Metropolitan Washington Airports Authority

EROSION AND SEDIMENT CONTROL

and

STORMWATER MANAGEMENT PROGRAM

2014 Revision
INTRODUCTION

The Metropolitan Washington Airports Authority (Authority) Erosion and Sediment Control Program is an integral component of the design, construction, maintenance, and management of Ronald Reagan Washington National and Dulles International Airports, Dulles Toll and Access Roads and associated Authority owned property. The Authority’s Erosion and Sediment Control (E&SC) Annual Standards and Specifications submittal has been developed to ensure that all land-disturbing activities undertaken by the Authority will proceed in accordance with the Virginia Erosion and Sediment Control Law (§10.1-560 et. seq.), and The Virginia Erosion and Sediment Control Regulations and to municipal separate storm sewer systems (MS-4) and construction activities.

The Annual Standards and Specifications for E&SC shall apply to all plan design, construction and maintenance activities undertaken by the Authority, either by its internal workforce or contracted to external entities, where such activities are regulated by the Virginia E&SC Law. During any inspections of the Authority’s land-disturbing activities by DEQ and other such environmental agencies, compliance with the approved Authority Annual Standards and Specifications for E&SC (and all parts thereof) will be expected.

The Authority’s Annual Standards and Specifications for E&SC are submitted to the Department of Environmental Quality (DEQ) for review and approval on an annual basis. This submittal constitutes Authority’s commitment to execute all provisions contained herein on our regulated land-disturbing activities and land development projects. As such, this submittal will be made available and utilized as an operational guidance document by all appropriate Authority and DEQ personnel.
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1.0 ANNUAL STANDARDS AND SPECIFICATIONS ADMINISTRATION

All projects involving land-disturbing activity subject to the Virginia Erosion and Sediment Control Law (§10.1-560 et seq. as amended), and the Virginia Erosion and Sediment Control Regulations (9VAC25-840 et seq. as amended) shall be bound by the Authority Annual Standards and Specifications for Erosion and Sediment Control.

1.1 Authority Annual Standards and Specifications for Erosion and Sediment Control (E&SC) approved by DEQ are composed of general specifications. The general specifications for E&SC that apply to the land-disturbing activities, listed in 1.0 above, include by reference the following:

1.1.1 Virginia Erosion and Sediment Control Law (§10.1-560 et seq. as amended);
1.1.2 Virginia Erosion and Sediment Control Regulations (9VAC25-840 et seq. as amended);
1.1.3 Virginia Erosion and Sediment Control Certification Regulations (9VAC25-850 et seq. as amended);
1.1.4 Virginia Erosion and Sediment Control Handbook, 1992;

1.2 Any land-disturbing activity carried out in a locality with a local E&SC program with more stringent regulations than those of the state program shall be consistent with the requirements of the local program.

1.3 Site-Specific E&SC Plans shall be prepared for all projects involving a regulated land-disturbing activity as defined in §10.1-560. Site-specific E&SC plans shall be submitted to the Authority Annual Standards and Specifications Administrator for review. Checklists that summarize the required components of the E&SC Plans are included in Appendix A. Prior to starting a land-disturbing project, as defined in §10.1-560, the project must have written approval issued by the Authority’s Building Code/Environmental Department E&SC Annual Standards and Specifications Administrator.

1.4 A Responsible Land Disturber (RLD) shall be designated prior to initiating the land-disturbing activity. The Contractor shall notify the Authority and DEQ Woodbridge Regional Office of the Responsible Land Disturber at least two weeks in advance of the land-disturbing activity. The information provided shall include the name, contact information and certification number of the RLD.

1.5 The Authority may request DEQ to grant a project specific variance to the approved Authority Annual Standards and Specifications for E&SC. All requested variances are to be considered
unapproved until written approval from DEQ is received. Refer to Section 6.0 for more information on variances.

2.0 ANNUAL STANDARDS AND SPECIFICATIONS PERSONNEL

The Authority’s Building Code/Environmental Department shall be the authority for administering Authority Projects under the Authority Annual Standards and Specifications for E&SC. The following is a breakdown of related responsibilities and titles. Responsibilities may be combined in terms of staffing resources only if the person responsible for the task(s) is qualified per Section 1.1.3. The following titles are designated to ensure compliance with the Authority Annual Standards and Specifications for E&SC on all Authority projects.

2.1 E&SC Annual Standards and Specifications Administrator (Administrator) shall have overall management and coordination responsibilities for the Authority Annual Standards and Specifications for E&SC. This person will reside within the Building Codes/Environmental Department. At a minimum, this person shall be a DEQ certified program administrator.

