APPENDICES -- BASIC PERFORMANCE STANDARDS

Appendix A.	Erosion and sedimentation control	1
Appendix B.	Inspection and maintenance	6
Appendix C.	Housekeeping	7
Appendix D.	Large construction activities	10

APPENDIX A. Erosion and sedimentation control

A person who conducts, or causes to be conducted, an activity that involves filling, displacing, or exposing soil or other earthen materials shall take measures to prevent unreasonable erosion of soil or sediment beyond the project site or into a protected natural resource as defined in 38 M.R.S. § 480-B. Erosion control measures must be in place before the activity begins. Measures must remain in place and functional until the site is permanently stabilized. Adequate and timely temporary and permanent stabilization measures must be taken.

NOTE: The site must be maintained to prevent unreasonable erosion and sedimentation. See 38 M.R.S.§ 420-C (in part). A license is required for any stormwater discharge that the department "determines to contribute to a violation of a water quality standard or is a significant contributor of pollutants to waters of the State". 06-096 CMR 521(9)(a)(1)(v)(in part).

NOTE: The Department has prepared protocols for the control of erosion and sedimentation. See "Maine Erosion and Sediment Control BMPs Maine Department of Environmental Protection."

- 1. Pollution prevention. Minimize disturbed areas and protect natural downgradient buffer areas to the extent practicable. Control stormwater volume and velocity within the site to minimize soil erosion. Minimize the disturbance of steep slopes. Control stormwater discharges, including both peak flow rates and volume, to minimize erosion at outlets. The discharge may not result in erosion of any open drainage channels, swales, stream channels or stream banks, upland, or coastal or freshwater wetlands off the project site.
 - **a. Buffers.** Whenever practicable, no disturbance activities should take place within 50 feet of any protected natural resource. If disturbance activities take within 50 feet of any protected natural resource, and stormwater discharges through the disturbed areas toward the protected natural resource, perimeter sediment controls must be doubled.
 - **NOTE**: Buffers improve water quality by helping to filter pollutants in run-off both during and after construction. Minimizing disturbed areas through phasing limits the amount of exposed soil on the site through retention of natural cover and by retiring areas as permanently stabilized. Less exposed soil results in fewer erosion controls to install and maintain. If work within an area is not expected to begin within two weeks' time, consider leaving the area in its naturally existing cover.
 - **NOTE**: Many construction activities within 75 feet of a protected natural resource require a permit under the *Natural Resources Protection Act* prior to initiation. For more information regarding the applicability of the NRPA to your project, you can visit the Department's website at <u>http://www.maine.gov/dep/land/nrpa/index.html</u> or contact staff of the Division of Land Resource Regulation at the nearest regional office.

