



INSTRUCTIONS FOR A NOTICE OF INTENT (NOI) AUTHORIZATION PACKAGE FOR COVERAGE UNDER THE EROSION AND SEDIMENT CONTROL GENERAL PERMIT (ESCGP-2) FOR EARTH DISTURBANCE ASSOCIATED WITH OIL AND GAS EXPLORATION, PRODUCTION, PROCESSING, OR TREATMENT OPERATIONS OR TRANSMISSION FACILITIES

GENERAL INFORMATION

The Department requires that you use the most up-to-date NOI authorization package available. These instructions are designed to assist the applicant in completing the NOI and in determining if any other environmental permits or approvals are needed for the project. Please type or print clearly when completing the form. If information requested is more than the space allows, copy that appropriate page of the form and complete as required. If a question is not applicable to you or your project, check N/A in the appropriate box.

Note: The Department interprets “project” to be substantially connected well sites, access roads, pipelines, other service lines, support facilities, and/or other oil and gas activities. Well pads, impoundments and pipelines etc. may be permitted separately but are considered together solely to determine whether the total project acreage limit of § 102.5(c) has been met and a permit is required.

Pursuant to 25 Pa. Code § 102.5(c) a person proposing oil and gas activities that involve five (5) acres or more of earth disturbance over the life of the project must obtain an Erosion and Sediment Control Permit (E&S Permit) prior to commencing the earth disturbance activity. ESCGP-2 is an E&S Permit under Chapter 102 issued pursuant to 25 Pa. Code § 102.5(m) for earth disturbances associated with oil and gas exploration, production, processing or treatment operations or transmission facilities.

Note: Pursuant to § 3211(a) and (g) of the 2012 Oil and Gas Act and 25 Pa Code § 102.4(d) a well permit is required prior to construction of the well site including the access road.

The Department offers a voluntary expedited permit review process. NOIs submitted through the expedited permit review which qualify for permit coverage will be provided with an acknowledgement of coverage within 14 business days from the submission of a complete and accurate NOI. NOIs not submitted under the expedited permit review will be provided with an acknowledgement of coverage within 43 business days if the operator demonstrates compliance with the Department’s antidegradation requirements at 25 Pa Code § 102.4(b)(6) and 102.8(h).

Be advised the expedited permit review is not available for all projects.

Operator Requirement

When the operator/contractor and owner/developer of the facility or activity is not the same individual, corporation, partnership, or other entity, the Department requires in 25 Pa. Code § 102.5(h) that both the operator and owner apply for coverage under a permit as co-permittees. If no operator/contractor has been selected at the time of permit NOI submission, then once selected, the operator/contractor must either be made a co-permittee or the permit must be transferred to the contractor.

Permit Authorization

The DEP Regional Office Oil and Gas Program or delegated Conservation District for transmission activities, will give the applicant written acknowledgement of permit coverage approval or denial.

If the authorization is provided for an initial phase of a phased permitted project, each subsequent phase identified in the permit NOI will require submission for review and decision individually. If approved, a separate authorization will be made on each subsequent phase. For more information on phased permitted activities please see the Department Permit Guidelines for Phased NPDES Stormwater Discharges Associated with Construction Activity Permits, Chapter 102 Erosion and Sediment Control Permits, and Chapter 105 Waterway Restoration Project Permits, Document Number 363-2134-013. Also refer to ESCGP Policy Document No. 550-2100-008.

ESCGP-2 only authorizes earth disturbance under 25 Pa. Code Chapter 102 and does not include or provide any necessary 25 Pa. Code Chapter 105 authorizations of water obstruction, encroachments or dam in wetlands or water bodies of the Commonwealth.

Note: As a condition of the permit, earth disturbance activity cannot begin until written permit authorization is received by the applicant. The applicant must invite the Department at least 7 days prior to the Preconstruction Meeting and Standard Condition #9 of the ESCGP-2 requires Department notification 7 days prior to the start of earth disturbance.

NOI Checklist

The NOI checklist must be completed and enclosed with the NOI. If the applicant is proposing a phased project the checklist must be included with each subsequent phase submission.

The checklist is provided to ensure that the applicant has included all the required information for an administrative review. This checklist will also be utilized by the Department or delegated Conservation District to determine administrative completeness. The Checklist also serves as an outline for these instructions. Failure to provide all of the requested information will delay the processing of the NOI, may prohibit the use of the expedited review, and may result in the NOI being placed on hold with no action, or being considered withdrawn and the NOI file closed with forfeiture of the NOI Filing Fee.

E&S and PCSM/SR Technical Preparation Guides

Technical preparation guides for both the E&S and PCSM/SR Plans have been provided as Attachment A and Attachment B respectively. These guides are intended to provide specific points to be addressed in the E&S and PCSM/SR Plans. Following these guides will help ensure submission of complete and technically sound NOIs. *The Guides are not to be submitted with the NOI.*

1. NOI INSTRUCTIONS

The reviewing entity will give the applicant written acknowledgement of permit coverage approval or denial. If the Department or Conservation District determines the NOI/Application is incomplete or contains insufficient information, the applicant will be notified in writing. The applicant will have 60 days to provide the necessary information along with the appropriate filing fees. If the requested information is not submitted in 60 days, the NOI will be considered withdrawn, and no fees will be refunded. The following information must be submitted in order for the NOI to be considered complete.

Section A: Applicant Information

Application Type. Check the appropriate boxes for the NOI type.

New – A new NOI for a project that has not yet been permitted.

Renewal – An NOI to renew an existing permit that is nearing expiration. This renewal should be submitted a minimum of 60 days prior to expiration.

Note: An expired permit cannot be renewed.

Modification (Major) – An NOI that will modify an existing permit in a major way such as adding to the total disturbed acreage. The reviewing entity should be consulted for discussion prior to submittal of this type of NOI.

Expedited – An NOI requesting to be reviewed under the “Expedited Review Option”.

Phased – An NOI where an additional phase of construction is being added to an already existing permit that was established as a phased project at the time of original permit issuance.

The following information must be provided in order to identify the applicant.

1. **Applicant's Last Name, First Name, MI.** Required information: Enter the Name of the Corporation, Partnership, Agency or Individual.
2. **Co-Applicant's Last Name, First Name, MI.** Required for additional individuals, partners or operators to be co-permittee. Enter the Name of the Corporation, Partnership, Agency or Individual.
3. **Mailing Address.** The mailing address of the Owner/Operator (applicant) identified above (this should not include locational data that is not appropriate for a mail piece). In addition to the street number and name, PO Box#, RR# Box#, or Highway Contract# designations, use any appropriate designation and number to further define the mailing address of the applicant, e.g., APT (Apartment) FL (Floor) BLDG (Building) RM (Room) DEPT (Department) STE (Suite).
4. **City, State, ZIP+4.** Do not use abbreviations for the city name. Use the two-character abbreviation for the state. Include the four-digit extension to the ZIP code.

Section B: Site Information

1. **Site Name.** Provide the name of the site at the specific physical location. **Do not** use abbreviations, acronyms, etc.
2. **Site Location.** Provide the physical address of the location where the permitted activities will occur. **No PO Box Numbers will be accepted for site location information.** Provide the city (or municipality), state, and the ZIP+4.
3. **Detailed Written Directions to Site.** When providing written directions, **do not** use PO Box address data. Include landmarks and approximate distances from the nearest highway.
4. **County and Municipality.** Indicate the county(ies) and municipality(ies) in which the site is located. Check the appropriate box to identify the type of municipality entered (city, borough, and township). If more than one municipality or county is affected, please list them on an attached separate sheet.

Section C: Project Information

1. **Total Project Area/Project Site.** The total project area is the entire area of activity, development, or sale, including the area of an earth disturbance activity, the area planned for an

earth disturbance activity and other areas which are not subject to an earth disturbance activity. Enter the size of the area in acres. See ESCGP Policy Document No. 800-2100-008.

Total Disturbed Area. The Total Disturbed Area is that portion of the total project area where earth disturbance activities are planned to occur over the life of the project. For phased projects, this refers to the disturbed area of the initial project phase **plus** the planned disturbed areas of subsequent project phases in sufficient detail as to allow evaluation of the total project impact. Enter the size of the area in acres to the nearest acre.

2. **Project Name.** Provide the name by which this proposed earth disturbance activity or project is, or will be known.
3. **Project Type and Description.** Check all boxes that best describe the general type of activity. In the Project Description, provide details such as number of wells to be drilled. Does the project include a tank battery, compressor station, pipeline, other, etc.? NOTE: Clean fill cannot be placed in or on waters of the Commonwealth. If fill will be imported or exported, Form FP-001 (Document # 258-2182-773) must be used to certify origin of the fill material.
4. **Latitude and Longitude.** Provide the latitude and longitude coordinates for the approximate center of the project area or facility. For linear projects provide the project's termini. The coordinates should be in degrees, minutes and seconds. The Reference Datum must be North American 1983 (NAD 83). Check the appropriate horizontal collection method.
5. **U.S.G.S. Quad Map Name.** Locate the project area on an 8 1/2" x 11" photocopy of the U.S.G.S. topo map area. The map must include the name of the appropriate 1:24,000 scale U.S.G.S. 7.5 minute series quadrangle map where the project is located. A copy of this map should be submitted with the completed NOI.
6. **Estimated Timetable for Phased Projects.** Identify whether the project will be conducted as a phased permitted project and that a master plan identifying the initial and all subsequent phases are included. Also provide an estimate of the timetable for the major phases (Attach additional sheet(s) of information when necessary). For the initial and subsequent phases, provide a description of the activity undertaken during the phase, total area of the phase, the disturbed area of the phase, and the start and end dates for each phase of the activity. Each of these phases must be clearly identified on the plan drawings and narrative and on a master project site plan. The sum of the total areas and disturbed areas listed under line 6 should be equal to the size of the Total Project Area and Total Disturbed Area respectively, listed on line 1 of the NOI form. For more information on phased permitted activities please see the Department Permit Guidelines for Phased NPDES Stormwater Discharges Associated with Construction Activity Permits, Chapter 102 Erosion and Sediment Control Permits, and Chapter 105 Waterway Restoration Project Permits, Document No. 363-2134-013 and ESCGP Policy Document No. 550-2100-008.
7. **Existing and previous land use.** List the existing and previous land use for at least 5 years.
8. **Other Pollutants.** If the stormwater discharge contains a pollutant other than sediment, list the pollutant, the source of the pollutant, and concentration. Provide a plan for removal of the pollutant.
9. **Preparedness Prevention and Contingency (PPC) Plan.** If you will use, store or transport materials including fuels (other than fuels contained in equipment fuel tanks), chemicals, solvents, biocides waste water, wash water, core drilling wastewater, cement, sanitary wastes, solid wastes, hazardous wastes or other waste or materials onto, on or from a project site during earth disturbance activities, a PPC Plan must be developed and implemented. In addition, the PPC Plan must be available on site during earth disturbance activities and available upon request.
10. **Siltation impaired waters.** If the project has the potential to discharge to siltation impaired waters, demonstrate that the project will not result in a net change (pre to post condition) in volume, rate, or water quality or otherwise explain how the project will not contribute to a violation of water quality standards. See Section G (below).
11. **Identify naturally occurring geologic formations or soil conditions** that may have potential to cause pollutions during earth disturbance activity and include BMPs to avoid or minimize potential pollution and its impacts.
12. **Identify potential thermal impacts to surface waters** of the Commonwealth from earth disturbance activity including BMPs to avoid, minimize or mitigate potential thermal pollution.
13. **E&S and PCSM/SR Plan Consistency.** The E&S Plan must be planned, designed and implemented to be consistent with the PCSM or SR Plan. Unless otherwise approved by the Department, the PCSM Plan must be separate from the E&S Plan and labeled as such in the final plans for construction (See 25 Pa. Code § 102.8(d)). Projects that require site restoration as opposed to PCSM may include the SR Plan as part of the E&S Plan (See 25 Pa. Code §102.8(n)).