2.2 E&SC Plan Reviewer (Reviewer) shall be responsible for reviewing plans to insure compliance with the Authority Annual Standards and Specifications for E&SC and applicable E&SC laws and regulations. The Plan Reviewer must state in writing the reason(s) for disapproval of an E&SC Plan and specify the modifications, terms, and conditions necessary for plan approval. This person shall be DEQ certified as a plan reviewer and will reside within the Building Code/Environmental Department.

2.3 E&SC Inspector (Inspector) shall have the responsibility for inspecting erosion and sediment control practices to evaluate compliance with the approved E&SC plan and associated laws, regulations, and the Annual Standards and Specifications for E&SC. This position shall be a DEQ certified inspector from the Building Code/Environmental Department.

2.4 Certifications shall be in accordance with Virginia Erosion and Sediment Control Certification Regulations (9VAC25-850 et seq.).

3.0 ANNUAL STANDARDS AND SPECIFICATIONS IMPLEMENTATION

E&SC plans shall comply with the Authority Annual Standards and Specifications for Erosion and Sediment Control, Virginia’s Erosion and Sediment Control Law (§10.1-560 et. seq.), and the Virginia Erosion and Sediment Control Regulations (9VAC25-840 et. seq.). Refer to Section 1.1 for more information on general specifications.

3.1 E&SC drawings and narratives (E&SC plans) shall be submitted to the Authority’s Administrator for review and approval prior to any land-disturbing activities. The Administrator will transmit the E&SC plans to the appropriate Reviewer. The Reviewer shall have 30 days to review the plan and provide written comments to the Authority’s Administrator. Prior to commencement of a land-disturbing project, the project must have received written approval for the plan(s) from the Authority’s Administrator.
3.2 Plan reviews shall be conducted by qualified personnel. Plan reviews shall ensure compliance with the Authority Annual Standards and Specifications. Plan Reviewers shall use the Plan Review Checklist provided in Appendix A for E&SC plans.

3.3 The Inspector(s) is responsible for determining if the implementation of the project is in accordance with the project specific erosion and sediment control plans and associated E&SC laws and regulations. Refer to Section 5.0 for more information on inspections and enforcement procedures.

3.4 An approved plan may be changed by the Building Code/Environmental Department in the following cases:

   (i) Where inspection has revealed the plan is inadequate to satisfy applicable regulations; or

   (ii) if for changed circumstances or other reasons the approved plan cannot be effectively carried out, and proposed amendments to the plan, consistent with the requirements of this article, are agreed to by the plan-approving authority and the person responsible for carrying out the plan.

3.5 Subject to the discretion of the Inspector and/or project manager, revisions to an approved E&SC plan must be submitted in writing to the Administrator for review. Formal plan revisions are only necessary when the changes involve engineered controls (e.g., a sediment trap or basin) or a reduction in the level or quantity of E&SC. Revisions shall not be considered approved until written notice is provided. Revisions must comply with the Authority’s Annual Standards and Specifications for E&SC.

4.0 CONSTRUCTION PLAN REQUIREMENTS

4.1 Complete erosion and sediment control plans shall be provided in the construction plans and include the following:

   4.1.1 Minimum standards 1 through 19 shall be listed in the construction plans.

   4.1.2 Construction sequence of operations shall be defined on the construction plans with staged implementation of erosion and sediment control measures for each phase. The area which may be disturbed in each phase shall be set forth in the construction plans.

   4.1.3 Construction plans shall provide information on the maintenance of all erosion and sediment control measures or reference the narrative section that contains the maintenance information.

   4.1.4 Construction plans shall include the amount of disturbed area listed per phase and proposed net increase in impervious area.
4.1.5 Plans shall provide information on the maintenance of BMPs or reference the narrative section that contains the information.

4.1.6 Land disturbing activity occurring at a separate location shall be included in the plan or in a separate approved plan.

4.1.7 Permanent SWM BMPs shall have unique identifications and referenced in all documentation, (e.g., SWPPP, narrative, construction plans, and calculations sealed by a Virginia Professional Engineer, etc.).

4.1.8 Profiles shall be included for all closed and open storm systems. The profile shall include the existing surface, final surface, proposed water elevations, pipes, pipe crossings, and hydraulic grade line. Surcharges shall be clearly indicated on the profile.

4.1.9 SWM calculations include but are not limited to: ditch computations, stormwater routing, storm inlet computations, pipe capacity computations, BMP computations, pond routings and computations, etc.

4.1.10 Proof of adequate outfall and adequacy of the receiving channel to the SWM treatment facility needs to be submitted.

4.1.11 Plans should also include a detailed landscape plan with a planting schedule.

4.1.12 Stockpile/lay-down areas and trailer locations shall be provided on the erosion and sediment control plans.

4.1.13 Areas of equipment maintenance, fuel storage, chemical storage, etc. shall be identified.

4.2 A copy of the completed plan checklist (see Appendix A) shall be provided with the construction plans. A notation shall be provided for each checklist item, such as a specific plan sheet or narrative section, indicating the location where the requirement is addressed.

