Attach Address Label

U.S. ENVIRONMENTAL PROTECTION AGENCY

AIRPORT DEICING QUESTIONNAIRE

Form Approved
OMB Control No. 2040-0267
Approval Expires 01/31/2009

INTRODUCTION

The U.S. Environmental Protection Agency (EPA) is conducting a survey of airport deicing and anti-icing as part of its effort to develop national effluent guidelines regulations for the airport deicing operations point source category. This questionnaire requests information on airports where deicing and/or anti-icing of aircraft or pavement occurred during the 2002/2003, 2003/2004, and/or 2004/2005 winter seasons. EPA is sending questionnaires to a sample of airport certificate holders to help the Agency compile a national assessment of deicing operations. EPA will also send a separate questionnaire to a sample of airline owners/operators.

This questionnaire is conducted under the authority of Section 308 of the Clean Water Act (Federal Water Pollution Control Act, 33 U.S.C. Section 1318). **All airports that receive this questionnaire must respond to it within 60 days** of receiving it.

BACKGROUND ON EFFLUENT LIMITATIONS GUIDELINES AND STANDARDS (ELGs)

As explained in EPA's 2004 Effluent Guidelines Plan (69 FR 53719 September 2, 2004), the Agency has identified airport deicing operations for possible effluent guidelines rulemaking. Effluent guidelines (i.e., effluent limitations guidelines and standards) are developed pursuant to the Clean Water Act and are restrictions that may be applied to industrial discharges. EPA develops ELGs on an industry-by-industry basis using information collected during the rulemaking process.

OVERVIEW OF THE QUESTIONNAIRE

The questionnaire is divided into the following parts and sections:

PART A: TECHNICAL INFORMATION

SECTION 1: General Airport Information
SECTION 2: Airport Deicing and Anti-Icing Operations
SECTION 3: Deicing Stormwater Containment and/or Collection
SECTION 4: Deicing Stormwater Treatment/Recovery
SECTION 5: Analytical Data
SECTION 6: Pollution Prevention Practices

PART B: FINANCIAL AND ECONOMIC INFORMATION

SECTION 1: Ownership and Management Structure
SECTION 2: Airport Finances
SECTION 3: Capital Expenditures
SECTION 4: Airport Operations

The questionnaire includes questions on the deicing technologies employed, amount of deicing chemicals used, deicing stormwater collection and treatment systems used, pollution prevention techniques, and economic and financial information for the last three winter seasons (i.e., 2002/2003, 2003/2004, and/or 2004/2005).

EPA will use the technical data collected in Part A of this questionnaire to determine the usage of deicing chemicals, annual deicing stormwater generation rates, deicing stormwater management and treatment practices, to formulate regulatory options, and information necessary for assessing environmental impact. EPA will also use these technical data together with the financial data collected in Part B of this questionnaire to estimate the costs and benefits associated with any new national effluent guidelines regulations considered for the airport deicing point source category. Finally, EPA will characterize the economic status of the industry and estimate the possible economic impacts of such national effluent guidelines regulations using the financial and economic data collected in Part B of this questionnaire.

COMPLETION OF THE QUESTIONNAIRE

Each section should be completed by the person(s) most knowledgeable about the information requested. All airports must have the corporate official or designee responsible for directing or supervising the response to the questionnaire sign one of the Certification Statements on page v or vi to either (1) verify and validate the information provided, or (2) certify that airport or aircraft deicing or anti-icing was not performed at this airport during the 2002/2003, 2003/2004, or 2004/2005 winter seasons.

QUESTIONNAIRE ASSISTANCE

If you have any questions regarding completion of this questionnaire you can request assistance using EPA's e-mail helplines provided below. Please include the question number along with your questions. Respondents who desire assistance by telephone should send an e-mail with "Please Call Me" in the subject line. Please provide the call-back phone number, contact name, and desired day and time to call. The return phone call will be free of charge to the respondent.

EPA also has a website (see below) for the Deicing questionnaires where you can download a blank questionnaire or electronic questionnaire form, and obtain other information.

EPA AIRPORT DETAILED QUESTIONNAIRE E-MAIL ADDRESSES AND WEBSITE

Email Helpline for Technical Information (Part A) . . . . . **airportdeicehelp.tech@erg.com**
Email Helpline for Economic Information (Part B) . . . . . **airportdeicehelp.econ@erg.com**
Website . . . . . **www.epa.gov/guide/airport**
See the "Frequently Asked Questions" web page for updates and clarifications

WHEN TO RETURN THE QUESTIONNAIRE

The response to this questionnaire is due 60 days after receiving it.

If you wish to request an extension, you must do so **in writing** no later than one week of the due date of this questionnaire. Written requests may be e-mailed to Mr. Brian D'Amico at **damico.brian@epa.gov** or may be mailed to:

Postal Mail:
Mr. Brian D'Amico
U.S. Environmental Protection Agency
Engineering and Analysis Division (4303T)
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Courier Delivery:
Mr. Brian D'Amico
U.S. Environmental Protection Agency
Engineering and Analysis Division
1301 Constitution Avenue, NW (Room 6231)
Washington, DC 20004

WHERE TO RETURN THE QUESTIONNAIRE

After completing the questionnaire and certifying the information that it contains, use the enclosed mailing label to mail the completed questionnaire to:

U.S. Environmental Protection Agency
Airport Deicing Questionnaire
c/o Eastern Research Group, Inc.
14555 Avion Parkway, Suite 200
Chantilly, VA 20151

ELECTRONIC VERSION OF THE QUESTIONNAIRE

To complete the questionnaire electronically, an electronic form is available on EPA's website at **www.epa.gov/guide/airport**. The electronic questionnaire form is in Microsoft Word© format. You may save the file on your local computer. Detailed instructions for completing the questionnaire electronically are provided on EPA's website.

This electronic form does not have the capability to fill in multiple copies of questions. To complete multiple copies for Part A Questions 15, 43-48, and 54, individual files are provided on EPA's website. You may save a file for each copy needed and complete them electronically.

If you complete the survey electronically, you must print the survey response, sign the Certification Statement on page v, and **submit it as a hard copy**.

CONFIDENTIAL BUSINESS INFORMATION

Regulations governing the confidentiality of business information are contained in the Code of Federal Regulations (CFR) at Title 40 Part 2, Subpart B. You may assert a business confidentiality claim covering part or all of the information you submit, other than effluent data and information or data that is otherwise publicly available, as described in 40 CFR 2.203(b):

> "(b) *Method and time of asserting business confidentiality claim.* A business which is submitting information to EPA may assert a business confidentiality claim covering the information by placing on (or attaching to) the information, at the time it is submitted to EPA, a cover sheet, stamped or typed legend, or other suitable form of notice complying language such as 'trade secret,' 'proprietary,' or 'company confidential.' Allegedly confidential portions of otherwise nonconfidential documents should be clearly identified by the business, and may be submitted separately to facilitate identification and handling by EPA. If the business desires confidential treatment only until a certain date or until the occurrence of a certain event, the notice should so state."

If no business confidentiality claim accompanies the information when it is received by EPA, EPA may make the information available to the public without further notice.

You may claim as confidential all information included in the response to a question by checking the Confidential Business Information (CBI) box next to the question number. Note that you may be asked to justify any claim of confidentiality at a later time, for example if someone requests access to your data. Note also that airport effluent data are not eligible for confidential treatment, pursuant to Section 308(b) of the Clean Water Act. In addition, information that is publicly available should not be claimed confidential. Note also that information claimed confidential cannot be accessed or used by the industry to evaluate data and analyses supporting the national effluent guidelines regulations.

Information covered by a claim of confidentiality will be disclosed by EPA only to the extent of, and by means of, the procedures set forth in 40 CFR Part 2, Subpart B. In general, submitted information protected by a business confidentiality claim may be disclosed to other employees, officers, or authorized representatives of the United States concerned with implementing the Clean Water Act. The authorized representatives include employees of other executive branch agencies, who may review CBI during the course of reviewing draft regulations.

Information covered by a claim of confidentiality will be made available to EPA contractors to enable the contractors to perform the work required by their contracts with EPA. All EPA contracts provide that contractor employees use the information only for the purpose of performing the work required by their contracts and will not disclose any CBI to anyone other than EPA without prior written approval from each affected business or from EPA's legal office.

GENERAL INSTRUCTIONS FOR QUESTIONNAIRE

Read all question-specific instructions and definitions of key terms. Carefully read the definitions of key terms (found on the following pages) and any instructions for specific questions.

Mark responses for each question for which the answer is known based on readily available data. Fill in the appropriate response(s) to each question. Please use **black ink** or **type** in the spaces provided. Answer the questions in sequence unless you are directed to SKIP. EPA prepared this questionnaire to be applicable to a variety of airports; therefore, not all of the questions will apply to every airport. Complete each relevant item in the questionnaire. If the answer is zero, write "0" or "zero". If a question is not applicable to your airport, write "NA." If the information is unknown, write "Unknown." You are not required to provide engineering or "best professional judgement" estimates for questions for which the answer is not known based on readily available data.

Include any clarifying attachments. If additional attachments are required to clarify a response, please place the associated question number and your airport name in the top right corner of each page of the attachments. The following list contains examples of items which may be included as attachments to this questionnaire:

- Airport brochure, pamphlet, general description;
- Piping and deicing stormwater treatment flow diagrams;
- NPDES pre-treatment requirements or NPDES stormwater permit;
- Deicing stormwater treatment operation and maintenance logs;
- Stormwater pollution prevention plans or their equivalent;
- Pollution prevention or management practices policies or data; and
- Airport site map.

The questionnaire requests information applicable to the last three winter seasons (i.e., 2002/2003, 2003/2004, and 2004/2005).

You are not required to perform new or non-routine tests or measurements solely for the purpose of responding to this questionnaire. EPA intends that responses to all questions be based upon readily available data and information. The Comments page located at the end of each section can be used to note any methods or underlying assumptions used in providing responses.

You may need to make copies of some pages before responding. Some pages in the questionnaire will need to be photocopied before you respond. Indicate how many copies of the page you are submitting by completing the entry "Copy ___ of ___" in the top right corner.

Pay close attention to the measurement units requested (e.g., gallons, pounds). Report answers in the units that are specified, unless the question requires you to specify the units.

Indicate information that should be treated as confidential. You may claim as confidential all information included in the response to a question by checking the Confidential Business Information (CBI) box next to the question number. Note that you may be asked to justify any claim of confidentiality at a later time. See the CONFIDENTIAL BUSINESS INFORMATION section on page iii.

Questions? If you have any questions regarding the completion of this questionnaire, see the QUESTIONNAIRE ASSISTANCE section on page ii for assistance by e-mail or website.

BE SURE TO RETAIN A COPY OF THE COMPLETED QUESTIONNAIRE FOR YOUR RECORDS. EPA will review the information submitted and may request your cooperation in answering follow-up questions, if necessary, to complete analyses.

CERTIFICATION STATEMENT

The individual responsible for directing or supervising the preparation of the questionnaire must read and sign the Certification Statement listed below. The certifying official must be a responsible corporate official or his/her authorized representative.

Certification Statement #1 should be completed and signed if this airport completed the questionnaire for deicing or anti-icing operations during the 2002/2003, 2003/2004, and/or 2004/2005 winter seasons.

Certification Statement #2 should be completed and signed if this airport did not perform deicing or anti-icing operations during the 2002/2003, 2003/2004, or 2004/2005 winter seasons.

Certification Statement #1

I certify under penalty of law that the attached questionnaire was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. The information submitted is, to the best of my knowledge and belief, accurate and complete. For the information claimed as company confidential business information pursuant to 40 CFR Part 2, Subpart B, I understand that the company may be asked to justify our claim at a later time, for example, if someone requests access to these data. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment as explained in Section 308 of the Clean Water Act.

Signature of Certifying Official

Date

Printed Name of Certifying Official

( ) Telephone Number

Title of Certifying Official

Airport Name

Certification Statement #2

I certify under penalty of law that deicing or anti-icing operations were not performed at this airport during the 2002/2003, 2003/2004, or 2004/2005 winter seasons. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment as explained in Section 308 of the Clean Water Act.

Signature of Certifying Official

Date

Printed Name of Certifying Official

( ) Telephone Number

Title of Certifying Official

Airport Name

DEFINITIONS OF KEY TERMS

Aircraft Deicing Fluid (ADF) - Any fluid used for the purpose of deicing or anti-icing aircraft. These include, but are not limited to, Type I, II, III, or IV deicing fluid, hot water.

Aircraft Deicing Pad - An area specifically designed and used for aircraft deicing/anti-icing and which is served by a deicing stormwater collection and/or segregation system. Aircraft deicing pads include specially designed deicing pads and also other paved areas designated for deicing/anti-icing operations and retrofitted with a collection and/or segregation system.

Airfield - Air operation areas including aircraft movement areas (e.g., ramps, aprons, taxiways, runways, aircraft parking areas, loading ramps) and any other operational areas (e.g., general aviation and cargo areas) which are used by aircraft.

Anti-Icing - The prevention of the accumulation of frost, snow, or ice on an aircraft or airfield pavement. This may include chemical means (application of glycol-based fluids).

Aquifer - A water-saturated geologic layer with sufficient porosity and permeability to have the potential to be a usable source of water for wells.

