most updated copy of your SWPPP, and other relevant documents or information that must be kept with the SWPPP.

7.2.2. Nature of Construction Activities.

The SWPPP must describe the nature of your construction activities, including the size of the property (in acres) and the total area expected to be disturbed by the construction activities (in acres), construction support activity areas covered by this permit (see Part 1.3.c), and the maximum area expected to be disturbed at any one time.

7.2.3. Emergency-Related Projects.

If you are conducting earth-disturbing activities in response to a public emergency (see Part 1.2), you must document the cause of the public emergency *(e.g., natural disaster, extreme flooding conditions, etc.)*, information substantiating its occurrence *(e.g., state disaster declaration or similar state or local declaration)*, and a description of the construction necessary to reestablish effected public services.

7.2.4. Identification of Other Site Operators.

The SWPPP must include a list of all other operators who will be engaged in construction activities at your site, and the areas of the site over which each operator has control.

7.2.5. Sequence and Estimated Dates of Construction Activities.

The SWPPP must include a description of the intended sequence of construction activities, including a schedule of the estimated start dates and the duration of the activity, for the following activities:

7.2.5.1 Installation of stormwater control measures, and when they will be made operational, including an explanation of how the sequence and schedule for installation of stormwater control measures complies with Part 2.1.1.3a and of any departures from manufacturer specifications pursuant to Part 2.1.1.3b;

7.2.5.2 Commencement and duration of earth-disturbing activities, including clearing and grubbing, mass grading, site preparation (i.e., excavating, cutting and filling), final grading, and creation of soil and vegetation stockpiles requiring stabilization;

7.2.5.3 Cessation, temporarily or permanently, of construction activities on the site, or in designated portions of the site;

7.2.5.4 Final or temporary stabilization of areas of exposed soil. The dates for stabilization must reflect the applicable deadlines to which you are subject in Part 2.2.1; and

7.2.5.5 Removal of temporary stormwater conveyances/channels and other stormwater control measures, removal of construction equipment and vehicles, and cessation of any pollutant-generating activities.

Note: If plans change due to unforeseen circumstances or for other reasons, the requirement to describe the sequence and estimated dates of construction activities is not meant

to "lock in" the operator to meeting these projections. When departures from initial projections are necessary, this should be documented in the SWPPP itself or in associated records, as appropriate.

7.2.6. Site Map.

The SWPPP must include a legible site map, or series of maps, showing the following features of your project:

Note: Included in the project site are any construction support activities covered by this permit (see Part 1.3.c).

7.2.6.1 Boundaries of the property and of the locations where construction activities will occur, including:

a. Locations where earth-disturbing activities will occur, noting any phasing of construction activities;

b. Approximate slopes before and after major grading activities. Note areas of steep slopes, as defined in Appendix A;

c. Locations where sediment, soil, or other construction materials will be stockpiled;

d. Locations of any crossings of surface waters;

e. Designated points on the site where vehicles will exit onto paved roads;

f. Locations of structures and other impervious surfaces upon completion of construction; and

g. Locations of construction support activity areas covered by this permit (see Part 1.3.c).

7.2.6.2 Locations of all surface waters, including wetlands, that exist within or in the immediate vicinity of the site. Indicate which waterbodies are listed as impaired, and which are identified by your state, tribe, or EPA as Tier 2, Tier 2.5, or Tier 3 waters;

7.2.6.3 The boundary lines of any natural buffers provided consistent with Part 2.1.2.1a;

7.2.6.4 Areas of federally-listed critical habitat for endangered or threatened species;

7.2.6.5 Topography of the site, existing vegetative cover (*e.g., forest, pasture, pavement, structures*), and drainage pattern(s) of stormwater and authorized non-stormwater flow onto, over, and from the site property before and after major grading activities;

7.2.6.6 Stormwater and allowable non-stormwater discharge locations, including:

a. Locations of any storm drain inlets on the site and in the immediate vicinity of the site; and

Note: The requirement to show storm drain inlets in the immediate vicinity of the site on your site map only applies to those inlets that are easily identifiable from your site or from a publicly accessible area immediately adjacent to your site.

b. Locations where stormwater or allowable non-stormwater will be discharged to surface waters (including wetlands) on or near the site.

7.2.6.7 Locations of all potential pollutant-generating activities identified in Part 7.2.7;

7.2.6.8 Locations of stormwater control measures; and

7.2.6.9 Locations where polymers, flocculants, or other treatment chemicals will be used and stored.

7.2.7. Construction Site Pollutants.

The SWPPP must include the following:

7.2.7.1 A list and description of all the pollutant-generating activities[25] on your site.

7.2.7.2 For each pollutant-generating activity, an inventory of pollutants or pollutant constituents *(e.g., sediment, fertilizers and/or pesticides, paints, solvents, fuels)* associated with that activity, which could be exposed to rainfall, or snowmelt, and could be discharged from your construction site. You must take into account where potential spills and leaks could occur that contribute pollutants to stormwater discharges. You must also document any departures from the manufacturer's specifications for applying fertilizers containing nitrogen and phosphorus, as required in Part 2.3.5.1.

7.2.8. Non-Stormwater Discharges.

The SWPPP must also identify all sources of allowable non-stormwater discharges listed in Part 1.3.d.

7.2.9. Buffer Documentation.

If you are required to comply with Part 2.1.2.1 because a surface water is located within 50 feet of your project's earth disturbances, you must describe which compliance alternative you have selected for your site, and comply with any additional requirements to provide documentation in Part 2.1.2.1.

7.2.10. Description of Stormwater Control Measures.

7.2.10.1 ***Stormwater Control Measures to be Used During Construction Activity.*** The SWPPP must describe all stormwater control measures that are or will be installed and maintained at your site to meet the requirements of Part 2. For each stormwater control measure, you must document:

a. Information on the type of stormwater control measure to be installed and maintained, including design information;

b. What specific sediment controls will be installed and made operational prior to conducting earth-disturbing activities in any given portion of your site to meet the requirement of Part 2.1.2.2a;

c. For exit points on your site, document stabilization techniques you will use and any additional controls that are planned to remove sediment prior to vehicle exit consistent with Part 2.1.2.3; and

d. For linear projects, where you have determined that the use of perimeter controls in portions of the site is impracticable, document why you believe this to be the case (see Part 2.1.2.2a).

7.2.10.2 ***Use of Treatment Chemicals.*** If you will use polymers, flocculants, or other treatment chemicals at your site, the SWPPP must include:

a. A listing of all soil types[26] that are expected to be exposed during construction and that will be discharged to locations where chemicals

[25] Examples of pollutant-generating activities include, but are not limited to: paving operations; concrete, paint, and stucco washout and waste disposal; solid waste storage and disposal; and dewatering operations.

will be applied. Also include a listing of soil types expected to be found in fill material to be used in these same areas, to the extent you have this information prior to construction.

b. A listing of all treatment chemicals to be used at the site, and why the selection of these chemicals is suited to the soil characteristics of your site;

c. If you have been authorized by your applicable EPA Regional Office to use cationic treatment chemicals, include the specific controls and implementation procedures designed to ensure that your use of cationic treatment chemicals will not lead to a violation of water quality standards;

d. The dosage of all treatment chemicals you will use at the site or the methodology you will use to determine dosage;

e. Information from any applicable Material Safety Data Sheets (MSDS);

f. Schematic drawings of any chemically-enhanced stormwater controls or chemical treatment systems to be used for application of the treatment chemicals;

g. A description of how chemicals will be stored consistent with Part 2.1.3.3b;

h. References to applicable state or local requirements affecting the use of treatment chemicals, and copies of applicable manufacturer's specifications regarding the use of your specific treatment chemicals and/or chemical treatment systems; and

i. A description of the training that personnel who handle and apply chemicals have received prior to permit coverage, or will receive prior to use of the treatment chemicals at your site.

7.2.10.3 ***Stabilization Practices.*** The SWPPP must describe the specific vegetative and/or non-vegetative practices that will be used to comply with the requirements in Part 2.2, including:

a. If you will be complying with the stabilization deadlines specified in Part 2.2.1.3a, you must indicate in your SWPPP the beginning and ending dates of the seasonally dry period and your site conditions; and

b. If you will be complying with the stabilization deadlines specified in Part 2.2.1.3b, you must document the circumstances that prevent you from meeting the deadlines specified in Parts 2.2.1.1 and/or 2.2.1.2.

7.2.11. Pollution Prevention Procedures.

7.2.11.1 ***Spill Prevention and Response Procedures.*** The SWPPP must describe procedures that you will follow to prevent and respond to spills and leaks consistent with Part 2.3, including:

a. Procedures for expeditiously stopping, containing, and cleaning up spills, leaks, and other releases. Identify the name or position of the employee(s) responsible for detection and response of spills or leaks; and

[26] Information on soils may be obtained at http://websoilsurvey.nrcs.usda.gov/app/.

b. Procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity consistent with Part 2.3.4 and established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302, occurs during a 24-hour period. Contact information must be in locations that are readily accessible and available.

You may also reference the existence of Spill Prevention Control and Countermeasure (SPCC) plans developed for the construction activity under Part 311 of the CWA, or spill control programs otherwise required by an NPDES permit for the construction activity, provided that you keep a copy of that other plan onsite.

Note: Even if you already have an SPCC or other spill prevention plan in existence, your plans will only be considered adequate if they meet all of the requirements of this Part, either as part of your existing plan or supplemented as part of the SWPPP.

7.2.11.2 ***Waste Management Procedures.*** The SWPPP must describe procedures for how you will handle and dispose of all wastes generated at your site, including, but not limited to, clearing and demolition debris, sediment removed from the site, construction and domestic waste, hazardous or toxic waste, and sanitary waste.

7.2.12. Procedures for Inspection, Maintenance, and Corrective Action.

The SWPPP must describe the procedures you will follow for maintaining your stormwater control measures, conducting site inspections, and, where necessary, taking corrective actions, in accordance with Part 2.1.1.4, Part 2.3.2, Part 4, and Part 5 of the permit. The following information must also be included in your SWPPP:

7.2.12.1 Personnel responsible for conducting inspections;

7.2.12.2 The inspection schedule you will be following, which is based on whether your site is subject to Part 4.1.2 or Part 4.1.3, and whether your site qualifies for any of the allowances for reduced inspection frequencies in Part 4.1.4. If you will be conducting inspections in accordance with the inspection schedule in Part 4.1.2.2 or Part 4.1.3, the location of the rain gauge on your site or the address of the weather station you will be using to obtain rainfall data;

7.2.12.3 If you will be reducing your inspection frequency in accordance with Part 4.1.4.2, the beginning and ending dates of the seasonally-defined arid period for your area or the valid period of drought. If you will be reducing your inspection frequency in accordance with Part 4.1.4.3, the beginning and ending dates of frozen conditions on your site; and

7.2.12.4 Any inspection or maintenance checklists or other forms that will be used.

7.2.13. Staff Training.

The SWPPP must include documentation that the required personnel were trained in accordance with Part 6.

7.2.14. Documentation of Compliance with Other Federal Requirements.

7.2.14.1 *Endangered Species Act.* The SWPPP must include documentation supporting your determination with respect to Part 1.1.e and Appendix D.

7.2.14.2 *Historic Properties.* The SWPPP must include documentation required by Appendix E in relation to potential impacts to historic properties.

7.2.14.3 *Safe Drinking Water Act Underground Injection Control (UIC) Requirements for Certain Subsurface Stormwater Controls.* If you are using any of the following stormwater controls at your site, as they are described below, you must document any contact you have had with the applicable state agency or EPA Regional Office responsible for implementing the requirements for underground injection wells in the Safe Drinking Water Act and EPA's implementing regulations at 40 CFR Parts 144 -147. Such controls would generally be considered Class V UIC wells:

a. Infiltration trenches (if stormwater is directed to any bored, drilled, driven shaft or dug hole that is deeper than its widest surface dimension, or has a subsurface fluid distribution system);

b. Commercially manufactured pre-cast or pre-built proprietary subsurface detention vaults, chambers, or other devices designed to capture and infiltrate stormwater flow; and

c. Drywells, seepage pits, or improved sinkholes (if stormwater is directed to any bored, drilled, driven shaft or dug hole that is deeper than its widest surface dimension, or has a subsurface fluid distribution system).

Note: For state UIC program contacts, refer to the following EPA website: http://water.epa.gov/type/groundwater/uic/whereyoulive.cfm.

7.2.15. SWPPP Certification.

You must sign and date your SWPPP in accordance with Appendix I, Part I.11.

7.2.16. Post-Authorization Additions to the SWPPP.

Once you are notified of your coverage under this permit, you must include the following documents as part of your SWPPP:

7.2.16.1 A copy of your NOI submitted to EPA along with any correspondence exchanged between you and EPA related to coverage under this permit;

7.2.16.2 A copy of the acknowledgment letter you receive from the NOI Processing Center or eNOI system assigning your permit tracking number;

7.2.16.3 A copy of this permit (an electronic copy easily available to the stormwater team is also acceptable).

7.3. ON-SITE AVAILABILITY OF YOUR SWPPP.

You are required to keep a current copy of your SWPPP at the site or at an easily accessible location so that it can be made available at the time of an on-site inspection or upon request by EPA; a state, tribal, or local agency approving stormwater management plans; the operator of a storm sewer system receiving discharges from the site; or representatives of the U.S. Fish and Wildlife Service (USFWS) or the National Marine Fisheries Service (NMFS).

EPA may provide access to portions of your SWPPP to a member of the public upon request. Confidential Business Information (CBI) will be withheld from the public, but may not be withheld from EPA, USFWS, or NMFS.

Note: Information covered by a claim of confidentiality will be disclosed by EPA only to the extent of, and by means of, the procedures set forth in 40 CFR Part 2, Subpart B. In general, submitted information protected by a business confidentiality claim may

be disclosed to other employees, officers, or authorized representatives of the United States concerned with implementing the CWA. The authorized representatives, including employees of other executive branch agencies, may review CBI during the course of reviewing draft regulations.

If an onsite location is unavailable to keep the SWPPP when no personnel are present, notice of the plan's location must be posted near the main entrance of your construction site.

7.4. REQUIRED SWPPP MODIFICATIONS.

7.4.1. List of Conditions Requiring SWPPP Modification.

You must modify your SWPPP, including the site map(s), in response to any of the following conditions:

7.4.1.1 Whenever new operators become active in construction activities on your site, or you make changes to your construction plans, stormwater control measures, pollution prevention measures, or other activities at your site that are no longer accurately reflected in your SWPPP. This includes changes made in response to corrective actions triggered under Part 5. You do not need to modify your SWPPP if the estimated dates in Part 7.2.5 change during the course of construction;

7.4.1.2 To reflect areas on your site map where operational control has been transferred (and the date of transfer) since initiating permit coverage;

7.4.1.3 If inspections or investigations by site staff, or by local, state, tribal, or federal officials determine that SWPPP modifications are necessary for compliance with this permit;

7.4.1.4 Where EPA determines it is necessary to impose additional requirements on your discharge, the following must be included in your SWPPP:

a. A copy of any correspondence describing such requirements; and

b. A description of the stormwater control measures that will be used to meet such requirements.

7.4.1.5 To reflect any revisions to applicable federal, state, tribal, or local requirements that affect the stormwater control measures implemented at the site; and

7.4.1.6 If applicable, if a change in chemical treatment systems or chemically-enhanced stormwater control is made, including use of a different treatment chemical, different dosage rate, or different area of application.

7.4.2. Deadlines for SWPPP Modifications.

You must complete required revisions to the SWPPP within 7 calendar days following the occurrence of any of the conditions listed in Part 7.4.1.

7.4.3. SWPPP Modification Records.

You are required to maintain records showing the dates of all SWPPP modifications. The records must include the name of the person authorizing each change (see Part 7.2.15 above) and a brief summary of all changes.

7.4.4. Certification Requirements.

All modifications made to the SWPPP consistent with Part 7.4 must be authorized by a person identified in Appendix I, Part I.11.b.

7.4.5. Required Notice to Other Operators.

Upon determining that a modification to your SWPPP is required, if there are multiple operators covered under this permit, you must immediately notify any operators who may be impacted by the change to the SWPPP.

8. HOW TO TERMINATE COVERAGE.

Until you terminate coverage under this permit, you are required to comply with all conditions and effluent limitations in the permit. To terminate permit coverage, you must submit to EPA a complete and accurate Notice of Termination (NOT), which certifies that you have met the requirements for terminating in Part 8.

8.1. MINIMUM INFORMATION REQUIRED IN NOT.

You will be required to provide the following in your NOT:

8.1.1. NPDES permit tracking number provided by EPA when you received coverage under this permit;

8.1.2. Basis for submission of the NOT (see Part 8.2);

8.1.3. Operator contact information;

8.1.4. Name of project and address (or a description of location if no street address is available); and

8.1.5. NOT certification.

8.2. CONDITIONS FOR TERMINATING PERMIT COVERAGE.

You may terminate permit coverage only if one of the following conditions occurs at your site:

8.2.1. You have completed all earth-disturbing activities at your site and, if applicable, construction support activities covered by this permit (see Part 1.3.c), and you have met the following requirements:

8.2.1.1 For any areas that (1) were disturbed during construction, (2) are not covered over by permanent structures, and (3) over which you had control during the construction activities, you have met the requirements for final vegetative or non-vegetative stabilization in Part 2.2.2;

8.2.1.2 You have removed and properly disposed of all construction materials, waste and waste handling devices, and have removed all equipment and vehicles that were used during construction, unless intended for long-term use following your termination of permit coverage;

8.2.1.3 You have removed all stormwater controls that were installed and maintained during construction, except those that are intended for long-term use following your termination of permit coverage or those that are biodegradable; and

8.2.1.4 You have removed all potential pollutants and pollutant-generating activities associated with construction, unless needed for long-term use following your termination of permit coverage; or

8.2.2. You have transferred control of all areas of the site for which you are responsible under this permit to another operator, and that operator has submitted an NOI and obtained coverage under this permit; or

8.2.3. Coverage under an individual or alternative general NPDES permit has been obtained.

8.3. HOW TO SUBMIT YOUR NOT.

You are required to use EPA's electronic NOI system, or "eNOI system", to prepare and submit your NOT. The electronic NOT form you are required to complete is found at www.epa.gov/npdes/stormwater/cgpenoi. You will use your NOI tracking number *(i.e., the EPA number you were assigned upon authorization under the permit)* to upload the

fillable NOT form, which will ensure that EPA properly records your termination of coverage. If you have a problem with the use of the eNOI system, contact the EPA Regional Office that corresponds to the location of your site. If you are given approval by the EPA Regional Office to use a paper NOT, you must complete the form in Appendix K.

8.4. DEADLINE FOR SUBMITTING NOTS.

You must submit your NOT within 30 calendar days after any one of the triggering conditions in Part 8.2 occur.

8.5. EFFECTIVE DATE OF TERMINATION OF COVERAGE.

Your authorization to discharge under this permit terminates at midnight of the calendar day that a complete NOT is processed and posted on EPA's website (www.epa.gov/npdes/stormwater/cgpnoisearch).

9. PERMIT CONDITIONS APPLICABLE TO SPECIFIC STATES, INDIAN COUNTRY LANDS, OR TERRITORIES

The provisions in this Part provide modifications or additions to the applicable conditions of this permit to reflect specific additional conditions required as part of the state or tribal CWA Section 401 certification process, or the Coastal Zone Management Act (CZMA) certification process, or as otherwise established by the permitting authority. The specific additional revisions and requirements only apply to activities in those specific states, Indian country, and areas in certain states subject to construction projects by Federal Operators. States, Indian country, and areas subject to construction by Federal Operators not included in this Part do not have any modifications or additions to the applicable conditions of this permit

9.1. Region 1

9.1.1. MAR120000: Commonwealth of Massachusetts (except Indian country).

9.1.1.1 You must comply with the Massachusetts Clean Waters Act (Ch. 21, ss. 26-53).

9.1.1.2 You must comply with the conditions in 314 CMR 4.00- Massachusetts Surface Water Quality Standards.

9.1.1.3 You must comply with the conditions in 314 CMR 3.00- Massachusetts Surface Water Discharge Permit Program.

9.1.1.4 You must comply with the Wetlands Protection Act (Ch. 131 s. 40) and its regulations, 310 CMR 10.00 and any Order of Conditions issued by a Conservation Commission or a Superseding Order of Conditions issued by the Massachusetts Department of Environmental Protection.

9.1.1.5 You must comply with the Massachusetts Storm Water Performance Standards, as prescribed by state regulations promulgated under the authority of the Massachusetts Clean Waters Act, MGL Ch. 21, ss 26-53 and the Wetlands Protection Act, Ch. 131, s. 40.

9.1.1.6 You must comply with the conditions in 314 CMR 9.00 – Water Quality Certification for Discharges of Dredged or Fill Material, Dredging, and Dredged Material Disposal in Waters of the United States within the Commonwealth.

9.1.1.7 You must comply with the Massachusetts Endangered Species Act (MESA), MGL Ch. 313A and regulations at 321 CMR 10.00 and any actions undertaken to comply with this stormwater general permit shall not result in non-compliance with the MESA.

9.1.1.8 Activities covered under this general permit shall not interfere with the implementation of mosquito control work conducted in accordance with Chapter 252 including s. 5A thereunder and MassDEP Guideline Number BRP G01-02, West Nile Virus Application of Pesticides to Wetland Resource Areas and Buffer Zones, and Public Water Supplies.

9.1.1.9 The Department may request a copy of the Stormwater Pollution Prevention Plan (SWPPP) and the permittee is required to submit the SWPPP to the Department within 14 days of such request. The Department may conduct an inspection of any facility covered by this permit to ensure compliance with state law requirements, including state water quality standards. The Department may enforce its certification conditions.

9.1.1.10 The Department may require the permit holder to perform water quality monitoring during the permit term if monitoring is necessary for the protection of public health or the environment as designated under the authority at 314 CMR 3.00.

9.1.1.11 The Department may require the permit holder to provide measurable verification of the effectiveness of Best Management Practices (BMPs) and other control measures used in the stormwater management program, including water quality monitoring.

9.1.1.12 The Department has determined that compliance with this permit does not protect the permit holder from enforcement actions deemed necessary by the Department under its associated regulations to address an imminent threat to public health or a significant adverse environmental impact which results in a violation of the Massachusetts Clean Waters Act, Ch. 21, ss. 26-53.

9.1.1.13 The Department reserves the right to modify this 401 Water Quality Certification if any changes, modifications, or deletions are made to this general permit. In addition, the Department reserves the right to add and/or alter the terms and conditions of this 401 Water Quality Certification to carry out its responsibilities during the term of this general permit with respect to water quality, including any revisions to 314 CMR 4.00, Massachusetts Surface Water Quality Standards.

9.1.1.14 Should any violation of the Massachusetts Surface Water Quality Standards, 314 CMR 4.00, or the conditions of this 401 Water Quality Certification occur, the Department will direct the permit holder to correct the violation(s). The Department has the right to take any action as authorized by the General Laws of the Commonwealth to address the violation(s) of this permit or the Massachusetts Clean Waters Act and the regulations promulgated thereunder. Substantial civil and criminal penalties are authorized under MGL Ch. 21, s. 42 for discharging into Masachusetts' waters in violation of an order or permit issued by this Department. This 401 Water Quality Certification does not relieve the permit holder of the duty to comply with other applicable Massachusetts statutes and regulations.

9.1.2. NHR120000: State of New Hampshire.

9.1.2.1 If you disturb 100,000 square feet or more of contiguous area, you must also apply for an Alteration of Terrain (AoT) permit from DES pursuant to RSA 485-A:17 and Env-Ws 1500. This requirement also applies to a lower disturbance threshold of 50,000 square feet or more when construction occurs within the protected shoreline under the Shoreland Water Quality Protection Act (see RSA 483-B and Env-Ws 1400). A permit application must also be filed if your project disturbs an area of greater than 2,500 square feet, is within 50 feet of <u>any</u> surface water, and has a flow path of 50 feet or longer disturbing a grade of 25 percent or greater. Project sites with disturbances smaller than those discussed above, that have the potential to adversely affect state surface waters, are subject to the conditions of an AoT General Permit by Rule.

9.1.2.2 You must determine that any excavation dewatering discharges are not contaminated before they will be authorized as an allowable non-stormwater discharge under this permit (see Part 1.3.d). The water is considered uncontaminated if there is no groundwater contamination within 1,000 feet of the source of the groundwater to be treated and discharged.

Information on groundwater contamination can be generated over the Internet via the NHDES web site http://des.nh.gov/ at the OneStop Web Geographic Information System at http://www2.des.state.nh.us/gis/onestop. If it is determined that the groundwater to be dewatered is near a remediation or other waste site you must apply for the Remediation General Permit (see http://www.epa.gov/region1/npdes/rgp.html.)

9.1.2.3 You must treat any uncontaminated excavation dewatering discharges as necessary to remove suspended solids and turbidity. The discharges must be sampled at a location prior to mixing with stormwater at least once per week during weeks when discharges occur. Samples must be analyzed for total suspended solids (TSS) and must meet monthly average and daily maximum TSS limits of 50 milligrams per liter (mg/L) and 100 mg/L, respectively. TSS (a.k.a. Residue, Nonfilterable) sampling and analysis must be performed in accordance with Tables IB and II in 40 CFR 136.3 (see: http://www.access.gpo.gov/nara/cfr/waisidx_02/40cfr136_02.html). Records of any sampling and analysis must be maintained and kept with the SWPPP for at least three years after final site stabilization.

9.1.2.4 Construction site owners and operators must consider opportunities for post-construction groundwater recharge using infiltration best management practices (BMPs) during site design and preparation of the stormwater pollution prevention plan (SWPPP). If your construction site is in a town that is required to obtain coverage under the NPDES General Permit for discharges from Municipal Separate Storm Sewer Systems (MS4) you may be required to use such practices. The SWPPP must include a description of any on-site infiltration that will be installed as a post-construction stormwater management measure or reasons for not employing such measures such as 1) The facility is located in a wellhead protection area as defined in RSA 485-C:2; or 2) The facility is located in an area where groundwater has been reclassified to GAA, GAI or GA2 pursuant to RSA 485-C and Env-Ws 420; or 3) Any areas that would be exempt from the groundwater recharge requirements contained in Env-Ws 1507.04(e), including all land uses or activities considered to be a "High-load Area" (see Env-Wq 1502.26). For design considerations for infiltration measures see Volume II of the NH Stormwater Manual.

9.1.2.5 Appendix F contains a list of Tier 2, or high quality waters. Although there is no official list of tier 2 waters, it can be assumed that all NH surface waters are tier 2 for turbidity unless 1) the surface water that you are proposing to discharge into is listed as impaired for turbidity in the states listing of impaired waters (see Surface Water Quality Watershed Report Cards at http://des.nh.gov/organization/divisions/water/wmb/swqa/report_cards.htm or 2) sampling upstream of the proposed discharge location shows turbidity values greater than 10 NTU. A single grab sample collected during dry weather (no precipitation within 48 hours) is acceptable.

9.1.2.6 To ensure compliance with RSA 485-C, RSA 485-A, RSA 485-A:13, I(a), Env-Wq 1700 and Env-Wq 302, the following information may be requested by NHDES. This information must be kept on site unless you receive a written request from NHDES that it be sent to the address shown in Part 9.1.2.7.

a. A site map required in Part 7.2.6, showing the type and location of all post-construction infiltration BMPs utilized at the facility or the reason(s) why none were installed;

b. A list of all non-stormwater discharges that occur at the facility, including their source locations and the control measures being used (see Part 1.3.d).

c. Records of sampling and analysis of TSS required for construction dewatering discharges (see Part 9.1.2.3).

9.1.2.7 All required or requested documents must be sent to:

NH Department of Environmental Services, Wastewater Engineering Bureau, Permits & Compliance Section
P.O. Box 95
Concord, NH 03302-0095

9.1.2.8 When NHDES determines that additional water quality certification requirements are necessary to protect water quality, it may require individual discharges to meet additional conditions to obtain or continue coverage under the CGP. Any such conditions must be supplied to the permittee in writing. Any required pollutant loading analyses and any designs for structural best management practices necessary to protect water quality must be prepared by a civil or sanitary engineer registered in New Hampshire.

9.2. Region 4

9.2.1. FLR12000I: Indian country within the State of Florida.

9.2.1.1 **Seminole Tribe of Florida.** The following conditions apply only for discharges on federal trust lands of the Seminole Tribe of Florida (Big Cypress, Brighton, Hollywood, Immokalee, and Tampa Reservations):

a. Any discharges into waters of the Seminole Tribe of Florida shall not cause an exceedance in Turbidity of 29 NTU above natural background conditions.

b. Unless otherwise specified by previous permits or criteria, a storm event of three (3) day duration and twenty five (25) year return frequency shall be used in computing off-site discharge on Seminole Lands as agreed upon in the Water Rights Compact agreement attached to Public Law 100-228 (December 31, 1987), Seminole Indian Land Claims Settlement Act of 1987.

c. The Seminole Tribe of Florida accepts a 20' X 20' stabilization at entry/exit points.

9.3. Region 5

MNR12000I: Indian country within the State of Minnesota.

9.3.1.1 **Fond du Lac Band of Lake Superior Chippewa.** The following conditions apply only to discharges on the Fond du Lac Band of Lake Superior Chippewa Reservation.

a. A copy of the Storm Water Pollution Prevention Plan must be submitted to the following office at least thirty (30) days in advance of sending the Notice of Intent (NOI) to EPA:

Fond du Lac Reservation
Office of Water Protection
1720 Big Lake Road
Cloquet, MN 55720

CGP applicants are encouraged to work with the FDL Office of Water Protection in the identification of all proposed receiving waters.

b. Copies of the Notice of Intent (NOI) and the Notice of Termination (NOT) must be sent to the Fond du Lac Office of Water Protection at the same time they are submitted to EPA.

c. The turbidity limit shall NOT exceed 10% of natural background as determined by the Office of Water protection staff.

d. Turbidity sampling must take place within 24 hours of a ½ -inch or greater rainfall event. The results of the sampling must be reported to the Officce of Water Protection staff within 7 days of sample collection. All sample reporting must include the date and time, location (GPS:UTM/Zone 15), and NTU.

e. Discharges to receiving waters with open water must be sampled for turbidity prior to any authorized discharge as determined by Office of Water Protection staff.

f. This certification does not pertain to any new discharge to Outstanding Reservation Resource Waters (ORRW) as described in §105 b.3 of the Fond du Lac Water Quality Standards (Ordinance #12/98). Although additional waters may be designated in the future, currently Perch Lake, Rice Portage Lake, Miller Lake, Deadfish Lake and Jaskari Lake are designated as ORRWs. New dischargers wishing to discharge to an ORRW must obtain an individual permit for stormwater discharges from large and small construction activities.

g. All work shall be carried out in such a manner as will prevent violations of water quality criteria as stated in the Water Quality Standards of the Fond du Lac Reservation, Ordinance 12/98 as amended. This includes, but is not limited to, the prevention of any discharge that causes a condition in which visible solids, bottom deposits, or turbidity impairs the usefulness of water of the Fond du Lac Reservation for any of the uses designated in the Water Quality Standards of the Fond du Lac Reservation. These uses include wildlife, aquatic life, warm and cold water fisheries, subsistence fishing (netting), primary contact recreation, cultural, wild rice areas, aesthetic waters, agriculture, navigation and commercial.

h. Appropriate steps shall be taken to ensure that petroleum products or other chemical pollutants are prevented from entering waters of the Fond du Lac Reservation. All spills must be reported to the appropriate emergency management agency, and measures shall be taken immediately to prevent the pollution of waters of the Fond du Lac reservation, including groundwater.

i. This certification does not authorize impacts to cultural, historical, or archeological features or sites, or properties that may be eligible for such listing.

