

SECTION 01 57 20.00 10

ENVIRONMENTAL MANAGEMENT AND PROTECTION

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

U.S. AIR FORCE (USAF) / DEPARTMENT OF DEFENSE (DOD)

AFI 32-1053	Pest Management Program
AFMAN 32-1067	Water and Fuel Systems
AFMAN 32-7002	Environmental Compliance and Pollution Prevention
DOD Energy Independence and Security Act (EISA) Section 438, Storm Water Requirements	

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

29 CFR 1910.120	Hazardous Waste Operations and Emergency Response
33 CFR 328	Definitions of Waters of the United States
40 CFR 68	Chemical Accident Prevention Provisions
40 CFR 152 - 186	Pesticide Programs
40 CFR 261	Identification and Listing of Hazardous Waste
40 CFR 262	Standards Applicable to Generators of Hazardous Waste
40 CFR 273	Standards for Universal Waste Management
40 CFR 279	Standards for the Management of Used Oil
40 CFR 300	National Oil and Hazardous Substances Pollution Contingency Plan
40 CFR 302	Designation, Reportable Quantities, and Notification
40 CFR 355	Emergency Planning and Notification
49 CFR 171 - 178	Hazardous Materials Regulations

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1	(1996) U.S. Army Corps on Engineers Safety and Health Requirements Manual
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1.2 DEFINITIONS

1.2.1 Environmental Pollution and Damage

Environmental pollution and damage is the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances of importance to human life; affect other species of importance to humankind; or degrade the environment aesthetically, culturally and/or historically.

1.2.2 Environmental Protection

Environmental protection is the prevention/control of pollution and habitat disruption that may occur to the environment during construction. The control of environmental pollution and damage requires consideration of land, water, and air; biological and cultural resources; and includes management of visual aesthetics; noise; solid, chemical, gaseous, and liquid waste; radiant energy and radioactive material as well as other pollutants.

1.2.3 Solid Waste

Includes but is not limited to garbage, refuse, debris, sludge, or other discharged material, including solid, liquid, semisolid, or contained gaseous materials resulting from domestic, industrial, commercial, mining, or agricultural operations. Types of solid waste typically generated at construction sites may include:

- a. Green waste: The vegetative matter from landscaping, land clearing and grubbing, including, but not limited to, grass, bushes, scrubs, small trees and saplings, tree stumps and plant roots. Marketable trees, grasses and plants that are indicated to remain, be re-located, or be re-used are not included.
- b. Surplus soil: Existing soil that is in excess of what is required for this work, including aggregates intended, but not used, for on-site mixing of concrete, mortars and paving. Contaminated soil meeting the definition of hazardous material or hazardous waste is not included. Surplus soil must be disposed of at a facility approved by 914 MSG/CEV. Please provide written documentation prior to soil removal.
- c. Debris: Non-hazardous solid material generated during the construction, demolition, or renovation of a structure which exceeds 60 mm(2.5 inch) (2.5 inch) particle size that is: a manufactured object; plant or animal matter; or natural geologic material (e.g. cobbles and boulders), broken or removed concrete, masonry, and rock asphalt paving; ceramics; roofing paper and shingles. Inert materials may be reinforced with or contain ferrous wire, rods, accessories and weldments. A mixture of debris and other material such as soil or sludge is also subject to regulation as debris if the mixture is comprised primarily of debris by volume, based on visual inspection will be disposed of by the contractor with weights and recycling facilities documented and submitted to LGC. This includes wood, and scrap metal. Recyclable materials will be handled in a similar manner.

1.2.4 Hazardous Waste

Any discarded material, liquid, solid, or gas, which meets the definition of hazardous material or is designated hazardous waste by the Environmental Protection Agency or State Hazardous Control Authority as defined in 40 CFR 260, 40 CFR 261, 40 CFR 263, 40 CFR 264, 40 CFR 265, 40 CFR 266, 40 CFR 268, 40 CFR 270, 40 CFR 271, 40 CFR 272, 40 CFR 273, 40 CFR 279, and 40 CFR 280.

1.2.5 Contractor Generated Hazardous Waste

Contractor generated hazardous waste means materials that, if abandoned or disposed of, may meet the definition of a hazardous waste. These waste streams would typically consist of material brought on site by the Contractor to execute work, but are not fully consumed during the course of construction. Examples include, but are not limited to, excess paint thinners (i.e. methyl ethyl ketone, toluene etc.), waste thinners, excess paints, excess solvents, waste solvents, and excess pesticides, and contaminated pesticide equipment rinse water.

1.2.6 Hazardous Materials

Hazardous materials as defined in 49 CFR 171 and listed in 49 CFR 172.

Hazardous material is any material that:

- a. Is regulated as a hazardous material per 49 CFR 173, or
- b. Requires a Material Safety Data Sheet (MSDS) per 29 CFR 1910.120, or
- c. During end use, treatment, handling, packaging, storage, transportation, or disposal meets or has components that meet or have potential to meet the definition of a hazardous waste as defined by 40 CFR 261 Subparts A, B, C, or D.

Designation of a material by this definition, when separately regulated or controlled by other instructions or directives, does not eliminate the need for adherence to that hazard-specific guidance which takes precedence over this instruction for "control" purposes. Such material include ammunition, weapons, explosive actuated devices, propellants, pyrotechnics, chemical and biological warfare materials, medical and pharmaceutical supplies, medical waste and infectious materials, bulk fuels, radioactive materials, and other materials such as asbestos, mercury, and polychlorinated biphenyls (PCBs). Nonetheless, the exposure may occur incident to manufacture, storage, use and demilitarization of these items. All hazardous materials used in this project must be registered with the Niagara Falls HAZMART.

1.2.7 Waste Hazardous Material (WHM)

Any waste material which because of its quantity, concentration, or physical, chemical, or infectious characteristics may pose a substantial hazard to human health or the environment and which has been so designated. Used oil not containing any hazardous waste, as defined above, falls under this definition. Hazardous waste will be appropriately tested and discarded in a manner which is in compliance with other State and local, 914 MSG/CEV requirements.

1.2.8 Oily Waste

Oily wastes are those materials which are, or were, mixed with oil and have become separated from that oil. Oily wastes also includes materials which have come into contact with oil including wastewaters, centrifuge solids, filter residues or sludges, bottom sediments, tank bottoms, and sorbents.

This definition includes materials such as oily rags, "spedi-dry" sorbent clay and organic sorbent material. These materials must be handled as directed by 914 MSG/CEV.

1.2.9 Regulated Waste

Those solid wastes that have specific additional Federal, state, or local controls for handling, storage, or disposal.

1.2.10 Ozone Depleting Substances (ODS)

Ozone Depleting Substances are any Class I or Class II controlled substances as defined in Federal Regulations 40 CFR 82. All Class I and Class II Ozone Depleting Substance (ODS) must be handled in accordance with 40 CFR 82, and Section 602(a) and 602(s) of The Clean Air Act Amendments of 1990.

1.2.11 Universal Waste

The universal waste regulations streamline collection requirements for certain hazardous wastes in the following categories: batteries, pesticides, mercury-containing equipment (e.g., thermostats) and lamps (e.g., fluorescent bulbs). Please contact 914 MSG/CEV for disposition instructions.

1.2.12 Installation Pest Management Coordinator

Installation Pest Management Coordinator (IPMC) is the individual officially designated by the Installation Commander to oversee the Installation Pest Management Program and the Installation Pest Management Plan.

1.2.13 Project Pesticide Coordinator

The Project Pesticide Coordinator (PPC) is an individual that resides at a Civil Works Project office and that is responsible for oversight of pesticide application on Project grounds.

1.2.14 Pesticide

Pesticide is defined as any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, or intended for use as a plant regulator, defoliant or desiccant.

