



NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) DISCHARGES OF STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES EROSION AND SEDIMENT CONTROL (E&S) MODULE 1 INSTRUCTIONS

E&S Module 1 (3800-PM-BCW0406a) must be attached to the permit application or Notice of Intent (NOI). Completion of E&S Module 1 constitutes an E&S Plan required by 25 Pa. Code § 102.4(b)(5) for the purpose of PAG-02 coverage when accompanied by E&S Plan Drawings and supporting calculations. A separate E&S narrative is not required.

Enter the Applicant Name and the Project Site Name as listed on the application or NOI.

E&S Plan Information

1. **Topography.** In the space provided, describe the existing topographic features of the project site and the immediate surrounding area. Describe land cover, structures, drainage patterns, surface waters and other features of the pre-construction (i.e., present) land surface.
2. **Soils.** For soils present at the project site, identify in the table (a.) provided: 1) the Natural Resources Conservation Service (NRCS) soil survey map unit symbol of soils present at the project site; 2) the NRCS soil survey map unit name; 3) the acres associated with each soil map unit; 4) the Hydrologic Soil Group (HSG) associated with each soil map unit; 5) the percentage of each soil map unit within the disturbed area; 6) any site-specific limitations associated with the soil type (check the box if True); and 7) the presence of hydric soils within the soil map unit on the project site (check the box if True). A separate table may be attached. Note that soil types and characteristics are expected to be field verified.
 - a. Discuss the presence of any site-specific soil limitations (e.g., steep slopes, piping, high water table) and how the E&S Plan was developed to address those limitations. If no limitations exist the applicant may enter, "N/A."
 - b. If hydric soils are present, a wetland determination must be attached to E&S Module 1. Check the appropriate box to indicate whether a wetland determination is attached (select the box for Yes, No, or N/A if there are no hydric soils on the project site).

NOTE 1 – When soils are indicated to have major hydric components or have hydric inclusions (i.e., relatively small (unmapped) areas of hydric soil located within larger areas (mapped) of otherwise non-hydric soil; see Table E.1 of DEP's E&S Manual, for example), a wetland determination must be completed and attached to E&S Module 1.

- c. If it is determined that wetlands are present on a project site, a professional with experience in wetlands science should prepare a report and identify the extent of wetlands on the site on a map. Check the appropriate box to indicate whether a wetland delineation and report is attached (select the box for Yes, No, or N/A if there are no wetlands on the project site).
 - d. Check the appropriate box (Yes or No) to indicate whether environmental due diligence was conducted for on-site soils to evaluate the potential for soil contamination. Environmental due diligence is expected prior to submission of the NOI.
 - e. If soils are known to be contaminated on the project site, identify the pollutants exceeding Act 2 standards (MSCs contained in 25 Pa. Code Chapter 250), attach an E&S Plan Drawing that illustrates the extent of soil contamination, and describe the methods that will be used to avoid or minimize disturbance of the contaminated soils.

NOTE 2 – To determine if soil pollutant concentrations exceed Act 2 standards, measured concentrations should be compared to the more stringent of the Soil to Groundwater and Direct Contact Numeric Values

contained in Chapter 250, Appendix A, Tables 3 and 4, for the applicable land use (residential or non-residential), assuming a used aquifer and Total Dissolved Solids (TDS) concentration of less than 2,500 mg/L (unless evidence is provided to the contrary).