9.3.1.2 **Grand Portage Band of Lake Superior Chippewa.** The following conditions apply only to discharges on the Grand Portage Band of Lake Superior Chippewa Reservation.

a. The CGP authorization is for construction activities that may occur within the exterior boundaries of the Grand Portage Reservation in

accordance to the Grand Portage Land Use Ordinance. The CGP regulates stormwater discharges associated with construction sites of one acre or more in size. Only those activities specifically authorized by the CGP are authorized by this certification (the "Certification"). This Certification does not authorize impacts to cultural, historical, or archeological features or sites, or properties that may be eligible for listing as such.

b. All construction stormwater discharges authorized by the CGP must comply with the Water Quality Standards and Water Resources Ordinance, as well as Applicable Federal Standards (as defined in the Water Resources Ordinance). As such, appropriate steps must be taken to ensure that petroleum products or other chemical pollutants are prevented from entering the Waters of the Reservation (as defined in the Water Resources Ordinance). All spills must be reported to the appropriate emergency-management agency, and measures must be taken to prevent the pollution of the Waters of the Reservation, including groundwater.

c. A copy of the Storm Water Pollution Prevention Plan (the "Plan") required by the CGP must be submitted to the Board at least 30 days in advance of sending the requisite Notice of Intent to EPA. The Board may require monitoring of storm-water discharges as determined on a case-by-case basis. If the Board determines that a monitoring plan is necessary, the monitoring plan must be prepared and incorporated into the Plan before the Notice of Intent is submitted to the EPA. The Plan should be sent to:

   Grand Portage Environmental Resources Board
   P.O. Box 428
   Grand Portage, MN 55605

   Copies of the Notice of Intent and Notice of Termination required under the General Permit must be submitted to the Board at the address above at the same time they are submitted to the EPA.

d. If requested by the Grand Portage Environmental Department, the permittee must provide additional information necessary for a case-by-case eligibility determination to assure compliance with the Water Quality Standards and any Applicable Federal Standards.

e. Discharges that the Board has determined to be or that may reasonably be expected to be contributing to a violation of Water Quality Standards or Applicable Federal Standards are not authorized by this Certification.

f. The Board retains full authority provided by the Water Resources Ordinance to ensure compliance with and to enforce the provisions of the Water Resource Ordinance and Water Quality Standards, Applicable Federal Standards, and these Certification conditions.

g. Appeals related to Board actions taken in accordance with any of the preceding conditions may be heard by the Grand Portage Tribal Court.

9.3.2. WIR12000I: Indian country within the State of Wisconsin.

9.3.2.1 **Bad River Band of the Lake Superior Tribe of Chippewa Indians.** The following conditions apply only to discharges on the Bad River Band of the Lake Superior Tribe of Chippewa Indians Reservation.

a. Only those activities specifically authorized by the CGP are authorized by this Certification. This Certification does not authorize impacts to cultural properties, or historical sites, or properties that may be eligible for listing as such.[27, 28]

b. Operators are not eligible to obtain authorization under the CGP for all new discharges to an Outstanding Tribal Resource Water (or Tier 3 water).[29] Outstanding Tribal Resource Waters, or Tier 3 waters, include the following: Kakagon Slough and the lower wetland reaches of its tributaries that support wild rice, Kakagon River, Bad River Slough, Honest John Lake, Bog Lake, a portion of Bad River, from where it enters the Reservation through the confluence with the White River, and Potato River.[30]

c. Projects utilizing cationic treatment chemicals[31] within the Bad River Reservation boundaries are not eligible for coverage under the CGP.[32]

d. All projects which are eligible for coverage under the CGP and are located within the exterior boundaries of the Bad River Reservation shall be implemented in such a manner that is consistent with the Tribe's Water Quality Standards (WQS).[33]

e. An operator proposing to discharge to an Outstanding Resource Water (or Tier 2.5 water) under the CGP must comply with the antidegradation provisions of the Tribe's WQS. Outstanding Resource Waters, or Tier 2.5 waters, include the following: a portion of Bad River, from downstream the confluence with the White River to Lake Superior, White River, Marengo River, Graveyard Creek, Bear Trap Creek, Wood Creek, Brunsweiler River, Tyler Forks, Bell Creek, and Vaughn Creek.[34] The antidegradation demonstration materials described in provision E.4.iii. must be submitted to the following address:

   Bad River Tribe's Natural Resources Department
   Attn: Water Resources Specialist
   P.O. Box 39
   Odanah, WI 54861

f. An operator proposing to discharge to an Exceptional Resource Water (or Tier 2 water) under the CGP must comply with the antidegradation provisions of the Tribe's WQS. Exceptional Resource Waters, or Tier 2 waters, include the following: any surface water within the exterior boundaries of the Reservation that is not specifically classified as an Outstanding Resource Water (Tier 2.5 water) or an Outstanding Tribal

[27] Bad River Band of Lake Superior Tribe of Chippewa Indians Water Quality Standards adopted by Resolution No. 7-6-11-441 (hereafter, Tribe's WQS).

[28] 36 C.F.R §800.16(l)(2).

[29] Tribe's WQS: See provisions E.3.ii and E.4.iv.

[30] Tribe's WQS: See provision E.2.iii.

[31] See definition of cationic treatment chemicals in Appendix A of the CGP

[32] Tribe's WQS: See provisions E.6.ii.a and E.6.ii.c.

[33] See Footnote 27.

[34] Tribe's WQS: See provision E.2.ii.

Resource Water (Tier 3 water).[35] The antidegradation demonstration materials described in provision E.4.ii. must be submitted to the following address:

Bad River Tribe's Natural Resources Department
Attn: Water Resources Specialist
P.O. Box 39
Odanah, WI 54861

g. A discharge to a surface water within the Bad River Reservation boundaries shall not cause or contribute to an exceedance of the turbidity criterion included in the Tribe's WQS, which states: Turbidity shall not exceed 5 NTU over natural background turbidity when the background turbidity is 50 NTU or less, or turbidity shall not increase more than 10% when the background turbidity is more than 50 NTU.[36]

h. All projects which are eligible for coverage under the CGP within the exterior boundaries of the Bad River Reservation must comply with the Bad River Reservation Wetland and Watercourse Protection Ordinance, or Chapter 323 of the Bad River Tribal Ordinances, including the erosion and sedimentation control, natural buffer, and stabilization requirements. Questions regarding Chapter 323 and requests for permit applications can be directed to the Wetlands Specialist in the Tribe's Natural Resources Department at (715) 682-7123 or wetlands@badriver-nsn.gov.

i. An operator of a project, which is eligible for coverage under the CGP, that would result in an allowable discharge under the CGP occurring within the exterior boundaries of the Bad River Reservation must notify the Tribe prior to the commencing earth-disturbing activities.[37] The operator must submit a copy of the Notice of Intent (NOI) to the following addresses at the same time it is submitted to the U.S. EPA:

Bad River Tribe's Natural Resources Department
Attn: Water Resources Specialist
P.O. Box 39
Odanah, WI 54861

Bad River Tribe's Natural Resources Department
Attn: Tribal Historic Preservation Officer (THPO)
P.O. Box 39
Odanah, WI 54861

The operator must also submit a copy of the Notice of Termination (NOT) to the above addresses at the same time it is submitted to the U.S. EPA.

j. The THPO must be provided 30 days to comment on the project.[38]

k. The operator must obtain THPO concurrence in writing. This written concurrence will outline measures to be taken to prevent or mitigate effects to historic properties. For more information regarding the specifics

[35] Tribe's WQS: See provision E.2.i.

[36] Tribe's WQS: See provision E.7.iii.

[37] See footnotes 27 and 28.

[38] 36 C.F.R. § 800.3(c)(4).

of the cultural resources process, see 36 CFR Part 800. A best practice for an operator is to consult with the THPO during the planning stages of an undertaking.[39]

l. An operator of a project, which is eligible for coverage under the CGP, that would result in an allowable discharge under the CGP occurring within the exterior boundaries of the Bad River Reservation must submit a copy of the Stormwater Pollution Prevention Plan (SWPPP) to the following address at the same time as submitting the NOI:[40]

Bad River Tribe's Natural Resources Department
Attn: Water Resources Specialist
P.O. Box 39
Odanah, WI 54861

m. Any corrective action reports that are required under the CGP must be submitted to the following address within one (1) working day of the report completion:[41]

Bad River Tribe's Natural Resources Department
P.O. Box 39
Odanah, WI 54861

n. An operator shall be responsible for meeting any additional permit requirements imposed by the U.S. EPA necessary to comply with the Tribe's antidegradation policies if the discharge point is located upstream of waters designated by the Tribe.[42]

9.3.2.2 **Lac du Flambeau Band of Lake Superior Chippewa Indians.** The following conditions apply only to discharges on the Lac du Flambeau Band of Lake Superior Chippewa Indians Reservation.

a. A copy of the Storm Water Pollution Prevention Plan must be submitted to the following office at least thirty (30) days in advance of sending the Notice of Intent (NOI) to EPA:

Lac du Flambeau
Tribal Land Management
P. O. Box 279
Lac du Flambeau, WI 54538

CGP applicants are encouraged to work with the LdF Office of Water Protection in the identification of all proposed receiving waters.

b. Copies of the NOI and the Notice of Termination (NOT) must be sent to the LdF Water Resource Program at the same time they are submitted to EPA.

c. All work shall be carried out in such a manner as will prevent violations of water quality criteria as stated in the Water Quality Standards of the Lac du Flambeau Reservation. This includes, but is not limited to, the

[39] 36 C.F.R. § 800.3(b).

[40] See footnote 27.

[41] See footnote 27.

[42] See footnote 27.

prevention of any discharge that causes a condition in which visible solids, bottom deposits, or turbidity impairs the usefulness of water of the Lac du Flambeau Reservation for any of the uses designated in the Water Quality Standards of the Lac du Flambeau Reservation.

d. Appropriate steps shall be taken to ensure that petroleum products or other chemical pollutants are prevented from entering waters of the Lac du Flambeau Reservation. All spills must be reported to the appropriate emergency management agency, and measures shall be taken immediately to prevent the pollution of waters of the Lac du Flambeau Reservation, including groundwater.

e. This certification does not authorize impacts to cultural, historical, or archeological features or sites, or properties that may be eligible for such listing.

Note: Facilities within the Sokaogon Chippewa Community are not eligible for stormwater discharge coverage under this permit. Contact the Region 5 office for an individual permit application.

9.4. Region 6

9.4.1. NMR120000: State of New Mexico, except Indian country.

9.4.1.1 In addition to all other provisions of this permit, operators who intend to obtain authorization under this permit for all new and existing stormwater discharges must satisfy the following condition:

The SWPPP must include site-specific interim and permanent stabilization, managerial, and structural solids, erosion, and sediment control best management practices (BMPs) and/or other controls that are designed to prevent to the maximum extent practicable an increase in the sediment yield and flow velocity from pre-construction, pre-development conditions to assure that applicable standards in 20.6.4 NMAC, including the antidegradation policy, or waste load allocations (WLAs) are met. This requirement applies to discharges both during construction and after construction operations have been completed. The SWPPP must identify, and document the rationale for selecting these BMPs and/or other controls. The SWPPP must also describe design specifications, construction specifications, maintenance schedules (including a long term maintenance plan), criteria for inspections, and expected performance and longevity of these BMPs. BMP selection must be made based on the use of appropriate soil loss prediction models (e.g., SEDCAD 4.0, RUSLE, SEDIMOT II, MULTISED, etc.), or equivalent, generally accepted (by professional erosion control specialists), soil loss prediction tools. The operator(s) must demonstrate, and include documentation in the SWPPP, that implementation of the site-specific practices will assure that the applicable standards or WLAs are met, and will result in sediment yields and flow velocities that, to the maximum extent practicable, will not be greater than the sediment yield levels and flow velocities from pre-construction, pre-development conditions. The SWPPP must be prepared in accordance with good engineering practices by qualified (e.g., CPESC certified, engineers with appropriate training, etc.) erosion control specialists familiar with the use of soil loss prediction models and design of erosion and sediment control systems based on these models (or equivalent soil loss prediction tools). Qualifications of the preparer (e.g., professional certifications, description of appropriate training) must be

documented in the SWPPP. The operator(s) must design, implement, and maintain BMPs in the manner specified in the SWPPP.

9.4.1.2 Operators are not eligible to obtain authorization under this permit for all new and existing stormwater discharges to outstanding national resource waters (ONRWs) (also referred to as "Tier 3" waters).

9.4.1.3 For temporary stabilization, instead of the deadline for initiating and completing stabilization in Part 2.2.1.3a, operators must comply with the deadlines in Parts 2.2.1.1 and 2.2.1.2.

9.4.1.4 Instead of the criteria for vegetative stabilization in Part 2.2.2.1.a, operators must provide a uniform vegetation (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 70 percent of the native background vegetative cover for all unpaved areas and areas not covered by permanent structures. The adjustment to allow for less than 100 % native vegetative cover (e.g., 50 % native vegetative cover x 70 % = 35 %) is acceptable.

9.4.1.5 The following replaces the criteria for final vegetative stabilization in Part 2.2.2.1.b:

- The area you have seeded and planted must within 3 years provide established vegetation that achieves 70% of the native background vegetative cover for all unpaved areas and areas not covered by permanent structures; and
- In addition to to seeding or planting the area to be vegetatively stabilized, you must select, design, and install non-vegetative erosion controls that provide cover for at least 3 years without active maintenance by you.

In addition, permittees are only authorized to used this option as a method for final vegetative stabilization for purposes of filing a Notice of Termination (NOT) under the following conditions:

If this option is selected, you must notify NMED at the address listed in Part 9.4.1.6 at the time the NOT is submitted to EPA. The information to be submitted includes:

- A copy of the NOT;
- Contact information, including individual name or title, address, and phone number for the party responsible for implementing the final stabilization measures; and
- The date that the permanent vegetative stabilization practice was implemented and the projected timeframe that the 70 % native vegetative cover requirements are expected to be met. (Note that if more than three years is required to establish 70 % of the natural vegetative cover, this technique cannot be used or cited for fulfillment of the final stabilization requirement – you remain responsible for establishment of final stabilization).

NMED also requires that operators periodically (minimum once/year) inspect and properly maintain the area until the criteria for final stabilization, as specified in Part 2.2 of the CGP, have been met. Operators must prepare an inspection report documenting the findings of these inspections and signed in accordance with Appendix I, Part I.11. This inspection record must be

retained along with the SWPPP for three years after the NOT is submitted for the site and additionally submitted to NMED at the address listed in Part 9.4.1.6. The inspections at a minimum must include the following:

- Observations of all areas of the site disturbed by construction activity;
- Best Management Practices (BMPs)/post-construction stormwater controls must be observed to ensure they are effective;
- An assessment of the status of vegetative re-establishment; and
- Corrective actions required to ensure vegetative success within three years, and control of pollutants in stormwater runoff from the site, including implementation dates.

9.4.1.6 Copies of all documents submitted to EPA in non-electronic format must be sent to the following address:

Program Manager
Point Source Regulation Section
Surface Water Quality Bureau
New Mexico Environment Department
P.O. Box 5469
Santa Fe, New Mexico 87502

9.4.2. NMR12000I: Indian country within the State of New Mexico.

9.4.2.1 **Pueblo of Sandia**. The following conditions apply only to discharges on the Pueblo of Sandia Reservation:

a. Copies of all Notices of Intent submitted to the EPA must also be sent concurrently to the Pueblo of Sandia at the following address. Discharges are not authorized by this permit unless an accurate and complete NOI has been submitted to the Pueblo of Sandia.

Regular U.S. Delivery Mail:
Pueblo of Sandia Environment Department
Attention: Water Quality Manager
481 Sandia Loop
Bernalillo, New Mexico 87004

b. The Pueblo of Sandia will not allow the Rainfall Erosivity Waivers (see Appendix C) to be granted for any small construction activities.

c. The Stormwater Pollution Prevention Plan (SWPPP) must be available to the Pueblo of Sandia Environment either electronically or hard copy upon request for review. The SWPPP must be made available at least fourteen (14) days before construction begins. The fourteen (14) day period will give Tribal staff time to become familiar with the project site, prepare for construction inspections, and determine compliance with the Pueblo of Sandia Water Quality Standards. Failure to provide a SWPPP to the Pueblo of Sandia may result in denial of the discharge or construction delay.

d. An "Authorization to Proceed Letter" with site specific mitigation, site and project requirements will be sent out to the permittee when a review of the NOI and SWPPP is completed by the Pueblo of Sandia

Environment Department. This approval will allow the construction to proceed if all applicable requirements are met.

e. Before submitting a Notice of Termination (NOT), permittees must clearly demonstrate to the Pueblo of Sandia Environment Department though a site visit or documentation that requirements for site stabilization have been met and any temporary erosion control structures have been removed. A short letter stating the stabilization requirements have been met will be sent to the permittee to add to the permittees NOT submission to EPA.

f. Copies of all NOT submitted to the EPA must also be sent concurrently to the Pueblo of Sandia at the following address:

Regular U.S. Delivery Mail:
Pueblo of Sandia Environment Department
Attention: Water Quality Manager
481 Sandia Loop
Bernalillo, New Mexico 87004

9.4.3. OKR12000F: Discharges in the State of Oklahoma that are not under the authority of the Oklahoma Department of Environmental Quality, including activities associated with oil and gas exploration, drilling, operations, and pipelines (includes SIC Groups 13 and 46, and SIC codes 492 and 5171), and point source discharges associated with agricultural production, services, and silviculture (includes SIC Groups 01, 02, 07, 08, 09).

In accordance with Section 303 of the Clean Water Act and Oklahoma's Water Quality Standards (OAC 785: 45):

9.4.3.1 For activities located within the watershed of any Oklahoma Scenic River, including the Illinois River, Flint Creek, Barren Fork Creek, Upper Mountain Fork, Little Lee Creek, and Big Lee Creek or any water or watershed designated "ORW" (Outstanding Resource Water) in Oklahoma's Water Quality Standards, this permit may only be used to authorize discharges from temporary construction activities. Certification is denied for any on-going activities such as sand and gravel mining or any mineral mining.

9.4.3.2 For activities located within the watershed of any Oklahoma Scenic River, including the Illinois River, Flint Creek, Barren Fork Creek, Upper Mountain Fork, Little Lee Creek, and Big Lee Creek or any water or watershed designated "ORW" (Outstanding Resource Water) in Oklahoma's Water Quality Standards, certification is denied for any discharges originating from support activities, including concrete and asphalt batch plants, equipment staging yards, material storage areas, excavated material disposal areas, or borrow areas.

9.5. Region 8

9.5.1. MTR12000I: Indian country within the State of Montana

9.5.1.1 **The Confederated Salish and Kootenai Tribes of the Flathead Nation.** The following conditions apply only to discharges on the Confederated Salish and Kootenai Tribes of the Flathead Nation Reservation:

a. Permittees must send the Stormwater Pollution Prevention Plan (SWPPP) to the Tribes at least 30 days before construction starts.

b. Before submitting the Notice of Termination (NOT), permittees must clearly demonstrate to an appointed tribal staff person during an on-site inspection that requirements for site stabilization have been met.

c. The permittee must send a copy of the Notice of Intent (NOI) and the Notice of Termination (NOT) to the tribes.

d. Permittees may submit their SWPPPs and NOTs electronically to clintf@cskt.org.

Written NOI's, SWPPPs and NOT's may be mailed to:
Clint Folden, Water Quality Regulatory Specialist
Confederated Salish and Kootenai Tribes
Natural Resources Department
P.O. Box 278
Pablo, MT 59855

9.5.1.2 Fort Peck Tribes. The following conditions apply only to discharges on the Fort Peck Reservation:

Permittees must notify the Fort Peck Office of Environmental Protection (OEP) two weeks prior to commencing construction.

9.6. Region 9

9.6.1. AZR12000I: Indian country within the State of Arizona.

9.6.1.1 **Hualapai Tribal Lands**. The following condition applies only for discharges on the Hualapai Reservation:

All notices of intent for proposed stormwater discharges under the CGP and all pollution prevention plans for stormwater discharges on Hualapai Tribal lands shall be submitted to Water Resources Program through the Tribal Chairman for review and approval, P.O. Box 179, Peach Springs, AZ 86434.

9.6.2. CAR12000I: Indian country within the State of California.

9.6.2.1 **Big Pine Paiute Tribe of the Owens Valley**. Big Pine Tribal Water Quality Standards Section VII(e): If a proposed action has the possibility to adversely affect the water quality of Big Pine Creek, an application must be filed with the Tribal Environmental Office. The application must describe the action proposed and its effects on the creek, how this information was derived, and a justification for the action. Upon satisfying these requirements, the Tribal Environmental Office will recommend or not recommend this proposal to be considered by the Tribal Council. Tribal Council will make a determination whether to consider the proposal further. If the Tribal Council wishes to consider the application further, the public participation process will take place (see paragraph VII(d)). The Tribal Council has the sole authority in permitting degradation to Big Pine Creek. If the Tribal Council makes the decision to allow degradation, they will submit their decision to the USEPA for review and approval.

9.6.3. GUR120000: The Island of Guam. Permittees must adhere with imposed conditions for the project, in accordance with section 307(c)(1), of the Coastal Zone Management Act, 15 CFR part 930.

9.6.4. MPR120000: Commonwealth of the Northern Mariana Islands (CNMI).

9.6.4.1 An Earthmoving and Erosion Control Permit must be obtained from DEQ prior to any construction activity covered under the NPDES General Permit.

9.6.4.2 All conditions and requirements set forth in the United States Environmental Protection Agency (USEPA), National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges from Construction Activities must be complied with.

9.6.4.3 A stormwater pollution prevention plan (SWPPP) for stormwater discharges from construction activities must be approved by the Director of DEQ prior to submission of the Notice of Intent (NOI).

9.6.4.4 A NOI to be covered by the General Permit for Discharges from Construction Activities must be submitted to DEQ and USEPA, Region IX, in the form prescribed by USEPA, accompanied by a SWPPP approval letter from DEQ.

9.6.4.5 The NOI must be postmarked fourteen (14) calendar days prior to any stormwater discharges and a copy is submitted to the Director of DEQ no later than seven (7) calendar days prior to any stormwater discharges.

9.6.4.6 Copies of all monitoring reports required by the NPDES General Permit are submitted to DEQ.

9.6.4.7 In accordance with Section 10.3(h) and (i) of the CNMI Water Quality Standards, DEQ reserves the right to deny coverage under this permit and require submittal of an application for an individual NPDES permit based on review of the NOI or other information made available to the Director.

9.6.5. NVR12000I: Indian country within the State of Nevada.

9.6.5.1 **Pyramid Lake Paiute Tribe**. The following conditions apply only for discharges on the Pyramid Lake Paiute Reservation:

a. A SWPPP for stormwater discharges from project construction activities must be submitted to, and approved by, the PLPT Environmental Department director, prior to the submission of a Notice of Intent (NOI or eNOI) to EPA.

b. The applicant is to submit a hard copy of the Notice of Intent (NOI or eNOI) and a draft or final copy of the Stormwater Pollution Prevention Plan (SWPPP) by U.S. Mail to the Pyramid Lake Environmental Department at the address below:

Pyramid Lake Tribe Environmental Department
P.O. Box 256
Nixon, NV 89424

c. The applicant is to concurrently submit to the PLPT Environmental Department, hard copies of any other forms submitted to the EPA, including waivers, reporting, and Notice of Termination (NOT).

9.7. Region 10

9.7.1. IDR120000: The State of Idaho, except those located on Indian country.

For the complete text of Idaho's certification including the full anti-degradation analysis, please visit the IDEQ website at http://www.deq.idaho.gov/media/821491-usepa-npdes-general-permit-storm-water-discharges-401-certification-final-0412.pdf

9.7.1.1 The Idaho Department of Environmental Quality's (DEQ) certification of this permit does not constitute authorization of your permitted activities by any other state or federal agency or private person or entity. DEQ's certification does not excuse you from the obligation to obtain any other necessary

approvals, authorizations or permits, including without limitation, the approval from the owner of a private water conveyance system, if one is required, to use the system in connection with the permitted activities.

9.7.1.2 Idaho's Antidegradation Policy. Idaho Water Quality Standards (WQS) (IDAPA 58.01.02) contain an antidegradation policy providing three levels of protection to water bodies in Idaho (IDAPA 58.01.02.051).

a. Tier 1 Protection. The first level of protection applies to all water bodies subject to Clean Water Act jurisdiction and ensures that existing uses of a water body and the level of water quality necessary to protect those existing uses will be maintained and protected (IDAPA 58.01.02.051.01; 58.01.02.052.01). Additionally, a Tier 1 review is performed for all new or reissued permits or licenses (IDAPA 58.01.02.052.05).
b. Tier 2 Protection. The second level of protection applies to those water bodies considered high quality and ensures that no lowering of water quality will be allowed unless deemed necessary to accommodate important economic or social development (IDAPA 58.01.02.051.02; 58.01.02.052.06).
c. Tier 3 Protection. The third level of protection applies to water bodies that have been designated outstanding resource waters and requires that activities not cause a lowering of water quality (IDAPA 58.01.02.051.03; 58.01.02.052.07).

DEQ is employing a water body by water body approach to implementing Idaho's antidegradation policy. This approach means that any water body fully supporting its beneficial uses will be considered high quality (Idaho Code § 39-3603(2)(b)(i)). Any water body not fully supporting its beneficial uses will be provided Tier 1 protection for that use, unless specific circumstances warranting Tier 2 protection are met (Idaho Code § 39-3603(2)(b)(iii)). The most recent federally approved Integrated Report and supporting data are used to determine support status and the tier of protection (Idaho Code § 39-3603(2)(b)). The primary pollutants of concern associated with stormwater discharges from construction activities are sediment and turbidity (as Total Suspended Solids). Other potential pollutants include the following: phosphorus, nitrogen and other nutrients from fertilizers; pesticides; petroleum products; construction chemicals; and solid wastes.

9.7.1.3 Protection and Maintenance of Existing Uses (Tier 1 Protection). In order to protect and maintain designated and existing beneficial uses, a permitted discharge must comply with narrative and numeric criteria of the Idaho WQS, as well as other provisions of the WQS such as Section 055, which addresses water quality limited waters. The permittee must notify the appropriate DEQ Regional Office (see table in Part 9.7.1.8 below for contact information) of any potential discharges to impaired waters - water bodies identified as "impaired" for sediment or a sediment-related parameter, such as total suspended solids (TSS) or turbidity, and/or nutrients, including impairments for nitrogen and/or phosphorus.

To determine the support status of the affected water body, the permittee must use the most current EPA-approved Integrated Report, available on Idaho DEQ's website: http://www.deq.idaho.gov/water-quality/surface-water/monitoring-assessment/integrated-report.aspx. Impaired waters are identified in Categories 4 and 5 of the Integrated Report. Category 4(a) reflects impaired waters for which a TMDL has been approved by EPA. Category 5

contains waters which have been identified as "impaired" but do not yet have an EPA-approved TMDL.

DEQ's webpage also has a link to the state's map-based Integrated Report which presents information from the Integrated Report in a searchable, map-based format: http://mapcase.deq.idaho.gov/wq2010/.

In addition to complying with the Part 3.2.2 requirements for any sediment or nutrient-impaired waters, permittee(s) must also comply with Idaho's numeric turbidity criteria, developed to protect aquatic life uses. The criterion states, "Turbidity shall not exceed background turbidity by more than 50 NTU instantaneously or more than 25 NTU for more than 10 consecutive days" (IDAPA 58.01.02250.02.e). For Waters of the State which have been identified as impaired due to sedimentation/siltation, the permittee must conduct turbidity monitoring as described below in Part 9.7.1.6

9.7.1.4 Protection of High-Quality Waters (Tier 2 Protection). To determine the support status of the affected water body, the permittee must use the most current EPA-approved Integrated Report, available on Idaho DEQ's website: http://www.deq.idaho.gov/water-quality/surface-water/monitoring-assessment/integrated-report.aspx. DEQ's webpage also has a link to the state's map-based Integrated Report which presents information from the Integrated Report in a searchable, map-based format: http://mapcase.deq.idaho.gov/wq2010/.

DEQ retains the authority to determine that a 303(d) listed water body is actually a high quality water body if there is biological, chemical or physical data to support such a determination. In cases where information submitted with the NOI, or available from other sources, indicates that further Tier 2 analysis is necessary and/or additional conditions are needed, either for a new project or an existing project with a significantly increased discharge, EPA and DEQ will conduct a review and require any appropriate additional controls. If during this review, EPA and DEQ decide that an additional Tier 2 protection is warranted, then EPA may either change the terms of coverage or terminate coverage under the CGP and require an individual permit.

9.7.1.5 Protection of Outstanding Resource Waters (Tier 3 Protection). Idaho's antidegradation policy requires that the quality of outstanding resource waters (ORWs) be maintained and protected from the impacts of point source discharges. No water bodies in Idaho have been designated as outstanding resource waters to date; however, it is possible that waters may become designated during the term of the CGP. Any applicant proposing to discharge to an ORW must obtain an individual NPDES permit from EPA.

9.7.1.6 Turbidity Monitoring. For Waters of the State which are identified in the Integrated Report as impaired for sedimentation/siltation, the permittee must conduct turbidity monitoring each day during construction activities when the project is not stabilized per Part 2.2 or shut down per Part 4.1.4.3 of the CGP. A properly and regularly calibrated turbidimeter is required.

A sample must be taken twice daily at an undisturbed area immediately upstream of the project area to establish background turbidity levels for each monitoring event. Background turbidity, location, date and time must be recorded prior to monitoring downstream of the project area.

A sample must also be taken twice daily immediately downstream from any point of discharge, and within any visible plume. The turbidity, location, date

and time must be recorded. The downstream sample(s) must be taken immediately following the upstream sample(s) in order to obtain meaningful and representative results.

Results from the compliance point sampling or observation must be compared to the background levels to determine whether project activities are causing an exceedance of state WQS. If the downstream turbidity is 50 NTUs or more than the upstream turbidity, or a plume is observed, then the project is causing an exceedance of the WQS. The permittee must inspect the condition of project BMPs. If the BMPs are functioning to their fullest capability, then the permittee must modify project activities and/or BMPs to correct the violation.

Copies of daily logs for turbidity monitoring must be available to DEQ upon request. The report must describe all exceedances and subsequent actions taken, including the effectiveness of the action.

9.7.1.7 Equivalent Analysis Waiver. Use of the "Equivalent Analysis Waiver" in Appendix C (Part C.3) of the CGP is not authorized.

9.7.1.8 Reporting of Discharges Containing Hazardous Materials or Petroleum Products. Any spill of hazardous materials must be immediately reported to the appropriate DEQ regional office (see table of contacts, below) (IDAPA 58.01.02.850.03). Spills of petroleum products that exceed 25 gallons or that cause a visible sheen on nearby surface waters should be reported to DEQ within 24-hours. Petroleum product spills of less than 25 gallons or spills that do not cause a sheen on nearby surface waters shall only be reported to DEQ if clean-up cannot be accomplished within 24-hours (IDAPA 58.01.02.851.04).