Batch Treatment - A discreet volume of deicing stormwater is collected, treated, and/or discharged.

Capital Cost - Costs for additions or improvements to the airport; any equipment or system cost, including design, equipment purchase, installation, administrative, and legal costs (e.g., deicing stormwater treatment unit).

Owner/Certificate Holder - The airport owner/certificate holder is the entity identified as the “Owner” in the “Airport Master Record” (Form 5010) that the airport submits to the Federal Aviation Administration. Should you not have your copy of your airport master record in your files, it may be accessed at: http://www.faa.gov/arp/safety/5010/menu.cfm?ARPnav=safety (either the Airport Contact Information or the Airport Facilities Data files have this information).

Clean Water Act (CWA) - Federal legislation enacted by Congress to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters” (Federal Water Pollution Control Act of 1972, as amended, 33 U.S.C. 1251 et seq.).

Continuous Flow - A flow regime characterized by persistent flow.

Continuous Treatment - Deicing stormwater is collected, treated, and/or discharged without interruption throughout the operating hours of the treatment unit, except for shutdowns for maintenance or other similar activities.

Contract Haul - Collection of deicing stormwater or treatment residuals by a private disposal company, scavenger, or purveyor for subsequent transportation, treatment/recovery, and/or disposal off site.

Deicing - The removal of frost, snow, or ice from an aircraft or an airfield. This may include chemical and mechanical means (e.g., application of glycol-based fluids or hot water, use of brooms).

Deicing Stormwater - Any stormwater, runoff, or snow melt that comes in contact with or is generated from deicing and/or anti-icing fluids or chemicals (including hot water), for example, stormwater containing used ADF that is collected from deicing pads, or stormwater that is contaminated with runway deicing chemicals.

Deicing Stormwater Containment - Measures used to control the discharge of deicing stormwater to surface waters and/or POTWs (e.g., stormwater drainage system, block or pump).

Deicing Stormwater Treatment - The processing of deicing stormwater by physical, chemical, biological, or other means to remove specific pollutants from the deicing stormwater stream or to alter the physical or chemical state of specific pollutants in the deicing stormwater stream. Deicing stormwater treatment may include, but is not limited to, equalization and controlled discharge through a lagoon, biological treatment of deicing stormwaters, and/or processing of deicing stormwaters for glycol recovery.

Direct Discharger - An airport that directly discharges deicing stormwater to surface waters of the United States, such as rivers, lakes, or oceans (see **Surface Waters** definition).

Discharge - The conveyance of deicing stormwater to: (1) United States surface waters such as rivers, lakes, and oceans, or (2) a publicly owned, federally owned, or other treatment works.

Disposal - Intentional placement of waste into or on any land where the material will remain after closure. Deicing stormwater placed into water is defined as discharge, not disposal.

Ephemeral Flow - A flow regime characterized by flows that occur only for short periods of time during and immediately after precipitation events.

Indirect Discharger - A facility that has a permit to convey by pipe or conduit or haul deicing stormwater to a publicly owned, federally owned, or other treatment works.

Injection Well - Any bored, drilled or driven shaft or a dug hole, improved sinkhole, or a subsurface fluid distribution system where the depth is greater than the largest surface dimension that is used to discharge fluids underground. The most common wells discharge fluid a few feet underground. Examples include on-site drainage systems, septic systems, cesspools, stormwater wells, french drains, and deep wells.

Intermittent Flow - A flow regime characterized by flows that occur sporadically, seasonally, or for only a portion of a season.

NPDES Program - The National Pollutant Discharge Elimination System (NPDES) program authorized by Sections 307, 318, 402, and 405 of the Clean Water Act that applies to facilities that discharge wastewater directly to United States surface waters.

Pollutant - Under the Clean Water Act, a dredged spoil, solid waste, incinerator residue, filter backwash, sewage sludge, munitions, chemical waste, biological material, certain radioactive material, heat, wrecked or discarded equipment, rock sand, cellar dirt, and industrial, municipal, and agricultural waste (40 CFR 122.2).

Pollution Prevention - The use of materials, processes, or practices that reduce or eliminate deicing stormwater. It includes practices that result in conservation or more efficient use of deicing and/or anti-icing material (e.g., enhanced weather prediction). It includes source reduction prior to recycling, treatment, or disposal that reduces the amount of any pollutant or contaminant entering any waste stream or otherwise released into the environment. Source reduction can include equipment or technology modifications, process or procedure modifications, substitution of raw materials, and improvements in housekeeping, maintenance, training, or inventory control (e.g., deicing/anti-icing fluid application training for airport personnel, use of alternative mechanical methods in place of chemical usage for deicing).

Publicly Owned Treatment Works (POTW) - Any device or system used in the treatment (including recycling and reclamation) of municipal sewage or industrial wastes of a liquid nature which is owned by a State or a municipality. This includes sewers, pipes, or other conveyances only if they convey wastewater to a POTW providing treatment.

Recycle/Recovery - The process of recovering usable constituent fractions within deicing stormwater.

Sanitary Wastewater - Wastewater that is generated from restrooms, cafeterias, showers, and domestic (versus industrial) activities.

Sludge - The accumulated solids separated from liquids during processing.

Stormwater - Any surface runoff related to storm events or snow melt.

Surface Impoundment - A natural topographic depression, man-made excavation, or diked area framed primarily of earthen materials (although it may be lined with man-made materials), used to temporarily or permanently treat, store, or dispose of deicing stormwater. Other common names for surface impoundments include ponds, pits, lagoons, finishing ponds, settling ponds, playa lakes, and natural ponds.

Surface Waters - Oceans and all interstate and intrastate lakes, rivers, streams, mudflats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, and natural ponds.

Treatment Residual - Any wastes generated by the deicing stormwater treatment system. Examples include sludge, or membrane filtration concentrate.

Zero Discharge or Alternative Disposal Methods - Disposal of deicing stormwater other than by direct discharge to a surface water or by indirect discharge to a POTW. Examples include evaporation, well injection, contract hauling, and/or off-site recycle/recovery.

PART A: TECHNICAL INFORMATION

SECTION 1: GENERAL AIRPORT INFORMATION

Attach Airport Address Label Here

1. Is the mailing address on the mailing label correct?

- ☐ Yes (*Skip to Question 3*)
- ☐ No

2. Please print the correct mailing address.

_____
Airport Name

_____
Street Address, Post Office Box, or Roadway Intersection

_____ _____ _____-_____
City State Zip Code

3. Is the airport's physical location the same as its mailing address?

- ☐ Yes (*Skip to Question 5*)
- ☐ No

4. Provide the street address (physical address) if different from mailing address.

_____
Street Address

_____ _____ _____-_____
City State Zip Code

5. Provide the following information for the primary contact for the technical information supplied in Part A of this questionnaire:

_____ (_____)_____
Primary Contact Name Telephone Number

_____ (_____)_____
Title Fax Number

_____
E-mail Address

Convenient time to call:
_____ between ___ am/pm and ___ am/pm
Street Address or Post Office Box (Eastern Time)

_____ _____ _____-_____
City State Zip Code

6. Provide the following information for the secondary contact for the technical information supplied in Part A of this questionnaire:

_____ (_____)_____
Secondary Contact Name Telephone Number

_____ (_____)_____
Title Fax Number

_____
E-mail Address

Convenient time to call:
_____ between ___ am/pm and ___ am/pm
Street Address or Post Office Box (Eastern Time)

_____ _____ _____-_____
City State Zip Code

7. Were deicing and/or anti-icing operations on aircraft and/or airfield pavement performed at this airport at any time during the 2002/2003, 2003/2004, and/or 2004/2005 winter seasons (hereafter referred to as the **last three winter seasons**)?

☐ Yes
☐ No **(Complete and sign the certification statement on page vi and return this questionnaire and the signed certification statement to the questionnaire return address on page ii.)**

8. Was any deicing stormwater discharged during any of the last three winter seasons to a publicly owned treatment works (POTW)?

☐ Yes
☐ No (*Skip to Question 10*)

9. Please provide the name, address, and telephone number of the POTW. Please attach a copy of the documentation issued by the POTW that describes the discharge requirements for your deicing stormwater. Write your airport ID number and Question 9 in the top right corner of the first page of your attachment.

_____
POTW Name

_____ (_____)_____
Street Address Telephone Number

_____ _____ _____-_____
City State Zip Code

☐ Check here if POTW documentation attached.

10. Was any deicing stormwater associated with any of the last three winter seasons discharged directly to surface waters?

☐ Yes

☐ No (*Skip to Question 15*)

11. a. For the 2004/2005 deicing season, please provide the total number of NPDES-permitted stormwater outfalls at your airport that discharge directly to surface waters.

_____

b. How many of the outfalls identified in 11a drain areas where aircraft or pavement deicing and/or anti-icing activities were conducted during the 2004/2005 season?

_____

c. Please provide the name and type of surface water and the current NPDES permit number(s) associated with your airport's outfalls.

Receiving Water		NPDES Permit No.	Outfall Number(s)
Name	**Type**		
	☐ Stream or river ☐ Pond or lake ☐ Estuary or other coastal water		
	☐ Stream or river ☐ Pond or lake ☐ Estuary or other coastal water		
	☐ Stream or river ☐ Pond or lake ☐ Estuary or other coastal water		
	☐ Stream or river ☐ Pond or lake ☐ Estuary or other coastal water		

d. For those NPDES permits that include outfalls with deicing stormwater, are any airlines or fixed-base operators listed as co-permittees?

☐ Yes
☐ No

Identify the fixed-base operators and/or airlines that are co-permittees.

_____ _____
_____ _____
_____ _____
_____ _____
_____ _____

e. For those outfalls identified in 11b, provide the specific latitude and longitude coordinates (if known), the approximate catchment area, in acres, for each outfall location (if known), and indicate the types of deicing and anti-icing activities that occurred within each catchment area during any of the last three deicing seasons by placing an "X" in the appropriate column(s):

Outfall Number	Latitude*	Longitude*	Catchment Area (acres)	Aircraft Deicing	Aircraft Anti-Icing	Pavement Deicing/Anti-Icing

*Provide coordinates in decimal form with 4-6 significant digits after the decimal place, if possible.

f. Please submit a copy of your airport's Stormwater Pollution Prevention Plan (or equivalent document). Write your airport ID number and Question 11 in the top right corner of the first page of your submittal. If portions of your SWPPP pertain solely to entities that do not participate in deicing activities, you do not need to submit those portions of the SWPPP.

Electronic Copy of SWPPP

You may submit an electronic copy of your document in lieu of, or in addition to, a hard copy. EPA's preference for electronic file format is either Adobe Portable Document Format (PDF) or a widely available word processor such as Microsoft Word©. A document with a file size less than 10 megabytes (MB) may be sent by e-mail to: **airportdeicehelp.tech@erg.com** in the e-mail message, write "Airport Deicing - SWPPP" on the Subject Line. In the body of the message write the following:

EPA Airport Deicing Questionnaire
Airport ID and Name (see label on the title page)
Contact person name
Question 11
SWPPP document attached

A large document comprised of multiple files, each under 10 MB may be sent in multiple e-mail messages. Number each message, e.g., "Message 1 of 5," etc.

For larger electronic documents, please place them on a compact disc (CD) and enclose with this hard copy questionnaire.

Check all that apply:

☐ Hard copy of SWPPP is attached.

☐ Electronic file(s) on CD enclosed

☐ Electronic file(s) sent by e-mail on _____ (date).

12. Provide a site map showing your facility's boundaries, the NPDES-permitted outfalls through which you discharge deicing stormwater, and the surface waters to which the outfalls discharge. Label each outfall. Include latitude and longitude coordinate reference points on your map's boundaries, if available. If you provided latitude and longitude in Question 11e., then inclusion of latitude/longitude on the map is optional. Write your airport ID number and Question 12 in the top right of the map.

If this map is part of another document you have submitted in response to this survey (e.g., your airport's SWPPP), provide the name of the document below:

Document Name: _____

13. Complete the following tables with information available on the surface waters to which you discharge deicing stormwater through NPDES-permitted outfalls at any time during the last three winter seasons. The information should represent flow downstream of the NPDES-permitted outfalls.

You are not required to collect new information to complete these tables. If information is available in documents you are submitting in response to this survey, you may complete the relevant sections of the tables by referencing the appropriate document name and page number. If information is unknown, write “Unknown” in the table cell.

Provide receiving water flow regime, mean flow rate, and total volume information **specific to the time of year during which you discharge deicing stormwater to the receiving water**. If you can provide an annual figure only, write “annual” next to your table entry.

Stream and River Waters

Receiving Water Name	Receiving Water Flow Regime*	Receiving Water Mean Flow Rate**	Where Measured***	Names of Waters Downstream of Receiving Water
	☐ Continuous ☐ Intermittent ☐ Ephemeral	__________ ft^3/sec		1. 2. 3.
	☐ Continuous ☐ Intermittent ☐ Ephemeral	__________ ft^3/sec		1. 2. 3.
	☐ Continuous ☐ Intermittent ☐ Ephemeral	__________ ft^3/sec		1. 2. 3.
	☐ Continuous ☐ Intermittent ☐ Ephemeral	__________ ft^3/sec		1. 2. 3.
	☐ Continuous ☐ Intermittent ☐ Ephemeral	__________ ft^3/sec		1. 2. 3.