14. **Riparian Forest Buffers.** Identify existing and proposed riparian forest buffers.
15. **Riparian Buffer Exceptions and Waivers.** Pursuant to 25 Pa. Code § 102.14(d)(1)(vii) oil and gas activities for which site reclamation or restoration is part of the permit authorization in Chapter 78 are not required to provide mandatory riparian buffers in accordance with §102.14 (a) and (b) so long as any existing riparian buffer is undisturbed to the extent practicable. Projects which involve only repair, replacement or maintenance of existing pipelines are also exempted if riparian buffers are undisturbed to the extent practicable.

Other projects that do not qualify for exemptions of riparian buffer requirements must provide a buffer of 150 feet unless the project qualifies for a waiver.

For earth disturbance activities associated with existing riparian buffers the Department has provided for waivers associated with certain activities as long as the existing riparian buffers are undisturbed to the extent practicable and the applicant demonstrates that reasonable alternatives will otherwise meet the requirements of Chapter 102. Applicants requesting a waiver must submit a written request that demonstrates that reasonable alternatives will meet the requirements of the Department or Conservation District with the NOI. The earth disturbance activities for which waivers may be obtained include:

- Linear projects which may include pipelines, public roadways, rail lines or utility lines.
 - Projects that are temporary in nature and the site will be fully restored to its existing condition.
 - Projects for which compliance with §§102.14(a) or 102.14(b) is not appropriate or feasible due to site characteristics, or existing structures at the project site.
16. **Antidegradation Implementation.** Indicate whether the antidegradation implementation requirements are met.
17. **Seasonal High Ground Water.** Indicate whether the seasonal high ground water table has been identified at all proposed pit and impoundment locations.
18. **Provide the Chapter 93 stream classifications.** The designated use of the receiving waters can be obtained from 25 Pa. Code Chapter 93 of the Department's regulations located online at www.pacode.com. The existing use can be obtained from the Department's Statewide Existing Use Listing at www.depweb.state.pa.us,

keyword: Existing Use. Siltation-impaired waters and watersheds can be identified in Pennsylvania's 303(d) list.

19. **Expedited Review Request.** The Expedited Review is not available for all projects. The applicant must refer to Item 8, Expedited Review Process, Page 17 of these instructions to determine if the project is eligible for an expedited review.

Section D: Erosion and Sediment Control Plan BMPs

All earth disturbance activities requiring permit coverage under 25 Pa. Code Chapter 102 must ensure that a written E&S Plan that meets the requirements as described in Section 102.4(b) is prepared and submitted with the NOI. The Chapter 102 regulations require that the design standards be based on the design standards in §102.11 unless the applicant demonstrates to the department that an alternative approach will be more protective, or will protect and maintain existing and designated uses. Unless otherwise authorized by the Department or Conservation District, earth disturbance activities must be planned and implemented in accordance with the following:

- Minimize the extent and duration of the earth disturbance.
 - Maximize protection of existing drainage features and vegetation.
 - Minimize soil compaction.
 - Utilize other measures or controls that prevent or minimize the generation of increased stormwater runoff.
1. Provide a summary of E&S BMPs that demonstrates that the E&S BMPs have been and will be implemented in accordance Section 102.4(b).
 2. **Riparian Buffer Information** – Check off appropriate boxes and provide information as applicable. If a waiver is requested, the applicant must provide a demonstration that there are reasonable alternatives for compliance with this section, that any existing riparian buffer is undisturbed to the extent practicable, and that the activity will otherwise meet the riparian buffer requirements of Chapter 102.
 3. **Thermal Impact Analysis.** This analysis must be completed as part of the ESCGP-2 Permit NOI. The applicant shall provide a summary of potential thermal impacts associated with the planned project and how the potential thermal impacts are to be avoided, minimized, or mitigated.

Some examples include: minimizing impervious surfaces, maintaining shade over and around construction sites to the extent possible and

discharging from the bottom of surface impoundments, using subsurface impoundments, infiltration, and maximizing the use of vegetated areas to cool runoff prior to discharge. Maintaining canopy cover and riparian buffers that limit ground surface exposure to direct sunlight is effective in the control of thermal pollution of surface waters. Using borings instead of open cuts for utility crossings will limit vegetation disturbance and exposure of the ground surface to sunlight.

The analysis should evaluate the effectiveness of various alternatives or combination of alternatives that prevent or minimize thermal pollution.

Section E: Site Restoration (SR) Plan BMPs

The portion of a site reclamation or restoration plan (SR plan) that identifies PCSM BMPs to manage stormwater may be used to satisfy PCSM requirements if the SR Plan meets the requirements of §§102.8 (b), (c), (e), (f), (h), (i), and (l) and when applicable (m) for the following activities (1) oil and gas activities permitted in accordance with Chapter 78, (2) pipelines and other similar utility infrastructure and (3) Department permitted activities involving less than 1 acre of earth disturbance Regulated activities not included above must submit PCSM Plans that meet all provisions of §102.8 (See Section F of the NOI Instructions).

Three copies of the plan must be provided. The plan should address rate, volume, and water quality impacts to each drainage area.

The permit NOI allows the use of design standards other than those specified in Chapter 102 provided that certain criteria are adhered to. The SR Plan should be designed to maximize volume reduction technologies, eliminate (where possible) or minimize point source discharges to surface waters, preserve the integrity of stream channels, and must protect the physical, biological and chemical qualities of the receiving water.

The SR plan must be consistent with any DEP approved and current County Act 167 Plan. The Department considers any Act 167 Plan from 2005 or later to be current and requires that SR Plans must demonstrate consistency with the Act 167 Plan. Where a project is located within a watershed and municipality covered by an Act 167 Plan, approved by the Department prior to 2005, the Act 167 consistency requirement is not applicable and the SR Plan will only be evaluated for compliance with Chapter 102. To demonstrate consistency with the Act 167 plan, the applicant may select one of the following options:

- Submit a letter provided by the municipal or county planning engineer that verifies plan consistency.
- Submit an Act 167 Plan consistency verification report. The report must be prepared and sealed

by a licensed professional. The report should include the following:

- a. A summary of the PCSM recommendations in the plan including Peak Rate Controls, Volume Controls, Water Quality Controls and any other PCSM controls recommended in the plan. A separate summary should be submitted for each plan in the project area. The summary should be as detailed as practicable.
- b. Identification of watersheds in the plan where hydrologic modeling was performed and release rates more stringent than the DEP Stormwater BMP Manual Recommended Peak Rate Control Guideline have been established.
- c. Calculations to demonstrate that the SR plan is consistent with the Department approved Act 167 plan including post construction stormwater runoff peak rate, volume, water quality and any other control recommended by the plan. When applicable the appropriate worksheets referenced in the DEP Stormwater Best Management Practices (BMP) Manual should be included.

If no Department approved Act 167 plan exists, the SR plan must otherwise comply with Section 102.8 and should be consistent with the practices contained within the DEP Stormwater Best Management Practices (BMP) Manual and should include the appropriate completed worksheets referenced in the Stormwater Best Management Practices (BMP) Manual. In addition to these volume, rate and water quality requirements, all SR plans must comply with local flood control requirements.

Permittees and co-permittees are responsible for proper installation of the SR Plan BMPs prior to the submission of the Notice of Termination for this permit. **BMP's not included in the departments manual will require documentation to support the effectiveness of the BMP.** SR Plans must address all requirements of Chapter 102.8(n).

1. **Site Restoration Plan Information.** Check all applicable boxes and provide the requested information regarding any Department approved Act 167 plans.
2. **Riparian Buffer Information.** Check off appropriate boxes and provide information as applicable. If a waiver is requested, the applicant must provide a demonstration that there are reasonable alternatives for compliance with this section, that any existing riparian buffer is undisturbed to the extent practicable, and that the activity will otherwise meet the riparian buffer requirements of Chapter 102.

- 3. Summary Table for Supporting Calculation and Measurement Data.** Please provide this summary data from the calculations and measures submitted as part of the SR Plan. Reference the Stormwater Methodology used, and check off the appropriate volume measurement used (acre-feet or cubic feet). For a project involving multiple watershed boundaries, please submit a complete separate Summary Table for each additional watershed. Watersheds should be identified based on the drainage patterns of the project area.
- 4. Summary Description of Site Restoration BMPs.** Please check all the appropriate boxes. If there is no check box for a planned BMP, check the box for "other" and list the BMP. Do not list erosion and sediment control BMPs.
- 5. Off-site Discharge Analysis.** If an applicant proposes off-site discharges of stormwater from SR to areas other than surface waters, documentation must be provided to demonstrate that the discharge will not cause erosion, damage, or a nuisance to off-site properties. It is the applicant's responsibility to obtain a legal authority to discharge onto adjacent properties. Please check the appropriate box in this block.
- 6. Thermal Impact Analysis.** This analysis must be completed as part of the ESCGP-2 Permit NOI. The applicant shall provide a summary of potential thermal impacts associated with the planned project and how the potential thermal impacts are to be avoided, minimized, or mitigated.

Some examples include: minimizing impervious surfaces, maintain shade over and around construction sites to the extent possible and discharging from the bottom of surface impoundments, using subsurface impoundments, infiltration, and maximize the use of vegetated areas to cool runoff prior to discharge. Maintaining canopy cover and riparian buffers that limit ground surface exposure to direct sunlight is effective in the control of thermal pollution of surface waters. Using borings instead of open cuts for utility crossings will limit vegetation disturbance and exposure of the ground surface to sunlight.

The analysis should evaluate the effectiveness of various alternatives or combination of alternatives that prevent or minimize thermal pollution.

Section F: Post Construction Stormwater Management Plan BMPs

This permit requires a written Post Construction Stormwater Plan (PCSM) to be developed, implemented, operated and maintained in accordance with Section 102.8(a). The PCSM Plan must comply with 25 Pa. Code § 102.8 and should be designed to maximize volume reduction technologies, eliminate

(where possible) or minimize stormwater discharges to surface waters, preserve the integrity of stream channels, and must protect the physical, biological and chemical qualities of the receiving water.

