# NPDES PERMIT

#### issued to

**Location Address:** 

Tweed-New Haven Airport Authority Administration Bldg 155 Burr Street New Haven, Connecticut 06512 155 Burr Street New Haven, CT 06512

**Facility ID: 093-292 Permit ID:** CT0030457

Receiving Stream: Morris Creek Permit Expires: April 16, 2013

#### **SECTION 1: GENERAL PROVISIONS**

- (A) This permit is issued 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, 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 an N.P.D.E.S. permit program.
- (B) Tweed-New Haven Airport Authority, ("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 subsection (i)(2), (i)(3), (j)(1), (j)(6), (j)(8), (j)(9)(C), (j)(10)(C), (j)(11)(C), (D), (E), and (F), (k)(3) and (4) and (1)(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
- (1) 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
- (i) Public Hearings
- (k) Submission of Plans and Specifications. Approval.
- (1) 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, seeking penalties, injunctions and/or forfeitures pursuant to applicable sections of the CGS and RCSA.
- (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 Environmental Protection ("Commissioner"). To request such approval, the Permittee and proposed transferee shall register such proposed transfer with the Commissioner, at least 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) No provision of this permit and no action or inaction by the Commissioner shall be construed to constitute an assurance by the Commissioner that the actions taken by the Permittee pursuant to this permit will result in compliance or prevent or abate pollution.
- (G) Nothing in this permit shall relieve the Permittee of other obligations under applicable federal, state and local
- (H) An annual fee shall be paid for each year this permit is in effect as set forth in section 22a-430-7 of the Regulations of Connecticut State Agencies.
- (I) This permitted discharge is consistent with the applicable goals and policies of the Connecticut Coastal

Management Act (section 22a-92 of the Connecticut General Statutes).

#### **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 section 22a-430-3(a) and 22a-430-6 of the RCSA, except for "No Observable Acute Effect Level (NOAEL)" which is redefined below.
- (B) In addition to the above, the following definitions shall apply to this permit:

"Best management practices" means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. BMPs include, without limitation, treatment practices, operating procedures, and practices to control runoff, spillage or leaks, sludge disposal or waste disposal, or drainage from raw material storage.

"Construction activities" means activities including but not limited to clearing and grubbing, grading, excavation and dewatering.

"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 discharged during an operating day.

"Dewatering wastewater" means wastewater generated from the lowering of the groundwater table, the pumping of accumulated stormwater from an excavation, the pumping of surface water from a cofferdam, or the pumping of other surface water that has been diverted into the construction site.

"Guidelines" means the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended, or as may be amended, established pursuant to section 22a-328 of the Connecticut General Statutes.

"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 greater than 50% survival of test organisms in 100% (undiluted) effluent and 90% or greater survival of test organisms at the CTC.

"Stormwater" means waters consisting of precipitation runoff.

# **SECTION 3: COMMISSIONER'S DECISION**

- (A) The Commissioner has issued a final determination and found that the proposed erosion and sediment control systems to treat the discharges will protect the waters of the state from pollution. The Commissioner's decision is based on Application No. 200600317 for permit issuance received on February 10, 2006 and the administrative record established in the processing of that application.
- (B) The Commissioner hereby authorizes the Permittee to discharge in accordance with the provisions of this permit, the above referenced application, and all approvals issued by the Commissioner or the Commissioner's authorized agent for the discharges and/or activities authorized by, or associated with, 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 which 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: GENERAL EFFLUENT LIMITATIONS**

- (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 83°F or, in any case, raise the temperature of the receiving stream by more than 4°F. The incremental temperature increase in coastal and marine waters is limited to 1.5°F during the period including July, August and September.

#### SECTION 5: SPECIFIC EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

(A) The discharges shall not exceed and shall otherwise conform to the specific terms and conditions listed below. The discharges are restricted by, and shall be monitored in accordance with, the table(s) below:

<sup>&</sup>quot;ug/l" means micrograms per liter.