4.3 Suggested Sheets (actual sheets may vary accordingly):

- Cover Sheet (General Notes, Vicinity Map, Soils Map)
- General Construction Details
- Existing Conditions and Grading (2’ contours)
- Existing Drainage Divides (include calculated areas, impervious areas, and C-values)
- Proposed Site Plan
- Proposed Grading Plan (1-2’ contours; spot elevations @ high/low points and entrances)
- Proposed Drainage Divides (include calculated areas, impervious areas, and C-values)
- E&S Narrative (Narrative Template)
- Phases of E&S w/ Drainage Divides identified per construction phase
- E&S/BMP/SWM Details
- Stormwater Pipe Profiles (include dimensioned utility crossings; V=1:5 H=1:25)
- Stormwater Calculations (ditch comps, pipe comps, inlet comps, pond routings, etc.)
5.0 INSPECTIONS AND ENFORCEMENT

5.1 Periodic inspections shall be conducted, at a minimum, every two weeks and within 48 hours of a rainfall event producing runoff. In addition, inspections shall be made during or immediately following initial installation of erosion and sediment controls and at the completion of the project.

The inspection report provided in Appendix B shall be used during each site inspection. All measures shown on the plan shall be inspected. All problems and violations shall be documented on the inspection report. Inspection reports shall specify a corrective action for each problem or violation noted and a date the corrective action must be completed. A copy of the inspection report will be provided to the project staff.

5.2 When violations noted on written inspection reports remain during subsequent inspections, a Notice to Comply will be issued by the Building Codes/Environmental Department. The Notice to Comply will contain specific measures or corrections that need to be made and specify deadlines for completion. Stop Work Orders will be issued when:

   i. The project has failed to meet the prescribed deadlines in a Notice to Comply;

   ii. Land disturbing activities commenced without an approved plan; or

   iii. Violations are causing or are in imminent danger or causing harmful erosion.

5.3 Violations shall be documented in the Inspection Report, including photographs, descriptions, and necessary corrective actions. If a violation continues to be repeated, then a formal Notice of Non-Compliance will be issued, and DEQ will be notified. At the discretion of Building Codes/Environmental Department, the Construction Permit may be suspended and/or revoked; at which time all land disturbing activity must cease until the violation(s) of the plan or permit has ceased, corrective action completed, and any related environmental or property damages abated. The Authority reserves the right to contract with a 3rd party to install and maintain the Erosion and Sediment Control and/or Stormwater Management measures in accordance with the approved plan, complete any necessary corrective actions, and abate any related damages. The Contractor (the officer of the company and senior project officers) shall schedule and meet with the Building Codes/Environmental Department to discuss the violations. After the meeting has been conducted and the site is stabilized to the satisfaction of the Building Codes/Environmental Department, site work may resume. All associated costs will be back-charged to the Contractor. The Stop Work Order will be lifted once the required E&SC measures or corrections are in place and verified by the E&SC Inspector.
5.4 E&SC Inspectors will also be responsible for responding in a timely manner to reports of alleged violations reported by Authority staff, or adjacent property owners, or others. Corrective measures if warranted will follow standard procedures as outlined for E&SC inspections.

6.0 VARIANCES

6.1 Variances to regulations must ensure off-site properties and resources are protected from damage. Economic hardship is not sufficient reason to request a variance. For a variance to become part of project specific E&SC plans, a written variance request must be submitted by the Building Code/Environmental Department to DEQ for review and approval. This request must include a detailed description of the alternative E&SC practice and justification that the practice meets the intent of the Minimum Standard for which the variance is sought. (9VAC25-840-50)

6.2 All requests for project specific variances to Authority Annual Standards and Specifications for E&SC shall be sent by the design professional to the Authority’s Administrator and shall be accompanied by complete details and documentation, including justification for the requested variance and impacts associated with the variance request. If determined to be appropriate by the Authority’s Administrator and the Reviewer, then the Authority’s Administrator will send the variance request to the DEQ Northern Regional Office for review and approval.

6.3 All requested variances will be considered unapproved until written approval from DEQ is received. (A period of sixty days shall be scheduled for this request)

6.4 All approved variances shall be listed in the General Notes section of the E&SC plans for land disturbing activities and included in the Narrative.

7.0 LAND-DISTURBING ACTIVITIES

7.1 A list of regulated land-disturbing activities expected to be under contract during the referenced time period are included in Appendix C. The list includes project location, estimated disturbed acreage by watershed, and approximate start and completion dates for each project. Information on specific land-disturbing activities not included on the list will be provided to DEQ no less than two weeks prior to the start of the activity.

