

NPDES PERMIT

issued to

Connecticut Airport Authority
Bradley International Airport
Administrative Offices
Terminal A – 3rd Floor
Windsor Locks, CT 06096

Location Address:

Schoephoester Road Bradley Airport
Windsor Locks, CT 06096

Permit ID: CT0030538

Permit Expires:

Receiving Streams: Seymour Hollow Brook, Rainbow Brook, DeGraves Brook, Stony Brook, Spencer Brook, Kettle Brook, and an unnamed tributary of Farmington River

CT Stream Segment Number: 4300-51-1-L1, 4300-50-1-L1, 4100-11-1, 4100-13-1, 41-14-1, 4000-09-1, 4300-00

SECTION 1: GENERAL PROVISIONS

- (A) This permit is reissued in accordance with Section 22a-430 of Chapter 446k, Connecticut General Statutes (“CGS”), and Regulations of Connecticut State Agencies (“RCSA”) adopted thereunder, as amended, and Section 402(b) of the Clean Water Act (“CWA”), as amended, 33 USC 1251, *et. seq.*, and pursuant to an approval dated September 26, 1973, by the Administrator of the United States Environmental Protection Agency for the State of Connecticut to administer a NPDES permit program.
- (B) Connecticut Airport Authority, Bradley International Airport, ("Permittee"), shall comply with all conditions of this permit including the following sections of the RCSA which have been adopted pursuant to section 22a-430 of the CGS and are hereby incorporated into this permit. Your attention is especially drawn to the notification requirements of subsections (i)(2), (i)(3), (j)(1), (j)(6), (j)(8), (j)(9)(C), (j)(11)(C), (D), (E), and (F), (k)(3) and (4) and (l)(2) of section 22a-430-3.

Section 22a-430-3 General Conditions

- (a) Definitions
- (b) General
- (c) Inspection and Entry
- (d) Effect of a Permit
- (e) Duty
- (f) Proper Operation and Maintenance
- (g) Sludge Disposal
- (h) Duty to Mitigate
- (i) Facility Modifications; Notification
- (j) Monitoring, Records and Reporting Requirements
- (k) Bypass
- (l) Conditions Applicable to POTWs
- (m) Effluent Limitation Violations (Upsets)
- (n) Enforcement
- (o) Resource Conservation
- (p) Spill Prevention and Control
- (q) Instrumentation, Alarms, Flow Recorders
- (r) Equalization

Section 22a-430-4 Procedures and Criteria

- (a) Duty to Apply
- (b) Duty to Reapply
- (c) Application Requirements
- (d) Preliminary Review
- (e) Tentative Determination
- (f) Draft Permits, Fact Sheets
- (g) Public Notice, Notice of Hearing
- (h) Public Comments
- (i) Final Determination
- (j) Public Hearings
- (k) Submission of Plans and Specifications. Approval.
- (l) Establishing Effluent Limitations and Conditions
- (m) Case by Case Determinations
- (n) Permit issuance or renewal
- (o) Permit Transfer
- (p) Permit revocation, denial or modification
- (q) Variances
- (r) Secondary Treatment Requirements
- (s) Treatment Requirements for Metals and Cyanide
- (t) Discharges to POTWs - Prohibitions

- (C) Violations of any of the terms, conditions, or limitations contained in this permit may subject the Permittee to enforcement action, including but not limited to, penalties, injunctions and/or forfeitures pursuant to applicable sections of the CGS and RCSA. Specifically, civil penalties of up to twenty-five thousand dollars (\$25,000) may be assessed per violation per day.
- (D) Any false statement in any information submitted pursuant to this permit may be punishable as a criminal offense under section 22a-438 or 22a-131a of the CGS or in accordance with section 22a-6, under section 53a-157b of the CGS.
- (E) The authorization to discharge under this permit may not be transferred without prior written approval of the Commissioner of Energy and Environmental Protection ("the Commissioner"). To request such approval, the Permittee and proposed transferee shall register such proposed transfer with the Commissioner at least thirty (30) days prior to the transferee becoming legally responsible for creating or maintaining any discharge which is the subject of the permit transfer. Failure by the transferee to obtain the Commissioner's approval prior to commencing such discharge(s) may subject the transferee to enforcement action for discharging without a permit pursuant to applicable sections of the CGS and RCSA.
- (F) Nothing in this permit shall relieve the Permittee of other obligations under applicable federal, state and local law.
- (G) An annual fee shall be paid for each year this permit is in effect as set forth in section 22a-430-7 of the RCSA.

SECTION 2: DEFINITIONS

- (A) The definitions of the terms used in this permit shall be the same as the definitions contained in section 22a-423 of the CGS and sections 22a-430-3(a) and 22a-430-6 of the RCSA.
- (B) In addition to the above, the following definitions shall apply to this permit:

"----" in the limits column on the monitoring table means a limit is not specified but a value must be reported on the Discharge Monitoring Report ("DMR").

"Annual", in the context of a sampling frequency, means that a representative sample of stormwater runoff must be collected during the period of April-September, inclusive.

"Average Monthly Limit" means the maximum allowable "Average Monthly Concentration" as defined in section 22a-430-3(a) of the RCSA when expressed as a concentration (e.g. mg/l); otherwise, it means "Average Monthly Discharge Limitation" as defined in section 22a-430-3(a) of the RCSA.

"Critical Test Concentration (CTC)" means the specified effluent dilution at which the Permittee is to conduct a single-concentration Aquatic Toxicity test.

"Daily Concentration" means the concentration of a substance as measured in a daily composite sample, or

the arithmetic average of all grab sample results defining a grab sample average.

"Daily Quantity" means the quantity of waste generated during an operating day.

"Instantaneous Limit" means the highest allowable concentration of a substance as measured by a grab sample, or the highest allowable measurement of a parameter as obtained through instantaneous monitoring.

"In stream Waste Concentration (IWC)" means the concentration of a discharge in the receiving water after mixing has occurred in the allocated zone of influence.

"Maximum Daily Limit" means the maximum allowable "Daily Concentration" (defined above) when expressed as a concentration (e.g. mg/l); otherwise, it means the maximum allowable "Daily Quantity" as defined above unless it is expressed as a flow quantity. If expressed as a flow quantity it means "Maximum Daily Flow" as defined in section 22a-430-3(a) of the RCSA.

"NA" as a Monitoring Table abbreviation means "not applicable".

"NR" as a Monitoring Table abbreviation means "not required".

"No Observable Acute Effect Level (NOAEL)" means any concentration equal to or less than the critical test concentration in a single concentration (pass/fail) toxicity test conducted pursuant to section 22a-430-3(j)(7)(A)(i) RCSA demonstrating 90% or greater survival of test organisms at the CTC.

"PFAS" means, for the purposes of this permit, the following perfluorinated and polyfluorinated alkyl substances:

Analyte	Acronym	Chemical Abstract Services Registry Number (CASRN)
Hexafluoropropylene oxide dimer acid	HFPO-DA	13252-13-6b
N-ethyl perfluorooctanesulfonamidoacetic acid	NEtFOSAA	2291-50-6
N-methyl perfluorooctanesulfonamidoacetic acid	NMeFOSAA	2355-31-9
Perfluorobutanesulfonic acid	PFBS	375-73-5
Perfluorodecanoic acid	PFDA	335-76-2
Perfluorododecanoic acid	PFDoA	307-55-1
Perfluoroheptanoic acid	PFHpA	375-85-9
Perfluorohexanesulfonic acid	PFHxs	355-46-4
Perfluorohexanoic acid	PFHxA	307-24-4
Perfluorononanoic acid	PFNA	375-95-1
Perfluorooctanesulfonic acid	PFOS	1763-23-1
Perfluorooctanoic acid	PFOA	335-67-1
Perfluorotetradecanoic acid	PFTA	376-06-7
Perfluorotridecanoic acid	PFTTrDA	72629-94-8
Perfluoroundecanoic acid	PFUna	2058-94-8
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid	11Cl-PF3OUdS	763051-92-9c
9-chlorohexadecafluoro-3-oxanone-1-sulfonic acid	9Cl-PF3ONS	756426-58-1d
4,8-dioxa-3H-perfluorononanoic acid	ADONA	919005-14-4e

"Semi-Annual" in the context of a sampling frequency, means that a representative sample of stormwater runoff must be collected during each of the following periods: October-March, inclusive and April-September, inclusive.

"ug/l" means micrograms per liter.

SECTION 3: COMMISSIONER'S FINAL DETERMINATION

- (A) The Commissioner has made a final determination and found that the discharge will not cause pollution of the waters of the state. The Commissioner's final determination is based on Application No. 201000823 for permit issuance received on February 17, 2010 and the administrative record established in the processing of that application.
- (B) Effective from issuance date for a term not to exceed five (5) years and until this permit expires or is modified or revoked, the Commissioner hereby authorizes the Permittee to discharge in accordance with the terms and conditions of Permit No. CT0030538, issued by the Commissioner to the Permittee based on Application No. 201000823, received by the Department on February 17, 2010, and all modifications and approvals issued by the Commissioner or the Commissioner's authorized agent for the discharge and/or activities authorized by, or associated with, Permit No. CT0030538, following the issuance date of this permit.
- (C) The Commissioner reserves the right to make appropriate revisions to the permit in order to establish any appropriate effluent limitations, schedules of compliance, or other provisions that may be authorized under the Federal Clean Water Act or the CGS or regulations adopted thereunder, as amended. The permit as modified or renewed under this paragraph may also contain any other requirements of the Federal Clean Water Act or CGS or regulations adopted thereunder which are then applicable.

SECTION 4: EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

- (A) No discharge shall contain, or cause in the receiving stream, a visible oil sheen or floating solids; or, cause visible discoloration or foaming in the receiving stream.
- (B) No discharge shall cause acute or chronic toxicity in the receiving water body beyond any zone of influence specifically allocated to that discharge in this permit.
- (C) The temperature of any discharge shall not increase the temperature of the receiving stream above 85°F, or, in any case, raise the normal temperature of the receiving stream more than 4°F beyond the approved thermal zone of influence.
- (D) The discharge(s) shall not exceed and shall otherwise conform to the specific terms and conditions listed below. The discharge(s) are restricted by, and shall be monitored in accordance with, the table(s) below.

Table A									
Discharge Serial Number: 101-1						Monitoring Location: 1			
Wastewater Description: Stormwater runoff from rental car facilities, airport grasslands and portions of Schoephoester Road at the southeast side of the airport									
Monitoring Location Description: Outfall 1A						Receiving Stream: Seymour Hollow Brook			
PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test ²
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency ¹	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample/ Reporting Frequency ¹	Sample Type or measurement to be reported	
Aquatic Toxicity, Daphnia pulex NOAEL = 100%	%	NA	NA	NR	GSA	----	Annual	Grab	
Aquatic Toxicity, Pimephales promelas NOAEL = 100%	%	NA	NA	NR	GSA	----	Annual	Grab	
Aluminum, Total	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	X
Chemical Oxygen Demand ³	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Chloride	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Copper, Total ³	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	X
Dioxin	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Lead, Total	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Iron, Total	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Isopropyl Alcohol	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Ethylene Glycol	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Manganese, Total	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Nitrogen, Ammonia (total as N)	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Nitrogen, Nitrate (total as N) ⁵	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Nitrogen, Total Kjeldahl (total as N) ³	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
pH, Day of Sampling ³	S.U.	NA	NA	NR	GSA	----	Semi-annual	Grab	
Phosphorus, Total ³	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Propyl Alcohol	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Propylene Glycol	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Total Suspended Solids ³	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Zinc, Total ³	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	X
PFAS ^{4,5}	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	

Table Footnotes:
¹ The first entry in this column is the 'Sample Frequency'. If a 'Reporting Frequency' does not follow this entry and the 'Sample Frequency' is more frequent than monthly then the 'Reporting Frequency' is monthly. If the 'Sample frequency' is specified as monthly, or less frequent, then the 'Reporting Frequency' is the same as the 'Sample Frequency'.
² Minimum Level Test refers to Section 5 Paragraph A(3) of this permit.
³ See Section 8(C) for information about Benchmark Monitoring. Provided the Permittee complies with all requirements of Section 9(C), exceedance of benchmarks is not, in itself, a violation of this permit.
⁴ PFAS analyses shall be performed using the methods approved by the EPA pursuant to 40 CFR 136. If no test method is approved by 40 CFR 136, PFAS analyses shall be performed in accordance with the draft EPA method 1633.
⁵ Sampling not required until the sampling plan as required in Section 9(C) of this permit has been approved.

Remarks
For the months when a sample is not collected, the DMR shall be submitted with the comment, "Monitoring Conditional"
This sampling location has additional required sampling during winter deicing events which can be found in Section (4) (G) Table P of this permit.