				Гable A						
Discharge Serial Number: 101-1 and 102-1 Monitoring Location: 1										
Wastewater Description: Dewatering wastewaters					ay 20 Safety Area	at the north end of	site			
Monitoring Location Description: Discharge from	dewaterin	g sedimentation	basin (sample	from either basin) 5						
	UNITS	FLOW/TIME	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			
PARAMETER	UNIIS	Average	Maximum	Sample/Reporting	Sample Type or	Instantaneous	Sample/	Sample Type	Minimum Level	
		Monthly	Daily Limit	Frequency <sup>2</sup>	Measurement to	limit or required	Reporting	or	Test <sup>3</sup>	
		Limit			be reported	range	Frequency	measurement		
								to be reported		
Aquatic Toxicity <sup>4</sup> , Daphnia pulex NOAEL=100	%	NA	NA	NR	NA	≥90% Survival	Monthly	Grab		
Aquatic Toxicity <sup>4</sup> , Pimephales promelas NOAEL=100	%	NA	NA	NR	NA	≥90% Survival	Monthly	Grab		
Aquatic Toxicity <sup>4</sup> , Mysidopsis bahia NOAEL=100	%	NA	NA	NR	NA	≥90% Survival	Monthly	Grab		
Aquatic Toxicity <sup>4</sup> , Cyprinodon variegatus NOAEL=100	%	NA	NA	NR	NA	≥90% Survival	Monthly	Grab		
Aluminum, Total	mg/l	NA	NA	NR	NA		Monthly	Grab	X	
Arsenic, Total	mg/l	NA	NA	NR	NA		Monthly	Grab	X	
Biochemical Oxygen Demand (BOD)	mg/l	NA	NA	NR	NA		Monthly	Grab		
Copper, Dissolved	mg/l	NA	NA	NR	NA		Monthly	Grab	X	
Copper, Total	mg/l	NA	NA	NR	NA		Monthly	Grab	X	
Flow, Total <sup>1</sup>	gpd	NA		Monthly	Daily Flow	NA	NR	NA		
Iron, Total	mg/l	NA	NA	NR	NA		Monthly	Grab		
Lead, Total	mg/l	NA	NA	NR	NA		Monthly	Grab	X	
Nickel, Total	mg/l	NA	NA	NR	NA		Monthly	Grab	X	

NR

NR

NR

NR

NR

NR

NA

NA

NA

NA

NA

NA

10.0

30.0

-----

----

6.0 - 9.0

Monthly

Monthly

Monthly

Monthly

Monthly

Monthly

Grab

Grab

Grab

Grab

Grab

Grab

X

X

X

Oil and Grease, Total

Total Suspended Solids

Turbidity

Zinc, Total

Polyaromatic Hydrocarbons (PAHs)

NA

mg/l

mg/l

S.U.

mg/l

NTU

mg/l

# Footnotes:

- <sup>1</sup> For this parameter the Permittee shall maintain at the facility a record of the total flow for each day of discharge from both discharge locations. The Permittee shall report on the DMR the Maximum Daily Flow for the month for the sampled location.
- <sup>2</sup> 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'.
- <sup>3</sup> Minimum Level Test refers to Section 6(A) of this permit.
- <sup>4</sup> The results of the Toxicity Tests shall be recorded in % on the Discharge Monitoring Report (DMR). See Section 6(B) of this permit for Toxicity Test information. For the aquatic toxicity test species that was not utilized during the Toxicity Test, the Permittee shall write "Monitoring Conditional" on the DMR.
- <sup>5</sup> The Permittee shall identify on the DMR which discharge was sampled. For the location that was not sampled, the Permittee shall write "Monitoring Conditional" on the DMR.