1.2.15 Pests

The term "pests" means arthropods, birds, rodents, nematodes, fungi, bacteria, viruses, algae, snails, marine borers, snakes, weeds and other organisms (except for human or animal disease-causing organisms) that adversely affect readiness, military operations, or the well-being of personnel and animals; attack or damage real property, supplies, equipment, or vegetation; or are otherwise undesirable.

1.2.16 Surface Discharge

The term "Surface Discharge" implies that the water is discharged with possible sheeting action and subsequent soil erosion may occur. Waters that are surface discharged may terminate in drainage ditches, storm sewers, creeks, and/or "waters of the United States" and would require a permit to discharge water from the governing agency.

1.2.17 Waters of the United States

All waters which are under the jurisdiction of the Clean Water Act, as defined in 33 CFR 328.

1.2.18 Wetlands & Other Waters of the U.S.

Wetlands means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, and bogs. There are Federal and State wetlands located on Niagara Falls Air Reserve Station. Construction or work in these areas including other "Waters of the U.S." such as Cayuga Creek and its tributaries and certain drainage ditches are regulated by the NYSDEC and the

U.S. Army Corps of Engineers. The Contractor shall prepare permit applications for work in these areas in coordination with the 914 MSG/CEV.

1.3 GENERAL REQUIREMENTS

The Contractor shall minimize environmental pollution and damage that may occur as the result of construction operations. The environmental resources within the project boundaries and those affected outside the limits of permanent work shall be protected during the entire duration of this contract. The Contractor shall comply with all applicable environmental Federal, State, and local laws and regulations. The Contractor shall be responsible for any delays resulting from failure to comply with environmental laws and regulations.

1.4 CONFORMANCE WITH ENVIRONMENTAL MANAGEMENT SYSTEM

The Contractor shall perform work under this contract consistent with the relevant policy and objectives identified in the agency, organizational, or facility environmental management system (EMS) applicable for your contract. The Contractor shall perform work in a manner that conforms to all appropriate Environmental Management Programs and Operational Controls identified by the agency, organizational, or facility EMS, and provide monitoring and measurement information as necessary for the organization to address environmental performance relative to the environmental, energy, and transportation management goals. In the event an environmental nonconformance or noncompliance associated with the contracted services is identified, the contractor shall take corrective and/or preventative actions. In the case of a noncompliance, the Contractor shall respond and take corrective action immediately. In the case of a nonconformance, the Contractor shall respond and take corrective action based on the time schedule established by the EMS Site Coordinator. In addition, the Contractor shall ensure that their employees are aware of the roles and responsibilities identified by the environmental management system and how these requirements affect their work performed under this contract.

1.5 SUBCONTRACTORS

The Contractor shall ensure compliance with this section by subcontractors.

1.6 PAYMENT

No separate payment will be made for work covered under this section. The Contractor shall be responsible for payment of fees associated with environmental permits, application, plan development, and/or notices obtained by the Contractor. All costs associated with this section shall be included in the contract price. The Contractor shall be responsible for payment of all fines/fees for violation or non-compliance with Federal, State, Regional and local laws and regulations. The Contractor shall be responsible for payment of all costs associated with the cleanup of a spill caused by the Contractor.

1.7 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

Environmental Protection Plan; G,

Stormwater Pollution Prevention Plan; G,

Certificate of Applicability/Non-Applicability of EISA 2007 Section 438; G,

Survey Report

Demolition Plan, [IF REQUIRED, SEE SECT 1.10 OF THIS SPEC], G

SD-09 Field Reports

Stormwater Inspection Reports,

Waste/Recycled Material Log (Attachment 2)

SD-11 Closeout Submittals

Disposal Documentation for Hazardous and Regulated Waste,

Waste/Recycled Material Log (Attachment 2)

1.8 ENVIRONMENTAL PROTECTION PLAN

Prior to commencing construction activities or delivery of materials to the site, the Contractor shall submit an Environmental Protection Plan for review and approval by the Contracting Officer and 914 MSG/CEV. The purpose of the Environmental Protection Plan is to present a comprehensive overview of known or potential environmental issues which the Contractor must address during construction. Issues of concern shall be defined within the Environmental Protection Plan as outlined in this section. The Contractor shall address each topic at a level of detail commensurate with the environmental issue and required construction task(s). Topics or issues which are not identified in this section, but which the Contractor considers necessary, shall be identified and discussed after those items formally identified in this section. Prior to submittal of the Environmental Protection Plan, the Contractor shall meet with the Contracting Officer for the purpose of discussing the implementation of the initial Environmental Protection Plan; possible subsequent additions and revisions to the plan including any reporting requirements; and methods for administration of the Contractor's Environmental Plans. The Environmental Protection Plan shall be current and maintained onsite by the Contractor.

1.8.1 Compliance

No requirement in this Section shall be construed as relieving the Contractor of any applicable Federal, State, and local environmental protection laws and regulations. During Construction, the Contractor shall be responsible for identifying, implementing, and submitting for approval any additional requirements to be included in the Environmental Protection Plan.

1.8.2 Contents

The environmental protection plan shall include, but shall not be limited to, the following:

- a. Name(s) of person(s) within the Contractor's organization who is(are) responsible for ensuring adherence to the Environmental Protection Plan.
- b. Name(s) and qualifications of person(s) responsible for manifesting hazardous waste to be removed from the site, if applicable.
- c. Name(s) and qualifications of person(s) responsible for training the Contractor's environmental protection personnel.
- d. Description of the Contractor's environmental protection personnel training program.

e. Drawings showing locations of proposed temporary excavations or embankments for haul roads, stream crossings, material storage areas, structures, sanitary facilities, and stockpiles of excess or spoil materials including methods to control runoff and to contain materials on the site.

f. Traffic control plans including measures to reduce erosion of temporary roadbeds by construction traffic, especially during wet weather. Plan shall include measures to minimize the amount of sediment transported onto paved roads by vehicles or runoff.

g. Work area plan showing the proposed activity in each portion of the area and identifying the areas of limited use or nonuse. Plan should include measures for marking the limits of use areas including methods for protection of features to be preserved within authorized work areas.

h. Drawing showing the location of borrow areas.

i. A Spill Control Plan which shall include the procedures, instructions, and reports to be used in the event of an unforeseen spill of a substance regulated by 40 CFR 68, 40 CFR 302, 40 CFR 355, and/or regulated under State or Local laws and regulations. The Spill Control Plan shall include procedures contained within the Hazardous Materials Emergency Planning and Response (HAZMAT) Plan for Niagara Falls Air Reserve Station "Quick Reference Guide, Off-Station Contractors and Suppliers" (Attachment 1). In response to a spill, the Contractor is responsible for assisting the Fire Department (914 MSG/CEF) or Environmental Office (914 MSG/CEV) in development of a spill report and any other actions needed by Niagara Falls ARS to respond to the spill/cleanup. This plan shall include as a minimum:

1. The name of the individual who will report any spills or hazardous substance releases and who will follow up with complete documentation. This individual shall immediately notify the Fire Department and the Contracting Officer. The plan shall contain a list of the required reporting channels and telephone numbers.
2. The name and qualifications of the individual who will be responsible for implementing and supervising the containment and cleanup.
3. Training requirements for Contractor's personnel and methods of accomplishing the training.
4. A list of materials and equipment to be immediately available at the job site, tailored to cleanup work of the potential hazard(s) identified.
5. The methods and procedures to be used for expeditious contaminant and cleanup.

j. A Non-hazardous Solid Waste Disposal Plan which identifies methods and locations for solid waste disposal including clearing debris. The plan shall include schedules for disposal. The Contractor shall identify any subcontractors responsible for the transportation and disposal of solid waste. Licenses or permits shall be submitted for solid waste disposal sites that are not a commercial operating facility. Evidence of the disposal facility's acceptance of the solid waste (i.e. acceptance letter prior to disposal, weight tickets, receipts, etc.) shall be attached to this plan during the construction.