- 2. Preserve native topsoil, unless infeasible. Topsoil which is stripped or removed must be stockpiled for use in reclaiming disturbed land areas. Soil stockpiles shall be seeded, mulched, or otherwise stabilized. Preserving native topsoil is not required where the intended function of a specific area of the site dictates that the topsoil is disturbed or removed.
- **3. Minimize soil compaction.** In areas of your site where final vegetative stabilization will occur or where infiltration practices will be installed, restrict vehicle and equipment use. In these locations, avoid soil compaction and use techniques that rehabilitate and condition the soils as necessary to support vegetative growth.
- 4. High Infiltration Capacity Soils. To the extent practicable:
 - **a.** Hydrologic Soil Group (HSG) A and B soils must not be disturbed,
 - b. Stormwater must be directed to low-lying areas and depressions with HSG A and B soils,
 - c. Temporary sediment traps and basins must be installed over HSG A and B soils
- **5. Sediment barriers.** Prior to soil disturbance, properly install sediment barriers at the downgradient edge of any area to be disturbed and adjacent to any drainage channels within the disturbed area. Sediment barriers should be installed downgradient of soil or sediment stockpiles and stormwater prevented from running onto the stockpile. Maintain the sediment barriers by removing accumulated sediment, or removing and replacing the barrier, until the disturbed area is permanently stabilized. Where a discharge to a storm drain inlet occurs, if the storm drain carries water directly to a surface water and you have authority to access the storm drain inlet, you must install and maintain protection measures that remove sediment from the discharge.
- 6. Stabilized construction entrance. Prior to construction, properly install a stabilized construction entrance (SCE) at all points of egress from the site. The SCE is a stabilized pad of aggregate underlain by a geotextile filter fabric or an equivalent measure used to prevent traffic from tracking material away from the site onto public right-of-way. Maintain the SCE until all disturbed areas are stabilized.
- 7. Temporary sediment basins. Temporary sediment basins must be designed to provide storage for either the calculated runoff from a 2-year, 24-hour storm or provide for 3,600 cubic feet of capacity per acre draining to the basin. Erosion controls and velocity dissipation devices must be used if the discharging waters are likely to create erosion. Accumulated sediment must be removed as needed from the basin to maintain at least ½ of the design capacity of the basin.
 - **a.** Utilize surface outlets. To the maximum extent practicable, outlet structures must be utilized to withdraw water from the surface of temporary sedimentation basins, in order to minimize the discharge of pollutants. Exceptions may include periods of extended cold weather, where alternate outlets are required during frozen periods. If such a device is infeasible for portions of or the entire construction period, justification must be made.
- 8. Cationic treatment chemicals. If you plan to use cationic treatment chemicals, such as polymers, flocculants, or other chemicals that contain an overall positive charge designed to reduce turbidity in stormwater, you are ineligible for coverage under this general permit unless you notify the Department in advance and the Department authorizes the use. When requesting approval to use cationic treatment chemicals, you must describe appropriate controls and implementation procedures to ensure the use will not lead to a violation of water quality standards. In addition, you must specify the type(s) of soil likely to be treated on the site,

chemicals to be used and how they are to be applied and in what quantity, any manufacturer's recommendations, and any training had by personnel who will handle and apply the chemicals.

- **9. Temporary stabilization.** Stabilize any exposed soil with mulch, or other non-erodible cover within 7 days of the temporary cessation of construction activities. Stabilize areas within 75 feet of a downgradient protected natural resource within 48 hours of the initial disturbance of the soil or prior to any storm event, whichever comes first.
- **10. Removal of temporary measures.** Remove any temporary control measures, such as silt fence, within 30 days after permanent stabilization is attained. Remove any accumulated sediments and stabilize.

NOTE: It is recommended that silt fences be removed by cutting the fence materials at ground level to avoid additional soil disturbance.

- **11. Permanent stabilization.** If the area will not be worked for more than one year or has been brought to final grade, then permanently stabilize the area within 7 days by planting vegetation, seeding, sod, or through the use of permanent mulch, or riprap, or road sub-base. If using vegetation for stabilization, select the proper vegetation for the light, moisture, and soil conditions; amend areas of disturbed subsoils with topsoil, compost, or fertilizers; protect seeded areas with mulch or, if necessary, erosion control blankets; and schedule sodding, planting, and seeding so to avoid die-off from summer drought and fall frosts. Newly seeded or sodded areas must be protected from vehicle traffic, excessive pedestrian traffic, and concentrated runoff until the vegetation is well-established. If necessary, areas must be reworked and restabilized if germination is sparse, plant coverage is spotty, or topsoil erosion is evident. One or more of the following may apply to a particular site.
 - **a.** Seeded areas. For seeded areas, permanent stabilization means a 90% cover of the disturbed area with mature, healthy plants with no evidence of washing or riling of the topsoil.
 - **b.** Sodded areas. For sodded areas, permanent stabilization means the complete binding of the sod roots into the underlying soil with no slumping of the sod or die-off.
 - **c. Permanent Mulch.** For mulched areas, permanent mulching means total coverage of the exposed area with approved mulch material. Erosion Control Mix may be used as mulch for permanent stabilization according to the approved application rates and limitations.
 - **d. Riprap.** For areas stabilized with riprap, permanent stabilization means that slopes stabilized with riprap have an appropriate backing of a well-graded gravel or approved geotextile to prevent soil movement from behind the riprap. Stone must be sized appropriately. It is recommended that angular stone be used.
 - e. Agricultural use. For construction projects on land used for agricultural purposes (e.g., pipelines across crop land), permanent stabilization may be accomplished by returning the disturbed land to agricultural use.
 - **f. Paved areas.** For paved areas, permanent stabilization means the placement of the compacted gravel subbase is completed.
 - **g.** Ditches, channels, and swales. For open channels, permanent stabilization means the channel is stabilized with mature vegetation at least three inches in height, with well-graded

riprap lining, or with another non-erosive lining capable of withstanding the anticipated flow velocities and flow depths without reliance on check dams to slow flow. There must be no evidence of slumping of the lining, undercutting of the banks, or downcutting of the channel.

