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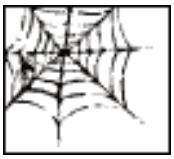

The Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (2000 MSGP), issued in October 2000, expired at midnight on October 30, 2005. A new permit, the 2008 Multi-Sector General Permit (2008 MSGP) was issued on September 29, 2008. Visit www.epa.gov/npdes/stormwater/msgp to view the final 2008 MSGP and supporting documents.

Part 4 - Sector-Specific Requirements for Industrial Activity
Subsection S - Sector S-Air Transportation

S.1 Covered Stormwater Discharges.

The requirements in Subsection S apply to stormwater discharges associated with industrial activity from Air Transportation facilities identified by the SIC Codes in Major Group 45, as specified under Sector S in Table D-1 of Appendix D of the permit, namely air transportation, scheduled, and air courier (SIC 4512 and 4513); air transportation, non scheduled (SIC 4522); 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; and 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. (SIC 4581)

S.2 Industrial Activities Covered by Sector S.

The types of activities that Air Transportation facilities are primarily engaged in are:

- Servicing, repairing, or maintaining aircraft and ground vehicles
- Equipment cleaning and maintenance (including vehicle and equipment rehabilitation mechanical repairs, painting, fueling, and lubrication)
- Deicing/anti-icing operations which conduct the above described activities

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.

S.3 Limitation on Coverage

S.3.1 *Limitations on Coverage*. This permit authorizes stormwater discharges from only those portions of the air transportation facility that are involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling and lubrication), equipment cleaning operations or deicing operations.

S.3.2 *Prohibition of Non-Stormwater Discharges*. (See also Part 1.2.4 and Part S.4) This permit does not authorize the discharge of aircraft, ground vehicle, runway and equipment washwaters; nor the dry weather discharge of deicing chemicals. Such discharges must be covered by separate NPDES permit(s).

S.3.3 *Hazardous Substances or Oil*. (See also Part 2.1.4.3) 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 as described at Part 2.1.4.3. If an airport authority is the sole permittee under this permit, then the sum total of all spills at the airport must be assessed against the RQ. I f 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.

S.4 Stormwater Pollution Prevention Plan (SWPPP) Requirements.

In addition to the requirements contained in Part 2, the following specific elements must be included in any SWPPP for a air transportation facility authorized under this permit. An airport authority and tenants of the airport are encouraged to work in partnership in the development and implementation of a stormwater pollution prevention plan. If an airport tenant obtains authorization under this permit and develops a SWPPP for discharges from his own areas of the airport, that SWPPP must be coordinated and integrated with the plan SWPPP 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.

S.4.1 *Drainage Area Site Map.* (See also Part 2.1.2) The site map must also identify the following areas of the facility and indicate whether activities occurring there 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.

S.4.2 *Potential Pollutant Sources.* (See also Part 2.1.4) In your inventory of exposed materials, describe and assess the potential for the following activities and facility areas to contribute pollutants to stormwater discharges: 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 you use deicing chemicals, you 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 your 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.

S.4.2.1 Deicing Season. (See also S.4.4.) The SWPPP must define the average seasonal timeframe (e.g., December- February, October - March, etc.) during which deicing activities typically occur at the facility. Implementation of BMPs, facility inspections and monitoring must be conducted with particular emphasis throughout the defined deicing season.

S.4.3 *Good Housekeeping Measures.* (See also 2.1.5.1) The SWPPP must describe the specific good housekeeping control measures used in each of the following facility areas. Recommended measures are discussed as indicated:

S.4.3.1 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; prohibiting 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.

S.4.3.2 Aircraft, Ground Vehicle and Equipment Cleaning Areas. (see also S.4.6) Clean equipment only in the areas identified in the SWPPP and site map and clearly demarcate these areas on the ground using signage or other appropriate means. Describe and implement measures that prevent or minimize the contamination of stormwater runoff from cleaning areas.

S.4.3.3 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.

S.4.3.4 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.

S.4.3.5 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 only dry cleanup methods; and collecting stormwater runoff.

S.4.3.6 Source Reduction. Consider all feasible 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.

S.4.3.6.1 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.

S.4.3.6.2 Aircraft Deicing Operations. Determine whether excessive application of deicing chemicals occurs and adjust as necessary, consistent with considerations of flight safety. EPA intends for this evaluation to 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, thermal blankets for MD-80s and DC-9s. Also consider using ice-detection systems and airport traffic flow strategies and departure slot allocation systems.

S.4.3.7 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. Describe the controls used for collecting or containing contaminated melt water from collection areas used for disposal of contaminated snow. 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.

S.4.4 *Inspections.* (See also Part 2.1.5.5) Specify the frequency of inspections in your SWPPP. At a minimum they must be conducted monthly during the deicing season (e.g., October through April for most mid-latitude airports). If your 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 your inspections to weekly until such time as the chemical spills/discharges or impacts are reduced to acceptable levels. The Director may specifically require you to increase inspections and SWPPP reevaluations as necessary.

S.4.5 *Comprehensive Site Compliance Evaluation.* (See also Part 3.1) Using only qualified personnel, conduct your annual 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.

S.4.6 *Vehicle and Equipment Washwater Requirements.* Attach to or reference in your SWPPP, a copy of the NPDES permit issued for vehicle/equipment washwater or, if an NPDES permit has not been issued, a copy of the pending application. If an industrial user permit is issued under a local pretreatment program, attach a copy to your SWPPP. In any case, describe and implement all non-stormwater discharge permit conditions or pretreatment conditions in your SWPPP. If washwater is handled in another manner (e.g., hauled offsite, retained onsite), describe the disposal method and attach all pertinent documentation/information (e.g., frequency, volume, destination, etc.) in the plan.

S.5 Monitoring and Reporting Requirements. (See also Part 3 of the permit.)

Monitor per the requirements in Table S-1. Collect a minimum of four (4) samples only during the timeframe defined in Part S.4.2.1 when deicing activities are occurring, for the year 1 of your permit coverage, and four times per year thereafter during the permit term, depending on comparison of monitoring results to benchmark monitoring cutoff concentrations.

Table S-1. Sector-specific Numeric Effluent Limitations and Benchmark Monitoring

Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration[1]	Effluent Limitation Guidelines
Facilities at airports that use more that 100,000 gallons of glycol-based deicing/anti-icing chemicals and/or 100 tons or more of urea on an average annual basis: monitor ONLY those outfalls from the airport facility that collect runoff from areas where deicing/anti-icing activities occur (SIC 4512-4581).	Biochemical Oxygen Demand (BOD_5)	30 mg/L	--
	Chemical Oxygen Demand (COD)	120 mg/L	--
	Ammonia	19 mg/L	--
	pH	6.0 - 9.0 s.u.	--
	Total Suspended Solids (TSS)	100 mg/L	--

[1]You must monitor quarterly in the first year of your coverage for each benchmark parameter (see Part 3.2.2.1). For each parameter, no additional benchmark monitoring is required if the average of your 4 monitoring values does not exceed the benchmark (see Part 3.2.2.3). However, for each parameter there are additional requirements if the average of your four monitoring values exceeds the benchmark (see Part 3.2.2.4).