DEQ Regional Office	Contact Name	Phone Number
Boise	Lance Holloway	208-373-0550
Coeur d'Alene	June Bergquist	208-769-1422
Idaho Falls	Troy Saffle	208-528-2650
Lewiston	John Cardwell	208-799-4370
Pocatello	Greg Mladenka	208-236-6160
Twin Falls	Balthasar Buhidar	208-736-2190

Outside of regular business hours, qualified spills shall be reported to the State Communications Center (1-800-632-8000 or 208-846-7610).

9.7.2. ORR12000I: Indian country within the State of Oregon.

9.7.2.1 **Confederated Tribes of the Umatilla Indian Reservation**. The following conditions apply only to discharges on the Umatilla Indian Reservation:

a. The operator shall be responsible for achieving compliance with the Confederated Tribes of the Umatilla Indian Reservations (CTUIR) Water Quality Standards.

b. The operator shall submit a copy of the Notice of Intent (NOI) to be covered by the general permit to the CTUIR Water Resources Program at the address below, at the same time it is submitted to EPA.

c. The operator shall be responsible for submitting all Stormwater Pollution Prevention Plans (SWPPP) required under this permit to the CTUIR Water Resources Program for review and determination that the SWPPP is sufficient to meet Tribal Water Quality Standards, prior to the beginning of any discharge activities taking place.

d. The operator shall be responsible for reporting an exceedance to Tribal Water Quality Standards to the CTUIR Water Resources Program at the same time it is reported to EPA.

Confederated Tribes of the Umatilla Indian Reservation
Water Resources Program
46411 Timine Way
Pendleton, OR 97801

e. The CTUIR Tribal Historic Preservation Office (THPO) requests copies of each NOI which will define whether or not the undertaking has the potential to affect historic properties, and if so, define the undertaking's area of potential effect (APE).

f. The THPO must be provided 30 days to comment on the APE as defined in the permit application.

g. If the project is an undertaking, a cultural resource investigation must occur. All fieldwork must be conducted by qualified personnel (as outlined by the Secretary of Interior's Standards and Guidelines; http://www.nps.gov/history/local-law/arch_stnds_0.htm) and documented using Oregon Reporting Standards (http://egov.oregon.gov/OPRD/HCD/ARCH/arch_pubsandlinks.shtml). The resulting report must be submitted to the THPO and the THOP must concur with the findings and recommendations before any ground disturbing work can occur. The THPO requires 30 days to review all reports.

h. The operator must obtain THPO concurrence in writing. If historic properties are present, this written concurrence will outline measures to be taken to prevent or mitigate effects to historic properties.

i. For more information regarding the specifics of the cultural resources process, see 36 CFR Part 800.

Confederated Tribes of the Umatilla Indian Reservation
Cultural Resources Protection Program
Tribal Historic Preservation Office
46411 Timine Way
Pendleton, OR 97801

9.7.2.2 Confederated Tribes of the Warm Springs Reservation of Oregon. The following conditions apply only for discharges on the Warm Springs Reservation:

a. All activities covered by this NPDES general permit occurring within a designated riparian buffer zone as established in Ordinance 74 (Integrated Resource Management Plan or IRMP) must be reviewed, approved and permitted through the Tribe's Hydraulic Permit Application process, including payment of any applicable fees.

b. All activities covered by this NPDES permit must follow all applicable land management and resource conservation requirements specified in the IRMP.

c. Operators of activities covered by this NPDES general permit must submit a Storm Water Pollution Prevention Plan to the Tribe's Water Control Board at the following address for approval at least 30 days prior to beginning construction activity:

Chair, Warm Springs Water Control Board
P.O. Box C
Warm Springs, Oregon 97761

d. The operator shall be responsible for achieving compliance with the Water Quality Standards of the Confederated Tribes of the Warm Springs Reservation of Oregon. The operator shall be responsible for reporting an exceedance to Tribal Water Quality Standards to the Water Control Board at the address above.

e. The operator shall submit a copy of the Notice of Intent (NOI) to be covered by the general permit to the CTWS, Branch of Natural Resources, Tribal Environmental Office at the address above, at the same time it is submitted to EPA.

f. The CTWS Tribal Historic Preservation Officer (THPO) requests copies of each NOI which will define whether or not the undertaking has the potential to affect historic properties, and if so, define the undertaking's area of potential effect (APE).

g. The THPO must be provided 30 days to comment on the APE as defined in the permit application.

h. If the project is an undertaking, a cultural resource investigation must occur. All fieldwork must be conducted by qualified personnel (as outlined by the Secretary of Interior's Standards and Guidelines; http://www.nps.gov/history/local-law/arch_stnds_0.htm) and documented using Oregon Reporting Standards (http://egov.oregon.gov/OPRD/HCD/ARCH/arch_pubsandlinks.shtml). The resulting report must be submitted to the THPO and the THOP must concur with the findings and recommendations before any ground disturbing work can occur. The THPO requires 30 days to review all reports.

i. The operator must obtain THPO concurrence in writing. If historic properties are present, this written concurrence will outline measures to be taken to prevent or mitigate effects to historic properties.

j. For more information regarding the specifics of the cultural resources process, see 36 CFR Part 800.

9.7.3. WAR12000F: Areas in the State of Washington, except those located on Indian country, subject to construction by Federal Operators.

9.7.3.1 Discharges shall not cause or contribute to a violation of surface water quality standards (Chapter 173-201A WAC), ground water quality standards (Chapter 173-200 WAC), sediment management standards (Chapter 173-204 WAC), and human health-based criteria in the National Toxics Rule (40 CFR Part 131.36). Discharges that are not in compliance with these standards are not authorized.

9.7.3.2 Prior to the discharge of stormwater and non-stormwater to waters of the state, the permittee shall apply all known, available, and reasonable methods of prevention, control, and treatment (AKART). This includes the preparation and implementation of an adequate Stormwater Pollution Prevention Plan (SWPPP), with all appropriate best management practices (BMPs) installed and maintained in accordance with the SWPPP and the terms and conditions of this permit.

9.7.3.3 Sampling & Numeric Effluent Limitations – For Sites Discharging to Certain Waterbodies on the 303(d) List

a. Permittees that discharge to water bodies listed as impaired by the State of Washington under Section 303(d) of the Clean Water Act for turbidity, fine sediment, high pH or phosphorus, shall conduct water quality sampling according to the requirements of this subsection.

Parameter identified in 303(d) listing	Parameter/Units	Analytical Method	Sampling Frequency	Water Quality Standard
Turbidity Fine Sediment Phosphorus	Turbidity/NTU	SM2130 or EPA180.1	Weekly, if discharging	If background is 50 NTU or less: 5 NTU over background; or If background is more than 50 NTU: 10% over background
High pH	pH/Standard Units	pH meter	Weekly, if discharging	In the range of 6.5 – 8.5

b. The operator must retain all monitoring results required by this section as part of the SWPPP. All data and related monitoring records must be provided to EPA or the Washington State Department of Ecology (Ecology) upon request.

c. The operator must notify EPA when the discharge turbidity or discharge pH exceeds the water quality standards as defined in 5.b and 6.b below. All such reports must be submitted within 30 day s of measurement to EPA at the following address:

USEPA – Region 10
NPDES Compliance Unit - Attn: Federal Facilities Compliance Officer
1200 6th Avenue, Suite 900
OCE-133
Seattle, WA 98101
(206) 553-1846

d. All references and requirements associated with Section 303(d) of the Clean Water Act mean the most current EPA approved listing of impaired waters that exists on January 29, 2009, or the date when the operator's complete NOI is received by EPA, whichever is later. The most

recent EPA approved 303(d) list is available on Ecology's website at www.ecy.wa.gov/programs/wq/303d/2008/index.html.

e. Discharges to waterbodies on the 303(d) list for turbidity, fine sediment, or phosphorus

i. Permittees which discharge to waterbodies on the 303(d) list for turbidity, fine sediment, or phosphorus shall conduct turbidity sampling at the following locations to evaluate compliance with the water quality standard for turbidity:

(1) Background turbidity shall be measured in the 303(d) listed receiving water immediately upstream (upgradient) or outside the area of influence of the discharge.

(2) Discharge turbidity shall be measured at the point of discharge into the 303(d) listed receiving waterbody, inside the area of influence of the discharge; or

(3) Alternatively, discharge turbidity may be measured at the point where the discharge leaves the construction site, rather than in the receiving waterbody.

Based on sampling, if the discharge turbidity ever exceeds the water quality standard for turbidity (more than 5 NTU over background turbidity when the background turbidity is 50 NTU or less, or more than a 10% increase in turbidity when the background turbidity is more than 50 NTU), all future discharges shall comply with a numeric effluent limit which is equal to the water quality standard for turbidity. If the receiving water background turbidity is 50 NTU or less, the water quality standard is 5 NTU over background. If the receiving water background turbidity is more than 50 NTU, the water quality standard is 10% over background.

If a future discharge exceeds the water quality standard for turbidity, the permittee shall:

(1) Review the SWPPP for compliance with the permit and make appropriate revisions within seven days of the discharge that exceeded the standard.

(2) Fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible, but no later than ten days of the discharge that exceeded the standard.

(3) Document BMP implementation and maintenance in the site log book.

(4) Continue to sample daily until discharge turbidity meets the water quality standard for turbidity.

f. Discharges to waterbodies on the 303(d) list for High pH

i. Permittees which discharge to waterbodies on the 303(d) list for high pH shall conduct sampling one of the following locations to evaluate compliance with the water quality standard for pH (in the range of 6.5 – 8.5):

(1) pH shall be measured at the point of discharge into the 303(d) listed waterbody, inside the area of influence of the discharge; or,

(2) Alternatively, pH may be measured at the point where the discharge leaves the construction site, rather than in the receiving water.

ii. Based on the sampling set forth above, if the pH ever exceeds the water quality standard for pH (in the range of 6.5 – 8.5), all future discharges shall comply with a numeric effluent limit which is equal to the water quality standard for pH. If a future discharge exceeds the water quality standard for pH, the permittee shall:

(1) Review the SWPPP for compliance with the permit and make appropriate revisions within 7 days of the discharge.

(2) Fully implement and maintain appropriate source control and/or treatment BMPs as soon as possible, but no later than 10 days of the discharge that exceeded the standards.

(3) Document BMP implementation and maintenance in the site log book.

(4) Continue to sample daily until discharge meets the water quality standard for pH (in the range of 6.5 – 8.5).

9.7.3.4 Sampling & Limitations – For Sites Discharging to TMDLs

a. Discharges to a waterbodies subject to an applicable Total Maximum Daily Load (TMDL) for turbidity, fine sediment, high pH, or phosphorus, shall be consistent with the assumptions and requirements of the TMDL.

i. Where an applicable TMDL sets specific waste load allocations or requirements for discharges covered by this permit, discharges shall be consistent with any specific waste load allocations or requirements established by the applicable TMDL.

(1) Discharges shall be sampled weekly, or as otherwise specified by the TMDL, to evaluate compliance with the specific waste load allocations or requirements.

(2) Analytical methods used to meet the monitoring requirements shall conform to the latest revision of the Guidelines Establishing Test Procedures for the Analysis of Pollutants contained in 40 CFR Part 136.

ii. Where an applicable TMDL has established a general waste load allocation for construction stormwater discharges, but no specific requirements have been identified, compliance with this permit will be assumed to be consistent with the approved TMDL.

iii. Where an applicable TMDL has not specified a waste load allocation for construction stormwater discharges, but has not excluded these discharges, compliance with this permit will be assumed to be consistent with the approved TMDL.

iv. Where an applicable TMDL specifically precludes or prohibits discharges from construction activity, the operator is not eligible for coverage under this permit.

b. Applicable TMDL means a TMDL for turbidity, fine sediment, high pH, or phosphorus, which has been completed and approved by EPA prior to February 16, 2012, or prior to the date the operator's complete NOI is received by EPA, whichever is later.

Completed TMDLs are available on Ecology's website at www.ecy.wa.gov/programs/wq/tmdl/TMDLsbyWria/TMDLbyWria.html, or by phone at (360) 407-6460.

9.7.4. WAR12000I: Indian country within the State of Washington

9.7.4.1 **Kalispel Tribe**. The following conditions apply only for discharges on the Kalispel Reservation:

a. The operator shall be responsible for achieving compliance with the Kalispel Tribe's Water Quality Standards, and;

b. The operator shall submit a copy of the Notice of Intent (NOI) to be covered by the general permit to the Kalispel Tribe Natural Resources Department (KNRD) at the same time as it is submitted to the EPA, and;

c. The operator shall submit all Storm Water Pollution Prevention Plans (SWPPP) to KNRD thirty (30) days prior to beginning any discharge activities for review, and;

d. The operator shall be responsible for reporting any exceedance of Tribal Water Quality Standards to KNRD at the same time it is reported to EPA, and;

e. Prior to any land disturbing activities on the Kalispel Indian Reservation and its dependent communities, the operator shall attain a cultural resource clearance letter from KNRD.

f. All tribal correspondence pertaining to the General Permit for Discharges from Construction Activities shall be sent to:

Kalispel Tribe Natural Resources Department
Water Resources Program
PO Box 39
Usk, WA 99180

9.7.4.2 **Lummi Nation**. The following conditions apply only for discharges on the Lummi Reservation:

a. Pursuant to Lummi Code of Laws (LCL) 17.05.020(a), the operator must also obtain a land use permit from the Lummi Planning Department as provided in Title 15 of the Lummi Code of Laws and regulations adopted thereunder.

b. Pursuant to LCL 17.05.020(a), each operator shall develop and submit a Stormwater Pollution Prevention Plan to the Lummi Water Resources Division for review and approval by the Water Resources Manager prior to beginning any discharge activities.

c. Pursuant to LCL Title 17, each operator shall be responsible for achieving compliance with the Water Quality Standards for Surface Waters of the Lummi Indian Reservation (Lummi Administrative Regulations [LAR] 17 LAR 07.010 together with supplements and amendments thereto).

d. Each operator shall submit a signed hard copy of the Notice of Intent (NOI) to the Lummi Water Resources Division at the same time it is submitted electronically to the Environmental Protection Agency (EPA) and shall provide the Lummi Water Resources Division the acknowledgement of receipt of the NOI from the EPA and the associated NPDES tracking number provided by the EPA within 7 calendar days of receipt by EPA.

e. Each operator shall submit a signed hard copy of the Notice of Termination (NOT) to the Lummi Water Resources Division at the same time it is submitted electronically to the EPA and shall provide the Lummi Water Resources Division the EPA acknowledgement of receipt of the NOT.

f. Stormwater Pollution Prevention Plans, Notice of intent, Notice of Termination and associated correspondence with the EPA shall be submitted to:

Lummi Natural Resources Department
ATTN: Water Resources Manager
2616 Kwina Road
Bellingham, WA 98226-9298

g. Please see the Lummi Nation website (www.lummi-nsn.gov) and/or the Lummi Natural Resources Department website (http://lnnr.lummi-nsn.gov/LummiWebsite/Website.php?PageID=53) to review a copy of Title 17 of the Lummi Code of Laws, associated regulations, and the references upon which the conditions identified above are based.

9.7.4.3 **Makah Tribe**. The following conditions apply only for discharges on the Makah Reservation:

a. The operator shall be responsible for achieving compliance with the Makah Tribe's Water Quality Standards.

b. The operator shall submit a Storm Water Pollution Prevention Plan to the Makah Tribe Water Quality Program and Makah Fisheries Habitat Division for review and approval at least thirty (30) days prior to beginning any discharge activities.

c. The operator shall submit a copy of the Notice of Intent to the Makah Tribe Water Quality Program and Makah Fisheries Habitat Division at the same time it is submitted to EPA.

d. Storm Water Pollution Prevention Plans and Notices of Intent shall be submitted to:

Ray Colby
Makah Tribal Water Quality
Water Quality Specialist
(360) 645-3162
colby.ray@centurytel.net
PO Box 115
Neah Bay, WA 98357

9.7.4.4 **Puyallup Tribe of Indians**. The following conditions apply only for discharges on the Puyallup Reservation:

a. Each permittee shall be responsible for achieving compliance with the Puyallup Tribe's Water Quality Standards, including antidegradation provisions. The Puyallup Natural Resources Department will conduct an antidegradation review for permitted activities that have the potential to lower water quality. The antidegradation review will be consistent with the Tribe's Antidegradation Implementation Procedures.

b. The permittee shall be responsible for meeting any additional permit requirements imposed by EPA necessary to comply with the Puyallup Tribe's antidegradation policies if the discharge point is located within 1 linear mile upstream of waters designated by the Tribe.

c. Each permittee shall submit a copy of the Notice of Intent (NOI) to be covered by the general permit to the Puyallup tribal Natural Resources Department at the address listed below at the same time it is submitted to EPA.

   Puyallup Tribe of Indians
   3009 E. Portland Avenue
   Tacoma, WA 98404
   ATTN: Natural Resources Department – Bill Sullivan and Char Naylor

d. All supporting documentation and certifications in the NOI related to coverage under the general permit for Endangered Species Act purposes shall be submitted to Bill Sullivan and Char Naylor in the Puyallup Tribal Natural Resources Department for review.

e. If EPA requires coverage under an individual or alternative permit, the permittee shall submit a copy of the permit to Bill Sullivan and Char Naylor in the Puyallup Tribal Natural Resources Department at the address listed above.

f. The permittee shall submit all stormwater pollution prevention plans to Bill Sullivan and Char Naylor in the Puyallup Tribal Natural Resources Department for review and approval prior to beginning any activities resulting in a discharge to tribal waters.

g. The permittee shall conduct benchmark monitoring for turbidity and nutrients, complying with Section 3 monitoring requirements.

h. The permittee shall notify Bill Sullivan and Char Naylor prior to conducting inspections at construction sites generating stormwater discharged to tribal waters.

Appendix A - Definitions and Acronyms

Definitions

"Action Area" – all areas to be affected directly or indirectly by the federal action and not merely the immediate area involved in the action. See 50 CFR 402. For the purposes of this permit and for application of the Endangered Species Act requirements, the following areas are included in the definition of action area:

- The areas on the construction site where stormwater discharges originate and flow toward the point of discharge into the receiving waters (including areas where excavation, site development, or other ground disturbance activities occur) and the immediate vicinity. (Example: Where bald eagles nest in a tree that is on or bordering a construction site and could be disturbed by the construction activity or where grading causes stormwater to flow into a small wetland or other habitat that is on the site that contains listed species.)
- The areas where stormwater discharges flow from the construction site to the point of discharge into receiving waters. (Example: Where stormwater flows into a ditch, swale, or gully that leads to receiving waters and where listed species (such as listed amphibians) are found in the ditch, swale, or gully.)
- The areas where stormwater from construction activities discharge into receiving waters and the areas in the immediate vicinity of the point of discharge. (Example: Where stormwater from construction activities discharges into a stream segment that is known to harbor listed aquatic species.)
- The areas where stormwater controls will be constructed and operated, including any areas where stormwater flows to and from the stormwater controls. (Example: Where a stormwater retention pond would be built.)
- The areas upstream and/or downstream from the stormwater discharge into a stream segment that may be affected by these discharges. (Example: Where sediment discharged to a receiving stream settles downstream and impacts a breeding area of a listed aquatic species.)

"Agricultural Land" - cropland, grassland, rangeland, pasture, and other agricultural land, on which agricultural and forest-related products or livestock are produced and resource concerns may be addressed. Agricultural lands include cropped woodland, marshes, incidental areas included in the agricultural operation, and other types of agricultural land used for the production of livestock.

"Antidegradation Policy" or "Antidegradation Requirements" - the water quality standards regulation that requires States and Tribes to establish a three-tiered antidegradation program:

1. Tier 1 maintains and protects existing uses and water quality conditions necessary to support such uses. An existing use can be established by demonstrating that fishing, swimming, or other uses have actually occurred since November 28, 1975, or that the water quality is suitable to allow such uses to occur. Where an existing use is established, it must be protected even if it is not listed in the water quality standards as a designated use. Tier 1 requirements are applicable to all surface waters.
2. Tier 2 maintains and protects "high quality" waters -- water bodies where existing conditions are better than necessary to support CWA § 101(a)(2) "fishable/swimmable"

uses. Water quality can be lowered in such waters. However, State and Tribal Tier 2 programs identify procedures that must be followed and questions that must be answered before a reduction in water quality can be allowed. In no case may water quality be lowered to a level which would interfere with existing or designated uses.

3. Tier 3 maintains and protects water quality in outstanding national resource waters (ONRWs). Except for certain temporary changes, water quality cannot be lowered in such waters. ONRWs generally include the highest quality waters of the United States. However, the ONRW classification also offers special protection for waters of exceptional ecological significance, i.e., those which are important, unique, or sensitive ecologically. Decisions regarding which water bodies qualify to be ONRWs are made by States and authorized Indian Tribes.

"Arid Areas" – areas with an average annual rainfall of 0 to 10 inches.

"Bank" (e.g., stream bank or river bank) – the rising ground bordering the channel of a water of the U.S.

"Bluff" – a steep headland, promontory, riverbank, or cliff.

"Borrow Areas" – the areas where materials are dug for use as fill, either onsite or off-site.

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

"Cationic Treatment Chemical" – polymers, flocculants, or other chemicals that contain an overall positive charge. Among other things, they are used to reduce turbidity in stormwater discharges by chemically bonding to the overall negative charge of suspended silts and other soil materials and causing them to bind together and settle out. Common examples of cationic treatment chemicals are chitosan and cationic PAM.

"Commencement of Earth-Disturbing Activities" - the initial disturbance of soils (or 'breaking ground') associated with clearing, grading, or excavating activities or other construction-related activities (e.g., stockpiling of fill material).

"Commencement of Pollutant-Generating Activities" – at construction sites (for the purposes of this permit) occurs in any of the following circumstances:

- Clearing, grubbing, grading, and excavation has begun;
- Raw materials related to your construction activity, such as building materials or products, landscape materials, fertilizers, pesticides, herbicides, detergents, fuels, oils, or other chemicals have been placed at your site;
- Use of authorized non-stormwater for washout activities, or dewatering activities, have begun; or
- Any other activity has begun that causes the generation of or the potential generation of pollutants.

"Construction Activities" – earth-disturbing activities, such as the clearing, grading, and excavation of land.

"Construction and Development Effluent Limitations and New Source Performance Standards" (C&D Rule) – as published in 40 CFR § 450 is the regulation requiring effluent limitations guidelines

(ELG's) and new source performance standards (NSPS) for controlling the discharge of pollutants from construction sites.

"Construction Site" – the land or water area where construction activities will occur and where stormwater controls will be installed and maintained. The construction site includes construction support activities, which may be located at a different part of the property from where the primary construction activity will take place, or on a different piece of property altogether. The construction site is often a smaller subset of the lot or parcel within which the project is taking place.

"Construction Support Activities" – a construction-related activity that specifically supports the construction activity and involves earth disturbance or pollutant-generating activities of its own, and can include activities associated with concrete or asphalt batch plants, equipment staging yards, materials storage areas, excavated material disposal areas, and borrow areas.

"Construction Waste" – discarded material (such as packaging materials, scrap construction materials, masonry products, timber, steel, pipe, and electrical cuttings, plastics, and styrofoam).

"Conveyance Channel" – a temporary or permanent waterway designed and installed to safely convey stormwater flow within and out of a construction site.

"Corrective Action" – for the purposes of the permit, any action taken to (1) repair, modify, or replace any stormwater control used at the site; (2) clean up and dispose of spills, releases, or other deposits found on the site; and (3) remedy a permit violation.

"Critical Habitat" – as defined in the Endangered Species Act at 16 U.S.C. 1531 for a threatened or endangered species, (i) the specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the provisions of section 4 of the Endangered Species Act, on which are found those physical or biological features essential to the conservation of the species and which may require special management considerations or protection; and (ii) specific areas outside the geographical area occupied by the species at the time it is listed in accordance with the provisions of section 4 of the Endangered Species Act, upon a determination by the Secretary that such areas are essential for the conservation of the species.

"CWA" – the Clean Water Act or the Federal Water Pollution Control Act, 33 U.S.C. section 1251 et seq.

"Dewatering" – the act of draining rainwater and/or groundwater from building foundations, vaults, and trenches.

"Discharge" – when used without qualification, means the "discharge of a pollutant."

"Discharge of a Pollutant" – any addition of any "pollutant" or combination of pollutants to "waters of the United States" from any "point source," or any addition of any pollutant or combination of pollutants to the waters of the "contiguous zone" or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation. This includes additions of pollutants into waters of the United States from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works. See 40 CFR 122.2.

"Discharge Point" – for the purposes of this permit, the location where collected and concentrated stormwater flows are discharged from the construction site.

"Discharge-Related Activity" – activities that cause, contribute to, or result in stormwater and allowable non-stormwater point source discharges, and measures such as the siting, construction, and operation of stormwater controls to control, reduce, or prevent pollutants from being discharged.

"Discharge to an Impaired Water" – for the purposes of this permit, a discharge to an impaired water occurs if the first water of the U.S. to which you discharge is identified by a State, Tribe, or EPA pursuant to Section 303(d) of the Clean Water Act as not meeting an applicable water quality standard, or is included in an EPA-approved or established total maximum daily load (TMDL). For discharges that enter a storm sewer system prior to discharge, the water of the U.S. to which you discharge is the first water of the U.S. that receives the stormwater discharge from the storm sewer system.

"Domestic Waste" – for the purposes of this permit, typical household trash, garbage or rubbish items generated by construction activities.

"Drainageway" – an open linear depression, whether constructed or natural, that functions for the collection and drainage of surface water.

"Drought-Stricken Area" – for the purposes of this permit, an area in which the National Oceanic and Atomospheric Administration's U.S. Seasonal Drought Outlook indicates for the period during which the construction will occur that any of the following conditions are likely: (1) "Drought to persist or intensify", (2) "Drought ongoing, some improvement", (3) "Drought likely to improve, impacts ease", or (4) "Drought development likely". See http://www.cpc.ncep.noaa.gov/products/expert_assessment/season_drought.gif.

"Earth-Disturbing Activity" or "Land-Disturbing Activity" – actions taken to alter the existing vegetation and/or underlying soil of a site, such as clearing, grading, site preparation (e.g., excavating, cutting, and filling), soil compaction, and movement and stockpiling of top soils.

"Effective Operating Condition" – for the purposes of this permit, a stormwater control is kept in effective operating condition if it has been implemented and maintained in such a manner that it is working as designed to minimize pollutant discharges.

"Effluent Limitations" – for the purposes of this permit, any of the Part 2 or Part 3 requirements.

"Effluent Limitations Guideline" (ELG) – defined in 40 CFR § 122.2 as a regulation published by the Administrator under section 304(b) of CWA to adopt or revise effluent limitations.

"Electronic Notice of Intent" (eNOI) – EPA's online system for submitting electronic Construction General Permit forms.

"Eligible" – for the purposes of this permit, refers to stormwater and allowable non-stormwater discharges that are authorized for coverage under this general permit.

"Emergency-Related Project" – a project initiated in response to a public emergency (e.g., natural disaster, disruption in essential public services), for which the related work requires immediate authorization to avoid imminent endangerment to human health or the environment, or to reestablish essential public services.

"Endangered Species" – defined in the Endangered Species Act at 16 U.S.C. 1531 as any species which is in danger of extinction throughout all or a significant portion of its range other than a species of the Class Insecta determined by the Secretary to constitute a pest whose

protection under the provisions of this Act would present an overwhelming and overriding risk to man.

"Excursion" – a measured value that exceeds a specified limit.

"Existing Project" – a construction project that commenced construction activities prior to February 16, 2012 (April 9, 2012 for the State of Idaho, except for Indian Country; April 13, 2012 for areas in the state of Washington, except for Indian Country, subject to construction activity by a Federal Operator; May 9, 2012 for projects in the following areas: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin).

"Exit Points" – any points of egress from the construction site to be used by vehicles and equipment during construction activities.

"Exposed Soils" – for the purposes of this permit, soils that as a result of earth-disturbing activities are left open to the elements.

"Federal Operator" – an entity that meets the definition of "Operator" in this permit and is either any department, agency or instrumentality of the executive, legislative, and judicial branches of the Federal government of the United States, or another entity, such as a private contractor, performing construction activity for any such department, agency, or instrumentality.

"Final Stabilization" – on areas not covered by permanent structures, either (1) vegetation has been established, or for arid or semi-arid areas, will be established that provides a uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 70 percent of the natural background vegetative cover, or (2) non-vegetative stabilization methods have been implemented to provide effective cover for exposed portions of the site.

"Hazardous Materials" or "Hazardous Substances" or "Hazardous or Toxic Waste" – for the purposes of this permit, any liquid, solid, or contained gas that contain properties that are dangerous or potentially harmful to human health or the environment. See also 40 CFR §261.2.

"Historic Property" – as defined in the National Historic Preservation Act regulations means any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria.

"Impaired Water" or "Water Quality Impaired Water" or "Water Quality Limited Segment" – for the purposes of this permit, waters identified as impaired on the CWA Section 303(d) list, or waters with an EPA-approved or established TMDL. Your construction site will be considered to discharge to an impaired water if the first water of the U.S. to which you discharge is identified by a state, tribe, or EPA pursuant to Section 303(d) of the CWA as not meeting an applicable water quality standard, or is included in an EPA-approved or established total maximum daily load (TMDL). For discharges that enter a storm sewer system prior to discharge, the first water of the U.S. to which you discharge is the waterbody that receives the stormwater discharge from the storm sewer system.

"Impervious Surface" – for the purpose of this permit, any land surface with a low or no capacity for soil infiltration including, but not limited to, pavement, sidewalks, parking areas and driveways, packed gravel or soil, or rooftops.

"Indian Country" or "Indian Country Lands" – defined at 40 CFR §122.2 as:

1. All land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and, including rights-of-way running through the reservation;
2. All dependent Indian communities with the borders of the United States whether within the originally or subsequently acquired territory thereof, and whether within or without the limits of a state; and
3. All Indian allotments, the Indian titles to which have not been extinguished, including rights-of-ways running through the same.

"Infeasible" – for the purpose of this permit, infeasible means not technologically possible or not economically practicable and achievable in light of best industry practices. EPA notes that it does not intend for any permit requirement to conflict with state water rights law.

"Install" or "Installation" – when used in connection with stormwater controls, to connect or set in position stormwater controls to make them operational.

"Intermittent (or Seasonal) Stream" – one which flows at certain times of the year when groundwater provides water for stream flow, as well as during and immediately after some precipitation events or snowmelt.

"Jar test" – a test designed to simulate full-scale coagulation/flocculation/sedimentation water treatment processes by taking into account the possible conditions.

"Landward" – positioned or located away from a waterbody, and towards the land.

"Level Spreader" – a temporary stormwater control used to spread stormwater flow uniformly over the ground surface as sheet flow to prevent concentrated, erosive flows from occurring.

"Linear Project" – includes the construction of roads, bridges, conduits, substructures, pipelines, sewer lines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment and associated ancillary facilities in a long, narrow area.