- **12. Winter Construction.** "Winter construction" is construction activity performed during the period from November 1 through April 15, or outside of the said period if the ground is frozen or snow covered. If areas within the construction activity are not stabilized with temporary or permanent measures outlined above by November 15, then the site must be protected with additional stabilization measures that are specific to winter conditions.
 - **a.** Site Stabilization. For winter stabilization, hay mulch is applied at twice the standard temporary stabilization rate. At the end of each construction day, areas that have been brought to final grade must be stabilized. Mulch may not be spread on top of snow.
 - **b.** Sediment Barriers. All areas within 75 feet of a protected natural resource must be protected with a double row of sediment barriers.
 - **c. Ditch.** All vegetated ditch lines that have not been stabilized by November 1, or will be worked during the winter construction period, must be stabilized with an appropriate stone lining backed by an appropriate gravel bed or geotextile unless specifically released from this standard by the department.
 - **d. Slopes.** Mulch netting must be used to anchor mulch on all slopes greater than 8% unless erosion control blankets or erosion control mix is being used on these slopes.

- **13. Laydown & Staging Areas.** This section applies to the projects which will use areas within a project's limit of disturbance for material laydown and staging.
 - a. Upland areas must be selected for laydown and staging to the extent practicable,
 - **b.** Use of wet areas (e.g., minor depressions along drainageways) hydraulically connected to downgradient protected natural resources and/or parcel must be justified using specific site or operational limitations. Temporary structures (e.g., swales, dikes) must be provided to intercept upgradient stormwater and divert it away from these laydown and staging areas,
 - **c.** Provide stormwater quality treatment in compliance with the applicable Chapter 500 standard for the areas which will be used for more than 12 months.
- 14. Parking areas. Parking areas must be constructed to ensure runoff is delivered to adjacent swales, catch basins, curb gutters, or buffer areas without eroding areas downslope. The parking area's subbase compaction and grading must be done to ensure runoff is evenly distributed to adjacent buffers or side slopes. Catch basins must be located and set to provide enough storage depth at the inlet so to allow inflow of peak runoff rates without by-pass of runoff to other areas.
- **15. Roads.** Gravel and paved roads must be designed and constructed with crowns or other measures, such as water bars, to ensure that stormwater is delivered immediately to adjacent stable ditches, vegetated buffer areas, catch basin inlets, or street gutters.

NOTE: The Department has prepared protocols for the control of erosion and sedimentation during the winter months. See "Maine Erosion and Sediment Control BMPs Maine Department of Environmental Protection."

- **NOTE:** (1) Gravel and paved roads should be maintained so that they continue to conform to this standard to prevent erosion problems. (2) The Department recommends that impervious surfaces, including roads, be designed, and constructed so that stormwater is distributed in sheet flow to natural vegetated buffer areas wherever such areas are available. Road ditches should be designed so that stormwater is frequently (at least every 100 to 200 feet) discharged via ditch turnouts in sheet flow to adjacent natural buffer areas wherever possible.
- **16.** Culverts. Culverts must be sized to avoid unintended flooding of upstream areas or frequent overtopping of roadways. Culvert inlets must be protected with appropriate materials for the expected entrance velocity, and protection must extend at least as high as the expected maximum elevation of storage behind the culvert. Culvert outlet design must incorporate measures, such as aprons or plunge pools, to prevent scouring of the stream channel. Culvert inlet and outlet protection measures must be installed within 48 hours of culvert installation, or prior to a storm event, whichever is sooner. Outlet protection measures must be designed to stay within the channel limits. The design must take account of tailwater depth.
- **17. Stormwater channels.** All disturbed ditches, swales, and other open stormwater channels must be stabilized by the end of each workday. Stabilization shall be maintained on a daily basis.