7.2 The Authority will track regulated land-disturbing activities through the Building Code/Environmental Department Construction Permitting process. The Building Code/Environmental Department shall provide an annual list of proposed projects as related to Erosion and Sediment Control. Any changes to the annual list will be updated and forwarded to DEQ.
8.0 ANNUAL STANDARDS AND SPECIFICATIONS REVIEW AND EVALUATION

8.1 DEQ shall have sixty days in which to comment on any erosion and sediment control specifications submitted to it for review, and its comments shall be binding on the Authority and any private business hired by the Authority (§10.1-564.D).

8.2 The Authority shall ensure compliance with the approved plan and annual standards and specifications (§10.1-564.F). Upon request by the DEQ, the Authority shall provide a copy of the approved plan sheets and narrative for each regulated land-disturbing activity as outlined in Section 1.1. The Authority shall provide DEQ with the appropriate information, in a timely manner, when requested.
APPENDIX A:
E&SC Plan Checklists
CHECKLIST FOR SUBMITTING
THE
STORMWATER POLLUTION PREVENTION PLAN

The following checklist shall be completed prior to submitting the project specific Stormwater Pollution Prevention Plan (SPPP). This completed checklist shall be included with the SPPP; immediately after the SPPP Title Page.

General:

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title Page including Project, Contract Number, and Date.</td>
<td>☐</td>
</tr>
<tr>
<td>Certification Statement Signed by an Officer of the Company?</td>
<td>☐</td>
</tr>
<tr>
<td>Plan signed off by all subcontractors?</td>
<td>☐</td>
</tr>
<tr>
<td>Responsible Land-Disturber Certificate Included?</td>
<td>☐</td>
</tr>
<tr>
<td>DCR Stormwater Discharge Permit included?</td>
<td>☐</td>
</tr>
</tbody>
</table>

Section 1.0 Narrative:

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detailed description of construction activities</td>
<td>☐</td>
</tr>
<tr>
<td>Site description (i.e. location, type of ground cover, etc.)</td>
<td>☐</td>
</tr>
<tr>
<td>Site location map</td>
<td>☐</td>
</tr>
<tr>
<td>Estimated area to be disturbed</td>
<td>☐</td>
</tr>
<tr>
<td>Construction sequence/schedule of land-disturbing activities</td>
<td>☐</td>
</tr>
<tr>
<td>Pre and post stormwater runoff coefficients</td>
<td>☐</td>
</tr>
<tr>
<td>Name and location of receiving waters and tributaries</td>
<td>☐</td>
</tr>
<tr>
<td>Location of wetlands or other sensitive habitat within the project</td>
<td>☐</td>
</tr>
</tbody>
</table>

Section 2.0 Potential Pollution Sources:

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aboveground storage tanks addressed?</td>
<td>☐</td>
</tr>
<tr>
<td>List of chemicals, petroleum products provided (include volumes)</td>
<td>☐</td>
</tr>
</tbody>
</table>
Sanitary waste facilities addressed

Vehicle maintenance addressed

**Section 3.0 Best Management Practices (BMPs):**

Description, type, and schedule of stabilization practices provided?

Description and type of structural BMPs (i.e. silt fence, check dams, inlet protection, sediment traps/basins, construction entrances, gabions, etc.) provided?

Soil stockpile stabilization addressed?

**Section 4.0 Operational Practices (Good Housekeeping):**

Solid waste management addressed?

Dust suppression addressed?

Sediment tracking on roads addressed?

**Section 5.0 Inspection and Maintenance of BMPs:**

Provided a plan for inspecting and maintaining the BMPs?

Designated a qualified individual to inspect all BMPs?

Included name and telephone number for the qualified person?

Example of BMP inspection checklist included?

**Section 6.0 Detailed Maps:**

Soil disturbance areas shown?
APPENDIX B:

- Annual Standards and Specifications
- Inspection Report Form
SECTION 312514 - STORM WATER POLLUTION PREVENTION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings, Contract and Special Provisions, Supplementary Conditions, latest version of Virginia Erosion and Sediment Control Handbook and other Division-01 Specifications apply to this Section.

1.2 SUMMARY

A. This Section includes preparation for and submitting for approval for a Storm Water Pollution Prevention Plan (SPPP).

1. Provisions for furnishing, installing and removal of silt fence, filter boxes, storm drain inlet protection, straw bale barriers, construction entrances, sediment traps, diversion berm, dust control and other erosion control measures during construction, and temporary and permanent soil stabilization measures, as noted on the contract plans and in the approved SPPP. All measures and practices shall be in accordance with the latest version of the Virginia Erosion and Sediment Control Handbook and for preventing contamination of storm water from construction activities in accordance with the Commonwealth Of Virginia Regulation 9VAC 25-180 (i.e., temporary fuel storage, fueling operations, equipment maintenance, hazardous material and waste handling, good housekeeping practices, etc.).

