**SAMPLE MUNICIPAL AIRPORT**

 **Storm Water Pollution Prevention Plan**

Mailing Address:

City of Sample

111 Sample Street

Sample, Iowa 51111

(555) 555-5555

Physical Address:

Sample Municipal Airport

111 Sample Street

Sample, Iowa

(555)555-5555

Contact:

John Smith, Public Works Director

Clyde Cessna, Airport Manager

Facility Coordinator:

Name: Clyde Cessna

Title: Airport Manager

Telephone: (555) 555-5555 Work

 (555) -555-5555 Home

 (555) 555-5555 Cell

Address: c/o Sample Municipal Airport

 111 Sample Street

 Sample, IA 51111

 Standard Industrial Classification (SIC) code: 4581

 Permit Information:

 Type: ( ) General (X) Individual

 NPDES Permit Number: XXX-XXX

 Effective Dates of Coverage: 3/15/08-10/1/2012

 Number of Storm Water Outfalls: 0

 Receiving Waters: Mississippi River via Prices Creek

 Emergency Contact:

 Name: Clyde Cessna

 Telephone: (555) - 555-5555 Work

 (555) - 555-5555 Cell

Sample Fire Department/Sample Rural Fire Department 911

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 **Storm Water Pollution Prevention Plan**

**I. Background**

In 1987, amendments to the Clean Water Act required the U.S. Environmental Protection Agency (USEPA) to establish permit requirements for storm water discharge associated with industrial activities. In response to these amendments, the USEPA published storm water regulations, which establish types of activities that require a permit and actions required to avoid storm water contamination. The Iowa Department of Natural Resources (IADNR) is the governing authority that administers storm water discharge permits for the State of Iowa, which reflects federal requirements for control of storm water discharge from industrial sites.

In accordance with IA DNR Administrative Code requirements the Sample Municipal Airport has prepared this SWPPP, which acts as a living plan to be routinely updated as conditions change at the industrial site. An SWPPP is required to contain or specify:

• A Pollution Prevention Team (PPT) with a designated leader.

• Major activities conducted at the site.

• Site drainage pattern maps, activities, and materials exposed to storm water.

• Best management practices (BMPs) to protect storm water from contamination.

• A summary of existing storm water data.

• All potential sources of storm water contamination.

• Sources of non‑storm water discharges from on-site storm water outfalls.

• Source area and treatment BMPs to control storm water contamination.

• Annual comprehensive inspection requirements.

**II. Site Map and Description of Industrial Activity**

A drainage base map is required as part of the SWPPP to provide and display information regarding site drainage patterns, surface and subsurface storm drainage systems, and water bodies. Appendix A shows the drainage base map for the Sample Municipal Airport. Drainage area and flow direction are shown.

The Sample Municipal Airport is a small airport handling fewer than 50,000 operations annually; no aircraft deicing is performed at the facility.

Sample Municipal airport does not discharge storm water through a Municipal Separate Storm Sewer System in a city with a population of 100,000 or more.

A single storm water detention pond with no outlet is located at the Sample Municipal airport storm water and any spill would be contained in this clay lined pond on airport property.

There is limited Industrial activity conducted at the Sample Municipal Airport. See section XI for potential activities.

**III. Existing Management Plans**

Existing management plans are procedures, plans, or systems that exist on the site to control exposure of industrial activity to storm water. The Sample Airport has the following in effect:

**Spill Prevention Control and Countermeasures Plan, reviewed 26 February 2010, by John L. Doe, P.E. & L.S. IA #XXXXX**

**IV. Pollution Prevention Team and Member Duties**

The storm water PPT should consist of several individuals, each representing different areas of the site. In most cases, the PPT leader should either be the Environmental or Site Manager, have the authority to make decisions regarding site activity, and have a working knowledge of the outdoor activity. The rest of the PPT should consist of a representative from various areas of production. Responsibilities for the PPT will include keeping the SWPPP up-to-date, performing inspections, determining the need for BMPs, or, if needed, collecting storm water samples for analysis. It is so noted that the Airport Commission contracts only one individual therefore, the pollution team roster is very limited.

The team should occasionally be reevaluated to ensure representation from each part of the facility. Appendix B, shows the current PPT, and a blank PPT form is provided in Appendix C.