## Remarks:

			,	Table B					
Discharge Serial Number: 103-1 and 104-1					Monite	oring Location: 1			
Wastewater Description: Dewatering wastewaters fr	rom excav	ations and st	ockpiles during c	onstruction of Taxiv	ay B improvement	s at east side of site	;		
Monitoring Location Description: Discharge from d	ewatering	sedimentatio	n basin (sample	from either basin) <sup>5</sup>					
	* IN IMPO	FLOW/TIM	IE BASED MON	ITORING		INSTANTANEO	Minimum		
PARAMETER	UNITS	Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency <sup>2</sup>	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample/ Reporting Frequency	Sample Type or measurement to be reported	Minimum Level Test <sup>3</sup>
Aquatic Toxicity <sup>4</sup> , Daphnia pulex NOAEL=100	%	NA	NA	NR	NA	≥90% Survival	Monthly	Grab	
Aquatic Toxicity <sup>4</sup> , Pimephales promelas NOAEL=100	%	NA	NA	NR	NA	≥90% Survival	Monthly	Grab	
Aquatic Toxicity <sup>4</sup> , Mysidopsis bahia NOAEL=100	%	NA	NA	NR	NA	≥90% Survival	Monthly	Grab	
Aquatic Toxicity <sup>4</sup> , Cyprinodon variegatus NOAEL=100	%	NA	NA	NR	NA	≥90% Survival	Monthly	Grab	
Aluminum, Total	mg/l	NA	NA	NR	NA		Monthly	Grab	X
Arsenic, Total	mg/l	NA	NA	NR	NA		Monthly	Grab	X
Biochemical Oxygen Demand (BOD)	mg/l	NA	NA	NR	NA		Monthly	Grab	
Copper, Dissolved	mg/l	NA	NA	NR	NA		Monthly	Grab	X
Copper, Total	mg/l	NA	NA	NR	NA		Monthly	Grab	X
Flow, Total <sup>1</sup>	gpd	NA		Monthly	Daily Flow	NA	NR	NA	
Iron, Total	mg/l	NA	NA	NR	NA		Monthly	Grab	
Lead, Total	mg/l	NA	NA	NR	NA		Monthly	Grab	X
Nickel, Total	mg/l	NA	NA	NR	NA		Monthly	Grab	X
Oil and Grease, Total	mg/l	NA	NA	NR	NA	10.0	Monthly	Grab	
Polyaromatic Hydrocarbons (PAHs)	mg/l	NA	NA	NR	NA		Monthly	Grab	X
pH	S.U.	NA	NA	NR	NA	6.0 - 9.0	Monthly	Grab	
Total Suspended Solids	mg/l	NA	NA	NR	NA	30.0	Monthly	Grab	
Turbidity	NTU	NA	NA	NR	NA		Monthly	Grab	X
Zinc, Total	mg/l	NA	NA	NR	NA		Monthly	Grab	X

# Footnotes:

- <sup>1</sup> For this parameter the Permittee shall maintain at the facility a record of the total flow for each day of discharge from both discharge locations. The Permittee shall report on the DMR the Maximum Daily Flow for the month for the sampled location.
- <sup>2</sup> 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'.
- <sup>3</sup> Minimum Level Test refers to Section 6(A) of this permit.
- <sup>4</sup> The results of the Toxicity Tests shall be recorded in % on the Discharge Monitoring Report. See Section 6(B) of this permit for Toxicity Test information. For the aquatic toxicity test species that was <u>not</u> utilized during the Toxicity Test, the Permittee shall write "Monitoring Conditional" on the DMR.
- <sup>5</sup> The Permittee shall identify on the DMR which discharge was sampled. For the location that was not sampled, the Permittee shall write "Monitoring Conditional" on the DMR.