One original and 2 copies of the plan must be provided. The plan should address rate, volume, and water quality impacts to each drainage area. The PCSM plan must be consistent with any DEP approved and current County Act 167 Plan. The Department considers any Act 167 Plan from 2005 or later to be current and requires that PCSM plans must demonstrate consistency with the Act 167 Plan. Where a project is located within a watershed and municipality covered by an Act 167 Plan, approved by the Department prior to 2005, the Act 167 consistency requirement is not applicable and the SR Plan will only be evaluated for compliance with Chapter 102. To demonstrate consistency with the Act 167 plan, the applicant may select one of the following options:

- Submit a letter provided by the municipal or county planning engineer that verifies plan consistency.
- Submit an Act 167 Plan consistency verification report. The report must be prepared and sealed by a licensed professional. The report should include the following:
 - a. A summary of the PCSM recommendations in the plan including Peak Rate Controls, Volume Controls, Water Quality Controls and any other PCSM controls recommended in the plan. A separate summary should be submitted for each plan in the project area. The summary should be as detailed as practicable.
 - b. Identification of watersheds in the plan where hydrologic modeling was performed and release rates more stringent than the DEP Stormwater BMP Manual Recommended Peak Rate Control Guideline have been established.
 - c. Calculations to demonstrate that the SR plan is consistent with the Department approved Act 167 plan including post construction stormwater runoff peak rate, volume, water quality and any other control recommended by the plan. When applicable the appropriate worksheets referenced in the DEP Stormwater Best Management Practices (BMP) Manual should be included.

If no Department approved Act 167 plan exists, the PCSM Plan must otherwise demonstrate compliance with Section 102.8(g) and should be consistent with the practices contained within the DEP Stormwater Best Management Practices (BMP) Manual. Complete and attach the appropriate worksheets referenced in the Stormwater Best Management Practices (BMP) Manual. In addition to these volume,

rate and water quality requirements, all SR plans must comply with local flood control requirements.

Permittees and co-permittees are responsible for proper installation of the PCSM Plan BMPs prior to the submission of the Notice of Termination for this permit. **BMP's not included in the departments manual will require documentation to support the effectiveness of the BMP.**

1. **PCSM Plan Information** – Check all applicable boxes and provide the requested information regarding any Department approved Act 167 plans.
2. **Riparian Buffer Information** – Check off appropriate boxes and provide information as applicable. If a waiver is requested, the applicant must provide a demonstration that there are reasonable alternatives for compliance with this section, that any existing riparian buffer is undisturbed to the extent practicable, and that the activity will otherwise meet the riparian buffer requirements of Chapter 102.
3. **Summary Table for Supporting Calculation and Measurement Data.** Please provide this summary data from the calculations and measures submitted as part of the PCSM Plan. Reference the Stormwater Methodology used, and check off the appropriate volume measurement used (acre-feet or cubic feet). For a project involving multiple watershed boundaries, please submit a complete separate Summary Table for each additional watershed. Watersheds should be identified based on the drainage patterns of the project area.
4. **Summary Description of Post Construction Stormwater BMPs.** Please check all the appropriate boxes. If there is no check box for a planned BMP, check the box for “other” and list the BMP. Do not list erosion and sediment control BMPs.
5. **Off-site Discharge Analysis.** If an applicant proposes off-site discharges of stormwater from PCSM to areas other than surface waters, documentation must be provided to demonstrate that the discharge will not cause erosion, damage, or a nuisance to off-site properties. It is the applicant’s responsibility to obtain a legal authority to discharge onto adjacent properties. Please check the appropriate box in this block.
6. **Thermal Impact Analysis.** This analysis must be completed as part of the ESCGP-2 Permit NOI. The applicant shall provide a summary of potential thermal impacts associated with the planned project and how the potential thermal impacts are to be avoided, minimized, or mitigated. Some examples include: minimizing impervious surfaces, maintain shading over and around construction sites to the extent possible and

discharging from the bottom of surface impoundments, using subsurface impoundments, infiltration, and maximize the use of vegetated areas to cool runoff prior to discharge. Maintaining canopy cover and riparian buffers that limit ground surface exposure to direct sunlight is effective in the control of thermal pollution of surface waters. Using borings instead of open cuts for utility crossings will limit vegetation disturbance and exposure of the ground surface to sunlight.

The analysis should evaluate the effectiveness of various alternatives or combination of alternatives that prevent or minimize thermal pollution.

7. **Critical PCSM plan stages.** Identify the critical stages of implementation of the PCSM plan for which a licensed professional or designee shall be present on site. The critical stages may include the installation of underground treatment or storage BMPs, structurally engineered BMPs or other BMPs as deemed appropriate by the Department or conservation district.

Section G: Antidegradation Analysis

This section must be completed where activities will be conducted in special protection waters or siltation-impaired waters.

Maintaining and protecting existing water quality for High Quality (HQ), Exceptional Value (EV) streams, and Exceptional Value (EV) wetlands and protecting designated and existing uses for all surface waters is critical. The antidegradation requirements in 25 Pa. Code § 93.4c must be met by following the process set out in 25 Pa. Code Section 102.4(b)(6) and 102.8(h) (relating to implementation of antidegradation requirements). The Antidegradation Analysis outlines that process.

Part 1 - Nondischarge Alternative Evaluation

Nondischarge alternatives are environmentally sound and cost-effective BMPs that individually or collectively eliminate the net change in stormwater volume, rate and quality for storm events up to and including the 2-year/24-hour storm when compared to the stormwater rate, volume and quality prior to the earth disturbance activities to maintain and protect the existing quality of the receiving surface water of this Commonwealth. Nondischarge alternative BMPs should be evaluated and included in E&S and PCSM/SR Plans. If the applicant demonstrates that nondischarge alternatives do not exist for the project the applicant must utilize ABACT. For nondischarge BMPs not checked, provide an explanation of why they are not utilized.

Part 2 – Antidegradation Best Available Combination of Technologies (ABACT)

In circumstances where nondischarge alternatives for the project do not exist, an applicant must utilize ABACT BMPs in their E&S and PCSM/SR Plans to

demonstrate that any net change in stormwater runoff will maintain and protect the existing quality and water uses of receiving surface waters. ABACT means environmentally sound and cost effective treatment, land disposal, pollution prevention and stormwater reuse BMPs that individually or collectively manage the difference in the net change in stormwater volume, rate, and quality for storm events up to and including the 2-year/24-hour storm when compared to the stormwater rate, volume and quality prior to the earth disturbance activities to maintain and protect the existing quality of the receiving surface waters of this Commonwealth.

Erosion and Sediment Control Antidegradation Implementation

To satisfy the antidegradation implementation requirements the applicant should refer to 102.4(b)(6), and ensure they (1) evaluate and include nondischarge alternatives in the E&S plan, and (2) if nondischarge alternatives do not exist the E&S Plan must include ABACT BMPs that manage the change in the 2-year/24-hour storm event. Nondischarge alternatives and ABACT, and their design standards, are listed in the Erosion and Sediment Control BMP Manual.

PCSM/SR Antidegradation Implementation

To satisfy the antidegradation implementation requirements the applicant should refer to 102.8(h) and ensure they (1) evaluate and include nondischarge alternatives in the PCSM/SR Plan, and (2) if nondischarge alternatives do not exist, the PCSM/SR Plan must include ABACT BMPs that manage the change in 2-year/24-hour storm event. Nondischarge alternatives and ABACT, and their design standards, are listed in the DEP Stormwater BMP Manual. Where ABACT BMPs will be utilized, the applicant's pre to post comparative analysis must demonstrate any net change in stormwater will be managed utilizing ABACT BMPs that will protect and maintain water quality and designated uses.

For nondischarge alternative and ABACT BMPs not listed in the Department's manuals, the applicant must provide data to support the BMPs, including a demonstration that they will maintain and protect the existing quality of receiving surface waters.

Section H: Compliance Review

Provide the information requested. Use additional pages if necessary. If the applicant(s) are in violation of any permits issued by DEP or have been in violation of any regulated activities within the past five years, the information in this section must be completed.

Section I: Certification by Person Preparing NOI

The person responsible for preparing the E&S Plan and PCSM/SR Plan with PCSM BMPs must complete this section. If the applicant is requesting an

expedited review, the licensed professional responsible for the development of a complete permit NOI package, including the E&S and PCSM/SR Plans that specifies BMP implementation and maintenance requirements that meet regulatory requirements, must sign and seal the NOI in the space provided certifying that the information provided is true and correct. The licensed professional must also provide the location and date of the most recent Department training they attended.

Section J: Applicant Certification

The NOI shall be signed as follows:

1. In the case of corporations, by a principal executive officer of at least the level of vice president, or an authorized representative.
2. In the case of a partnership, by a general partner.
3. In the case of a sole proprietorship, by the proprietor.
4. In the case of a municipal, state, or other public facility, by either a principal executive officer, ranking elected official or other authorized employee.

Section K: Contact for Additional Information

Provide contact information for the individual to provide assistance to the Department or Conservation District with question concerning the NOI.

2. EROSION AND SEDIMENT CONTROL (E&S) PLAN REQUIREMENTS

The E&S Plan that meets the requirements of 25 Pa. Code § 102.4(b) must be submitted with the NOI and must contain Best Management Practices (BMPs) designed to minimize discharges to surface waters, preserve the integrity of stream channels and protect the physical, biological and chemical qualities of the receiving water. The Department recommends that the E&S Plan be developed utilizing guidelines and BMP information provided in the Erosion and Sediment Control BMP Manual.

The E&S Plan must be submitted (1 original, 2 copies) to the Department or authorized county Conservation District (for transmission facilities) along with the completed NOI, Checklist and Technical Review Guide. The Checklist includes an outlines of the information needed to submit a complete E&S Plan.

If the project is located in a High Quality or Exceptional Value watershed or Exceptional Value wetland pursuant to 25 Pa. Code Chapter 93 and 25 Pa. Code Chapter 105, the E&S Plan must address the special protection requirements in the department's antidegradation implementation requirements at 25 Pa. Code § 102.4(b)(6) and Section II Chapter 4 of the Oil and Gas Operators Manual. The applicant must identify whether the receiving water/watershed is siltation-impaired.

In most applications, an erosion and sediment control plan will consist of two parts: a plan narrative and maps/drawings. Maps and drawings are used to show the existing and proposed topography, as well as the construction details and maintenance details for the proposed Best Management Practices (BMPs). The narrative is used to document the design calculations for the BMPs.

Note: All Program Manuals, technical guidance, NOI forms and instructions related to the E&S, NPDES, and Post Construction Stormwater Management Programs can be found at www.depweb.state.pa.us. On the upper left side of the screen, click on the keyword stormwater.

BMP's not included in the department's manuals will require documentation to support their effectiveness.

The applicant's Erosion and Sediment Control Plan should include the following:

a. Topographic Features:

Plan drawings showing the existing topographic features of the project site including the immediate surrounding area must be provided. The scale of the drawings must be large enough to clearly depict the topographic features and the contours must be at an interval that will adequately describe the topography of the site. Scales of 1 inch equals 50 feet or less, with 2-foot maximum contour intervals are recommended. The drawings must include the location of the project with respect to roadways, municipalities, streams, watercourses, existing structures, existing ground cover, utilities and other identifiable landmarks, etc. The immediate surrounding area must be of sufficient size to include all areas contributing runoff to the project site, planned BMPs and water courses receiving runoff from the project for evaluation relative to resistance to erosion. All symbols shown on the drawings must be included in a legend; a north arrow and scale must also be shown on the drawings. These requirements also apply to all offsite disposal or borrow areas.