3. **Land Use.** Describe past (at least 50 years ago), pre-construction (i.e., present, within the past five years) and post-construction (i.e., proposed) land uses of the project site and how earth disturbance activities will alter the land uses of the project site.
4. **Runoff.** Describe the volume and rate of runoff from the project site and any area upgradient of the project site that flows onto the project site, to supplement supporting E&S BMP design calculations. Discuss the management of this runoff during construction (e.g., how runoff will be routed, treated, etc.). This may be a qualitative description.
5. **E&S BMPs.** Check all boxes within the table to indicate the E&S BMPs that have been selected for installation or implementation at the project site. The BMP Names are consistent with the E&S Manual and ordered as they appear in the E&S Manual's Table of Contents. List of the number of each type of BMP that will be installed. Explain any deviations from the E&S Manual in the space provided and as necessary attach an additional sheet providing the demonstration required by 25 Pa. Code § 102.11(b). If an alternative E&S BMP is proposed, identify it at the end of the table for question #5. Alternative E&S BMPs should be identified on DEP's list of reviewed alternative BMPs prior to proposing their use in a PAG-02 NOI (see www.dep.pa.gov/constructionstormwater, select E&S Resources).
6. **Standard E&S Worksheets.** Check the box if all applicable Standard E&S Worksheets from Appendix B of the E&S Manual or equivalent information and calculations have been completed and are attached to the module. The submission of completed Standard E&S Worksheets or equivalent is required for applicants seeking PAG-02 coverage.
7. **Sequence.** Check the box if a complete sequence of E&S BMP installation and removal in relation to the scheduling of earth disturbance activities prior to, during and after earth disturbance activities, that ensures the proper functioning of all BMPs is provided on the E&S Plan Drawings.
8. **Calculations Completed.** Check the box if supporting calculations for BMP design have been completed and have been attached. **E&S BMP design calculations are required for applicants seeking PAG-02 coverage.**
9. **Plan Drawings Attached.** Check the box if plan drawings have been attached to the NOI. **The submission of E&S Plan Drawings is required for applicants seeking PAG-02 coverage.**
10. **Inspections.** Check the box to confirm the applicant's understanding that inspections of earth disturbance activities must occur weekly and following measurable storm events (i.e., at least 0.25 inch). An inspection must be conducted within 24 hours following a 24-hour period in which at least 0.25 inch of precipitation occurs, or when snowmelt occurs that is sufficient to produce a discharge.
11. **Temporary Stabilization.** Check the box to verify that E&S Plan Drawings contain the following information relating to temporary vegetative stabilization measures: 1) vegetative species, 2) % pure live seed, 3) seed application rate, 4) fertilizer type, 5) fertilizer application rate, 6) mulch type, 7) mulching rate, and 8) liming rate.
12. **Permanent Stabilization.** Check the box to verify that E&S Plan Drawings contain the following information relating to permanent vegetative stabilization measures: 1) vegetative species, 2) % pure live seed, 3) seed application rate, 4) fertilizer type, 5) fertilizer application rate, 6) mulch type, 7) mulching rate, 8) liming rate, 9) anchor material, 10) anchoring method, 11) rate of anchor material application, 12) topsoil placement depth, and 13) seeding season dates.
13. **Recycling or Disposal.** Check the box to verify that E&S Plan Drawings identify how the applicant will ensure that proper recycling or disposal of materials will be conducted at the project site.
14. **Consistency.** Check the appropriate box to indicate that the E&S Plan has been planned, has been designed, and will be implemented to be consistent with the PCSM Plan. For example, a sediment basin E&S BMP may be designed with side slopes of 2:1; however, when the sediment basin is converted to a permanent PCSM SCM,

the slopes of the SCM's slopes must be no greater than 3:1. Therefore, the sediment basin should be initially designed with 3:1 slopes.

15. **Buffers.** If applicable, in the space provided identify the E&S and PCSM Plan Drawing Number(s) that show existing and proposed riparian forest buffers (select the box for N/A if not applicable).
16. **Construction Dewatering.** Check the appropriate box if construction dewatering water is expected during earth disturbance activities based on the findings of pre-development site characterization activities and BMPs for treating this water are shown on E&S Plan Drawings.
17. **Sensitive Features.** Identify the presence of any naturally occurring soil conditions or geologic formations (e.g., karst) that may have the potential to cause pollution during earth disturbance activities and identify BMPs that will be implemented to avoid or minimize potential pollution caused by these features. If no such features are known, the applicant may report, "unknown" or "none". These sensitive areas must also be identified on the E&S Plan Drawings.
18. **Thermal Impacts.** Identify whether the potential exists for thermal impacts to surface waters during the earth disturbance activity and, if such potential exists, identify BMPs that will be implemented to avoid, minimize, or mitigate potential thermal impacts.

E&S Plan Developer

The developer of the E&S Plan for the project must complete this section.

If True, check the box next to the statement, "I am trained and experienced in E&S control methods." In that statement, "trained and experienced" also refers to the size and scope of the project. Enter the number of years of experience the E&S Plan Developer has in preparing E&S Plans.

Check the box next to the statement, "I am a licensed professional" if the E&S Plan Developer is a professional engineer, landscape architect, geologist, or land surveyor licensed to practice in this Commonwealth.

Check the box next to the statement, "I am a certified professional" if the E&S Plan developer is a certified E&S professional (e.g., Certified Professional in Erosion and Sediment Control (CPESC), Certified Erosion, Sediment, and Stormwater Inspector (CESSWI), etc.).

Enter the name of the E&S Plan Developer, the business title (if applicable), the company that employs the E&S Plan Developer, mailing address, city, state, ZIP code (including 4-digit extension), phone number, and email address. If the E&S Plan Developer is a licensed professional, enter the License Type (i.e., engineer, landscape architect, geologist and/or land surveyor), License No., and Expiration ("Exp.") Date of the license; otherwise, leave these fields blank. If the E&S Plan Developer is a certified professional, enter the Certification (Cert.) Type, Certification Number, and Expiration Date.

The E&S Plan Developer must sign and date this section at the location specified. The signature attests to the accuracy of the information provided and to the E&S Plan Developer's understanding that the E&S Plan conforms to Chapter 102 requirements. Note that an E&S Plan Developer need not be a licensed professional but must be a person trained and experienced in E&S control methods and techniques applicable to the size and scope of the project being designed.