B. Related Sections

1. Division 01 Section “Quality Requirements” for quality issues.

1.3 DEFINITIONS

A. CWA- Clean Water Act means the law passed by the Congress of the United States in 1972 controlling the Discharge of Pollutants into the Nation's waterways.

B. BMP- Best Management Practices are defined as any one or group of management practices, activities, policies, equipment, and structures that will: prevent pollutants from entering the environment, minimize pollutants from entering the environment, and mitigate, reduce, and treat prior to the pollutant entering the environment.

C. NPDES- National Pollutant Discharge Elimination System is the national program for issuing, modifying, revoking, reissuing, terminating, monitoring and enforcing permits pursuant to sections 402, 318, and 405 of the CWA.

D. VDEQ- Virginia Department of Environmental Quality is the agency of the Commonwealth of Virginia that manages the Commonwealth of Virginia's environmental regulations.
E. VPDES- Virginia Pollutant Discharge Elimination System is the Commonwealth of Virginia program and regulations that describe the proper management of discharges of pollutants into the waters of the Commonwealth.

F. DCR- The Commonwealth of Virginia Department of Conservation and Recreation, Division of Soil and Water Conservation, regulates land disturbing activities and erosion and sedimentation compliance.

1.4 Submittals

A. Storm Water Pollution Prevention Plan (SPPP) - Prepare and submit for written approval by the Authority in accordance with the information provided below. Do not initiate ground-disturbing activities until the Authority has approved the SPPP. In addition, the SPPP will serve as the Soil Erosion and Sediment Control Plan required as a condition of the Authority's issuance of a Construction Permit by the Authority's Building Codes Department. Issuance of this Construction Permit is required prior to initiation of any project construction.

B. The SPPP may utilize plans, details, notes and other information provided in the construction documents, however, such information shall not, in itself, be construed to meet the requirements of this Section. Provide additional details to ensure that the SPPP accurately reflects means and methods for construction.

C. Prepare the SPPP on regular 8 ½ X 11 inch paper. Include attachments of the plans showing locations of erosion and sediment control devices and BMPs. Submit four bound copies to the COTR for review and approval.

D. Plan Certification with Virginia Pollution Discharge Elimination System Regulation (9VAC 25-180) and DCR (4VAC50-30).

1. Submit with Plan Certification the following certification statement signed by an officer of the company of Contractor and signed by all its subcontractors:

"I certify under penalty of law that I understand the terms and conditions of the General Permit for Discharges from Construction Activities that authorizes the storm water discharges from construction activities associated with the site identified by the permit."

2. The above certification shall be executed on the Contractor's letterhead. Include the name, title, address, and telephone number of contractor and all subcontractors, and the date the certification is made. The Certification shall be attached to the SPPP and submitted to the COTR.

E. Once the SPPP has been approved by the COTR, submit a Virginia Storm Water Management Program (VSMP) permit application to the Virginia Department of Conservation and Recreation (DCR) to obtain the VSMP permit. Submit payment of $500 with the permit application. The Contractor shall include the cost of the VSMP in his proposal.

F. Be responsible for submitting the Notice of Project Termination (NPT) shown in Appendix II for all construction activities within this particular construction project. Contractor shall notify the Authority and provide a copy to the COTR upon completion of this construction project.
G. Submit the name, and a copy of the certificate of competence issued by the Department of Conservation and Recreation for the person in charge of and responsible for carrying out the land-disturbing activity prior to conducting any land-disturbing activities.

H. Prepare the SPPP narrative and associated drawings in accordance with the following outline:

1. Site Description: A detailed description of the construction activities, physical features of the site, and other pertinent information shall be included in this Section.
   a. A description of the nature of the construction activities;
   b. A description of the intended sequence of major activities which disturb soils for major portions of the site (e.g. grubbing, excavation, grading);
   c. Estimate of the total area of land disturbing activities. Land disturbing areas greater than 2,500 square feet require the implementation and enforcement of a SPPP.
   d. Describe the quality of any discharge water from the site;
   e. A description of the existing vegetative cover at the site, include an estimate of the total buffer area that is covered by the vegetation before construction activities commence.
   f. The name of the receiving water(s), their tributaries, and the ultimate receiving water(s). A description of the aerial extent of wetlands present at the site and other sensitive habitats present on site describe measures that will be used to protect wetlands.
   g. Include in the plan a schedule of the planned start and completion of construction activities, major grading activities, and other activities that may require stabilization measures to be initiated at the site.