In addition to the topographic map, a location map is required that shows the relationship of the project to municipal boundaries and major highways. The location map may be included on the topographic map as an insert or may be included as a separate sheet in the narrative report. A reprint or a copy of a portion of a 7½ minute USGS quadrangle map is recommended for this purpose. The name of the USGS quadrangle map must be included on the location map. For permit applications, a location map reprinted or copied from USGS quadrangle maps is required.

b. Soil Characteristics:

The locations of the soils may be delineated on the drawings discussed above, or on a separate map

of the site. A photocopy of a portion of the county soil survey on which the proposed project can be clearly shown may also be used. The types, depth, slope and limitations of the soils should be included in the project narrative or included on the drawings. Data on the physical characteristics of the soils, such as their texture, resistance to erosion and suitability for intended (limitations) use is to be included in the narrative report. This information is available in soil survey reports, published by the USDA, Natural Resources Conservation Service (formerly Soil Conservation Service), in cooperation with the Pennsylvania State University College of Agriculture and others. The reports are available from the county conservation districts. The means to address the identified soils limitations must be included on the drawings. For example, a note to use only certain areas as borrow areas for fill for sediment basins or traps, or special fertilization requirements for portions of the project, etc.

c. Earth Disturbance Activity:

The proposed alteration in the project area and the limits of the project area must be shown on the plan drawings. Such information as the limits of earth disturbance, the areas of cuts and fills and the locations of roads, existing and proposed structures are to be included. Proposed contours of the project area must be included on these drawings. Separate drawings, or inserts on the plan drawings must be included for off-site borrow or disposal areas which are part of the project. These drawings or inserts must include the same information as required on the plan drawings. A legend that describes all of the alterations and BMPs to be used for erosion and sediment control must be included on the drawings.

A description of the past, present and proposed land use in the project area must be included in the project narrative.

d. Project Site Runoff

The maximum area draining to all basins, traps and channels must be determined to calculate volume and rate of runoff. In some instances the drainage area will increase or decrease as the site grading proceeds. In such cases, the maximum drainage area to the BMP must be used to determine the design capacity.

An analysis must be included in the project narrative showing the impact that runoff from the project site will have on existing downstream watercourses' resistance to erosion. Design computations for appropriate protective measures for downstream watercourses must be included when applicable. A discharge analysis for all non-surface water discharges must be provided in the project narrative.

e. Surface Water Classification

All streams in Pennsylvania are classified based on their designated and existing water uses and water quality criteria. If the runoff from a project area discharges to a stream that is classified for Special Protection or siltation-impaired waters, more stringent criteria are used to design the BMPs for that site. The criteria are found in Chapter 102.

The applicant must show on the drawings all streams, springs, wetlands, and floodways within, adjacent or receiving water from the project site. All special protection waters and existing uses as presented in Chapter 93 must be clearly identified on the drawings and in the project narrative.

f. BMP Description Narrative

A description of the location and type of perimeter and onsite BMPs used before during and after earth disturbance activity must be included in the project narrative.

g. BMP Installation Sequence Narrative

The project narrative must provide a sequence of BMP installation and removal. Unlike the previous item that identifies the location and type of BMP this item requires list of temporary or permanent BMPs to be installed and a schedule for their installation and removal as related to the various phases of the project. Other BMPs are constructed when needed to accommodate the planned sequence of project installation. The narrative must include a complete schedule of installation and removal of erosion control BMPs as they relate to the various phases of earthmoving activities.

Appropriate BMPs for sediment pollution control must be in place before earth disturbance occurs within a given drainage area. All of the steps to be taken from the initial site clearing through the final stabilization of the site must be included.

h. Supporting Calculations and Measurements

All design information for BMPs must be included in the project narrative. The information will vary according to the BMP, but should include such information as the drainage area, flow rate, velocity and the proposed method of stabilization. The STANDARD WORKSHEETS included in the *Erosion and Sediment Control BMP Manual* (No. 363-2134-008) gives guidance for the design calculations and information required. The applicant is not required to use the STANDARD WORKSHEETS, but must furnish the same information as indicated in the worksheets.

i. Plan Drawings

The locations of the BMPs must be shown on the plan drawings described earlier. A legend, describing all symbols must be included on all plan drawings. All construction details and specifications for the facilities must be included on

the drawings including standard notes and optional notes to clarify or explain requirements. Typical sketches maybe used; these sketches must provide sufficient information to show critical dimensions and construction details for each specific BMP. Standard Construction Details may be copied from those in the *Erosion and Sediment Control Manual* (No. 3632134-008) and inserted into the erosion and sediment control plan drawings of specific projects. Proposed new contours must tie into existing contours.

j. Maintenance Program

A maintenance program for both the temporary and permanent erosion and sediment control BMPs, including disposal of materials removed from the BMPs or project area, must be included in the project narrative and plan drawings. The maintenance program must include a schedule for inspection of each BMP and provides for inspection after each measurable runoff event as well as on a weekly basis. The type of maintenance, such as cleanout, repair, replacement, re-grading, stabilizing, etc. for each of the BMPs is to be included in the program. For sediment basins, the elevation corresponding to top of sediment storage level must be specified and a means to identify this elevation must be identified. The means of disposal of the materials removed from the BMPs must be specified. If materials removed from the BMPs are to be removed from the project area, the site and method of disposal must be indicated. Guidance on appropriate maintenance actions is provided for each BMP described in the *Erosion and Sediment Control BMP Manual* (No.363-2134-008). Maintenance requirements must be shown on the plan drawings.

k. Material Recycling and Disposal

Applicants for earth disturbance activities must ensure that proper mechanisms are in place to control waste materials. Construction wastes include, but are not limited to, excess soil materials, building materials, concrete wash water, sanitary wastes, etc. that could adversely impact water quality if not handled properly. The applicant must develop a plan in the project narrative which implements measures for housekeeping, materials management, and litter control. Wherever possible, recycling of excess materials is preferred, rather than disposal. A note directing proper handling, recycling and disposal of waste materials must be added to the plan drawings.

l. Soil Conditions and Geologic Formations

Geologic formations containing minerals (e.g. pyrite) in sufficient quantities that could result in discharges which do not meet water quality standards for the receiving surface water(s) should be identified and discussed in the project narrative.

The locations of the formations containing those minerals (if not site wide) must be shown on the plan drawings. Appropriate measures to prevent such discharges (including but not limited to proper handling, isolation, disposal, etc.) should also be provided on the plan drawings along with typical details illustrating the procedures and/or BMPs to be used to avoid or minimize potential pollution.

Bedrock or soil conditions which could result in significant slope failures causing mass soil movement into surface waters, property damage, or a public safety hazard should also be identified and discussed in the project narrative. The erosion control project narrative should briefly state the methods incorporated into the plan which address such hazards. Plan drawings should clearly mark the locations where potential for slope failures exist, and appropriate construction details and typical details should be provided. When poor geologic or soil conditions cannot be avoided, BMPs to minimize or mitigate their impact must be identified in the plan drawings and implemented at the construction site.

m. Thermal Impacts

An analysis of how thermal impacts, associated with the project, will be avoided should be provided in the project narrative. If thermal impacts cannot be avoided, describe in the project narrative how impacts are to be minimized and the BMPs that will be used to mitigate the impacts in a manner that will protect and maintain surface water quality. BMPs to be used to minimize or mitigate thermal impacts must be provided on the plan drawings with associated details and /or typical details. The primary means to address thermal pollutions is to limit the size and duration of exposed earth or through infiltration. Additional information on minimizing thermal impacts can be found in the *Pennsylvania Stormwater BMP Manual* (No. 363-0300-002).

n. E&S Plan and PCSM/SR Plan Consistency

The overall design of the project should support the management of stormwater for erosion and sediment control during earth disturbance activities in a manner that is compatible with and can be integrated into, structural and non-structural PCSM/SR practices and approaches. The project narrative should discuss the overall project and how the Erosion and Sediment Control Plan will accommodate Post Construction Stormwater Management/Site Restoration.

The plan drawings should identify locations where BMPs are planned and designed to be integrated into PCSM/SR structural and non-structural practices and approaches.

o. Riparian Forest Buffers

When riparian forest buffers will be incorporated into a project site, the areas of existing buffers or the areas where buffers will be developed should be identified on the plan drawings.

p. Antidegradation Requirements

Applicants proposing earth disturbance activities within special protection watersheds or siltation-impaired watersheds must implement nondischarge alternatives wherever cost-effective and environmentally sound. An evaluation of nondischarge alternatives should be provided in the project narrative that identifies viable alternatives for the proposed project. If no viable nondischarge alternatives exist the Erosion and Sediment Control Plan must include ABACT (Antidegradation Best Available Combinations of Technology). The plan drawings must show the locations and details for all non-discharge alternatives when identified or ABACTs when non-discharge alternatives don't exist.

3. PERMIT NOI FILLING FEES

A check for \$500 plus \$100 per acre of earth disturbance must be included with the NOI. Fractional acreage shall be rounded to the closest whole number (≥ 0.5 Round up; < 0.5 Round down).

For an NOI submitted to the Department, a check is to be made payable to the "Commonwealth of Pennsylvania, Clean Water Fund". The Check is to be dated within 10 days of the NOI submittal date and sent with the NOI directly to the Oil and Gas Program of the appropriate DEP Regional Office.

For an NOI submitted to a delegated County Conservation District, two checks are required. A check for the administrative fee of \$500 made payable to the delegated County Conservation District "Clean Water Fund". A second check for the \$100 per acre disturbance fee made payable to the "Commonwealth of Pennsylvania, Clean Water Fund". Both checks are to be dated within 10 days of the NOI submittal date and sent with the NOI directly to the delegated County Conservation District. Only certain federal and state government agencies are exempt from the fee.

Phased projects will need to pay the base administrative fee and the disturbed acreage fee for the initial phase or phases being submitted. Subsequent phase submissions must include only the disturbed acreage fee for that phase.

Note: The delegated County Conservation District will forward the 'per acre disturbance fee' check to the Water Management Program of the appropriate DEP Regional office.

4. MUNICIPAL NOTIFICATION

a. Act 14

Act 14, which amended the Commonwealth's Administrative Code (71 P.S. § 510-5), requires every applicant for a new, amended, or revised permit to give written notice to each municipality (borough, township) and county government in which the facility is located. The municipality and county government must receive the written notice at least thirty (30) - days before the Department may issue or deny approval of coverage. A sample of the municipal notification is provided in these instructions as **Attachment C**. The attached sample letter should be used when providing notification in accordance with Act 14.

Proof of Receipt - The applicant must submit with the NOI:

1. A copy of correspondence notifying the municipality and county government of your intention to submit a NOI, and
2. Evidence that the municipality and county government has received your notification. Acceptable forms of this evidence include certified mail receipt, proof of deliver from a commercial carrier or written acknowledgement of the notification from the municipality.