*”Continuous,” “intermittent,” and “ephemeral” are defined in the “Definitions of Key Terms” section.
**If you wish to provide flow rate information in a form other than a mean, please write “see comment” in the table below and provide the flow rate information and the basis for its calculation in the Comments on A-13.
***Examples include: “point of discharge,” “USGS stream gage upstream 1 mile,” etc.

Lake, Pond, and Coastal Waters

Receiving Water Name	Receiving Water Total Volume* (gallons or acre-feet of water)	Names of Waters Downstream of Receiving Water
		1. 2. 3.
		1. 2. 3.
		1. 2. 3.

*Applies to lakes and ponds, only, and not to coastal waters.

14. For each outfall identified in 11b, indicate when deicing stormwater discharge occurs.

Outfall Number	Discharge Occurs* (check one)	If Intermittently, During Which Months?
	☐ Continuously ☐ Intermittently	
	☐ Continuously ☐ Intermittently	
	☐ Continuously ☐ Intermittently	
	☐ Continuously ☐ Intermittently	
	☐ Continuously ☐ Intermittently	
	☐ Continuously ☐ Intermittently	
	☐ Continuously ☐ Intermittently	
	☐ Continuously ☐ Intermittently	
	☐ Continuously ☐ Intermittently	

*Continuously means discharges that occur all year long, otherwise, indicate intermittently.

15. Groundwater Information

a. How many discrete aquifers comprise the uppermost aquifer layer beneath your airport?

_____ (If "0", go to Question 16)

Complete the questions below for each discrete aquifer comprising the uppermost aquifer layer beneath your airport. **Photocopy these pages, as needed**, before writing on it and number each aquifer in b. below.

Electronic Questionnaire

If you use the electronic questionnaire form to complete your response, please note that the electronic form does not have the capability to fill in multiple copies of questions. See "Electronic Questionnaire" on page iii of the Introduction. Detailed instructions for completing the electronic questionnaire form are provided on EPA's website.

To complete multiple copies for Question 15, an individual file for this question is provided on EPA's website. To prepare your response, use the following procedure:

1. Open the MS Word file for Part A, Question 15.
2. Save a file on your local computer for each discrete aquifer counted in 15a above.
3. Enter the aquifer number and your airport ID in the spaces provided on each page.
4. Complete the responses to Question15 and save the aquifer file on your computer.

If you complete the survey electronically, you must print the survey response, sign the Certification Statement on page v, and **submit it as a hard copy**.

b. Aquifer number ___ of ___

c. Is groundwater withdrawn from this aquifer for drinking water use?

☐ Yes *(Go to d.)*
☐ No *(Go to Question 16)*
☐ Unknown *(Go to d.)*

d. Briefly describe the location of the aquifer on airport property and the approximate percentage of airport property the aquifer underlies. You may respond to this question by marking the horizontal extent of the aquifer and the aquifer number you provided in Question 15(b) above on the map requested in Question 12. Alternatively, you may specify in the spaces below the quadrant(s) of the airport and/or prominent airport surface feature(s) beneath which the aquifer lies.

Quadrants: _____
Prominent surface feature(s): _____
Approximate percentage of airport underlain by aquifer: _____ %

e. At what depth below the ground surface does the upper surface of the aquifer lie?

_____ ft

f. Is the aquifer overlain by a saturated zone (e.g., a perched groundwater body) that is not an aquifer and/or by an impervious geologic layer?

- ☐ Yes *(Go to g.)*
- ☐ No *(Go to h.)*
- ☐ Unknown *(Go to h.)*

g. Provide the approximate percentage of the aquifer that is overlain by saturated zones and/or an impervious geologic layer. If you only know that the zone and/or layer is not continuous, enter "<100%."

_____ %

h. How many of each of the following types of drinking water wells operate within airport boundaries? If you know only that a particular type of well operates within airport boundaries, enter "X" for that well type.

- ☐ Public water supply well (serves 25 or more people)
- ☐ Single or limited user supply well (including residential wells)
- ☐ Unknown well type

i. How many of each of the following types of drinking water wells operate within 0.5 miles of airport boundaries? If you know only that a particular type of well operates within 0.5 miles of airport boundaries, enter "X" for that well type.

- ☐ Public water supply well (serves 25 or more people)
- ☐ Single or limited user supply well (including residential wells)
- ☐ Unknown well type

j. If applicable, provide the Safe Drinking Water Information System (SDWIS) water system identification numbers for the wells that withdraw water from this aquifer within the airport's boundaries.

_____

- ☐ Not Applicable

16. a. Are you aware of any studies that characterize the general conditions of surface waterbody(ies) that receive deicing stormwater discharges from your airport and/or that characterize the environmental behavior of deicing stormwater discharges from your airport (e.g., watershed studies, environmental impact studies, bioassays, etc.)?

- ☐ Yes
- ☐ No *(Go to Question 17)*

b. Indicate the following information about the characterization studies, if known. If there are additional studies, please provide the information in the Comments on page A-13.

Title: _____

Publication Date: ____/____/____

Sponsoring Agency: _____

Receiving Water Name: _____

CBI? ☐ Yes

17. If you did not discharge deicing stormwater during the last three winter seasons, how do you achieve zero discharge? Indicate (✓) the method(s) below. (See Definitions of Key Terms on page vii for explanation of destinations.)

- ☐ Surface impoundment
- ☐ Evaporation
- ☐ Recycle/Recovery (on-site)
- ☐ Injection well
- ☐ Contract haul/Recycle/Recovery (off-site)
- ☐ Other (specify): _____
- ☐ Not Applicable

CBI? ☐ Yes

18. a. Do you plan any major changes in the destination of deicing stormwater at the airport in the future? (Refer to destinations listed in b. below.)

- ☐ Yes
- ☐ No (*Go to Question 19*)

b. Indicate the deicing stormwater destination planned and the year scheduled or planned below.

		Scheduled/Planned Year
☐	POTW	20___
☐	Surface water	20___
☐	Surface impoundment	20___
☐	Recycle (on-site)	20___
☐	Contract haul	20___
☐	Other (specify): _____	20___

19. Are weather related records related to type and volume of precipitation collected at your airport?

- ☐ Yes
- ☐ No

20. What was the actual number of airfield pavement deicing and anti-icing days per year for the last three winter seasons?

2002/2003: _____ days/season
2003/2004: _____ days/season
2004/2005: _____ days/season

21. During what months are airfield pavement deicing and anti-icing operations typically performed? Check all months that apply.

_____ July	_____ January
_____ August	_____ February
_____ September	_____ March
_____ October	_____ April
_____ November	_____ May
_____ December	_____ June

CBI? ☐ Yes

22. Which entities are responsible for performing and conducting aircraft deicing/anti-icing at your airport? Check all that apply.

- ☐ Airport personnel
- ☐ Airlines
- ☐ Fixed-base operator or private contractor
- ☐ Military
- ☐ Other: _____

CBI? ☐ Yes

23. Which entities are responsible for performing and conducting airfield pavement deicing/anti-icing at your airport? Check all that apply.

- ☐ Airport personnel *(Be sure to complete Question 28 through 30 in Section 2)*
- ☐ Airlines/Tenants
- ☐ Fixed-base operator or private contractor
- ☐ Military
- ☐ Other: _____

Copy ___ of ___

24. Comments for General Airport Information

Please cross-reference your comments by question number. **If you need additional space, please photocopy this page before writing on it, and number each copy in the space provided.**

Question Number	Comment

SECTION 2: AIRPORT DEICING AND ANTI-ICING OPERATIONS

CBI? ☐ Yes **25.** Where were **aircraft** deicing/anti-icing operations performed at your airport in the last three winter seasons? Check all that apply.

- ☐ Passenger terminal gates/apron areas
- ☐ Aircraft deicing/anti-icing pad(s)
- ☐ Taxiway(s)
- ☐ Airfield Ramp(s)
- ☐ Cargo apron areas
- ☐ Infrared deicing hangar
- ☐ Maintenance hangar ramp
- ☐ Aircraft parking apron(s)
- ☐ Military base(s)
- ☐ Other (Specify): _____

CBI? ☐ Yes **26.** Schematic Flow Diagram

Attach a simplified schematic flow diagram illustrating the sources and routing of deicing stormwater at your airport **during the 2004/2005 winter season**. You are not required to create a new diagram if an existing diagram will provide the requested information. Put your airport ID number (as shown on the mailing label on the questionnaire cover page) in the upper right corner, and number each diagram if you have multiple diagrams. Specific instructions and example diagrams are provided below. Review and check the following list to ensure that your schematic flow diagram is complete.

Deicing Stormwater Schematic Flow Diagram Checklist

Be sure to...	✓
Write your airport ID number in the upper right corner of each diagram.	☐
Identify and label airport and aircraft deicing and anti-icing areas (e.g., terminal gates, deicing pads, taxiways, airfield ramps, runway runoff, snow pile areas). One box in the diagram may represent multiple similar areas. See the example diagrams.	☐
Identify and label other pollutant sources potentially present at deicing/anti-icing areas consistent with you stormwater pollution prevention plan (SWPPP). Stormwater sources that are not mixed with deicing stormwater should not be included.	☐
Identify the intermediate and final destinations of deicing stormwater (e.g., storage basins, off-site recovery/recycle, discharged to surface waters, deicing stormwater treatment, POTW, injection well). If discharge goes to a surface water, indicate the outfall number.	☐
If you segregate higher concentrated glycol-contaminated deicing stormwater from lower concentrated glycol-contaminated deicing stormwater, indicate the segregation in the diagram.	☐
Show any diversion valves used to direct deicing stormwater to either deicing storm water containment, deicing stormwater treatment/recovery, or discharge.	☐
If known, include average annual flow rates for final discharge streams. If flow is intermittent, provide amount and frequency; for example “100 gal, twice/day, 1000 gal/month, 4 months/season.” If unknown, indicate this in the Section 2 comments on page A-23.	☐

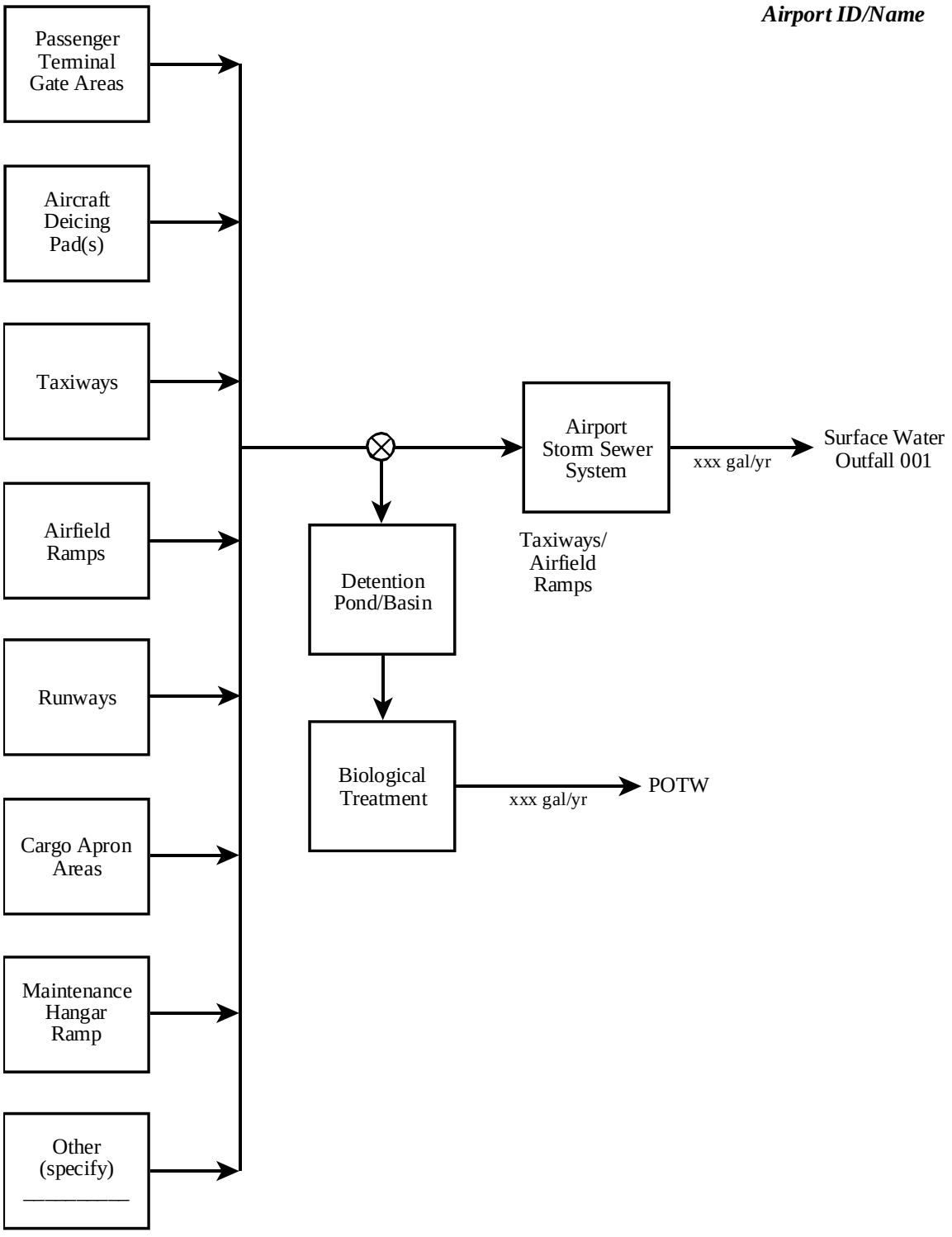
Include and label recycle, recovery, or reuse (e.g., glycol recycle/recovery) operations performed on-site at your airport. ☐

If you believe that the diagram should be treated as confidential, stamp it “Confidential” or write “Confidential” or “CBI” across the top. If any diagram is not marked “Confidential”, it will be considered nonconfidential under 40 CFR Part 2, Subpart B.