Table B									
Discharge Serial Number: 102-1					Monitoring Location: 1				
Wastewater Description: Stormwater runoff from rental car facilities, airport grasslands and portions of Schoephoester Road at the southeast side of the airport									
Monitoring Location Description: Outfall 1B					Receiving Stream: Seymour Hollow Brook				
PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test ²
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency ¹	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample/ Reporting Frequency ¹	Sample Type or measurement to be reported	
Monitoring not Required									

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Table C

Discharge Serial Number: 103-1					Monitoring Location: 1					
Wastewater Description: Stormwater runoff from terminal gate, terminal ramp, freight ramp, aircraft deicing areas, and airport parking garage and lots in south central portion of the airport: and groundwater										
Monitoring Location Description: Outfall 2					Receiving Stream: Seymour Hollow Brook					
PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test ³	
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency ¹	Sample Measurement reported	Type to be	Instantaneous limit or required range	Sample/Reporting Frequency ¹		Sample Type or measurement to be reported
Aquatic Toxicity, Daphnia pulex NOAEL = 100%	%	NA	NA	NR		GSA	----	Annual	Grab	
Aquatic Toxicity, Pimephales promelas NOAEL = 100%	%	NA	NA	NR		GSA	----	Annual	Grab	
Aluminum, Total	mg/l	NA	NA	NR		GSA	----	Semi-annual	Grab	X
Chemical Oxygen Demand ³	mg/l	NA	NA	NR		GSA	----	Semi-annual	Grab	
Chloride	mg/l	NA	NA	NR		GSA	----	Semi-annual	Grab	
Copper, Total ³	mg/l	NA	NA	NR		GSA	----	Semi-annual	Grab	X
Dioxin	mg/l	NA	NA	NR		GSA	----	Semi-annual	Grab	
Lead, Total	mg/l	NA	NA	NR		GSA	----	Semi-annual	Grab	
Iron, Total	mg/l	NA	NA	NR		GSA	----	Semi-annual	Grab	
Isopropyl Alcohol	mg/l	NA	NA	NR		GSA	----	Semi-annual	Grab	
Ethylene Glycol	mg/l	NA	NA	NR		GSA	----	Semi-annual	Grab	
Manganese, Total	mg/l	NA	NA	NR		GSA	----	Semi-annual	Grab	
Nitrogen, Ammonia (total as N)	mg/l	NA	NA	NR		GSA	----	Semi-annual	Grab	
Nitrogen, Nitrate (total as N) ³	mg/l	NA	NA	NR		GSA	----	Semi-annual	Grab	
Nitrogen, Total Kjeldahl (total as N) ³	mg/l	NA	NA	NR		GSA	----	Semi-annual	Grab	
pH, Day of Sampling ³	S.U.	NA	NA	NR		GSA	----	Semi-annual	Grab	
Phosphorus, Total ³	mg/l	NA	NA	NR		GSA	----	Semi-annual	Grab	
Propyl Alcohol	mg/l	NA	NA	NR		GSA	----	Semi-annual	Grab	
Propylene Glycol	mg/l	NA	NA	NR		GSA	----	Semi-annual	Grab	
Total Suspended Solids ³	mg/l	NA	NA	NR		GSA	----	Semi-annual	Grab	
Zinc, Total ³	mg/l	NA	NA	NR		GSA	----	Semi-annual	Grab	X
PFAS ^{4,5}	mg/l	NA	NA	NR		GSA	----	Semi-annual	Grab	

Table Footnotes:

¹ The first entry in this column is the 'Sample Frequency'. If a 'Reporting Frequency' does not follow this entry and the 'Sample Frequency' is more frequent than monthly then the 'Reporting Frequency' is monthly. If the 'Sample frequency' is specified as monthly, or less frequent, then the 'Reporting Frequency' is the same as the 'Sample Frequency'.

² Minimum Level Test refers to Section 5 Paragraph A(3) of this permit.

³ See Section 8(C) for information about Benchmark Monitoring. Provided the Permittee complies with all requirements of Section 9(C), exceedance of benchmarks is not, in itself, a violation of this permit.

⁴ PFAS analyses shall be performed using the methods approved by the EPA pursuant to 40 CFR 136. If no test method is approved by 40 CFR 136, PFAS analyses shall be performed in accordance with the draft EPA method 1633.

⁵ Sampling not required until the sampling plan as required in Section 9(C) of this permit has been approved.

Remarks

For the months when a sample is not collected, the DMR shall be submitted with the comment, "Monitoring Conditional

This sampling location has additional required sampling during winter deicing events which can be found in Section (4) (G) Table P of this permit.

Table D									
Discharge Serial Number: 104-1						Monitoring Location: 1			
Wastewater Description: Stormwater runoff from terminal gate, terminal ramp, freight ramp, aircraft deicing areas, and airport parking garage and lots in south central portion of the airport: and groundwater									
Monitoring Location Description: Outfall #3-1						Receiving Stream: Rainbow Brook			
PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test ³
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency ¹	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample/Reporting Frequency ¹	Sample Type or measurement to be reported	
Aquatic Toxicity, Daphnia pulex NOAEL = 100%	%	NA	NA	NR	GSA	----	Annual	Grab	
Aquatic Toxicity, Pimephales promelas NOAEL = 100%	%	NA	NA	NR	GSA	----	Annual	Grab	
Aluminum, Total	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	X
Chemical Oxygen Demand ³	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Chloride	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Copper, Total ³	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	X
Dioxin	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Lead, Total	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Iron, Total	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Isopropyl Alcohol	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Ethylene Glycol	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Manganese, Total	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Nitrogen, Ammonia (total as N)	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Nitrogen, Nitrate (total as N) ³	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Nitrogen, Total Kjeldahl (total as N) ³	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
pH, Day of Sampling ³	S.U.	NA	NA	NR	GSA	----	Semi-annual	Grab	
Phosphorus, Total ³	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Propyl Alcohol	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Propylene Glycol	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Total Suspended Solids ³	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Vanadium, Total	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	X
Zinc, Total ³	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	X
PFAS ^{4,5}	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	

Table Footnotes:

¹ The first entry in this column is the 'Sample Frequency'. If a 'Reporting Frequency' does not follow this entry and the 'Sample Frequency' is more frequent than monthly then the 'Reporting Frequency' is monthly. If the 'Sample frequency' is specified as monthly, or less frequent, then the 'Reporting Frequency' is the same as the 'Sample Frequency'.

² Minimum Level Test refers to Section 5 Paragraph A(3) of this permit.

³ See Section 8(C) for information about Benchmark Monitoring. Provided the Permittee complies with all requirements of Section 9(C), exceedance of benchmarks is not, in itself, a violation of this permit.

⁴ PFAS analyses shall be performed using the methods approved by the EPA pursuant to 40 CFR 136. If no test method is approved by 40 CFR 136, PFAS analyses shall be performed in accordance with the draft EPA method 1633.

⁵ Sampling not required until the sampling plan as required in Section 9(C) of this permit has been approved.

Remarks
 For the months when a sample is not collected, the DMR shall be submitted with the comment, "Monitoring Conditional"
 This sampling location has additional required sampling during winter deicing events which can be found in Section (4) (G) Table P of this permit.

Table E									
Discharge Serial Number: 105-1					Monitoring Location: 1				
Wastewater Description: Stormwater runoff from terminal gate, terminal ramp, freight ramp, aircraft deicing areas, and airport parking garage and lots in south central portion of the airport: and groundwater									
Monitoring Location Description: Outfall 3-2					Receiving Stream: Rainbow Brook				
PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test ³
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency ¹	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample/Reporting Frequency ¹	Sample Type or measurement to be reported	
Aquatic Toxicity, Daphnia pulex NOAEL = 100%	%	NA	NA	NR	GSA	----	Annual	Grab	
Aquatic Toxicity, Pimephales promelas NOAEL = 100%	%	NA	NA	NR	GSA	----	Annual	Grab	
Aluminum, Total	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	X
Chemical Oxygen Demand ³	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Chloride	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Copper, Total ³	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	X
Dioxin	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Lead, Total	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Iron, Total	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Isopropyl Alcohol	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Ethylene Glycol	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Manganese, Total	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Nitrogen, Ammonia (total as N)	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Nitrogen, Nitrate (total as N) ³	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Nitrogen, Total Kjeldahl (total as N) ³	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
pH, Day of Sampling ³	S.U.	NA	NA	NR	GSA	----	Semi-annual	Grab	
Phosphorus, Total ³	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Propyl Alcohol	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Propylene Glycol	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Total Suspended Solids ³	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Vanadium, Total	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	X
Zinc, Total ³	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	X
PFAS ^{4,5}	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	

Table Footnotes:
¹ The first entry in this column is the 'Sample Frequency'. If a 'Reporting Frequency' does not follow this entry and the 'Sample Frequency' is more frequent than monthly then the 'Reporting Frequency' is monthly. If the 'Sample frequency' is specified as monthly, or less frequent, then the 'Reporting Frequency' is the same as the 'Sample Frequency'.
² Minimum Level Test refers to Section 5 Paragraph A(3) of this permit.
³ See Section 8(C) for information about Benchmark Monitoring. Provided the Permittee complies with all requirements of Section 9(C), exceedance of benchmarks is not, in itself, a violation of this permit.
⁴ PFAS analyses shall be performed using the methods approved by the EPA pursuant to 40 CFR 136. If no test method is approved by 40 CFR 136, PFAS analyses shall be performed in accordance with the draft EPA method 1633.
⁵ Sampling not required until the sampling plan as required in Section 9(C) of this permit has been approved.

Remarks
For the months when a sample is not collected, the DMR shall be submitted with the comment, "Monitoring Conditional"
This sampling location has additional required sampling during winter deicing events which can be found in Section (4) (G) Table P of this permit.

Table F

Discharge Serial Number: 106-1						Monitoring Location: 1			
Wastewater Description: Stormwater runoff from taxiway, route 20, part of deicing facility, and grassland, woodland, and wetland in southwestern portion of property									
Monitoring Location Description: Outfall 4						Receiving Stream: Rainbow Brook			
PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test ²
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency ¹	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample/ Reporting Frequency ¹	Sample Type or measurement to be reported	
Aquatic Toxicity, Daphnia pulex NOAEL = 100%	%	NA	NA	NR	GSA	----	Annual	Grab	
Aquatic Toxicity, Pimephales promelas NOAEL = 100%	%	NA	NA	NR	GSA	----	Annual	Grab	
Aluminum, Total	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	X
Chemical Oxygen Demand ³	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Chloride	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Copper, Total ³	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	X
Dioxin	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Lead, Total	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Iron, Total	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Isopropyl Alcohol	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Ethylene Glycol	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Manganese, Total	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Nitrogen, Ammonia (total as N)	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Nitrogen, Nitrate (total as N) ³	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Nitrogen, Total Kjeldahl (total as N) ³	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
pH, Day of Sampling ³	S.U.	NA	NA	NR	GSA	----	Semi-annual	Grab	
Phosphorus, Total ³	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Propyl Alcohol	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Propylene Glycol	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Total Suspended Solids ³	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Zinc, Total ³	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	X
PFAS ^{4,5}	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	

Table Footnotes:
¹ The first entry in this column is the 'Sample Frequency'. If a 'Reporting Frequency' does not follow this entry and the 'Sample Frequency' is more frequent than monthly then the 'Reporting Frequency' is monthly. If the 'Sample frequency' is specified as monthly, or less frequent, then the 'Reporting Frequency' is the same as the 'Sample Frequency'.
² Minimum Level Test refers to Section 5 Paragraph A(3) of this permit.
³ See Section 8(C) for information about Benchmark Monitoring. Provided the Permittee complies with all requirements of Section 9(C), exceedance of benchmarks is not, in itself, a violation of this permit.
⁴ PFAS analyses shall be performed using the methods approved by the EPA pursuant to 40 CFR 136. If no test method is approved by 40 CFR 136, PFAS analyses shall be performed in accordance with the draft EPA method 1633.
⁵ Sampling not required until the sampling plan as required in Section 9(C) of this permit has been approved.

Remarks
 For the months when a sample is not collected, the DMR shall be submitted with the comment, "Monitoring Conditional"

Table G									
Discharge Serial Number: 107-1						Monitoring Location: 1			
Wastewater Description: Stormwater runoff from undeveloped grasslands and limited amounts of roadways, taxiways and runway areas; and groundwater									
Monitoring Location Description: Outfall 5						Receiving Stream: Seymour Hollow Brook			
PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test ²
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency ¹	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample/ Reporting Frequency ¹	Sample Type or measurement to be reported	
Monitoring not Required									

Table H									
Discharge Serial Number: 108-1						Monitoring Location: 1			
Wastewater Description: Stormwater runoff from undeveloped grasslands and limited amounts of roadways, taxiways and runway areas									
Monitoring Location Description: Outfall 6						Receiving Stream: Seymour Hollow Brook			
PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test ²
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency ¹	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample/ Reporting Frequency ¹	Sample Type or measurement to be reported	
Monitoring not Required									

Table I									
Discharge Serial Number: 109-1						Monitoring Location: 1			
Wastewater Description: Stormwater runoff from undeveloped grasslands, signature flight services, and limited amounts of roadways, taxiways and runway areas									
Monitoring Location Description: Outfall 9						Receiving Stream: Seymour Hollow Brook			
PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test ²
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency ¹	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample/ Reporting Frequency ¹	Sample Type or measurement to be reported	
Monitoring not Required									

Table J									
Discharge Serial Number: 110-1						Monitoring Location: 1			
Wastewater Description: Stormwater runoff from CT Fire Academy, airport grasslands, taxiways, runways and roads at the north end of the airport. Overflow from 250,000 gallon storage tank that collects fire training water and storm water									
Monitoring Location Description: Outfall 10						Receiving Stream: Stony Brook			
PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test ³
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency ¹	Sample Measurement Type or reported to be	Instantaneous limit or required range	Sample/Reporting Frequency ¹	Sample Type or measurement to be reported	
Aquatic Toxicity, Daphnia pulex NOAEL = 100%	%	NA	NA	NR	GSA	----	Annual	Grab	
Aquatic Toxicity, Pimephales promelas NOAEL = 100%	%	NA	NA	NR	GSA	----	Annual	Grab	
Aluminum, Total	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	X
Chemical Oxygen Demand ³	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Chloride	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Copper, Total ³	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	X
Dioxin	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Lead, Total	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Iron, Total	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Isopropyl Alcohol	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Ethylene Glycol	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Manganese, Total	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Nitrogen, Ammonia (total as N)	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Nitrogen, Nitrate (total as N) ³	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Nitrogen, Total Kjeldahl (total as N) ³	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
pH, Day of Sampling ³	S.U.	NA	NA	NR	GSA	----	Semi-annual	Grab	
Phosphorus, Total ³	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Propyl Alcohol	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Propylene Glycol	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Total Suspended Solids ³	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Zinc, Total ³	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	X
PFAS ^{4,5}	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	

Table Footnotes:
¹ The first entry in this column is the 'Sample Frequency'. If a 'Reporting Frequency' does not follow this entry and the 'Sample Frequency' is more frequent than monthly then the 'Reporting Frequency' is monthly. If the 'Sample frequency' is specified as monthly, or less frequent, then the 'Reporting Frequency' is the same as the 'Sample Frequency'.
² Minimum Level Test refers to Section 5 Paragraph A(3) of this permit.
³ See Section 8(C) for information about Benchmark Monitoring. Provided the Permittee complies with all requirements of Section 9(C), exceedance of benchmarks is not, in itself, a violation of this permit.
⁴ PFAS analyses shall be performed using the methods approved by the EPA pursuant to 40 CFR 136. If no test method is approved by 40 CFR 136, PFAS analyses shall be performed in accordance with the draft EPA method 1633.
⁵ Sampling not required until the sampling plan as required in Section 9(C) of this permit has been approved.