The Contractor shall attach a copy of each of the Non-hazardous Solid Waste Diversion Reports to the disposal plan. The report shall be submitted to the Contracting Officer and 914 MSG/CEV on the first working day after the first quarter that non-hazardous solid waste has been disposed and/or diverted and shall be for the previous quarter (e.g. the first working day of January, April, July, and October) and at project completion. The report shall state the project name, project number, project duration, contractor name, name of contact, and phone number. Additionally, the report shall include the date the waste was disposed, waste type (i.e. scrap metal concrete, construction debris, etc.), disposal method (landfill, recycle, incineration, etc.), disposal location

(facility name, city, state), and total amount (in tons) of waste generated. See Attachment 2 for Waste/Recycled Material Log.

k. A Recycling and Solid Waste Minimization Plan which identifies the measures to divert waste disposal from landfills. The Contractor must divert solid waste and construction and demolition debris (C&D) in accordance with federal regulations, see tables below. The Contractor will generate the least amount of solid waste possible, maximize pollution prevention processes, and maximize landfill diversion through source reduction, reuse of materials, and recycling. The Contractor will not dispose of any hazardous waste, salvageable items, green waste, concrete, or asphalt in landfills. These items must be properly disposed, diverted, recycled, or reused. The plan shall detail the Contractor's actions to comply with and to participate in Federal, State, Regional, and local government sponsored recycling programs to reduce the volume of solid waste at the source.

Solid Waste

Fiscal year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Minimum Diversion Rate Requirement	42%	44%	46%	48%	50%	50%	50%	50%	50%	50%

C&D Waste

Fiscal year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Minimum Diversion Rate Requirement	52%	54%	56%	58%	60%	60%	60%	60%	60%	60%

l. An Air Pollution Control plan which details the measures to limit dust, debris, materials, trash, etc. from impacting air quality.

m. A Contaminant Prevention Plan that: identifies potentially hazardous substances to be used on the job site; identifies the intended actions to prevent introduction of such materials into the air, water, or ground; and details provisions for compliance with Federal, State, and local laws and regulations for storage and handling of these materials. In accordance with EM 385-1-1, a copy of the Material Safety Data Sheets (MSDS) and the maximum quantity of each hazardous material to be on site at any given time shall be included in the contaminant prevention plan. As new hazardous materials are brought on site or removed from the site, the plan shall be updated.

n. A Waste Water Management Plan that identifies the methods and procedures for management and/or discharge of waste waters which are directly derived from construction activities, such as concrete curing water, dewatering of ground water, disinfection water, hydrostatic test water, and water used in flushing of lines. Waste water must be discharged in accordance with applicable Federal, state, and local regulations. If proposed discharge methods require permits, the Contractor shall submit a copy of the permit and associated documentation to the Contracting Officer prior to discharging the waste water.

o. A Historical, Archaeological, Cultural, Biological Resources and Wetlands Plan that defines procedures for identifying and protecting historical, archaeological, cultural resources, biological resources and wetlands known to be on the project site: and/or identifies procedures to be followed if historical archaeological, cultural resources, biological resources and wetlands not previously known to be onsite or in the area are discovered during construction. The plan shall include methods to assure the protection of known or discovered resources and shall identify lines of communication between Contractor personnel and the Contracting Officer.

p. A Pesticide Treatment Plan shall be included and updated, as information becomes available. The plan shall include: sequence of treatment, dates, times, locations, pesticide trade name, EPA registration numbers, authorized uses, chemical composition, formulation, original and applied concentration, application rates of active ingredient (i.e. pounds of active ingredient applied), equipment used for application and calibration of equipment. The Contractor is responsible for Federal, State, Regional and Local pest management record keeping and reporting requirements as well as any additional Installation Project Office specific requirements. The Contractor shall follow AR 200-5 Pest Management, Chapter 2, Section III "Pest Management Records and Reports" for data required to be reported to the Installation AFI 32-1053 Sections 3.4.13 and 3.4.14 for data required to be reported to the Installation.

1.8.3 Appendix

Copies of all environmental permits, permit application packages, approvals to construct, notifications, certifications, reports, and termination documents shall be attached, as an appendix, to the Environmental Protection Plan. The Contractor shall prepare all permit, permit applications, etc. for review and approval by 914 MSG/CEV. 914 MSG/CEV shall submit all permits and permit applications, etc. to the appropriate regulatory authorities unless otherwise agreed upon between the Contractor and 914 MSG/CEV.

1.9 STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

The Contractor shall prepare a project-specific Stormwater Pollution Prevention Plan (SWPPP) in accordance with New York State Department of Environmental Conservation (NYSDEC) regulations or Niagara Falls ARS guidance based on the extent of soil disturbance for the construction activity.

The definition of a construction activity is defined in the NYSDEC State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity, GP-0-10-001 (or most recent version) as "any clearing, grading, excavation, filling, demolition or stockpiling activities that result in soil disturbance. Clearing activities can include, but are not limited to, logging equipment operation, the cutting and skidding of trees, stump removal and/or brush root removal. Construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of a facility."

1.9.1 Construction Activities with Soil Disturbance Equal to or Greater than 1 Acre

For construction activities with soil disturbance equal to or greater than one acre, a NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity, GP-0-25-001 (or most recent version), shall be obtained. The Contractor shall be responsible for compliance with this permit. The Contractor will be responsible for all reports and documentation needed to comply with this permit including, but not limited to: the Notice of Intent, SWPPP, inspection reports, NOT. The Contractor shall prepare all permit related documentation for approval by 914 MSG/CEV or 914 MSG/CEV designated entity prior to start of construction activities. 914 MSG/CEV or 914 MSG/CEV designated entity shall submit all permits and permit applications, etc. to the appropriate regulatory authorities unless otherwise agreed upon between the Contractor and 914 MSG/CEV.

In addition to the minimum SWPPP component requirements as required by the permit, the Contractor (and its Subcontractors) shall:

- a. Sign a contractor certification statement ensuring compliance with stormwater control measures described within the SWPPP.
- b. Define Trained Contractor(s) (as defined in the permit) on behalf of the Contractor and Subcontractor who will be present on-site on a daily basis during soil disturbing activities.
- c. Designate and provide a Qualified Inspector (as defined in the permit) to perform required inspections.

- d. Include training certificates for Trained Contractor(s) and Qualified Inspector(s) who will perform these duties throughout the duration of the project.

Construction projects for facilities with a footprint greater than 5,000 gross square feet, or those that expand the footprint of existing facilities by more than 5,000 gross square feet as defined by EISA Section 438 must comply with the requirements contained within EISA Section 438. The Contractor shall develop and submit a Certificate of Applicability/Non-Applicability of EISA 2007 Section 438 that documents compliance with the regulation. The certificate shall include at a minimum:

- a. Site evaluation and soils analysis;
- b. Calculations for the 95th percentile rainfall event or the pre-development runoff volumes and rates to identify the volume of stormwater requiring management;
- c. Documentation of modifications to the performance design objective based on technical constraints;
- d. The site design and stormwater management practices employed at the site;
- e. Design calculations for each stormwater management practice employed;
- f. The respective volume of stormwater managed by each practice and the system as a whole;
- g. Operations and maintenance protocols for the stormwater management system

1.9.2 Construction Activities with Soil Disturbance Less than 1 Acre

For construction activities with soil disturbance less than one acre, a SWPPP shall be developed in accordance with the "Niagara Falls ARS Guidance for Stormwater Pollution Prevention/Erosion & Sediment Control Plan for Disturbances that are Less than One Acre", see Attachment 3. The Contractor will be responsible for compliance with the SWPPP and all reports and documentation described within the SWPPP. The contractor shall submit the SWPPP for approval by 914 MSG/CEV prior to start of construction activities.