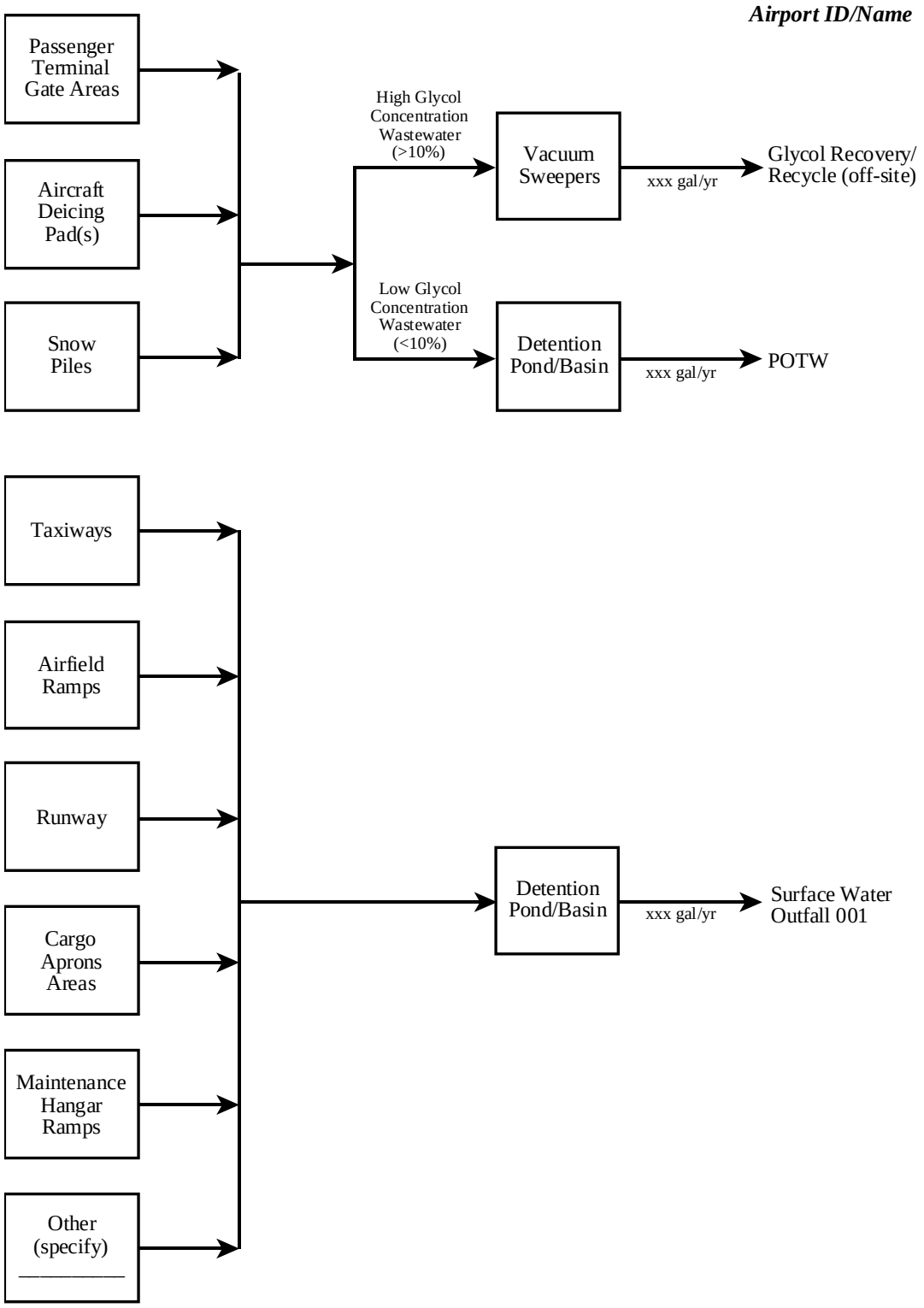
***Review: If any of the statements above were not checked off, please revise the Schematic Flow Diagram*(s)**

If you need assistance with the diagram, send an e-mail to airportdeicehelp.tech@erg.com.

EXAMPLE #1 AIRPORT DEICING STORMWATER SCHEMATIC FLOW DIAGRAM



EXAMPLE #2 AIRPORT DEICING STORMWATER SCHEMATIC FLOW DIAGRAM



AIRPORT DEICING STORMWATER SCHEMATIC FLOW DIAGRAM

Airport ID/Name _____

CBI? ☐ Yes

27. a. Is a diversion valve(s) included in your diagram?

☐ Yes
☐ No *(Go to Question 28)*

b. Describe when the diversion valve(s) is used: _____

_____

_____

c. Is this diversion specified by your permit?

☐ Yes
☐ No

Instructions for Questions 28, 29, and 30

Questions 28, 29, and 30 request information on airfield pavement deicing/anti-icing chemicals and materials for the 2002/2003, 2003/2004, and 2004/2005 winter seasons, respectively.

In Part a., provide the name, amount, formulation, percent concentration/range, and chemical brand name for the **airfield pavement** deicing/anti-icing chemicals and materials used at your airport.

In Part b. of these questions, indicate the deicing/anti-icing materials and/or practices not listed in Part a. used by your airport.

OR: If you have chemical usage reports with this information, you may attach copies of these reports. For any information that is **not** provided in the usage reports, please provide that information in the following tables for Questions 28 through 30.

☐ Reports attached

CBI? ☐ Yes

28. a. Provide the following information for the **Airfield Pavement** deicing and anti-icing chemicals and materials used at your airport in the **2002/2003 winter season**. If airfield pavement deicing/anti-icing was not performed at the airport during this winter season, check here ☐ and go to Question 29.

Deicing/Anti-Icing Chemical or Material	Check (✓) if Used	Amount Used (as purchased)[a]	As Purchased Formulation	As Purchased Percent Concentration	Brand Name of Chemical or Material
Airside Urea	☐	_____ lb/season	☐ Ready to Apply ☐ Concentrate	_____ %	
Potassium Acetate	☐	_____ gal/season	☐ Ready to Apply ☐ Concentrate	_____ %	
Calcium Magnesium Acetate (CMA)	☐	_____ ☐ gal/season _____ ☐ lb/season	☐ Ready to Apply ☐ Concentrate	_____ %	
Sodium Acetate	☐	_____ lb/season	☐ Ready to Apply ☐ Concentrate	_____ %	
Sand	☐	_____ lb/season			
Sodium Formate	☐	_____ lb/season	☐ Ready to Apply ☐ Concentrate	_____ %	
Ethylene Glycol-Based Fluids	☐	_____ gal/season	☐ Ready to Apply ☐ Concentrate	_____ %	
Propylene Glycol-Based Fluids	☐	_____ gal/season	☐ Ready to Apply ☐ Concentrate	_____ %	
Other: (Specify) _____	☐	_____ ☐ gal/season _____ ☐ lb/season	☐ Ready to Apply ☐ Concentrate	_____ %	
Other: (Specify) _____	☐	_____ ☐ gal/season _____ ☐ lb/season	☐ Ready to Apply ☐ Concentrate	_____ %	

a - Season = 2002/2003 winter season.

b. Indicate if the following airfield pavement deicing/anti-icing practices were used at your airport in the 2002/2003 winter season. Check all that apply.

☐ Mechanical Methods (e.g., snow plows, snow blowers, brooms)

☐ Heated Pavement

☐ Other practices or materials not listed in Part a.: _____

CBI? ☐ Yes

29. a. Provide the following information for the **Airfield Pavement** deicing and anti-icing chemicals and materials used at your airport in the **2003/2004 winter season**. If airfield pavement deicing/anti-icing was not performed at the airport during this winter season, check here ☐ and go to Question 30.

Deicing/Anti-Icing Chemical or Material	Check (✓) if Used	Amount Used (as purchased)[a]	As Purchased Formulation	As Purchased Percent Concentration	Brand Name of Chemical or Material
Airside Urea	☐	_____ lb/season	☐ Ready to Apply ☐ Concentrate	_____ %	
Potassium Acetate	☐	_____ gal/season	☐ Ready to Apply ☐ Concentrate	_____ %	
Calcium Magnesium Acetate (CMA)	☐	_____ ☐ gal/season _____ ☐ lb/season	☐ Ready to Apply ☐ Concentrate	_____ %	
Sodium Acetate	☐	_____ lb/season	☐ Ready to Apply ☐ Concentrate	_____ %	
Sand	☐	_____ lb/season			
Sodium Formate	☐	_____ lb/season	☐ Ready to Apply ☐ Concentrate	_____ %	
Ethylene Glycol-Based Fluids	☐	_____ gal/season	☐ Ready to Apply ☐ Concentrate	_____ %	
Propylene Glycol-Based Fluids	☐	_____ gal/season	☐ Ready to Apply ☐ Concentrate	_____ %	
Other: (Specify) _____	☐	_____ ☐ gal/season _____ ☐ lb/season	☐ Ready to Apply ☐ Concentrate	_____ %	
Other: (Specify) _____	☐	_____ ☐ gal/season _____ ☐ lb/season	☐ Ready to Apply ☐ Concentrate	_____ %	

a - Season = 2003/2004 winter season.

b. Indicate if the following airfield pavement deicing/anti-icing practices were used at your airport in the 2003/2004 winter season. Check all that apply.

☐ Mechanical Methods (e.g., snow plows, snow blowers, brooms)

☐ Heated Pavement

☐ Other practices or materials not listed in Part a.: _____

CBI? ☐ Yes

30. a. Provide the following information for the **Airfield Pavement** deicing and anti-icing chemicals and materials used at your airport in the **2004/2005 winter season**. If airfield pavement deicing/anti-icing was not performed at the airport during this winter season, check here ☐ and go to Question 31.

Deicing/Anti-Icing Chemical or Material	Check (✓) if Used	Amount Used (as purchased)[a]	As Purchased Formulation	As Purchased Percent Concentration	Brand Name of Chemical or Material
Airside Urea	☐	_____ lb/season	☐ Ready to Apply ☐ Concentrate	_____ %	
Potassium Acetate	☐	_____ gal/season	☐ Ready to Apply ☐ Concentrate	_____ %	
Calcium Magnesium Acetate (CMA)	☐	_____ ☐ gal/season _____ ☐ lb/season	☐ Ready to Apply ☐ Concentrate	_____ %	
Sodium Acetate	☐	_____ lb/season	☐ Ready to Apply ☐ Concentrate	_____ %	
Sand	☐	_____ lb/season			
Sodium Formate	☐	_____ lb/season	☐ Ready to Apply ☐ Concentrate	_____ %	
Ethylene Glycol-Based Fluids	☐	_____ gal/season	☐ Ready to Apply ☐ Concentrate	_____ %	
Propylene Glycol-Based Fluids	☐	_____ gal/season	☐ Ready to Apply ☐ Concentrate	_____ %	
Other: (Specify) _____	☐	_____ ☐ gal/season _____ ☐ lb/season	☐ Ready to Apply ☐ Concentrate	_____ %	
Other: (Specify) _____	☐	_____ ☐ gal/season _____ ☐ lb/season	☐ Ready to Apply ☐ Concentrate	_____ %	

a - Season = 2004/2005 winter season.

b. Indicate if the following airfield pavement deicing/anti-icing practices were used at your airport in the 2004/2005 winter season. Check all that apply.

☐ Mechanical Methods (e.g., snow plows, snow blowers, brooms)

☐ Heated Pavement

☐ Other practices or materials not listed in Part a.: _____

Copy ___ of ___

31. Comments for Airport Deicing and Anti-Icing Operations

Please cross-reference your comments by question number. **If you need additional space, please photocopy this page before writing on it, and number each copy in the space provided.**

Question Number	Comment

SECTION 3: DEICING STORMWATER CONTAINMENT, COLLECTION AND/OR CONVEYANCE

CBI? ☐ Yes

32. Does this airport use containment, collection and/or conveyance measures (provided in Question 33 below) to control the discharge of deicing stormwater to surface waters and/or POTWs?

☐ Yes

☐ No (*Skip to Question 35*)

CBI? ☐ Yes

33. Indicate the collection/containment/conveyance method(s) used for deicing stormwater in the last three winter seasons from each applicable deicing stormwater source. Check all that apply.