#### **Remarks:**

			r	Γable C					
Discharge Serial Number: 105-1 through 109-1  Wastewater Description: Dewatering wastewaters from excavations and stockpiles during construction of Runway 2 Safety Area at the south end of site									
Monitoring Location Description: Discharge from dev						t the south tha of si	ite		
			E BASED MO	•		INSTANTANEO	US MONITOR	RING	Minimum Level Test <sup>3</sup>
PARAMETER	UNITS	Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency <sup>2</sup>	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample/ Reporting Frequency	Sample Type or measurement to be reported	
Aquatic Toxicity <sup>4</sup> , Daphnia pulex NOAEL=100	%	NA	NA	NR	NA	≥90% Survival	Monthly	Grab	
Aquatic Toxicity <sup>4</sup> , Pimephales promelas NOAEL=100	%	NA	NA	NR	NA	≥90% Survival	Monthly	Grab	
Aquatic Toxicity <sup>4</sup> , Mysidopsis bahia NOAEL=100	%	NA	NA	NR	NA	≥90% Survival	Monthly	Grab	
Aquatic Toxicity <sup>4</sup> , Cyprinodon variegatus NOAEL=100	%	NA	NA	NR	NA	≥90% Survival	Monthly	Grab	
Aluminum, Total	mg/l	NA	NA	NR	NA		Monthly	Grab	X
Arsenic, Total	mg/l	NA	NA	NR	NA		Monthly	Grab	X
Biochemical Oxygen Demand (BOD)	mg/l	NA	NA	NR	NA		Monthly	Grab	
Copper, Dissolved	mg/l	NA	NA	NR	NA		Monthly	Grab	X
Copper, Total	mg/l	NA	NA	NR	NA		Monthly	Grab	X
Flow, Total <sup>1</sup>	gpd	NA		Monthly	Daily Flow	NA	NR	NA	
Iron, Total	mg/l	NA	NA	NR	NA		Monthly	Grab	
Lead, Total	mg/l	NA	NA	NR	NA		Monthly	Grab	X
Nickel, Total	mg/l	NA	NA	NR	NA		Monthly	Grab	X
Oil and Grease, Total	mg/l	NA	NA	NR	NA	10.0	Monthly	Grab	
Polyaromatic Hydrocarbons (PAHs)	mg/l	NA	NA	NR	NA		Monthly	Grab	X
pH	S.U.	NA	NA	NR	NA	6.0 - 9.0	Monthly	Grab	
Total Suspended Solids	mg/l	NA	NA	NR	NA	30.0	Monthly	Grab	
Turbidity	NTU	NA	NA	NR	NA		Monthly	Grab	X
Zinc, Total	mg/l	NA	NA	NR	NA		Monthly	Grab	X

# Footnotes:

- <sup>1</sup> For this parameter the Permittee shall maintain at the facility a record of the total flow for each day of discharge from all discharge locations. The Permittee shall report on the DMR the Maximum Daily Flow for the month for the sampled location.
- <sup>2</sup> 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'.
- <sup>3</sup> Minimum Level Test refers to Section 6(A) of this permit.
- <sup>4</sup> The results of the Toxicity Tests shall be recorded in % on the Discharge Monitoring Report. See Section 6(B) of this permit for Toxicity Test information. For the aquatic toxicity test species that was <u>not</u> utilized during the Toxicity Test, the Permittee shall write "Monitoring Conditional" on the DMR.
- <sup>5</sup> The Permittee shall identify on the DMR which discharge was sampled. For the location(s) that was not sampled, the Permittee shall write "Monitoring Conditional" on the DMR.

#### Remarks:

# Table D

Discharge Serial Number: 110-1 Monitoring Location: Not applicable

Wastewater Description: Dewatering wastewaters from tide gate reconstruction cofferdam

Monitoring Location Description: no sampling required

Remarks:

The discharge from the dewatering basin shall be inspected on a <u>daily</u> basis while the discharge is occurring and an inspection log maintained in accordance with Section 7(F) of this permit.