"Minimize" – to reduce and/or eliminate to the extent achievable using stormwater controls that are technologically available and economically practicable and achievable in light of best industry practices.

"Municipal Separate Storm Sewer System" or "MS4" – defined at 40 CFR §122.26(b)(8) as a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains):

1. Owned and operated by a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States;
2. Designed or used for collecting or conveying stormwater;
3. Which is not a combined sewer; and

4. Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR §122.2.

"National Pollutant Discharge Elimination System" (NPDES) – defined at 40 CFR §122.2 as the national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under sections 307, 402, 318, and 405 of CWA. The term includes an 'approved program.'

"Native Topsoil" – the uppermost layer of naturally occurring soil for a particular area, and is often rich in organic matter, biological activity, and nutrients.

"Native Vegetation" – the species of plants that have developed for a particular region or ecosystem and are considered endemic to that region or ecosystem.

"Natural Buffer" – for the purposes of this permit, an area of undisturbed natural cover surrounding surface waters within which construction activities are restricted. Natural cover includes the vegetation, exposed rock, or barren ground that exists prior to commencement of earth-disturbing activities.

"Natural Vegetation" – vegetation that occurs spontaneously without regular management, maintenance or species introductions, removals, and that generally has a strong component of native species.

"New Operator of a New or Existing Project" – an operator that through transfer of ownership and/or operation replaces the operator of an already permitted construction project.

"New Project" – a construction project that commences construction activities on or after February 16 (or on or after April 9, 2012 for the State of Idaho, except for Indian Country; April 13, 2012 for areas in the state of Washington, except for Indian Country, subject to construction activity by a Federal Operator; May 9, 2012 for projects in the following areas: the Fond du Lac Band and Grand Portage Band of Lake Superior Chippewa in Minnesota; and the Bad River Band and Lac du Flambeau Band of Lake Superior Chippewa in Wisconsin).

"New Source" – for the purpose of this permit, a construction project that commenced construction activities after February 1, 2010.

"New Source Performance Standards (NSPS)" – for the purposes of this permit, NSPS are technology-based standards that apply to construction sites that are new sources under 40 CFR 450.24.

"Non-Stormwater Discharges" – discharges that do not originate from storm events. They can include, but are not limited to, discharges of process water, air conditioner condensate, non-contact cooling water, vehicle wash water, sanitary wastes, concrete washout water, paint wash water, irrigation water, or pipe testing water.

"Non-Turbid" – a discharge that does not cause or contribute to an exceedence of turbidity-related water quality standards.

"Notice of Intent" (NOI) – the form (electronic or paper) required for authorization of coverage under the Construction General Permit.

"Notice of Termination" (NOT) – the form (electronic or paper) required for terminating coverage under the Construction General Permit.

"Operational" – for the purpose of this permit, stormwater controls are made "operational" when they have been installed and implemented, are functioning as designed, and are properly maintained.

"Operator" – for the purpose of this permit and in the context of stormwater discharges associated with construction activity, any party associated with a construction project that meets either of the following two criteria:

1. The party has operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications; or
2. The party has day-to-day operational control of those activities at a project that are necessary to ensure compliance with the permit conditions (e.g., they are authorized to direct workers at a site to carry out activities required by the permit).

This definition is provided to inform permittees of EPA's interpretation of how the regulatory definitions of "owner or operator" and "facility or activity" are applied to discharges of stormwater associated with construction activity.

"Ordinary High Water Mark" – the line on the shore established by fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, and/or the presence of litter and debris.

"Outfall" – see "Discharge Point."

"Permitting Authority" – for the purposes of this permit, EPA, a Regional Administrator of EPA, or an authorized representative.

"Point(s) of Discharge" – see "Discharge Point."

"Point Source" – any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff.

"Pollutant" – defined at 40 CFR §122.2. A partial listing from this definition includes: dredged spoil, solid waste, sewage, garbage, sewage sludge, chemical wastes, biological materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial or municipal waste.

"Pollutant-Generating Activities" – at construction sites (for the purposes of this permit), those activities that lead to or could lead to the generation of pollutants, either as a result of earth-disturbance or a related support activity. Some of the types of pollutants that are typically found at construction sites are:

- sediment;
- nutrients;
- heavy metals;
- pesticides and herbicides;
- oil and grease;
- bacteria and viruses;

- trash, debris, and solids;
- treatment polymers; and
- any other toxic chemicals.

"Pollution Prevention Measures" – stormwater controls designed to reduce or eliminate the addition of pollutants to construction site discharges through analysis of pollutant sources, implementation of proper handling/disposal practices, employee education, and other actions.

"Polymers" – for the purposes of this permit, coagulants and flocculants used to control erosion on soil or to enhance the sediment removal capabilities of sediment traps or basins. Common construction site polymers include polyacrylamide (PAM), chitosan, alum, polyaluminum chloride, and gypsum.

"Prohibited Discharges" – discharges that are not allowed under this permit, including:

1. Wastewater from washout of concrete;
2. Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds and other construction materials;
3. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance;
4. Soaps or solvents used in vehicle and equipment washing;
5. Toxic or hazardous substances from a spill or other release; and
6. Waste, garbage, floatable debris, construction debris, and sanitary waste from pollutant-generating activities.

"Provisionally Covered Under this Permit" – for the purposes of this permit, EPA provides temporary coverage under this permit for emergency-related projects prior to receipt of a complete and accurate NOI. Discharges from earth-disturbing activities associated with the emergency-related projects are subject to the terms and conditions of the permit during the period of temporary coverage.

"Receiving Water" – a "Water of the United States" as defined in 40 CFR §122.2 into which the regulated stormwater discharges.

"Run-On" – sources of stormwater that drain from land located upslope or upstream from the regulated site in question.

"Semi-Arid Areas" – areas with an average annual rainfall of 10 to 20 inches.

"Site" – for construction activities, the land or water area where earth-disturbing activities take place, including construction support activities.

"Small Construction Activity" – defined at 40 CFR §122.26(b)(15) and incorporated here by reference. A small construction activity includes clearing, grading, and excavating resulting in a land disturbance that will disturb equal to or greater than one (1) acre and less than five (5) acres of land or will disturb less than one (1) acre of total land area but is part of a larger common plan of development or sale that will ultimately disturb equal to or greater than one (1) acre and less than five (5) acres. Small construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the site.

"Small Residential Lot" – for the purpose of this permit, a lot being developed for residential purposes that will disturb less than 1 acre of land, but is part of a larger residential project that will ultimately disturb greater than or equal to 1 acre.

"Snowmelt" – the conversion of snow into overland stormwater and groundwater flow as a result of warmer temperatures.

"Spill" – for the purpose of this permit, the release of a hazardous or toxic substance from its container or containment.

"Stabilization" – the use of vegetative and/or non-vegetative cover to prevent erosion and sediment loss in areas exposed through the construction process.

"Steep Slopes" – where a state, Tribe, local government, or industry technical manual (e.g., stormwater BMP manual) has defined what is to be considered a "steep slope", this permit's definition automatically adopts that definition. Where no such definition exists, steep slopes are automatically defined as those that are 15 percent or greater in grade.

"Storm Sewer System" – a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains) designed or used for collecting or conveying stormwater.

"Stormwater" – stormwater runoff, snow melt runoff, and surface runoff and drainage.

"Stormwater Control Measure" - refers to any stormwater control, BMP, or other method (including narrative effluent limitations) used to prevent or reduce the discharge of pollutants to waters of the United States.

"Stormwater Controls" – see "Stormwater Control measure."

"Stormwater Discharge Associated with Construction Activity" – as used in this permit, a discharge of pollutants in stormwater to waters of the United States from areas where land-disturbing activities (e.g., clearing, grading, or excavation) occur, or where construction materials or equipment storage or maintenance (e.g., fill piles, borrow area, concrete truck chute washdown, fueling), or other industrial stormwater directly related to the construction process (e.g., concrete or asphalt batch plants), are located.

"Stormwater Inlet" – a structure placed below grade to conduct water used to collect stormwater runoff for conveyance purposes.

"Stormwater Team" – the group of individuals responsible for oversight of the development and modifications of the SWPPP, and oversight of compliance with the permit requirements. The individuals on the "Stormwater Team" must be identified in the SWPPP.

"Storm Event" – a precipitation event that results in a measurable amount of precipitation.

"Storm Sewer" – a system of pipes (separate from sanitary sewers) that carries stormwater runoff from buildings and land surfaces.

"Subcontractor" – for the purposes of this permit, an individual or company that takes a portion of a contract from the general contractor or from another subcontractor.

"Surface Water" – a "Water of the United States" as defined in 40 CFR §122.2.

"SWPPP" (Stormwater Pollution Prevention Plan) – a site-specific, written document that, among other things: (1) identifies potential sources of stormwater pollution at the construction site; (2) describes stormwater control measures to reduce or eliminate pollutants in stormwater discharges from the construction site; and (3) identifies procedures the operator will implement to comply with the terms and conditions of this general permit.

"Temporary Stabilization" – a condition where exposed soils or disturbed areas are provided a temporary vegetative and/or non-vegetative protective cover to prevent erosion and sediment loss. Temporary stabilization may include temporary seeding, geotextiles, mulches, and other techniques to reduce or eliminate erosion until either final stabilization can be achieved or until further construction activities take place to re-disturb this area.

"Thawing Conditions" – for the purposes of this permit, thawing conditions are expected based on the historical likelihood of two or more days with daytime temperatures greater than 32°F. This date can be determined by looking at historical weather data. Note: the estimation of thawing conditions is for planning purposes only. During construction the permittee will be required to conduct site inspections based upon actual conditions (i.e., if thawing conditions occur sooner than expected, the permittee will be required to conduct inspections at the regular frequency).

"Threatened Species" – defined in the Endangered Species Act at 16 U.S.C. 1531 as any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

"Tier 2 Waters" – for antidegradation purposes, pursuant to 40 CFR 131.12(a)(2), those waters thatare characterized as having water quality that exceeds the levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water.

"Tier 2.5 Waters" – for antidegradation purposes, those waters designated by States or Tribes as requiring a level of protection equal to and above that given to Tier 2 waters, but less than that given Tier 3 waters. Some States have special requirements for these waters.

"Tier 3 Waters" – for antidegradation purposes, pursuant to 40 CFR 131.12(a)(3), Tier 3 waters are identified by states as having high quality waters constituting an Outstanding Natural Resource Water (ONRW), such as waters of National Parks and State Parks, wildlife refuges, and waters of exceptional recreational or ecological significance.

"Total Maximum Daily Load" or "TMDL" – the sum of the individual wasteload allocations (WLAs) for point sources and load allocations (LAs) for nonpoint sources and natural background. If receiving water has only one point source discharger, the TMDL is the sum of that point source WLA plus the LAs for any nonpoint sources of pollution and natural background sources, tributaries, or adjacent segments. TMDLs can be expressed in terms of either mass per time, toxicity, or other appropriate measure.

"Toxic Waste" – see "Hazardous Materials."

"Turbidity" – a condition of water quality characterized by the presence of suspended solids and/or organic material.

"Uncontaminated Discharge" – a discharge that does not cause or contribute to an exceedence of applicable water quality standards.

"Upland" - the dry land area above and 'landward' of the ordinary high water mark.

"Upset" – Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond your reasonable control. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. See 40 CFR 122.41(n)(1).

"Water-Dependent Structures" – structures or facilities that are required to be located directly adjacent to a waterbody or wetland, such as a marina, pier, boat ramp, etc.

"Water Quality Standards" – defined in 40 CFR § 131.3, and are provisions of State or Federal law which consist of a designated use or uses for the waters of the United States, water quality criteria for such waters based upon such uses, and an antidegradation policy to protect high-quality waters. Water quality standards protect the public health or welfare, enhance the quality of water and serve the purposes of the Act.

"Waters of the United States" – defined at 40 CFR §122.2 as:

1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
2. All interstate waters, including interstate wetlands;
3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:
    a. Which are or could be used by interstate or foreign travelers for recreational or other purposes;
    b. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
    c. Which are used or could be used or could be used for industrial purposes by industries in interstate commerce;
4. All impoundments of waters otherwise defined as waters of the United States under this definition;
5. Tributaries of waters identified in paragraphs (1) through (4) of this definition;
6. The territorial sea; and
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (1) through (6) of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not waters of the United States. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the United States (such as disposal area in wetlands) nor resulted from the impoundment of waters of the United States. Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA.

In applying this definition, EPA will consider applicable Court cases and current guidance.

"Wetland" – those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. On-site evaluations are typically required to confirm the presence and boundaries of wetlands.

"Work day" – for the purposes of this permit, a work day is a calendar day on which construction activities will take place.

Acronyms

C&D – Construction & Development

CGP – Construction General Permit

CFR – Code of Federal Regulations

CWA – Clean Water Act

eNOI – Electronic Notice of Intent

EPA – United States Environmental Protection Agency

ESA – Endangered Species Act

FWS – United States Fish and Wildlife Service

MS4 – Municipal Separate Storm Sewer System

MSGP – Multi-Sector General Permit

NMFS – United States National Marine Fisheries Service

NOI – Notice of Intent

NOT – Notice of Termination

NPDES – National Pollutant Discharge Elimination System

NRC – National Response Center

NRCS – National Resources Conservation Service

POTW – Publicly Owned Treatment Works

SPCC – Spill Prevention Control and Countermeasure

SWPPP – Stormwater Pollution Prevention Plan

TMDL – Total Maximum Daily Load

USGS – United States Geological Survey

WQS – Water Quality Standard

Appendix B - Permit Areas Eligible for Coverage

Permit coverage for stormwater discharges from construction activity occurring within the following areas is provided by legally separate and distinctly numbered permits:

B.1 EPA Region 1: CT, MA, ME, NH, RI, VT

US EPA, Region 01
Office of Ecosystem Protection
NPDES Stormwater Program
5 Post Office Square
Boston, MA 02109-3912

The States of Connecticut, Maine, Rhode Island, and Vermont are the NPDES Permitting Authority for the majority of discharges within their respective states.

Permit No.	Areas of Coverage/Where EPA is Permitting Authority
CTR12000I	Indian country within the State of Connecticut
MAR120000	Commonwealth of Massachusetts (except Indian country)
MAR12000I	Indian country within the State of Massachusetts
NHR120000	State of New Hampshire
RIR12000I	Indian country within the State of Rhode Island
VTR12000F	Areas in the State of Vermont subject to construction by a Federal Operator

B.2 EPA Region 2: NJ, NY, PR, VI

For NJ, NY, and VI:
US EPA, Region 02
NPDES Stormwater Program
290 Broadway, 24th Floor
New York, NY 10007-1866

For PR:
US EPA, Region 02
Caribbean Environmental Protection Division
NPDES Stormwater Program
1492 Ponce de Leon Ave
Central Europa Building, Suite 417
San Juan, PR 00907-4127

The State of New York is the NPDES Permitting Authority for the majority of discharges within its state. The State of New Jersey and the Virgin Islands are the NPDES Permitting Authority for all discharges within their respective states.

Permit No.	Areas of Coverage/Where EPA is Permitting Authority
NYR12000I	Indian country within the State of New York
PRR120000	Commonwealth of Puerto Rico

B.3 EPA Region 3: DE, DC, MD, PA, VA, WV

US EPA, Region 03
NPDES Stormwater Program
1650 Arch St
Philadelphia, PA 19103

The State of Delaware is the NPDES Permitting Authority for the majority of discharges within its state. Maryland, Pennsylvania, Virginia, and West Virginia are the NPDES Permitting Authority for all discharges within their respective states.

Permit No.	Areas of Coverage/Where EPA is Permitting Authority
DCR120000	District of Columbia
DER12000F	Areas in the State of Delaware subject to construction by a Federal Operator

B.4 EPA Region 4: AL, FL, GA, KY, MS, NC, SC, TN

US EPA, Region 04
Water Protection Division
NPDES Stormwater Program
61 Forsyth St SW
Atlanta, GA 30303-3104

The States of Alabama, Florida, Mississippi, and North Carolina are the NPDES Permitting Authority for the majority of discharges within their respective States. EPA Region 4 is the NPDES Permitting Authority for all Indian country lands within any other Region 4 State except Catawba lands in South Carolina.

Permit No.	Areas of Coverage/Where EPA is Permitting Authority
ALR12000I	Indian country within the State of Alabama
FLR12000I	Indian country within the State of Florida
MSR12000I	Indian country within the State of Mississippi
NCR12000I	Indian country within the State of North Carolina
RE412000I	Indian country within any other Region 4 State (except Catawba lands in South Carolina)

B.5 EPA Region 5: IL, IN, MI, MN, OH, WI

US EPA, Region 05
NPDES & Technical Support
NPDES Stormwater Program
77 W Jackson Blvd
(WN-16J)
Chicago, IL 60604-3507

The States of Michigan, Minnesota, and Wisconsin are the NPDES Permitting Authority for the majority of discharges within their respective states. The States of Illinois, Indiana, and Ohio are the NPDES Permitting Authorities for all discharges within their respective states.

Permit No.	Areas of Coverage/Where EPA is Permitting Authority
MIR10000I	Indian country within the State of Michigan
MNR10000I	Indian country within the State of Minnesota
WIR10000I	Indian country within the State of Wisconsin, except the Sokaogon Chippewa (Mole Lake) Community

B.6 EPA Region 6: AR, LA, OK, TX, NM (except see Region 9 for Navajo lands, and see Region 8 for Ute Mountain Reservation lands)

US EPA, Region 06
NPDES Stormwater Program
1445 Ross Ave, Suite 1200
Dallas, TX 75202-2733

The States of Louisiana, Oklahoma, and Texas are the NPDES Permitting Authority for the majority of discharges within their respective state. The State of Arkansas is the NPDES Permitting Authority for all discharges within its respective state.

Permit No.	Areas of Coverage/Where EPA is Permitting Authority
LAR12000I	Indian country within the State of Louisiana
NMR120000	State of New Mexico, except Indian country
NMR12000I	Indian country within the State of New Mexico, except Navajo Reservation Lands that are covered under Arizona permit AZR10000I and Ute Mountain Reservation Lands that are covered under Colorado permit COR10000I.
OKR12000I	Indian country within the State of Oklahoma
OKR12000F	Discharges in the State of Oklahoma that are not under the authority of the Oklahoma Department of Environmental Quality, including activities associated with oil and gas exploration, drilling, operations, and pipelines (includes SIC Groups 13 and 46, and SIC codes 492 and 5171), and point source discharges associated with agricultural production, services, and silviculture (includes SIC Groups 01, 02, 07, 08, 09).
TXR12000F	Discharges in the State of Texas that are not under the authority of the Texas Commission on Environmental Quality (formerly TNRCC), including activities associated with the exploration, development, or production of oil or gas or geothermal resources, including transportation of crude oil or natural gas by pipeline.
TXR12000I	Indian country within the State of Texas

B.7 EPA Region 7: IA, KS, MO, NE (except see Region 8 for Pine Ridge Reservation Lands)

US EPA, Region 07
NPDES Stormwater Program
901 N 5th St
Kansas City, KS 66101

The States of Iowa, Kansas, and Nebraska are the NPDES Permitting Authority for the majority of discharges within their respective states. The State of Missouri is the NPDES Permitting Authority for all discharges within its state.

Permit No.	Areas of Coverage/Where EPA is Permitting Authority
IAR12000I	Indian country within the State of Iowa
KSR12000I	Indian country within the State of Kansas
NER12000I	Indian country within the State of Nebraska, except Pine Ridge Reservation lands (see Region 8)

B.8 EPA Region 8: CO, MT, ND, SD, WY, UT (except see Region 9 for Goshute Reservation and Navajo Reservation Lands), the Ute Mountain Reservation in NM, and the Pine Ridge Reservation in NE.

US EPA, Region 08
NPDES Stormwater Program
999 18th St, Suite 300
(EPR-EP)
Denver, CO 80202-2466

The States of Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming are the NPDES Permitting Authority for the majority of discharges within their respective states.

Permit No.	Areas of Coverage/Where EPA is Permitting Authority
COR12000F	Areas in the State of Colorado, except those located on Indian country, subject to construction activity by a Federal Operator
COR12000I	Indian country within the State of Colorado, as well as the portion of the Ute Mountain Reservation located in New Mexico
MTR12000I	Indian country within the State of Montana
NDR12000I	Indian country within the State of North Dakota, as well as that portion of the Standing Rock Reservation located in South Dakota (except for the portion of the lands within the former boundaries of the Lake Traverse Reservation which is covered under South Dakota permit SDR10000I listed below)
SDR12000I	Indian country within the State of South Dakota, as well as the portion of the Pine Ridge Reservation located in Nebraska and the portion of the lands within the former boundaries of the Lake Traverse Reservation located in North Dakota (except for the Standing Rock Reservation which is covered under North Dakota permit NDR10000I listed above)
UTR12000I	Indian country within the State of Utah, except Goshute and Navajo Reservation lands (see Region 9)
WYR12000I	Indian country within the State of Wyoming

B.9 EPA Region 9: CA, HI, NV, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, the Goshute Reservation in UT and NV, the Navajo Reservation in UT, NM, and AZ, the Duck Valley Reservation in ID, and the Fort McDermitt Reservation in OR.

US EPA, Region 09
NPDES Stormwater Program
75 Hawthorne St
San Francisco, CA 94105-3901

The States of Arizona, California and Nevada are the NPDES Permitting Authority for the majority of discharges within their respective states. The State of Hawaii is the NPDES Permitting Authority for all discharges within its state.

Permit No.	Areas of Coverage/Where EPA is Permitting Authority
ASR120000	Island of American Samoa
AZR12000I	Indian country within the State of Arizona, as well as Navajo Reservation lands in New Mexico and Utah
CAR12000I	Indian country within the State of California
GUR120000	Island of Guam
JAR120000	Johnston Atoll
MPR120000	Commonwealth of the Northern Mariana Islands
MWR120000	Midway Island and Wake Island
NVR12000I	Indian country within the State of Nevada, as well as the Duck Valley Reservation in Idaho, the Fort McDermitt Reservation in Oregon and the Goshute Reservation in Utah

B.10 EPA Region 10: AK, WA, ID (except see Region 9 for Duck Valley Reservation Lands), and OR (except see Region 9 for Fort McDermitt Reservation).

US EPA, Region 10
NPDES Stormwater Program
1200 6th Ave (OW-130)
Seattle, WA 98101-1128
Phone: (206) 553-6650

The States of Oregon and Washington are the NPDES Permitting Authority for the majority of discharges within their respective states.

Permit No.	Areas of Coverage/Where EPA is Permitting Authority
AKR12000I	Indian country within the State of Alaska
AKR12-000F	Areas in the the Denali National Park and Preserve subject to construction by a Federal Operator
IDR120000	State of Idaho, except Indian country
IDR12000I	Indian country within the State of Idaho, except Duck Valley Reservation lands (see Region 9)
ORR12000I	Indian country within the State of Oregon, except Fort McDermitt Reservation lands (see Region 9)
WAR12000F	Areas in the State of Washington, except those located on Indian country, subject to construction activity by a Federal Operator
WAR12000I	Indian country within the State of Washington

Appendix C - Small Construction Waivers and Instructions

These waivers are only available to stormwater discharges associated with small construction activities (i.e., 1-5 acres). As the operator of a small construction activity, you may be able to qualify for a waiver in lieu of needing to obtain coverage under this general permit based on: (A) a low rainfall erosivity factor, (B) a TMDL analysis, or (C) an equivalent analysis that determines allocations for small construction sites are not needed. Each operator, otherwise needing permit coverage, must notify EPA of its intention for a waiver. It is the responsibility of those individuals wishing to obtain a waiver from coverage under this general permit to submit a complete and accurate waiver certification as described below. Where the operator changes or another is added during the construction project, the new operator must also submit a waiver certification to be waived.

C.1 Rainfall Erosivity Waiver

Under this scenario the small construction project's rainfall erosivity factor calculation ("R" in the Revised Universal Soil Loss Equation) is less than 5 during the period of construction activity. The operator must certify to EPA that construction activity will occur only when the rainfall erosivity factor is less than 5. The period of construction activity begins at initial earth disturbance and ends with final stabilization. Where vegetation will be used for final stabilization, the date of installation of a stabilization practice that will provide interim non-vegetative stabilization can be used for the end of the construction period, provided the operator commits (as a condition of waiver eligibility) to periodically inspect and properly maintain the area until the criteria for final stabilization as defined in the construction general permit have been met. If use of this interim stabilization eligibility condition was relied on to qualify for the waiver, signature on the waiver with its certification statement constitutes acceptance of and commitment to complete the final stabilization process. The operator must submit a waiver certification to EPA prior to commencing construction activities.

Note: The rainfall erosivity factor "R" is determined in accordance with Chapter 2 of Agriculture Handbook Number 703, Predicting Soil Erosion by Water: A Guide to Conservation Planning With the Revised Universal Soil Loss Equation (RUSLE), pages 21–64, dated January 1997; United States Department of Agriculture (USDA), Agricultural Research Service.

EPA has developed an online rainfall erosivity calculator to help small construction sites determine potential eligibility for the rainfall erosivity waiver. You can access the calculator from EPA's website at:www.epa.gov/npdes/stormwater/lew. The R factor can easily be calculated by using the construction site latitude/longitude or address and estimated start and end dates of construction. This calculator may also be useful in determining the time periods during which construction activity could be waived from permit coverage. You may find that moving your construction activity by a few weeks or expediting site stabilization will allow you to qualify for the waiver. Use this online calculator or the Construction Rainfall Erosivity Waiver Fact Sheet (www.epa.gov/npdes/pubs/fact3-1.pdf) to assist in determining the R Factor for your small construction site.

If you are the operator of the construction activity and eligible for a waiver based on low erosivity potential, you can submit a rainfall erosivity waiver electronically via EPA's eNOI system (www.epa.gov/npdes/cgpenoi) or provide the following information on the waiver certification form in order to be waived from permitting requirements:

1. Name, address and telephone number of the construction site operator(s);
2. Name (or other identifier), address, county or similar governmental subdivision, and latitude/longitude of the construction project or site;
3. Estimated construction start and completion (i.e., final stabilization) dates, and total acreage (to the nearest quarter acre) to be disturbed;
4. The rainfall erosivity factor calculation that applies to the active construction phase at your project site; and
5. A statement, signed and dated by an authorized representative as provided in Appendix I, Subsection I.11, which certifies that the construction activity will take place during a period when the value of the rainfall erosivity factor is less than five.

You can access the waiver certification form from EPA's website at: (http://www.epa.gov/npdes/pubs/construction_waiver_form.pdf). Paper copies of the form must be sent to one of the addresses listed in Part C.4 of this section.

Note: If the R factor is 5 or greater, you cannot apply for the rainfall erosivity waiver, and must apply for NPDES permit coverage, unless you qualify for the Water Quality Waiver as described in section B below.

If your small construction project continues beyond the projected completion date given on the waiver certification, you must recalculate the rainfall erosivity factor for the new project duration. If the R factor is below five (5), you must update all applicable information on the waiver certification and retain a copy of the revised waiver as part of your records. The new waiver certification must be submitted prior to the projected completion date listed on the original waiver form to assure your exemption from permitting requirements is uninterrupted. If the new R factor is 5 or above, you must obtain NPDES permit coverage.

C.2 TMDL Waiver

This waiver is available if EPA has established or approved a TMDL that addresses the pollutant(s) of concern for the impaired water and has determined that controls on stormwater discharges from small construction activity are not needed to protect water quality. The pollutant(s) of concern include sediment (such as total suspended solids, turbidity or siltation) and any other pollutant that has been identified as a cause of impairment of any water body that will receive a discharge from the construction activity. Information on TMDLs that have been established or approved by EPA is available from EPA online at http://www.epa.gov/owow/tmdl/ and from state and tribal water quality agencies.

If you are the operator of the construction activity and eligible for a waiver based on compliance with an EPA-established or approved TMDL, you must provide the following information on the Waiver Certification form in order to be waived from permitting requirements:

1. Name, address and telephone number of the construction site operator(s);
2. Name (or other identifier), address, county or similar governmental subdivision, and latitude/longitude of the construction project or site;

3. Estimated construction start and completion (i.e., final stabilization) dates, and total acreage (to the nearest quarter acre) to be disturbed;
4. The name of the waterbody(s) that would be receiving stormwater discharges from your construction project;
5. The name and approval date of the TMDL;
6. A statement, signed and dated by an authorized representative as provided in Appendix I, Subsection I.11, that certifies that the construction activity will take place and that the stormwater discharges will occur, within the drainage area addressed by the TMDL.

C.3 Equivalent Analysis Waiver

This waiver is available for non-impaired waters only. The operator can develop an equivalent analysis that determines allocations for his/her small construction site for the pollutant(s) of concern or determines that such allocations are not needed to protect water quality. This waiver requires a small construction operator to develop an equivalent analysis based on existing in-stream concentrations, expected growth in pollutant concentrations from all sources, and a margin of safety.

If you are a construction operator who wants to use this waiver, you must develop your equivalent analysis and provide the following information to be waived from permitting requirements:

1. Name, address and telephone number of the construction site operator(s);
2. Name (or other identifier), address, county or similar governmental subdivision, and latitude/longitude of the construction project or site;
3. Estimated construction start and completion (i.e., final stabilization) dates, and total acreage (to the nearest quarter acre) to be disturbed;
4. The name of the waterbody(s) that would be receiving stormwater discharges from your construction project;
5. Your equivalent analysis;
6. A statement, signed and dated by an authorized representative as provided in Appendix I, Subsection I.11, that certifies that the construction activity will take place and that the stormwater discharges will occur, within the drainage area addressed by the equivalent analysis.

C.4 Waiver Deadlines and Submissions

1. Waiver certifications must be submitted prior to commencement of construction activities.
2. If you submit a TMDL or equivalent analysis waiver request, you are not waived until EPA approves your request. As such, you may not commence construction activities until receipt of approval from EPA.
3. Late Notifications: Operators are not prohibited from submitting waiver certifications after initiating clearing, grading, excavation activities, or other construction activities. The Agency reserves the right to take enforcement for any unpermitted discharges that occur between the time construction commenced and waiver authorization is granted.

Submittal of a waiver certification is an optional alternative to obtaining permit coverage for discharges of stormwater associated with small construction activity, provided you qualify for the waiver. Any discharge of stormwater associated with small construction activity not covered by either a permit or a waiver may be considered an unpermitted discharge under the Clean Water Act. As mentioned above, EPA reserves the right to take enforcement for any unpermitted discharges that occur between the time construction commenced and either discharge authorization is granted or a complete and accurate waiver certification is submitted. EPA may notify any operator covered by a waiver that they must apply for a permit. EPA may notify any operator who has been in non-compliance with a waiver that they may no longer use the waiver for future projects. Any member of the public may petition EPA to take action under this provision by submitting written notice along with supporting justification.

Complete and accurate Rainfall Erosivity waiver certifications not otherwise submitted electronically via EPA's eNOI system (www.epa.gov/npdes/cgpenoi) must be sent to one of the following addresses:

Regular U.S. Mail Delivery
EPA Stormwater Notice Processing Center
Mail Code 4203M
U.S. EPA
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Overnight/Express Mail Delivery
EPA Stormwater Notice Processing Center
Room 7420
U.S. EPA
1201Constitution Avenue, NW
Washington, DC 20004

Complete and accurate TMDL or equivalent analysis waiver requests must be sent to the applicable EPA Region office specified in Appendix B.

