Construction
Storm Water Pollution
Prevention Plan

Prairie Trace Golf Course
Wright-Patterson AFB, OH
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Appendix A: INSPECTION LOGS

1.0 INTRODUCTION

1.1 Background

In 1972, Congress passed the Federal Water Pollution Control Act (FWPCA), also known as the Clean Water Act (CWA), to restore and maintain the quality of the nation's waterways. The ultimate goal was to make sure that rivers and streams were fishable, swimmable, and drinkable. In 1987, the Water Quality Act (WQA) added provisions to the CWA that allowed the EPA to govern storm water discharges from construction sites. In 1998, EPA published the final notice for General Permits for Storm Water Discharges from Construction Activities Disturbing 5 Acres or Greater (63 Federal Register 7898, February 14, 1998). The General Permit includes provisions for development of a Storm Water Pollution Prevention Plan (SWPPP) to maximize the potential benefits of pollution prevention and sediment and erosion control measures at construction sites.

Development, implementation, and maintenance of the SWPPP will provide engineering-environmental Management, Inc. with the framework for reducing soil erosion and minimizing pollutants in storm water during the greens redesign at Prairie Trace Golf Course. The SWPPP will:

Define the Characteristics of the site and the type of construction which will be occurring;

Describe the site plan for the facility to be constructed;

Describe the practices that will be implemented to control erosion and the release of pollutants in storm water;

Create an implementation schedule to ensure that the practices described in this SWPPP are in fact implemented and to evaluate the plan's effectiveness in reducing erosion, sediment, and pollutant levels in storm water discharged from the site; and

Describe the final stabilization/termination design to minimize erosion and preven storm water impacts after construction is complete.

1.2 SWPPP Content

This SWPPP includes the following:

Identification of the SWPPP coordinator with a description of this person's duties;

Identification of the storm water pollution prevention team that will assist in implementation of the SWPPP during construction.

Description of the existing site conditions including existing land use for the site (i.e., wooded areas, open grassed areas, pavement, buildings, etc.), soil types at the site, as well as the location of surface waters which are located on or next to the site (wetlands, streams, rivers, lakes, ponds, etc.);

Identification of drainage areas and potential storm water contaminants;

Description of storm water management controls and various Best Management Practices (BMPs) necessary to reduce erosion, sediment and pollutants in strum water discharge;

Description of the facility monitoring plan and how controls will be coordinated with construction activities; and a

Description of the implementation schedule and provisions for amendment of the plan.

2.0 SWPPP COORDINATOR AND DUTIES

The construction site SWPPP coordinator for the facility is Mr. Sean O'Brien (phone number: (210) 602-5711) with engineering-environmental Management, Inc. Mr. O'Brien's duties include the following:

- Implement the SWPPP plan with the aid of the SWPPP team;
- Oversee maintenance practices identified as BMPs in the SWPPP;
- Implement and over see employee training
- Conduct or provide for inspection and monitoring activities;
- Identify other potential pollutant sources and make sure they are added to the plan;

- Identify any deficienes in the SWPPP and make sure they are corrected; and
- Ensure that any changes in construction plans are addressed in the SWPPP.

To aid in the implementation of the SWPPP plan, the members of the SWPPP team are:

3.0 FACILITY DESCRIPTION

3.1 Site Location

3.2 Construction Type

3.3 Existing Site Conditions

3.4 Site Plan

Table 1

Characteristics of Storm Water Drainage

Drainage Area	Storm Water Flow Description during Construction Activities	Total Size (sq. feet)	Impervious Surface Area During Construction (sq. feet)	Run off Coefficient	Drainage Discharge Point

4.0 IDENTIFICATION OF POTENTIAL STORM WATER CONTAMINANTS

The purpose of this section is to identify pollutants that could impact storm water during the facility.

4.1 Significant Material Inventory

Pollutants that result from clearing, grading, excavation, and building materials and have the potential to be present in storm water runoff are listed in Table 2. This table includes information regarding materials type, chemical and physical description, and the specific regulated storm water pollutants associated with each material.