			,	Гable Е						
Discharge Serial Number: 111-1					Monit	oring Location: 1				
Wastewater Description: Dewatering wastewaters	from soil	stockpiles at the	secondary soil	dewatering site at th	e south end of site					
Monitoring Location Description: Discharge from	dewaterin	g sedimentation	basin							
	TIMITE	FLOW/TIME	BASED MONI	TORING		INSTANTANEO	INSTANTANEOUS MONITORING			
PARAMETER	UNITS	Average Monthly Limit	Maximum Daily Limit	Sample/Reporting Frequency <sup>2</sup>	Sample Type or Measurement to be reported	Instantaneous limit or required range	Sample/ Reporting Frequency	Sample Type or measurement to be reported	Minimum Level Test <sup>3</sup>	
Aquatic Toxicity <sup>4</sup> , Daphnia pulex NOAEL=100	%	NA	NA	NR	NA	≥90% Survival	Monthly	Grab		
Aquatic Toxicity <sup>4</sup> , Pimephales promelas NOAEL=100	%	NA	NA	NR	NA	≥90% Survival	Monthly	Grab		
Aquatic Toxicity <sup>4</sup> , Mysidopsis bahia NOAEL=100	%	NA	NA	NR	NA	≥90% Survival	Monthly	Grab		
Aquatic Toxicity <sup>4</sup> , Cyprinodon variegatus NOAEL=100	%	NA	NA	NR	NA	≥90% Survival	Monthly	Grab		
Aluminum, Total	mg/l	NA	NA	NR	NA		Monthly	Grab	X	
Arsenic, Total	mg/l	NA	NA	NR	NA		Monthly	Grab	X	
Biochemical Oxygen Demand (BOD)	mg/l	NA	NA	NR	NA		Monthly	Grab		
Copper, Dissolved	mg/l	NA	NA	NR	NA		Monthly	Grab	X	
Copper, Total	mg/l	NA	NA	NR	NA		Monthly	Grab	X	
Flow, Total <sup>1</sup>	gpd	NA		Monthly	Daily Flow	NA	NR	NA		
Iron, Total	mg/l	NA	NA	NR	NA		Monthly	Grab		
Lead, Total	mg/l	NA	NA	NR	NA		Monthly	Grab	X	
Nickel, Total	mg/l	NA	NA	NR	NA		Monthly	Grab	X	
Oil and Grease, Total	mg/l	NA	NA	NR	NA	10.0	Monthly	Grab		
Polyaromatic Hydrocarbons (PAHs)	mg/l	NA	NA	NR	NA		Monthly	Grab	X	
pН	S.U.	NA	NA	NR	NA	6.0 - 9.0	Monthly	Grab		
Total Suspended Solids	mg/l	NA	NA	NR	NA	30.0	Monthly	Grab		
Turbidity	NTU	NA	NA	NR	NA		Monthly	Grab	X	
Zinc, Total	mg/l	NA	NA	NR	NA		Monthly	Grab	X	

## Footnotes:

#### Remarks:

<sup>&</sup>lt;sup>1</sup> For this parameter the Permittee shall maintain at the facility a record of the total flow for each day of discharge and shall report the Maximum Daily Flow for each month.

<sup>&</sup>lt;sup>2</sup> 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'.

<sup>&</sup>lt;sup>3</sup> Minimum Level Test refers to Section 6(A) of this permit.

<sup>&</sup>lt;sup>4</sup> The results of the Toxicity Tests shall be recorded in % on the Discharge Monitoring Report. See Section 6(B) of this permit for Toxicity Test information. For the aquatic toxicity test species that was <u>not</u> utilized during the Toxicity Test, the Permittee shall write "Monitoring Conditional" on the DMR.

Table	e F
Discharge Serial Number: 112-1	Monitoring Location: Not applicable
Wastewater Description: Stormwater runoff from construction areas	
Monitoring Location Description: No sampling required	

# Remarks:

Disturbed areas and erosion and sediment controls shall be inspected on a weekly basis and an inspection log maintained on site in accordance with the requirements of Section 7(F) of this permit.

- (1) All samples shall be comprised of only the wastewater described in each table. Samples shall be collected prior to combination with receiving waters or wastewater of any other type, and after all approved treatment units, if applicable. All samples collected shall be representative of the discharge during standard operating conditions.
- (2) 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 Environmental Protection personnel, the Permittee, or other parties.
- (3) The limits imposed on the discharges listed in this permit take effect on the issuance date of this permit, hence any sample taken after this date which, upon analysis, shows an exceedance of permit limits will be considered non-compliance.

The monitoring requirements begin on the date of issuance of this permit if the issuance date is on or before the 12th day of a month. For permits issued on or after the 13th day of a month, monitoring requirements begin the 1st day of the following month.

# SECTION 6: SAMPLE COLLECTION, HANDLING AND ANALYTICAL TECHNIQUES

#### (A) Chemical Analysis

- (1) Chemical analyses to determine compliance with effluent limits and conditions established in this permit shall be performed using the methods approved pursuant to 40 CFR 136 unless an alternative method has been approved in writing pursuant to 40 CFR 136.4 or as provided in section 22a-430-3(j)(7) of the RCSA. 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 5 Table(s) A, B, C, and E. 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>	Minimum Level
Aluminum	10.0 ug/L
Arsenic	5.0 ug/L
Cadmium	0.5 ug/L
Chlorine, total residual	20.0 ug/L
Copper	5.0 ug/L
Lead	5.0 ug/L
Nickel	5.0 ug/L
Polynuclear Aromatic Hydrocarbons (PAHs)	10.0 ug/L
Zinc	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.
- (7) The analytical method used to determine the concentration of polynuclear aromatic hydrocarbons (PAHs) shall be EPA Method 625.