Submit a copy of the NOI and E&S and PCSM/SR Plan drawings to each municipal and county government with the notification. The plan drawings should accurately portray the type and scope of work that is proposed. If the plans included in the municipal notification are not final, they should be marked accordingly. Failure to provide a copy of the notification correspondence and evidence of municipal receipt of your notification with the NOI will delay processing of your NOI. Failure to comply with municipal notification will result in the return of the NOI as incomplete.

b. Cultural Resources Notice

A Cultural Resources Notice is not required for ESCGP-2 as per the exemptions to the History Code (0120-PM-PY0003). However permitted activities which may affect Historic Resources on the National Register of Historic Places are not exempt regardless of size. Accordingly, when the permitted activities are on lands of the Allegheny National Forest (ANF), evaluations of cultural resources are to be coordinated with the appropriate ANF Ranger District. If, during the earth disturbance activity, historic resources are encountered, the earth disturbance activity should be ceased immediately and the Pennsylvania Historic and Museum Commission notified.

For additional information, refer to DEP's Implementation of Pennsylvania History Code (No. 012-0700-001), see www.depweb.state.pa.us.

5. PENNSYLVANIA NATURAL HERITAGE PROGRAM (PNHP)

Proof of consultation with PNHP is required. In order to provide proof of consultation with PNHP in accordance with 25 Pa. Code §102.6(a)(2) regarding the presence of a State or Federal threatened or endangered species on the project site, submit a Pennsylvania Natural Diversity Inventory Project Environmental Review Receipt (PNDI Receipt). The PNDI ER tool can be conducted via the Internet at the www.naturalheritage.state.pa.us/ website. First time users will have to register at the website before conducting the review. A PNDI Receipt is automatically available for printing upon completion of the review. If the PNHP review determines there are potential impacts to a T&E species, the PNHP review receipt will provide an explanation of the potential impact(s) and instructions on how to resolve the potential impact. **READ AND FOLLOW THESE INSTRUCTIONS CAREFULLY** Following the procedure outlined in the *Policy for Pennsylvania Natural Diversity Inventory (PNDI) Coordination During Permit Review and Evaluation (PNDI Policy)*, No. 400-0200-001 meets the requirements in § 102.6(a)(2).

There are two options available to applicants for handling PNDI coordination in conjunction with the Department's permit review process: sequential review and concurrent review. If selecting sequential review, submit a PNDI receipt and clearance letters, if any, with the NOI. If selecting concurrent review, submit a PNDI receipt, a completed PNDI Form and a U.S.G.S. 7.5 minute quadrangle map with the project boundaries delineated on the map with the NOI. Additionally, submit the PNDI receipt to the appropriate jurisdictional agency. While DEP is commencing its completeness and technical review of the application, the applicant will engage in any consultation with the jurisdictional agencies. It is important to note, however, that the concurrent review option, carries certain risks and consequences to the applicant, including delay and redesign. See *PNDI Policy* pages 7-8.

When the activities are on lands of the Allegheny National Forest (ANF), evaluation of potential conflicts is to be coordinated with the appropriate ANF Ranger District.

Please note, early coordination (prior to NOI submission), by prospective applicants and their consultants with the appropriate jurisdictional agencies using the PNDI system is the most effective means of timely permit decision. For additional information, refer to DEP's *Policy for Pennsylvania Natural Heritage Program (PNHP) Coordination*

During Permit Review and Evaluation (400-0200-001), see www.depweb.state.pa.us.

6. POST CONSTRUCTION STORMWATER MANAGEMENT/SITE RESTORATION PLANS

A Post Construction Stormwater Management/Site Restoration Plan (PCSM/SR Plan) that meets the requirements of Pa. Code § 102.8 must also be submitted with the NOI and must identify BMPs to be installed, which manage and treat the stormwater discharges to protect water quality after construction. The Department recommends that the PCSM/SR Plan be developed utilizing DEP's Stormwater Best Management Practices Manual. PCSM/SR Plan BMPs should be designed to maximize replication of the natural hydrologic cycle, to protect the structural integrity of the stream, and to protect and maintain existing and designated uses of the Commonwealth waters. The PCSM/SR Plan must be submitted (1 original, 2 copies) to the Department or authorized county Conservation District (for transmission facilities) along with the completed NOI, E&S Plan, Checklist and Technical Review Guide. The Checklist is an outline of the information needed to submit a complete PCSM/SR Plan and the Technical Review Guide identifies specific content required in each item in the Checklist. If the project is located in a High Quality or Exceptional Value watershed or Exceptional Value wetland pursuant to 25 Pa. Code Chapter 93 and 25 Pa. Code chapter 105, the PCSM/SR Plan must address the special protection requirements in the Department's antidegradation implementation requirements at 25 Pa. Code § 102.8(h).

Technical references for both E&S control and PCSM/SR BMPs can be found on the DEP website. Pennsylvania's Comprehensive Stormwater Management Policy (No. 392-0300-002) is also available at www.depweb.state.pa.us. After clicking on the DEP keyword stormwater, click on "Technical Information" then click on Post Construction Stormwater Management and look for the "Comprehensive Stormwater Management Policy."

Note: BMP's not included in the department's manuals will require documentation to support their effectiveness.

The applicant's Post Construction Stormwater Management/Site Restoration Plan should include the following:

a. Topographic Features

Plan drawings showing the existing topographic features of the project site including the immediate surrounding area must be provided. The scale of the drawings must be large enough to clearly depict the topographic features and the existing and proposed contours must be at an interval that will adequately describe the topography of the site. Scales of 1 inch equals 50 feet or less, with 2-foot maximum contour intervals are recommended.

The drawings must include the location of the project with respect to roadways, municipalities, streams, watercourses, existing structures, existing ground cover, utilities and other identifiable landmarks, etc. The immediate surrounding area must be of sufficient size to include all areas contributing runoff to the project site, planned BMPs and water courses receiving runoff from the project for evaluation relative to resistance to erosion. All symbols shown on the drawings must be included in a legend; a north arrow and scale must also be shown on the drawings. These requirements also apply to all offsite disposal or borrow areas.

In addition to the topographic map, a location map is required that shows the relationship of the project to municipal boundaries and major highways. The location map may be included on the plan drawings as an insert or may be included as a separate sheet in the project narrative. A reprint or a copy of a portion of a 7½ minute USGS quadrangle map is recommended for this purpose. The name of the USGS quadrangle map must be included on the location map. For permit applications, a location map reprinted or copied from USGS quadrangle maps is required.

b. Soil and Geologic Formation Characteristics:

The types, depth, slope, locations and limitations of the soils and geologic formations must be identified for the entire project. The soil types should be delineated on the plan drawings along with notes describing any limitation and the proposed resolutions to address the limitations. Geologic formations that have the potential to impact the project site such as unstable rock, Karst formations and formations prone to landslides when exposed by earth disturbance should be identified on the plan drawings and in the project narrative with proposed resolutions. A photocopy of a portion of the soil survey on which the proposed project can be clearly shown may also be used as a soils map.

Data on the physical characteristics of the soils, such as their permeability, depth to seasonal high ground water, texture, landslide potential, resistance to erosion and suitability for intended (limitations) use is available in soil survey reports, published by the USDA Natural Resources Conservation Service (formerly Soil Conservation Service), in cooperation with the Pennsylvania State University College of Agriculture and others should be included in the project narrative. Of special interest are soils identified as "hydric" indicating the potential for the presence of wetlands. Soils identified as "hydric" in the USDA soil surveys must be investigated in the field to determine the presence or absence of wetlands.

c. Earth Disturbance Activity Characterization:

The proposed alteration in the project area and the limits of construction must be shown on the plan drawings. Such information as the limits of earth disturbance, the areas of cuts and fills, proposed impervious areas and the locations of roads, existing and proposed structures are to be included. Proposed contours and grades of the project area must be included on the project drawings. Separate drawings, or inserts on the plan drawings must be included for off-site borrow or disposal areas which are part of the project. These drawings or inserts must include the same information as required on the plan drawings. A legend that describes all of the alterations and PCSM/SR BMPs to be used for erosion and sediment control must be included on the drawings.

A description of the past, present and proposed land use in the project area must be included in the project narrative.

d. Net Change in Volume and Rate of Runoff

The net change in runoff volume and rate between preconstruction hydrology and post construction hydrology for the entire project site and each drainage area must be identified. The PCSM/SR BMPs should manage the net change in runoff volume and rate for a 2-year/24-hour storm event. An analysis must be included in the project narrative that describes how any net change in runoff volume and rate will be managed. The PCSM/SR Plan must meet the requirements Pa. Code § 102.8. The Department recommends that the PCSM/SR Plan be developed using DEP's Stormwater Best Management Practices Manual (No. 363-0300-002).

e. Surface Water Classification

All streams in Pennsylvania are classified based on their designated and existing water uses and water quality criteria. If the runoff from a project area discharges to a stream that is classified for Special Protection, more stringent criteria are used to design the PCSM/SR BMPs for that site. The criteria are found in Chapter 102.

The applicant must show on the plan drawings all streams, springs, wetlands, and floodways within, adjacent or receiving watercourses from the project site. All special protection waters, classifications and existing uses as presented in Chapter 93 must be clearly identified on the plan drawings and in the project narrative.

f. BMP Description Narrative

A written description of the location and type of PCSM/SR BMPs must be provided in the project narrative. Project drawings must show the location of permanent PCSM/SR BMPs and provide

construction details including permanent stabilization specifications. Proprietary BMP systems should be presented on the plan drawings in accordance with the manufacturer's requirements. All infiltration BMPs shall be provided with overflows and /or underdrains as needed to meet site and soil limitations.

g. BMP Installation Sequence Narrative

A sequence of PCSM/SR BMP implementation and installation in relation to earth disturbance activities of the project site and a schedule of inspection for critical stages of PCSM/SR BMP installation must be provided in the project narrative. Removal of temporary BMPs and activities or actions to be taken limit exposed area on the project site should be included in the plan narrative. The location of the PCSM/SR BMPs with construction details must be included on the project drawings.

h. Supporting Calculations

All design information and calculations for PCSM/SR BMPs and other points of concern must be included in the project narrative. The information will vary according to the PCSM/SR BMP, but should include such information as the methodology used for all calculations, drainage area, flow rate, flow velocity, design storm used for each calculation and the proposed method of stabilization. The FLOWCHARTS and STANDARD WORKSHEETS included in the Pennsylvania Stormwater BMP Manual (No. 363-0300-002) give guidance for the design calculations and information required and is recommended by the Department to facilitate submittal and review. Although the FLOWCHARTS and WORKSHEETS are recommended by the Department, the applicant is not required to use them, but must furnish the same information as indicated on the forms.

Current (2005 or more recent) and approved Act 167 Plan that covers the project site must be identified and a verification of PCSM/SR plan consistency with the Act 167 Plan must be made and presented in the Plan Narrative.

i. Plan Drawings

The locations of the PCSM/SR BMPs with tributary drainage areas must be shown on the plan drawings along with construction details and specifications for the facilities including standard notes to clarify or explain construction requirements. Typical sketches maybe used; these sketches must provide sufficient information to show critical dimensions and construction details for each specific PCSM/SR BMP. Areas sufficient in size and number where infiltration testing is to be conducted for proposed volume and rate control BMPs should be identified and marked as restricted access areas to avoid soil compaction.