Construction projects for facilities with a footprint greater than 5,000 gross square feet, or those that expand the footprint of existing facilities by more than 5,000 gross square feet as defined by EISA Section 438 must comply with the requirements contained within EISA Section 438. The Contractor shall develop and submit a Certificate of Applicability/Non-Applicability of EISA 2007 Section 438 that documents compliance with the regulation. The certificate shall include at a minimum:

- a. Site evaluation and soils analysis;
- b. Calculations for the 95th percentile rainfall event or the pre-development runoff volumes and rates to identify the volume of stormwater requiring management;
- c. Documentation of modifications to the performance design objective based on technical constraints;
- d. The site design and stormwater management practices employed at the site;
- e. Design calculations for each stormwater management practice employed;

1.10 PROTECTION FEATURES

Prior to start of any onsite construction activities, the Contractor and the Contracting Officer shall make a joint condition survey. Immediately following the survey, the Contractor shall prepare a brief report including a plan describing the features requiring protection under the provisions of the Contract Clauses, which are not specifically identified on the drawings as environmental features requiring protection along with the condition of trees, shrubs and grassed areas immediately adjacent to the site of work and adjacent to the Contractor's assigned storage area and access route(s), as applicable. This survey report shall be signed by both the Contractor and the Contracting Officer upon mutual agreement as to its accuracy and completeness. The Contractor shall protect those environmental features included in the Survey Report and any indicated on the drawings, regardless of interference which their preservation may cause to the Contractor's work under the contract.

1.11 SPECIAL ENVIRONMENTAL REQUIREMENTS

The Contractor shall comply with the special environmental requirements listed here and included at the end of this section.

1.11.1 Demolition

If the project requires the demolition of facility, portion of a facility, or structure a Demolition Plan shall be submitted to the Contracting Officer for approval prior to the start of demolition. At a minimum, the Demolition Plan shall include the following: proposed method to demolish buildings, recycling plan, engineering controls to reduce the amount of dust released to the air, disposal location, utilities capping plan, etc.

1.11.2 Hazardous Material/Waste Certifications and Training

If the project requires the Contractor to be in contact with hazardous materials or wastes, the Contractor and their personnel shall be appropriately trained and certified to handle such materials. At a minimum, personnel must be trained in accordance with OSHA 29 CFR 1910.120, Hazardous Waste Operations and Emergency Response (HAZWOPER) standards. Documentation of proper training shall be submitted with the Environmental Protection Plan or upon request.

1.11.3 Asbestos

The Contractor shall comply with all Federal, state (New York State Code Rule 56), and local regulations for handling, removal, and disposal of asbestos containing material. The Contractor shall notify the Contracting Officer and 914 MSG/CEV before conducting any work that involves any material that contains or is suspected to contain asbestos.

1.11.4 Lead-based Paint

The Contractor shall comply with all Federal, state, and local regulations for work involving Lead-based paint. The Contractor shall notify the Contracting Officer and 914 MSG/CEV before conducting any work involving Lead-based paint.

1.12 ENVIRONMENTAL ASSESSMENT OF CONTRACT DEVIATIONS

Any deviations, requested by the Contractor, from the drawings, plans and specifications which may have an environmental impact will be subject to approval by the Contracting Officer and 914 MSG/CEV and may require an extended review, processing, and approval time. The Contracting Officer reserves the right to disapprove alternate methods, even if they are more cost effective, if the Contracting Officer or 914 MSG/CEV determines that the proposed alternate method will have an adverse environmental impact.

1.13 NOTIFICATION

The Contracting Officer will notify the Contractor in writing of any observed noncompliance with Federal, State or local environmental laws or regulations, permits, and other elements of the Contractor's Environmental Protection Plan. The Contractor shall, after receipt of such notice, inform the Contracting Officer of the proposed corrective action and take such action when approved by the Contracting Officer. The Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No time extensions shall be granted or equitable adjustments allowed to the Contractor for any such suspensions. This is in addition to any other actions the Contracting Officer may take under the contract, or in accordance with the Federal Acquisition Regulation or Federal Law.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.1 ENVIRONMENTAL PERMITS AND COMMITMENTS

The Contractor shall be responsible for obtaining and complying with all environmental permits and commitments required by Federal, State, Regional, and local environmental laws and regulations. The Contractor shall prepare all permit applications for review and approval by 914 MSG/CEV. 914 MSG/CEV shall submit all permits and permit applications, etc. to the appropriate regulatory agencies unless otherwise agreed upon by the Contractor and 914 MSG/CEV. The Contractor shall prepare and submit the Joint Application form to 914 MSG/CEV as necessary for appropriate permits.

3.2 LAND RESOURCES

The Contractor shall confine all activities to areas defined by the drawings and specifications. Prior to the beginning of any construction, the Contractor shall identify any land resources to be preserved within the work area. Except in areas indicated on the drawings or specified to be cleared, the Contractor shall not remove, cut, deface, injure, or destroy land resources including trees, shrubs, vines, grasses, topsoil, and land forms without approval. No ropes, cables, or guys shall be fastened to or attached to any trees for anchorage unless specifically authorized. The Contractor shall provide effective protection for land and vegetation resources at all times as defined in the following subparagraphs. Stone, soil, or other materials displaced into uncleared areas shall be removed by the Contractor.

3.2.1 Work Area Limits

Prior to commencing construction activities, the Contractor shall mark the areas that need not be disturbed under this contract. Isolated areas within the general work area which are not to be disturbed shall be marked or fenced. Monuments and markers shall be protected before construction operations commence. Where construction operations are to be conducted during darkness, any markers shall be visible in the dark. The Contractor's personnel shall be knowledgeable of the purpose for marking and/or protecting particular objects.

3.2.2 Landscape

Trees, shrubs, vines, grasses, land forms and other landscape features indicated and defined on the drawings to be preserved shall be clearly identified by marking, fencing, or wrapping with boards, or any other approved techniques. The Contractor shall restore landscape features damaged or destroyed during construction operations outside the limits of the approved work area.

3.2.3 Contractor Facilities and Work Areas

The Contractor's field offices, staging areas, stockpile storage, and temporary buildings shall be placed in areas designated on the drawings or as directed by the Contracting Officer. Temporary movement or relocation of Contractor facilities shall be made only when approved. Erosion and sediment controls shall be provided for on-site borrow and spoil areas to prevent sediment from entering nearby waters. Temporary excavation and embankments for plant and/or work areas shall be controlled to protect adjacent areas.

3.3 WATER RESOURCES

The Contractor shall monitor construction activities to prevent pollution of surface and ground waters. Toxic or hazardous chemicals shall not be applied to soil or vegetation unless otherwise indicated. All water areas affected by construction activities shall be monitored by the Contractor. For construction activities immediately adjacent to impaired surface waters, the Contractor shall be capable of quantifying sediment or pollutant loading to that surface water when required by State or Federally issued Clean Water Act permits.

The Contractor shall implement and adhere to the provisions in the SWPPP, as discussed in Section 1.8. This includes, but is not limited to, construction, maintenance, and inspection of appropriate Best Management Practices (BMPs). The Contractor shall maintain Stormwater Inspection Reports in accordance with the SWPPP and submit these reports to 914 MSG/CEV for review on request.

3.4 AIR RESOURCES

Equipment operation, activities, or processes will be in accordance with all Federal, state, and local air emission and performance laws and standards.