**V. Summary of Existing Data**

Currently the Sample Airport has no existing storm water discharge data to report due to the fact our airport is not required to take any storm water samples because our total operations per year are under the 50,0000 operations per year testing requirement. The facility has no other permits requiring storm water sampling of any kind.

**VI. Potential Sources of Pollution**

# Risk Identification

Airplane motor oil is delivered individual dispensing containers. Oil is dispensed directly from the individual containers directly into the engines. Containment pans are placed under the filling locations to catch minor leaks or spills during transfer.

 Aircraft and vehicle maintenance, washing etc. is done inside in areas not exposed to storm water run-off.

Motor oil, mineral spirits, hydraulic and waste oil are stored inside, they are not exposed to storm water.

Fuel is stored in a dual compartment 20,000 gallon underground tank installed in 1998. The tank is double walled for leak prevention conforming to ATSM specs . Additionally tanks are fitted with overfill shutoff and catch sumps to protect against spillage during tank refilling from fuel tanker. An EMCO electronic leak detection system is installed with continuous monitoring of tank volume provided. Piping, cabinets etc. inspected annually for integrity by PMMIC and Tanknology Inc.

All fueling is performed in a set location on the ramp via 2 fixed cabinets one for Jet A fuel, the other 100 LL Aviation Gasoline. Each cabinet has independent shut off valves .Power for pumps can also be shutoff via circuit breakers in the airport office.

Daily inspections for leaks, cleanliness etc. are performed by airport personnel

In case of fuel spill or leak during fueling, all fuel would be cleaned up and contained with dry granular material. A spill kit containing barrier materials is located along with a fire extinguisher adjacent to the fueling cabinets.

The sources of pollution at the Sample Airport are related to the activity that occurs on-site. Appendix D, Worksheet # 3, is for listing spills at the Sample Airport in the past 3 years. Appendix E, Worksheet 3A, lists the materials and activities with the potential to be exposed to storm water. Efforts in storm water management will focus primarily on the materials and activities outlined in these Appendix’s. No spills have occurred at the airport in the past three years; therefore, no data information is reported on the worksheets.

**VII. Status of Non‑storm Water Discharges ‑**

To date there have been no Non-storm water discharges however, if there is a discharge of non‑storm water from the permitted site, it will be important to consider additional types of non‑storm water discharges present. A discharge of clear, cold water that flows for an extended period could indicate that there is groundwater entering the storm sewer. A discharge of clear, cold water that flows for a short period could indicate that the fire department is flushing a fire line. A discharge of clear, warm water could indicate that the flow contains discharge from car washing, or landscape irrigation. These types of drainage are quite common and do not require any additional state discharge permits.

The visual inspection technique for non‑storm water discharge assumes that if there is no flow from a storm water outfall after an extended period of dry weather, it is likely that there is no non‑storm water entering the storm water conveyance system.

The procedures for annual non‑storm water discharge inspection are outlined below:[[1]](#endnote-1)

1. Conduct the evaluation after at least 3 days without rainfall.

2. Conduct the evaluation during normal business hours, when non‑storm water discharges are most likely to occur.

3. Observe the outfall for the presence of discharge.

4. Observe the outfall for the presence of stains, sludge, material deposits, or any other unusual conditions that may indicate a non‑storm water discharge.

5. If a non‑storm water discharge is observed, search the area of the facility serviced by this system for a possible source, including lawn sprinkling, hoses left running, a water line flushing, street cleaning, or improperly disposed wastes. In addition, look inside the facility for possible sources such as floor drains that may be cross‑connected to the storm sewer.

6. Collect a sample of the non‑storm water discharge. If it is clear and cold, the discharge is probably due to groundwater infiltrating the pipes. If groundwater is the possible source of infiltration, wait several days, collect another sample, and confirm the results.

If a non‑storm water flow is observed, its source should be identified. The storm water permit list the types of observation techniques considered to be acceptable for non‑storm water evaluations. When the source is identified, a plan to terminate the discharge must be developed and carried out. Certain types of discharges are allowed by the IADNR, either in general or by special permit. General discharges allowed are those occurring from water-line flushing; landscape and lawn irrigation; diverted stream flow; uncontaminated pumped groundwater or groundwater infiltration; discharges from potable water sources; foundation drains; air conditioning condensate; residential car washing; and street wash water.

**VIII. Best Management Practices (Controls)**

 ***1. Baseline Source Area Controls***

 Baseline source area control BMPs are practices required to be considered in an SWPPP. The following are BMPs to be implemented at the y Airport.