The PCSM/SR Plan is to be consistent with the E&S Plan in regards to proposed contours, improvements, soils, wetlands, floodways, streams, discharge locations BMPs etc. All easements and rights-of-way on the project site must be shown on the plan drawings. Delineations of sensitive resources such as floodplains, floodways, steep slopes, riparian buffer areas, existing and proposed discharge points, points of interest or concern etc. should be clearly shown on the plan drawings. A legend, describing all symbols must be included on all plan drawings.

j. Long Term Operation and Maintenance Schedule

A long-term operation and maintenance schedule, which provides for inspection of PCSM/SR BMPs, including the direction for repair, replacement, or other routine maintenance of the PCSM/SR BMPs to ensure their proper function and operation must be included in the project narrative. The program must provide for completion of a written report documenting each inspection and all PCSM/SR BMP repair and maintenance activities including directions for the disposal of accumulated sediment. The long term operation and maintenance schedule must identify the responsible party (owner, operator, and inspector) for program conduct and how access to the PCSM/SR BMPs will be provided.

k. Material Recycling and Disposal

Procedures which ensure that the proper measures for recycling or disposal of materials associated with or from the PCSM/SR BMPs are in accordance with the Department laws, regulations and requirements. The applicant must develop a plan in the project narrative which identifies project wastes and provides directions to implements measures for recycling, disposal, housekeeping, materials management, and litter control etc. Wherever possible, recycling of excess materials is preferred, rather than disposal. A note directing proper handling, recycling and disposal of waste materials must be added to the plan drawings where appropriate.

l. Geologic Formations and Soil Conditions

The applicant must identify naturally occurring geologic formations or soil conditions that may have the potential to cause pollution after earth disturbance activities and PCSM/SR BMPs are operational. A management plan to avoid or minimize potential pollution and its impacts from geologic formations or soil conditions must be included in the project narrative. Appropriate measures to prevent discharges (including but not limited to proper handling, isolation, disposal, etc.) should be included in the management plan. Details for the proper handling, isolation and/or

disposal of these materials must be provided. The locations of the geologic formations containing those minerals or soil conditions exhibiting limitations (if not site wide) must be shown on the plan drawings along with typical details illustrating the procedures and/or PCSM/SR BMPs to be used to avoid or minimize potential pollution.

Bedrock or soil conditions which could result in significant slope failures causing mass soil movement into surface waters, property damage, or a public safety hazard should also be identified and discussed in the project narrative. The project narrative should briefly state the methods incorporated into the plan which address such hazards. Plan drawings should clearly mark the locations where the potential for slope failures exist. When poor geologic or soil conditions cannot be avoided, BMPs to minimize or mitigate their impact must be identified in the plan drawings and implemented at the construction site.

m. Thermal Impacts

An analysis of how thermal impacts associated with the project will be avoided must be provided in the project narrative. If thermal impacts cannot be avoided, describe in the project narrative how impacts are to be minimized and the BMPs that will be used to mitigate the impacts in a manner that will protect and maintain surface water quality. BMPs to be used to minimize or mitigate thermal impacts must be shown on the plan drawings including associated BMP details. The primary means to address thermal pollutions is to limit the size and duration of exposed earth or through infiltration. Additional information on minimizing thermal impacts can be found in the *Pennsylvania Stormwater BMP Manual* (No. 363-0300-002).

n. Riparian Forest Buffer Management Plan

When riparian forest buffers are part of the project, a Riparian Forest Buffer Plan is required. The plan must show the existing and/or proposed buffers on the plan drawings and include a planting plan that shows the number, density, species and approximate location of trees and shrubs; a maintenance plan to ensure survival and growth of plantings and protection from competing plants and animals for a 5 year establishment period; and, an inspection to ensure long-term maintenance and functioning of the riparian forest buffer.

o. Antidegradation Requirements

Applicants proposing earth disturbance activities within special protection watersheds or siltation-impaired watersheds must implement nondischarge alternatives wherever cost-effective and environmentally sound. An evaluation of nondischarge alternatives must be provided, in the project narrative that identifies viable nondischarge alternatives for the proposed project. If no viable

nondischarge alternatives exist, the Erosion and Sediment Control Plan must include ABACT (Antidegradation Best Available Combinations of Technology). The plan drawings must show the locations and details for all non-discharge alternatives when identified or ABACTs when non-discharge alternatives don't exist.

7. PCSM PLAN STORMWATER ANALYSIS

The portion of a site reclamation or restoration plan (SR plan) that identifies PCSM BMPs to manage stormwater may be used to satisfy PCSM requirements if the SR Plan meets the requirements of §§102.8 (b), (c), (e), (f), (h), (i), and (l) and when applicable (m) for the following activities (1) oil and gas activities permitted in accordance with Chapter 78, (2) pipelines, (3) other similar utility infrastructure, and (4) department permitted activities involving less than 1 acre of earth disturbance.

Regulated activities not included above, including new road construction, must submit PCSM Plans that meet all provisions of §102.8 including a PCSM Plan stormwater analysis.

a. Site Characterization and Assessment

A predevelopment site characterization and assessment of soil and geology including appropriate infiltration and geotechnical studies that identify the location and depths of test sites and methods used must be included in the project narrative. The assessment should identify the pre-construction hydrology of the project site as a base line to which post construction hydrology will be compared. In addition, the assessment should identify site characteristics that may be useful when addressing volume, rate and water quality requirements discussed below.

b. Volume Reduction and Water Quality Requirements

The applicant must include an analysis in the project narrative that demonstrate the PCSM BMPs to be used will meet the volume and water quality requirements specified in an applicable Department approved and current Act 167 stormwater management watershed plan or manage the net change for storms up to and including the 2-year/24-hour storm event when compared to preconstruction runoff volume and water quality.

c. Rate Requirements

The applicant must include an analysis in the project narrative that demonstrates the PCSM BMPs to be used will meet the rate requirements specified in and applicable Department approved and current Act 167 stormwater management watershed plan or manage the net change in peak rate for the 2-, 10-, 50- and 100-year/24-hour storm

events in a manner not to exceed preconstruction rates.

d. Calculation Methodologies

The applicant must identify and describe the methodologies used to calculate the total runoff volume and peak rate of runoff and provide supporting documentation and calculations in the project narrative.

e. Construction Techniques

Construction techniques or special considerations used by the applicant to address soil and geologic limitations affecting the project site as they relate to PCSM should be identified and described in the project narrative. Detail drawings of specific PCSM BMPs to be used should be included on the project drawings with appropriate notes describing their use and any special conditions necessary to ensure proper installation and operation.

f. Antidegradation Requirements

Applicants proposing earth disturbance activities within special protection watersheds or siltation-impaired watersheds must implement nondischarge alternatives wherever cost-effective and environmentally sound. An evaluation of nondischarge alternatives should be provided in the project narrative that identifies viable alternatives for the proposed project. If no viable nondischarge alternatives exist the Erosion and Sediment Control Plan must include ABACT (Antidegradation Best Available Combinations of Technology). The plan drawings must show the locations and details for all non-discharge alternatives when identified or ABACTs when non-discharge alternatives don't exist.

8. EXPEDITED REVIEW PROCESS

DEP has an established an optional expedited permit review process for ESCGP-2 NOIs.

The "Expedited Review Process" is not available for projects:

a. Located in or with potential to discharge to waters that have a designated or existing use of High Quality or Exceptional Value pursuant to Chapter 93, including exceptional value wetlands.

b. In which the area surrounding an oil or natural gas wellhead that is subject to earth disturbance and that is used or planned for use for drilling, production or plugging of the well including associated support activities is to be constructed in or on a Floodplain. For the purposes of this permit a floodplain is the lands adjoining a river or stream that have been or may be expected to be inundated by flood waters in a 100-year frequency flood. (See 25 Pa. Code §105.1). Unless otherwise specified, the boundary of the floodplain is as

indicated on maps and flood insurance studies provided by FEMA. In an area where no FEMA maps or studies have defined the boundary of the 100-year frequency floodplain, it is assumed absent evidence to the contrary, that the floodplain extends from (1) any perennial stream to 100 feet horizontally from the top of the bank of such perennial stream, and (2) from any intermittent stream to 50 feet horizontally from the top of the bank of such intermittent stream, and

- c. Where earth disturbance activities are proposed on lands that are known to be currently contaminated by the release of regulated substances as defined in Section 103 of Act 2, 35 P.S. § 6026.103.
- d. For transmission facilities.

NOIs submitted through the expedited permit review process which qualify for permit coverage will be provided with an acknowledgement of coverage within 14 business days from the submission of a complete and accurate NOI. To qualify for the expedited review option the applicant must:

- Submit a technically and administratively complete and accurate NOI package.
- Develop an E&S Plan that meets the requirements of 25 Pa. Code Section 102.4(b), as well as the standards and specifications identified in the Department's *Erosion and Sediment Control Best Management Practices (BMP) Manual*, No. 363-2134-008, as amended and updated.
- Develop a PCSM/SR Plan with post construction BMPs that are designed to meet the requirements of 25 Pa Code Section 102.8, as well as the standards and specifications identified in the *Pennsylvania Stormwater Best Management Practices Manual*, No. 363-0300-002, as amended and updated.
- Satisfies and meets the terms and conditions of ESCGP-2 and all applicable regulations.
- Meets the guidelines of DEP's *Oil and Gas Operators Manual*, No. 550-0300-001 and the *Erosion and Sediment Pollution Control Program Manual*.
- Applies BMPs consistent with the site characteristics and meets applicable performance and water resource protection requirements as amended and updated.

In addition, to qualify for an expedited permit, the NOI must be prepared and certified by a licensed professional (e.g. engineer, surveyor, geologist or landscape architect) who is registered in Pennsylvania

and who has attended up-to-date training provided by DEP, Office of Oil and Gas Management on erosion and sediment control and post construction stormwater management for oil and gas activities. The licensed professional is responsible for the development of a complete permit NOI package, including an erosion and sediment control plan that specifies BMP implementation and maintenance requirements and a PCSM/SR Plan with BMPs that meet regulatory requirements. All E & S and PCSM/SR Plan drawings and plan narratives must be sealed by the licensed professional that prepared the NOI and plans. The seal must be placed on each plan drawing and on the cover of the narrative.

9. PHASED PROJECTS

Under 25 Pa. Code § 102.5(e), "a person proposing oil and gas activities that involve 5 acres (2 hectares) or more of earth disturbance over the life of the project shall obtain an E&S Permit under Chapter 102 prior to commencing the earth disturbance activity." In some cases, the life of the project as defined above may be a long term or large scale project and the operator may wish to develop the project over time or in phases.

If an applicant plans to develop a phased project, but the exact location of wells in the subsequent phases cannot be determined until some wells are drilled, an operator may still seek an E&S General Permit for Oil and Gas Activities for a phased project so long as the operator identifies the anticipated scope, locations, and types of activities of such subsequent phases.

Under the phased project approach, an NOI can be submitted with the initial phase or phases accompanied with detailed construction plans and drawings. The subsequent phases as described in the original NOI can be submitted without detailed construction plans and drawings but with sufficient detail to describe the scope, location and type of activity to allow the Department to assess the total environmental impact of the project.