Deicing Stormwater Source	Collection/Containment/Conveyance Method for Airport Deicing Stormwater					
	Stormwater Drainage System	Glycol Recovery Vehicles/Vacuum Sweepers	Aboveground/ Underground Tank	Containment Pond/Basin	Block/Pump	Other (specify) _____
Terminal Gates and Apron/Areas	☐	☐	☐	☐	☐	☐
Aircraft Deicing/Anti-Icing Pads	☐	☐	☐	☐	☐	☐
Taxiway(s)	☐	☐	☐	☐	☐	☐
Airfield Ramp(s)	☐	☐	☐	☐	☐	☐
Runways	☐	☐	☐	☐	☐	☐
Cargo Apron Areas	☐	☐	☐	☐	☐	☐
Infrared Deicing Hangar	☐	☐	☐	☐	☐	☐
Maintenance Hangar Ramp	☐	☐	☐	☐	☐	☐
Aircraft Parking Apron(s)	☐	☐	☐	☐	☐	☐
Military Base(s)	☐	☐	☐	☐	☐	☐
ADF Contaminated Snow Dumps	☐	☐	☐	☐	☐	☐
Other (Specify):	☐	☐	☐	☐	☐	☐

CBI? ☐ Yes **34.** If glycol recovery vehicles or vacuum trucks are used for deicing stormwater collection and/or conveyance, indicate the capital and operation and maintenance (O&M) costs associated with their use.

☐ Not applicable *(Go to Question 35)*

a. Capital Cost $ _____ Year basis _____

b. O&M Cost $/yr _____ Year basis _____

CBI? ☐ Yes **35.** a. Does the airport segregate higher glycol-concentrated deicing stormwater from lower glycol-concentrated deicing stormwater?

☐ Yes

☐ No *(Go to Question 36)*

b. How do you define high versus low glycol concentration?

High = greater than _____ % glycol

Low = less than _____ % glycol

☐ Other (concentration not used as basis, provide descriptions in the Comments Question 39)

CBI? ☐ Yes **36.** For each type of deicing stormwater stream (e.g., high concentration, low concentration, or unsegregated), indicate the discharge destination or disposal method used over the last three winter seasons. Check all that apply.

Discharge Destination/ Disposal Method	Unsegregated Deicing Stormwater Stream*	High Glycol Concentration	Low Glycol Concentration	Annual Average Volume
U.S. Surface Waters	☐	☐	☐	_____ gal/yr
POTW	☐	☐	☐	_____ gal/yr
On-Site Storage/Treatment	☐	☐	☐	_____ gal/yr
On-Site Glycol Recovery/ Recycling	☐	☐	☐	_____ gal/yr
Off-Site Glycol Recovery/ Recycling	☐	☐	☐	_____ gal/yr
Injection Well	☐	☐	☐	_____ gal/yr
Other (specify): _____	☐	☐	☐	_____ gal/yr

*Includes deicing stormwater generated from using only hot water.

CBI? ☐ Yes **37.** a. Was glycol-contaminated deicing stormwater sent to on-site or off-site glycol recovery during any of the last three winter seasons? If yes, provide the following information regarding glycol recovery.

☐ Yes
☐ No *(Go to Question 38)*

b. What is the name of recovery company where the glycol-contaminated deicing was sent?:

_____

c. What is the minimum glycol concentration required? _____%

CBI? ☐ Yes **38.** Does your airport plan to implement any new or additional stormwater containment measures for deicing stormwater in the future?

☐ Yes
☐ No *(Go to Question 39)*

Please list the collection/containment method(s) planned below. (Refer to Question 33 for example methods.)

Collection/Containment Method Planned	Scheduled/Planned Year
	20____
	20____
	20____
	20____

Copy ___ of ___

39. Comments for Deicing Stormwater Containment Information

Please cross-reference your comments by question number. **If you need additional space, please photocopy this page before writing on it, and number each copy in the space provided.**

Question Number	Comment

SECTION 4: DEICING STORMWATER TREATMENT/RECOVERY

Equalization ponds and detention ponds or lagoons that receive deicing stormwaters <u>are</u> considered treatment units for the purpose of this section.

CBI? ☐ Yes

40. Was a deicing stormwater treatment/recovery system operated at your airport any time during the last three winter seasons?

☐ Yes

☐ No (*Skip to Question 50 on page A-57*)

CBI? ☐ Yes

41. In the table below, please check the deicing stormwater treatment/recovery unit operations used at your airport to treat/recover deicing stormwater. Please check all that apply. Complete the applicable question for each unit operation checked.

Treatment Operations That Treat or Recover Deicing Stormwater	If this Deicing Stormwater Treatment Operation is Performed, Complete the following Question 4 Section
☐ Equalization/Storage Tank/Pond	43
☐ Biological Treatment	44
☐ Membrane Separation (Reverse Osmosis, Ultrafiltration)	45
☐ Sand or Other Media Filtration	46
☐ Oil/Water Separation	47
☐ Other (specify)[a]: _____	48
☐ Other (specify): _____	48
☐ Other (specify): _____	48

[a]Example treatment operation may be a constructed wetland.

CBI? ☐ Yes

42. Provide a diagram of each deicing stormwater treatment/recovery system used to treat or recover deicing stormwater associated with deicing and/or anti-icing operations. See example diagrams on pages A-31 and A-32. You are not required to create a new diagram if an existing diagram will provide the requested information. Check the list below to ensure that each Deicing Stormwater Treatment Diagram is complete. **If your airport does not operate a deicing stormwater treatment system, check "No" in Question 40 and SKIP to Question 50.**

If you use more than one treatment system at your airport to treat/recover deicing stormwater, copy page A-33 and provide a diagram for each treatment system.

Deicing Stormwater Treatment Diagram Checklist

Be sure to	✓
Write your airport ID number in the upper right corner of each diagram.	☐
Number each treatment diagram (e.g., 1 of 3, 2 of 3, 3 of 3).	☐
Include and label all treatment units (see deicing stormwater treatment unit codes on page A-30). If you have more than one of a certain type of unit, assign each unit a unique number on the diagram. For example, if you have two equalization ponds or tanks, label them as EQ-1 and EQ-2 on the diagram. These unit labels will be used to complete Questions 43 through 48, Deicing Stormwater Treatment Unit.	☐
Identify and label all sources entering the treatment/recovery system. Sources include, but are not limited to: deicing stormwater, other stormwater, or groundwater.	☐
Identify and label all deicing stormwater destinations using destination codes provided on page A-30.	☐
If known, include flow rates for all streams, indicating the basis (e.g., daily, monthly, annually). If the flows are estimated using a calculation method, you can describe the method in the comments section on page A-58.	☐
Identify and label all residuals (e.g., sludges, oils, and wastes) leaving the treatment system and their destinations.	☐
Indicate all locations at which deicing stormwater samples are routinely collected for analysis with the letters "SP" and a unique sample point number (i.e., SP1, SP2).	☐

If you believe that the diagram should be treated as confidential business information, stamp it "Confidential" or write "Confidential" or "CBI" across the top. If any diagram is not marked "Confidential", it will be considered nonconfidential under 40 CFR Part 2, Subpart B. In general, EPA does not believe that wastewater treatment diagrams support claims of confidentiality because such diagrams do not divulge trade secrets.

Review:
If any of the statements above were not checked off, please review the Deicing stormwater Treatment Diagram.

If you need assistance with your diagram, send an e-mail to airportdeicehelp.tech@erg.com.

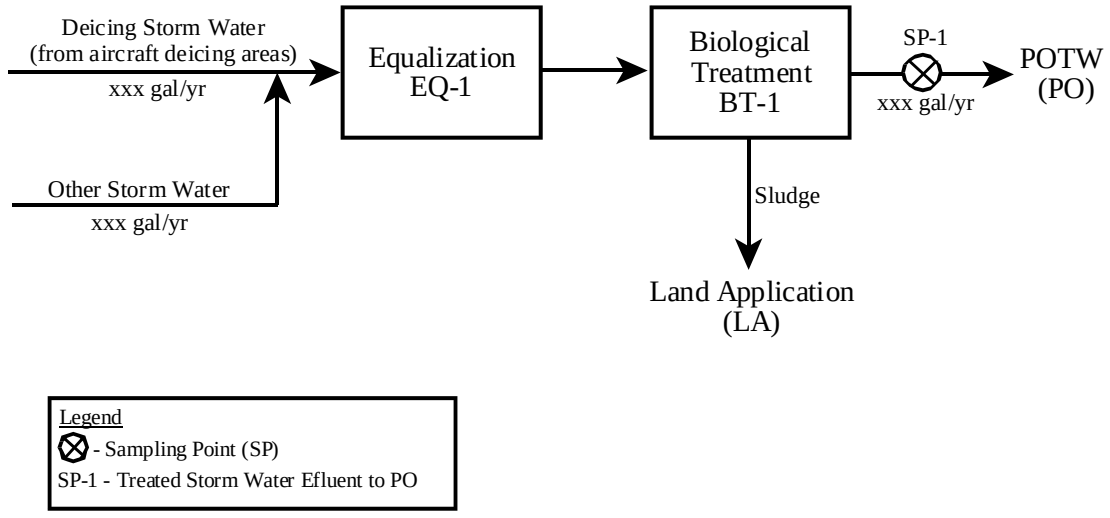
DEICING STORMWATER TREATMENT UNIT CODES	
Code	**Treatment Unit/Operation**
EQ	Equalization/Storage Tank/Pond
BT	Biological Treatment
FM	Membrane Separation (Reverse Osmosis, Ultrafiltration)
FS	Sand or Other Media Filtration
OW	Oil/Water Separation
OT1	Other (specify):
OT2	Other (specify):
OT3	Other (specify):

DEICING STORMWATER DESTINATION CODES	
Code	**Deicing Stormwater Destination**
PO	POTW
SFW	Surface waters
EV	Evaporated on site
RE	Recycle/Recovery (on-site)
UI	Underground injected on site
CH	Contract hauled (including off-site recycle/recovery)
LA	Land application (spray irrigation, vegetative swales)
OT1	Other destination (specify on Deicing Stormwater Treatment Diagram)

42. (Continued)

EXAMPLE #1 AIRPORT DEICING STORMWATER TREATMENT DIAGRAM

Airport ID/Name

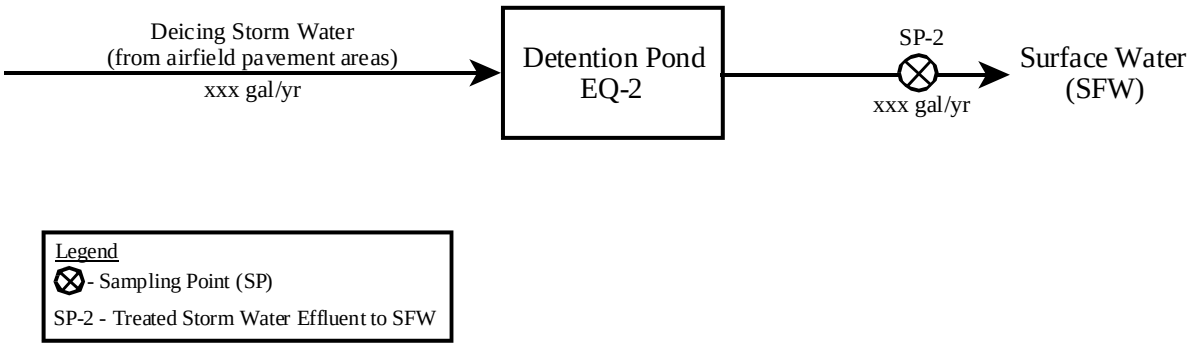


Legend
⊗ - Sampling Point (SP)
SP-1 - Treated Storm Water Efluent to PO

42. (Continued)

EXAMPLE #2 AIRPORT DEICING STORMWATER TREATMENT DIAGRAM

Airport ID/Name



Legend
⊗ - Sampling Point (SP)
SP-2 - Treated Storm Water Effluent to SFW

42. (Continued)

DEICING STORMWATER TREATMENT DIAGRAM
 # ____ of ____

Airport ID/Name _____

Wastewater Treatment Unit Operations

Provide the requested information for each treatment unit operation used to treat deicing stormwater in the last three winter seasons. This information is divided into six questions listed below:

43. Equalization/Storage Tank/Pond
44. Biological Treatment
45. Membrane Separation (Reverse Osmosis, Ultrafiltration)
46. Sand or Other Media Filtration
47. Oil/Water Separation
48. Other Unit/Operation (specify)

For each treatment unit checked in Question 41, please complete the question that best describes the treatment unit operation. Complete Question 48 (Other Unit/Operation) to describe any treatment indicated on the Deicing Stormwater Treatment Diagram that does not fit into Questions 43 - 47. **Complete only the questions that are applicable to the treatment operations for deicing stormwater at your airport.**

Instructions for completing these sections are provided below.

- **Remember that equalization ponds and detention ponds or lagoons that receive deicing stormwater <u>are</u> considered treatment units for the purpose of this section.**
- Complete the appropriate sections for each deicing stormwater treatment unit used at your airport. **If you have more than one treatment unit of the same type, photocopy the appropriate question before writing on it, and number each copy in the spaces provided in the top right corner.**
- Please use the same treatment unit code (from the Deicing Stormwater Treatment Diagram) in the box provided at the top of the table on each page.
- Be sure to provide the type of unit, if applicable, and provide values for all parameters that apply.
- Provide average flows for all influent and effluent streams associated with this unit.
- Check your Deicing Stormwater Treatment Diagram to ensure that questions have been completed for each treatment unit indicated on the diagram.

