

Appendix S

S. Sector S - Air Transportation

1. Covered Stormwater Discharges. The requirements in Part VI for Sector S apply to stormwater discharges associated with industrial activity from Air Transportation facilities as identified by the SIC Codes specified below.

SECTOR S: AIR TRANSPORTATION	
4512-4581	Air Transportation Facilities

2. Industrial Activities Covered by Sector S. The types of activities that permittees under Sector S are primarily engaged in are:
 - a. air transportation, scheduled, and air courier;
 - b. air transportation, non scheduled;
 - c. airports; flying fields, except those maintained by aviation clubs; and airport terminal services including: air traffic control, except government; aircraft storage at airports; aircraft upholstery repair; airfreight handling at airports; airport hangar rental; airport leasing, if operating airport; airport terminal services; and hangar operations.
 - d. airport and aircraft service and maintenance including: aircraft cleaning and janitorial service; aircraft servicing / repairing, except on a factory basis; vehicle maintenance shops; material handling facilities; equipment clearing operations; and airport and aircraft deicing / anti-icing.

Note: “deicing” will generally be used to imply both deicing (removing frost, snow or ice) and anti-icing (preventing accumulation of frost, snow or ice) activities, unless specific mention is made regarding anti-icing and / or deicing activities.

3. Limitations on Coverage. Only those portions of the facility that are involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling and lubrication), equipment cleaning operations or deicing operations are addressed in this Appendix.
 - a. *Prohibition of Non-Stormwater Discharges.* (See also Part I(B)(3)(d)) Not covered by this permit: aircraft, ground vehicle, runway and equipment washwaters; and dry weather discharges of deicing chemicals. These discharges must be covered by a separate MEPDES permit.
4. Special Conditions. *Hazardous Substances or Oil.* Each individual permittee is required to report spills equal to or exceeding the reportable quantity (RQ) levels specified at 40 CFR 110, 117 and 302. See also 38 M.R.S.A. § 543, 550 and 1318-B. If an airport authority is the sole permittee, then the sum total of all spills at the airport must be assessed against the RQ. If the airport authority is a co-permittee with other deicing

operators at the airport, such as numerous different airlines, the assessed amount must be the summation of spills by each co-permittee. If separate, distinct individual permittees exist at the airport, then the amount spilled by each separate permittee must be the assessed amount for the RQ determination.

5. SWPPP Requirements. In addition to the following requirements, the permittee must also comply with the requirements listed in Part IV of the MSGP (See also Part IV(E)). If an airport's tenant has a SWPPP for discharges from their own areas of the airport, that SWPPP must be integrated with the plan for the entire airport. Tenants of the airport facility include air passenger or cargo companies, fixed based operators and other parties who have contracts with the airport authority to conduct business operations on airport property and whose operations result in stormwater discharges associated with industrial activity.
 - a. *Drainage Area Site Map.* (See also Part IV(F)(2)(b)) Identify where any of the following may be exposed to precipitation / surface runoff: aircraft and runway deicing operations; fueling stations; aircraft, ground vehicle and equipment maintenance / cleaning areas; storage areas for aircraft, ground vehicles and equipment awaiting maintenance.
 - b. *Potential Pollutant Sources.* (See also Part IV(F)(4)) Include in the inventory of exposed materials a description of the potential pollutant sources from the following activities: aircraft, runway, ground vehicle and equipment maintenance and cleaning; aircraft and runway deicing operations (including apron and centralized aircraft deicing stations, runways, taxiways and ramps). If the permittee uses deicing chemicals, the permittee must maintain a record of the types (including the Material Safety Data Sheets [MSDS]) used and the monthly quantities, either as measured or, in the absence of metering, as estimated to the best of the facility's owner(s) or operator(s) knowledge. This includes all deicing chemicals, not just glycols and urea (e.g., potassium acetate), because large quantities of these other chemicals can still have an adverse impact on receiving waters. Tenants or other fixed-based operations that conduct deicing operations must provide the above information to the airport authority for inclusion in any comprehensive airport SWPPPs.
 - c. *Good Housekeeping Measures.* (See also IV(F)(7))
 1. Aircraft, Ground Vehicle and Equipment Maintenance Areas. Describe and implement measures that prevent or minimize the contamination of stormwater runoff from all areas used for aircraft, ground vehicle and equipment maintenance (including the maintenance conducted on the terminal apron and in dedicated hangers). Consider the following practices (or their equivalents): performing maintenance activities indoors; maintaining an organized inventory of material used in the maintenance areas; draining all parts of fluids prior to disposal; preventing the practice of hosing down the apron or hanger floor; using dry cleanup methods; and collecting the stormwater runoff from the maintenance area and providing treatment or recycling.
 2. Aircraft, Ground Vehicle and Equipment Cleaning Areas. Clean equipment only in the areas identified in the SWPPP and site map and

clearly demarcate these areas on the ground. Describe and implement measures that prevent or minimize the contamination of stormwater runoff from cleaning areas.