Remarks
For the months when a sample is not collected, the DMR shall be submitted with the comment, "Monitoring Conditional"

Table K									
Discharge Serial Number: 111-1					Monitoring Location: 1				
Wastewater Description: Stormwater runoff from ConnDOT Sand Building, runway areas, roadways, grasslands, and woodlands.									
Monitoring Location Description: Outfall 11					Receiving Stream: Seymour Hollow Brook				
PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test ²
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency ¹	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample/ Reporting Frequency ¹	Sample Type or measurement to be reported	
Monitoring not Required									

Table L									
Discharge Serial Number: 112-1					Monitoring Location: 1				
Wastewater Description: Stormwater runoff from undeveloped grasslands and limited amounts of roadways, taxiways and runway areas; and groundwater									
Monitoring Location Description: Outfall 12					Receiving Stream: Seymour Hollow Brook				
PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test ²
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency ¹	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample/ Reporting Frequency ¹	Sample Type or measurement to be reported	
Monitoring not Required									

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Table M

Discharge Serial Number: 113-1 **Monitoring Location:** 1
Wastewater Description: Stormwater runoff from roads, runways, taxiways, ramps, parking lots and airport grasslands on the east and north sides of the airport; General Aviation facilities; Army Nation Guard Facility; UPS freight ramp, and groundwater

Monitoring Location Description: Outfall113-1 **Receiving Stream:** Stoney Brook

PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test ³
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency ¹	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample/Reporting Frequency ¹	Sample Type or measurement to be reported	
Aquatic Toxicity, Daphnia pulex NOAEL = 100%	%	NA	NA	NR	GSA	----	Annual	Grab	
Aquatic Toxicity, Pimephales promelas NOAEL = 100%	%	NA	NA	NR	GSA	----	Annual	Grab	
Aluminum, Total	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	X
Chemical Oxygen Demand ³	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Chloride	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Copper, Total ³	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	X
Dioxin	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Lead, Total	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Iron, Total	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Isopropyl Alcohol	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Ethylene Glycol	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Manganese, Total	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Nitrogen, Ammonia (total as N)	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Nitrogen, Nitrate (total as N) ⁵	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Nitrogen, Total Kjeldahl (total as N) ³	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
pH, Day of Sampling ³	S.U.	NA	NA	NR	GSA	----	Semi-annual	Grab	
Phosphorus, Total ³	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Propyl Alcohol	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Propylene Glycol	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Total Suspended Solids ³	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	
Zinc, Total ³	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	X
PFAS ^{4,5}	mg/l	NA	NA	NR	GSA	----	Semi-annual	Grab	

Table Footnotes:

¹ The first entry in this column is the 'Sample Frequency'. If a 'Reporting Frequency' does not follow this entry and the 'Sample Frequency' is more frequent than monthly then the 'Reporting Frequency' is monthly. If the 'Sample frequency' is specified as monthly, or less frequent, then the 'Reporting Frequency' is the same as the 'Sample Frequency'.

² Minimum Level Test refers to Section 5 Paragraph A(3) of this permit.

³ See Section 8(C) for information about Benchmark Monitoring. Provided the Permittee complies with all requirements of Section 9(C), exceedance of benchmarks is not, in itself, a violation of this permit.

⁴ PFAS analyses shall be performed using the methods approved by the EPA pursuant to 40 CFR 136. If no test method is approved by 40 CFR 136, PFAS analyses shall be performed in accordance with the draft EPA method 1633.

⁵ Sampling not required until the sampling plan as required in Section 9(C) of this permit has been approved.

Remarks

For the months when a sample is not collected, the DMR shall be submitted with the comment, "Monitoring Conditional"

Table N									
Discharge Serial Number: 114-1					Monitoring Location: 1				
Wastewater Description: Stormwater runoff from undeveloped grasslands and limited amounts of roadways, taxiways and runway areas; and groundwater									
Monitoring Location Description: Outfall 13A					Receiving Stream: Seymour Hollow Brook				
PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test ²
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency ¹	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample/ Reporting Frequency ¹	Sample Type or measurement to be reported	
Monitoring not Required									

Table O									
Discharge Serial Number: 115-1					Monitoring Location: 1				
Wastewater Description: Stormwater runoff from roads, runways, taxiways, ramps and parking lots									
Monitoring Location Description: Outfall 14					Receiving Stream: Seymour Hollow Brook				
PARAMETER	UNITS	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			Minimum Level Test ²
		Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency ¹	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample/ Reporting Frequency ¹	Sample Type or measurement to be reported	
Monitoring not Required									

(E) Annual stormwater monitoring and semi-annual stormwater monitoring for the October-March period shall be performed during winter storm events when aircraft deicing activity is taking place. Samples shall be collected in such a manner that they are representative of stormwater quality resulting from deicing operations

(F) STORMWATER SAMPLING PROCEDURES

- (1) All samples shall be comprised of only the stormwater runoff and groundwater described in these tables. Samples shall be collected prior to combination with receiving waters or wastewater of any type, and after all approved treatment units, if applicable. All samples collected shall be representative of the discharge during standard operating conditions.
- (2) All samples shall be collected from discharges resulting from a storm event that occurs at least 72 hours after any previous storm event generating a stormwater discharge. Any sample containing snow or ice melt must be identified on the Discharge Monitoring Report.
- (3) Collection of grab samples shall begin between sixty (60) minutes and ninety (90) minutes after the onset of a storm event discharge and shall be completed as soon as possible.
- (4) All discharge samples must be taken during the same storm event, if feasible.
- (5) The date, discharge temperature, time of the start of the discharge, time of sampling, and magnitude (in inches) of the storm event sampled shall be recorded.
- (6) Observations of foaming, sheen, floating solids and discolorations shall be recorded and reported for each grab sample.
- (7) The duration between the storm event sampled and the end of the most recent storm event that produced a discharge shall be recorded.
- (8) In cases where limits and sample type are specified but sampling is not required by this permit, the limits specified shall apply to all samples which may be collected and analyzed by the Department of Energy and Environmental Protection personnel, the Permittee, or other parties.

(G) HOURLY SAMPLING DURING DEICING EVENTS

In addition to the monitoring of stormwater outfalls required in Section 4 Tables A-O, the Permittee shall monitor the following locations on two (2) winter storm events when aircraft deicing activity is taking place, as follows:

TABLE P			
Winter Storm Deicing Event Hourly Sample Locations ¹			
Stormwater Outfall 2 (Seymour Hollow Brook), and Outfall 1A (a/k/a DSN 101)			
Stormwater Outfall 3 (Rainbow Brook near inlet to Watts Pond, downstream of stormwater outfalls 3-1 and 3-2)			
PARAMETER	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE
Aquatic Toxicity, <i>Daphnia Pulex</i> LC50	%	2 Winter Events/Year	Grab ² (1 st sample only)
Aquatic Toxicity, <i>Pimephales promelas</i> LC50	%	2 Winter Events/Year	Grab ² (1 st sample only)
Chemical Oxygen Demand	mg/l	2 Winter Events/Year	Hourly Grab
Chloride	mg/l	2 Winter Events/Year	Hourly Grab
Dissolved Oxygen	mg/l	2 Winter Events/Year	Hourly Grab
Nitrogen, Ammonia (total as N)	mg/l	2 Winter Events/Year	Hourly Grab
pH	mg/l	2 Winter Events/Year	Hourly Grab
Zinc	mg/l	2 Winter Events/Year	Hourly Grab
Propylene Glycol	mg/l	2 Winter Events/Year	Hourly Grab

¹ Reference: Bradley International Airport-Stormwater Sampling, Sample Location Map, March 2003, by Loureiro Engineering Associates, Inc.

² Aquatic toxicity testing shall be conducted only on the first grab sample collected from Outfall 2 and Outfall 3.

TABLE Q			
Winter Storm Deicing Event Hourly Sample Locations ¹			
Receiving Stream Monitoring Locations: T1, T2, T6 (Seymour Hollow Brook) T3, T5 (Rainbow Brook)			
PARAMETER	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE
Chemical Oxygen Demand	mg/l	2 Winter Events/Year	Hourly Grab
Chloride	mg/l	2 Winter Events/Year	Hourly Grab
Dissolved Oxygen	mg/l	2 Winter Events/Year	Hourly Grab
Nitrogen, Ammonia (total as N)	mg/l	2 Winter Events/Year	Hourly Grab
pH	mg/l	2 Winter Events/Year	Hourly Grab
Zinc	mg/l	2 Winter Events/Year	Hourly Grab
Propylene Glycol	mg/l	2 Winter Events/Year	Hourly Grab

¹ Reference: Bradley International Airport-Stormwater Sampling, Sample Location Map, March 2003, by Loureiro Engineering Associates, Inc.

- (1) Hourly grab samples shall be collected at outfalls 2 and 3 and receiving stream locations T1, T2, and T3 between sixty (60) minutes and ninety (90) minutes after the onset of the storm event discharge and continue hourly while a storm event discharge occurs or for a maximum of 8 hours. Hourly grab samples shall be collected at receiving stream locations T5 and T6 between ninety (90) minutes and 120 minutes after the onset of the storm event discharge and continue hourly while a storm event discharge occurs or for a maximum of 6 hours.
- (2) The following storm event information shall be recorded and reported: date, temperature, time of the start of the discharge, time of sampling, and magnitude (in inches) of the storm event sampled, and the duration between the storm event sampled and the end of the most recent storm event that produced a discharge shall be recorded.
- (3) Observations of foaming, sheen, floating solids and discolorations shall be recorded and reported for each grab sample.
- (4) The winter event stormwater report shall include a summary of deicing activity during the storm including the location(s) where deicing occurred, the number of aircraft deiced, and an estimate of the volumes of Type I and Type IV fluids used.
- (5) The winter event stormwater report shall be submitted as an attachment to the Discharge Monitoring Report by the last day of the month following the month in which the samples are collected.

SECTION 5: SAMPLE COLLECTION, HANDLING AND ANALYTICAL TECHNIQUES

(A) Chemical Analysis

- (1) All samples shall be collected, handled, and analyzed in accordance with the methods approved by the EPA under 40 CFR 136, unless another method is required under 40 CFR subchapter N or unless an alternative method has been approved in writing pursuant to 40 CFR 136.5. To determine compliance with limits and conditions established in this permit, monitoring must be performed using sufficiently-sensitive methods approved pursuant to 40 CFR 136 for the analysis of pollutants having approved methods under that part, unless a method is required under 40 CFR subchapter N or unless an alternative method has been approved in writing pursuant to 40 CFR 136.5. Chemicals which do not have methods of analysis defined in 40 CFR 136 shall be analyzed in accordance with methods specified in this permit.
- (2) All metals analyses identified in this permit shall refer to analyses for Total Recoverable Metal as defined in 40 CFR 136 unless otherwise specified.
- (3) The Minimum Levels specified below represent the concentrations at which quantification must be achieved and verified during the chemical analyses for the parameters identified in Section 4 Tables A-O. Analyses for these parameters must include check standards within ten percent of the specified Minimum Level or calibration points equal to or less than the specified Minimum Level.