3.4.1 Particulates

The Contractor shall control dust particles, aerosols, and gaseous by-products from construction activities at all times, including weekends, holidays, and hours when work is not in progress. Maintain excavations, stockpiles, haul roads, permanent and temporary access roads, plant sites, spoil areas, borrow areas, and all other work areas to prevent nuisance or hazardous air conditions. The Contractor shall comply with all Federal, state, and local regulations for air pollution, including visibility requirements. The Contractor shall implement air pollution control measures as proposed in the Environmental Protection Plan and approved by 914 MSG/CEV.

3.4.2 Odors

The Contractor shall control odors to prevent nuisances and to maintain compliance with Federal, state, and local regulations.

3.4.3 Noise

The Contractor shall comply with Federal, state, and local regulations for noise from construction activities.

3.4.3 Burning

Burning shall be prohibited on the Government premises.

3.5 HAZARDOUS MATERIALS MANAGEMENT AND WASTE DISPOSAL

3.5.1 Hazardous Materials

Hazardous materials are defined in 49 CFR 171 - 178. The Contractor shall register all hazardous materials with the Niagara Falls HAZMART and submit a Hazardous Material Inventory Log to the Contracting Officer prior to construction and at project completion. The Hazardous Material Inventory Log shall include a list all hazardous materials used with chemical MSDS, maximum quantity stored on base, dates used, and the total quantity used. The Contractor shall manage and store all hazardous materials in accordance with Federal, state, and local regulations. Copies of MSDS shall be maintained on site at all times.

3.5.2 Contractor Generated Hazardous Waste/Excess Hazardous Material

Hazardous wastes are defined in 40 CFR 261, or are as defined by applicable State and local regulations.

The Contractor shall, at a minimum, manage and store hazardous waste in compliance with 40 CFR 262 and in accordance with the Environmental Protection Plan discussed in Section 1.7. The Contractor shall take sufficient measures to prevent spillage of hazardous and toxic materials during dispensing. The Contractor shall segregate hazardous waste from other materials and wastes, shall

protect it from the weather by placing it in a safe covered location, and shall take precautionary measures such as berming or other appropriate measures against accidental spillage.

The Contractor shall be responsible for storage, describing, packaging, labeling, marking, and placarding of hazardous waste and hazardous material in accordance with 49 CFR 171 - 178, State, and local laws and regulations. The Contractor shall transport Contractor generated hazardous waste off Government property within 60 days in accordance with the Environmental Protection Agency and the Department of Transportation laws and regulations. The Contractor shall manifest, pack, ship and dispose of hazardous waste, regulated waste, and universal waste in compliance with Federal, State and local laws and regulations.

Spills of hazardous or toxic materials shall be immediately reported to the Contracting Officer and the 914 MSG/CEV. Cleanup and cleanup costs due to spills shall be the Contractor's responsibility. The disposition of Contractor generated hazardous waste and excess hazardous materials are the Contractor's responsibility. The Contractor shall coordinate the disposition of hazardous waste with the Contracting Officer and 914 MSG/CEV.

3.5.3 Disposal Documentation for Hazardous and Regulated Waste

The Contractor shall submit a copy of the applicable EPA and or State permit(s), manifest(s), or license(s) for transportation, treatment, storage, and disposal of hazardous and regulated waste by permitted facilities. Hazardous or toxic waste manifest must be reviewed, signed, and approved before the Contractor may ship waste.

3.5.5 Fuel and Lubricants

Storage, fueling and lubrication of equipment and motor vehicles shall be conducted in a manner that affords the maximum protection against spill and evaporation. Fuel, lubricants and oil shall be managed and stored in accordance with all Federal, State, Regional, and local laws and regulations. Used lubricants and used oil to be discarded shall be stored in marked corrosion-resistant containers and recycled or disposed in accordance with 40 CFR 279, State, and local laws and regulations. There shall be no storage of fuel on the project site. Fuel must be brought to the project site each day that work is performed.

3.5.6 Waste Water

Disposal of waste water shall be as specified below.

- a. Waste water from construction activities, such as onsite material processing, concrete curing, foundation and concrete clean-up, water used in concrete trucks, forms, etc. shall be contained for disposal. The Contractor shall dispose of the construction related waste water off-Government property in accordance with all Federal, State, Regional and Local laws and regulations.
- b. For discharge of groundwater, the Contractor shall propose a disposal method in the Environmental Protection Plan for approval by 914 MSG/CEV. If a State or Federal permit is required based on the proposed disposal method the Contractor shall prepare all supporting permit documentation for approval by 914 MSG/CEV prior to start of construction activities. 914 MSG/CEV shall submit all permits and permit applications, etc. to the appropriate regulatory authorities unless otherwise agreed upon between the Contractor and 914 MSG/CEV.
- c. For discharge of water generated from the flushing of lines after disinfection or disinfection in conjunction with hydrostatic testing hydrostatic testing, the Contractor shall propose a disposal method in the Environmental Protection Plan for approval by 914 MSG/CEV.

3.6 HISTORICAL, ARCHAEOLOGICAL, AND CULTURAL RESOURCES

There are no known historic properties at Niagara Falls Air Reserve Station.

If there are unanticipated discoveries of historic properties during construction, excavation, or repair, contractors will stop or redirect work and notify the Base Contracting Officer (who in turn shall immediately notify the 914 MSG/CEV Cultural Resources Manager) until a qualified archeologist can evaluate the find. Examples of historic properties include but are not limited to; (a) intact or fragmentary artifacts of human manufacture such as tools, weapons, pottery, basketry, and textiles; (b) human remains such as bone, teeth, mummified flesh, burials and cremations; and (c) components of structures and features such as houses, mills, piers, fortifications, raceways, earthworks and mounds.

Should the unanticipated discovery involve human remains, construction activities will stop in the vicinity and the Base Contracting Officer shall be notified immediately (who in turn shall immediately notify the 914 MSG/CEV Cultural Resources Manager).

3.7 BIOLOGICAL RESOURCES

The Contractor shall minimize interference with, disturbance to, and damage to fish, wildlife, and plants including their habitat. The Contractor shall be responsible for the protection of threatened and endangered animal and plant species including their habitat in accordance with Federal, State, Regional, and local laws and regulations.

3.8 INTEGRATED PEST MANAGEMENT

In order to minimize impacts to existing fauna and flora, the Contractor, through the Contracting Officer, shall coordinate with the Installation Pest Management Coordinator (IPMC) Project Pesticide Coordinator (PPC) at the earliest possible time prior to pesticide application. The Contractor shall discuss integrated pest management strategies with the IPMC and receive concurrence from the IPMC through the COR prior to the application of any pesticide associated with these specifications. Installation Project Office Pest Management personnel shall be given the opportunity to be present at all meetings concerning treatment measures for pest or disease control and during application of the pesticide. The use and management of pesticides are regulated under 40 CFR 152 - 186.

3.8.1 Pesticide Delivery and Storage

Pesticides shall be delivered to the site in the original, unopened containers bearing legible labels indicating the EPA registration number and the manufacturer's registered uses. Pesticides shall be stored according to manufacturer's instructions and under lock and key when unattended.

3.8.2 Qualifications

For the application of pesticides, the Contractor shall use the services of a subcontractor whose principal business is pest control. The subcontractor shall be licensed and certified in the state where the work is to be performed.

3.8.3 Pesticide Handling Requirements

The Contractor shall formulate, treat with, and dispose of pesticides and associated containers in accordance with label directions and shall use the clothing and personal protective equipment specified on the labeling for use during all phases of the application. Material Safety Data Sheets (MSDS) shall be available for all pesticide products.

3.8.4 Application

Pesticides shall be applied by a State Certified Pesticide Applicator in accordance with EPA label restrictions and recommendation. The Certified Applicator shall wear clothing and personal protective equipment as specified on the pesticide label. Water used for formulating shall only come from locations designated by the Contracting Officer. The Contractor shall not allow the equipment to overflow. Prior to application of pesticide, all equipment shall be inspected for leaks, clogging, wear, or damage and shall be repaired prior to being used.

