

Top 10 NPDES Permit Application Completeness Review Comments

- 1. Are all E&S and PCSM BMP IDs consistently identified throughout the documentation (NOI, E&S Module, PCSM Module, plans, details, calculations, etc.)?
- 2. Has the E&S Manual, Appendix E Soil Use Limitations, been used to address site soil conditions, including the presence of hydric soils?
- 3. Has a pre-development site characterization (soils and geotechnical testing results, including narrative of methods and results) been performed, and has the proposed PCSM BMP design taken the pre-development site characterization into consideration?
- 4. Do the E&S and PCSM plans identify where the discharges from the site enter the surface water, and has the pathway been shown on the plans?
- 5. Are the critical stages of E&S and PCSM BMP construction identified on the plans?
- 6. Are the floodplains and floodways (50 feet on either side of top of bank if not otherwise mapped) shown on the plans?
- 7. Are there any proposed stormwater discharges during or after construction to areas other than surface waters? If so, has an off-site discharge analysis been performed and provided for each discharge point to the receiving water? (Refer to DEP's Frequently Asked Questions (FAQ) for Chapter 102 Off-Site Discharges of Stormwater to Non-Surface Waters for additional guidance on what is required with an off-site discharge analysis.)
- 8. Have ABACT (Antidegradation Best Available Combination of Technologies) E&S and PCSM BMPs been provided for discharges to surface waters that are identified in DEP's latest published Integrated Water Quality Monitoring and Assessment Report that are impaired for siltation, suspended solids, turbidity, water/flow variability, flow modification/alterations, or nutrients?
- 9. Are the plans, calculations, and forms signed and sealed where appropriate?
- 10. Has the ZIP+4 been provided on the MCCD Application and the NPDES application?
- 11. BONUS TIP It is recommended to use the Fact Sheet enclosed in the DEP Standard Operating Procedures to verify that all applicable items have been provided.



Top 10 NPDES Permit Application Technical Review Comments

- 1. Do the E&S and PSCM plans include sufficient surrounding area so that tributary drainage areas as well as receiving watercourses can be identified and evaluated?
- 2. Are calculations (dewatering, stage/storage/discharge, spillway, riprap, channel, antiseep collars, conveyance, tailwater conditions, etc.) provided, complete, and consistent throughout documentation (NOI, E&S Module, PCSM Module, plans, details, etc.)?
- 3. Has the geometric mean been used to determine the average rate following multiple tests?
- 4. Are all hydrographs provided, complete, and consistent throughout documentation (NOI, E&S Module, PCSM Module, plans, details, calculations, etc.)?
- 5. Are perimeter E&S BMPs (e.g. compost socks, silt fence) parallel to existing contours with each end hooked up sufficiently to prevent end-around flows?
- 6. Have proposed E&S BMPs been designed with consideration of the contributing drainage areas and the potential for concentrated flow runoff conditions?
- 7. Have inlet protection measures been designed with consideration of the contributing drainage areas, road conditions (live traffic), temporary berm, and sequencing?
- 8. Has a pre-development site characterization (soils and geotechnical testing results, including narrative of methods and results) been performed in accordance with Appendix C of the Stormwater BMP Manual?
- 9. Are all E&S and PCSM BMP IDs consistently identified throughout the documentation (NOI, E&S Module, PCSM Module, plans, details, calculations, etc.)?
- 10. Has the off-site discharge analysis evaluated the effects of construction and postconstruction stormwater discharges to the receiving water regardless of whether there are increases in the volume or peak rate of stormwater discharges from a project site? (Refer to DEP's Frequently Asked Questions (FAQ) for Chapter 102 Off-Site Discharges of Stormwater to Non-Surface Waters for additional guidance on what is required with an off-site discharge analysis.)
- 11. BONUS TIP It is recommended to use the Fact Sheet enclosed in the DEP Standard Operating Procedures to verify that all applicable items have been provided.



Top 10 Managed Release Concept (MRC) Review Comments

- 1. Has a narrative been provided which addresses the eligibility criteria and all 13 MRC Design Standards, including all supporting calculations and page references, where appropriate?
- 2. Is the MRC Design Summary Sheet provided and consistent with the calculations?
- 3. Is the MRC Design Summary Sheet current and signed and sealed by a PA registered professional engineer?
- 4. Has the 1.2-inch/2-hour storm hydrograph been provided and have routing computations for the 1.2-inch/2-hour storm been provided?
- 5. Has a composite CN value <u>not</u> been used for the 1.2-inch/2-hour storm event computations?
- 6. Has the entire drainage area been used for the rate control calculations?
- 7. Have calculations to support the volume credits been provided, using only the volume routed from the disturbed area?
- 8. Have dewatering calculations for the 2-year, 20-year, 50-year, and 100-year storm events been provided?
- 9. Has adequate and appropriate soils and geologic testing and evaluation been performed to demonstrate the infiltration capacity of the entire project site (one infiltration test per 40,000 square feet of earth disturbance, minimum of four infiltration tests).
- 10. Has appropriate testing identified at least one foot (two feet preferred) of separation distance between water and the bottom footprint of the MRC BMP's soil media?
- 11. BONUS TIP In addition to the Managed Release Concept document, DEP provides guidance through various documents including: Managed Release Concept for Post-Construction Stormwater Management Frequently Asked Questions (FAQ), Managed Release Concept Design Examples, and Managed Release Concept Review Checklist.