<u>Parameter</u>	<u>Minimum Level</u>
Aluminum	10.0 ug/L
Copper	5.0 ug/L
Vanadium	10.0 ug/L
Zinc	10.0 ug/L

- (4) The value of each parameter for which monitoring is required under this permit shall be reported to the maximum level of accuracy and precision possible consistent with the requirements of this section of the permit.
 - (5) Effluent analyses for which quantification was verified during the analysis at or below the minimum levels specified in this section and which indicate that a parameter was not detected shall be reported as "less than x" where 'x' is the numerical value equivalent to the analytical method detection limit for that analysis.
 - (6) Results of effluent analyses which indicate that a parameter was not present at a concentration greater than or equal to the Minimum Level specified for that analysis shall be considered equivalent to zero (0.0) for purposes of determining compliance with effluent limitations or conditions specified in this permit.
- (B) Acute Aquatic Toxicity Test
- (1) Samples for monitoring of Aquatic Toxicity shall be collected and handled as prescribed in "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" (EPA/821-R-02-012).
 - (a) Composite samples shall be chilled as they are collected. Grab samples shall be chilled immediately following collection. Samples shall be held at 4 degrees Centigrade until Aquatic Toxicity testing is initiated.
 - (b) Effluent samples shall not be dechlorinated, filtered or modified in any way, prior to testing for Aquatic Toxicity unless specifically approved in writing by the Commissioner for monitoring at this facility.
 - (c) Chemical analyses of the parameters identified in Section 4 Tables A-F shall be conducted on an aliquot of the same sample tested for Aquatic Toxicity.
 - (i) At a minimum, pH, specific conductance, salinity, total alkalinity, total hardness, and total residual chlorine shall be measured in the effluent sample and, during Aquatic Toxicity tests, in the highest concentration of test solution and in the dilution (control) water at the beginning of the test and at test termination. If Total Residual Chlorine is not detected at test initiation, it does not need to be measured at test termination. Dissolved oxygen, pH, and temperature shall be measured in the control and all test concentrations at the beginning of the test, daily thereafter, and at test termination.
 - (ii) For tests with saltwater organisms that require salinity adjustment of the effluent, chemical analyses shall be conducted on an aliquot of the effluent sample collected for Aquatic Toxicity testing and on an aliquot of the effluent following salinity adjustment. Both sets of results shall be reported on the Aquatic Toxicity Monitoring Report (ATMR).
 - (d) Tests for Aquatic Toxicity shall be initiated within 24 hours of sample collection.
 - (2) Monitoring for Aquatic Toxicity to determine compliance with the permit condition on Aquatic Toxicity (invertebrate) above shall be conducted for 48-hours utilizing neonatal Daphnia pulex (less than 24-hours old)
 - (3) Monitoring for Aquatic Toxicity to determine compliance with the permit condition on Aquatic Toxicity (vertebrate) above shall be conducted for 48-hours utilizing larval Pimephales promelas (1-14 days old with no more than 24-hours range in age).
 - (4) Tests for Aquatic Toxicity shall be conducted as prescribed for static non-renewal acute tests in "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" (EPA/821-R-02-012), except as specified below.
 - (a) Definitive (multi-concentration) testing, with LC50 as the endpoint, shall be conducted to determine compliance with limits on Aquatic Toxicity and monitoring conditions and shall incorporate, at a minimum, the following effluent concentrations:

- (i) For Aquatic Toxicity Limits expressed as LC50 values of 33% or greater: 100%, 75%, 50%, 25%, 12.5%, and 6.25%
 - (ii) For Aquatic Toxicity Limits expressed as LC50 values between 15% and 33% and for monitoring only conditions: 100%, 50%, 25%, 12.5%, and 6.25%
 - (iii) For Aquatic Toxicity Limits expressed as LC50 values of 15% or less: 100%, 50%, 25%, 12.5%, 6.25%, and 3%
- (b) For Aquatic Toxicity Limits and for monitoring only conditions, expressed as an NOAEL value, Pass/Fail (single-concentration) tests shall be conducted at a specified Critical Test Concentration (CTC) equal to the Aquatic Toxicity Limit, or 100% in the case of monitoring only conditions, as prescribed in section 22a-430-3(j)(7)(A)(I) of the Regulations of Connecticut State Agencies, except that five replicates of undiluted effluent and five replicates of effluent diluted to the CTC shall be included.
 - (c) Organisms shall not be fed during the tests.
 - (d) Copper nitrate shall be used as the reference toxicant in tests with freshwater organisms.
 - (e) Synthetic freshwater prepared with deionized water adjusted to a hardness of 50 mg/L (plus or minus 5 mg/L) as CaCO₃ shall be used as dilution water in tests with freshwater organisms.
- (5) Compliance with limits on Aquatic Toxicity shall be determined as follows:
- (a) For limits expressed as a minimum LC50 value, compliance shall be demonstrated when the results of a valid definitive Aquatic Toxicity test indicates that the LC50 value for the test is greater than the Aquatic Toxicity Limit.
 - (b) For limits expressed as an NOAEL value, compliance shall be demonstrated when the results of a valid pass/fail Aquatic Toxicity test indicates there is greater than 50% survival in the undiluted effluent and 90% or greater survival in the effluent at the specified CTC.

SECTION 6: REPORTING REQUIREMENTS

- (A) The results of chemical analyses and any aquatic toxicity test required above shall be entered on the Discharge Monitoring Report (DMR), provided by this office, and reported to the Bureau of Materials Management and Compliance Assurance (Attn: DMR Processing) at the following address. Except for continuous monitoring, any monitoring required more frequently than monthly shall be reported on an attachment to the DMR, and any additional monitoring conducted in accordance with 40 CFR 136 or other methods approved by the Commissioner shall also be included on the DMR, or as an attachment, if necessary. The report shall also include a detailed explanation of any violations of the limitations specified. The DMR shall be received at this address by the last day of the month following the month in which samples are collected.

Bureau of Materials Management and Compliance Assurance
 Water Permitting and Enforcement Division (Attn: DMR Processing)
 Connecticut Department of Energy and Environmental Protection
 79 Elm Street
 Hartford, CT 06106-5127

- (B) Complete and accurate aquatic toxicity test data, including percent survival of test organisms in each replicate test chamber, LC50 values and 95% confidence intervals for definitive test protocols, and all supporting chemical/physical measurements performed in association with any aquatic toxicity test, shall be entered on the Aquatic Toxicity Monitoring Report form (ATMR) and sent to the Bureau of Water Protection and Land Reuse at the following address. The ATMR shall be received at this address by the last day of the month following the month in which samples are collected.

Bureau of Water Protection and Land Reuse (Attn: Aquatic Toxicity)
 Connecticut Department of Energy and Environmental Protection
 79 Elm St.
 Hartford, CT 06106-5127

- (C) If this permit requires monitoring of a discharge on a calendar basis (e.g. Monthly, quarterly, etc.), but a discharge has not

occurred within the frequency of sampling specified in the permit, the Permittee must submit the DMR and ATMR, as scheduled, indicating "NO DISCHARGE". For those Permittees whose required monitoring is discharge dependent (e.g. per batch), the minimum reporting frequency is monthly. Therefore, if there is no discharge during a calendar month for a batch discharge, a DMR must be submitted indicating such by the end of the following month.

(D) NetDMR Reporting Requirements

- (1) Prior to one-hundred and eighty (180) days after the issuance of this permit, the Permittee may either submit monitoring data and other reports to the Department in hard copy form or electronically using NetDMR, a web-based tool that allows Permittees to electronically submit discharge monitoring reports (DMRs) and other required reports through a secure internet connection. Unless otherwise approved in writing by the Commissioner, no later than one-hundred and eighty (180) days after the issuance of this permit the Permittee shall begin reporting electronically using NetDMR. Specific requirements regarding subscription to NetDMR and submittal of data and reports in hard copy form and for submittal using NetDMR are described below:

(a) Submittal of *NetDMR Subscriber Agreement*

On or before fifteen (15) days after the issuance of this permit, the Permittee and/or the person authorized to sign the Permittee's discharge monitoring reports ("Signatory Authority") as described in RCSA Section 22a-430-3(b)(2) shall contact the Department at deep.netdmr@ct.gov and initiate the NetDMR subscription process for electronic submission of Discharge Monitoring Report (DMR) information. Information on NetDMR is available on the Department's website at www.ct.gov/deep/netdmr. On or before ninety (90) days after issuance of this permit the Permittee shall submit a signed and notarized copy of the *Connecticut DEEP NetDMR Subscriber Agreement* to the Department.

(b) Submittal of Reports Using NetDMR

Unless otherwise approved by the Commissioner, on or before one-hundred and eighty (180) days after issuance of this permit, the Permittee and/or the Signatory Authority shall electronically submit DMRs and reports required under this permit to the Department using NetDMR in satisfaction of the DMR submission requirement in paragraph (A) of this Section of this permit.

DMRs shall be submitted electronically to the Department no later than the 30th day of the month following the completed reporting period. All reports required under the permit, including any monitoring conducted more frequently than monthly or any additional monitoring conducted in accordance with 40 CFR 136, shall be submitted to the Department as an electronic attachment to the DMR in NetDMR. Once a Permittee begins submitting reports using NetDMR, it will no longer be required to submit hard copies of DMRs or other reports to the Department. Permittee shall also electronically file any written report of non-compliance described in Section paragraph (A) of this Section and in the following Section of this Permit as an attachment in NetDMR. NetDMR is accessed from: <https://netdmr.epa.gov/netdmr/public/home.htm>.

(c) Submittal of NetDMR Opt-Out Requests

If the Permittee is able to demonstrate a reasonable basis, such as technical or administrative infeasibility, that precludes the use of NetDMR for electronically submitting DMRs and reports, the Commissioner may approve the submission of DMRs and other required reports in hard copy form ("opt-out request"). Opt-out requests must be submitted in writing to the Department for written approval on or before fifteen (15) days prior to the date a Permittee would be required under this permit to begin filing DMRs and other reports using NetDMR. This demonstration shall be valid for twelve (12) months from the date of the Department's approval and shall thereupon expire. At such time, DMRs and reports shall be submitted electronically to the Department using NetDMR unless the Permittee submits a renewed opt-out request and such request is approved by the Department.

All opt-out requests and requests for the NetDMR subscriber form should be sent to the following address or by email at deep.netdmr@ct.gov:

Attn: NetDMR Coordinator
Connecticut Department of Energy and Environmental Protection
79 Elm Street
Hartford, CT 06106-5127

SECTION 7: RECORDING AND REPORTING OF VIOLATIONS, ADDITIONAL TESTING REQUIREMENTS

- (A) If any sample analysis indicates that an Aquatic Toxicity effluent limitation in Section 5 of this permit has been exceeded, or that the test was invalid, another sample of the effluent shall be collected and tested for Aquatic Toxicity and associated chemical parameters, as described above in Section 5 and Section 6, and the results reported to the Bureau of Materials Management and Compliance Assurance (Attn: DMR Processing), at the address listed above, within thirty (30) days of the exceedance or invalid test. Results of all tests, whether valid or invalid, shall be reported.
- (B) If any two consecutive test results or any three test results in a twelve month period indicates that an Aquatic Toxicity Limit has been exceeded, the Permittee shall immediately take all reasonable steps to eliminate toxicity wherever possible and shall submit a report to Bureau of Materials Management and Compliance Assurance (Attn: Aquatic Toxicity) for the review and approval of the Commissioner in accordance with section 22a-430-3(j)(10)(c) of the RCSA describing proposed steps to eliminate the toxic impact of the discharge on the receiving water body. Such a report shall include a proposed time schedule to accomplish toxicity reduction and the Permittee shall comply with any schedule approved by the Commissioner.
- (C) The Permittee shall notify the Bureau of Materials Management and Compliance Assurance, Water Permitting and Enforcement Division, within seventy-two (72) hours and in writing within thirty days of the discharge of any substance listed in the application but not listed in the permit if the concentration or quantity of that substance exceeds two times the level listed in the application.

SECTION 8: STORMWATER POLLUTION PREVENTION PLAN

(A) Development of the Stormwater Pollution Prevention Plan

- (1) On or before sixty (60) days following the date of permit issuance, the Permittee shall update the facility's existing Stormwater Pollution Prevention Plan ("Plan") to meet the requirements of this section. The Permittee and its tenants shall perform all actions required by the Plan in accordance with the schedule set forth below. The Plan shall include records and documentation of compliance with all elements and shall be kept on-site at all times. The Permittee and its tenants shall maintain compliance with the Plan thereafter.
- (2) Signature and Plan Review
 - (A) The Plan shall be signed by a principal executive officer of the Connecticut Airport Authority, as that term is defined in section 22a-430-3(b)(2) of the Regulations of Connecticut State Agencies;

The Plan shall also be certified, in accordance with the "Plan Certification" section below, by a professional engineer licensed in the State of Connecticut or a Certified Hazardous Materials Manager.

The Plan shall be retained on site at the facility.
 - (B) The Permittee shall make a copy of the Plan available to the following immediately upon request:
 - (i) the commissioner at his/her own request or at the request of a member of the public;
 - (ii) to the operator of the municipal separate storm sewer system receiving the discharge.
 - (C) The commissioner may notify the Permittee at any time that the Plan does not meet one or more of the requirements of this section. Within one-hundred and twenty (120) days of such notification unless otherwise specified by the commissioner in writing, the Permittee shall revise the Plan, perform all actions required by the revised Plan, and shall inform the Commissioner in writing that the requested changes have been made and implemented, and such other information as the commissioner requires.

(3) Plan Certification

The Plan shall contain the following certification, signed by a professional engineer licensed to practice in the State of Connecticut or a Certified Hazardous Materials Manager:

“I certify that I have thoroughly and completely reviewed the Stormwater Pollution Prevention Plan prepared for this site. I further certify, based on such review and site visit by myself or my agent, and on my professional judgment, that the Stormwater Pollution Prevention Plan meets the criteria set forth in this permit. I am aware that there are significant penalties for false statements in this certification, including the possibility of fine and imprisonment for knowingly making false statements.”