3.9 PREVIOUSLY USED EQUIPMENT

The Contractor shall clean all previously used construction equipment prior to bringing it onto the project site. The Contractor shall ensure that the equipment is free from soil residuals, egg deposits from plant pests, noxious weeds, and plant seeds. The Contractor shall consult with the USDA jurisdictional office for additional cleaning requirements.

3.10 MAINTENANCE OF POLLUTION FACILITIES

The Contractor shall maintain permanent and temporary pollution control facilities and devices for the duration of the contract or for that length of time construction activities create the particular pollutant.

3.11 TRAINING OF CONTRACTOR PERSONNEL

The Contractor's personnel shall be trained in all phases of environmental protection and pollution control. The Contractor shall conduct environmental protection/pollution control meetings for all Contractor personnel prior to commencing construction activities. Additional meetings shall be conducted for new personnel and when site conditions change. The training and meeting agenda shall include: methods of detecting and avoiding pollution; familiarization with statutory and contractual pollution standards; installation and care of devices, vegetative covers, and instruments required for monitoring purposes to ensure adequate and continuous environmental protection/pollution control; anticipated hazardous or toxic chemicals or wastes, and other regulated contaminants; recognition and protection of archaeological sites, artifacts, wetlands, and endangered species and their habitat that are known to be in the area.

All on-site contractor personnel shall complete yearly EPA sponsored environmental training specified for the type of work conducted on-site. Upon contract award, the Contracting Officer's Representative will notify the facility-level Environmental Management Systems Coordinator to arrange EMS training for appropriate staff.

3.12 POST CONSTRUCTION CLEANUP

The Contractor shall clean up all areas used for construction in accordance with Contract Clause: "Cleaning Up". The Contractor shall, unless otherwise instructed in writing by the Contracting Officer, obliterate all signs of temporary construction facilities such as haul roads, work area, structures, foundations of temporary structures, stockpiles of excess or waste materials, and other vestiges of construction prior to final acceptance of the work. The disturbed area shall be graded, filled and the entire area seeded unless otherwise indicated.

-- End of Section --

ATTACHMENT 1

OFF-STATION CONTRACTORS AND SUPPLIERS**IF YOU DETECT A SPILL OF POL OR OTHER HAZARDOUS MATERIAL**

The following steps should be taken if an off-base contractor or supplier detects a spill of POL or hazardous material resulting from their operations at Niagara Falls ARS.

If the spill can be contained by the off-base contractor or supplier without injury to personnel and without assistance from Niagara Falls ARS response teams, the following procedures shall be observed by the organization or any person recognizing an oil and/or hazardous material release:

1. Contain and/or control the release.
2. Notify the CEF at 236-2117 commercial (ext. 911 on-Station phone) and provide the following information:
 - a. Name of individual reporting spill, facility address, facility phone number
 - b. Date and time of discharge
 - c. Location of discharge
 - d. Type of material discharged
 - e. Estimate of the total quantity discharged
 - f. Source of the discharge
 - g. Description of all affected media (e.g., water, land, air)
 - h. Cause of the discharge
 - i. Damages or injuries caused by the discharge
 - j. Actions being used to stop, remove, and mitigate effects of the discharge
 - k. Whether an evacuation has occurred
 - l. Names of other individuals or organizations contacted
3. Clean up the release using proper absorbent media for the substance spilled. Recover as much of the spill as possible utilizing absorbents or approved vacuum device to minimize hazardous waste volume. **(Do not hose down spilled material into floor drains or storm drains.)**
4. Follow any operating instructions and/or directive relative to spill response and proper waste disposal.
5. If requested by any appropriate Station official, properly label and close DOT-approved containers of the spilled material and contaminated absorbent, assist with the completion of AF Forms 1348-1 and 2005, and contact the hazardous waste coordinator to turn-in the waste to the hazardous waste storage facility.
6. Complete HAZMAT Release Incident Form (see end of this Guide) with available information and submit to 914 AW/MSG/CEV as soon as possible but not later than close of business the next business day.

If the spill cannot be contained by the off-Station contractor or supplier:

1. Activate emergency alarm system, if any.
2. Evacuate to an area upwind of the spill.
3. Ensure all employees shut down their operations and secure their equipment, if time permits.
4. Notify the CEF at 236-2117 commercial (ext. 911 on-Station phone) and provide the following information:
 - a. Name of individual reporting spill, facility address, facility phone number
 - b. Date and time of discharge
 - c. Type of material discharged
 - d. Estimate of the total quantity discharged
 - e. Source of the discharge
 - f. Description of all affected media (e.g., water, land, air)
 - g. Cause of the discharge
 - h. Damages or injuries caused by the discharge
 - i. Actions being used to stop, remove, and mitigate effects of the discharge
 - j. Whether an evacuation has occurred
 - k. Names of other individuals or organizations contacted
5. Stop the source of the spill when possible without undue risk of personal injury, including the use of on-site spill containment equipment and materials.
6. Make the spill scene OFF LIMITS to unauthorized personnel.
7. Restrict or eliminate all sources of ignition.
8. Report to the Incident Commander (IC) upon his/her arrival.
9. Ensure an employee roll call is conducted to ensure all personnel are accounted for and not trapped in the affected area.
10. Perform or assist with the post-emergency cleanup operations within the contractor's/supplier's capabilities and under the direction of Civil Engineering. Permission must be obtained through CEV/CEX and the Contracting Officer to bring additional off-Station resources (i.e. non-AFR contracted spill response contractors) to the Station.
11. Follow any operating instructions and/or directive by IC relative to spill response and proper waste disposal.
12. Complete HAZMAT Release Incident Form (see end of this Guide) with available information and submit to 914 AW/MSG/CEV as soon as possible but not later than close of business the next business day.

HAZMAT RELEASE INCIDENT FORM

PAGE 1 of 3

A. GENERAL INFORMATION

Incident Number (From Fire Dept.) _____

Incident Time/Date: _____ Report Time/Date: _____

Incident Location: _____

Weather Conditions: _____

Notifier Organization/Name: _____ Phone: _____

Spiller Organization/Name: _____ Phone: _____

Severity of Incident (Fire & Emergency Services determines response level, see Table 2-1 and Table 2-2):

☐ Level I (least) ☐ Level II ☐ Level III (most)

Pollutant: ☐ Jet-A ☐ Mogas ☐ Diesel ☐ Hyd. Fluid ☐ Other _____

Source of Discharge: _____

Chemical Name: _____ CAS No: _____

Reportable Quantity: _____ Amount Discharged: _____

How Estimated: _____

Affected Media: ☐ Air ☐ Land ☐ Water ☐ Pavement ☐ Other _____

Amount Discharge to Navigable Waters: _____

Cause: ☐ Human Error ☐ Procedure ☐ Equipment Failure ☐ Pressure-related

☐ Other, Describe: _____

Description of Incident: _____

Additional Pages Attached? ☐ Yes ☐ No

HAZMAT RELEASE INCIDENT FORM	
PAGE 2 of 3	
Threat/Damage to Human Life: ☐ Severe ☐ Minor ☐ None	
Threat/Damage to Property: ☐ Severe ☐ Minor ☐ None	
☐ Federal ☐ State ☐ Municipal ☐ Private	
Threat/Damage to Environment: ☐ Severe ☐ Minor ☐ None	
☐ Fish ☐ Wildlife ☐ Plants ☐ Other: _____	
Describe Threat/Damage: _____	

Describe Release Response: _____	

Additional Pages Attached? ☐ Yes ☐ No	
Immediately report release to: Fire Dept. @ 911; 914 MSG/CEV @ 3126 / 3124; 107 th ATKW @ 2514	
Time reported: (Fire Dept.) _____ (914 MSG/CEV) _____	
Describe cleanup action: _____	

Additional Pages Attached? ☐ Yes ☐ No	
Long-term Remediation Required? ☐ Yes ☐ No	

HAZMAT RELEASE INCIDENT FORM

PAGE 3 of 3

B. OFF-STATION REPORTING OF RELEASE (COMPLETE ONLY IF REQUIRED)

A description of various release scenarios that require off-station reporting is provided in the Quick Reference Guide. Refer to the table before completing the remainder of this form.