New ditches, swales, and other open stormwater channels must be designed, constructed, and stabilized using measures that achieve long-term erosion control. Ditches, swales and other open stormwater channels must be sized to handle, at a minimum, the expected volume run-off. Each channel should be constructed in sections so that the section's grading, shaping, and installation of the permanent lining can be completed the same day. If the channel's final grading or permanent lining installation must be delayed, then diversion berms must be used to divert stormwater away from the channel, properly spaced check dams must be installed in the channel to slow the water velocity, and a temporary lining installed along the channel to prevent scouring. Permanent stabilization for channels is addressed under Appendix A(11)(g) above.

- **a.** The channel should receive adequate routine maintenance to maintain capacity and prevent or correct any erosion of the channel's bottom or side slopes.
- **b.** When the subcatchment draining to a ditch or swale is less than 1 acre of total drainage and less than ¹/₄ acre of impervious area, diversion of runoff to adjacent wooded or otherwise vegetated buffer areas is encouraged where the opportunity exists.
- **18.** Utility Trench. Trenches shall be backfilled and temporarily stabilized (including spoil and/or backfill piles) at the end of each working day.
- 19. Additional requirements. Additional requirements may be applied on a site-specific basis.

APPENDIX B. Inspection and maintenance

The following standards must be met during a construction activity. The Operator must know that additional inspection and maintenance standards may apply for the permanent, post-construction stormwater best management practices (BMPs) to be installed during the activity.

- 1. Inspection. Inspect disturbed areas, erosion control measures, materials storage areas that are exposed to precipitation, and locations where vehicles enter or exit the site. Inspect these areas at least once a week as well as before and within 24 hours after a storm event (rainfall), and prior to completing permanent stabilization measures. A person with knowledge of erosion and stormwater control, including the standards and conditions in the permit, shall conduct the inspections.
- 2. Maintenance and corrective action. If best management practices (BMPs) need routine maintenance (i.e., minor repairs or other upkeep performed to ensure the BMP remains in effective operating condition), the repair work should be initiated upon discovery of the problem but no later than the end of the next workday. If the same routine maintenance requirements are required repeatedly, you must either: complete work to fix any subsequent repeat occurrences of this same problem, or document in your inspection report why the specific reoccurrence of this same problem should still be addressed as a routine maintenance item.

If BMPs need significant repair or if additional BMPs are necessary, implementation must be completed within 7 calendar days and prior to any storm event (rainfall). If it is infeasible to complete the repair or installation within 7 calendar days, you must document in your inspection report why it is infeasible to complete the repair or installation and document your schedule for installing the stormwater BMP(s) and making it operational.

All temporary measures must be maintained in effective operating condition until disturbed areas are permanently stabilized.

3. Documentation. Keep a log (report) summarizing the inspections and any corrective action taken. The log must include the name(s) and qualifications of the person making the inspections, the date(s) of the inspections, and major observations about the operation and maintenance of erosion and sedimentation controls, materials storage areas, and vehicles access points to the parcel. Major observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and location(s) where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken.

The log must be made accessible to Department staff and a copy must be provided upon request. The permittee shall retain a copy of the log for a period of at least three years from the completion of permanent stabilization.

- 4. **Perimeter Fence.** If perimeter fence is installed before the project's permanent stabilization, the perimeter fence shall not restrict inspection and maintenance of temporary BMPs. At a minimum, access points shall be provided along the fence line for the vehicles and equipment to maintain the BMPs.
- 5. Additional requirements. Additional requirements may be applied on a site-specific basis.