#### (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) 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 5 Table(s) A, B, C, and E 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. Salinity shall be measured in each test concentration at the beginning of the test 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) For freshwater discharges with a salinity of less than or equal to 2 parts per thousand, monitoring for Aquatic Toxicity to determine compliance with the permit limit on Aquatic Toxicity (invertebrate) above shall be conducted for 48-hours utilizing neonatal <u>Daphnia pulex</u> (less than 24-hours old).
- (3) For freshwater discharges with a salinity of less than or equal to 2 parts per thousand, monitoring for Aquatic Toxicity to determine compliance with the permit limit on Aquatic Toxicity (vertebrate) above shall be conducted for 48-hours utilizing larval <u>Pimephales promelas</u> (1-14 days old with no more than 24-hours range in age).
- (4) For saline discharges with a salinity of greater than 2 parts per thousand, monitoring for Aquatic Toxicity to determine compliance with the permit limit on Aquatic Toxicity (invertebrate) above shall be conducted for 48-hours utilizing juvenile <u>Mysidopsis bahia</u> (1-5 days old with no more than 24-hours range in age). See paragraph (6)(e) below.
- (5) For saline discharges with a salinity of greater than 2 parts per thousand, monitoring for Aquatic Toxicity to determine compliance with the permit limit on Aquatic Toxicity (vertebrate) above shall be conducted for 48-hours utilizing larval <u>Cyprinodon variegatus</u> (1-14 days old with no more than 24-hours range in age). See paragraph (6)(e) below.
- (6) 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) For Aquatic Toxicity Limits 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 of 100%, as prescribed in section 22a-430-3(j)(7)(A)(i) of the Regulations of Connecticut State Agencies.
  - (b) Organisms shall not be fed during the tests, except Mysidopsis bahia which must be fed.
  - (c) Copper nitrate shall be used as the reference toxicant in tests with freshwater organisms.
  - (d) For freshwater testing, 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.
  - (e) Aquatic toxicity tests with saltwater organisms shall be conducted at the salinity of the effluent <u>but not less than 5 parts per thousand</u>. The salinity of the effluent shall be adjusted as necessary, in accordance with the following:
    - (i) Salinity adjustment that may be required in tests with saltwater organisms shall utilize the minimum amount of synthetic salts to achieve the required salinity.
    - (ii) Synthetic seawater for use as dilution water or controls shall be prepared with deionized water and artificial sea salts as described in EPA/821-R-02-012. The salinity of the dilution water or controls shall be equal to the salinity of the effluent but not less than 5 parts per thousand.
    - (iii) If the salinity of the effluent is more than 5 parts per thousand higher or lower than the culture water used for rearing the organisms, a second set of controls matching the salinity of the culture water shall be added to the test series. Test validity shall be determined using the controls adjusted to match the effluent salinity.

- (iv) Sodium lauryl sulfate or sodium dodecyl sulfate shall be used as the reference toxicant.
- (7) Compliance with limits on Aquatic Toxicity shall be determined as follows:
  - (a) 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 90% or greater survival in the undiluted effluent.