Is off-Station notification required? ☐ Yes ☐ No

Notifier Organization/Name _____

National Response Center ☐ Yes ☐ No Date/Time: _____ Name: _____

NY Emerg. Mgmt. Office ☐ Yes ☐ No Date/Time: _____ Name: _____

Niagara County OES ☐ Yes ☐ No Date/Time: _____ Name: _____

NY DEC ☐ Yes ☐ No Date/Time: _____ Name: _____

DOT ☐ Yes ☐ No Date/Time: _____ Name: _____

Niagara Co. Health Dept. ☐ Yes ☐ No Date/Time: _____ Name: _____

Sewer District #1 ☐ Yes ☐ No Date/Time: _____ Name: _____

U.S. EPA Region II ☐ Yes ☐ No Date/Time: _____ Name: _____

HQ AFRC/CEV ☐ Yes ☐ No Date/Time: _____ Name: _____

NRC Case Number: _____

New York State DEC Spill Number: _____

No. of employees in facility: _____ No. evacuated: _____

General Public notified? ☐ Yes ☐ No How: _____

C. PREVENTATIVE ACTIONS

Training, procedures, management practices to be implemented to prevent future occurrence of release:

D. REPORTING OFFICIAL

Name/Title: _____ Organization: _____

Signature: _____ Date: _____

Attachment 2

WASTE/RECYCLED MATERIALS LOG FOR CONTRACTORS

Contractor Guidelines: Contractor shall fill out this log as a record of how waste generated during a construction project will be disposed/recycled. Original or copies of the waste tickets received from the landfill or recycling facility shall accompany this log. The log shall be submitted to the 914 MSG/CEV via the Contracting Officer quarterly (1 Jan, 1 Apr, 1 Jul, 1 Oct) and upon project completion.

Project Name:	
Project Number:	
Project Duration:	
Contractor Name:	
Name of Contact:	
Phone No:	

Date	Waste Type (i.e. scrap metal, concrete, etc)	Disposal Method (Landfill or Recycle)	Disposal Location (Facility Name)	Weight (tons)

Storm Water Pollution Prevention /Erosion & Sediment Control Plan
for disturbances that are less than one acre

- 1.0** Prepare a Stormwater Pollution Prevention/Erosion & Sediment Plan (“Plan”) for projects with land disturbance that is less than one acre based on the following outline and guidance. Land disturbance is defined as soil exposure from clearing, grading, grubbing, excavating, and filling. The total amount of the disturbance must include the area of the overall plan of the disturbance.
- 1.1** This outline and guidance is for projects that disturb an area less than one acre. The total amount of the disturbed area shall include disturbance from all activities related to the project including utility and road work. If a project is phased over time or separated into distinct construction activities, the “total amount of disturbed area” shall be based on the land area that will ultimately be disturbed.
- 2.0** Notify the 914 CEC immediately if it is determined that the project will disturb greater than one acre. Disturbances that are greater than one acre have additional permitting requirements.
- 3.0** Discharges from construction activities shall not: 1) cause and increase in turbidity that will cause a substantial visible contrast to natural conditions 2) cause suspended, colloidal and settleable solids from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages; and 3) cause residue from oil and floating substances attributable to sewage, industrial wastes or other wastes, nor visible oil film nor globules or grease.
- 3.1** It is a violation of the Clean Water Act and New York State water quality rules and regulations for not maintaining water quality and for the falsification of reports. There are substantial criminal, civil, and administrative penalties associated with violations.
- 3.1.1** Costs associated with fines for water quality violations because of contractor’s failure to comply with New York State regulations for maintaining water quality will not be incurred by Niagara Falls Air Reserve Station; therefore, all fines levied by the New York State Department of Environmental Conservation for erosion control and water quality violations will be charged to the contractor.
- 4.0** The following areas should be addressed in the Plan. However, the extent of developing these areas within the Plan depends on the project and its potential impacts.
- 1) **Site evaluation and design** (site map, soil information, receiving waters, rainfall data, drainage patterns, grading and disturbance areas)
 - 2) **Assessment** (total site disturbance, drainage areas, and runoff estimates)
 - 3) **Control Selection/Plan Design** (erosion and sediment controls, inspection and maintenance)
 - 4) **Certification** (for inspections and controls)
 - 5) **Final Stabilization/Maintenance**
- 4.1** Other Controls and best management practices (BMPs):
- 1) **Good Housekeeping** (e.g., cleanup of sediments, and neat and orderly storage of hazardous materials, and prompt cleanup of spills)
 - 2) **Waste Disposal** (e.g., construction, hazardous, spill residue, concrete, and sandblasting grit)
 - 3) **Minimize Offsite Vehicle Tracking of Sediment** (streets should be cleaned on a daily basis to remove sediment tracked from the project site)
 - 4) **Material Management**
 - 5) **Spills**
 - 6) **Control of Allowable Non-storm Water Discharges** (e.g., dewatering and sumps)

Storm Water Pollution Prevention /Erosion & Sediment Control Plan
for disturbances that are less than one acre

5.0 The Plan shall be amended if: 1. changes in design, construction, operation or maintenance have significantly effected discharges 2. the Plan is ineffective in minimizing pollutants 3. to identify any new contractors or subcontractors. Erosion and sedimentation control methods shall be changed to replace ineffective methods as soon as they are identified and the changes shall be documented in the Plan.

6.0 Sedimentation and erosion control (including maintenance and inspections) shall continue until project completion regardless if the project is temporarily delayed or work postponed due to seasonal or weather conditions, scheduling, or any other factors that would cause a work delay. See paragraph 7.0 for additional guidance on winter site stabilization and inspections.

→ Use this outline for projects with less than one acre of land disturbance.

1.0 GENERAL INFORMATION

Provide a general description of the proposed project. Provide the names and telephone numbers of those responsible for the project and the pollution prevention controls.

2.0 PROJECT DESCRIPTION

This section is a description of the construction project: what is being built, what is the extent of excavation, etc. A location map showing the location of the project should also be presented. Include any off-site soil storage or deposit locations.

3.0 SOILS

The types and percentages of soils present at the project site should be described and shown on a map.

4.0 TOPOGRAPHY AND DRAINAGE

The bulk of this section is a topographic map of the project site that includes surface waters, project boundaries, roadways, etc. The scale of the map should be one inch equals 100 feet or less with two-foot contour intervals. This section must also show what the final alterations to the site will look like upon project completion. The topographic map is typically used as a starting point to show the new, post-construction contour lines.

5.0 STAGING OF EARTH MOVING ACTIVITIES

A schedule and timeline of staging activities, as well as other E&S control measures, must be provided in this section.

6.0 STORM WATER MANAGEMENT

The quantity of runoff from the project site must be determined in this section in order to properly design the correct E&S and stormwater management controls.

7.0 POLLUTION PREVENTION

Provide a description of the measures to control litter, construction chemicals, and construction debris from becoming a pollutant source in the stormwater.

8.0 TEMPORARY E&S CONTROL MEASURES

All temporary erosion control measures to be used at the site must be described and their locations shown on a map. Including any off-site soil storage or deposit locations.