APPENDIX C. Housekeeping

- 1. Spill prevention. Controls must be used to prevent pollutants from construction and waste materials stored on site to enter stormwater, which includes storage practices to minimize exposure of the materials to stormwater. The Operator must develop, and implement as necessary, appropriate spill prevention, containment, and response planning measures.
 - **NOTE:** Any spill or release of toxic or hazardous substances must be reported to the Department. For oil spills, call 1-800-482-0777 which is available 24 hours a day. For spills of toxic or hazardous material, call 1-800-452-4664 which is available 24 hours a day. For more information, visit the Department's website at: http://www.maine.gov/dep/spills/emergspillresp/
- 2. Groundwater protection. During construction, liquid petroleum products and other hazardous materials with the potential to contaminate groundwater may not be stored or handled in areas of the site draining to an infiltration area. An "infiltration area" is any area of the site that by design or because of soils, topography and other relevant factors accumulates runoff that infiltrates into the soil. Dikes, berms, sumps, and other forms of secondary containment that prevent discharge to groundwater may be used to isolate portions of the site for the purposes of storage and handling of these materials. Any project proposing infiltration of stormwater must provide adequate pre-treatment of stormwater prior to discharge of stormwater to the infiltration area, or provide for treatment within the infiltration area, to prevent the accumulation of fines, reduction in infiltration rate, and consequent flooding and destabilization.

NOTE: Lack of appropriate pollutant removal best management practices (BMPs) may result in violations of the groundwater quality standard established by 38 M.R.S. §465-C(1).

- **3.** Fugitive sediment and dust. Actions must be taken to ensure that activities do not result in noticeable erosion of soil or fugitive dust emissions during or after construction. Oil may not be used for dust control, but other water additives may be considered as needed. A stabilized construction entrance (SCE) should be included to minimize tracking of mud and sediment. If off-site tracking occurs, public roads should be swept immediately and no less than once a week prior to significant storm events. Operations during dry months, that experience fugitive dust problems, should wet down unpaved access roads once a week or more frequently as needed with a water additive to suppress fugitive sediment and dust.
- 4. **Debris and other materials.** Minimize the exposure of construction debris, building and landscaping materials, trash, fertilizers, pesticides, herbicides, detergents, sanitary waste and other materials to precipitation and stormwater runoff. These materials must be prevented from becoming a pollutant source.
 - **NOTE**: To prevent these materials from becoming a source of pollutants, activities may be required to comply with applicable provision of rules related to solid, universal, and hazardous waste, including, but not limited to, the Maine solid waste and hazardous waste management rules; Maine hazardous waste management rules; Maine oil conveyance and storage rules; and Maine pesticide requirements.

5. Excavation de-watering. Excavation de-watering is the removal of water from trenches, foundations, coffer dams, ponds, and other areas within the construction area that retain water after excavation. In most cases the collected water is heavily silted and hinders correct and safe construction practices. The collected water removed from the ponded area, either through gravity or pumping, must be spread through natural wooded buffers or removed to areas that are specifically designed to collect the maximum amount of sediment possible, like a cofferdam sedimentation basin. Avoid allowing the water to flow over disturbed areas of the site. Equivalent measures may be taken if approved by the Department.

NOTE: Dewatering controls are discussed in the "Maine Erosion and Sediment Control BMPs, Maine Department of Environmental Protection."

- 6. Vehicle and equipment washing. Provide an effective means of minimizing the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other types of wash water. Ensure there is no discharge of soaps solvents, or detergents in equipment and vehicle wash water. For washing applicators and containers used for concrete, form release oils, curing compounds, or other materials, direct wash water into a leak-proof container or leak-proof and lined pit designed so no overflows can occur due to inadequate sizing or precipitation. Locate any washout or cleanout activities as far away as possible from receiving waters, constructed or natural site drainage features, and storm drain inlets, and, to the extent feasible, designate areas to be used for these activities and conduct such activities on in these areas.
- **7. Authorized non-stormwater discharges.** Identify and prevent contamination by nonstormwater discharges. Where allowed non-stormwater discharges exist, they must be identified, and steps should be taken to ensure the implementation of appropriate pollution prevention measures for the non-stormwater component(s) of the discharge. Authorized nonstormwater discharges are:
 - **a.** Discharges from firefighting activity.
 - **b.** Fire hydrant flushing.
 - **c.** Vehicle wash water if detergents are not used and washing is limited to the exterior of vehicles (engine, undercarriage and transmission washing is prohibited).
 - **d.** Dust control runoff in accordance with permit conditions and Appendix (C)(3).
 - e. Routine external building washdown, not including surface paint removal, that does not involve detergents.
 - **f.** Pavement wash water (where spills/leaks of toxic or hazardous materials have not occurred unless all spilled material has been removed) if detergents are not used.
 - g. Uncontaminated air conditioning or compressor condensate.
 - **h.** Uncontaminated groundwater or spring water.
 - i. Foundation or footer drain-water where flows are not contaminated.
 - j. Uncontaminated excavation dewatering (see requirements in Appendix C(5)).
 - k. Potable water sources including waterline flushing; and
 - **l.** Landscape irrigation.