10. PREPAREDNESS, PREVENTION AND CONTINGENCY (PPC) PLAN

The applicant must prepare and implement a Preparedness, Prevention and Contingency (PPC) Plan when storing, using or transporting materials including: fuels, chemicals, solvents, pesticides, fertilizers, lime, petrochemicals, wastewaters, wash water, core drilling wastewater, cement, sanitary wastes, solid wastes or hazardous materials onto, on or from the project site during earth disturbance activities. The PPC Plan shall be available upon request by the Department or conservation district.

The PPC Plan should include a description of operations, pollution prevention methods, waste disposal methods, pollution incident response, a narrative section describing the potential types of pollution problems associated with the proposed

operations and a PPC Schedule describing the implementation of the PPC Plan and Plan updates as dictated by changes in operations. The Oil and Gas Operators Manual (No. 550-0300-001) provides guidelines for PPC Plan development associated with oil and gas operations.

11. SUBSEQUENT PHASE CERTIFICATION FOR EXPEDITED REVIEW

When the applicant desires expedited review for subsequent phases of a phased project the applicant must answer the question accordingly and provide the following:

- Signature
- Company Name
- Address
- Phone Number

- Date and location of most recent DEP training attended

12. PERMIT RENEWAL

An operator may request a 1-year renewal of a well permit. The request shall be accompanied by a permit fee, the surcharge required in section 601 of the act (58 P. S. § 601.601), and an affidavit affirming that the information on the original application is still accurate and complete, that the well location restrictions are still met and that the surface owners, coal owners and operators, gas storage operators, where the permit renewal is for a proposed well location within an underground gas storage reservoir or the reservoir protective area, and water supply owners within 1,000 feet have been notified of this request for renewal. The request shall be received by the Department at least 15 calendar days prior to the expiration of the original permit.

ATTACHMENT A

STANDARD E&S PLAN TECHNICAL GUIDE

Project: _____

Project Name: _____ Date: _____

Item Location: D = E&S Drawings, N = E&S Narrative, D&N = Drawings and Narrative

Check that the following items are completed in the E&S Plan. If an item is not applicable write N/A.

“The E&S Plan shall be prepared by a person trained and experienced in E&S control methods and techniques applicable to the size and scope of the project being designed”

Name _____ Address _____ Telephone No. _____ D&N

“The existing topographic features of the project site and the immediate surrounding area”

_____	Legible mapping	D
_____	Existing contours	D
_____	Type of cover	D
_____	Existing improvements, i.e. roads, buildings, utilities, etc.	D
_____	Sufficient surrounding area	D
_____	Complete mapping symbols legend and north arrow	D
_____	Location map, i.e. USGS	D or N

“The types, depth, slope, locations and limitations of the soils”

_____	Types, slopes, and locations of soil types	D
_____	Soil type use limitations and resolutions	N
_____	Hydric soils	N

“The characteristics of the earth disturbance activity, including the past, present, and proposed land uses and the proposed alteration to the project site”

_____	Proposed boundary and limits of construction	D
_____	Proposed contours/grades	D
_____	Proposed waterways and stormwater management facilities	D
_____	Proposed improvements, i.e., roads, buildings, utilities, etc.	D
_____	Past, present and proposed land uses	N

“The volume and rate of runoff from the project area and its upstream watershed area”

_____	Maximum during construction drainage areas	D
_____	Offsite drainage area(s) on USGS quadrangle map	N
_____	Discharge analysis provided for non-surface water discharges	N

“The location of all surface waters of this Commonwealth which may receive runoff within or from the project site and their classification under Chapter 93”

_____	Existing streams, wetlands, floodway, etc.	D
_____	Receiving watercourses	D
_____	Chapter 93 classification of streams or other water bodies	N

“A narrative description of the location and type of perimeter and onsite BMPs used before, during and after the earth disturbance activity”

_____ Description provided in the narrative N

“A sequence of BMP installation and removal in relation to the scheduling of earth disturbance activities, prior to, during and after earth disturbance activities that ensure the proper functioning of all BMPs”

_____ Complete and site specific sequence of BMP installation D

_____ Activities planned to limit exposed areas D

_____ Removal of temporary BMPs D

“Supporting calculations and measurements” and “Plan Drawings”

Stabilized Construction Entrance

_____ Locations _____ Complete Details D

Silt Fencing

_____ Locations _____ Slope Length _____ Complete Details D

Channels

_____ Locations _____ Drainage Areas _____ D

_____ Contours and Grades _____ Complete details D

_____ Peak flow calculations _____ Capacity and freeboard calculations N

_____ Protective lining calculations N

Sediment Basins

_____ Locations _____ Contours _____ Drainage Areas D

_____ Complete berm & outlet details _____ Cleanout information D&N

_____ Discharge to surface waters or approved alternative D

_____ Structurally sound D&N

_____ Capacity calculations _____ Discharge calculations N

_____ Dewatering calculations N

Sediment Traps

_____ Locations _____ Contours _____ Drainage Areas D

_____ Complete berm & outlet details _____ Cleanout information D&N

_____ Discharge to surface waters or approved alternative D

_____ Capacity information _____ Discharge calculations N

Outlet Protection

_____ Locations _____ Complete Details D

_____ Design Calculations N

Inlet Protection

_____ Locations _____ Complete Details D

Other BMPs (specify) _____

_____ Locations _____ Complete Details D

_____ Design Calculations N

Temporary Stabilization

Types Seed _____ Lime _____ Fertilizer _____ Mulch _____ Others _____ D

Rates _____ _____ _____ _____ _____ D

Permanent Stabilization

_____ Topsoil replacement D

	Seed	Lime	Fertilizer	Mulch	Others	
Types	_____	_____	_____	_____	_____	D
Rates	_____	_____	_____	_____	_____	D

“A maintenance program, which provides for the operation and maintenance of BMPs and the inspection of BMPs on a weekly basis and after each stormwater event, including the repair or replacement of BMPs to ensure effective and efficient operation. The program must provide for completion of a written report documenting each inspection and all BMP repair, or replacement and maintenance activities”

_____	Inspection schedule	D
_____	Maximum sediment storage elevation/level in BMPs	D
_____	Time frames for completing specific maintenance and repairs for each type of BMP proposed	D
_____	Site stabilization repair parameters and directions	D
_____	Disposal directions for sediment removed from BMPs	D
_____	Note provided requiring written documentation of inspection & repair/replacement of BMPs by contractor	D

“Procedures which ensure that the proper measures for the recycling or disposal of materials associated with or from the project site will be undertaken in accordance with this title”

_____	Project construction wastes are identified	N
_____	Directions for recycling/disposal of construction wastes	D
_____	Soil/rock disposal areas provided with BMPs	D

“Identification of natural occurring geologic formations or soil conditions that may have the potential to cause pollution during earth disturbance activities and include BMPs to avoid or minimize potential pollution and its impacts from the formations”

_____	Potential for geologic or soil conditions to cause pollution during construction is addressed	N
_____	Instructions for proper handling and/or disposal of all materials which could cause pollution are provided	D
_____	Typical details are provided for proper handling and/or disposal of all such materials	D
_____	The locations of all such materials are clearly shown on the plan maps	D

“Identification of the potential thermal impacts to surface waters of this Commonwealth from the earth disturbance activity including BMPs to avoid, minimize or mitigate potential pollution from thermal impacts”

_____	Analysis of how thermal impacts associated with the project will be avoided is provided	N
_____	If impacts cannot be avoided, impacts are minimized and BMPs provided to mitigate impacts and protect and maintain surface water quality	D&N

“The E&S Plan shall be planned, designed, and implemented to be consistent with the PCSM Plan under § 102.8 (relating to PCSM requirements). Unless otherwise approved by the Department, the E&S Plan must be separate from the PCSM Plan and labeled “E&S” or “Erosion and Sediment Control Plan” and be the final plan for construction”

_____	Overall plan supports the managing of stormwater for erosion and sediment control during earth disturbance activities	D&N
_____	BMPs are compatible with and can be integrated into structural and non-structural PCSM practices	D&N

“Identification of existing and proposed riparian forest buffers”

_____	Existing and/or proposed buffers are shown on the plan drawings.	D
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ATTACHMENT B

STANDARD PCSM TECHNICAL GUIDE

Project: _____

Project Name: _____ Date: _____

Check that the following items are completed in the PCSM Plan. If an item is not applicable write N/A.

“The PCSM Plan shall be prepared by a person trained and experienced in PCSM design methods and techniques applicable to the size and scope of the project being designed”

Item Location: D = E&S Drawings, N = E&S Narrative, D&N = Drawings and Narrative

1. “The existing topographic features of the project site and the immediate surrounding area”

_____	Legible Mapping	D
_____	Existing Contours	D
_____	Type of Cover	D
_____	Existing Improvements (i.e. roads, buildings, utilities, etc.)	D
_____	Sufficient surrounding area	D
_____	Complete mapping symbols and north arrow	D
_____	Location Map (i.e. USGS)	D or N

2. “The types, depth, slope, locations and limitations of the soils and geologic formations”

_____	Types, slopes and locations of soil types	D
_____	Soil type use limitations and resolutions	N
_____	Hydric Soils	N

3. “The characteristics of the project site, including the past, present and proposed land uses and the proposed alteration to the project site”

_____	Proposed limits of construction	D
_____	Proposed contours and grades	D
_____	Proposed improvements (i.e. roads, buildings, utilities etc.)	D
_____	Past, present and proposed land uses	N
_____	Existing features	D
_____	Proposed Impervious Areas	D

4. “An identification of the net change in volume and rate of stormwater from preconstruction hydrology to post construction hydrology for the entire project site and each drainage area”

_____	The design storm used for calculations is identified	N
_____	Preconstruction hydrology runoff rate and volume are identified for the entire project site and each drainage area	N
_____	Post-construction hydrology runoff rate and volume are identified for the entire project site and each drainage area	N
_____	The net change in runoff rate and volume are identified for the entire project site and each drainage area	N

5. “An identification of the location of surface waters of this Commonwealth, which may receive runoff within or from the project site and their classification under Chapter 93 (relating to water quality standards)”

_____	Existing streams, wetlands, floodway, etc.	D
_____	Receiving watercourses	D
_____	Chapter 93 classification streams or other water bodies	N

6. “A written description of the location and type of PCSM BMPs including construction details for permanent stormwater BMPs including permanent stabilization specifications and locations”

_____	All permanent PCSM BMPs are identified in the narrative and shown in the plan drawings	D & N
_____	Construction details are included for all permanent PCSM BMPs	N
_____	Permanent stabilization specifications for all permanent PCSM BMPs are included	N
_____	Proprietary BMP systems are illustrated on the drawings in accordance with their manufacturer’s requirements	D
_____	Infiltration BMPs are provided with overflows and/or underdrains as needed to meet site and soil limitations	D & N

7. “A sequence of PCSM BMP implementation or installation in relation to earth disturbance activities of the project site and a schedule of inspections for critical stages of PCSM BMP installation”