Storm Water Pollution Prevention /Erosion & Sediment Control Plan
for disturbances that are less than one acre

9.0 PERMANENT E&S CONTROL MEASURES

All permanent erosion control measures to be used at the site must be described and their locations shown on a map. Also, stabilization techniques to be used upon project completion must be presented. Including any off-site soil storage or deposit locations.

10.0 INSPECTION AND MAINTENANCE PROGRAM FOR E&S CONTROL MEASURES

An inspection and maintenance program for the project site must be identified in this section. This section ensures that pollution prevention and E&S measures are operating correctly. The results from these inspections can result in modifications to the stormwater controls and changes to the Plan. Documentation of the inspections is required.

Additional details for each section of the outline listed above.

1.0 General Information: The first section of the project-specific Plan should provide general information about the proposed project. It should identify at a minimum the type of work being done, who is responsible for erosion control, the contracting vehicle used, and the name of the contractor performing the work. Since different offices under various contracting mechanisms can manage the construction projects at Niagara Falls ARS, it is important for this section of the Plan to clearly identify the responsible parties.

Include the names, addresses, and phone numbers of the: Niagara Falls ARS project manager, the developer (i.e. construction contractor), and any additional contractors or subcontractors.

2.0 Project Description: Include a description of the construction activity, the size of the project, and provide a site map identifying the proposed project and the areas of ground disturbing activities. Provide a description of the intended sequence of activities which disturb soils (e.g. grubbing, excavating, grading).

3.0 Soils: Determine the type of soils present and their properties for erosion control.

4.0 Topography and Drainage: Use maps to depict topography and drainage features (existing, pre-development conditions). Show the existing drainage features and the final topography and new drainage patterns of the completed (proposed, future development condition) site. Information should also include upstream watershed areas that impact the project site receiving watercourses.

5.0 Staging and Earth Moving Activities: Develop a project schedule to minimize the amount of exposed soil at any one time. Describe the earth moving activities and the associated E&S control measures. Include the time of year of the earth moving activities and when the E&S control measures occur. Provide a schedule that includes the initial steps from ground breaking to final site stabilization.

The contractor shall initiate stabilization measures as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after construction activity in that portion of the site has temporarily or permanently ceased. This requirement does not apply in the following instances:

a. where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceased is precluded by snow cover or frozen ground condition, stabilization measures shall be initiated as soon as practicable.

b. where construction activity on a portion of the site is temporarily ceased, and earth-moving activities will be resumed within twenty-one (21) days, temporary stabilization measures need not be initiated on that portion of the site.

Storm Water Management: Determine the amount of runoff from the site from before and after the project completion. The information is used to design the appropriate storm water runoff management facilities. The information is also used to determine the amount of additional stormwater runoff to downstream surface waters as a result of the project.

Storm Water Pollution Prevention /Erosion & Sediment Control Plan
for disturbances that are less than one acre

6.0 Pollution Prevention: Described spill prevention and response procedures from equipment and supplies at the project site. Identify the spill response equipment and supplies that will be located at the project site in sufficient quantities to control spills. Identify the best management practices to be employed in order to prevent storm water contamination.

7.0 Temporary E&S Measures: Use a topographic map to show the locations of all E&S facilities that will be used to control erosion and sedimentation during construction. Provide dimensional details on the construction and the maintenance schedule of the E&S facilities. Identify E&S facilities that will be converted to permanent stormwater management facilities. Use the technical standards for erosion and sediment controls that are detailed in the “*New York State Standards and Specifications for Erosion and Sediment Control*.” Include a description of the maintenance procedures for the E&S facilities for example: sediment shall be removed from sediment traps or sediment ponds and basins whenever their capacity has been reduced by fifty (50) percent from their design capacity.

8.0 Permanent E&S Control Measures: Describe any permanent stormwater control structures that will be used for long-term control of E&S and locate on the project map. Include any final stabilization techniques including both vegetative and structural. Describe any post construction maintenance for E&S and stormwater management facilities.

9.0 Inspection and Maintenance Program for E&S Control Measures: Provide the names of those accountable of ensuring that stormwater management and erosion and sedimentation control practices are properly installed and maintained. A qualified person who is knowledgeable in the principals and practices of erosion and sediment control shall perform a site assessment prior to the commencement of construction and every 7 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater. Develop a program to include a schedule for inspections of the control measures and document the inspection on an “Inspection Report Form.” Provide a description of the maintenance procedures for the various control measures. Maintenance identified on the schedule must be performed on a regular basis and as soon as a problem exists. An example of an inspection report with the minimum required information is attached for reference. The Plan and reports shall be kept available at the project site for inspection by the State or authorized representative of the EPA. Copies of the Plan, Plan updates, and inspection reports shall be delivered to the Project Manager within three (3) calendar days of completion of the Plans and reports.

7.0 Guidelines for winter site stabilization and inspections can be found at the following website:

<http://www.dec.ny.gov/chemical/29074.html>

8.0 Other guidance on developing stormwater pollution prevention plans and erosion and sediment control can be found at the following websites:

<http://cfpub.epa.gov/npdes/stormwater/menuofbmps/menu.cfm>

<http://www.dec.ny.gov/chemical/8694.html>

http://cfpub.epa.gov/npdes/pkeyword.cfm?keywords=Construction+Activities&program_id=0

(and look for: **Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices**)

“Stabilization” means: covering or maintaining an existing cover over soil. Cover can be vegetative (e.g. grass, trees, seed and mulch, shrubs, or turf) or non-vegetative (e.g. geotextiles, riprap, or gabions).

“Final Stabilization” means: that all soil disturbing activities have been completed, and that a uniform perennial vegetative cover with a density of 80% has been established or equivalent stabilization measures (such as the use of mulches or geotextiles) have been employed on all unpaved areas not covered by permanent structures.

Storm Water Pollution Prevention /Erosion & Sediment Control Plan
for disturbances that are less than one acre

SAMPLE INSPECTION REPORT FORM (Project Name)

Storm Water Pollution Prevention/Erosion and Sedimentation (E&S) Control Plan Inspection and Maintenance Report Form

To be completed after every seven (7) days and within 24 hours of a rainfall event of 0.5 inches or more.

Inspector: _____

Date: _____

Inspector's Qualifications: _____

Days since last rainfall: _____

Amount of last rainfall: _____

Inspection of Disturbed Areas and Condition of Control Measures

Disturbance Location(s) Each Area	Date of Construction Activity	Date when Construction Ceased	Are Control Practices in Place? (Yes/No)	Condition of the Control Measures	Are Controls Working? (Yes/No)

Is the area stabilized? (Yes/No) (Temporary/Permanent) Date of Stabilization _____

Maintenance Required*:

To be performed by: _____

On or before: _____

*deficiencies in pollution prevention control measures and changes to E&S Plan shall be addressed as appropriate, but in no case later than 7 calendar days.

Storm Water Pollution Prevention /Erosion & Sediment Control Plan
for disturbances that are less than one acre

SAMPLE INSPECTION FORM (Project Name) continued

Inspection of Outfalls, Drainage System, and Receiving Waters

Appearance of Receiving Water	Appearance of the Outfall Discharge to the Receiving Water	Appearance of Drainage System Outfall After Controls	Are Pollutants Entering the Drainage System? (Yes/No)

Measures taken to correct deficiencies*:

Other Controls

Are Materials Stored on Site? (Yes/No)	Are Materials Kept in a Dry Covered Area? (Yes/No)	Are Vehicles Leaking? (Yes/No)	Is Other Equipment Leaking? (Yes/No)

Are Vehicles Inspected for Offsite Sediment Tracking? (Yes/No)

Is Soil and Mud Transported from the Site onto Roads? (Yes/No)

Measures taken to correct deficiencies*:

Changes required to the SWPP/E&S Plan:

Signature: _____

Date: _____