Allowable non-stormwater discharges cannot be authorized under this permit unless they are directly related to and originate from a construction site or dedicated support activity (e.g., a pressure washing company cannot broadly use this general permit for their business operations, because general vehicle washing is not associated with a construction site). It is not necessary to list these sources of non-stormwater in the NOI.

8. Unauthorized non-stormwater discharges. The Department's approval under this Chapter does not authorize a discharge that is mixed with a source of non-stormwater, other than those

Appendices 8

discharges in compliance with Appendix C (7). Specifically, the Department's approval does not authorize discharges of the following:

- **a.** Wastewater from the washout or cleanout of concrete, stucco, paint, form release oils, curing compounds or other construction materials.
- **b.** Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance.
- c. Soaps, solvents, or detergents used in vehicle and equipment washing; and
- d. Toxic or hazardous substances from a spill or other release.
- 9. Additional requirements. Additional requirements may be applied on a site-specific basis.

APPENDIX D. Large Construction Activities

The requirements of this appendix apply to large construction activities as defined in the general permit. If a requirement in this appendix contradicts another requirement of the general permit, the more stringent requirement applies.

"Project" is used to refer to a "large construction activity" in the remainder of the appendix for brevity.

Unless explicitly stated, the requirements in this appendix apply to projects that create a total disturbed area (TDA) of 5 acres or more. However, the applicability of certain requirements depends on the level of TDA as defined in Table 1.

Table 1		
Level	TDA* (acres)	
Ι	Equal to or greater than 5 & less than 20	
II	Equal to or greater than 20 & less than 100	
III	Equal to or greater than 100	
	*: See definition of "disturbed area" in Part II(F) of the general permit. If the project results in soil disturbance in more than one subcatchment, TDA is calculated by summing each subcatchment's disturbed area.	

1. Construction Sequencing. For all projects, open disturbed areas must be minimized in accordance with the SMART development strategy outlined in the Department's ESC manual.

Level I projects must:

- **a.** sequence soil disturbance in upslope-downslope direction.
- b. have no more than five acres of open disturbed area at a given time

Level II projects must:

- b. sequence soil disturbance in an upslope-downslope direction, and
- **c.** has no more than 10 acres of open disturbed area at a given time.

Level III projects must:

- d. sequence soil disturbance in an upslope-downslope direction in each subcatchment, and
- e. limit open disturbed area in each subcatchment that drains into an outlet point on the parcel boundary to no more than 10 acres at a given time.

These requirements do not apply to soil disturbance necessary for the construction of stormwater control measures, including conveyances.

- 2. On-site Minimum Mulch Storage. Projects must have the following amount of mulch readily available on site for emergency temporary stabilization of exposed soil during storm events:
 - **a.** Level I: Minimum 9 tons of straw/hay mulch.
 - b. Level II: Minimum 18 tons of straw/hay mulch,
 - **c.** Level III: Minimum 18 tons of straw/hay mulch for each subcatchment that drains into an outlet point on the parcel boundary.
- **3. Dedicated Environmental Crew.** Level III projects must have a dedicated environmental crew tasked with installation, inspection, maintenance, and repair of ESC measures.
- **4. Inspection During Construction.** Projects must have a resident inspector, certified in erosion control practices by the Department, to carry out the requirements in Appendix B(1).

Level II and III projects must have a Department-approved third-party inspector to ensure overall compliance with the general permit.

Any project that has a third-party inspection condition under its Site Law license is considered to meet the third-party inspector requirements of this section.

- **5.** Contractor Certification. Projects must have a civil contractor who is certified in erosion control practices by the Department. .
- **6. Buffers.** This requirement applies to the non-linear portions of all projects. Whenever practicable:
 - **a.** no disturbance should take place within 100 feet of any downslope protected natural resource, and
 - **b.** no disturbance should take place within 50 feet of any downslope parcel.