2. Potential Pollution Sources:
   a. Describe potential pollution sources. Description should include, but not be limited to, the following:
      1) Vehicle Fueling: A description of the location and number of all above ground storage tanks (ASTs) and any storage containers that will be used for the purpose of fueling vehicles or storing any materials used during construction activities (indicate location on the site map).
      2) Storage Tanks: ASTs storing regulated substances and greater than 660 gallons shall be registered with the Department of Environmental Quality. All ASTs shall be properly equipped and follow the AST requirements. For example, requirements include that ASTs be double walled or have 110% secondary containment devices that will not collect rainwater. Tanks shall have spill containment buckets and be properly labeled, etc. Earthen berms shall not be permitted.
      3) Materials Storage: A description of the storage location and a minimum quantity of all hazardous and non-hazardous materials that might pollute storm water. Pollutants such as, but not limited to, paints, solvents, hydraulic fluids, engine oil, form oil, etc. that will be used during the course of construction activities. All containers of materials of any size that are used on site and their associated secondary containment shall be covered to prevent rainwater from coming in contact with the containers. Earthen
berms shall not be permitted. All drums and containers shall be removed from the site as they become empty.

4) Sanitary Waste Facility: A description of the location and the number of sanitary waste facilities (e.g. portable chemical toilets) and method of disposal for the subject waste during the course of construction activities on site.

5) Equipment Maintenance: A detailed description of how and where equipment will be maintained. This shall include fluid changes, servicing, breakdowns, etc. The plan shall provide a standard operating procedure that shall be used for the protection of the environment while maintaining the equipment.

6) The SPPP shall include a drum and container management plan. The plan shall describe the methods and location for the containment, protection, and storage of all solvents, chemicals, petroleum products, and all toxic material as defined by the EPA brought on site. All drums and containers shall be stored within a secondary containment system and shall be covered to prevent rainwater from entering the secondary containment.

3. Best Management Practices (BMPs) and Control Measures. The purpose of this Section is to identify all appropriate BMPs and control measures that shall be implemented at the construction site. This Section of the plan shall clearly describe the construction activities in sequence and their associated BMPS, control measures, and Erosion and Sediment (E&S) controls that are applicable. This Section shall indicate the timing to achieve the above-referenced sequencing relative to the installation of BMPs, E&S, and the control measures.

a. The components of this Section of the plan shall, at a minimum, include but not be limited to the following:

1) Stabilization Practices: All stabilization practices, including interim and permanent stabilization measures as well as specific scheduling of the Implementation of the practices, shall be included in this Section. Where possible, this portion of the plan shall describe all existing vegetation that is preserved for the purpose of site stabilization. Stabilization measures include, but are not limited to the following:

a) Vegetative buffer strips
b) Sod stabilization
c) Geotextile
d) Mulching
e) Temporary Seeding
f) Permanent Seeding
g) Protection of trees
h) Preservation of mature vegetation
i) Other measures/stabilization practices

2) Structural BMPS: This Section shall adequately describe the structural BMPs and practices that will divert and mitigate storm water runoff from soils, sediments, exposed materials, ASTs, and containers of hazardous/non-hazardous materials. Structural BMPs include, but are not limited to the following list:
a) Silt fences  
b) Earth dikes  
c) Drainage swales  
d) Sediment traps  
e) Subsurface drains  
f) Secondary containment for ASTs and containers  
g) Pipe slope drains  
h) Coverage for ASTs and containers  
i) Level spreaders  
j) Storm drain inlet protection  
k) Reinforced soil retaining systems  
l) Rock outlet protection/wheel washers  
m) Gabions  
n) Construction rock entrance  
o) Temporary or permanent sediment basins  
p) Other BMPs and structural controls.

3) The installation of these structural BMPs may be subject to the CWA Section 404 "Permitting Requirements". Be responsible for determination whether the above-permitting requirements apply to any of the structural BMPs.

4) Provide wheel washers and construction rock entrances for all projects where constructions traffic enters or exits paved surfaces. Be responsible for ensuring that all wheel washers and construction rock entrances are designed and constructed to adequately meet the expected construction traffic demand.

5) Temporary or Permanent Sediment Basins

a) If the project site involves common drainage areas that serve 3 acres or more of disturbed area(s), a temporary or permanent sediment basin is required. Such a basin shall provide 134 cubic feet of storage per acre drained. Where 134 cubic feet of storage per acre drained or equivalent is not attainable due to site constraints, smaller sediment basins and sediment traps shall be used as approved by the COTR on a case-by-case basis.

b) To prevent the movement and erosion of soils, structural measures should be placed on all upland areas.