Appendix D - Endangered Species Act Requirements

The purpose of this guidance is to assist you in complying with the requirements in Part 1.1.e of the permit requiring you to demonstrate that you meet one of the criteria listed in this appendix with respect to the protection of any and all species that are federally-listed as endangered or threatened under the Endangered Species Act (ESA) or of habitat that is federally-designated as "critical habitat" under the ESA in order to be eligible for coverage under this permit.

This guidance provides you information on the following:

- **Section D.1:** ESA Eligibility Criteria
- **Section D.2:** Guidance for Determining Which ESA Criteria Applies

D.1 ESA Eligibility Criteria

You must certify in your NOI that you meet one of the eligibility criteria listed below in order to be eligible for coverage under this permit. You must also specify in the NOI the basis for your selection of the applicable eligibility criterion.

> Note: (1) Regardless of the criterion selected, you must provide documentation in your SWPPP that is sufficient to support your determination that you satisfy the requirements of the particular criterion. (2) While coordination between you and the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service (together, the "Services") is not necessarily required in all cases, EPA encourages you to coordinate with the Services and to do so early in the planning process prior to submitting your NOI.

Criterion A. No federally-listed threatened or endangered species or their designated critical habitat(s) are likely to occur in your site's "action area" as defined in Appendix A of this permit.

Criterion B. The construction site's discharges and discharge-related activities were already addressed in another operator's valid certification of eligibility for your action area under eligibility Criterion A, C, D, E, or F and there is no reason to believe that federally-listed species or federally-designated critical habitat not considered in the prior certification may be present or located in the "action area". To certify your eligibility under this Criterion, there must be no lapse of NPDES permit coverage in the other operator's certification. By certifying eligibility under this Criterion, you agree to comply with any effluent limitations or conditions upon which the other operator's certification was based. You must include in your NOI the tracking number from the other operator's notification of authorization under this permit. If your certification is based on another operator's certification under Criterion C, you must provide EPA with the relevant supporting information required of existing dischargers in Criterion C in your NOI form.

Criterion C. Federally-listed threatened or endangered species or their designated critical habitat(s) are likely to occur in or near your site's "action area," and your site's discharges and discharge-related activities are not likely to adversely affect listed threatened or endangered species or critical habitat. This determination may include consideration of any stormwater controls and/or management practices you will adopt to ensure that your discharges and discharge-related activities are not likely to adversely affect listed species and critical habitat. To make this certification, you must include the following in your NOI: 1) any federally listed species and/or designated habitat located in your "action area"; and 2) the distance between your site and the listed species or designated critical habitat (in miles). You must also include a copy of your site map with your NOI.

Criterion D. Coordination between you and the Services has been concluded. The coordination must have addressed the effects of your site's discharges and discharge-related activities on federally-listed threatened or endangered species and federally-designated critical habitat, and must have resulted in a written concurrence from the relevant Service(s) that your site's discharges and discharge-related activities are not likely to adversely affect listed species or critical habitat. You must include copies of the correspondence between yourself and the Services in your SWPPP and your NOI.

Criterion E. Consultation between a Federal Agency and the U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service under section 7 of the ESA has been concluded. The consultation must have addressed the effects of the construction site's discharges and discharge-related activities on federally-listed threatened or endangered species and federally-designated critical habitat. The result of this consultation must be either:

i. a biological opinion that concludes that the action in question (taking into account the effects of your site's discharges and discharge-related activities) is not likely to jeopardize the continued existence of listed species, nor the destruction or adverse modification of critical habitat; or

ii. written concurrence from the applicable Service(s) with a finding that the site's discharges and discharge-related activities are not likely to adversely affect federally-listed species or federally-designated habitat.

You must include copies of the correspondence between yourself and the Services in your SWPPP and your NOI.

Criterion F. Your construction activities are authorized through the issuance of a permit under section 10 of the ESA, and this authorization addresses the effects of the site's discharges and discharge-related activities on federally-listed species and federally-designated critical habitat. You must include copies of the correspondence between yourself and the Services in your SWPPP and your NOI.

You must comply with any applicable terms, conditions, or other requirements developed in the process of meeting the eligibility criteria in this section to remain eligible for coverage under this permit. Documentation of these requirements must be kept as part of your SWPPP (see Part 7.2.14.1).

D.2 Guidance for Determining Which Criterion Applies

Part 1.1.5 of the permit requires that you meet one of the six criteria listed above in order to be eligible for coverage under the permit.

You must follow the procedures in Steps 1through 6 to determine the ESA criterion under which your site is eligible for permit coverage.

D.2.1 Step 1 - Determine if Your Discharges and Discharge-Related Activities Were Already Addressed in Another Operator's Valid Certification that Included Your Action Area.

- **If your discharges and discharge-related activities <u>were</u> already addressed in another operator's valid certification that included your action area** (e.g., a general contractor or developer may have completed and filed an NOI for the entire action area with the necessary ESA certifications (Criterion A, C, D, E, or F)), *you may select eligibility Criterion B on your Notice of Intent form.*

  By certifying eligibility under Criterion B, you must comply with any terms and conditions imposed under the eligibility requirements of Criterion A, C, D, E, or F to ensure that your discharges and discharge-related activities are protective of listed species and/or critical habitat.

  Note: If you are unable to meet these eligibility requirements, then you may either establish eligibility under one of the other criterion, or you may consider applying to EPA for an individual permit.

  Under Criterion B, you must provide documentation in your SWPPP of any of these terms and conditions, as well as the other operator's basis for establishing eligibility. You must also provide a description of the basis for your selection of Criterion B on your NOI form, including the eligibility criterion (A, C, D, E, or F) that was certified to by the previous operator, and must provide the Tracking Number from the other operator's notification of authorization under this permit.

  If your certification is based on another operator's certification under criterion C, you must provide the documentation required in the NOI for criterion C, namely: 1) what federally listed species and/or designated habitat are located in your "action area"; and 2) what is the distance between your site and the listed species or designated critical habitat (in miles).

- **If discharges and discharge-related activities from your site <u>were not</u> addressed in another operator's valid certification that included your action area,** you must follow the applicable procedures in Steps 2 through 5 below.

D.2.2 Step 2 - Determine if Listed Threatened or Endangered Species or their Designated Critical Habitat(s) are Likely to Occur in your Site's Action Area

You must determine, to the best of your knowledge, whether species listed as either threatened or endangered, or their critical habitat(s) (see definitions of these terms in Appendix A), are located in your site's action area. To make this determination, you should first determine if listed species and/or critical habitat are expected to exist in your county or township. The local offices of the U.S. Fish and Wildlife Service (FWS), National Marine Fisheries Service (NMFS), and State or Tribal Heritage Centers often maintain lists of federally listed endangered or threatened species on their internet sites. For FWS

terrestrial and aquatic species information, you can use FWS' on-line mapping tool, the Information, Planning, and Consultation (IPAC) System, located at http://www.fws.gov/ipac/.

Note: To determine the field office that corresponds to your project site, visit http://www.fws.gov/endangered/regions/index.html and http://www.nmfs.noaa.gov/ (under the left tabe for "Regions").

In most cases, species and/or critical habitat lists allow you to determine if any such species or habitat exists in your county or township. You can also find critical habitat designations and associated requirements at 50 CFR Parts 17 and 226. http://www.access.gpo.gov.

- ***If there are listed species and/or critical habitat in your county or township***, you should contact your local FWS, NMFS, or State or Tribal Heritage Center to determine if the listed species are known to exist in your action area and if any critical habitat areas have been designated that overlap your action area.
    - If your local FWS, NMFS, or State or Tribal Heritage Center indicates that these species and/or critical habitat could exist in your action area, you must:
        - Do **one or more** of the following:
            - Conduct visual inspections. This method may be particularly suitable for construction sites that are smaller in size or located in non-natural settings such as highly urbanized areas or industrial parks where there is little or no natural habitat, or for construction activities that discharge directly into municipal stormwater collection systems.
            - Conduct a formal biological survey. In some cases, particularly for larger construction sites with extensive stormwater discharges, biological surveys may be an appropriate way to assess whether species are located in the action area and whether there are likely to be adverse effects to such species. Biological surveys are frequently performed by environmental consulting firms. A biological survey may in some cases be useful to conduct in conjunction with Steps Two, Three, or Four of these instructions.
            - If required, conduct an environmental assessment under the National Environmental Policy Act (NEPA). Some construction activities might require review under NEPA for specific reasons, such as federal funding or other federal involvement in the project. Note: Coverage under the CGP does not trigger such a review for individual projects/sites. EPA has complied with NEPA in the issuance of the CGP.

and

- Follow the instructions in Steps 3 – 5 below, as applicable. Note that many but not all measures imposed to protect listed species under these steps will also protect critical habitat. Thus, meeting the eligibility requirements of this CGP may require measures to protect critical habitat that are separate from those to protect listed species.

- ***If there are no listed species in your county or township and no critical habitat areas in your action area,*** *you may check eligibility criterion A on your NOI form.* You must also provide a description of the basis for the criterion selected on your NOI form and provide documentation supporting the criterion selected in your SWPPP.

D.2.3 **Step 3 -** Determine if the Construction Activity's Discharges or Discharge-Related Activities Are Likely to Adversely Affect Listed Threatened or Endangered Species or Designated Critical Habitat

If in Step 2 you determine based on communication with your local FWS, NMFS, or State or Tribal Heritage Center, or other determination, that listed species and/or critical habitat could exist in your action area, you must next assess whether your discharges or discharge-related activities are likely to adversely affect listed threatened or endangered species or designated critical habitat.

Potential adverse effects from discharges and discharge-related activities include:

- *Hydrological*. Stormwater discharges may cause siltation, sedimentation or induce other changes in receiving waters such as temperature, salinity or pH. These effects will vary with the amount of stormwater discharged and the volume and condition of the receiving water. Where a stormwater discharge constitutes a minute portion of the total volume of the receiving water, adverse hydrological effects are less likely. Construction activity itself may also alter drainage patterns on a site where construction occurs that can impact listed species or critical habitat.

- *Habitat*. Excavation, site development, grading, and other surface disturbance activities from construction activities, including the installation or placement of stormwater controls, may adversely affect listed species or their habitat. Stormwater may drain or inundate listed species habitat.

- *Toxicity*. In some cases, pollutants in stormwater may have toxic effects on listed species.

The scope of effects to consider will vary with each site. If you are having difficulty determining whether your project is likely to adversely affect listed species or critical habitat, or one of the Services has already raised concerns to you, you should contact the appropriate office of the FWS, NMFS or Natural Heritage Center for assistance.

- ***If adverse effects to listed threatened or endangered species or their critical habitat are not likely****, then you may select eligibility criterion C on the NOI form.* You must provide the following specific information on your NOI form: 1) what federally listed species and/or designated habitat are located in your "action area"; and 2) what is the distance between your site and the listed species or

designated critical habitat (in miles). You must also provide a copy of your site map with your NOI.

- ***If adverse effects to listed threatened or endangered species or their critical habitat are likely,*** you must follow Step 4 below.

D.2.4 Step 4 - Determine if Measures Can Be Implemented to Avoid Adverse Effects

If you make a preliminary determination in Step 3 that adverse effects from your construction activity's discharges or discharge-related activities are likely to occur, you can still receive coverage under eligibility criterion C of the CGP if appropriate measures are undertaken to avoid or eliminate the likelihood of adverse effects prior to applying for CGP coverage.

These measures may involve relatively simple changes to construction activities such as re-routing a stormwater discharge to bypass an area where species are located, relocating stormwater controls, or by modifying the "footprint" of the construction activity. If you are unable to ascertain which measures to implement to avoid the likelihood of adverse effects, you must coordinate or enter into consultation with the FWS and/or NMFS, in which case you would not be eligible for coverage under eligibility criterion C, but may instead be eligible for coverage under eligibility criterion D, E, or F (described in more detail in Step 5).

- **If you are able to install and implement appropriate measures to avoid the likelihood of adverse effects,** *then you may check eligibility criterion C on the NOI form.* The measures you adopt to avoid or eliminate adverse affects must be implemented for the duration of the construction project and your coverage under the CGP. You must also provide a description of the basis for the criterion selected , and the following specific information on your NOI form: 1) what federally listed species and/or designated habitat are located in your "action area"; and 2) what is the distance between your site and the listed species or designated critical habitat (in miles).

- **If you cannot ascertain which measures to implement to avoid the likelihood of adverse effects,** you must follow the procedures in Step 5.

D.2.5 Step 5 - Determine if the Eligibility Requirements of Criterion D, E, or F Can Be Met

If in Step 4 you cannot ascertain which measures to implement to avoid the likelihood of adverse effects, you must contact the FWS and/or NMFS. You may still be eligible for CGP coverage if any likely adverse effects can be addressed through meeting criterion D, E, or F.

- **Criterion D:** You have coordinated with the Services and have addressed the effects of your site's discharges on federally-listed threatened or endangered species and federally-designated critical habitat, which resulted in a written concurrence from the relevant Service(s) that your site's discharges are not likely to adversely affect listed species or critical habitat.

  If you have met the requirements of criterion D, *you may select eligibility criterion D on the NOI form.* You must provide a description of the basis for the criterion selected on your NOI form and must include copies of the correspondence between you and the applicable Service in your SWPPP.

- **Criterion E:** Formal or informal ESA section 7 consultation is performed with the FWS and/or NMFS and that consultation addresses the effects of your discharges and discharge-related activities on federally-listed and threatened species and designated critical habitat. In order to be eligible for coverage under this permit, consultation must result in a "no jeopardy opinion" or a written concurrence by the Service(s) on a finding that your stormwater discharge(s) and stormwater discharge-related activities are not likely to adversely affect listed species or critical habitat (For more information on consultation, see 50 CFR §402). If you receive a "jeopardy opinion," you may continue to work with the FWS and/or NMFS and your permitting authority to modify your project so that it will not jeopardize listed species or designated critical habitat.

  Note that most consultations are accomplished through informal consultation. When conducting informal ESA section 7 consultation as a non-federal representative, you must follow the procedures found in 50 CFR Part 402 of the ESA regulations. You must notify FWS and/or NMFS of your intention and agreement to conduct consultation as a non-federal representative.

  Consultation may occur in the context of another federal action at the construction site (e.g., where ESA section 7 consultation was performed for issuance of a wetlands dredge and fill permit for the project or where a NEPA review is performed for the project that incorporates a section 7 consultation). Any terms and conditions developed through consultations to protect listed species and critical habitat must be incorporated into the SWPPP. As noted above, operators may, if they wish, initiate consultation with the Services at Step Four.

  Whether ESA section 7 consultation must be performed with either the FWS, NMFS or both Services depends on the listed species that may be affected by the operator's activity. In general, NMFS has jurisdiction over marine, estuarine, and anadromous species. Operators should also be aware that while formal section 7 consultation provides protection from incidental takings liability, informal consultation does not.

  If you have met the requirements of criterion E, *you may select eligibility criterion E on the NOI form.* You must provide a description of the basis for the criterion selected on your NOI form and must include copies of the correspondence between yourself and the Services in your SWPPP.

- **Criterion F:** Your construction activities are authorized through the issuance of a permit under section 10 of the ESA, and that authorization addresses the effects of your discharge(s) and discharge-related activities on federally-listed species and designated critical habitat. You must follow FWS and/or NMFS procedures when applying for an ESA Section 10 permit (see 50 CFR §17.22(b)(1) for FWS and §222.22 for NMFS). Application instructions for section 10 permits for FWS and NMFS can be obtained by accessing the FWS and NMFS websites (http://www.fws.gov and http://www.nmfs.noaa.gov) or by contacting the appropriate FWS and NMFS regional office.

  If you have met the requirements of criterion F, *you may select eligibility criterion F on the NOI form.* You must provide a description of the basis for the criterion selected on your NOI form and must include copies of the correspondence between yourself and the Services in your SWPPP.

Appendix E – Historic Property Screening Process

Background

Section 106 of the National Historic Preservation Act (NHPA) requires Federal agencies to take into account the effects of Federal "undertakings", such as the issuance of this permit, on historic properties that are either listed on, or eligible for listing on, the National Register of Historic Places. To address any issues relating to historic properties in connection with the issuance of this permit, EPA has developed the screening process in this appendix that enables construction operators to appropriately consider the potential impacts, if any, of their installation of stormwater controls on historic properties and to determine whether actions can be taken, if applicable, to mitigate any such impacts. Although the coverages of individual construction sites under this permit do not constitute separate Federal undertakings, the screening process in this appendix provides an appropriate site-specific means of addressing historic property issues in connection with EPA's issuance of the permit.

Key Terms

Historic property- prehistoric or historic districts, sites, buildings, structures, or objects that are included in or eligible for inclusion in the National Register of Historic Places, including artifacts, records, and remains that are related to and located within such properties

SHPO – The State Historic Preservation Officer for a particular state

THPO or Tribal representative – The Tribal Historic Preservation Officer for a particular Tribe or, if there is no THPO, the representative designated by such Tribe for NHPA purposes

Instructions for All Construction Operators

You are required to follow the screening process in this appendix to determine if your installation of stormwater controls on your site has the potential to cause effects to historic properties, and whether or not you need to contact your SHPO, THPO, or other tribal representative for further information. You may not submit your NOI until you have completed this screening process. The following four steps describe how applicants can meet the historic property requirements under this permit:

Step 1 *Are you installing any stormwater controls that require subsurface earth disturbance?*

The first step of the screening process is to determine if you will install stormwater controls that cause subsurface earth disturbance. The installation of the following types of stormwater controls require subsurface earth disturbance:

- Dikes
- Berms
- Catch Basins
- Ponds
- Ditches
- Trenches
- Culverts
- Channels
- Perimeter Drains

- Swales

Note: This list is not intended to be exhaustive. Other stormwater controls that are not on this list may involve earth-disturbing activities and must also be examined for the potential to affect historic properties.

Note: You are only required to consider earth-disturbing activities related to the installation of stormwater controls in the NHPA screening process. You are not reqired to conside other earth-disturbing activities a the site. If you are installing one of the above stormwater controls or another type of control that requires subsurface earth disturbance, your project has the potential to have an effect on historic properties. If this is the case, then you must proceed to Step 2.

If you are not installing one of the above stormwater controls or another type of control that requires subsurface earth disturbance, then you may indicate this on your NOI, and no further screening is necessary. During the 14-day waiting period after submitting your NOI, the SHPO, THPO, or other tribal representative may request that EPA hold up authorization based on concerns about potential adverse impacts to historic properties. EPA will evaluate any such request and notify you if any additional measures to address adverse impacts to historic properties are necessary.

Step 2 *Have prior professional cultural resource surveys or other evaluations determined that historic properties do not exist, or have prior disturbances precluded the existence of historic properties?*

If you are installing a stormwater control that requires subsurface earth disturbance, you must next determine if it has already been determined that no historic properties exist on your site based on prior professional cultural resource surveys or other evaluations, or that the existence of historic properties has been precluded because of prior earth disturbances.

If prior to your project it has already been determined that no historic properties exist at your site based on available information, including information that may be provided by your applicable SHPO, THPO, or other tribal representative, then you may indicate this on your NOI, and no further screening steps are necessary. Similarly, if earth disturbances that have occurred prior to your project have eliminated the possibility that historic properties exist on your site, you may indicate this on your NOI, and no further screening steps are necessary. After submitting your NOI, and during the 14-day waiting period, the SHPO, THPO, or other tribal representative may request that EPA hold up authorization based on concerns about potential adverse impacts to historic properties. EPA will evaluate any such request and notify you if any additional measures to address adverse impacts to historic properties are necessary.

If neither of these circumstances exists for your project, you must proceed to Step 3.

Step 3 *If you are installing any stormwater controls that require subsurface earth disturbance, you must determine if these activities will have an effect on historic properties.*

If your answer to the questions in Steps 1 and 2 is "no", *then you must assess whether your earth-disturbing activities related to the installation of stormwater controls will have an effect on historic properties. This assessment may be based on historical sources, knowledge of the area, an assessment of the types of earth-disturbing activities you are engaging in, considerations of*

any controls and/or management practices you will adopt to ensure that your stormwater control-related earth-disturbing activities will not have an effect on historic properties, and any other relevant factors. If you determine based on this assessment that earth disturbances related to the installation of yous stormwater controls will not cause effects to historic properties, you may indicate this on your NOI, and document the basis for your determinatioin in your SWPPP and no further screening steps are necessary. In this case you must also attach a copy of your site map to your NOI. After submitting your NOI, and during the 14-day waiting period, the SHPO, THPO, or other tribal representative may request that EPA hold up authorization based on concerns about potential adverse impacts to historic properties. EPA will evaluate any such request and notify you if any additional measures to address adverse impacts to historic properties are necessary.

If none of the circumstances in Steps 1-3 exist for your project, you must proceed to Step 4.

Step 4: *If you are installing any stormwater controls that require subsurface earth disturbance and you have not satisfied the conditions in Steps 1-3, you must contact and consult with the appropriate historic preservation authorities.*

Where you are installing stormwater controls that require subsurface earth disturbance, and you cannot determine in Step 3 that these activities will not have effects on historic properties, then you must contact the relevant SHPO, THPO, or other tribal representative to request their views as to the likelihood that historic properties are potentially present on your site and may be impacted by the installation of these controls.

> *Note: Addresses for SHPOs and THPOs may be found on the Advisory Council on Historic Preservation's website (www.achp.gov/programs.html). In instances where a Tribe does not have a THPO you should contact the appropriate Tribal government office designated by the Tribe for this purpose when responding to this permit eligibility condition.*

You must submit the following minimum information in order to properly initiate your request for information:

1. Project name (*i.e.*, the name or title most commonly associated with your project);
2. A narrative description of the project;
3. Name, address, phone and fax number, and email address (if available) of the operator;
4. Most recent U.S. Geological Survey (USGS) map section (7.5 minute quadrangle) showing actual project location and boundaries clearly indicated; and
5. Sections of SWPPP site map (see Part 7.2.6) that show locations where stormwater controls that will cause subsurface earth disturbance will be installed (see Step 1).

Without submitting this minimum information, you will not have been considered to have properly initiated your request. You will need to provide the SHPO, THPO, or other tribal representative a minimum of15 calendar days after they receive these materials to respond to your request for information about your project. You are advised to get a receipt from the post office or other carrier confirming the date on which your letter was received.

If you do not receive a response within15 calendar days after receipt by the SHPO, THPO, or other tribal representative of your request, then you may indicate this on your NOI, and no further screening steps are necessary. Or, if the applicable SHPO, THPO, or other tribal representative responds to your request with an indication that no historic properties will be affected by the installation of stormwater controls at your site, then you may indicate this on your NOI, and no further screening steps are necessary. After submitting your NOI, and during the 14-day waiting period, the SHPO, THPO, or other tribal representative may request that EPA hold up authorization based on concerns about potential adverse impacts to historic properties. EPA will evaluate any such request and notify you if any additional measures to address adverse impacts to historic properties are necessary.

If within 15 calendar days of receipt of your request the applicable SHPO, THPO, or other tribal representative responds with a request for additional information or for further consultation regarding appropriate measures for treatment or mitigation of effects on historic properties caused by the installation of stormwater controls on your site, you must comply with this request and proceed to Step 5.

Step 5: *Consultation with your applicable SHPO, THPO, or other tribal representative.*

If, following your discussions with the appropriate historic preservation authorities in Step 4, the applicable SHPO, THPO, or other tribal represenative requests additional information or further consultation, you must respond with such information or to consult to determine impacts to historic properties that may be caused by the installation of stormwater controls on your site and appropriate measures for treatment or mitigation of such impacts. If as a result of your discussions with the applicable SHPO, THPO, or tribal representative, you enter into, and comply with, a written agreement regarding treatment and/or mitigation of impacts on your site, then you may indicate this on your NOI, and no further screening steps are necessary.

If, however, agreement on an appropriate treatment or mitigation plan cannot be reached between you and the SHPO, THPO, or other tribal representative within 30 days of your response to the SHPO, THPO, or other tribal representative's request for additional information or further consultation, you may submit your NOI, but you must indicate that you have not negotiated measures to avoid or mitigate such effects. You must also include in your SWPPP the following documentation:

1. Copies of any written correspondence between you and the SHPO, THPO, or other tribal representative; and
2. A description of any significant remaining disagreements as to mitigation measures between you and the SHPO, THPO, or other tribal representative.

After submitting your NOI, and during the 14-day waiting period, the SHPO, THPO, ACHP or other tribal representative may request that EPA place a hold on authorization based upon concerns regarding potential adverse effects to historic properties. EPA, in coordination with the ACHP, will evaluate any such request and notify you if any additional measures to address adverse effects to historic properties are necessary.

Appendix F - List of Tier 3, Tier 2, and Tier 2.5 Waters

EPA's CGP has special requirements for discharges to waters designated by a state or tribe as Tier 2/2.5 or Tier 3 for antidegradation purposes under 40 CFR 131.12(a). See Parts 1.2.3 and 3.3.

The list below is provided as a resource for operators who must determine whether they discharge to a Tier 2/2.5 or Tier 3 water. Only Tier 2/2.5 or Tier 3 waters specifically identified by a water quality standard authority (e.g., a state, territory, or tribe) are identified in the table below. Many authorities evaluate the existing and protected quality of the receiving water on a pollutant-by-pollutant basis and determine whether water quality is better than the applicable criteria that would be affected by a new discharge or an increase in an existing discharge of the pollutant. In instances where water quality is better, the authority may choose to allow lower water quality, where lower water quality is determined to be necessary to support important social and economic development. Permittees are not required to identify those waters which are evaluated on an individual basis.

Permit Number	Areas of Coverage/Where EPA Is Permitting Authority	
MAR120000	**Commonwealth of Massachusetts, except Indian Country lands**	
	Tier 2 and Tier 2.5 waters are identified and listed in 314 CMR 4.06 Basin Classification. (314 CMR 4 can be found at DEP's web page at http://www.mass.gov/dep/service/regulations/314cmr04.pdf)	
	Tier 2	Tier 2 waters are listed on a parameter-by-parameter basis.
	Tier 2.5	Tier 2.5 waters are listed as "outstanding resource waters" on the website: http://www.mass.gov/dep/water/laws/tblfig.pdf
NHR120000	**State of New Hampshire**	
	Tier 2/2.5	There is no list of Tier 2/Tier 2.5 waters. New dischargers should contact Ken Edwardson at Kenneth.Edwardson@des.nh.gov.
	Tier 3	Env-Ws 1708.05(a) Surface waters of national forests and surface waters designated as "natural" under RSA 483:7-a, I shall be considered outstanding resource waters (ORW). "Natural waters" are listed at http://www.gencourt.state.nh.us/rsa/html/L/483/483-15.htm. Surface waters of national forests are not included in an official list. For further questions, new dischargers should contact Thelma Murphy (EPA Region 1's stormwater coordinator) at murphy.thelma@epa.gov.
PRR120000	**Commonwealth of Puerto Rico**	
	Tier 3	Tier III waters are those which are classified as either Class SA or Class SE. Class SA waters are defined as "Coastal waters and estuarine waters of high quality and/or exceptional ecological or recreational value whose existing characteristics shall not be altered, except by natural causes, in order to preserve the existing natural phenomena." Class SA waters include bioluminiscent lagoons and bays such as La Parguera and Monsio José on the Southern Coast, Bahía de Mosquito in Vieques, and any other coastal or estuarine waters of exceptional quality of high ecological value or recreational which may be designated by Puerto Rico, through Resolution, as requiring this classification for protection of the waters. Class SE waters are defined

Permit Number	Areas of Coverage/Where EPA Is Permitting Authority	
		as "Surface waters and wetlands of exceptional ecological value, whose existing characteristics should not be altered in order to preserve the existing natural phenomena." Class SE waters include Laguna Tortuguero, Laguna Cartagena and any other surface water bodies of exceptional ecological value as may be designated by Puerto Rico through Resolution.
DCR120000	**District of Columbia**	
	Tier 2/2.5	Rock Creek and its tributaries and Battery Kemble Creek and its tributaries are considered Special Waters of the District of Columbia (SWDC) under its antidegradation program.
MNR120001	**Fond du Lac Band of MN Chippewa**	
	Tier 3	Six lakes are presently identified as Tier 3: (1) Dead Fish, (2) Jaskari, (3) Miller (Mud), (4) Perch, (5) Rice Portage, (6) Wild Rice.
	Grand Portage Band of MN Chippewa	
	Tier 2/2.5	All waters, not already classified as Tier 3, are high quality Tier 2 waters. (see Grand Portage Reservation Water Quality Standards, Section VI & VII, Pages 14-16).
	Tier 3	"The portion of Lake Superior north of latitude 47 degrees, 57 minutes, 13 seconds, east of Hat Point, south of the Minnesota-Ontario boundary, and west of the Minnesota-Michigan boundary." (see Section VII, Page 16).
WIR120001	**Lac du Flambeau Band of the Lake Superior Chippewa**	
	Tier 2	All named waters, including wetlands, not specified under an antidegradation classification.
	Tier 2.5	Bills Lake, Birch Lake, Bobidosh Lake, Bog Lake (SE SE Sec. 31, T40NR6E), Bolton Lake, Broken Bow Lake, Chewalah Lake, Clear Lake (Sec. 2, T39NR4E), Corn Great, Great, Corn Lake, Little "Least/Lesser", Crawling Stone Lake, Big, Crawling Stone Lake, Little, Crescent Lake, Crooked Lake, Big, David Lake, Ellerson Lake, Middle, Ellerson Lake, West, Elsie Lake "Boundary Lake", Fat Lake, Fence Lake, Gresham Creek, Green Lake (NW NW Sec. 19, T41R6E), Grey Lake, Gunlock Lake, Haskell Lake, Headflyer Lake (Sec. 19, T41NR5E), Highway Lake (NW NW Sec. 19, T41NR5E), Horsehead Lake (SE SW Sec. 9, T40NR5E), Hutton's Creek, Ike Walton Lake, Lily Lake (SE SW Sec. 35, T40NR5E), Little Ten Lake, Lodge Lake "L. Rice" (NW NW Sec. 8, T41NR6E), Lucy Lake, Mindys Lake (Sec. 8, T40NR5E), Minette Lake, Mitten Lake, Monk's Lake (Sec. 13, T40NR5E), Moving Cloud Lake, Mud Creek, Muskesin Lake, Patterson Lake, Placid Twin Lake (North), Placid Twin Lake (South), Plummer Lake, Poupart Lake, Prairie Lake (NE SW Sec. 13, T40NR4E), Raven Lake, Ross Allen Lake, Sand Lake, Little, Scott Lake (Sec. 22, T40N, R4E), Shishebogama Lake, Signal Lake, Snort Lake (Sec. 5, T41N, R6E), Spring Lake "Jerms", Squirrel Lake, Statenaker Lake "Hollow", Stearns Lake "Hourglass", Sugarbush "Hidden Lake" (NW NW Sec. 17, T41NR5E), Sugarbush Creek, Sugarbush Lake, Little, Sugarbush Lake, Lower, Sugarbush Lake, Middle, Sugarbush Lake, Upper, Sunfish Lake, Tippecanoe Lake, Tomahawk River, To-To Tom Lake, Toulish Lake, Trout River, Warrior Lake, White Sand Lake, Whitefish Lake