(B) Contents of Plan

(1) The Plan shall be representative of current site conditions and shall address, at a minimum, all the elements below. If an element is not applicable to the facility, the Plan shall identify it and provide an explanation as to why the element does not apply.

(A) Facility Description

Provide a description of the nature of the industrial activities at the facility.

(B) General location map

Provide a general location map (e.g., U.S. Geological Survey (USGS) quadrangle map) with enough detail to identify the location of the facility and all receiving waters to which stormwater discharges.

(C) Pollution Prevention Team

The Permittee shall identify a specific individual or individuals for the site who shall serve as members of a Stormwater Pollution Prevention Team ("team"). The team shall be responsible for implementing the Plan and assisting in the implementation, maintenance, and development of revisions to the Plan as well as maintaining control measures and taking corrective actions where required. At least one team member shall be present at the facility or on call during all operational shifts. The Plan shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the Plan. Each member of the stormwater pollution prevention team must have ready access to either an electronic or paper copy of applicable portions of this permit and the Plan.

(D) Potential Pollutant Sources

The Plan shall map and describe the potential sources of pollutants that may reasonably be expected to affect stormwater quality at the site or that may result in the discharge of pollutants during dry weather from the site. The Plan shall identify all activities and materials that may be a source of stormwater pollution at the site. Accordingly, the Plan shall include, but not be limited to, the following:

(i) Site Map

A site map (at a defined or approximate scale) shall be developed showing:

- 1) a north arrow and surveyed or approximate property lines including the total site acreage;
- 2) location of existing buildings and structures;
- 3) the overall site size and amount of impervious coverage as well as an outline of the drainage area, including the extent of impervious surface, for each stormwater outfall and direction of flow within the drainage area;
- 4) existing structural control measures installed to reduce pollutants in stormwater runoff;
- 5) locations of all stormwater conveyances including catchbasins, ditches, pipes, and swales as well as the location of any non-stormwater discharges;
- 6) the areal extent of any wetlands to which stormwater discharges;
- 7) the receiving surface water body or bodies to which the site discharges including the identification of any impaired waters and whether or not a TMDL has been established for them;
- 8) location where major spills or leaks have occurred;

- 9) locations of all stormwater monitoring points including latitude and longitude, where available;
- 10) locations of discharges to a municipal storm sewer system;
- 11) locations where any drainage run-on enters the site; and
- 12) each location of the following activities and associated types of pollutants where such activities are exposed to precipitation:
 - fueling stations;
 - vehicle and equipment maintenance and/or cleaning areas;
 - loading/unloading areas;
 - locations used for the treatment, storage or disposal of wastes;
 - liquid storage tanks, including liquid deicing and anti-icing materials;
 - aircraft and runway deicing areas
 - deicing material storage areas;
 - processing areas;
 - storage areas;
 - areas with the potential for erosion that may impact surface waters or wetlands or may have off-site impacts; and
 - any other potential pollutant sources.

(ii) **Inventory of Exposed Materials**

A tabular inventory of non-gaseous materials at the site, including a description of potential pollutants associated with those materials that may be exposed to stormwater between the time of three years prior to the date of certification of the Plan and the present for the following areas:

- 1) loading and unloading operations;
- 2) roof areas;
- 3) outdoor storage activities;
- 4) outdoor manufacturing or processing activities;
- 5) dust or particulate generating processes; and
- 6) on-site waste disposal practices.

(iii) **Summary of Potential Pollutant Sources**

A narrative summary of each area of the site specified in "Inventory of Exposed Materials" section of this permit and each associated potential source of pollution. Such summary shall include:

- 1) method and location of on-site storage or disposal;
- 2) materials management practices employed to minimize contact of materials with stormwater runoff between the time of three years prior to the effective date of this permit and the present;
- 3) the location and a description of existing structural and non-structural control measures to reduce pollutants in stormwater runoff; and
- 4) a description of any treatment the stormwater receives.

(iv) **Spills and Leaks**

A list of spills and leaks of five (5) gallons or more of petroleum products, or of toxic or hazardous substances which could affect stormwater, as listed in section 22a-430-4 (Appendix B Tables II, III and V, and Appendix D) of the Regulations of Connecticut State Agencies, and 40 CFR 116.4, that occurred at the facility after the date of three years prior to the date of certification of the Plan.

(2) **Control Measures**

Control Measures are required Best Management Practices (BMP) that the Permittee must implement to minimize the discharge of pollutants from the permitted facility. The term "minimize" means reduce and/or eliminate to the extent achievable using control measures that are technologically available and economically practicable and achievable in light of best industry practice.

The Permittee must document the location and type of control measures installed and implemented at the site. The Permittee shall discuss the appropriateness and priorities of control measures in the Plan and how they address identified potential sources of pollutants at the site. The Plan shall include a schedule for implementing such controls measures if not already implemented.

- (A) **Good Housekeeping**
The Permittee must maintain a clean, orderly facility (e.g. sweeping at regular intervals, appropriate storage practices, proper garbage and waste management, dust control measures, etc.) in all areas that are exposed to rainfall and are potential sources of pollutants.
- (B) **Vehicle and Equipment Storage and Maintenance**
The permittee shall minimize the potential for stormwater exposure to leaky or leak-prone vehicles/equipment awaiting maintenance and must minimize contamination of stormwater runoff from all areas used for vehicle/equipment maintenance. The permittee must implement the following (or other equivalent measures): use drip pans; roof and cover storage areas; perform maintenance activities, indoors; drain all parts of fluids before disposal; use absorbents; use dry clean-up measures; minimizing run on/runoff of stormwater to and from storage and maintenance areas.
- (C) **Vehicle or Equipment Washing**
The Permittee must provide, at a minimum, that no washing or rinsing of equipment, buildings or vehicles shall be allowed at the site which would allow wash or rinse waters to enter any storm drainage system, surface waters, or groundwaters of the State without a permit.
- (D) **Fueling Areas**
The permittee shall minimize contamination of stormwater runoff from fueling areas. The following are possible control measures: covering the fueling area; using spill/overflow protection and cleanup equipment; minimizing stormwater run-on/runoff to the fueling area; using dry cleanup methods; and providing spill kits and catch basin covers nearby.
- (E) **Floor Drains**
The Permittee must provide that all floor drains have been sealed, authorized by a local authority to discharge to sanitary sewer or allowed by DEEP in accordance with the "Non-Stormwater Discharges" section of this permit.
- (F) **Roof Areas**
The Permittee must identify roof areas that may be subject to drippage, dust or particulates from exhausts or vents or other sources of pollution. The Permittee must inspect or monitor the runoff from these areas to determine if any potential sources of stormwater pollution are present. If so, the Permittee must minimize such sources or potential sources of pollution.
- (G) **Minimize Exposure**
The Permittee must minimize exposure to stormwater of materials identified in the "Inventory of Exposed Materials" section.
- (H) **Aircraft De-Icing Operations**
The permittee must implement a program to control or manage contaminated runoff to minimize the amount of pollutants discharged from deicing operations. The permittee shall implement these control measure options (or the equivalent), as appropriate: a dedicated deicing facility with a runoff collection/ recovery system; a drainage system that segregates uncontaminated stormwater from stormwater contaminated with deicing fluid; using vacuum/collection trucks; storing contaminated stormwater/deicing fluids in tanks and releasing controlled amounts to a publicly owned treatment works; and directing runoff into vegetative swales or other infiltration measures. The permittee must also recover deicing materials when these materials are applied during non-precipitation events (e.g., covering storm sewer inlets, using booms, installing absorptive interceptors in the drains, etc.) to prevent these materials from later becoming a source of stormwater contamination. Used deicing fluid should be recycled whenever possible.
- (I) **Sediment and Erosion Control**
The Permittee must identify areas that have a potential for soil erosion due to topography, activities, or other factors, and shall implement measures to limit erosion and stabilize such areas. All construction activities on site shall be conducted in accordance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control (Guidelines) and the "Future Construction" section of this permit.

(J) Solid Deicing Material Storage

The Permittee must ensure that storage piles of solid deicing materials (including pure salt, salt alternatives or either of these mixed with other materials) used for deicing or other commercial or industrial purposes that are in place for more than 180 days shall be enclosed or covered by a rigid or flexible roof or other structural means. Such structure shall not allow for the migration or release of material outside of the structure through its sidewalls. For temporary storage piles of solid deicing materials in place for less than 180 days per year, a waterproof cover may be used to prevent exposure to precipitation (except for exposure necessary to add or remove materials from the pile). In areas with a groundwater classification of GA or GAA, an impervious liner shall be utilized under any de-icing material pile to prevent infiltration to groundwater.

(K) Spill Prevention and Response Procedures

The Permittee must minimize the potential for leaks and spills. This shall include clearly identifying areas where potential spills can occur and their accompanying drainage points. The Permittee must plainly label containers (e.g., "Used Oil," "Spent Solvents," "Fertilizers and Pesticides," etc.) that could be susceptible to spillage or leakage in areas that could contribute pollutants to stormwater runoff. The Permittee shall identify procedures for containing, reporting and cleaning up spills. These procedures must be provided to the appropriate personnel through Employee Training along with the necessary equipment to implement a cleanup.

1) Containment

To prevent unauthorized discharges of liquid chemicals or wastewater from commingling with or polluting a facility's stormwater discharges, or otherwise causing pollution to the waters of the state, the Permittee shall comply with the following requirements, as applicable:

(i) Stationary Storage or Storage Areas

Storage area means an exterior area, which is or has the potential to be exposed to stormwater that contains one or more tanks or containers utilized for the storage of liquid chemicals, including deicing/anti-icing materials, or for the collection, storage or treatment of wastewater.

Any stationary above-ground tank, container or storage area used for the storage of liquid chemicals, including deicing/anti-icing liquid materials, chemicals identified in the "Spills and Leaks" section, or for the collection, storage or treatment of wastewater shall, at a minimum, comply with one of the following types of secondary containment requirements:

- (1) A double-walled above-ground tank or container; or
- (2) For any storage area, tank or container installed prior to the date of this permit, an impermeable secondary containment area which will hold at least 100 percent (%) of the volume of the largest tank or container or 10% of the total volume of all tanks and containers in the area, whichever is larger, without overflow from such secondary containment area; or
- (3) For any storage area, tank or container installed after the date of this permit, an impermeable secondary containment area which will hold at least 110% of the volume of the largest tank or container or 10% of the total volume of all tanks and containers in the area, whichever is larger, without overflow from such secondary containment area.

(ii) Mobile or Portable Storage

Any mobile or portable above-ground tank or container used for the collection or storage of wastewater shall comply with the secondary containment requirements of paragraph (J)1(i) above, unless the following minimum requirements are met:

- 1) Such mobile or portable tank or container and related appurtenances (i.e., piping, fittings, valves, gauges, alarms, switches, etc.) are designed, operated and maintained in a manner to prevent releases of wastewater resulting from factors including, but not limited to, physical or chemical damage, tampering or vandalism, freezing and thawing; and

- 2) In addition to the requirements of paragraph (J)1(i) above, for any mobile or portable tank or container and related appurtenances that are affixed to a trailer, such trailer shall be a registered motor vehicle designed, operated and maintained to be capable of on-road transport of wastewater at all times.
- (iii) Containment exemption for certain stationary above-ground storage tanks, containers, and areas
- (1) The secondary containment requirements above do not apply to stationary above-ground storage and treatment tanks and containers, and storage areas if such tanks, containers, and storage areas are associated with a discharge(s) authorized by a permit issued pursuant to Section 22a-430 or 22a-430b of the Connecticut General Statutes.
- (iv) Additional requirements
- An impermeable secondary containment area installed after the date of issuance of this permit shall be roofed in a manner which minimizes stormwater entry to the containment area, except for a containment area which stores tanks or containers of one-hundred (100) gallon capacity or more, in which case a roof is not required. Stormwater that may accumulate in a containment area may be discharged only after the Permittee conducts testing to confirm that it contains none of the relevant pollutants stored therein. For petroleum storage containment areas, visual inspection for a sheen fulfills this requirement. If testing is not conducted or if it indicates the presence of a relevant pollutant, this containment water must be treated and/or disposed of according to DEEP and federal regulations.
- 2) **Dumpsters**
The Permittee must ensure that all dumpsters, trash compactors, and "roll-off" containers used to store waste or recyclable materials are in sound watertight condition and have covers and drain plugs intact, or are in roofed areas that will prevent exposure to rainfall and will not allow dumpster leakage to enter any stormwater drainage system. All covers on dumpsters not under a roof must be closed when dumpsters are not being loaded or unloaded.
 - 3) **Loading Docks**
The Permittee shall provide that stormwater collection and drainage facilities adjacent to the loading dock shall be designed and maintained in a way that prevents any materials spilled or released at the loading dock from discharging to the storm sewer system. Loading docks (excluding those that allow a vehicle to enter the building) installed after the issuance of this permit shall be protected with a permanent roof or other structure that protects the loading dock from direct rainfall.
- (L) **Employee Training**
The Permittee shall ensure that all employees whose activities may affect stormwater quality receive training within ninety (90) days of employment and at least once a year thereafter to make them familiar with the components and goals of these control measures and the Plan. Training shall address topics such as emergency equipment location, spill response management, control measures, debris management and stormwater management measures, inspection requirements, good housekeeping and materials management practices. Training shall be conducted or supervised by a member of the Pollution Prevention Team or other qualified person and a written record shall be maintained in the Plan, including the date(s), employee name, employee responsibility and training agenda.
- (M) **Preventive Maintenance and Inspections - Schedules and Procedures**
The Permittee shall document in the Plan the schedules and procedures for implementation of control measures, monitoring and inspections. These include, but are not limited to: sweeping, waste management practices and other good housekeeping measures; regular inspections, testing, maintenance, and repair of all industrial equipment and systems potentially exposed to stormwater, procedures for preventing and responding to spills and leaks; employee training; routine and any other inspections.