<u>Electronic Questionnaire</u>

If you use the electronic questionnaire form to complete your response, please note that the electronic form does not have the capability to fill in multiple copies of questions. See "Electronic Questionnaire" on page iii of the Introduction. Detailed instructions for completing the electronic questionnaire form are provided on EPA's website.

To complete multiple copies of the Wastewater Treatment (WWT) Unit Operations in Questions 43 through 48, an individual file for each question is provided on EPA's website. To prepare your response, use the following procedure:

1. Open the MS Word file for the Part A Question number for the applicable WWT operation unit.
2. Save a file on your local computer for <u>each</u> WWT unit of the same type.

3. Enter the copy number, treatment unit code, and your airport ID in the spaces provided on each page.

4. Complete the responses for the WWT operation unit and save the WWT unit file on your computer.

If you complete the survey electronically, you must print the survey response, sign the Certification Statement on page v, and **submit it as a hard copy**.

Copy ___ of ___

CBI? ☐ Yes

43. EQUALIZATION / STORAGE TANK / POND

TREATMENT UNIT CODE: [ ] *(from Deicing Stormwater Treatment Diagram (Question 42))*

EQUALIZATION / STORAGE TANK / POND

a. Airport terminology for this unit . . . . . _____

b. Batch or continuous? . . . . . ☐ Batch
☐ Continuous
☐ Intermittent

c. Does mechanical mixing occur in this unit? . . ☐ Yes
☐ No

d. Does aeration occur in this unit? ☐ Yes
☐ No

e. Design capacity of unit . . . . . _____ gallons

f. Residence time* . . . . . _____ hours
OR
_____ days

*Please specify basis for calculating residence time in the Comments on page A-58.

g. If the unit is a pond, is the pond lined? . . . . . ☐ Yes
☐ No
☐ Not Applicable

h. If the unit is a pond, what size storm event was the pond designed for? . . . . . _____ year, 24-hour storm
☐ Other
☐ Not Applicable
☐ Unknown

Copy ___ of ___

43. EQUALIZATION / STORAGE TANK / POND (Continued)

TREATMENT UNIT CODE: [ ] *(from Deicing Stormwater Treatment Diagram (Question 42))*

EQUALIZATION / STORAGE TANK / POND (Continued)

i. Influent Flow

Source of Influent Streams to Treatment Unit	2002/2003 Winter Season		2003/2004 Winter Season		2004/2005 Winter Season	
	Average Daily Flow	Daily Maximum Flow	Average Daily Flow	Daily Maximum Flow	Average Daily Flow	Daily Maximum Flow
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day

j. Effluent Flow

Destination of Effluent from Treatment Unit (Use codes provided on page A-30)	2002/2003 Winter Season		2003/2004 Winter Season		2004/2005 Winter Season	
	Average Daily Flow	Daily Maximum Flow	Average Daily Flow	Daily Maximum Flow	Average Daily Flow	Daily Maximum Flow
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day

Copy ___ of ___

43. EQUALIZATION / STORAGE TANK / POND (Continued)

TREATMENT UNIT CODE: [ ] *(from Deicing Stormwater Treatment Diagram (Question 42))*

EQUALIZATION / STORAGE TANK / POND (Continued)

k. Are any chemicals added to this unit? . . . . . ☐ Yes ☐ No

l. If yes, please complete this table for each chemical added to the treatment unit. Provide the chemical name (including vendor name and product code, if applicable), the purpose of the chemical, and the usage rate of the undiluted chemical.

Chemical	Purpose	Annual Usage Rate (annual average for last three winter seasons)
EXAMPLE polymer	improve settling	_____ gal/yr _____ lbs/yr
		_____ gal/yr _____ lbs/yr
		_____ gal/yr _____ lbs/yr
		_____ gal/yr _____ lbs/yr
		_____ gal/yr _____ lbs/yr

m. Are capital costs available for this unit? . . . . . ☐ Yes ☐ No

Copy ___ of ___

CBI? ☐ Yes

44. BIOLOGICAL TREATMENT

TREATMENT UNIT CODE: [ ] *(from Deicing Stormwater Treatment Diagram (Question 42))*

BIOLOGICAL TREATMENT		
a. Airport terminology for this unit	_____	
b. Type of unit	☐ Aerobic	
	☐ Anaerobic	
	☐ Other: _____	
c. Batch or continuous?	☐ Batch	
	☐ Continuous	
d. Unit capacity	_____	gallons
e. Detention time in unit	_____	hours
	OR	
	_____	days

Copy ___ of ___

44. BIOLOGICAL TREATMENT (Continued)

TREATMENT UNIT CODE: [ ] *(from Deicing Stormwater Treatment Diagram (Question 42))*

BIOLOGICAL TREATMENT (Continued)

f. Influent Flow

Source of Influent Streams to Treatment Unit	2002/2003 Winter Season		2003/2004 Winter Season		2004/2005 Winter Season	
	Average Daily Flow	Daily Maximum Flow	Average Daily Flow	Daily Maximum Flow	Average Daily Flow	Daily Maximum Flow
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day

g. Effluent Flow

Destination of Effluent from Treatment Unit (Use codes provided on page A-30)	2002/2003 Winter Season		2003/2004 Winter Season		2004/2005 Winter Season	
	Average Daily Flow	Daily Maximum Flow	Average Daily Flow	Daily Maximum Flow	Average Daily Flow	Daily Maximum Flow
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day

Copy ___ of ___

44. BIOLOGICAL TREATMENT (Continued)

TREATMENT UNIT CODE: [ ] *(from Deicing Stormwater Treatment Diagram (Question 42))*

BIOLOGICAL TREATMENT (Continued)

h. Which parameters and/or pollutants are targeted for removal by this unit? Indicate the target concentration.

_____

_____

i. Design capacity flow . . . . . _____ gallons per day

j. Please complete this table for each chemical added to the treatment unit. Provide the chemical name (including vendor name and product code, if applicable), the purpose of the chemical, and the usage rate of the undiluted chemical.

Chemical	Purpose	Annual Usage Rate (annual average for last three winter seasons)
EXAMPLE ammonium sulfate BASF	nutrient addition	_____ gal/yr _____ lbs/yr
		_____ gal/yr _____ lbs/yr
		_____ gal/yr _____ lbs/yr
		_____ gal/yr _____ lbs/yr
		_____ gal/yr _____ lbs/yr

k. Are capital costs available for this unit? . . . . . ☐ Yes ☐ No

Copy ___ of ___

CBI? ☐ Yes

45. MEMBRANE SEPARATION (REVERSE OSMOSIS, ULTRAFILTRATION)

TREATMENT UNIT CODE: [ ] *(from Deicing Stormwater Treatment Diagram (Question 42))*

MEMBRANE SEPARATION (REVERSE OSMOSIS, ULTRAFILTRATION)

a.	Airport terminology for this unit	_____	
b.	Batch or continuous?	☐ Batch ☐ Continuous	
c.	What type of membrane separation does your site use?	☐ Reverse Osmosis ☐ Ultrafiltration ☐ Other (specify): _____	
d.	Design capacity flow	_____	gallons/day
e.	Tank capacity	_____	gallons
f.	Residence time	_____ **OR** _____	hours days

Copy ___ of ___

45. MEMBRANE SEPARATION (REVERSE OSMOSIS, ULTRAFILTRATION) (Continued)

TREATMENT UNIT CODE: [ ] *(from Deicing Stormwater Treatment Diagram (Question 42))*

MEMBRANE SEPARATION (REVERSE OSMOSIS, ULTRAFILTRATION) (Continued)

g. Influent Flow

Source of Influent Streams to Treatment Unit	2002/2003 Winter Season		2003/2004 Winter Season		2004/2005 Winter Season	
	Average Daily Flow	Daily Maximum Flow	Average Daily Flow	Daily Maximum Flow	Average Daily Flow	Daily Maximum Flow
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day

h. Effluent Flow

Destination of Effluent from Treatment Unit (Use codes provided on page A-30)	2002/2003 Winter Season		2003/2004 Winter Season		2004/2005 Winter Season	
	Average Daily Flow	Daily Maximum Flow	Average Daily Flow	Daily Maximum Flow	Average Daily Flow	Daily Maximum Flow
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day

Copy ___ of ___

45. MEMBRANE SEPARATION (REVERSE OSMOSIS, ULTRAFILTRATION) (Continued)

TREATMENT UNIT CODE: [ ] *(from Deicing Stormwater Treatment Diagram (Question 42))*

MEMBRANE SEPARATION (REVERSE OSMOSIS, ULTRAFILTRATION) (Continued)

i. Is any pH adjustment performed prior to this unit? . . . . . ☐ Yes ☐ No

If yes, please indicate target pH level . . . . . _____

j. Membrane Life . . . . . _____ seasons

k. Which parameters/pollutants are targeted for removal by this unit? Indicate the target effluent concentration.

_____

_____

l. Direction of deicing stormwater flow (check one) . . . . . ☐ Upflow ☐ Downflow

m. Filtration rate . . . . . _____ gal/ft²/min

n. Are any chemicals added to this unit? . . . . . ☐ Yes ☐ No

o. If yes, please complete this table for each chemical added to the treatment unit. Provide the chemical name (including vendor name and product code, if applicable), the purpose of the chemical, and the usage rate of the undiluted chemical.

Chemical	Purpose	Annual Usage Rate (annual average for last three winter seasons)
EXAMPLE polymer	improve settling	_____ gal/yr _____ lbs/yr
		_____ gal/yr _____ lbs/yr
		_____ gal/yr _____ lbs/yr
		_____ gal/yr _____ lbs/yr

p. Are capital costs available for this unit? . . . . . ☐ Yes ☐ No

Copy ___ of ___

CBI? ☐ Yes

46. SAND OR OTHER MEDIA FILTRATION

TREATMENT UNIT CODE: [ ] *(from Deicing Stormwater Treatment Diagram (Question 42))*

SAND OR OTHER MEDIA FILTRATION

a.	Airport terminology for this unit	_____	
b.	Batch or continuous?	☐ Batch ☐ Continuous	
c.	Type of filter media (*check all that apply*) . . .	☐ Sand ☐ Multi-media ☐ Other (specify): _____	
d.	Is this unit a gravity or pressure unit? (*check one*)	☐ Gravity ☐ Pressure	
e.	Design capacity flow	_____	gallons/day
f.	Tank capacity	_____	gallons
g.	Residence time	_____ **OR** _____	hours days

Copy ___ of ___

46. SAND OR OTHER MEDIA FILTRATION (Continued)

TREATMENT UNIT CODE: [ ] *(from Deicing Stormwater Treatment Diagram (Question 42))*

SAND OR OTHER MEDIA FILTRATION (Continued)

h. Influent Flow

Source of Influent Streams to Treatment Unit	2002/2003 Winter Season		2003/2004 Winter Season		2004/2005 Winter Season	
	Average Daily Flow	Daily Maximum Flow	Average Daily Flow	Daily Maximum Flow	Average Daily Flow	Daily Maximum Flow
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day

i. Effluent Flow

Destination of Effluent from Treatment Unit (Use codes provided on page A-30)	2002/2003 Winter Season		2003/2004 Winter Season		2004/2005 Winter Season	
	Average Daily Flow	Daily Maximum Flow	Average Daily Flow	Daily Maximum Flow	Average Daily Flow	Daily Maximum Flow
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day

Copy ___ of ___

46. SAND OR OTHER MEDIA FILTRATION (Continued)

TREATMENT UNIT CODE: ☐ *(from Deicing Stormwater Treatment Diagram (Question 42))*

SAND OR OTHER MEDIA FILTRATION (Continued)

j. Annual volume of backwash water . . . . . _____ gallons per season

Indicate the destination of the backwash water (if another treatment unit, please list treatment unit number) . . . . . .

☐ Other treatment unit number: _____
☐ Discharged without treatment
☐ Other (specify): _____

k. Which parameters/pollutants are targeted for removal by this unit? Indicate the target concentration.

_____

_____

l. Are any chemicals added to this unit? . . . . . ☐ Yes ☐ No

m. If yes, please complete this table for each chemical added to the treatment unit. Provide the chemical name (including vendor name and product code, if applicable), the purpose of the chemical, and the usage rate of the undiluted chemical.