Permit Number	Areas of Coverage/Where EPA Is Permitting Authority	
		"Cattail Lake" (Sec. 34, T40N5R), Wishow Lake, Wyandock Lake
	Tier 3	Bear River (1st bridge to Reservation boundary), Big Springs (Sec. 25, T40NR4E), Black Lake, Cranberry Lake, Doud Lake, Eagle Lake, Gene Lake, Johnson Springs, Little Trout Lake, Lost Lake (Sect. 1, T41NR4E), Mishonagon Creek, Munnomin (Jesse, Duck) Lake, Negani (Hegani) Lake, Reservation Line Lake, Spring Creek, Tank Lake, Thomas Lake, Wild Rice Lake, Zee Lake
NMR120000	**State of New Mexico**	
	Tier 3	(1) Rio Santa Barbara, including the west, middle and east forks from their headwaters downstream to the boundary of the Pecos Wilderness; and (2) the waters within the United States forest service Valle Vidal special management unit including: (a) Rio Costilla, including Comanche, La Cueva, Fernandez, Chuckwagon, Little Costilla, Holman, Gold, Grassy, LaBelle and Vidal creeks, from their headwaters downstream to the boundary of the United States forest service Valle Vidal special management unit; (b) Middle Ponil creek, including the waters of Greenwood Canyon, from their headwaters downstream to the boundary of the Elliott S. Barker wildlife management area; (c) Shuree lakes; (d) North Ponil creek, including McCrystal and Seally Canyon creeks, from their headwaters downstream to the boundary of the United States forest service Valle Vidal special management unit; and (e) Leandro creek from its headwaters downstream to the boundary of the United States forest service Valle Vidal special management unit. (3) the named perennial surface waters of the state, identified in Subparagraph (a) below, located within United States department of agriculture forest service wilderness. Wilderness are those lands designated by the United States congress as wilderness pursuant to the Wilderness Act. Wilderness areas included in this designation are the Aldo Leopold wilderness, Apache Kid wilderness, Blue Range wilderness, Chama River Canyon wilderness, Cruces Basin wilderness, Dome wilderness, Gila wilderness, Latir Peak wilderness, Pecos wilderness, San Pedro Parks wilderness, Wheeler Peak wilderness, and White Mountain wilderness. (a) The following waters are designated in the Rio Grande basin: (i) in the Aldo Leopold wilderness: Byers Run, Circle Seven creek, Flower canyon, Holden Prong, Indian canyon, Las Animas creek, Mud Spring canyon, North Fork Palomas creek, North Seco creek, Pretty canyon, Sids Prong, South Animas canyon, Victorio Park canyon, Water canyon; (ii) in the Apache Kid wilderness Indian creek and Smith canyon; (iii) in the Chama River Canyon wilderness: Chavez canyon, Ojitos canyon, Rio Chama; (iv) in the Cruces Basin wilderness: Beaver creek, Cruces creek, Diablo creek, Escondido creek, Lobo creek, Osha creek; (v) in the Dome wilderness: Capulin creek, Medio creek, Sanchez

Permit Number	Areas of Coverage/Where EPA Is Permitting Authority	
		canyon/creek; (vi) in the Latir Peak wilderness: Bull creek, Bull Creek lake, Heart lake, Lagunitas Fork, Lake Fork creek, Rito del Medio, Rito Primero, West Latir creek; (vii) in the Pecos wilderness: Agua Sarca, Hidden lake, Horseshoe lake (Alamitos), Jose Vigil lake, Nambe lake, Nat lake IV, No Fish lake, North Fork Rio Quemado, Rinconada, Rio Capulin, Rio de las Trampas (Trampas creek), Rio de Truchas, Rio Frijoles, Rio Medio, Rio Molino, Rio Nambe, Rio San Leonardo, Rito con Agua, Rito Gallina, Rito Jaroso, Rito Quemado, San Leonardo lake, Santa Fe lake, Santa Fe river, Serpent lake, South Fork Rio Quemado, Trampas lake (East), Trampas lake (West); (viii) in the San Pedro Parks wilderness: Agua Sarca, Cañon Madera, Cave creek, Cecilia Canyon creek, Clear creek (North SPP), Clear creek (South SPP), Corralitos creek, Dove creek, Jose Miguel creek, La Jara creek, Oso creek, Rio Capulin, Rio de las Vacas, Rio Gallina, Rio Puerco de Chama, Rito Anastacio East, Rito Anastacio West, Rito de las Palomas, Rito de las Perchas, Rito de los Pinos, Rito de los Utes, Rito Leche, Rito Redondo, Rito Resumidero, San Gregorio lake; (ix) in the Wheeler Peak wilderness: Black Copper canyon, East Fork Red river, Elk lake, Horseshoe lake, Lost lake, Sawmill creek, South Fork lake, South Fork Rio Hondo, Williams lake. (b) The following waters are designated in the Pecos River basin: (i) in the Pecos wilderness: Albright creek, Bear creek, Beatty creek, Beaver creek, Carpenter creek, Cascade canyon, Cave creek, El Porvenir creek, Hollinger creek, Holy Ghost creek, Horsethief creek, Jack's creek, Jarosa canyon/creek, Johnson lake, Lake Katherine, Lost Bear lake, Noisy brook, Panchuela creek, Pecos Baldy lake, Pecos river, Rio Mora, Rio Valdez, Rito Azul, Rito de los Chimayosos, Rito de los Esteros, Rito del Oso, Rito del Padre, Rito las Trampas, Rito Maestas, Rito Oscuro, Rito Perro, Rito Sebadilloses, South Fork Bear creek, South Fork Rito Azul, Spirit lake, Stewart lake, Truchas lake (North), Truchas lake (South), Winsor creek; (ii) in the White Mountain wilderness: Argentina creek, Aspen creek, Bonito creek, Little Bonito creek, Mills canyon/creek, Rodamaker creek, South Fork Rio Bonito, Turkey canyon/creek. (c) The following waters are designated in the Gila River basin: (i) in the Aldo Leopold wilderness: Aspen canyon, Black Canyon creek, Bonner canyon, Burnt canyon, Diamond creek, Falls canyon, Fisherman canyon, Running Water canyon, South Diamond creek; (ii) in the Gila wilderness: Apache creek, Black Canyon creek, Brush canyon, Canyon creek, Chicken Coop canyon, Clear creek, Cooper canyon, Cow creek, Cub creek, Diamond creek, East Fork Gila river, Gila river, Gilita creek, Indian creek, Iron creek, Langstroth canyon, Lilley canyon, Little creek, Little Turkey creek, Lookout canyon, McKenna creek, Middle Fork Gila river, Miller Spring canyon, Mogollon creek, Panther canyon, Prior creek, Rain creek, Raw Meat creek, Rocky canyon, Sacaton creek, Sapillo creek, Sheep Corral canyon, Skeleton canyon, Squaw creek, Sycamore canyon, Trail canyon, Trail creek, Trout creek, Turkey creek, Turkey Feather creek, Turnbo canyon,

Permit Number	Areas of Coverage/Where EPA Is Permitting Authority	
		West Fork Gila river, West Fork Mogollon creek, White creek, Willow creek, Woodrow canyon. (d) The following waters are designated in the Canadian River basin: in the Pecos wilderness Daily creek, Johns canyon, Middle Fork Lake of Rio de la Casa, Middle Fork Rio de la Casa, North Fork Lake of Rio de la Casa, Rito de Gascon, Rito San Jose, Sapello river, South Fork Rio de la Casa, Sparks creek (Manuelitas creek). (e) The following waters are designated in the San Francisco River basin: (i) in the Blue Range wilderness: Pueblo creek; (ii) in the Gila wilderness: Big Dry creek, Lipsey canyon, Little Dry creek, Little Whitewater creek, South Fork Whitewater creek, Spider creek, Spruce creek, Whitewater creek. (f) The following waters are designated in the Mimbres Closed basin: in the Aldo Leopold wilderness Corral canyon, Mimbres river, North Fork Mimbres river, South Fork Mimbres river. (g) The following waters are designated in the Tularosa Closed basin: in the White Mountain wilderness Indian creek, Nogal Arroyo, Three Rivers. (h) The wetlands designated are identified on the maps and list of wetlands within United States forest service wilderness areas designated as outstanding national resource waters published at the New Mexico state library and available on the department's website.

Appendix G – Buffer Guidance.

The purpose of this guidance is to assist you in complying with the requirements in Part 2.1.2.1 of the permit regarding the establishment of natural buffers or equivalent sediment controls. This guidance is organized as follows:

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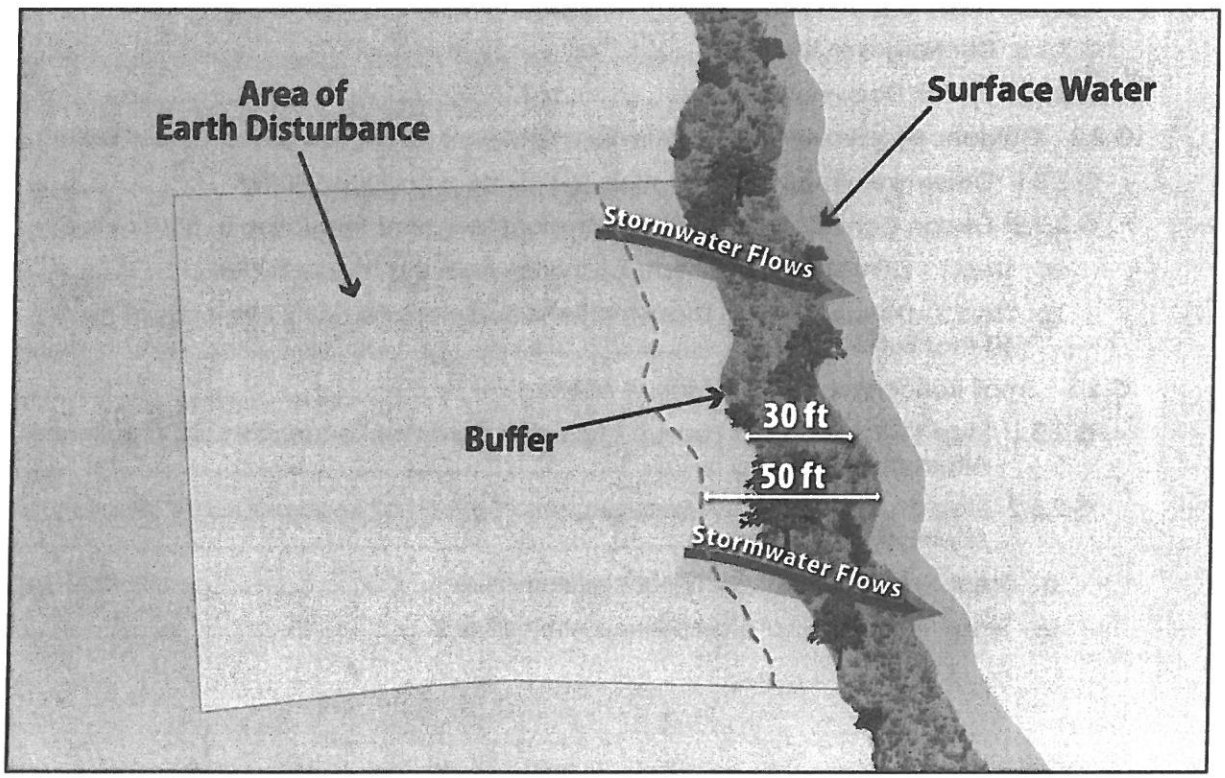
G.1 Sites That Are Required to Comply with Part 2.1.2.1

The purpose of this part is to help you determine if the requirements in Part 2.1.2.1 apply to your site.

G.1.1 Step 1 - Determine if Your Site is Within 50 Feet of a Surface Water

Part 2.1.2.1 applies to you only if your earth-disturbing activities will occur within 50 feet of a surface water that receives stormwater discharges from your site. Figure G – 1 illustrates when a site would be required to comply with the requirements in Part 2.1.2.1 due to their proximity to a surface water. If the surface water is not located within 50 feet of the earth-disturbing activities, Part 2.1.2.1 does not apply.

Figure G - 1. Example of earth-disturbing activities within 50 feet of a surface water.



If you determine that your earth-disturbing activities will occur within 50 feet of a surface water that receives stormwater discharges from your site, the requirements in Part 2.1.2.1 apply, except for certain circumstances that are described in Step 2.

Note that where some natural buffer exists but portions of the area within 50 feet of the surface water are occupied by preexisting development disturbances, or if a portion of area within 50 feet of the surface water is owned by another party and is not under your control, the buffer requirements in Part 2.1.2.1 still apply, but with some allowances.

Clarity about how to implement the compliance alternatives for these situations is provided in G.2.1.2 and G.2.2.2 below.

Note that EPA does not consider designed stormwater control features *(e.g., stormwater conveyance channels, storm drain inlets, stormwater basins)* that direct storm water to surface waters more than 50 feet from the disturbance to constitute surface waters for the purposes of determining if the buffer requirements apply.

G.1.2 Step 2 - Determine if Any Exceptions to the Requirements in Part 2.1.2.1 Apply

The following exceptions apply to the requirements in Part 2.1.2.1:

- If there is no discharge of stormwater to surface waters through the area between the disturbed portions of the site and any surface waters located within 50 feet of your site, you are not required to comply with the requirements in this Part. This includes situations where you have implemented controls measures, such as a berm or other barrier, that will prevent such discharges.
- Where no natural buffer exists due to preexisting development disturbances *(e.g., structures, impervious surfaces)* that occurred prior to the initiation of planning for the current development of the site, you are not required to comply with the requirements in this Part.

  Where some natural buffer exists but portions of the area within 50 feet of the surface water are occupied by preexisting development disturbances, you <u>are</u> required to comply with the requirements in this Part. For the purposes of calculating the sediment load reduction for either compliance alternative 2 or 3 below, you are not expected to compensate for the reduction in buffer function that would have resulted from the area covered by these preexisting disturbances. Clarity about how to implement the compliance alternatives for these situations is provided in G.2.1.2 and G.2.2.2 below.

  If during your project, you will disturb any portion of these preexisting disturbances, the area removed will be deducted from the area treated as natural buffer.
- For "linear construction projects" (see Appendix A), you are not required to comply with this requirement if site constraints *(e.g., limited right-of-way)* prevent you from complying with the requirements of the alternatives in Part 2.1.2.1a, provided that, to the extent practicable, you limit disturbances within 50 feet of the surface water and/or you provide supplemental erosion and sediment controls to treat stormwater discharges from earth disturbances within 50 feet of the surface water. You must also document in your SWPPP your rationale for why it is infeasible for you to comply with the requirements in Part 2.1.2.1a, and describe any buffer width retained and/or supplemental erosion and sediment controls installed.
- For "small residential lot" construction *(i.e., a lot being developed for residential purposes that will disturb less than 1 acre of land, but is part of a larger residential project that will ultimately disturb greater than or equal to 1 acre)*, you have the option of complying with the requirements in Part G.2.3 of this appendix.
- The following disturbances within 50 feet of a surface water are exempt from the requirements in this Part:

  - Construction approved under a CWA Section 404 permit; or

- Construction of a water-dependent structure or water access areas *(e.g., pier, boat ramp, trail)*.

Note that you must document in your SWPPP if any disturbances related to any of the above exceptions occurs within the buffer area on your site.

G.2 COMPLIANCE ALTERNATIVES GUIDANCE

If in Part G.1 of this guidance you determine that the buffer requirements apply to your site, you have three compliance alternatives from which you can choose:

1. Provide and maintain a 50-foot buffer undisturbed natural buffer (Part 2.1.2.1a.i);[1] or
2. Provide and maintain an undisturbed natural buffer that is less than 50 feet and is supplemented by additional erosion and sediment controls, which in combination achieves the sediment load reduction equivalent to a 50-foot undisturbed natural buffer (Part 2.1.2.1a.ii);[1] or
3. If it is infeasible to provide and maintain an undisturbed natural buffer of any size, you must implement erosion and sediment controls that achieve the sediment load reduction equivalent to a 50-foot undisturbed natural buffer (Part 2.1.2.1a.iii).[1]

The compliance alternative selected above must be maintained throughout the duration of permit coverage.

The following provides detailed guidance for how you can comply with each of the compliance alternatives. Part G.2.1 below provides guidance on how to provide and maintain natural buffers consistent with the alternatives 1 and 2, above. Part G.2.2 below provides guidance on how to comply with the requirement to provide a 50-foot buffer equivalent through erosion and sediment controls consistent with alternatives 2 and 3, above.

G.2.1 Guidance for Providing and Maintaining Natural Buffers

The following guidance is intended to assist you in complying with the requirements to provide and maintain a natural buffer during construction. This part of the guidance applies to you if you choose either alternative 1 (50-foot buffer) or alternative 2 (a buffer of < 50 feet supplemented by additional erosion and sediment controls that achieve the equivalent sediment load reduction as the 50-foot buffer), or if you are providing a buffer in compliance with one of the small residential lot compliance alternatives in Part G.2.3 below.

[1] *For the compliance alternatives in 1 and 2, you are not required to enhance the quality of the vegetation that already exists in the buffer, or provide vegetation if none exists (e.g., arid and semi-arid areas). You only need to retain and protect from disturbance the natural buffer that existed prior to the commencement of construction. Any preexisting structures or impervious surfaces are allowed in the natural buffer provided you retain and protect from disturbance the natural buffer area outside the preexisting disturbance. Similarly, for alternatives 2 and 3, you are required to implement and maintain sediment controls that achieve the sediment load reduction equivalent to the undisturbed natural buffer that existed on the site prior to the commencement of construction. In determining equivalent sediment load reductions, you may consider naturally non-vegetated areas and prior disturbances. See Part G.2.2 of this Appendix for a discussion of how to determine equivalent reductions.*

G.2.1.1 *Buffer Width Measurement*

Where you are retaining a buffer of any size, the buffer should be measured perpendicularly from any of the following points, whichever is further landward from the water:

1. The ordinary high water mark of the water body, defined as the line on the shore established by fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, and/or the presence of litter and debris; or
2. The edge of the stream or river bank, bluff, or cliff, whichever is applicable.

Refer to Figure G – 2 and Figure G - 3. You may find that specifically measuring these points is challenging if the flow path of the surface water changes frequently, thereby causing the measurement line for the buffer to fluctuate continuously along the path of the waterbody. Where this is the case, EPA suggests that rather than measuring each change or deviation along the water's edge, it may be easier to select regular intervals from which to conduct your measurement. For instance, you may elect to conduct your buffer measurement every 5 to 10 feet along the length of the water.

Additionally, note that if earth-disturbing activities will take place on both sides of a surface water that flows through your site, to the extent that you are establishing a buffer around this water, it must be established on both sides. For example, if you choose alternative 1 above, and your project calls for disturbances on both sides of a small stream, you would need to retain the full 50 feet of buffer on both sides of the water. However, if your construction activities will only occur on one side of the stream, you would only need to retain the 50-foot buffer on the side of the stream where the earth-disturbance will occur.

Figure G - 2. This image shows buffer measurement from the ordinary high water mark of the water body, as indicated by a clear natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation, and/or the presence of litter/debris.

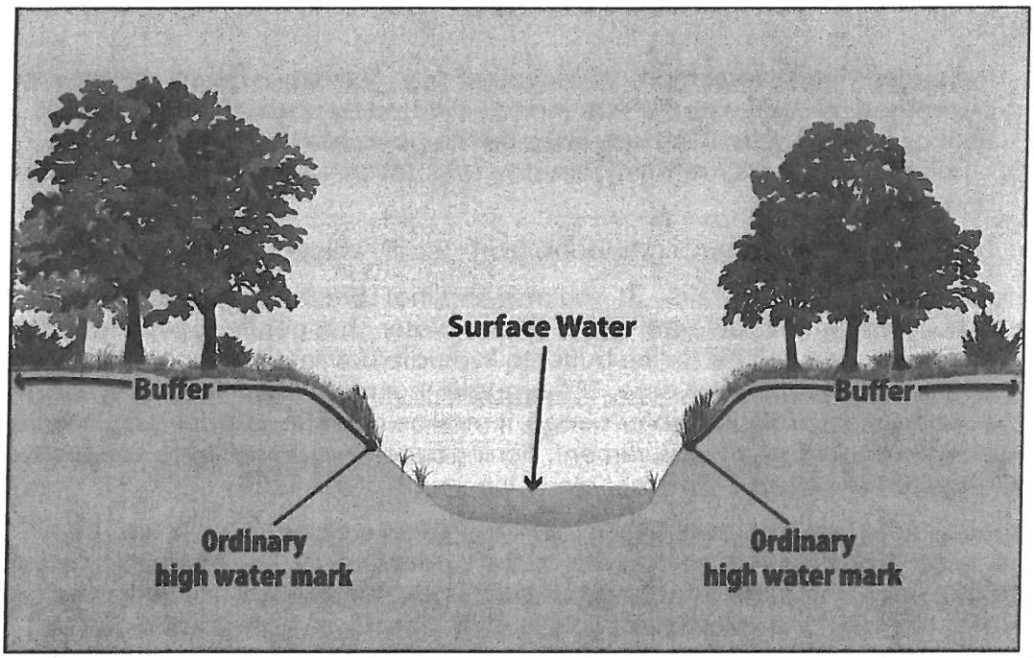
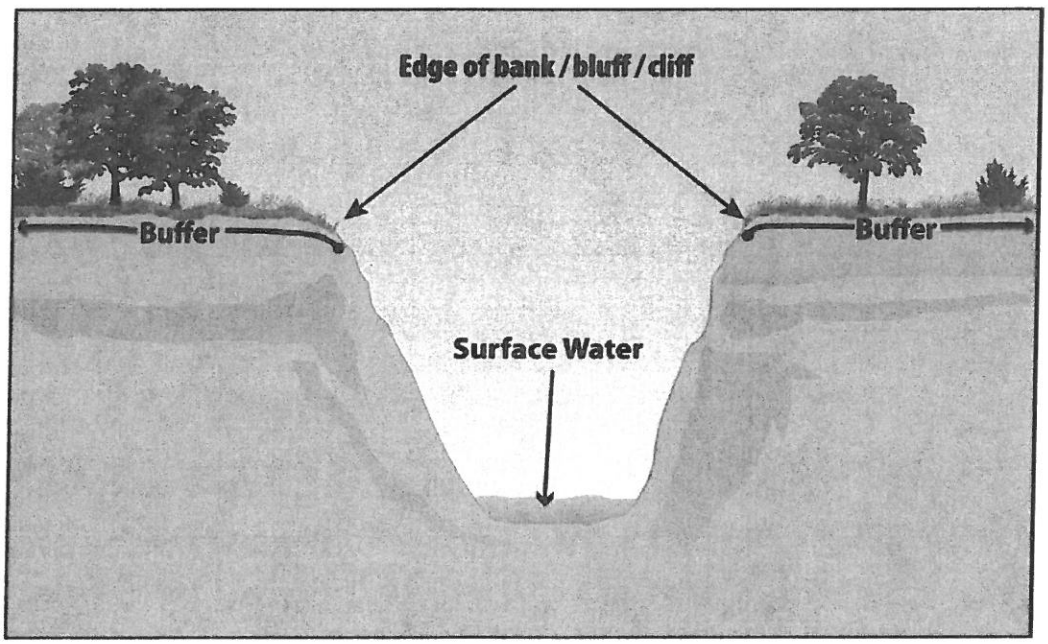


Figure G - 3. This image shows buffer measurement from the edge of the bank, bluff, or cliff, whichever is applicable.



G.2.1.2 *Limits to Disturbance Within the Buffer*

You are considered to be in compliance with this requirement if you retain and protect from construction activities the natural buffer that existed prior to the commencement of construction. If the buffer area contains no vegetation prior to the commencement of construction (e.g., sand or rocky surface), you are not required to plant any additional vegetation. As noted above, any preexisting structures or impervious surfaces are allowed in the buffer provided you retain and protect from disturbance the vegetation in the buffer outside the preexisting disturbance.

To ensure that the water quality protection benefits of the buffer are retained during construction, you are prohibited from conducting any earth-disturbing activities within the buffer during permit coverage. In furtherance of this requirement, prior to commencing earth-disturbing activities on your site, you must delineate, and clearly mark off, with flags, tape, or a similar marking device, the buffer area on your site. The purpose of this requirement is to make the buffer area clearly visible to the people working on your site so that unintended disturbances are avoided.

While you are not required to enhance the quality of the vegetation that already exists within the buffer, you are encouraged to do so where such improvements will enhance the water quality protection benefits of the buffer. (Note that any disturbances within the buffer related to buffer enhancement are permitted and do not constitute construction disturbances.) For instance, you may want to consider targeted plantings where limited vegetation exists, or replacement of existing vegetation where invasive or noxious plant species (see http://plants.usda.gov/java/noxiousDriver) have taken over. In the case of invasive or noxious species, you may want to remove and replace them with a diversity of native trees, shrubs, and herbaceous plants that are well-adapted to the climatic, soil, and hydrologic conditions on the site. You are also encouraged to limit the removal of naturally deposited leaf litter, woody debris, and other biomass, as this material contributes to the ability of the buffer to retain water and filter pollutants.

If a portion of the buffer area adjacent to the surface water is owned by another party and is not under your control, you are only required to retain and protect from construction activities the portion of the buffer area that is under your control. For example, if you elect alternative 1 above (provide and maintain a 50-foot buffer), but 10 feet of land immediately adjacent to the surface water is owned by a different party than the land on which your construction activities are taking place and you do not have control over that land, you must only retain and protect from construction activities the 40-foot buffer area that occurs on the property on which your construction activities are taking place. EPA would consider you to be in compliance with this requirement regardless of the activities that are taking place in the 10-foot area that is owned by a different party than the land on which your construction activities are taking place that you have no control over.

G.2.1.3 *Discharges to the Buffer*

You must ensure that all discharges from the area of earth disturbance to the natural buffer are first treated by the site's erosion and sediment controls (*for example, you must comply with the Part 2.1.2.2 requirement to establish sediment controls around the downslope perimeter of your site disturbances*), and if necessary to prevent erosion caused by stormwater flows within the buffer, you must use velocity dissipation devices. The purpose of this requirement is to decrease the rate of stormwater flow and

encourage infiltration so that the pollutant filtering functions of the buffer will be achieved. To comply with this requirement, construction operators typically will use devices that physically dissipate stormwater flows so that the discharge entering the buffer is spread out and slowed down.

G.2.1.4 *SWPPP Documentation*

You are required to document in your SWPPP the natural buffer width that is retained. For example, if you are complying with alternative 1, you must specify in your SWPPP that you are providing a 50-foot buffer. Or, if you will be complying with alternative 2, you must document the reduced width of the buffer you will be retaining (and you must also comply with the requirements in Part 2.1.2.1c to describe the erosion and sediment controls you will use to achieve an equivalent sediment reduction, as described in Part G.2.2 below). Note that you must also show any buffers on your site plan in your SWPPP consistent with Part 7.2.6.3. Additionally, if any disturbances related to the exceptions in Part 2.1.2.1e occur within the buffer area, you must document this in the SWPPP.

G.2.2 Guidance for Providing the Equivalent Sediment Reduction as the 50-foot Buffer

If you are selecting Alternative 2 (provide and maintain a buffer that is less than 50 feet that is supplemented by additional erosion and sediment controls that, together, achieve the equivalent sediment load reduction as the 50-foot buffer) or Alternative 3 (implement erosion and sediment controls that achieve the equivalent sediment load reduction as the 50-foot buffer), the following guidance is intended to assist you in demonstrating that you will achieve the equivalent sediment reduction as the 50-foot buffer.

G.2.2.1 *Determine Whether it is Feasible to Provide a Reduced Buffer*

EPA recognizes that there will be a number of situations in which it will be infeasible to provide and maintain a buffer of any width. While some of these situations may exempt you from the buffer requirement entirely (see G.1.2), if you do not qualify for one of these exemptions, there still may be conditions or circumstances at your site that make it infeasible to provide a natural buffer. For example, there may be sites where a significant portion of the property on which the earth-disturbing activities will occur is located within the buffer area, thereby precluding the retention of natural buffer areas. EPA believes there are likely to be other examples of situations that make it infeasible to provide any buffer area.

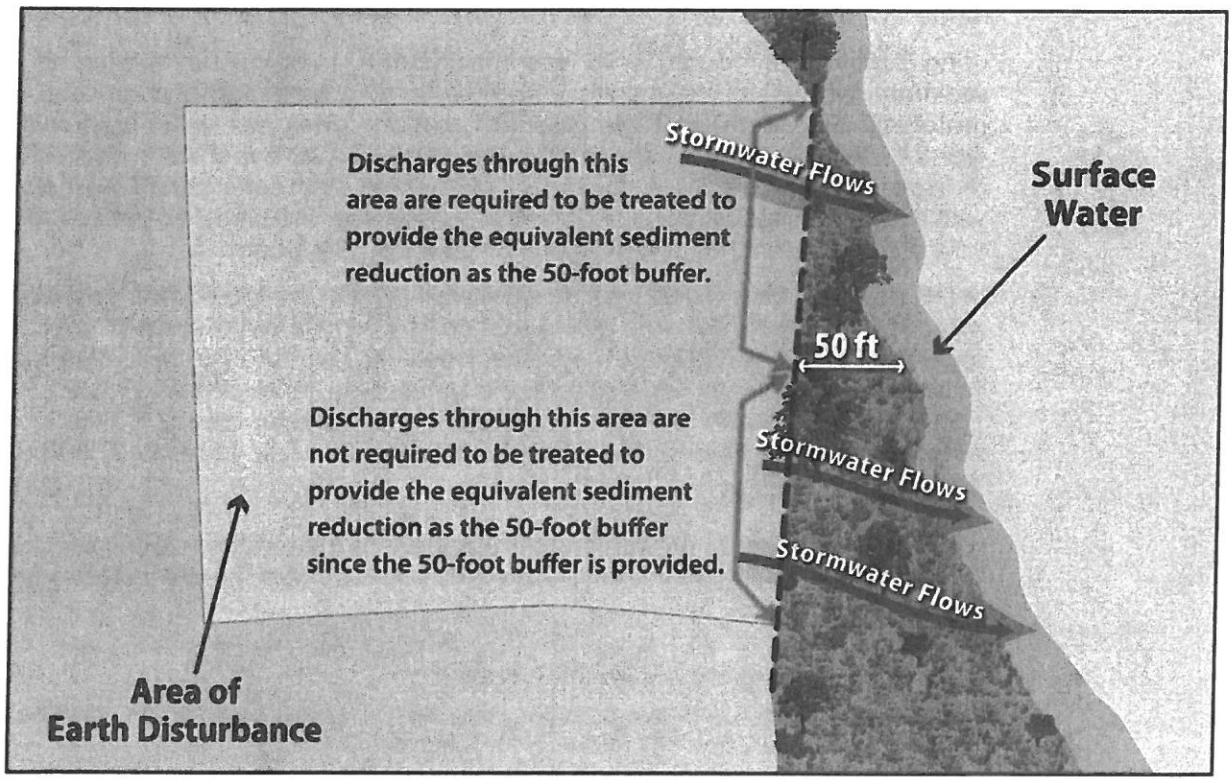
Therefore, in choosing between the 2 different compliance alternatives (Alternative 2 or 3), you should only elect to comply with Alternative 2 if it is feasible for you to retain any natural buffer on your site. (Note: For any buffer width retained, you are required to comply with the requirements in Part G.2.1, above, concerning the retention of vegetation and restricting earth disturbances.) Similarly, if you determine that it is infeasible to provide a natural buffer of any size during construction, you should elect to comply with Alternative 3. After making this determination, you should proceed to Part G.2.2.2 to determine how to provide controls that, together with any buffer areas that is being retained, if applicable, will achieve an equivalent sediment load reduction as the 50-foot buffer.