The Permittee must implement the preventive maintenance program, which shall include but not be limited to: the inspection and maintenance of all stormwater management devices (e.g. cleaning stormwater treatment devices, catch basins, catch basin inserts, etc.); the visual inspection and/or testing of on-site equipment and systems to identify conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters; and the appropriate maintenance of such equipment and systems. These areas shall be included in the "Routine Inspections" section of this permit. If the Permittee maintains an existing preventive maintenance program that addresses the requirements of this control measure, that program may be used to meet this requirement. The existence of such a program and the location of its maintenance records shall be referenced in the Plan.

(1) Semi-Annual Inspections

The Permittee must provide that qualified personnel shall conduct comprehensive site inspections at appropriate intervals specified in the Plan, but in no event less frequently than semi-annually. Such evaluations shall, at a minimum, include:

- (a) Visual inspection of material handling areas and other potential sources of pollution identified in the Plan for evidence of, or the potential for, pollutants entering the stormwater drainage system. Structural stormwater management measures, erosion control measures, control measures and other structural pollution prevention measures identified in the Plan shall be observed to ensure that they are implemented and maintained properly. A visual inspection of equipment needed to implement the plan, such as spill response equipment, shall be made. Inspections should be made during rainfall events if possible.
- (b) Preparation of a report summarizing the scope of the inspection, personnel making the inspection, the date(s) of the inspection, major observations relating to the Plan, actions taken, and updates made to the Plan shall be made and retained as part of the Stormwater Pollution Prevention Plan for at least five (5) years. The report shall be signed by the Permittee.

(2) Routine Inspections

In addition to the Semi-annual inspections required above, the Permittee shall identify in the Plan qualified personnel to visually inspect designated equipment and specific sensitive areas of the site **AT LEAST MONTHLY**. A written set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of routine inspections shall be maintained in the Plan kept on-site.

(N) Non-Stormwater Discharge Certification

The Permittee must eliminate non-stormwater discharges except as provided below. The Plan shall include the following certification, signed by a professional engineer licensed to practice in the State of Connecticut or a Certified Hazardous Materials Manager:

"I certify that in my professional judgment, the discharge from the site consists only of stormwater, or of stormwater combined with wastewater authorized by an effective permit issued under section 22a-430 or section 22a-430b of the Connecticut General Statutes, or of stormwater combined with any of the following discharges provided they do not contribute to a violation of water quality standards:

- landscape irrigation or lawn watering;
- uncontaminated groundwater discharges such as pumped groundwater, foundation drains, water from crawl space pumps and footing drains;
- discharges of uncontaminated air conditioner or refrigeration condensate;
- water sprayed for dust control or at a truck load wet-down station;
- naturally occurring discharges such as rising groundwaters, uncontaminated groundwater infiltration (as defined at 40 CFR 35.2005(20)), springs, and flows from riparian habitats and wetlands.

This certification is based on testing and/or evaluation of the stormwater discharge from the site. I further certify that all potential sources of non-stormwater at the site, a description of the results of any test and/or evaluation for the presence of non-stormwater discharges, the evaluation criteria or testing method used, the date of any testing and/or evaluation, and the on-site drainage points that were directly observed during the test have been described in detail in the Stormwater Pollution Prevention Plan prepared for the site. I further certify that no interior building floor drains exist unless such floor drain connection has been approved and permitted by the commissioner or otherwise authorized by a local authority for discharge as domestic sewage to sanitary sewer. I am aware that there may be significant penalties for false statements in this certification, including the possibility of fine and imprisonment for knowingly making false statements.”

- (3) Additional requirements for stormwater discharges associated with industrial activity through municipal separate storm sewer systems as may be required by the municipality.

In addition to the applicable requirements of this permit, the Plan must comply with applicable requirements in a municipal separate storm sewer system (MS4) permit for the municipal separate storm sewer system that receives the facility's stormwater discharge, provided such discharger has been notified of such conditions.

- (4) **Consistency with Other Plans and Permits**
The Plan may reference requirements contained in a Spill Prevention Control and Countermeasure (SPCC) plan or a plan prepared or approved under the Resource Conservation and Recovery Act (RCRA) and other plans required by state, federal or local law. A copy of the pertinent sections of any referenced plan must be kept with the Plan. The Plan shall identify all general and individual permits issued by the DEEP for which the facility is authorized.
- (5) **Future Construction**
Note that any construction activity that disturbs greater than one acre must be conducted in accordance with the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities (as amended). All construction activities, regardless of size, shall comply with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control during construction and the 2004 Connecticut Stormwater Quality Manual for the design and implementation of post-construction stormwater management measures. In addition, the Permittee shall avoid the use of copper or galvanized roofing or building materials for any new building construction where these materials will be exposed to stormwater.
- (6) **Monitoring Program**
A description of the monitoring program implemented to comply with the sampling requirements of Section 4 Tables A-O of this permit.

(C) Benchmark Monitoring

Benchmark Concentrations:

Chemical Oxygen Demand	75 mg/l
Copper, Total	0.059 mg/l
Nitrogen, Total Kjeldahl	2.30 mg/l
Nitrogen, Nitrate	1.1 mg/l
Total Phosphorous	0.40 mg/l
Total Suspended Solids	90 mg/l
Zinc, Total	0.160 mg/l

In accordance with “Keeping Plan Current” ((Section 8(D) below)), should the average of four (4) consecutive monitoring values exceed the benchmark for any parameter, then the Permittee must review the selection, design, installation and implementation of the control measures to determine if modifications are necessary to meet the benchmarks in this permit, and either:

- Make the necessary modifications to the control measures and Plan; or

- Make a determination that no further pollutant reductions are technologically available and economically practicable and achievable in light of best industry practice to implement additional control measures or meet the benchmarks. The Permittee must also document the rationale for concluding that no further pollutant reductions are achievable and submit this documentation to the Commissioner for written approval. The Permittee must retain all records related to this documentation with the Plan.

If an exceedance of the four (4) event average is mathematically certain, then the Permittee must review the control measures and perform any required corrective action immediately (or document why no corrective action is required), without waiting for the full four monitoring events, in accordance with the "Keeping Plan Current" (Section 8(D) below). If after modifying the control measures and conducting additional monitoring, the average of the most recent 4 monitoring events still exceeds the benchmark (or if an exceedance of the benchmark by the 4 event average is mathematically certain for the most recent 4 monitoring events), the Permittee must again review the control measures and take one of the two actions above. **Provided the Permittee complies with all requirements of this Benchmark Monitoring section, exceedance of the benchmarks is not, in itself, a violation of this permit.**

(D) Keeping Plan Current

The Permittee shall amend the Plan whenever;

- (1) there is a change at the site which has an effect on the potential to cause pollution of the surface waters of the state;
- (2) the actions required by the Plan fail to ensure or adequately protect against pollution of the surface waters of the state; or
- (3) the Commissioner requests modification of the Plan;
- (4) the Permittee is notified that they are subject to requirements because the receiving water to which the industrial activity discharges has been designated as impaired under Section 303(d) of the Clean Water Act and as identified in the most recent State of Connecticut Integrated Water Quality Report;
- (5) the Permittee is notified that a TMDL to which the Permittee is subject has been established for the stormwater receiving water;
- (6) necessary to address any significant sources or potential sources of pollution identified as a result of any inspection or visual monitoring;
- (7) required as a result of monitoring benchmarks or effluent limitations.

The Plan shall be amended and all actions required by the Plan shall be completed within one hundred twenty (120) days (or within another interval as may be specified in this general permit or as may be approved in writing by the Commissioner) of the date the Permittee becomes aware or should have become aware that any of the conditions listed above has occurred.

If significant changes are made to the site or to the Plan in accordance with paragraphs (D)(1)-(7) above, the Plan shall be recertified in accordance with the "Non-Stormwater Discharges" and "Plan Certification" sections of this permit, by a professional engineer licensed to practice in the State of Connecticut or a Certified Hazardous Materials Manager. The Permittee shall maintain compliance with such Plan thereafter.

(E) Failure to Prepare or Amend Plan

In no event shall failure to complete or update a Plan in accordance with this permit relieve a Permittee of responsibility to implement actions required to protect the surface waters of the state, complete any actions that would have been required by such Plan, and to comply with all conditions of the permit.

SECTION 9: COMPLIANCE SCHEDULE

- A. Annually, on or before July 30 of each year, the Permittee and its tenants shall certify to the Commissioner in writing that it does not use airfield deicing products that contain urea, in accordance with Title 40 Part 449.10 Airport Deicing Point Source Category effluent limitations representing the best available technologically economically achievable (BAT). The certification shall include the following statement:
- “I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in the submitted information may be punishable as a criminal offense, in accordance with section 22a-6 of the General Statutes, pursuant to section 53a-157b of the General Statutes, and in accordance with any other applicable statute.”
- B. Annually, on or before July 30 of each year, the Permittee shall submit to the Commissioner, a deicing fluid collection efficiency spreadsheet documenting the volumes of Type I and Type IV deicing fluids sprayed during the previous deicing season versus the volume of deicing fluids collected for treatment and disposal.
- C. On or before one-hundred and twenty (120) days after the issuance date of this permit, the Permittee shall submit for the Commissioner’s review and approval a sampling plan on for the analysis of PFAS in the Permittee’s discharges using sufficiently sensitive methods. At a minimum this plan must identify the test method, laboratory, sampling protocols including sample quality control procedures to be implemented, and sampling locations.
- D. On or before three (3) years following permit issuance, the Permittee shall submit for the Commissioner’s review, a report that evaluates the efficiency of the current structural and management practices to collect deicing fluids, identifies the limitations of the spent deicing fluid collection system (such as fluids that cannot be recovered during airplane takeoff) and current available technologies, provides recommendations for implementation of short-term and long-term improvements, identifies priorities for improvements as new collection technologies, pollution prevention opportunities, and/or product substitutions become available, and includes an analysis and discussion of the economic and social/public service impacts of new technologies and products.
- E. The Permittee shall use best efforts to submit to the Commissioner all documents required by this section of the permit in a complete and approvable form. If the Commissioner notifies the Permittee that any document or other action is deficient, and does not approve it with conditions or modifications, it is deemed disapproved, and the Permittee shall correct the deficiencies and resubmit it within the time specified by the Commissioner or, if no time is specified by the Commissioner, within thirty days of the Commissioner’s notice of deficiencies. In approving any document or other action under this Compliance Schedule, the Commissioner may approve the document or other action as submitted or performed or with such conditions or modifications as the Commissioner deems necessary to carry out the purposes of this section of the permit. Nothing in this paragraph shall excuse noncompliance or delay.
- F. Dates. The date of submission to the Commissioner of any document required by this section of the permit shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under this section of the permit, including but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is personally delivered or the date three days after it is mailed by the Commissioner, whichever is earlier. Except as otherwise specified in this permit, the word "day" as used in this section of the permit means calendar day. Any document or action which is required by this section only of the permit, to be submitted, or performed, by a date which falls on, Saturday, Sunday, or, a legal Connecticut or federal holiday, shall be submitted or performed on or before the next day which is not a Saturday, Sunday, or legal Connecticut or federal holiday.
- G. Notification of noncompliance. In the event that the Permittee becomes aware that it did not or may not comply, or did not or may not comply on time, with any requirement of this Section of the permit, or of any document required hereunder, the Permittee shall immediately notify the Commissioner and shall take all reasonable steps to ensure that any noncompliance or delay is avoided or, if unavoidable, is minimized to the greatest extent possible. In so notifying the Commissioner, the Permittee shall state in writing the reasons for the noncompliance or delay and propose, for the review of the Commissioner, dates by which compliance will be achieved, and the Permittee shall comply with any dates that may be approved in writing by the Commissioner. Notification by the Permittee shall not excuse noncompliance or delay, and the Commissioner’s approval of any compliance dates proposed shall not excuse noncompliance or delay unless specifically so stated by the Commissioner in writing.

- H. Notice to Commissioner of changes. Within fifteen days of the date the Permittee becomes aware of a change in any information submitted to the Commissioner under this section of the permit, or that any such information was inaccurate or misleading or that any relevant information was omitted, the Permittee shall submit the correct or omitted information to the Commissioner.