Chemical	Purpose	Annual Usage Rate (annual average for last three winter seasons)
EXAMPLE polymer	improve settling	_____ gal/yr _____ lbs/yr
		_____ gal/yr _____ lbs/yr
		_____ gal/yr _____ lbs/yr
		_____ gal/yr _____ lbs/yr
		_____ gal/yr _____ lbs/yr

n. Are capital costs available for this unit? . . . . . ☐ Yes ☐ No

Copy ___ of ___

CBI? ☐ Yes

47. OIL/WATER SEPARATION

TREATMENT UNIT CODE: [ ] *(from Deicing Stormwater Treatment Diagram (Question 42))*

OIL/WATER SEPARATION		
a. Airport terminology for this unit	_____	
b. Batch or continuous?	☐ Batch ☐ Continuous	
c. Tank capacity	_____	gallons
d. Type of device	☐ Plate separator ☐ Skimmer ☐ Coalescer ☐ Microfilter ☐ Oil mop ☐ Other (specify): _____	
e. Residence time	_____	hours
f. Design capacity flow	_____	gal/day

Copy ___ of ___

47. OIL/WATER SEPARATION (Continued)

TREATMENT UNIT CODE: [ ] *(from Deicing Stormwater Treatment Diagram (Question 42))*

OIL/WATER SEPARATION (Continued)

g. Influent Flow

Source of Influent Streams to Treatment Unit	2002/2003 Winter Season		2003/2004 Winter Season		2004/2005 Winter Season	
	Average Daily Flow	Daily Maximum Flow	Average Daily Flow	Daily Maximum Flow	Average Daily Flow	Daily Maximum Flow
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day

h. Effluent Flow

Destination of Effluent from Treatment Unit (Use codes provided on page A-30)	2002/2003 Winter Season		2003/2004 Winter Season		2004/2005 Winter Season	
	Average Daily Flow	Daily Maximum Flow	Average Daily Flow	Daily Maximum Flow	Average Daily Flow	Daily Maximum Flow
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day

Copy ___ of ___

47. OIL/WATER SEPARATION (Continued)

TREATMENT UNIT CODE: [ ] *(from Deicing Stormwater Treatment Diagram (Question 42))*

OIL/WATER SEPARATION (Continued)

i. Which parameters/pollutants are targeted for removal by this unit? Indicate the target concentration.

_____

_____

j. Are any chemicals added to this unit? . . . . . ☐ Yes ☐ No

k. If yes, please complete this table for each chemical added to the treatment unit. Provide the chemical name (including vendor name and product code, if applicable), the purpose of the chemical, and the usage rate of the undiluted chemical.

Chemical	Purpose	Annual Usage Rate (annual average for last three winter seasons)
EXAMPLE polymer	improve settling	_____ gal/yr _____ lbs/yr
		_____ gal/yr _____ lbs/yr
		_____ gal/yr _____ lbs/yr
		_____ gal/yr _____ lbs/yr
		_____ gal/yr _____ lbs/yr

l. Are capital costs available for this unit? . . . . . ☐ Yes ☐ No

Copy ___ of ___

CBI? ☐ Yes

48. OTHER UNIT

TREATMENT UNIT CODE: [ ] *(from Deicing Stormwater Treatment Diagram (Question 42))*

OTHER UNIT

a. Airport terminology for this unit . . . . . _____

b. Batch or continuous? . . . . . ☐ Batch ☐ Continuous

c. Tank or pond capacity . . . . . _____ gallons

d. Design capacity flow . . . . . _____ gal/day

e. Does mechanical mixing occur in this unit? . . ☐ Yes ☐ No

f. Which parameters/pollutants are targeted for removal by this unit? Indicate the target concentration.

_____

_____

Copy ___ of ___

47. OTHER UNIT (Continued)

TREATMENT UNIT CODE: [ ] *(from Deicing Stormwater Treatment Diagram (Question 42))*

OTHER UNIT (Continued)

g. Influent Flow

Source of Influent Streams to Treatment Unit	2002/2003 Winter Season		2003/2004 Winter Season		2004/2005 Winter Season	
	Average Daily Flow	Daily Maximum Flow	Average Daily Flow	Daily Maximum Flow	Average Daily Flow	Daily Maximum Flow
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day

h. Effluent Flow

Destination of Effluent from Treatment Unit (Use codes provided on page A-30)	2002/2003 Winter Season		2003/2004 Winter Season		2004/2005 Winter Season	
	Average Daily Flow	Daily Maximum Flow	Average Daily Flow	Daily Maximum Flow	Average Daily Flow	Daily Maximum Flow
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day
	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day	_____ gal/day

Copy ___ of ___

47. OTHER UNIT (Continued)

TREATMENT UNIT CODE: ☐ *(from Deicing Stormwater Treatment Diagram (Question 42))*

OTHER UNIT (Continued)

i. Are any chemicals added to this unit? . . . . . ☐ Yes ☐ No

j. If yes, please complete this table for each chemical added to the treatment unit. Provide the chemical name (including vendor name and product code, if applicable), the purpose of the chemical, and the usage rate of the undiluted chemical.

Chemical	Purpose	Annual Usage Rate (annual average for last three winter seasons)
EXAMPLE polymer	improve settling	_____ gal/yr _____ lbs/yr
		_____ gal/yr _____ lbs/yr
		_____ gal/yr _____ lbs/yr
		_____ gal/yr _____ lbs/yr
		_____ gal/yr _____ lbs/yr

k. Are capital costs available for this unit? . . . . . ☐ Yes ☐ No

CBI?
☐ Yes

49. If available, provide actual operating and maintenance (O&M) costs and rates for all deicing stormwater treatment/recovery systems in use at your airport for each winter season. Include operating labor, maintenance, sampling/monitoring costs, chemical costs, energy costs, steam costs, and sludge, oil, or other residual disposal fees. Also include rates of labor, energy, steam, and sludge, oil, and other residual disposal fees.

a. 2002/2003 Winter Season

O&M Category	Cost	Rate
Labor (operating and maintenance)	$	$_____ per hour (average rate of labor)
Labor (training)	$	$_____ per hour (average rate of labor)
Materials and Vendors	$	
Costs for Laboratory Analysis	$	
Chemical costs	$	
Energy costs - electric	$	$_____ per kwh
Energy costs - gas	$	$_____ per ☐ mmcf ☐ million btu
Energy costs - fuel oil	$	$_____ per ☐ gallon ☐ barrel
Energy costs - other *(specify)*:	$	$_____ per *(specify unit of measurement)*:
RCRA-hazardous disposal	$	$_____ per ☐ gallon ☐ ton
Nonhazardous disposal	$	$_____ per ☐ gallon ☐ ton
Other disposal, if other classifications apply to your area *(specify type)*:	$	$_____ per ☐ gallon ☐ ton
Oil disposal	$	$_____ per ☐ gallon ☐ ton
Other *(specify)*:	$	
Other *(specify)*:	$	
Other *(specify)*:	$	

RCRA = Resource Conservation and Recovery Act
kwh = kilowatt hour
barrel = 42 gallons
mmcf = million cubic feet
btu = British thermal unit
ton = English ton, wet weight

b. 2003/2004 Winter Season

O&M Category	Cost	Rate
Labor (operating and maintenance)	$	$_____ per hour (average rate of labor)
Labor (training)	$	$_____ per hour (average rate of labor)
Materials and Vendors	$	
Costs for Laboratory Analysis	$	
Chemical costs	$	
Energy costs - electric	$	$_____ per kwh
Energy costs - gas	$	$_____ per ☐ mmcf ☐ million btu
Energy costs - fuel oil	$	$_____ per ☐ gallon ☐ barrel
Energy costs - other *(specify)*:	$	$_____ per *(specify unit of measurement)*:
RCRA-hazardous disposal	$	$_____ per ☐ gallon ☐ ton
Nonhazardous disposal	$	$_____ per ☐ gallon ☐ ton
Other disposal, if other classifications apply to your area *(specify type)*:	$	$_____ per ☐ gallon ☐ ton
Oil disposal	$	$_____ per ☐ gallon ☐ ton
Other *(specify)*:	$	
Other *(specify)*:	$	
Other *(specify)*:	$	

RCRA = Resource Conservation and Recovery Act
kwh = kilowatt hour
barrel = 42 gallons
mmcf = million cubic feet
btu = British thermal unit
ton = English ton, wet weight

c. 2004/2005 Winter Season

O&M Category	Cost	Rate
Labor (operating and maintenance)	$	$_____ per hour (average rate of labor)
Labor (training)	$	$_____ per hour (average rate of labor)
Materials and Vendors	$	
Costs for Laboratory Analysis	$	
Chemical costs	$	
Energy costs - electric	$	$_____ per kwh
Energy costs - gas	$	$_____ per ☐ mmcf ☐ million btu
Energy costs - fuel oil	$	$_____ per ☐ gallon ☐ barrel
Energy costs - other *(specify)*:	$	$_____ per *(specify unit of measurement)*:
RCRA-hazardous disposal	$	$_____ per ☐ gallon ☐ ton
Nonhazardous disposal	$	$_____ per ☐ gallon ☐ ton
Other disposal, if other classifications apply to your area *(specify type)*:	$	$_____ per ☐ gallon ☐ ton
Oil disposal	$	$_____ per ☐ gallon ☐ ton
Other *(specify)*:	$	
Other *(specify)*:	$	
Other *(specify)*:	$	

RCRA = Resource Conservation and Recovery Act
kwh = kilowatt hour
barrel = 42 gallons
mmcf = million cubic feet
btu = British thermal unit
ton = English ton, wet weight

CBI?
☐ Yes

50. In the next five years, do you plan to add any new or additional treatment/recovery unit to treat/recover deicing stormwater since the 2004/2005 season? If so, please list below.

Type of Deicing Stormwater Treatment/Recovery Unit Planned	Scheduled/Planned Year
	20____
	20____
	20____
	20____

Copy ___ of ___

51. Comments for Deicing Stormwater Treatment/Recovery

Please cross-reference your comments by question number. **If you need additional space, please photocopy this page before writing on it, and number each copy in the space provided.**

Question Number	Comment

SECTION 5: ANALYTICAL DATA

Analytical data includes intermediate (prior to outfall), outfall, and in-stream (receiving surface water) data for analytes monitored for your permit and/or other analytes you monitored. If applicable, indicate whether an EPA-approved method was used for the analysis. **Note: EPA is not requesting <u>submittal</u> of data at this time.**

CBI? ☐ Yes

52. Were samples collected and analyzed to characterize deicing stormwater generated at your airport during any of the last three winter seasons?

☐ Yes
☐ No

CBI? ☐ Yes

53. During any of the last three winter seasons, were any paired influent and effluent samples collected to characterize the effectiveness of a deicing stormwater treatment system at your airport? (If you did not operate a deicing stormwater treatment system, check "NA.")

☐ Yes
☐ No *(Skip to Question 54)*
☐ NA *(Skip to Question 55)*

If you checked "No" or "NA" to both Questions 52 <u>and</u> 53, skip to Question 55.

Instructions for Question 54

In the following table, please provide information on pollutants monitored and/or sampled for in deicing stormwater streams during any of the last three winter seasons for any purpose including compliance testing or monitoring for other than compliance. Instructions for completing the table are provided below.

- **Before writing on Question 54, photocopy Question 54 for each sampling point, and number each copy in the space provided in the top right corner (e.g., 1 of 2, 2 of 2). Make sure you include your airport ID on each page.**
- If applicable, indicate the sampling point number from the deicing stormwater treatment diagram.
- Provide the name and a description of the deicing stormwater stream.
- If known, indicate the percentage of deicing stormwater.
- Identify the pollutants for which you monitored by checking the box next to the pollutant name. For those pollutants checked, indicate how often these pollutants were monitored (daily (D), monthly (M), quarterly (Q).
- For those pollutants listed in Question 3b that are not monitored, leave the row blank.
- If information on the pollutants and frequency of monitoring for specific sampling points is listed in your NPDES permit, you may attach the applicable permit pages in place of completing Question 54.b. for those specific deicing stormwater streams.
- Where applicable, indicate pollutants that were analyzed using EPA-approved methods.

Electronic Questionnaire

If you use the electronic questionnaire form to complete your response, please note that the electronic form does not have the capability to fill in multiple copies of questions. See "Electronic Questionnaire" on page iii of the Introduction. Detailed instructions for completing the electronic questionnaire form are provided on EPA's website.

To complete multiple copies for Question 54, an individual file for this question is provided on EPA's website. To prepare your response, use the following procedure:

1. Open the MS Word file for Part A, Question 54.
2. Save a file on your local computer for each sampling point.
3. Enter the copy number and your airport ID in the spaces provided on each page.
4. Complete the responses to Question 54 and save the sampling point file on your computer.

If you complete the survey electronically, you must print the survey response, sign the Certification Statement on page v, and **submit it as a hard copy**.

Copy ___ of ___

CBI? ☐ Yes

54. Deicing Stormwater Sampling and Analysis Data

Sampling Point: _____

Deicing Stormwater Stream Name/Description: _____

a. If the sample represents more than airport deicing stormwater, indicate what percentage of the sampled water is deicing stormwater. _____%

b. Pollutants Monitored:

Pollutants for Which Your Airport Monitors	How Often (Daily (D), Monthly (M), Quarterly (Q)) Did Your Airport Monitor for this Pollutant During the Last Three Winter Seasons?			
	2002/2003	2003/2004	2004/2005	Used EPA-Approved Methods
☐ Biochemical Oxygen Demand (BOD)				☐
☐ Total Suspended Solids (TSS)				☐
☐ Oil and Grease				☐
☐ pH				☐
☐ Fecal Coliform				☐
☐ Metals				☐
☐ Organic Pollutants (other than glycol)				☐
☐ Nitrogen				☐
☐ Chemical Oxygen Demand (COD)				☐
☐ Total Organic Carbon (TOC)				☐
☐ Other: _____				☐
☐ Other: _____				☐

c. Did you monitor this stream for glycol?

☐ Yes
☐ No *(Go to Question 55)*

d. What method(s) did you use to analyze glycol?