 **a. Erosion control** .

A majority of the industrial site is composed of pavement and grass surfaces. Erosion of soil is minimized in permeable areas by maintaining grass. Most of these permeable areas have minimal slope so erosion in bare areas is less probable.

 **b. Good housekeeping** .

 **See Section XI**.

 Some of the good housekeeping BMP’s that protect storm water at the airport site are:

 \*Indoor storage of equipment. The airport stores all equipment under cover where it cannot

 come into contact with storm water

 \*Covered storage of waste and recyclable materials. All solid waste and recyclable materials at the airport facility are stored in covered dumpsters until picked up. Refuse and recyclable materials are routinely picked up by the waste handling services.

 **c. Preventive maintenance and inspections** .

Maintenance and inspections at the Sample Airport are ongoing activities. Vehicle inspections are performed by the vehicle operators, and are performed indoors and are not exposed to storm water. Also, vehicle maintenance fluids, such as oil and hydraulic fluid, are stored indoors and away from high traffic areas where they might be spilled and pose a potential to contaminate storm water.

 **d. Spill prevention and response** .

The airport plans on purchasing lay down covers for use by the FBO employees in the event of large spill to avoid run-off into the storm water inlet. The airport FBO employees will informed when the covers are purchased and on how to use them. In the event of a large spill the Sample Fire Dept. Haz- Mat team will be contacted via 911.

 The airport fuel farm is situated on a concrete slab, which alleviates any contamination or spills that could leave the permitted site.

 **e. Employee training** .

Training conducted annually conducted by the permittee focuses on minimizing storm water pollution. Staff is instructed to keep a clean and safe work environment, and this will have a positive effect on storm water pollution prevention. In addition, personnel are instructed to use spill cleanup materials on any noticeable leaks throughout the facility. The airport staff is aware of the city’s interest in minimizing environmental problems in and around its facility. .

 **f. Covered salt storage** . – Not applicable.

 **g. Secondary containment for Section 313 chemicals**  -

No Section 313 chemicals are stored at the airport facility.

  ***2. Additional Source Area BMPs Controls***

 **a. Covered delivery.** Any shipping or receiving of raw materials and finished products that would enter the airport facility would be unloaded in a area that would prevent storm water exposure.

 **b. Covered Storage.** All materials that would have a potential to contaminate storm water at the airport facility would be stored under temporary or permanent cover.

  ***3. Treatment BMPs Controls***

Currently there is no storm water treatment BMPs at the airport facility.

**IX. Facility Monitoring Plan**

  **A. Annual Site Compliance Inspection**

 **Inspection Team Members:**

 **Waste Water Treatment Manager Barney Rooter**

 **Public Works Manager John Smith**

 **Airport Manager Clyde Cessna**

*Perform and document the results of an Annual Facility Site Compliance Inspection (AFSCI). The inspection shall be adequate to verify that the site drainage conditions and potential pollution sources identified in the SWPPP remain accurate, and that the best management practices prescribed in the SWPPP are being implemented, properly operated, and adequately maintained. Information reported shall include: the inspection date, inspection personnel, scope of the inspection, major observations, and revisions needed in the SWPPP.*

  ***1. What to Inspect***

 This annual inspection is both a state and a federal requirement of the storm water regulatory program, and it is intended to serve two purposes: to act as a reminder of storm water monitoring obligations and to update the SWPPP annually. A permittee should document summaries of inspection and monitoring results for review by the IADNR if requested by a representative from the DNR office.

 As the facility changes, it is intended that the SWPPP will also change to address the new potential for contamination from industrial activities. The SWPPP must be amended if the company has changed materials handling or storage resulting in any significant increase of the exposure of industrial activity and materials to storm water. The amendment must contain a description of the new activities; planned source area controls to control the activities' potential to pollute storm water; an estimate of the new pollutant loading resulting from the change; and, only when appropriate, a description of the effect of the change on existing storm water treatment practices. Changes to the facility may have altered drainage, so that flow patterns shown on the map are no longer representative of actual flows on the property. These changes may cause more outfalls or a change in the drainage area of each outfall.

 It is important to look through the listings of Material Safety Data Sheets (MSDS) to determine if there are any new materials used at the facility since last year and if they are used in any uncovered areas. If so, additional BMPs may need to be added to the SWPPP to ensure that they will not contaminate storm water.