Natural vegetation within the buffer area must be preserved during construction to slow down stormwater runoff and filter sediment. If existing vegetation in the buffer area is sparse (e.g., a cleared forest lacking understory vegetation), the operator must evaluate the practicability of revegetating the buffer area considering the construction schedule. If revegetating, the buffer area soil should be tested, amended per the test results, seeded, and mulched at the rates described for winter conditions in the Department's ESC Manual as soon as practicable upon the start of the construction.

If buffers meeting the above width and vegetation requirements cannot be provided, sections 7 and 8 of this appendix apply.

7. Temporary Sediment Basin. A temporary sediment basin is required upslope of a perimeter control if the subcatchment of the perimeter control is greater than ten acres and if the buffer requirements in section 6 cannot be met.

The temporary sediment basin must be designed by a Professional Engineer licensed in Maine in accordance with the Department's ESC manual.

Once the disturbed area within the subcatchment is sufficiently stabilized, the temporary sediment basin may be decommissioned and backfilled with the Department's approval.

8. Erosion Risk Assessment (ERA). If the buffer recommendations in section 6 cannot be met, a basic ERA must be conducted for the project subcatchments. The subcatchment's average slope and soil erodibility (Erosion Factor for whole soil, K_w) must be considered using a conservative approach.

The best available soil survey data must be used in the ERA, which includes:

- **a.** Level I: The NRCS county soil survey is acceptable. It is recommended that the county soil survey data should be confirmed in the field by a qualified professional.
- **b.** Level II & III: The soil survey completed as a requirement of the Site Law application must be used (see "Section 11. Soils" of the Department's Site Law application). No additional field work is required.

If area-weighted K_w value is equal to or greater than 0.37 and the average slope, calculated using pre-development grades, is equal to or greater than 5% for a given subcatchment, the subcatchment will be considered to have elevated erosion risk (EER).

Alternatively, the operator may elect to classify the subcatchments as EER subcatchments without performing the ERA and implement the minimum additional controls listed below.

At a minimum, the following additional controls must be used in an EER subcatchment:

- c. A double sediment barrier must be installed along the perimeter.
- **d.** Temporary seeding of disturbed soil must be completed as soon as practicable.
- e. Mulch or an equivalent measure shall be applied to all work areas at the end of the workday.
- **f.** No earth moving (e.g., grading, trenching, rock removal, or grubbing) shall be done in an EER subcatchment during mud days, to be determined by the third-party inspector. If the project does not have a third-party inspector, the resident inspector will make the determination.
- **g.** In the areas brought to final grade, slope interruption measures (e.g., erosion control mix berms, sediment retention fiber rolls) must be placed parallel to the contours with a maximum spacing of 100 ft.
- **9.** Soil Testing. This section applies to projects that will permanently stabilize 50% or more of the disturbed area by revegetation. After the area to be revegetated is brought to final grade, soil testing must be performed to determine any soil amendments necessary for revegetation. Topsoil, compost, fertilizers, and other soil amendments must be applied at rates based on the soil test results to facilitate rapid growth of the plants selected for permanent stabilization.
- **10. Documentation.** The resident inspector is responsible for the "Inspection and Maintenance Log" required by Appendix B(3). The resident inspector or another designee of the permittee shall be responsible for fulfilling the remaining requirements listed below. If the responsible parties change, the Department must be notified within seven calendar days.
 - a. Level I & II: The inspection and maintenance log must be in an electronic format.
 - **b.** Level II & III: A plan sheet with scale must be submitted to the Department monthly which delineates up to date "Cleared" area (only for projects proposing tree clearing) and "Open", "Temporarily Stabilized", and "Permanently Stabilized" disturbed areas within the limits of work.
 - **c.** Level III: The inspection and maintenance log must be in an electronic format and be made available to the Department using a "cloud" service. An automated weather station continuously recording precipitation and ambient air temperature must be used on site. If

there is a National Weather Service-certified station within 10 miles of the project site, that facility can be designated as the weather data source for the project. Weather data must be submitted to the Department every month in an electronic format.

11. Additional requirements. Additional requirements may be applied on a site-specific basis.