This permit is hereby issued on

Jennifer L. Perry, P.E.
Bureau Chief
Materials Compliance and Assurance Division
Department of Energy and Environmental Protection

JP/PB

DATA TRACKING AND TECHNICAL FACT SHEET
NPDES Permit Issuance

APPLICANT	Connecticut Airport Authority/Bradley International Airport
PERMIT NO.	CT0030538
APPLICATION NO.	201000823
DATE APPLICATION RECEIVED	February 17, 2010
LOCATION ADDRESS	Schoephoester Road Bradley Airport Windsor Locks, CT 06096
FACILITY CONTACT	Bill Borowiec Office Phone: 860 929 6104 Email: bborowiec@ctairports.org
MAILING ADDRESS	Administrative Offices Terminal A – 3 rd floor Windsor Locks, CT 06096
DMR CONTACT	Bill Borowiec Office Phone: 860 929 6104 Email: bborowiec@ctairports.org
PERMIT TERM	5 Years
PERMIT CATEGORY	NPDES MINOR (MI)
SIC CODE(S)	4581
PERMIT TYPE	Issuance
OWNERSHIP	State
RECEIVING WATERBODIES	Seymour Hollow Brook, Stony Brook, Rainbow Brook, Degrayes Brook, Spencer Brook, Kettle Brook, Unnamed Tributary
DEEP STAFF ENGINEER	Patrick Bieger
TENTATIVE DECISION FACT SHEET DATE	2/23/2022

SOLVENT MANAGEMENT PLAN

Is the facility operating under an approved solvent management plan (SMP)? Yes No N/A

PERMIT FEES

Application Fee:

Filing Fee	Cost: \$1,300	Date Paid: 2/17/2010
Processing Fee	Cost: \$5,250	Date Paid: 6/19/2014

Annual Fee:

DISCHARGE CODE	WASTEWATER CATEGORY (per 22a-430-7)	DSN	ANNUAL FEE (per 22a-430-7 and CGS 22a-6f)
108000		101	\$2,912.50
108000n		102-115	N/A*
TOTAL			\$2,912.50

I. APPLICANT

The Department of Energy and Environmental Protection (DEEP or the Department) received an application (Application No. 201000823) from Connecticut Airport Authority/Bradley International Airport seeking issuance of a permit authorizing the discharge of stormwater from airport operations to Seymour Hollow Brook, Stony Brook, Rainbow Brook, Degrayes Brook, Spencer Brook, Kettle Brook, and an Unnamed Tributary in the towns of East Granby, Suffield, Windsor, and Windsor Locks. On October 7, 2010, the application was determined to be timely and administratively sufficient.

II. NATURE OF THE BUSINESS GENERATING THE DISCHARGE

The applicant seeks authorization for the following:

DSN	PROPOSED AVERAGE MONTHLY FLOW (gpd)	PROPOSED MAXIMUM DAILY FLOW (gpd)	PROPOSED WASTESTREAMS	TREATMENT TYPE	Outfall Consent Order	DISCHARGE TO
101	NA	NA	Stormwater runoff from rental car facilities, airport grasslands, and portions of Schoephoester Road on southeast side of the airport and groundwater	NA	01A	Seymour Hollow Brook
102	NA	NA	Stormwater runoff from rental car facilities, airport grasslands, and portions of Schoephoester Road on southeast side of the airport and ground water	NA	01B	Seymour Hollow Brook
103	NA	NA	Stormwater runoff from terminal gate, terminal ramp, freight ramp, aircraft deicing areas, and airport parking garage and lots in south central portion of the airport; and groundwater	NA	2	Seymour Hollow Brook
104	NA	NA	Stormwater runoff from terminal gate, terminal ramp, freight ramp, aircraft deicing areas, and airport parking garage and lots in south central portion of the airport; and groundwater	NA	3-1	Rainbow Brook
105	NA	NA	Stormwater runoff from terminal gate, terminal ramp, freight ramp, aircraft deicing areas, and airport parking garage and lots in south central portion of the airport; and groundwater	NA	3-2	Rainbow Book
106	NA	NA	Stormwater runoff from taxiway, route 20, part of deicing facility, and grassland, woodland, and wetland in southwestern portion of property.	NA	4	Rainbow Brook
107	NA	NA	Stormwater runoff from undeveloped grasslands and limited amounts of roadways, taxiways and runway areas; and groundwater	NA	5	Rainbow Brook
108	NA	NA	Stormwater runoff from undeveloped grasslands and limited amounts of roadways, taxiways and runway areas	NA	6	Unnamed stream
109	NA	NA	Stormwater runoff from undeveloped grasslands, signature flight services, and limited amounts of roadways, taxiways and runway areas	NA	9	Degrayes Brook
110	NA	NA	Runways Fire station, and the fire academy. Stormwater runoff from aircraft operation and maintenance, fueling, vehicle parking, vehicle operation and maintenance, pavement deicing, material handling and storage, and garbage and other waste storage and disposal.	NA	10	Unnamed Brook to Stony Brook
111	NA	NA	Stormwater runoff from ConnDOT Sand Building, runway areas, roadways, grasslands, and woodlands.	NA	11	Unnamed Brook to Stony Brook
112	NA	NA	Stormwater runoff from undeveloped grasslands and limited amounts of roadways, taxiways and runway areas; and groundwater	NA	12	Spencer Brook
113	NA	NA	Stormwater runoff from roads, runways, taxiways, ramps, parking lots and airport grasslands on the east and north sides of the airport; General Aviation facilities; Army National Guard Facility; UPS, and groundwater	NA	13-1	Spencer Brook
114	NA	NA	Stormwater runoff from undeveloped grasslands and limited amounts of roadways, taxiways and runway areas; and groundwater	NA	13-A	Spencer Brook
115	NA	NA	Stormwater runoff from roads, runways, taxiways, ramps and parking lots	NA	14	Kettle Brook

III. BACKGROUND/PERMIT HISTORY

Bradley International Airport is a business where airport operations are performed including commercial passenger, freight, mail and general aviation operations. The stormwater runoff is discharged to Rainbow Brook, Seymour Hollow Brook, Degrayes Brook, Stony Brook, Spencer Brook, Kettle Brook, and an unnamed tributary by way of DSN 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114 and 115 under this proposed permit.

Compliance/Enforcement

Is the Permittee subject to an ongoing enforcement action? Yes No

If yes, provide a brief explanation; include discussions of any issues relevant to the activities regulated under the permit.

The facility is currently subject to CT DEP Consent Order WC5257 (consent order), issued to the State of Connecticut Department of Transportation/Bradley International Airport (Bradley) on September 23, 1998. A certificate of compliance with the consent order will follow issuance of this permit.

Does the Permit contain a compliance schedule? Yes No

If yes, please check all that apply.

- Pollution Prevention Water Conservation Remediation
 Water Quality Requirement Treatment Requirement Other

Section 9 of the permit contains a requirement for Bradley to evaluate the efficiency of the current structural and management practices to collect aircraft deicing fluids, identify the limitations of the spent aircraft deicing fluid collection system and current available technologies, provide recommendations for implementation of short-term and long-term improvements, and identify priorities for improvements as new collection technologies, pollution prevention opportunities, and/or product substitutions become available and; include an analysis and discussion of the economic and social/ public service impacts of new technologies and products. Additionally, the compliance schedule requires Bradley to create a plan to sample PFAS that includes, the test method, laboratory used, and sampling protocols. Semi-annual PFAS sampling will be required after approval of this plan.

IV. THE ON-SITE WASTEWATER TREATMENT SYSTEM

Discharge of stormwater from activities associated with airport operations. No treatment is required prior to discharge; however, the implementation of stormwater management measures is required to prevent pollution. During frost and winter weather conditions, spent deicing fluid and contaminated stormwater at the terminal gate, remote ramp, freight ramp and remote deicing facility area are collected via both a mobile and a passive (segregated piping) collection system that is managed manually by Bradley personnel. The wastewater is then treated through filtration reverse osmosis, and using patented glycol concentrators (distillation). Recovered propylene glycol is shipped off-site for further processing and reuse, while the by-product of the reverse osmosis process is discharged to the MDC Windsor/Poquonock Water Pollution Control Facility in accordance with the General Permit for the Discharges of Wastewaters from Significant Industrial Users.

V. EFFLUENT GUIDELINES

Drainage basin Code:	Water Quality Standard:
4300 Farmington River Watershed	
4300-50 Rainbow Brook	A
4300-51 Seymour Hollow Brook	A
4300-00 Unnamed tributary	A
4100 Stony Brook Watershed	
4100-11 DeGrayes Brook	A
4100-13 Stony Brook	A
4100-14 Spencer Brook	A
4000 Connecticut River Watershed	
4000-09 Kettle Brook	A

This permit involves the discharge of stormwater from 2,360 acres to 15 stormwater outfalls into 7 different receiving streams. Given the complex situation and the variable and intermittent nature of stormwater runoff, no zone of influence has been assigned to the receiving streams and no water quality-based discharge limitations have been included in the permit. Instead, utilizing best professional judgment, the parameters and requirements for stormwater benchmark monitoring contained in DEEP's *General Permit for the Discharge of Stormwater Associated with Industrial Activity* (stormwater general permit) have been incorporated into this permit. In addition, monitoring for propylene glycol is required at outfalls that receive stormwater runoff from areas of the airport where deicing fluids are used.

The stormwater general permit was used as a reference for the requirements for the Stormwater Pollution Prevention Plan contained in Section 8 of this permit.

VI. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

BASIS FOR STANDARDS OR CONDITIONS		REGULATION	DISCHARGE POINT(S)
<input checked="" type="checkbox"/>	Federal Effluent Limitation Guideline ("ELG")	40 CFR 439	DSN 101, 103, 104, 105, 106, 110, 113
<input checked="" type="checkbox"/>	New Source Performance Standards ("NSPS")	40 CFR 439.11	DSN 101, 103, 104, 105, 106, 110, 113
<input checked="" type="checkbox"/>	Case-by-Case Determination using Best Professional Judgment ("BPJ") RCRA Sections 22a-430-4(1)(4)(D)(iii) and 22a-430-4(m)		DSN 101, 103, 104, 105, 106, 110, 113
<input checked="" type="checkbox"/>	Other (DEEP's General Permit for the Discharge of Stormwater Associated with Industrial Activity)		DSN 101, 103, 104, 105, 106, 110, 113

ENFORCEMENT AND MONITORING HISTORY

Consent Order WC5257 (consent order) was issued to the State of Connecticut Department of Transportation/Bradley International Airport (Bradley) on September 23, 1998, and serves as the authorization for Bradley to discharge stormwater associated with airport activities. The consent order required Bradley to implement a long-term plan to eliminate the discharge of stormwater contaminated with deicing chemicals from the airport facilities. The following general requirements of Consent Order WC5257 have been met: implementation of a Stormwater Pollution Prevention Plan; construction of spent deicing fluid collection and storage facilities at primary terminal gates and the Remote Deicing Facility (RDF); acquisition of additional mobile, deicing fluid collection vehicles, and implementation of comprehensive spent deicing fluid collection program. Information about the on-going implementation of these components of the consent order was included in Application #201000823 and will continue in effect with the issuance of this permit.

Attachment A of the consent order is a stormwater monitoring program with 9 discharge sampling locations to be monitored quarterly, and 8 receiving water monitoring locations to be sampled twice per year during winter storm deicing events. The stormwater monitoring locations and the receiving water monitoring locations are identified on a site map labeled, "Bradley International Airport-Stormwater Sampling, Sample Location Map, March 2003" by Loureiro Engineering Associates, Inc. Reports of each of these monitoring events have been submitted to DEEP and are included in the Department file information.

The table below identifies the stormwater outfalls that have been sampled in accordance with the consent order and the monitoring locations that are being maintained in this permit.

Outfall¹	Sampled for Consent Order	Monitoring (Required) Location in Permit	Discharge Serial Number in Permit
1A	YES	YES	101
1B	No	No	102
2	YES	YES	103
3-1	YES	YES	104
3-2	YES	YES	105
4	No	YES	106
5	No	No	107
6	No	No	108
7	YES	No	N/A*
8	YES	No	N/A*
9	YES	No	109
10	YES	YES	110
11	No	No	111
12	No	No	112
13-1	YES	YES	113
13A	No	No	114
14	No	No	115

¹ Reference: Bradley International Airport-Stormwater Sampling, Sample Location Map, March 2003, by Loureiro Engineering Associates, Inc.

***CHANGES TO MONITORING CONDITIONS**

Stormwater monitoring by Bradley at Outfall 7 and Outfall 8 is being discontinued to eliminate redundancy in stormwater permitting. The drainage areas for Outfalls 7 and 8 are occupied by the CT Air National Guard (East Granby) which maintains a stormwater general permit registration (GSI000934), stormwater pollution prevention plan and performs stormwater sampling.

Stormwater runoff monitoring at DSN 111 (Outfall 9), has been discontinued under this permit. Review of file data shows that all parameters of concern are significantly below the benchmarks of the general permit and concentrations of propylene glycol at this outfall are non-detectable.

A review of the available stormwater monitoring data required by the consent order and submitted as Attachment O in Application No. 201000823 shows the concentrations of the following parameters required by the consent order as typically not detected: total chromium, total nickel, total oil and grease, formaldehyde, and ethyl alcohol. Therefore, monitoring for these parameters will be discontinued with the issuance of this permit. Fecal coliform has also been removed from monitoring because none of the receiving streams are identified as impaired for bacteria in the 2012 Connecticut Integrated Water Quality Report. In the current Stormwater Pollution Prevention Plan, the permittee has identified several pigeon roosting areas on building roofs that may be contributing to high, seasonal fecal coliform levels.