G.2.2.2 *Design Controls That Provide Equivalent Sediment Reduction as 50-foot Buffer*

You must next determine what additional controls must be implemented on your site that, alone or in combination with any retained natural buffer, achieve a reduction in sediment equivalent to that achieved by a 50-foot buffer.

Note that if only a portion of the natural buffer is less than 50 feet, you are only required to implement erosion and sediment controls that achieve the sediment load reduction equivalent to the 50-foot buffer for discharges through that area. You would not be required to provide treatment of stormwater discharges that flow through 50 feet or more of natural buffer. See Figure G - 4.

Figure G - 4 Example of how to comply with the requirement to provide the equivalent sediment reduction when only a portion of your earth-disturbances discharge to a buffer of less than 50-feet.



To comply with this requirement, you are required to do the following:

Step1 - Estimate the sediment reduction expected from your site if you had retained a 50-foot natural buffer;

Step 2 - Design controls that alone or in combination with any width of buffer retained achieve the equivalent sediment removal efficiency as that expected from the 50-foot buffer; and

Step 3 - Document in your SWPPP how your controls will achieve the equivalent sediment removal efficiency of the 50-foot buffer.

Guidelines to help you work through these requirements are provided below.

a. **Step 1 - Estimate the Sediment Reduction from the 50-foot Buffer**

In order to design controls that match the sediment removal efficiency of a 50-foot buffer, you first need to know what this efficiency is for your site. The sediment removal efficiencies of natural buffers vary according to a number of site-specific factors, including precipitation, soil type, land cover, slope length, width, steepness, and the types of sediment controls used to reduce the discharge of sediment prior to the buffer. EPA has simplified this calculation by developing buffer performance tables covering a range of vegetation and soil types for the areas covered by the CGP. See Attachment 1, Tables G - 8 through G - 15. Note: buffer performance values in Tables G - 8 through G - 15 represent the percent of sediment captured through the use of perimeter controls (e.g., silt fences) and 50-foot buffers at disturbed sites of fixed proportions and slopes.[2]

Using Tables G - 8 through G - 15 (see Attachment 1), you can determine the sediment removal efficiency of a 50-foot buffer for your geographic area by matching the vegetative cover type that best describes your buffer area and the type of soils that predominate at your site. For example, if your site is located in Massachusetts (Table G - 9), and your buffer vegetation corresponds most closely with that of tall fescue grass, and the soil type at your site is best typified as sand, your site's sediment removal efficiency would be 81 percent.

In this step, you should choose the vegetation type in the tables that most closely matches the vegetation that would exist naturally in the buffer area on your site regardless of the condition of the buffer. However, because you are not required to plant any additional vegetation in the buffer area, in determining what controls are necessary to meet this sediment removal equivalency in Step 2 below, you will be able to take credit for this area as a fully vegetated "natural buffer."

Similarly, if a portion of the buffer area adjacent to the surface water is owned by another party and is not under your control, you can treat the area of land not

[2] EPA used the following when developing the buffer performance tables:

- The sediment removal efficiencies are based on the U.S. Department of Agriculture's RUSLE2 ("Revised Universal Soil Loss Equation 2") model for slope profiles using a 100-foot long denuded slopes.
- Sediment removal was defined as the annual sediment delivered at the downstream end of the 50-foot natural buffer (tons/yr/acre) divided by the annual yield from denuded area (tons/yr/acre).
- As perimeter controls are also required by the CGP, sediment removal is in part a function of the reduction due to a perimeter control (i.e., silt fence) located between the disturbed portion of the site and the upstream edge of the natural buffer and flow traveling through a 50-foot buffer of undisturbed natural vegetation.
- It was assumed that construction sites have a relatively uniform slope without topographic features that accelerate the concentration for erosive flows.
- It was assumed that vegetation has been removed from the disturbed portion of the site and a combination of cuts and fills have resulted in a smooth soil surface with limited retention of near-surface root mass

To represent the influence of soil, EPA analyzed 11 general soil texture classifications in its evaluation of buffer performance. To represent different types of buffer vegetation, EPA evaluated 4 or more common vegetative types for each state/territory covered under the permit. For each vegetation type evaluated, EPA considered only permanent, non-grazed and non-harvested vegetation, on the assumption that a natural buffer adjacent to the surface water will typically be undisturbed. EPA also evaluated slope steepness and found that sediment removal efficiencies present in Tables G -8 through G - 15 are achievable for slopes that are less than nine percent.

under control as having the equivalent vegetative cover and soil type that predominates on the portion of the property on which your construction activities are occurring.

For example, if your earth-disturbances occur within 50 feet of a surface water, but the 10 feet of land immediately adjacent to the surface water is owned by a different party than the land on which your construction activities are taking place and you do not have control over that land, you can treat the 10 foot area adjacent to the stream as having the equivalent soil and vegetation type as predominates in the 40 foot area under your control. You would then make the same assumption in Step 2 for purposes of determining the equivalent sediment removal.

Alternatively, you may do your own calculation of the effectiveness of the 50-foot buffer based upon your site-specific conditions, and may use this number as your sediment removal equivalency standard to meet instead of using Tables G - 8 through G - 15. This calculation must be documented in your SWPPP.

b. <u>Step 2 - Design Controls That Match the Sediment Removal Efficiency of the 50-foot Buffer</u>

Once you have determined the estimated sediment removal efficiency of a 50-foot buffer for your site in Step 1, you will be required to select stormwater controls that will provide an equivalent sediment load reductions. These controls can include the installation of a single designed control, such as a sediment pond, additional perimeter controls, or other type of device. Alternatively, you may elect to install a combination of stormwater controls and to retain some amount of a buffer. Whichever control(s) you select, you must demonstrate in your SWPPP that the controls will provide at a minimum the same sediment removal capabilities as the 50-foot buffer (Step 1). You are allowed to take credit for the removal efficiencies of your required perimeter controls in your calculation of equivalency, because these were included in calculating the buffer removal efficiencies in tables G - 8 through G - 15. (Note: You are reminded that the controls must be kept in effective operating condition until you have completed final stabilization on the disturbed portions of the site discharging to the surface water.)

To make the determination that your controls and/or buffer area achieve an equivalent sediment load reduction as the 50-foot buffer, you will need to use a model or other type of calculator. As mentioned above, there are a variety of models available that can be used to support your calculation, including USDA's RUSLE-series programs and the WEPP erosion model, SEDCAD, SEDIMOT, or other models. A couple of examples are provided in Attachment 3 to help illustrate how this determination could be made.

If you are retaining a buffer of less than 50 feet, you may take credit for the removal that will occur from the reduced buffer and only need to provide additional controls to make up the difference between the removal efficiency of a 50 foot buffer and the removal efficiency of the narrower buffer. For example, if you are retaining a 30 foot buffer, you can account for the sediment removal provided by the 30-foot buffer retained, and you will only need to design controls to make up for the additional removal provided by the 20-foot of buffer that is not being provided. To do this, you would plug the width of the buffer that is

retained into RUSLE or another model, along with other stormwater controls that will together achieve a sediment reduction equivalent to a natural 50-foot buffer.

As described in Step 1 above, you can take credit for the area you have retained as a "natural buffer" as being fully vegetated, regardless of the condition of the buffer area.

> *For example, if your earth-disturbances occur 30 feet from a surface water, but the 10 feet of land immediately adjacent to the surface water is owned by a different party than the land on which your construction activities are taking place and you do not have control over that land, you can treat the 10-foot area as a natural buffer, regardless of the activities that are taking place in the area. Therefore, you can assume (for purposes of your equivalency calculation) that your site is providing the sediment removal equivalent of a 30-foot buffer, and you will only need to design controls to make up for the additional removal provided by the 20-foot of buffer that is not being provided.*

c. <u>Step 3 - Document How Site-Specific Controls Will Achieve the Sediment Removal Efficiency of the 50-foot Buffer</u>

In Steps 1 and 2, you determined both the expected sediment removal efficiency of a 50-foot buffer at your site, and you used this number as a performance standard to design controls to be installed at your site, which alone or in combination with any retained natural buffer, achieves the expected sediment removal efficiency of a 50-foot buffer at your site. The final step is to document in your SWPPP the information you relied on to calculate the equivalent sediment reduction as an undisturbed natural buffer.

EPA will consider your documentation to be sufficient if it generally meets the following:

- For Step 1, refer to the table in Attachment 1 that you used to derive your estimated 50-foot buffer sediment removal efficiency performance. Include information about the buffer vegetation and soil type that predominate at your site, which you used to select the sediment load reduction value in Tables G - 8 through G - 15. Or, if you conducted a site-specific calculation for sediment removal efficiency, provide the specific removal efficiency, and the information you relied on to make your site-specific calculation.
- For Step 2: (1) Specify the model you used to estimate sediment load reductions from your site; and (2) the results of calculations showing how your controls will meet or exceed the sediment removal efficiency from Step 1.

If you choose Alternative 3, you must also include in your SWPPP a description of why it is infeasible for you to provide and maintain an undisturbed natural buffer of any size.

G.2.3 Small Residential Lot Compliance Alternatives

In this part of Appendix G, EPA provides additional compliance alternatives for operators of small residential lots. In accordance with Part 2.1.2.1e.iv, operators of small residential lots who do not provide a 50-foot buffer are not required to make the demonstration outlined in Part G.2.2.2. Instead, qualifying operators can comply with the buffer requirement by choosing to implement a set of traditional sediment and erosion controls from the menu of practices provided in Part G.2.3.2.

> A **small residential lot** is a lot or grouping of lots being developed for residential purposes that will disturb less than 1 acre of land, but that is part of a larger residential project that will ultimately disturb greater than or equal to 1 acre.

EPA has developed two different alternatives for compliance. The following steps describe how a small residential lot operator would achieve compliance with these 2 alternatives.

G.2.3.1 *Step 1 – Determine if You are Eligible for the Small Residential Lot Compliance Alternatives*

In order to be eligible for the small residential lot compliance alternatives, the following conditions must be met:

a. The lot or grouping of lots meets the definition of "small residential lot"; and

b. The operator must comply with all other requirements in Part 2.1.2.1, including:

- **i.** Ensure that all discharges from the area of earth disturbance to the natural buffer are first treated by the site's erosion and sediment controls, and use velocity dissipation devices if necessary to prevent erosion caused by stormwater within the buffer;
- **ii.** Document in the SWPPP the natural buffer width retained on the property, and show the buffer boundary on your site plan; and
- **iii.** Delineate, and clearly mark off, with flags, tape, or other similar marking device, all natural buffer areas.

G.2.3.2 *Step 2 – Implement the Requirements of the Small Residential Lot Compliance Alternative Selected*

You must next choose from one of two small residential lot compliance alternatives and implement the stormwater control practices associated with that alternative.

Note: The compliance alternatives provided below are not mandatory. Operators of small residential lots can alternatively choose to comply with the any of the options that are available to other sites in Part 2.1.2.1a, described in Parts G.2.1 and G.2.2 in this appendix.

a. <u>Small Residential Lot Compliance Alternative 1</u>

Alternative 1 is a straightforward tiered- technology approach that specifies the controls that a small residential lot must implement based on the buffer width retained. To achieve compliance with Alternative 1, you must implement the

controls specified in Table G – 1 based on the buffer width to be retained. See footnote 3, below, for a description of the controls you must implement.

For example, if you are an operator of a small residential lot that will be retaining a 35-foot buffer and you choose Small Residential Lot Compliance Alternative 1, you must implement double perimeter controls between earth disturbances and the surface water.

In addition to implementing the applicable control, you must also document in your SWPPP how you will comply with Alternative 1.

Table G - 1. Alternative 1 Requirements[3]

Retain 50-foot Buffer	Retain <50 and >30 foot Buffer	Retain ≤ 30 foot Buffer
No Additional Requirements	Double Perimeter Controls	Double Perimeter Controls and 7-Day Site Stabilization

b. <u>Small Residential Lot Compliance Alternative 2</u>

Alternative 2 specifies the controls that a builder of a small lot must implement based on both the buffer width retained and their risk of sediment discharge. By incorporating the sediment risk, this approach may result in the implementation of controls that are more appropriate for the site's specific conditions.

Step 1 – Determine Your Site's Sediment Risk Level

To meet the requirements of Alternative 2, you must first determine your site's sediment discharge "risk level" based on the site's slope, location, and soil type. To help you to determine your site's sediment risk level, EPA has developed five different tables for different slope conditions. You must select the table that most closely corresponds to your site's average slope.

For example, if your site's average slope is 7 percent, you would use Table G – 4 to determine your site's sediment risk.

After you determine which table applies to your site, you must then use the table to determine the "risk level" (e.g., "low", "moderate", or "high") that corresponds to your site's location and predominant soil type.[4]

For example, based on Table G - 3, a site located in New Hampshire with a 4 percent average slope and with predominately sandy clay loam soils would fall into the "moderate" risk level.

[3] **Description of Additional Controls Applicable to Small Residential Lot Compliance Alternatives 1 and 2:**

- **No Additional Requirements:** If you implement a buffer of 50 feet or greater, then you are not subject to any additional requirements. Note that you are required to install perimeter controls between the disturbed portions of your site and the buffer in accordance with Part 2.1.2.2.
- **Double Perimeter Control:** In addition to the reduced buffer width retained on your site, you must provide a double row of perimeter controls between the disturbed portion of your site and the surface water spaced a minimum of 5 feet apart.
- **Double Perimeter Control and 7-Day Site Stabilization:** In addition to the reduced buffer width retained on your site and the perimeter control implemented in accordance with Part 2.1.2.2, you must provide a double row of perimeter controls between the disturbed portion of your site and the surface water spaced a minimum of 5 feet apart, and you are required to complete the stabilization activities specified in Parts 2.2.1.2a and/or 2.2.1.2b within 7 calendar days of the temporary or permanent cessation of earth-disturbing activities.

[4] One source for determining your site's predominant soil type is the USDA's Web Soil Survey located at http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx.

Table G - 2. Risk Levels for Sites with Average Slopes of ≤ 3 Percent

Location \ Soil Type	Clay	Silty Clay Loam or Clay-Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Guam	Moderate	Moderate	Moderate	Moderate	High
Puerto Rico	Moderate	Moderate	Moderate	Moderate	High
Virgin Islands	Low	Moderate	Low	Moderate	Moderate
American Samoa	Moderate	Moderate	Moderate	Moderate	High
Massachusetts and New Hampshire	Low	Moderate	Low	Low	Moderate
Idaho	Low	Low	Low	Low	Low
New Mexico	Low	Low	Low	Low	Low
Washington D.C.	Low	Moderate	Low	Low	Moderate

Table G - 3. Risk Levels for Sites with Average Slopes of > 3 Percent and ≤ 6 Percent

Location \ Soil Type	Clay	Silty Clay Loam or Clay-Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Guam	Moderate	Moderate	Moderate	Moderate	High
Puerto Rico	Moderate	Moderate	Moderate	Moderate	High
Virgin Islands	Moderate	Moderate	Moderate	Moderate	High
American Samoa	High	High	Moderate	High	High
Massachusetts and New Hampshire	Moderate	Moderate	Low	Moderate	High
Idaho	Low	Low	Low	Low	Low
New Mexico	Low	Low	Low	Low	Moderate
Washington D.C.	Moderate	Moderate	Moderate	Moderate	High

Table G - 4. Risk Levels for Sites with Average Slopes of > 6 Percent and ≤ 9 Percent

Location \ Soil Type	Clay	Silty Clay Loam or Clay-Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Guam	Moderate	High	Moderate	High	High
Puerto Rico	Moderate	High	Moderate	Moderate	High
Virgin Islands	Moderate	Moderate	Moderate	Moderate	High
American Samoa	High	High	High	High	High
Massachusetts and New Hampshire	Moderate	Moderate	Moderate	Moderate	High
Idaho	Low	Low	Low	Low	Low
New Mexico	Low	Low	Low	Low	Moderate
Washington D.C.	Moderate	Moderate	Moderate	Moderate	High

Table G - 5. Risk Levels for Sites with Average Slopes of > 9 Percent and ≤ 15 Percent

Location \ Soil Type	Clay	Silty Clay Loam or Clay-Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Guam	High	High	High	High	High
Puerto Rico	High	High	High	High	High
Virgin Islands	Moderate	High	Moderate	High	High
American Samoa	High	High	High	High	High
Massachusetts and New Hampshire	Moderate	Moderate	Moderate	Moderate	High
Idaho	Low	Low	Low	Low	Low
New Mexico	Low	Moderate	Low	Moderate	Moderate
Washington D.C.	Moderate	High	Moderate	Moderate	High

Table G - 6. Risk Levels for Sites with Average Slopes of > 15 Percent

Location \ Soil Type	Clay	Silty Clay Loam or Clay-Loam	Sand	Sandy Clay Loam, Loamy Sand or Silty Clay	Loam, Silt, Sandy Loam or Silt Loam
Guam	High	High	High	High	High
Puerto Rico	High	High	High	High	High
Virgin Islands	High	High	High	High	High
American Samoa	High	High	High	High	High
Massachusetts and New Hampshire	High	High	Moderate	High	High
Idaho	Low	Low	Low	Low	Moderate
New Mexico	Moderate	Moderate	Moderate	Moderate	High
Washington D.C.	High	High	Moderate	High	High

Step 2 – Determine Which Additional Controls Apply

Once you determine your site's "risk level", you must next determine the additional controls you need to implement on your site, based on the width of buffer you plan to retain. Table G - 7 specifies the requirements that apply based on the "risk level" and buffer width retained. See footnote 3, above, for a description of the additional controls that are required.

> *For example, if you are the operator of a small residential lot that falls into the "moderate" risk level, and you decide to retain a 20-foot buffer, using Table G-7 you would determine that you need to implement double perimeter controls to achieve compliance with Part 2.1.2.1.*

You must also document in your SWPPP your compliance with Alternative 2.

Table G - 7. Alternative 2 Requirements[2]

Risk Level Based on Estimated Soil Erosion	Retain ≥ 50' Buffer	Retain <50' and >30' Buffer	Retain ≤30' and >10' Buffer	Retain ≤ 10' Buffer
Low Risk	No Additional Requirements	No Additional Requirements	Double Perimeter Control	Double Perimeter Control
Moderate Risk	No Additional Requirements	Double Perimeter Control	Double Perimeter Control	Double Perimeter Control and 7-Day Site Stabilization
High Risk	No Additional Requirements	Double Perimeter Control	Double Perimeter Control and 7-Day Site Stabilization	Double Perimeter Control and 7-Day Site Stabilization

ATTACHMENT 1

Sediment Removal Efficiency Tables[5]

EPA recognizes that very high removal efficiencies, even where theoretically achievable by a 50-foot buffer, may be very difficult to achieve in practice using alternative controls. Therefore in the tables below, EPA has limited the removal efficiencies to a maximum of 90%. Efficiencies that were calculated at greater than 90% are shown as 90%, and this is the minimum percent removal that must be achieved by alternative controls.

Table G - 8. Estimated 50-foot Buffer Performance in Idaho*

	Estimated % Sediment Removal				
Type of Buffer Vegetation**	**Clay**	**Silty Clay Loam or Clay-Loam**	**Sand**	**Sandy Clay Loam, Loamy Sand or Silty Clay**	**Loam, Silt, Sandy Loam or Silt Loam**
Tall Fescue Grass	42	52	44	48	85
Medium-density Weeds	28	30	28	26	60
Low-density Warm-season Native Bunchgrass (i.e., Grama Grass)	25	26	24	24	55
Northern Mixed Prairie Grass	28	30	28	26	50
Northern Range Cold Desert Shrubs	28	28	24	26	50

* Applicable for sites with less than nine percent slope
** Characterization focuses on the under-story vegetation

Table G - 9. Estimated 50-foot Buffer Performance in Massachusetts and New Hampshire*

	Estimated % Sediment Removal				
Type of Buffer Vegetation**	**Clay**	**Silty Clay Loam or Clay-Loam**	**Sand**	**Sandy Clay Loam, Loamy Sand or Silty Clay**	**Loam, Silt, Sandy Loam or Silt Loam**
Warm-season Grass (i.e., Switchgrass, Lemongrass)	79	90	90	90	90
Cool-season Dense Grass (Kentucky Bluegrass, Smooth Bromegrass, Timothy)	78	90	90	90	90
Tall Fescue Grass	76	90	81	89	90
Medium-density Weeds	66	76	60	72	66

* Applicable for sites with less than nine percent slope
** Characterization focuses on the under-story vegetation

[5] The buffer performances were calculated based on a denuded slope upgradient of a 50-foot buffer and a perimeter controls, as perimeter controls are a standard requirement (see Part 2.1.2.2).

Table G - 10. Estimated 50-foot Buffer Performance in New Mexico*

	Estimated % Sediment Removal				
Type of Buffer Vegetation **	**Clay**	**Silty Clay Loam or Clay-Loam**	**Sand**	**Sandy Clay Loam, Loamy Sand or Silty Clay**	**Loam, Silt, Sandy Loam or Silt Loam**
Tall Fescue grass	71	85	80	86	90
Medium-density Weeds	56	73	55	66	78
Low-density Warm-season Native Bunchgrass (i.e., Grama Grass)	53	70	51	62	67
Southern Mixed Prairie Grass	53	71	52	63	50
Southern Range Cold Desert Shrubs	56	73	55	65	53

* Applicable for sites with less than nine percent slope
** Characterization focuses on the under-story vegetation

Table G - 11. Estimated 50-foot Buffer Performance in Washington, DC*

	Estimated % Sediment Removal				
Type of Buffer Vegetation **	**Clay**	**Silty Clay Loam or Clay-Loam**	**Sand**	**Sandy Clay Loam, Loamy Sand or Silty Clay**	**Loam, Silt, Sandy Loam or Silt Loam**
Warm-season Grass (i.e., Switchgrass, Lemongrass)	82	90	90	90	90
Cool-season Dense Grass (Kentucky Bluegrass, Smooth Bromegrass, Timothy)	81	90	90	90	90
Tall Fescue Grass	79	90	83	89	90
Medium-density Weeds	71	79	66	75	74

* Applicable for sites with less than nine percent slope
** Characterization focuses on the under-story vegetation

Table G - 12. Estimated 50-foot Buffer Performance in American Samoa*

	Estimated % Sediment Removal				
Type of Buffer Vegetation **	**Clay**	**Silty Clay Loam or Clay-Loam**	**Sand**	**Sandy Clay Loam, Loamy Sand or Silty Clay**	**Loam, Silt, Sandy Loam or Silt Loam**
Bahiagrass (Permanent cover)	82	90	90	90	83
Warm-season Grass (i.e., Switchgrass, Lemongrass)	82	90	90	90	85
Dense Grass	82	90	90	90	83
Tall Fescue Grass	82	89	82	89	79
Medium-density Weeds	70	73	62	75	59

* Applicable for sites with less than nine percent slope
** Characterization focuses on the under-story vegetation

Table G - 13. Estimated 50-foot Buffer Performance in Guam*

	Estimated % Sediment Removal				
Type of Buffer Vegetation **	**Clay**	**Silty Clay Loam or Clay-Loam**	**Sand**	**Sandy Clay Loam, Loamy Sand or Silty Clay**	**Loam, Silt, Sandy Loam or Silt Loam**
Bahiagrass (Permanent cover)	80	90	90	90	89
Warm-season Grass (i.e., Switchgrass, Lemongrass)	80	90	90	90	90
Dense Grass	79	90	90	90	89
Tall Fescue Grass	76	90	80	88	87
Medium-density Weeds	63	73	53	68	61

* Applicable for sites with less than nine percent slope
** Characterization focuses on the under-story vegetation

Table G - 14. Estimated 50-foot Buffer Performance in Puerto Rico*

	Estimated % Sediment Removal				
Type of Buffer Vegetation**	**Clay**	**Silty Clay Loam or Clay-Loam**	**Sand**	**Sandy Clay Loam, Loamy Sand or Silty Clay**	**Loam, Silt, Sandy Loam or Silt Loam**
Bahiagrass (Permanent cover)	83	90	90	90	90
Warm-season Grass (i.e., Switchgrass, Lemongrass)	83	90	90	90	90
Dense Grass	83	90	90	90	90
Tall Fescue Grass	82	90	84	90	89
Medium-density Weeds	72	78	65	76	64

* Applicable for sites with less than nine percent slope
** Characterization focuses on the under-story vegetation

Table G - 15. Estimated 50-foot Buffer Performance in Virgin Islands*

Type of Buffer Vegetation**	**Clay**	**Silty Clay Loam or Clay-Loam**	**Sand**	**Sandy Clay Loam, Loamy Sand or Silty Clay**	**Loam, Silt, Sandy Loam or Silt Loam**
Bahiagrass (Permanent cover)	85	90	90	90	90
Warm-season Grass (i.e., Switchgrass, Lemongrass)	86	90	90	90	90
Dense Grass	85	90	90	90	90
Tall Fescue Grass	85	90	88	90	89
Medium-density Weeds	75	77	71	78	63

* Applicable for sites with less than nine percent slope
** Characterization focuses on the under-story vegetation

ATTACHMENT 2

Using the Sediment Removal Efficiency Tables – Questions and Answers

- *What if my specific buffer vegetation is not represented in Tables G - 8 through G - 15?* Tables G - 8 through G - 15 provide a wide range of factors affecting buffer performance; however, there may be instances where the specific buffer vegetation type on your site is not listed. If you do not see a description of the type of vegetation present at your site, you should choose the vegetation type that most closely matches the vegetation type on your site. You can contact your local Cooperative Extension Service Office (www.csrees.usda.gov/Extension) for assistance in determining the vegetation type in Tables G - 8 through G - 15 that most closely matches your site-specific vegetation.
- *What if there is high variability in local soils?* EPA recognizes that there may be a number of different soil type(s) on any given construction site. General soil information can be obtained from USDA soil survey reports (http://websoilsurvey.nrcs.usda.gov) or from individual site assessments performed by a certified soil expert. Tables G - 8 through G - 15 present eleven generic soil texture classes, grouping individual textures where EPA has determined that performance is similar. If your site contains different soil texture classes, you should use the soil type that best approximates the predominant soil type at your site.
- *What if my site slope is greater than 9 percent after final grade is reached?* As indicated in the buffer performance tables, the estimated sediment removal efficiencies are associated with disturbed slopes of up to 9 percent grade. Where your graded site has an average slope of greater than 9 percent, you should calculate a site-specific buffer performance.
- *How do I calculate my own estimates for sediment reduction at my specific site?* If you determine that it is necessary to calculate your own sediment removal efficiency using site-specific conditions (e.g., slopes at your site are greater than 9 percent), you can do so by choosing from a range of available mathematical models that are available to facilitate this calculation, including USDA's RUSLE-series programs and the WEPP erosion model, SEDCAD, SEDIMOT, or other equivalent models.
- *What is my estimated buffer performance if my site location is not represented by Tables G - 8 through G - 15?* If your site is located in an area not represented by Tables G - 8 through G - 15, you should use the table that most closely approximates conditions at your site. You may also choose to conduct a site-specific calculation of the buffer performance.
- *What if only a portion of my site drains to the buffer area?* If only a portion of your site drains to a surface water, where that water is within 50 feet of your construction activities, you are only required to meet the equivalency requirement for the stormwater flows corresponding to those portions of the site. See Example 2 below for an example of how this is expected to work.

ATTACHMENT 3

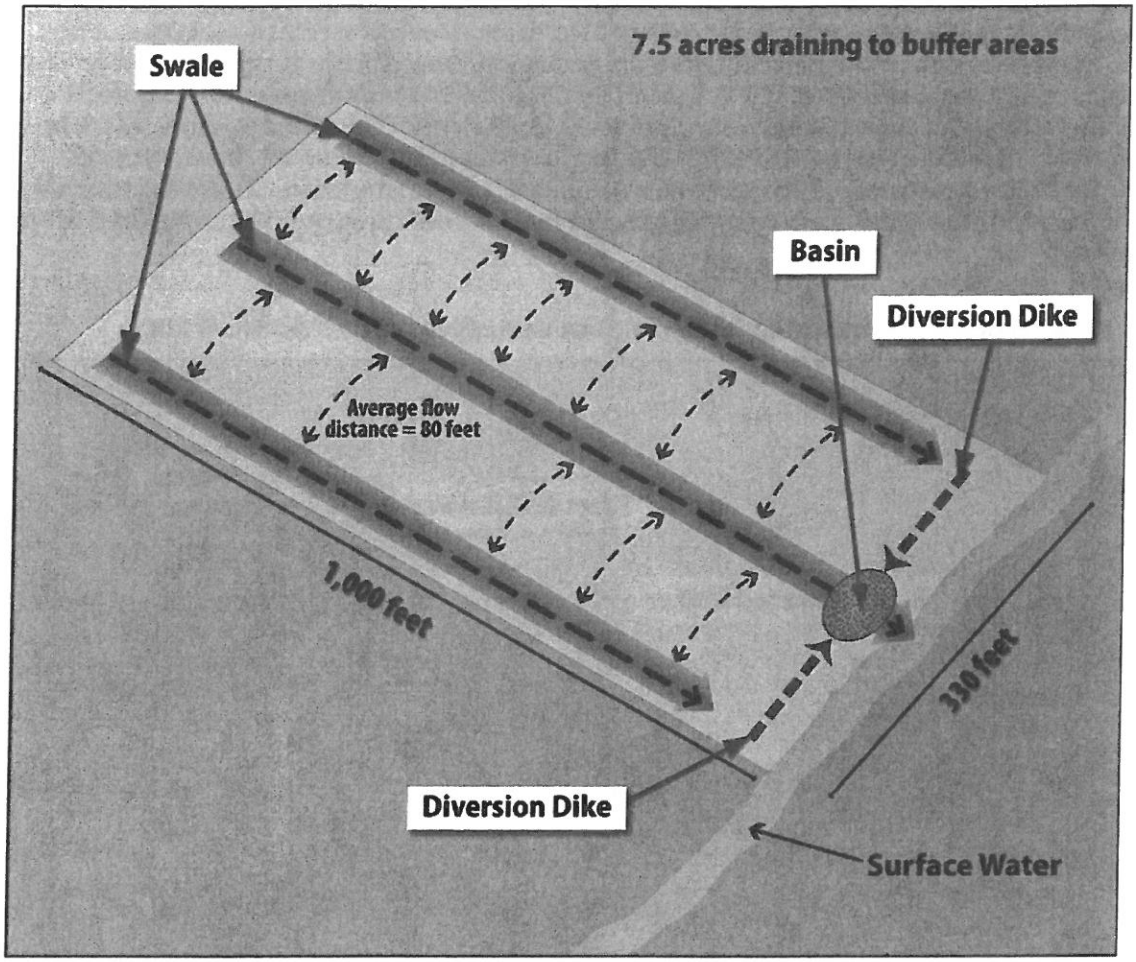
Examples of How to Use the Sediment Removal Efficiency Tables

Example 1. Comparatively Wet Location (7.5 acre site located in Massachusetts)

The operator of a 7.5-acre construction site in Massachusetts has determined that it is infeasible to establish a buffer of any size on their site, and is now required to select and install controls that will achieve an equivalent sediment load reduction as that estimated in G - 9 for their site conditions. The first step is to identify what percentage of eroded sediment is estimated to be retained from a 50-foot buffer. For this example, it is assumed that the site has a relatively uniform gentle slope (3 percent), so Table G - 9 can be used to estimate the 50-foot buffer sediment load reduction. If the site's buffer vegetation is best typified by cool-season dense grass and the underlying soil is of a type best described as loamy sand, the 50-foot buffer is projected to capture 90 percent of eroded sediment from the construction site.