4. Operational Practices (Good Housekeeping Practices). This Section shall include measures and BMPs including good housekeeping practices that address the following sources of pollution:

a. The plan shall contain measures that prevent trash, innocuous solid materials, building materials, garbage, and debris from entering the Authority's storm sewer system or directly into a stream or waterway.

b. Provide a daily program of vacuum or hand sweeping or other acceptable means of cleaning sediments that are tracked or transported onto the public roads from the construction sites shall be implemented. The roads may be washed only after the sediments have been removed.

5. Inspection And Maintenance of BMPs
a. Provide a schedule of inspection of all structural BMPs, the necessary maintenance and corrective action to correct all discrepancies found on site. Designate qualified personnel that have adequate knowledge of E&S requirements and storm water management and pollution prevention requirements, to inspect all structural control measures and BMPs at "least every seven calendar days and within 24 hours of the end of a storm event that is .5 inches or greater."

b. At a minimum develop a checklist for these inspections that conforms to the inspection checklist of Appendix I. Areas where final stabilization has been established need only be inspected once every month. Provide the completed inspection checklist and a report summarizing the corrective actions taken by the contractor to the COTR according to the following schedule of frequencies:
   c. Every seven calendar days: Under the normal circumstances.
   d. Every 24 hours: After a rainfall of 0.5 inches or greater, of intensity.
   e. Every 30 days: for the areas where final stabilization has been accomplished.
   f. Correct any and all discrepancies immediately upon discovery. The SPPP shall be revised as necessary to reflect any modifications to strengthen the BMPs and other structural controls in order to address the discrepancies. The above inspections and findings shall be subject to Authority field verification. Be responsible for responding to all regulatory inquiries from the Virginia Department of Environmental Quality-Water Division (VDEQ-Water), Virginia Department of Conservation and Recreation (DCR), and the Environmental Protection Agency (EPA) Region III. Be responsible for addressing the outcome of all compliance monitoring inspections conducted by the above regulatory agencies. Take all corrective actions as required by VDEQ-Water, DCR or EPA Region III.

6. Non-Storm water Discharge. This SPPP is for the sole purpose of preventing pollution associated with storm water runoff (Act of God: rain, snow, etc.). Plan shall identify all non-storm water components, process waste water discharges, and any other non-storm water influent that may exist in this particular construction site. Plan shall ensure that all of the above non-storm water discharges are appropriately eliminated, permitted or addressed through other acceptable regulatory permitting mechanisms.

7. Detailed Composite SPPP Map. Prepare the following:
   a. Drainage pattern and approximate slopes anticipated after completing major grading activities on site
   b. Soil disturbance areas
   c. Location of all Best Management Practices (BMPs), structural controls, non-structural controls, good housekeeping practices (GHP) and other erosion and sediment (E&S) control measures to be used during the course of construction activities
   d. Locations where stabilization is expected to be used, including the types of vegetative cover which will be employed on site
   e. Location of all receiving waters, including their tributaries and the ultimate receiving waters (including wetlands/sensitive habitats)
   f. Location of all points of discharge to existing storm sewers and outfalls
   g. Existing and planned paved areas, impervious surfaces, and buildings
   h. Location of all post-construction BMPs and Storm water management practices that will address the long-term water quality improvement needs for the site, if applicable.
i. Location of any fuel storage, materials storage and sanitary waste and other potential pollution sources and their associated BMPs. shall be reflected on the site map.

j. Two site maps shall be developed, one indicating pre-construction and during construction site conditions and the second indicating final site conditions. Maps shall be to the same scale.

1.5 Quality Assurance

A. Prepare and submit the SPPP with input from each subcontractor.

PART 2 - PRODUCTS

2.1 General

A. Provide erosion and sediment control devices and products as indicated, in accordance with the SPPP and in accordance with the latest updated version of the Virginia Erosion and Sediment Control Handbook.

PART 3 - EXECUTION

3.1 Implementation

A. Implement and maintain the approved SPPP throughout the life of the contract in accordance with provisions of the Virginia Erosion and Sediment Control Handbook and applicable contract documents.

B. Exercise every reasonable precaution, including temporary and permanent measures, throughout the duration of the project to control erosion and prevent or minimize pollution of rivers, streams, lakes and other receiving waters. Apply siltation and stabilization control measures to material, subject to erosion, exposed by any activity associated with construction including but not limited to local material sources, stockpiles, disposal areas, and haul roads.

C. Initiate stabilization measures as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased but no later than 14 days after the construction activities have temporarily or permanently ceased. Except as provided in the following paragraphs:

1. If snow cover and or severe weather conditions preclude initiation of the stabilization measures by the 14th day after construction activities have ceased, either temporarily or permanently, the stabilization practices shall be initiated as soon as practicable.