☐ EPA 8015
☐ EPA 1671
☐ Other *(specify)*: _____

Copy ___ of ___

55. Comments for Analytical Data

Please cross-reference your comments by question number. **If you need additional space, please photocopy this page before writing on it, and number each copy in the space provided.**

Question Number	Comment

SECTION 6: AIRFIELD POLLUTION PREVENTION PRACTICES

The questions in this section pertain to pollution prevention practices employed during the last three winter seasons at your airport.

If you or a fixed-base operator or private contractor performed airfield deicing/anti-icing at any time during the last three winter seasons at your airport, complete Questions 56 through 68 on pollution prevention practices below.

CBI?
☐ Yes

56. a. Did your airport or FBO (for your airport) perform an evaluation of application rates of airfield pavement fluids to prevent excessive application at any time during the last three winter seasons?

☐ Yes
☐ No *(Go to Question 57)*

b. Describe practice: _____

_____

_____

_____

c. Cost if known:

Cost of installation/implementation $ _____

Operating costs of the practice $ _____

d. Net savings relative to previous practice if known $/yr _____

CBI? ☐ Yes

57. a. Did your airport or FBO (for your airport) use alternative chemicals for airfield pavement deicing at any time during the last three winter seasons?

☐ Yes
☐ No *(Go to Question 58)*

b. Describe practice: _____

_____

_____

_____

c. Cost if known:

Cost of installation/implementation $ _____

Operating costs of the practice $ _____

d. Net savings relative to previous practice if known $/yr _____

CBI? ☐ Yes

58. a. Did your airport or FBO (for your airport) use prewet dry chemical constituents prior to application at any time during the last three winter seasons?

☐ Yes
☐ No *(Go to Question 59)*

b. Describe practice: _____

_____

_____

_____

c. Cost if known:

Cost of installation/implementation $ _____

Operating costs of the practice $ _____

d. Net savings relative to previous practice if known $/yr _____

CBI? ☐ Yes

59. a. Did your airport or FBO (for your airport) install and/or operate a runway ice detection system(s) at any time during the last three winter seasons?

☐ Yes
☐ No *(Go to Question 60)*

b. Describe practice: _____

_____

_____

_____

c. Cost if known:

Cost of installation/implementation $ _____

Operating costs of the practice $ _____

d. Net savings relative to previous practice if known $/yr _____

CBI? ☐ Yes

60. a. Did your airport or FBO (for your airport) use enhanced weather forecasting at any time during the last three winter seasons?

☐ Yes
☐ No *(Go to Question 61)*

b. Describe practice: _____

_____

_____

_____

c. Cost if known:

Cost of installation/implementation $ _____

Operating costs of the practice $ _____

d. Net savings relative to previous practice if known $/yr _____

CBI? ☐ Yes **61.** a. Did your airport or FBO (for your airport) pretreat the airfield in advance of precipitation at any time during the last three winter seasons?

☐ Yes
☐ No *(Go to Question 62)*

b. Describe practice: _____

_____

_____

_____

c. Cost if known:

Cost of installation/implementation $ _____

Operating costs of the practice $ _____

d. Net savings relative to previous practice if known $/yr _____

CBI? ☐ Yes **62.** a. Did your airport or FBO (for your airport) conduct specialized employee training at any time during the last three winter seasons?

☐ Yes
☐ No *(Go to Question 63)*

b. Describe practice: _____

_____

_____

_____

c. Cost if known:

Cost of installation/implementation $ _____

Operating costs of the practice $ _____

d. Net savings relative to previous practice if known $/yr _____

CBI? ☐ Yes

63. a. Did your airport or FBO (for your airport) perform physical removal using blowers, plows, and/or brooms at any time during the last three winter seasons?

☐ Yes
☐ No *(Go to Question 64)*

b. Describe practice: _____

_____

_____

_____

c. Cost if known:

Cost of installation/implementation $ _____

Operating costs of the practice $ _____

d. Net savings relative to previous practice if known $/yr _____

CBI? ☐ Yes

64. a. Did your airport or FBO (for your airport) use heated sand at any time during the last three winter seasons?

☐ Yes
☐ No *(Go to Question 65)*

b. Describe practice: _____

_____

_____

_____

c. Cost if known:

Cost of installation/implementation $ _____

Operating costs of the practice $ _____

d. Net savings relative to previous practice if known $/yr _____

CBI?
☐ Yes

65. a. Did your airport or FBO (for your airport) perform any other pollution prevention practices at any time during the last three winter seasons?

☐ Yes *(specify)*: _____

☐ No *(Go to Question 66)*

b. Describe practice: _____

_____

_____

_____

c. Cost if known:

Cost of installation/implementation $ _____

Operating costs of the practice $ _____

d. Net savings relative to previous practice if known $/yr _____

CBI? ☐ Yes

66. Do you or FBO (for your airport) plan on implementing any new or additional pollution prevention practices in the next five years? If so, please list below. (Refer to Questions 56 through 65 for example practices.)

Practice	Scheduled Implementation (Date)

CBI? ☐ Yes

67. a. Are there airfield pollution prevention practices that your airport or FBO (for your airport) considered and rejected?

☐ Yes

☐ No *(Go to Question 68)*

b. Describe the practices and why they were rejected.

Copy ___ of ___

68. Comments for Airfield Pollution Prevention Practices

Please cross-reference your comments by question number. **If you need additional space, please photocopy this page before writing on it, and number each copy in the space provided.**

Question Number	Comment

PART B: FINANCIAL AND ECONOMIC INFORMATION

SECTION 1: OWNERSHIP AND MANAGEMENT STRUCTURE

1. Provide the following information for the primary contact for the financial and economic information supplied in Part B of this questionnaire:

_____ (_____)_____
Primary Contact Name Telephone Number

_____ (_____)_____
Title Fax Number

_____
E-mail Address

Convenient time to call:
_____ between ___ am/pm and ___ am/pm
Street Address or Post Office Box (Eastern Time)

_____ _____ _____-_____
City State Zip Code

2. The owner/certificate holder of this airport is a:

- ☐ City or county government
- ☐ Multi-purpose port authority
- ☐ Single-purpose airport authority
- ☐ State government
- ☐ Privately owned

3. What were the 2004 revenues (rounded to the nearest thousand dollars) for the owner/certificate holder of this airport (e.g., if the owner/certificate holder is a city government, what were the city's revenues in 2004)?

$___ ___ ___,___ ___ ___, 0 0 0

4. Does the owner/certificate holder of this airport also hold certificates for other airports?

- ☐ Yes
- ☐ No

If yes, please provide the airport id codes and types (e.g., large hub, medium hub, small hub, non-hub commercial service, general aviation/reliever) for all airport certificates held by this entity.

_____

5. Is operation of this airport managed by the owner/certificate holder or contracted to another agency/company?

- ☐ Operated by the owner/certificate holder
- ☐ Operations are contracted to independent management

6. What approach does this airport use for setting rates, fees, and charges?

- ☐ Residual-cost approach
- ☐ Compensatory approach
- ☐ Mix of residual-cost and compensatory approaches
- ☐ None of the above (please explain in the comment section on page B-7)

7. a. If a mixed approach is used, which of the following revenue areas use a residual cost revenue collection approach? (Check all that apply.)

- ☐ Airfield operations
- ☐ Terminal area concessions
- ☐ Airline leased areas
- ☐ Other leased areas – Describe:

_____

b. Are "land-side" revenues used to offset "air-side" expenses?

- ☐ Yes
- ☐ No

8. Do signatory airlines have a *majority-in-interest* clause in the *airport use agreement* that provides them the right to review and veto or defer capital projects at this airport that would affect their fees?

- ☐ Yes
- ☐ No

9. Airport management:

- ☐ Has the authority to issue bonds to pay for capital improvements
- ☐ Needs approval of some other authority (e.g., local government) to issue bonds to pay for capital improvements. If so, who?

_____

10. What was direct airport employment in 2004 (i.e., those directly employed by the airport)? Do not include employment by airlines, concessionaires that are airport tenants, FBOs, and other independently owned and operated businesses associated with the airport.

_____

SECTION 2: AIRPORT FINANCES

11. If this airport submitted Form 5100-127 to the FAA in 2004, please check the following box:

☐ Form 5100-127 submitted to FAA in 2004

12. If this airport submitted Form 5100-127 to the FAA, is that financial information reported on a calendar year or fiscal year basis?

☐ Calendar year basis
☐ Fiscal year basis, ending (specify date): _____/_____/_____
☐ Not applicable; Form 5100-127 not submitted to FAA in 2004

13. a. Of total airport landing fees paid to this airport in 2004, what percent were paid by commercial airlines?

_____%

b. For all other sources of airport operating revenues paid to this airport in 2004 *except landing fees* (e.g., apron fees, terminal rents, loading bridge rentals), what percent were paid by commercial airlines?

_____%

14. Does this airport receive direct operating subsidies from non-airport operations through:

☐ State government
☐ City or county government
☐ Other
☐ No operating subsidies are received

If operating subsidies are received, what percentage of airport operating revenues are provided by these subsidies?

_____%

15. Are revenues from this airport used by ownership to support other operations?

☐ No airport revenues are used to support other activities.
☐ This airport's revenues are used to support operations at airports under the same ownership.
☐ This airport's revenues are used to support non-airport operations at other sites (e.g. public transport operations "grandfathered" in under current regulations).

If so, what percentage of airport revenues are used to support these other operations? _____ %

16. What were the landing fees for commercial air carriers at this airport in 2004?

Air Carrier Type	Landing Fee
Passenger Air Carrier, Signatory	$ ___.___ ___ per 1,000 lbs. Maximum Gross Landing Weight
Passenger Air Carrier, Non-Signatory	$ ___.___ ___ per 1,000 lbs. Maximum Gross Landing Weight
Cargo Air Carrier, Signatory	$ ___.___ ___ per 1,000 lbs. Maximum Gross Landing Weight
Cargo Air Carrier, Non-Signatory	$ ___.___ ___ per 1,000 lbs. Maximum Gross Landing Weight
Commuter/Small Certificated	$ ___.___ ___ per 1,000 lbs. Maximum Gross Landing Weight
Other (describe)	

17. List the signatory airlines at this airport for 2004. If you need additional space, you may attach a list following Question 29; state in the space below that additional airlines are on the attached list.

1.	11.
2.	12.
3.	13.
4.	14.
5.	15.
6.	16.
7.	17.
8.	18.
9.	19.
10.	20.

18. How frequently can landing fees be adjusted at this airport? _____ per _____

19. If known, what percentage of passenger traffic at your airport is composed of "origin and destination" (O&D) passengers?

_____%

☐ Unknown

20. If known, what percentage of passenger enplanements at your airport is accounted for by the three largest carriers?

_____%

☐ Unknown

SECTION 3: CAPITAL EXPENDITURES

21. Using readily available information, characterize the percentage of capital expenditures at this airport of the last five years accounted for by:

a. Airport Improvement Program (AIP) grants _____%

b. Other government grants _____%

"Pay-as-you-go" financed through:

c. Passenger Facility Charges (PFC) _____%

d. Rates and charges _____%

e. Other revenue _____%

Bonds financed through dedicated revenue streams:

f. Passenger Facility Charges (PFC) _____%

g. Rates and charges _____%

h. Other revenue _____%

22. a. What is the Passenger Facility Charge (PFC) at this airport? $__.__ __

b. If the airport does use a PFC, though what year are the funds from the PFC committed for capital programs already in place or planned? 20 __ __

23. If this airport currently receives AIP grants, though what year are the funds from the AIP grants committed for capital programs already in place or planned? 20 __ __

CBI? ☐ Yes

24. If this airport needs to upgrade the collection and/or treatment/recovery of glycol-contaminated stormwater, what percentage of costs would the airport anticipate passing through to:

a. Commercial airlines terminal rental fees _____%

b. Commercial airlines landing fees _____%

c. Fixed base operators _____%

d. Concession and parking fees _____%

e. Other (specify): _____ _____%

25. What was this airport's debt service coverage ratio in 2004? Please provide both the net operating revenue and net debt service figures used to calculate the ratio.

a. Net operating revenues: $ __ __ __,__ __ __, 0 0 0

b. Net debt service: $ __ __ __,__ __ __, 0 0 0

c. Ratio: __.__ __

SECTION 4: AIRPORT OPERATIONS

26. Of the following types of noncommercial aircraft, how many of each are based at this airport? Approximately what percentage of based aircraft in each category is hangered during bad weather? What were the total departures for each aircraft type in 2004 (include both based and transient aircraft)?

Aircraft Category		Number of Based Aircraft	Percent of Based Aircraft Hangered in Bad Weather	Total Departures (Based and Transient Aircraft)
a.	Military aircraft			___ ___ ___,___ ___ ___
b.	Air Taxis			___ ___ ___,___ ___ ___
c.	General aviation			___ ___ ___,___ ___ ___

27. Please provide a copy of this airport's end-of-year financial statement **INCLUDING THE NOTES** for 2004 with your completed survey.

☐ Airport financial statement for 2004 attached to this survey

Copy ____ of _____

28. Comments for Part B

Please cross-reference your comments by question number. **If you need additional space, please photocopy this page before writing on it, and number each copy in the space provided.**

Question Number	Comment