4.2 Potential areas for Storm Water Contamination

The following potential source areas of storm water contamination were identified and evaluated:

4.3 A summary of Available Storm Water Sampling Data

Table 2

Potential Construction Site Storm Water Pollutants

Trade Name Material	Chemical/ Physical Description	Storm Water Pollutants
Pesticides (insecticides, fungicides, herbicides, rodenticides)	Various colored to colorless liquid, powder, pellets, or grains	Chlorinated hydrocarbons, organophosphates, carbamates, arsenic
Fertilizer	Liquid or solid grains	Nitrogen phosphorous
Plaster	White granules or powder	Calcium sulphate, calcium carbonate, sulfuric acid
Cleaning Solvents	Colorless, blue, or yellow green liquid	Perchloroethylene, methylene chloride, trichloroethylene, petroleum distillates
Asphalt	Black solid	Oil, petroleum distillates
Concrete	White Solid	Limestone, sand
Glue, Adhesives	White or yellow liquid	Polymers, epoxies
Paints	Various colored liquid	Metal oxides, Stoddard solvent, talc calcium carbonate, arsenic
Curing Compounds	Creamy white liquid	Maphtha
Wastewater from construction equipment washing	Water	Soil, oil & greas, solids
Wood preservatives	Clear amber or dark brown liquid	Stoddard solvent, petroleum distillates, arsenic, copper chromium
Hydraulic oil/fluids	Brown oily petroleum hydrocarbon	Mineral oil
Gasoline	Colorless, pale brown or pink petroleum hydrocarbon	Benzene, ethyl benzene, toluene, xylene, MTBE
Diesel Fuel	Clear, blue-green to yellow liquid	Petroleum distillate, oil & greas, naphthalene, xylenes
Kerosene	Pale yellow liquid petroleum hydrocarbon	Coal oil, petroleum distillates
Antifreeze/coolant	Clear green/yellow liquid	Ethylene glycol, propylene glycol, heavy metals (copper, lead, zinc)
Erosion	Solid Particles	Soil, Sediment

Table 3

Locations of Potential Sources of Storm Water Contamination

Drainage Area	Potential Storm Water Contamination Point	Potential Pollutants	Potential Problem

5.0 STORM WATER MANAGEMENT CONTROLS

The purpose of this section is to identify the types of temporary and permanent erosion and sediment controls that will be used during construction activities. The controls will provide soil stabilization for disturbed areas and structural controls to divert runoff and remove sediment. This section will also address control of other potential storm water pollutant sources such as construction materials (paints, concrete dust, solvents, and plaster), waste disposal, control of vehicle traffic, and sanitary waste disposal.

5.1 Temporary and Permanent Erosion Control Practices

Site Wide Control Measures

To prevent soil from washing into _____ or the undisturbed areas of the site, the following BMPs will be implemented:

5.4 Certification of Compliance with Federal, State, and Local Regulations

This SWPPP reflects _____ requirements for storm water management and erosion and sediment control, as established in _____. To ensure compliance, this plan was prepared in accordane with the EPA's requirements.

6.0 MAINTENANCE/INSPECTION PROCEDURES

6.1 Inspections

Visual inspection of all cleared and graded areas of the construction site will performed daily and within 12 hours of the end of a storm with rainfall amounts greater than 0.5 inches. The inspection will be conducted by the SWPPP coordinator or his designated storm water team members. The inspection will verify that the structural BMPs described in section 5 of this SWPPP are in good condition and are minimizing erosion. The inspection will also verify that the procedures used to prevent storm water contamination from construction materials and petroleum products are effective. The following inspection and maintenance practices will be used to maintain erosion and sediment controls

- Built up sediment will be removed from silt fencing when it has reached one – third the height of the fence.
- Silt fences will be inspected for depth of sediment, for tears, to see if the fabric is securely attached to the fence posts, and to see that the fence posts are firmly in the ground

- The sediment basin will be inspected for depth of sediment and built up sediment will be removed when it reaches 1 foot in depth.
- Temporary and permanent seeding will be inspected for bare spots, washouts, and healthy growth.
- The stabilized construction entrance will be inspected for bare sediment tracked on the road, for clean gravel, and to make sure that the culvert beneath the entrance is working and that all traffic use the stabilized entrance when leaving the site.

The maintenance inspection report will be made after each inspection. A copy of the report form to be completed by the SWPPP coordinator is provided in Appendix A of this SWPPP. Completed forms will be maintained on-site during the entire construction project. Following construction, the completed forms will be retained at the general contractor's office, engineering-environmental Management, Inc., for a minimum of 1 year. If construction activities or design modifications are made to the site plan which could impact storm water, this SWPPP will be amended appropriately. The amended SWPPP will have a description of the new activities that contribute to the increased pollutant loading and the planned source control activies

6.2 Employee Training

An employee training program will be developed and implemented to educate employees about the requirements of the SWPPP. This education program will include background on the components and goals of the SWPPP and hands-on-training in erosion controls, spill prevention and response, good housekeeping, proper material handling, disposal and control of waste, equipment fueling, and proper storage, washing, and inspections procedures. All employees will be trained prior to their first day on the site.