Top 10 Module Review Comments

- 1. Have the instructions, provided within the NOI Instructions document, been used to complete the E&S Module 1 and PCSM Module 2?
- 2. Have responses been provided on the E&S Module 1 *except* where the questions specifically requests page number references?
- 3. Have all applicable Standard E&S Worksheets from Appendix B, or equivalent, been completed and attached to the E&S Module 1?
- 4. Has the E&S Plan Developer section been completed and signed by a person trained and experienced in E&S control methods, which also refers to the size and scope of the project, within E&S Module 1?
- 5. Has all information addressing PCSM Plan Information Question 1 been completed and consistently identified throughout the documentation (NOI, PCSM Module, plans, details, calculations, etc.) within PCSM Module 2?
- 6. Has PCSM Plan Information Question 3 Plan Drawings Developed within PCSM Module 2 been addressed per the NOI Instructions (For applicants seeking PAG-02 coverage, this box should remain unchecked)?
- 7. Where proposed BMPs propose the use of infiltration, has the Infiltration Information section within PCSM Module 2 been completed consistently with the attached soil/geologic test results?
- 8. Where the applicant only completes the summary of peak rate table in the Rate Worksheet, has the PCSM Module 2 Stormwater Analysis Peak Rate page been completed consistently with documentation (plans, calculations, etc.)?
- 9. Has the PCSM Plan Developer section been completed and signed by a person trained and experienced in PCSM methods, which also refers to the size and scope of the project, within PCSM Module 2?
- 10. Has a Stormwater Analysis been performed addressing each discharge point? DEP allows applicants to complete the analysis on a surface water basis (i.e., all discharge points to a single surface water may be considered collectively). Attach additional sheets as necessary. Where there are multiple receiving waters, a Stormwater Analysis Runoff Volume section and a Stormwater Analysis Peak Rate section should be provided addressing a single surface water.



Top 10 DEP Post Construction Stormwater Management (PCSM) Spreadsheet Comments

- Has the applicant completed and provided a Stormwater Analysis addressing each discharge point? DEP allows applicants to complete the analysis on a surface water basis (i.e., all discharge points to a single surface water may be considered collectively). The spreadsheet is intended for the evaluation of volume, rate, and water quality for discharges to a single receiving surface water. Alternatively, the spreadsheet can be used on a discharge point basis.
- 2. On the General Information Worksheet, have the Drainage Area and Earth Disturbance in Drainage area columns been completed and consistently identified throughout the documentation (NOI, PCSM Module, plans, details, calculations, etc.)?
- 3. On The Volume Management Worksheet, do the total areas identified on each of the Pre-Construction Condition and Post-Construction Land Cover tables sum to the Total Earth Disturbance Area?
- 4. Where Non-Structural BMP Volume Credits have been identified on the Volume Management Worksheet, have calculations been provided and are the non-structural PCSM BMPs clearly identified throughout the documentation (PCSM Module, plans, details, calculations, etc.)?
- 5. On the Volume Management Worksheet, have all proposed structural BMPs been identified (NOI, PCSM Module, plans, details, calculations, etc.)?
- 6. For each proposed PCSM BMP identified on the Volume Management Worksheet, has the Incremental BMP Drainage Area been provided which reflects the tributary to the BMP within the disturbed area?
- 7. For each proposed PCSM BMP identified on the Volume Management Worksheet, have calculations been provided to support the volume routed to the BMP during the 2-year/24-hour storm event, reporting only the volume routed to the BMP from the disturbed area?
- 8. For each proposed PCSM BMP identified on the Volume Management Worksheet, have calculations been provided supporting the value entered for the Infiltration Period for BMPs that will rely on infiltration?
- 9. For each proposed PCSM BMP identified on the Volume Management Worksheet, have calculations been provided supporting the value entered for the Storage Volume based on the lowest outlet elevation?
- 10. Has the Certification section been completed by the person who utilized the spreadsheet?
- BONUS TIP The DEP Post-Construction Stormwater Management Spreadsheet Instructions contains many examples in addition to instructions on completing the PSCM Spreadsheets.