#### SECTION 7: STORMWATER POLLUTION CONTROL PLAN

- (A) The Permittee shall implement and maintain compliance with the Stormwater Pollution Control Plan ("Plan") prepared for the site as described in the Design Drawing Set entitled, "Tweed New Haven Airport Authority Runway Safety and Taxiway Improvements, Wetland Mitigation and Tide Gate Improvements" dated June 2005 and received January 10, 2006, and any amendments implemented in accordance with paragraphs (B) and (C) of this section. In addition, the Permittee shall comply with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control ("Guidelines"), as amended, and the provisions of this section.
- (B) The Commissioner may notify the Permittee at any time that the Plan and/or the site do not meet one or more of the requirements of this permit. Within 7 days of such notice, or such other time as the Commissioner may allow, the Permittee shall make the required changes to the Plan and perform all actions required by such revised Plan. Within 15 days of such notice, or such other time as the Commissioner may allow, the Permittee shall submit to the Commissioner a written certification that the requested changes have been made and implemented and such other information as the Commissioner requires.
- (C) The Permittee shall amend the Plan if the actions required by the Plan fail to prevent pollution or whenever there is a change in contractors or subcontractors at the site, or a change in design, construction, operation, or maintenance at the site which has the potential for the discharge of pollutants to the waters of the state and which has not otherwise been addressed in the Plan. Within 7 days of amending the Plan in accordance with this section, the Permittee shall submit to the Commissioner a description of the changes, an explanation of the need for the changes, and a schedule for implementation.
- (D) In no event shall failure to complete, maintain or update a Plan relieve the Permittee of responsibility to implement any actions required to protect the waters of the state and to comply with all conditions of this permit.
- (E) The Plan shall clearly identify each contractor and subcontractor that will perform actions on the site which may reasonably be expected to cause or have the potential to cause pollution of the waters of the State, and shall include a copy of the certification statement shown below signed by each such contractor and subcontractor. All certifications shall be included in the Plan.

# **Certification Statement**

"I certify under penalty of law that I have read and understand the terms and conditions of this permit. I understand that as a contractor or subcontractor at the site, I am authorized by this permit, and must comply with the terms and conditions of this permit, including but not limited to the requirements of the Plan prepared for the site."

The certification shall include the name and title of the person providing the signature; the name, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification is made.

- (F) The Permittee shall inspect disturbed areas of the construction activity that have not been finally stabilized, structural control measures, and locations where vehicles enter or exit the site at least once every seven calendar days and within 24 hours of the end of a storm that is 0.5 inches or greater. Where sites have been temporarily or finally stabilized, such inspection shall be conducted at least once every month for three months.
  - (1) Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the waters of the State. Erosion and sediment control measures shall be observed to ensure that they are operating correctly. Where discharge locations or points are assessable, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Locations where vehicles enter or exit the site shall be inspected for evidence of off-site sediment tracking.
  - (2) Based on the results of the inspection, the description of potential sources and pollution prevention measures identified in the Plan shall be revised as appropriate as soon as practicable after such inspection. Such modifications shall provide for timely implementation of any changes to the site within 24 hours and implementation of any changes to the Plan within 3 calendar days following the inspection. The Plan shall be revised and the site controls updated in accordance with sound engineering practices, the Guidelines, and paragraphs (B) and (C) of this section.
  - (3) A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the Plan, and actions taken shall be made and retained as part of the Plan for at least three years after the date of inspection.
- (G) The Permittee shall retain an updated copy of the Plan and all inspection reports required by this section at the construction site from the date construction is initiated at the site until the date construction at the site is completed
- (H) Upon completion of construction, the Plan shall be kept as an appendix to the Stormwater Pollution Prevention Plan for the Tweed-New Haven Airport that has been prepared and maintained in accordance with Section 5(b) of the DEP General Permit for the Discharge of Stormwater Associated with Industrial Activity.
- (I) Erosion and Sediment Controls

Erosion and sediment controls shall be installed and maintained in accordance with the Guidelines and the requirements of this permit. Use of controls to comply with this permit that are not included in the Guidelines must be approved by the Commissioner or the Commissioner's designated agent. The Plan and any amendments to the Plan, shall comply with the following:

### (1) Stabilization Practices

Existing vegetation shall be preserved where attainable and disturbed portions of the site must be stabilized. Stabilization practices may include but not be limited to: silt fences, temporary seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other vegetative and non-structural measures as may be identified by the guidelines. Where construction activities have permanently ceased or have temporarily been suspended for more than seven days, or when final grades are reached in any portion of the site, stabilization practices shall be implemented within three days. Areas that will remain disturbed but inactive for at least thirty days shall receive temporary seeding in accordance

with the Guidelines. Areas that will remain disturbed beyond the planting season, shall receive long-term, non-vegetative stabilization sufficient to protect the site through the winter. In all cases, stabilization measures shall be implemented as soon as possible in accordance with the Guidelines. Areas to be graded with slopes steeper than 3:1 (horizontal:vertical) and higher than 15 feet shall be graded with appropriate slope benches in accordance with the Guidelines.