Monitoring for biochemical oxygen demand (BOD₅) as required by the consent order has been eliminated but monitoring for chemical oxygen demand (COD) will be continued with this permit. According to EPA’s “Technical Development Document for the Final Effluent Limitations Guidelines and New Source Performance Standards for the Airport Deicing Category, April 2012”, COD is better suited than BOD₅ to serve as an indicator parameter to monitor the overall oxygen demand resulting from the discharge of glycol-based aircraft deicing fluids, because toxic additive compounds in aircraft deicing fluid may have a negative and variable effect on the cultures used in BOD₅ analysis.

File data indicates that concentrations of chloride during deicing events are frequently above Connecticut Water Quality criteria of 860 mg/l for acute exposure and are above background chloride levels (0-15 mg/l) during warm weather rain events. Monitoring has been added to each discharge in order to collect additional information regarding chloride concentrations in stormwater discharges from the airport. There is currently no benchmark concentration for chloride in the stormwater general permit.

Monitoring for vanadium, which is used in jet engines, has been added to DSN 104 and DSN 105 to determine if the airport is a possible source of vanadium that has been identified downstream in Rainbow Brook.

An annual monitoring requirement for Aquatic Toxicity has been added to each discharge location because the consent order required only limited Aquatic Toxicity testing on Outfall 2 (DSN 103) and Outfall 3 as part of the winter storm event monitoring described below.

Monitoring for Chlorides, which are applied to the roads around Bradley, are added to all DSNs to help gain data on the impacts these practices have on Bradley's stormwater discharge.

Monitoring for dioxin is included in each DSN of this permit to determine if the airport is a possible source of dioxin to the local streams.

Monitoring for Per- and Polyflorinated substances (PFAS) is included in each DSN of this permit. Each DSN contains an area of the facility where potential PFAS contamination may have occurred. Aqueous Film Forming Foam (AFFF) firefighting foam is a known source of PFAS and Bradley has used this compound in the past at the facility. Most sources of this firefighting foam have been removed from the airport, but it is still stored at the military bases in Bradley's site. Monitoring for PFAS is necessary to understand if there remains any contamination at Bradley's site for PFAS and what may be entering the environment.

PFAS does not current have an approved EPA test method for stormwater. To start collecting data so that the impact on PFAS can be determined Bradley will use EPA proposed test method 1633 until there is an approved EPA test method. PFAS sampling will not begin until 120 days after the issuance date of the permit as to allow Bradley to learn sampling protocols and find a lab that meets the requirements in the compliance schedule.

The quality of the stormwater discharging from the airport has been extensively documented through quarterly monitoring at nine (9) stormwater discharge locations since 1998. As there is little potential variation for change at these locations, this monitoring is being reduced to semi-annual.

HOURLY SAMPLING DURING WINTER STORM DEICING EVENTS

The permittee is currently required under the consent order to monitor two (2) stormwater outfalls and eight (8) receiving water monitoring locations on an hourly basis during two (2) winter season deicing events. The table below identifies the locations that have been sampled in accordance with the consent order and the monitoring locations that are being maintained in this permit:

Monitoring Location ¹	Receiving Stream	Sampled for Consent Order	Monitoring Location in Permit
Outfall 2 (a/k/a DSN 103)	Seymour Hollow Brook	YES	YES
Outfall 3	Rainbow Brook	YES	YES
T1	Seymour Hollow Brook	YES	YES
T2	Seymour Hollow Brook	YES	YES
T3	Rainbow Brook	YES	YES
T4	Rainbow Brook	YES	No
T5	Rainbow Brook	YES	YES
T6	Seymour Hollow Brook	YES	YES
E	Rainbow Brook	YES	No
F	Seymour Hollow Brook	YES	No
1A (a/k/a DSN 101)	Seymour Hollow	YES	YES

¹ Reference: Bradley International Airport-Stormwater Sampling, Sample Location Map, March 2003, by Loureiro Engineering Associates, Inc.

Receiving stream locations “E” and “F” identified for monitoring in the consent order are not being included in this permit. Application # 201000823 states that, following issuance of the consent order, it was determined that sampling location “E” is located in a swale that drains the Hamilton Sunstrand exit/entrance ramp to the Route 20 Connector and does not receive stormwater runoff from Bradley. Receiving stream location “F” is being eliminated as a redundant site. “F” is approximately 0.3 miles downstream from receiving stream monitoring location “T6”. Sampling results are similar for both locations.

Receiving Stream Monitoring Location T4 has been removed from the permit as construction at the facility has removed the location. This location has been replaced with Outfall location 3-2 as most stormwater will be captured through this outfall.

OTHER COMMENTS/Total Maximum Daily Load

Rainbow Brook and Seymour Hollow Brook are listed on CT DEEP’s 2012 305b list and a Total Maximum Daily Load Analysis (TMDL) for Seymour Hollow Brook and Rainbow Brook in Windsor and Windsor Locks, CT was adopted by the Connecticut Department of Environmental Protection on October 15, 1999. The major cause of impairment was identified as ethylene glycol and propylene glycol from the deicing activities at Bradley International Airport (Bradley). At the time the TMDL was approved, the Department’s expectation was that “the extensive plans by CT DOT to develop a centralized remote deicing facility and a separate collection system designed to collect all propylene glycol will provide reasonable assurance that no propylene glycol will enter Rainbow Brook or Seymour Hollow Brook”. Therefore, the TMDL portion allocated for propylene glycol and ethylene glycol is zero. The TMDL, which includes a copy of Consent Order WC5257, can be found on the DEEP website at the following link:

<https://portal.ct.gov/-/media/DEEP/water/tmdl/CTFinalTMDL/rainbowSeymourHollowBrook>

Bradley has prohibited the use of ethylene glycol-based deicing/anti-icing fluids since March 1, 1998, replaced UCAR, a urea and ethylene glycol based liquid runway deicer, with potassium acetate in 1997 and accomplished all the requirements of the consent order, including implementation of a comprehensive spent deicing fluid collection and treatment system. Although an existing point source, Bradley’s spent deicing fluid collection system is consistent with the collection requirements for new discharges subject to 40 CFR 449.11 New source performance standards (NSPS), published May 16, 2012. However, review of the available data shows that propylene glycol is still present in stormwater runoff from Bradley. Bradley’s discharges of stormwater runoff to Rainbow Brook and Seymour Hollow Brook are currently consistent with the TMDL as it states, “When fully implemented, control actions outlined in Consent Order WC5257 provide assurance that deicing activities at BIA will no longer impair Rainbow Brook and Seymour Hollow Brook.” Bradley has completed the actions outlined in Consent Order WC5257 and has followed the control actions required in the TMDL.

It appears, at this time, that there are no additional, feasible structural practices that can be implemented to meet the requirements of the TMDL. Bradley is already utilizing the technologies for the collection of aircraft deicing fluid identified by EPA in the “Technical Development Document for the Final Effluent Limitations Guidelines and New Source Performance Standards for the Airport Deicing Category” (technical development document).

Recognizing that the modeling assumptions, data, and other information used in development of the TMDL for Seymour Hollow Brook and Rainbow Brook have changed, the Department has initiated plans to revise the TMDL. The stormwater monitoring required by this permit will provide data that will contribute to the Department’s understanding of the impact of deicing activities, on the receiving waterbodies and will inform the Department’s efforts to revise the existing TMDL for Seymour Hollow Brook and Rainbow Brook. Additionally, the monitoring required by this permit will assist the Department in the collection of data regarding the impact of chlorides from the use of salt on roads and parking lots in and around the airport.

**NOTICE OF TENTATIVE DECISION INTENT TO ISSUE
A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
FOR THE FOLLOWING DISCHARGES INTO THE WATERS OF THE STATE OF
CONNECTICUT**

TENTATIVE DECISION

The Commissioner of Energy and Environmental Protection (“the Commissioner”) hereby gives notice of a tentative decision to issue a permit based on an application submitted by **Connecticut Airport Authority/Bradley Airport** (“the applicant”) under section 22a-430 of the Connecticut General Statutes (“CGS”) for a permit to discharge into the waters of the state.

In accordance with applicable federal and state law, the Commissioner has made a tentative decision that the discharge will not cause pollution of the waters of the state.

The Commissioner proposes to issue a permit for the discharge to Seymour Hollow Brook, Stoney Brook, Rainbow Brook, Degrayes Brook, Spencer Brook, Kettle Brook, and an Unnamed Tributary.

The proposed permit, if issued by the Commissioner, will require periodic monitoring to demonstrate that the discharge will not cause pollution.

APPLICANT'S PROPOSAL

Connecticut Airport Authority/Bradley Airport proposes to discharge stormwater from airport operations and deicing events to Seymour Hollow Brook, Stoney Brook, Rainbow Brook, Degrayes Brook, Spencer Brook, Kettle Brook, and an Unnamed Tributary in Windsor Locks.

The name and mailing address of the permit applicant are:
Connecticut Airport Authority/Bradley Airport
Administrative Offices Terminal A- 3rd floor
Windsor Locks, CT 06096

The proposed activity will take place at:
Schoephoester Road Bradley Airport
Windsor Locks, CT 06096

REGULATORY CONDITIONS

Type of Treatment

DSN 101-1, 102-1, 103-1, 104-1, 105-1, 106-1, 107-1, 108-1, 109-1, 110-1, 111-1, 112-1, 113-1, 114-1, and 115-1: No treatment required.

Compliance Schedule

This permit contains an enforceable compliance schedule which requires the applicant to certify annually that the Permittee and its tenants do not use airfield deicing products that contain urea, submit deicing fluid collection efficiency spreadsheets, submit a sampling plan for the analysis of PFAS, and submit a report that evaluates the efficiency of the current structural and management practices to collect deicing fluids, identifies the limitations of the spend deicing fluid collection system and current available technologies, provides recommendations for implementation of short-term and long term improvements, identifies priorities for improvements as new collection technologies, pollution prevention opportunities, and/or product substitutions become available, and includes an analysis and discussion of the economic and social/public service impacts of new technologies and products.

COMMISSIONER'S AUTHORITY

The Commissioner of Energy and Environmental Protection is authorized to approve or deny such permits pursuant to section 402(b) of the Federal Water Pollution Control Act, as amended, 33 USC 1251, *et. seq.* and section 22a-430 of the Connecticut General Statutes and the Water Discharge Permit Regulations (section 22a-430-3 and 4 of the Regulations of Connecticut State Agencies).

INFORMATION REQUESTS

The application has been assigned the following numbers by the Department of Energy and Environmental Protection. Please use these numbers when corresponding with this office regarding this application.

APPLICATION NO. 201000823 PERMIT ID NO. CT0030538

Interested persons may obtain copies of the application from:

Bill Borowiec
Connecticut Airport Authority/Bradley Airport
Administrative Offices Terminal A- 3rd floor
Windsor Locks, CT 06096

860 929-6104

The application is available for inspection by contacting Patrick Bieger at patrick.bieger@ct.gov at the Bureau of Materials Management and Compliance Assurance, Department of Energy and Environmental Protection, from 8:30 - 4:30, Monday through Friday.

Any interested person may request in writing that his or her name be put on a mailing list to receive notice of intent to issue any permit to discharge to the surface waters of the state. Such request may be for the entire state or any geographic area of the state and shall clearly state in writing the name and mailing address of the interested person and the area for which notices are requested.

PUBLIC COMMENT

Prior to making a final decision to approve or deny any application, the Commissioner shall consider written comments on the application from interested persons that are received within thirty (30) days of this public notice. Written comments should be emailed to Patrick Bieger at patrick.bieger@ct.gov. The Commissioner may hold a public hearing prior to approving or denying an application if in the Commissioner's discretion the public interest will be best served thereby, and shall hold a hearing upon receipt of a petition signed by at least twenty-five (25) persons. Notice of any public hearing shall be published at least thirty (30) days prior to the hearing.

Petitions for a hearing shall be submitted within thirty (30) days from the date of publication of this public notice and should include the application number noted above and also identify a contact person to receive notifications. Petitions should also identify a person who is authorized to engage in discussions regarding the application and, if resolution is reached, withdraw the petition. In order to facilitate the filing of requests for hearing during the COVID-19 emergency and consistent with the Department's Temporary Directive, the Office of Adjudications will accept electronically-filed petitions in addition to petitions submitted by mail. Petitions with required signatures may be filed by email to deep.adjudications@ct.gov or mailed to the DEEP Office of Adjudications, 79 Elm Street, Hartford, CT 06106. Within thirty (30) days of filing the petition, original petitions that were filed electronically must be also be mailed to the Office at the above-noted address. If the original petition exists only in electronic format or signatures were produced using a computer or typewriter, the petition must be submitted with a statement bearing the wet-ink signature of the petitioner that the petition is only available in that format and has been submitted to satisfy the requirement that an original petition be filed. If a hearing is held, timely notice of such hearing will be published in a newspaper of general circulation and posted on the DEEP website at www.ct.gov/deep. Additional information at www.ct.gov/deep/adjudications.

DEEP is an Affirmative Action/Equal Opportunity Employer that is committed to complying with the requirements of the Americans with Disabilities Act. Please contact Patrick.Bieger@ct.gov if you are seeking a communication aid or service, have limited proficiency in English, or require some other accommodation. If you wish to file an ADA or Title VI discrimination complaint, you may submit your complaint to DEEP Office of Diversity and Equity at 860-418-5910 or deep.accommodations@ct.gov. In order to facilitate efforts to provide an accommodation, please request all accommodations as soon as possible following notice of any agency hearing, meeting, program or event.



Oswald Inglese, Jr.
Director
Water Permitting and Enforcement Division
Bureau of Materials Management and Compliance Assurance

Dated: June 30, 2022