3. Aircraft, Ground Vehicle and Equipment Storage Areas. Store all aircraft, ground vehicles and equipment awaiting maintenance in designated areas only. Consider the following BMPs (or their equivalents): storing aircraft and ground vehicles indoors; using drip pans for the collection of fluid leaks; and perimeter drains, dikes or berms surrounding the storage areas.
4. Material Storage Areas. Maintain the vessels of stored materials (e.g., used oils, hydraulic fluids, spent solvents, and waste aircraft fuel) in good condition, to prevent or minimize contamination of stormwater. Also plainly label the vessels (e.g., “used oil,” “Contaminated Jet A,” etc.). Describe and implement measures that prevent or minimize contamination of precipitation / runoff from these areas. Consider the following BMPs (or their equivalents): storing materials indoors; storing waste materials in a centralized location; and installing berms / dikes around storage areas.
5. Airport Fuel System and Fueling Areas. Describe and implement measures that prevent or minimize the discharge of fuel to the storm sewer / surface waters resulting from fuel servicing activities or other operations conducted in support of the airport fuel system. Consider the following BMPs (or their equivalents): implementing spill and overflow practices (e.g., placing absorptive materials beneath aircraft during fueling operations); using dry cleanup methods; and collecting stormwater runoff.
6. Source Reduction. Consider alternatives to the use of urea and glycol-based deicing chemicals to reduce the aggregate amount of deicing chemicals used and / or lessen the environmental impact. Chemical options to replace ethylene glycol, propylene glycol and urea include: potassium acetate; magnesium acetate; calcium acetate; anhydrous sodium acetate.

- **Runway Deicing Operation:** Evaluate, at a minimum, whether over-application of deicing chemicals occurs by analyzing application rates and adjusting as necessary, consistent with considerations of flight safety. Also consider these BMP options (or their equivalents): metered application of chemicals; pre-wetting dry chemical constituents prior to application; installing a runway ice detection system; implementing anti-icing operations as a preventive measure against ice buildup.

- **Aircraft Deicing Operations:** Determine whether excessive application of deicing chemicals occurs and adjust as necessary, consistent with considerations of flight safety. This evaluation must be carried out by the personnel most familiar with the particular aircraft and flight operations in question (vice an outside entity such as the airport authority). Consider using alternative deicing / anti-icing agents as well as containment measures for all applied chemicals. Also consider these BMP options (or their equivalents) for reducing deicing fluid use: forced-air deicing

systems, computer-controlled fixed-gantry systems, infrared technology, hot water, varying glycol content to air temperature, enclosed-basket deicing trucks, mechanical methods, solar radiation, hangar storage, aircraft covers, and thermal blankets for MD-80s and DC-9s. Also consider using ice-detection systems and airport traffic flow strategies and departure slot allocation systems.

7. Management of Runoff. Where deicing operations occur, describe and implement a program to control or manage contaminated runoff to reduce the amount of pollutants being discharged from the site. Consider these BMP options (or their equivalents): a dedicated deicing facility with a runoff collection / recovery system; using vacuum / collection trucks; storing contaminated stormwater / deicing fluids in tanks and releasing controlled amounts to a publicly owned treatment works; collecting contaminated runoff in a wet pond for biochemical decomposition (be aware of attracting wildlife that may prove hazardous to flight operations); and directing runoff into vegetative swales or other infiltration measures. Also consider recovering deicing materials when these materials are applied during non-precipitation events (e.g., covering storm sewer inlets, using booms, installing absorptive interceptors in the drains, etc.) to prevent these materials from later becoming a source of stormwater contamination. Used deicing fluid should be recycled whenever possible.
- d. *Inspections.* (See also Part IV(F)(7)(b)(i)) Specify the frequency of inspections in the SWPPP. At a minimum they must be conducted monthly during the deicing season. If the facility needs to deice before or after this period, expand the monthly inspections to include all months during which deicing chemicals may be used. Also, if significantly or deleteriously large quantities of deicing chemicals are being spilled or discharged, or if water quality impacts have been reported, increase the frequency of the inspections to weekly until such time as the chemical spills / discharges or impacts are reduced to acceptable levels. The Department may specifically require the permittee to increase inspections and SWPPP reevaluations as necessary.
 - e. *Comprehensive Site Compliance Evaluation.* (See also Part IV(K)) Using only qualified personnel, conduct one of the Comprehensive Site Compliance Evaluations during periods of actual deicing operations, if possible. If not practicable during active deicing or the weather is too inclement, conduct the evaluations when deicing operations are likely to occur and the materials and equipment for deicing are in place.