 Routine maintenance of the BMPs is also an essential part of the plan. BMPs should be routinely checked to be certain they are being maintained in working order and to determine whether routine maintenance or good housekeeping practice schedules are still adequate to keep the storm water clean. Examples of well‑maintained BMPs include unclogged sediment traps; materials remaining under cover, etc.

  ***2. Evaluating Results***

 The team leader at the Sample Municipal Airport will need to consider how the results of these inspections affect the storm water being discharged. The results of these inspections should be used to determine if there is a need for further BMP selection and implementation.

  ***3. Retaining the Results***

 The Sample Municipal Airport will retain the compiled information from the annual inspection throughout the life of the permit. Copies of the records will be kept in City Hall.

  **B. Annual Visual Inspection**

  *Perform and document annual visual inspections of storm water discharge quality at each outfall. The inspections shall include any observations of color, odor, turbidity, floating solids, foam, oil sheen or other obvious indicators of storm water pollution. Information reported shall include the inspection date, inspection personnel, visual quality of the storm water discharge, and probable sources of any observed storm water contamination.*

 Since there is no feasible single point for collecting a representative sample on the site no sampling is required.

 The annual inspection requirements consist of visual storm water monitoring at the site.

 The *Annual Visual Inspection Form* is presented in Appendix “F”.

  ***1. When to Inspect***

 The Sample Municipal Airport will need to visually inspect storm water samples from each outfall on an annual basis.

  ***2. What and Where to Inspect***

 The Sample Municipal Airport should monitor each outfall on the map in Appendix A to determine if visible storm water contamination exists.

  ***3. Recording Results***

 Tracing the source of storm water contamination requires an understanding of the site and the drainage area of each storm water outfall. Once runoff has been observed at the points shown on the map in Appendix A, complete the *Annual Visual Inspection Form* sheet provided in Appendix “F” for each outfall. These forms are for the airport's use and should remain in the SWPPP. If there is evidence of contamination, locate its possible sources, and evaluate the storm water in the next quarter.

  ***4. Retaining the Results***

 Results from the *Annual Visual Inspection Form* sheets should remain in the SWPP throughout the life of the permit.

**X. Schedule for Life of Permit**

 Requirements and other activities under the storm water permit.

• Begin annual visual inspections of storm water discharge from the facility.

 • Inspect each storm water conveyance system for the presence of non‑storm water discharges

 annually.

**XI. Examples of Activity-Specific Controls for Storm Water Pollution Prevention**

*Fueling Stations* • Discourage topping off fuel tanks.

 • Use dry cleanup methods for fuel area.

 • Use proper spill-control methods.

 • Encourage employee participation.

 *Vehicle & Equipment Maintenance* • Check for leaking oil and fluids regularly.

 • Use nontoxic or low-toxicity materials.

 • Drain oil filters before disposal or

 recycling.

 • Do not pour liquid wastes down drains.

 • Recycle engine fluids and batteries.

 • Segregate and label wastes; maximize

 recycling.

 *Painting Operations* • Inspect parts prior to painting.

 • Contain sanding wastes.

 • Prevent paint waste from contacting storm

 water.

 • Use proper interim storage of waste paint,

 solvents, etc.

 • Evaluate efficiency of equipment.

 • Recycle paint, paint thinners, and solvents.

 • Buy recycled products.

 *Vehicle & Equipment Washing* • Use phosphate-free detergents.

 • Use designated cleaning areas.

 *Loading/Unloading Materials* • Look for and contain leaks during transfer.

 • Check equipment regularly for leaks.

 • Limit exposure of material to rainfall.

 • Prevent storm water run off.

*Liquid Storage in* • Comply with applicable state/federal laws.

*Above Ground Tanks*

 • Properly train employees.

 • Routinely inspect tanks and equipment.

 • Install safeguards against accidental

 releases.

 • Install secondary containment.

 I*ndustrial Waste Management* • Conduct a waste reduction assessment.

*Areas and Outside Manufacturing*

 • Institute industrial waste source reduction

 and recycling controls.

 • Prevent runoff and runon from contacting

 the waste management area.

 • Minimize runoff from land application sites.

*Outside Storage of Raw Materials* • Store materials under a roof.

*Byproducts, or Finished Products*

 • Use temporary covers.

 • Enclose or berm the transfer or storage

 areas

1.  [↑](#endnote-ref-1)