The second step is to determine what sediment controls can be selected and installed in combination with the perimeter controls already required to be implemented at the site (see Part 2.1.2.2), which will achieve the 90 percent sediment removal efficiency from Table G - 9. For this example, using the RUSLE2 profile model, it was determined that installing a pair of shallow-sloped diversion ditches to convey runoff to a well-designed and maintained sediment basin provides 99 percent sediment removal. Because the estimated sediment reduction is greater than the required 90 percent that a 50-foot buffer provides, the operator will have met the buffer requirements. See Figure G - 5. The operator could also choose a different set of controls, as long as they achieve at least a 90 percent sediment removal efficiency.

Figure G - 5. Example 1 – Equivalent Sediment Load Reductions at a 7.5 ac Site in MA.



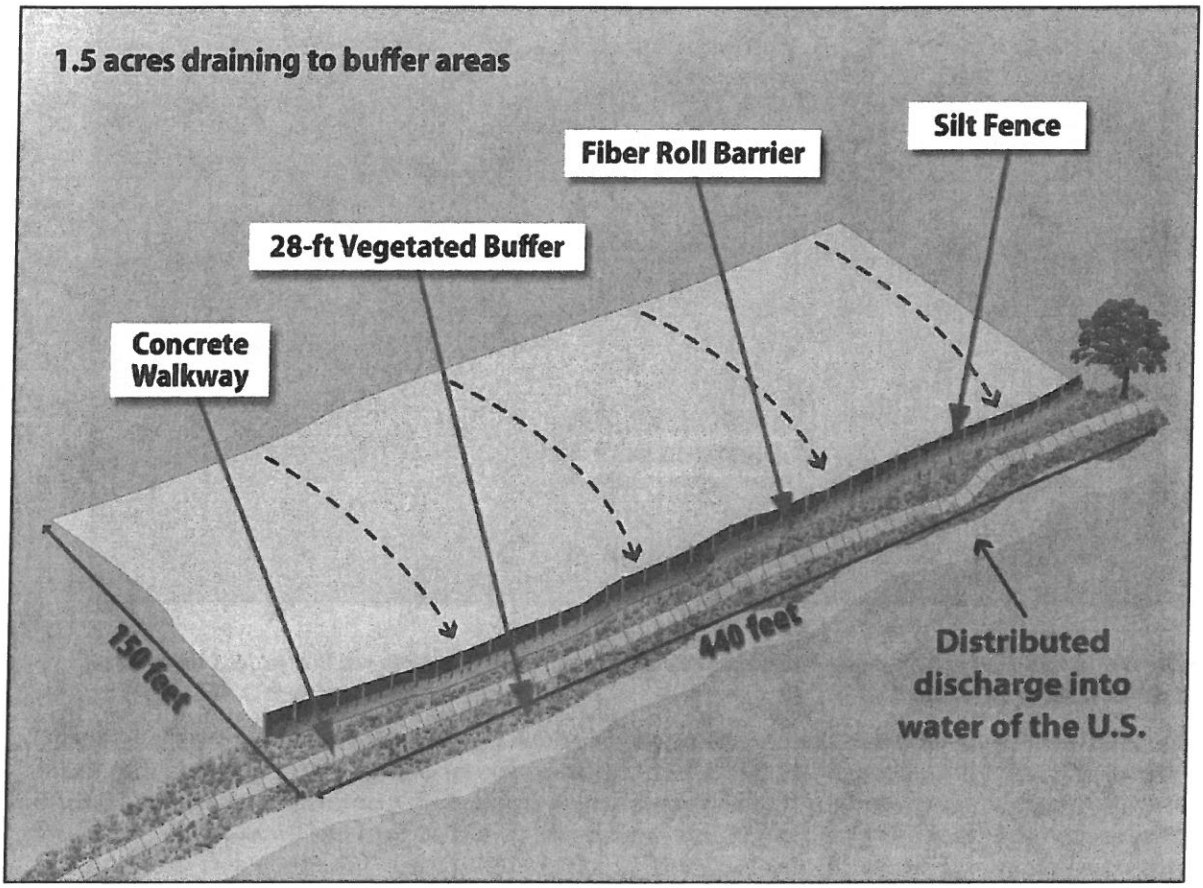
Example 2. Arid Location With Pre-existing Disturbances in the Natural Buffer (6.5 acre site located in New Mexico)

An operator of a site in New Mexico determines that it is not practicable to provide a 50-foot buffer, but a 28-foot buffer can be provided. Because the operator will provide a buffer that is less than 50 feet, the operator must determine which controls, in combination with the 28-foot buffer, achieve a sediment load reduction equivalent to the 50-foot buffer. In this example, the project will disturb 6.5 acres of land, but only 1.5 acres of the total disturbed area drains to the buffer area. Within the 28-foot buffer area is a preexisting concrete walkway. Similar to Example 1, the equivalence analysis starts with Step 1 (Part G.2.2.2) with a review of the New Mexico buffer performance (Table G - 10). The operator determines that the predominate vegetation type in the buffer area is prairie grass and the soil type is similar to silt, and that the site is of a uniform, shallow slope (e.g., 3 percent grade). Although the operator will take credit for the disturbance caused by the concrete walkway as a natural buffer in Step 2, here the operator can treat the entire buffer area as being naturally vegetated with prairie grass. Based on this information, the operator refers to Table G - 10 to estimate that the 50-foot buffer would retain 50 percent of eroded soil.

The second step is to determine, based on the 50 percent sediment removal efficiency found in Table G - 10, what sediment controls in combination with the 28-foot buffer area, can be

implemented to reduce sediment loads by 50 percent or more. The operator does not have to account the reduction in buffer function caused by the preexisting walkway, and can take credit for the entire 28-foot buffer being fully vegetated in the analysis. For this example, using the RUSLE2 profile model, the operator determined that installing a fiber roll barrier between the silt fence (already required by Part 2.1.2.2) and the 28-foot buffer will achieve an estimated 84 percent sediment removal efficiency. See Figure G - 6. Note that this operator is subject to the requirement in Part 2.1.2.1b.i to ensure that discharges through the silt fence, fiber roll barrier, and 28-foot buffer do not cause erosion within the buffer. The estimated sediment reduction is greater than the required 50 percent; therefore the operator will have met the buffer alternative requirement.

Figure G - 6. Example 2 – Equivalent Sediment Load Reductions at a 6.5 ac Site in NM.



Appendix H – 2-Year, 24-Hour Storm Frequencies

Part 2.1.3.2 of the permit indicates that if you install a sediment basin, one of the design requirements is to provide storage for either (1) the calculated volume of runoff from a 2-year, 24-hour storm, or (2) 3,600 cubic feet per acre drained. This appendix is intended to provide a guide to permittees to determine the volume of precipitation associated with their local 2-year, 24-hour storm event.

The permittee should start out by determining their local 2-year, 24-hour storm volume. The rainfall frequency atlases, technical papers, and the Precipitation Frequency Data Server (PFDS) developed by the National Oceanic and Atmospheric Administration's (NOAA) National Weather Service (NWS) serve as national standards for rainfall intensity at specified frequencies and durations in the United States. Operators of construction projects subject to the numeric effluent limits can use these standards to determine their local 2-year, 24-hour storm. Table H-1 identifies methods for determining precipitation frequency based on permit area. EPA notes that permittees may also use alternative peer-reviewed data sources not listed in Table H - 1 to determine the 2-year, 24-hour storm for their site.

Table H -1 – Method to Determine Precipitation Frequency Based on Permit Area

PERMIT AREA	METHOD TO DETERMINE PRECIPITATION FREQUENCY
District of Columbia	PFDS; NOAA Atlas 14, Vol. 2
Idaho	NOAA Atlas 2, Vol. 5; Technical Paper 40
Massachusetts	Technical Paper 40
New Hampshire	Technical Paper 40
New Mexico	PFDS; Technical Paper 40
Selected Pacific Islands	PFDS; Technical Paper 40
Puerto Rico and the U.S Virgin Islands	PFDS; Technical Paper 40
Other	PFDS; Technical Paper 40; NOAA Atlas 2 or 14

How to Determine Your Local 2-year, 24-hour Storm Size

Projects located in the **District of Columbia, New Mexico, Puerto Rico, U.S. Virgin Islands, or Pacific Islands** can use the PFDS at http://hdsc.nws.noaa.gov/hdsc/pfds/index.html or use NOAA's Atlas 14 Volumes 2, 3, and 5, respectively at http://www.nws.noaa.gov/oh/hdsc/currentpf.htm to determine their precipitation frequency.

The PFDS is an easy to use, point-and-click interface to official U.S. precipitation frequency estimates and intensities. The opening PFDS screen is a clickable map of the United States. Upon clicking on a state, a state-specific interface appears. From this page the user selects the following:

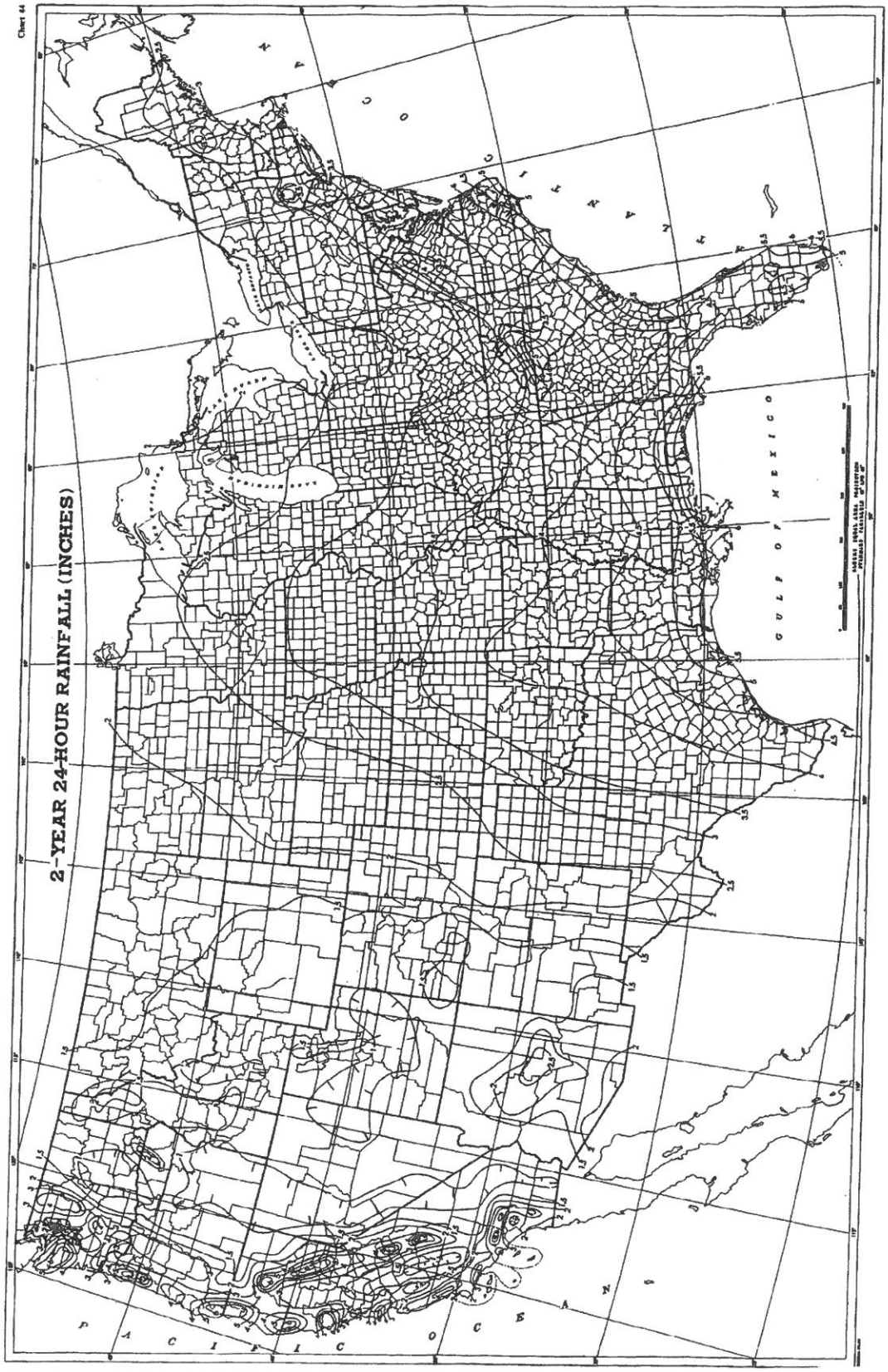
- A location: Either via clicking on the map or manually entering a longitude/latitude coordinate;
- Type of output: Depth-Duration Frequency (DDF) or Intensity-Duration-Frequency (IDF)
- Units: millimeters or inches; and
- Type of estimate: Point or areal.

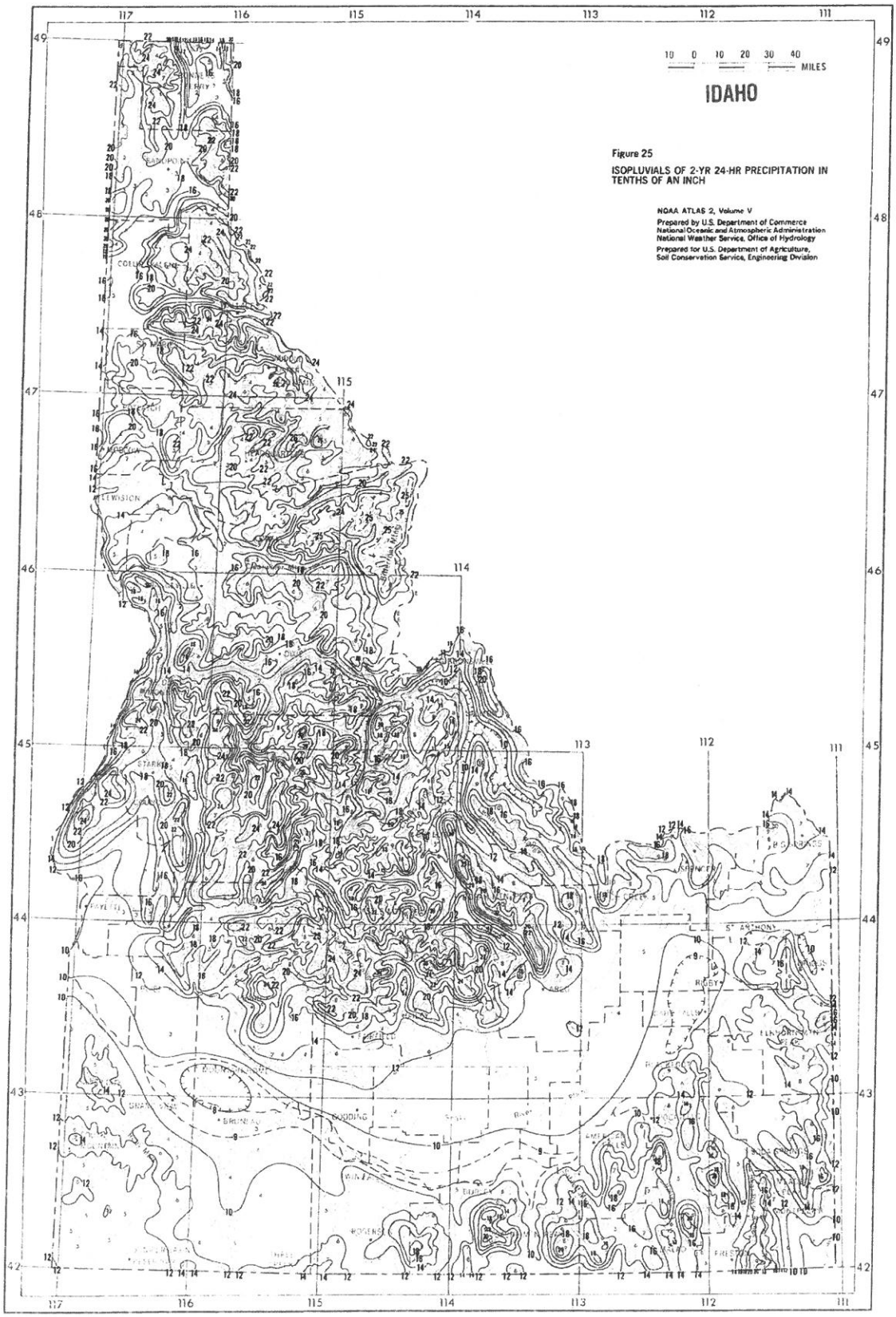
Additionally, PFDS also serves as a tool for providing references and other information for other current precipitation frequency standards that are not yet updated.

Projects located in the **District of Columbia, Puerto Rico, U.S. Virgin Islands, or Pacific Islands** can use NOAA's Atlas 14 Volumes 2, 3, and 5, respectively at http://www.nws.noaa.gov/oh/hdsc/currentpf.htm or access the PFDS at http://hdsc.nws.noaa.gov/hdsc/pfds/index.html to determine their precipitation frequency.

Projects located in **Massachusetts and New Hampshire**, or other areas not covered by the PFDS or NOAA Atlases will need to use TP-40 to identify the precipitation frequency. TP-40 provides a map of the continental U.S. for the 2-year, 24-hour rainfall. TP40 can be accessed at http://www.nws.noaa.gov/oh/hdsc/PF_documents/TechnicalPaper_No40.pdf. (See also attached map of TP-40)

Projects located in **Idaho** can use the NOAA Atlas 2, Vol. 5 to determine their precipitation frequency. NOTE: Precipitation Frequencies on the NOAA Atlas 2, Vol. 5 are in tenths of an inch and will have to be converted to inches to determine precipitation frequency. NOAA Atlas 2, Vol. 5 can be accessed at http://www.nws.noaa.gov/oh/hdsc/PF_documents/Atlas2_Volume5.pdf. (See also attached map of NOAA Atlas 2, Vol. 5)


2-YEAR 24-HOUR RAINFALL (INCHES)
GULF OF MEXICO
PACIFIC OCEAN


10 0 10 20 30 40
MILES
IDAHO
Figure 25
ISOPLUVIALS OF 2-YR 24-HR PRECIPITATION IN TENTHS OF AN INCH
NOAA ATLAS 2, Volume V
Prepared by U.S. Department of Commerce
National Oceanic and Atmospheric Administration
National Weather Service, Office of Hydrology
Prepared for U.S. Department of Agriculture,
Soil Conservation Service, Engineering Division

Appendix I - Standard Permit Conditions

Standard permit conditions in Appendix I are consistent with the general permit provisions required under 40 CFR 122.41.

I.1 Duty To Comply.

You must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

I.1.1 You must comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards, even if the permit has not yet been modified to incorporate the requirement.

I.1.2 Penalties for Violations of Permit Conditions: The Director will adjust the civil and administrative penalties listed below in accordance with the Civil Monetary Penalty Inflation Adjustment Rule (61 FR 252, December 31, 1996, pp. 69359-69366, as corrected in 62 FR 54, March 20, 1997, pp.13514-13517) as mandated by the Debt Collection Improvement Act of 1996 for inflation on a periodic basis. This rule allows EPA's penalties to keep pace with inflation. The Agency is required to review its penalties at least once every 4 years thereafter and to adjust them as necessary for inflation according to a specified formula. The civil and administrative penalties following were adjusted for inflation starting in 1996.

I.1.2.1 *Criminal Penalties.*

a. *Negligent Violations.* The CWA provides that any person who negligently violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to criminal penalties of not less than $2,500 nor more than $25,000 per day of violation, or imprisonment of not more than one year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than $50,000 per day of violation or by imprisonment of not more than two years, or both.

b. *Knowing Violations.* The CWA provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a fine of not less than $5,000 nor more than $50,000 per day of violation, or by imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than $100,000 per day of violation, or imprisonment of not more than 6 years, or both.

c. *Knowing Endangerment.* The CWA provides that any person who knowingly violates permit conditions implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act and who knows at that time that he or she is placing another person in imminent danger of death or serious bodily injury shall upon conviction be subject to a fine of not more than $250,000 or by imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than $500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in Section 309(c)(3)(B)(iii) of the Act, shall, upon

conviction of violating the imminent danger provision be subject to a fine of not more than $1,000,000 and can fined up to $2,000,000 for second or subsequent convictions.

d. *False Statement.* The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than 4 years, or both. The Act further provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

I.1.2.2 *Civil Penalties.* The CWA provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to a civil penalty not to exceed the maximum amounts authorized by Section 309(d) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note) (currently $37,500 per day for each violation).

I.1.2.3 *Administrative Penalties.* The CWA provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Act is subject to an administrative penalty, as follows

a. *Class I Penalty.* Not to exceed the maximum amounts authorized by Section 309(g)(2)(A) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note) (currently $16,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed $37,500).

b. *Class II Penalty.* Not to exceed the maximum amounts authorized by Section 309(g)(2)(B) of the Act and the Federal Civil Penalties Inflation Adjustment Act (28 U.S.C. § 2461 note) as amended by the Debt Collection Improvement Act (31 U.S.C. § 3701 note) (currently $11,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed $177,500).

I.2 Duty to Reapply.

If you wish to continue an activity regulated by this permit after the expiration date of this permit, you must apply for and obtain authorization as required by the new permit once EPA issues it.

I.3 Need to Halt or Reduce Activity Not a Defense.

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

I.4 Duty to Mitigate.

You must take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

I.5 Proper Operation and Maintenance.

You must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by you to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems which are installed by you only when the operation is necessary to achieve compliance with the conditions of this permit.

I.6 Permit Actions.

This permit may be modified, revoked and reissued, or terminated for cause. Your filing of a request for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

I.7 Property Rights.

This permit does not convey any property rights of any sort, or any exclusive privileges.

I.8 Duty to Provide Information.

You must furnish to EPA or an authorized representative (including an authorized contractor acting as a representative of EPA), within a reasonable time, any information that EPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. You must also furnish to EPA or an authorized representative upon request, copies of records required to be kept by this permit.

I.9 Inspection and Entry.

You must allow EPA or an authorized representative (including an authorized contractor acting as a representative of EPA), upon presentation of credentials and other documents as may be required by law, to:

I.9.1 Enter upon your premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

I.9.2 Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

I.9.3 Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

I.9.4 Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

I.10 Monitoring and Records.

I.10.1 Samples and measurements taken for the purpose of monitoring must be representative of the volume and nature of the monitored activity.

I.10.2 You must retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three years from the date the permit expires or the date the permittee's authorization is terminated. This period may be extended by request of EPA at any time.

I.10.3 Records of monitoring information must include:

I.10.3.1 The date, exact place, and time of sampling or measurements;

I.10.3.2 The individual(s) who performed the sampling or measurements;

I.10.3.3 The date(s) analyses were performed

I.10.3.4 The individual(s) who performed the analyses;

I.10.3.5 The analytical techniques or methods used; and

I.10.3.6 The results of such analyses.

I.10.4 Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in the permit.

I.10.5 The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than 4 years, or both.

I.11 Signatory Requirements.

I.11.1 All applications, including NOIs, must be signed as follows:

I.11.1.1 For a corporation: By a responsible corporate officer. For the purpose of this subsection, a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

I.11.1.2 For a partnership or sole proprietorship: By a general partner or the proprietor, respectively; or

I.11.1.3 For a municipality, state, federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this subsection, a principal executive

officer of a federal agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator of EPA).

I.11.2 Your SWPPP, including changes to your SWPPP, inspection reports, and any other compliance documentation required under this permit, must be signed by a person described in Appendix I, Subsection I.11.1 above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

I.11.2.1 The authorization is made in writing by a person described in Appendix I, Subsection I.11.1;

I.11.2.2 The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and

I.11.2.3 The signed and dated written authorization is included in the SWPPP. A copy must be submitted to EPA, if requested.

I.11.3 Changes to Authorization. If an authorization under Part 1.7 is no longer accurate because a different operator has responsibility for the overall operation of the construction site, a new NOI satisfying the requirements of Part 1.7 must be submitted to EPA. See Table 1 in Part 1.7.2 of the permit. However, if the only change that is occurring is a change in contact information or a change in the facility's address, the operator need only make a modification to the existing NOI submitted for authorization.

I.11.4 Any person signing documents in accordance with Appendix I, Subsections I.11.1 or I.11.2 above must include 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 gathered and evaluated the information contained therein. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

I.11.5 For persons signing documents electronically, in addition to meeting other applicable requirements in Appenidx I, Subsection I.11, such signatures must meet the same signature, authentication, and identity-proofing standards set forth at 40 CFR § 3.2000(b) for electronic reports (including robust second-factor authentication).

I.11.6 The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than $10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

I.12 Reporting Requirements.

I.12.1 Planned changes. You must give notice to EPA as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

I.12.1.1 The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b); or

I.12.1.2 The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42(a)(1).

I.12.2 Anticipated noncompliance. You must give advance notice to EPA of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

I.12.3 Transfers. This permit is not transferable to any person except after notice to EPA. Where a facility wants to change the name of the permittee, the original permittee (the first owner or operators) must submit a Notice of Termination pursuant to Part 8. The new owner or operator must submit a Notice of Intent in accordance with Part 1.7 and Table 1. See also requirements in Appendix I, Subsections I.11.1 and I.11.2.

I.12.4 Monitoring reports. Monitoring results must be reported at the intervals specified elsewhere in this permit.

I.12.4.1 Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by EPA for reporting results of monitoring of sludge use or disposal practices.

I.12.4.2 If you monitor any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR 136 unless otherwise specified in 40 CFR Part 503, or as specified in the permit, the results of this monitoring must be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by EPA.

I.12.5 Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit must be submitted no later than 14 days following each schedule date.

I.12.6 Twenty-four hour reporting. In addition to reports required elsewhere in this permit:

I.12.6.1 You must report any noncompliance which may endanger health or the environment. Any information must be provided orally within 24 hours from the time you become aware of the circumstances. A written submission must also be provided within five days of the time you become aware of the circumstances. The written submission must contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

I.12.6.2 The following shall be included as information which must be reported within 24 hours under this paragraph.

a. Any unanticipated bypass which exceeds any effluent limitation in the permit. (See 40 CFR 122.41(m)(3)(ii))

b. Any upset which exceeds any effluent limitation in the permit

c. Violation of a maximum daily discharge limit for any numeric effluent limitation. (See 40 CFR 122.44(g).)

I.12.6.3 EPA may waive the written report on a case-by-case basis for reports under Appendix I, Subsection I.12.6.2 if the oral report has been received within 24 hours.

I.12.7 Other noncompliance. You must report all instances of noncompliance not reported under Appendix I, Subsections I.12.4, I.12.5, and I.12.6, at the time monitoring reports are submitted. The reports must contain the information listed in Appendix I, Subsection I.12.6.

I.12.8 Other information. Where you become aware that you failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Permitting Authority, you must promptly submit such facts or information.

I.13 Bypass.

I.13.1 Definitions.

I.13.1.1 Bypass means the intentional diversion of waste streams from any portion of a treatment facility See 40 CFR 122.41(m)(1)(i).

I.13.1.2 Severe property damage means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. See 40 CFR 122.41(m)(1)(ii).

I.13.2 Bypass not exceeding limitations. You may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Appendix I, Subsections I.13.3 and I.13.4. See 40 CFR 122.41(m)(2).

I.13.3 Notice.

I.13.3.1 Anticipated bypass. If you know in advance of the need for a bypass, you must submit prior notice, if possible at least ten days before the date of the bypass. See 40 CFR 122.41(m)(3)(i).

I.13.3.2 Unanticipated bypass. You must submit notice of an unanticipated bypass as required in Appendix I, Subsection I.12.6 (24-hour notice). See 40 CFR 122.41(m)(3)(ii).

I.13.4 Prohibition of bypass. See 40 CFR 122.41(m)(4).

I.13.4.1 Bypass is prohibited, and EPA may take enforcement action against you for bypass, unless:

a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

b. There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

c. You submitted notices as required under Appendix I, Subsection I.13.3.

I.13.4.2 EPA may approve an anticipated bypass, after considering its adverse effects, if EPA determines that it will meet the three conditions listed above in Appendix I, Subsection I.13.4.1.

I.14 Upset.

I.14.1 Definition. Upset means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond your reasonable control. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. See 40 CFR 122.41(n)(1).

I.14.2 Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of Appendix I, Subsection I.14.3 are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. See 40 CFR 122.41(n)(2).

I.14.3 Conditions necessary for a demonstration of upset. See 40 CFR 122.41(n)(3). A permittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

I.14.3.1 An upset occurred and that you can identify the cause(s) of the upset;

I.14.3.2 The permitted facility was at the time being properly operated; and

I.14.3.3 You submitted notice of the upset as required in Appendix I, Subsection I.12.6.2.b (24 hour notice).

I.14.3.4 You complied with any remedial measures required under Appendix I, Subsection I.4.

I.14.4 Burden of proof. In any enforcement proceeding, you, as the one seeking to establish the occurrence of an upset, have the burden of proof. See 40 CFR 122.41(n)(4).

I.15 Retention of Records.

Copies of the SWPPP and all documentation required by this permit, including records of all data used to complete the NOI to be covered by this permit, must be retained for at least three years from the date that permit coverage expires or is terminated. This period may be extended by request of EPA at any time.

I.16 Reopener Clause.

I.16.1 Procedures for modification or revocation. Permit modification or revocation will be conducted according to 40 CFR §122.62, §122.63, §122.64 and §124.5.

I.16.2 Water quality protection. If there is evidence indicating that the stormwater discharges authorized by this permit cause, have the reasonable potential to cause or contribute to an excursion above any applicable water quality standard, you may be required to obtain an individual permit in accordance with Part 1.7.5 of this permit, or the permit may be modified to include different limitations and/or requirements.

I.16.3 Timing of permit modification. EPA may elect to modify the permit prior to its expiration (rather than waiting for the new permit cycle) to comply with any new statutory or regulatory requirements, such as for effluent limitation guidelines that may be promulgated in the course of the current permit cycle.

I.17 Severability.

Invalidation of a portion of this permit does not necessarily render the whole permit invalid. EPA's intent is that the permit is to remain in effect to the extent possible; in the event that any part of this permit is invalidated, EPA will advise the regulated community as to the effect of such invalidation.

Appendix J - Notice of Intent (NOI) Form and Instructions

Part 1.7.1 requires you to use the electronic NOI system, or "eNOI" system, to prepare and submit your NOI. However, if you are given approval by the EPA Regional Office to use a paper NOI form, and you elect to use it, you must complete and submit the following form.

Appendix D

Copy of NOI and acknowledgement letter from EPA/State

Appendix E

Inspection Reports

Appendix F

Pre-Development Photographs

Appendix G

Project Permits