_____	Complete and site specific sequence of BMP installations	D & N
_____	Activities planned to limit exposed areas	D & N
_____	Removal of temporary BMPs	D & N
_____	Critical stages of BMP installation are identified	N

8. “Supporting calculations”

_____	Calculations for all BMPs and points of interest are provided.	N
_____	Methodology used for all calculations is identified.	N
_____	The design storm used for each calculation is identified.	N
_____	Current (2005 or more recent) Act 167 plans are identified	D or N
_____	Act 167 plan consistency verification is provided	N
_____	All flowcharts from the Pennsylvania Stormwater BMP Manual with flow path highlighted have been provided	N
_____	All appropriate worksheets from the Pennsylvania Stormwater BMP Manual have been completed and are provided	N

9. “Plan drawings”

_____	Locations of BMPs are shown along with tributary drainage areas	D
_____	Construction details are included for all PCSM BMPs	D
_____	All easements and rights-of-way are shown on plan drawings.	D
_____	Sensitive resources are shown (i.e. steep slopes, riparian, etc.)	D & N
_____	Existing and proposed discharges & points of interest	D
_____	Floodplain and floodway delineations	D
_____	Locations and sufficient infiltration testing to represent proposed locations of volume and rate control BMPs	D
_____	PCSM Plan Drawings are consistent with E&S Plan in relation to proposed contours, improvements, soils, wetlands, floodways, streams, discharge locations, E&S BMPs, etc.	D

Infiltration BMPs

_____	All infiltration BMPs must have infiltration testing completed	N
_____	All infiltration BMPs must have soil testing completed	N
_____	All infiltration BMPs should be sited on un-compacted soils	D & N

BMP 6.4.2 Infiltration Basins

_____	Maintain a minimum 2-foot separation to bedrock and high water table	D & N
_____	Do not install on recently placed fill (<5 years)	D & N
_____	Allow 2 foot buffer between bed bottom and seasonal high groundwater table	D & N

BMP 6.4.4 Infiltration Trench

_____	Perforated pipe set at a minimum slope in a stone filled, level-bottomed trench	D & N
_____	Limited in width (3 to 8 feet) and depth of stone (6 feet max recommended)	D & N
_____	Trench is wrapped in nonwoven geotextile (top, sides, and bottom)	D & N
_____	A minimum of 6" of topsoil is placed over trench and vegetated	D & N

BMP 6.4.5 Bio-retention

_____	Ponding depths generally limited to 12 inches or less	D & N
_____	Native vegetation that is tolerant of variability, salts and stress	D & N
_____	Modify soil with compost	D & N

BMP 6.4.8 Vegetated swale

_____	Longitudinal slopes range from 1 to 6 %	D & N
_____	Side slopes range from 3:1 to 5:1	D & N
_____	Bottom width of 2 to 8 feet	D & N
_____	Convey the 10-year storm event with a minimum of 6 inches of freeboard	D & N
_____	Designed for non-erosive velocities up to the 10-year storm event	D & N

BMP 6.4.9 Vegetated Filter strip

_____	Filter Strip length is a function of the slope, vegetative cover, and soil type	D & N
_____	Minimum recommended length of filter strip is 25 feet	D & N
_____	Filter strip slope should never exceed 8%; less than 5% are preferred	D & N
_____	Level spreading devices are recommended to provide uniform sheet flow	D & N
_____	Maximum contributing drainage area slope is generally less than 5%	D & N
_____	Minimum filter strip width should equal the width of the drainage area	D & N

BMP 6.4.10 Infiltration Berm

_____	Maintain a minimum 2-foot separation to bedrock and high water table	D & N
_____	Berms should be relatively low, preferable no more than 24 inches in height	D & N
_____	If berms are to be mowed, the berm side slopes should not exceed a ratio of 4:1	D & N
_____	Berms should be vegetated with turf grass at a minimum	D & N

BMP 6.5.2 Runoff recapture and use

_____	Storage devices designed to capture a portion of small, frequent storm events	D & N
_____	Systems must provide for bypass or overflow of large storm events	D & N
_____	Water budget incorporating anticipated water inflow and usage required	D & N

Water Quality and Rate Control BMPs

BMP 6.6.1 Constructed Wetlands

_____	Adequate drainage area or proof of sustained base flow	D & N
_____	Maintenance of permanent water surface	D & N
_____	Relatively impermeable soils or engineered liner	D & N
_____	Sediment collection and removal	D & N
_____	Adjustable permanent pool and dewatering mechanism	D & N

BMP 6.6.2 Wet pond/Retention basin

_____	Adequate drainage area or proof of sustained baseflow	D & N
_____	Natural high groundwater table	D & N
_____	Maintenance of permanent water surface	D & N
_____	Should have at least 2 to 1 length to width ratio	D & N
_____	Forebay for sediment collection and removal	D & N
_____	Dewatering mechanism	D & N

BMP 6.6.3 Dry extended basin

_____	Hydraulic capacity controls effectiveness	D & N
_____	Ideal in combination with other BMPs	D & N

Restoration BMPs

BMP 6.7.1 Riparian buffer restoration

_____	Reestablish buffer areas along perennial, intermittent, and ephemeral streams	D & N
_____	Plant native, diverse tree and shrub vegetation	D & N
_____	Create a short-term maintenance and long-term maintenance plan	D & N
_____	Clear, well-marked boundary	D & N

BMP 6.7.2 Landscape restoration

_____	Minimize traditional turf lawn area	D & N
_____	Maximize landscape restoration area planted with native vegetation	D & N
_____	Protect landscape restoration area during construction	D & N
_____	Prevent post-construction erosion through adequate stabilization	D & N
_____	Minimize mowing (two times per year)	D & N

BMP 6.7.3 Soil amendment and restoration

_____	Physical loosening	D & N
_____	Compost amendments	D & N

BMP 6.7.4 Floodplain restoration

_____	Can prevent riparian problems from getting worse or can fix problems caused by historical practices	D & N
_____	Reattachment of root systems of floodplain vegetation/riparian areas connected to groundwater and/or base flow	D & N
_____	Removal of "legacy sediments" and associated nutrients stored within the stream corridors prior to release through bank erosion	D & N

Other BMPs and related structural measures

BMP 6.8.1 Level spreaders

_____	Must be level	D & N
_____	Are not applicable in areas with easily erodible soils and/or little vegetation	D & N
_____	Should safely diffuse at least the 10-year storm peak rate	D & N
_____	Bypassed flows should be stabilized in a sufficient manner	D & N

10. "A long-term operation and maintenance schedule, which provides for inspection of PCSM BMPs, including the repair, replacement, or other routine maintenance of the PCSM BMPs to ensure proper function and operation"

_____	Inspection schedule of each permanent BMP is provided	N
_____	Directions for maintenance and/or replacement of each BMP	N
_____	Directions for sediment disposal	N
_____	Responsible party (owner, operator, inspector) has been identified	N

11. "Procedures which ensure that the proper measures for recycling or disposal of materials associated with or from the PCSM BMPs are in accordance with Department laws, regulations and requirements"

_____	Project wastes are identified	N
_____	Directions for recycling /disposal of wastes	D or N

12. "An identification of naturally occurring geologic formations or soil conditions that may have the potential to cause pollution after earth disturbance activities are completed and PCSM BMPs are operational and development of a management plan to avoid or minimize potential pollution and its impacts"

_____	Potential for geologic or soil conditions to cause pollution during construction	N
_____	Instructions for proper handling and/or disposal of all materials which could cause pollution are provided	D
_____	Typical details are provided for proper handling and/or disposal of all such materials	D
_____	The locations of all such materials are clearly shown on the plan maps	D

13. "An identification of potential thermal impacts from post construction stormwater to surface waters of this Commonwealth including BMPs to avoid, minimize or mitigate potential pollution from thermal impacts"

_____	Applicant has described how thermal impacts of stormwater runoff from the project site were avoided	N
_____	Applicant has described how thermal impacts were minimized and mitigated	D & N

14. "A riparian forest buffer management plan when required under § 102.14 (relating to riparian buffer requirements)"

_____	Existing and/or proposed buffers are shown on the plan drawings	D
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ATTACHMENT C

Instructions

This letter is provided as an example only. Applicants may draft their own letter of notification. This letter must be modified to meet the specific requirements of the project if the applicant chooses to use the following text.

SAMPLE NOTICE LETTER TO MUNICIPALITY AND COUNTY

Date:

Dear (Municipal Secretary): or

Dear (County Commissioners):

This municipal notice, under the requirements of Act 14, 97 P.S. § 510-5, is to inform you that (I am/we are) applying for coverage under the Erosion and Sediment Control General Permit (ESCGP-2) for Earth Disturbance Associated with Oil & Gas Exploration, Production, Processing or Treatment Operations or Transmission Facilities from the Pennsylvania Department of Environmental Protection (DEP):

Applicant Contact:

Project Location:

Project Description:

Enclosed is a complete copy of the Notice of Intent (NOI) completed by the applicant for this project as well as copies of the erosion and sediment control plan and post construction stormwater management plans.

Sincerely,

Enclosures

cc: /county planning agencies

ATTACHMENT D

Instructions to Complete the Summary Table

(This table is located in Section E and F, of the NOI Application Form)

SUMMARY TABLE FOR SUPPORTING CALCULATION AND MEASUREMENT DATA			
See the Instructions below on how to Complete This Section			
Design storm frequency _____ Rainfall amount _____ inches	Pre-construction	Post Construction	Net Change
Impervious area (acres)	1	2	3
Volume of stormwater runoff (acre-feet) without planned stormwater BMPs	4	5	6
Volume of stormwater runoff (acre-feet) with planned stormwater BMPs		7	8
Stormwater discharge rate for the design frequency storm	9	10	11

- Box 1. Pre-construction impervious area: The total acres of impervious area on the project site before construction activities begin.
- Box 2. Post construction impervious area: The total acres of impervious area on the project site after construction activities have been completed.
- Box 3. Net change of impervious area: The difference between the acres of impervious area listed in Box 1 and Box 2.
- Box 4. Pre-construction stormwater runoff volume without planned BMPs: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence before construction activities begin.
- Box 5. Post construction stormwater runoff volume without planned BMPs: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence after construction activities have finished assuming that no stormwater infiltration or retention BMPs have been installed.
- Box 6. Net change in stormwater volume without planned BMPs: The difference between the amounts of stormwater runoff volume listed in Box 4 and Box 5.
- Box 7. Post construction stormwater runoff volume with planned BMPs: The amount of stormwater runoff volume from the project site that would result from the design storm occurrence after construction activities have finished and the planned stormwater infiltration or retention BMPs have been installed.
- Box 8. Net change in stormwater runoff volume with planned BMPs: The difference between the amounts of stormwater runoff volume listed in Box 4 and Box 7.
- Box 9. Pre-construction stormwater discharge rate: The stormwater runoff discharge rate for the design frequency storm as determined by the land use for the past five years.
- Box 10. Post construction stormwater discharge rate: The stormwater runoff discharge rate for the design frequency storm event after all planned stormwater BMPs are installed.
- Box 11. Net change stormwater discharge rate: The difference between the stormwater runoff discharge rates listed in Box 9 and Box 10.