2. If construction activities resume on a portion of the site within 21 days from the date that construction activities have temporarily ceased, then stabilization practices need not be initiated on that particular portion of the site by the 14th day after construction activities have temporarily ceased.
D. Be solely responsible for complying with the soil erosion, sedimentation control and good housekeeping requirements of this Contract, and for otherwise preventing contamination of storm water from construction activities. Be solely responsible for any and all fines, penalties or damage that result from the Contractor’s failure to comply.

3.2 Erosion and Siltation Control:

A. Control erosion and siltation through the use of the devices and measures specified herein, in the approved SPPP or as is otherwise necessary. The Authority reserves the right to require other temporary measures not specifically described herein to correct an erosion or siltation condition.

B. Maintenance: Maintain erosion and siltation control devices and measures in a functional condition at all times. Inspect temporary and permanent erosion and sedimentation control measures after each rainfall and at least daily during periods of prolonged rainfall. Correct deficiencies immediately. Make a daily review of the location of erosion and sediment control devices to ensure that they are properly located for effectiveness. Where deficiencies exist, make corrections immediately as approved or directed by the COTR.

PART 4 - CONTRACTOR’S QUALITY CONTROL

4.1 Field Quality Control

A. Conform to all applicable provisions of Division 01 Section “Quality Requirements”. Be responsible for periodic inspections for conformance with the approved SPPP. The results of the periodic inspections shall be submitted to the COTR upon completion.
## SPPP Inspection Checklist

<table>
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<th>BMP</th>
<th>Proper Installation</th>
<th>Proper Operation</th>
<th>Housekeeping Practices</th>
<th>Potential Hazard</th>
<th>Discharge: Storm water</th>
<th>Non-storm water</th>
<th>Effectiveness of BMP</th>
<th>Observations</th>
<th>Comments</th>
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Please list any discrepancies or items that are not in compliance in the space provided below.

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Please list the corrective actions necessary to abate the above-listed discrepancies.

________________________________________________________________________

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**Note:** All corrective actions must take place within 7 days of the discovery of the above discrepancies and non-compliance item(s).

Inspector:

Signature: ___________________________ Date: ________________
Metropolitan Washington Airports Authority

Notice of Project Termination

For

Storm water Discharges from Construction Activities

**Note:** This form shall be completed by the construction contractors upon final stabilization of the site, upon elimination of all storm water, or when the construction contractor has changed within the same construction project. The contractor shall submit a completed copy of this form to the Authority, at the address provided below and a copy to PMC's Resident Engineer within 30 days after final stabilization has been achieved or when it is no longer the construction contractor for this project. (An officer of the company shall sign this certification)

Completed form shall be submitted to:

Manager, Building Codes/Environmental Branch

Engineering Division

Ronald Reagan Washington National Airport

Washington, D.C. 20001

Copy to:

Parsons Management Consultants

45045 Aviation Drive

Chantilly, VA 20166

Attn: Project’s Resident Engineer
Contract Number:

**Contractor Information:**

Contractor's name and mailing address:

Subcontractor(s) name and mailing address:

**Location of Construction Site:**

Project Name

Address

City ____________________________ State _______ Zip Code ___________

Latitude ______________________ Longitude _________________________

If there is a change in the contractor(s) please provide the new contractor's information here:

**Certification:**

"I certify under penalty of law that disturbed soils at the identified project have been finally stabilized and temporary erosion and sediment control measures have been removed or will be removed at an appropriate time and that all storm water discharges associated with construction activities in this project have been eliminated, or that I am no longer the contractor for this construction site."

Print name:

Title:

Signature:

Date:

(This certification shall be signed by an officer of the company)
Note: This checklist shall be completed by all tenants of Washington Dulles International Airport (IAD) in the event of a hazardous material spill (under CERCLA, CWA, CAA, TSCA and/or a release of hazardous waste under RCRA). It is the responsibility of the tenants to notify all pertinent regulatory agencies within the time frame prescribed under the respective statutes and regulations.

1. Tenant Name:
2. Facility location within IAD where spill occurred:
3. Facility Environmental Manager, Foreman, or person in charge:
4. Time and date of release:
5. Amount of release material:
6. Description of how the release occurred and whether material reached a floor drain (if this situation occurred, describe amount of material that entered drain):
7. Type of material released (include common and chemical name; attach MSDS and/or Waste Manifest):
8. In the event of a release, verbal notification to IAD Fire Department and IAD Environmental Coordinator must be made immediately as follows:
   Fire Department:
   (703) 572-2970

IAD Government

Programs Engineer

(703) 572-0210

END OF SECTION 312514
APPENDIX C:
Proposed and Current Land Disturbing Projects
<table>
<thead>
<tr>
<th>Location</th>
<th>Project Name</th>
<th>Approx. Start Date</th>
<th>Approx. End Date</th>
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<tbody>
<tr>
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<td>Phase II Rail</td>
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<td>2017</td>
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