#### (2) Structural Practices

Structural practices shall be used to divert flows away from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from the site. Such practices include but may not be limited to earth dikes (diversions), drainage swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, outlet protection, reinforced soil retained systems, gabions, and temporary or permanent sediment basins and chambers. Unless otherwise specifically approved in writing, structural measures shall be installed on upland soils.

At a minimum, for discharge points that serve an area with between 2 and 5 disturbed acres at one time, a sediment basin, sediment trap, or other control as may be defined in the Guidelines for such drainage area, shall be designed in accordance with the Guidelines and installed. All sediment traps or basins shall provide a minimum of 134 cubic yards of water storage per acre drained and shall be maintained until final stabilization of the contributing area. This requirement shall not apply to flows from off-site areas and flows from the site that are either undisturbed or have undergone final stabilization where such flows are diverted around the sediment trap or basin. Any exceptions must be approved in writing by the commissioner.

For discharge points that serve an area with more than 5 disturbed acres at one time, a sediment basin shall be designed in accordance with the Guidelines and installed, which basin shall provide a minimum of 134 cubic yards of water storage per acre drained and which basin shall be maintained until final stabilization of the contributing area. This requirement shall not apply to flows from off-site areas and flows from the site that are either undisturbed or have undergone final stabilization where such flows are diverted around the sediment basin. Outlet structures from sedimentation basins shall not encroach upon a wetland. Any exceptions must be approved in writing by the commissioner.

#### (3) Maintenance

All erosion and sediment control measures, including vegetation and other protective measures shall be maintained in good and effective operating condition in accordance with the Guidelines and the conditions of this permit.

#### (4) Other controls

- (a) Best management practices shall be performed at the site to ensure that no litter, debris, building materials, or similar materials are discharged to waters of the State.
- (b) Off-site vehicle tracking of sediments and the generation of dust shall be minimized.
- (c) All post-construction stormwater structures shall be cleaned of construction sediment and any remaining silt fence shall be removed at the completion of the project when the site has been stabilized.

#### **SECTION 8: 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. 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 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, including measured daily flow and hours of operation for the day of sample collection, 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 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.

# SECTION 9: 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 below in Section 10(B). In addition to the reporting requirements described in Section 10(B), the results shall be reported to the Bureau of Materials Management and Compliance Assurance (Attn: DMR Processing), at the address listed above, within 30 days of the exceedance or invalid test. Results of all tests, whether valid or invalid, shall be reported.
- (B) The Permittee shall notify the Bureau of Materials Management and Compliance Assurance, Water Permitting and Enforcement Division, within 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 10: COMPLIANCE SCHEDULE**

- (A) On or before 30 days after the initiation of a discharge from the areas identified in Table A, Table B, Table C, and Table E, the Permittee shall collect and analyze a grab sample of the discharge from each area. For each of the discharge areas, the Permittee shall then submit a complete Attachment O (Part B discharge analysis of the permit application), including Table 5 Biological Testing Data, for the Commissioner's review and written approval. The Permittee must analyze for all substances listed in Table 1 and for those substances known or suspected present in Tables 2, 3 and 4 of the permit application.
- (B) If the results of any valid pass/fail aquatic toxicity test indicate less than 90% survival in the undiluted effluent, or that the aquatic toxicity test was invalid for reasons other than control mortality, the sampled discharge shall be stopped. On or before 14 days after stopping a discharge for these reasons, the Permittee shall submit the results of the aquatic toxicity test and the associated chemical analyses, and a report for the review and written approval of the Commissioner explaining why the toxicity test was invalid or identifying the source of the toxicity with a proposal to treat the discharge to eliminate the toxicity. Upon the approval of the Commissioner and the installation/implementation of any necessary additional treatment, the Permittee may resume the discharge that was stopped. Within 7 days of reinitiating the discharge, a sample of the effluent shall be collected and tested for aquatic toxicity and the associated chemical parameters, as described in Section 5 and Section 6 of this permit, and the results reported to the Bureau of Water Protection and Land Reuse (Attn: Aquatic Toxicity).

Within 14 days of identifying an invalid Aquatic Toxicity Test because of control mortality, another sample of the effluent shall be collected and tested for Aquatic Toxicity and the associated chemical parameters, as described in Section 5 and Section 6 of this permit, and the results reported to the Bureau of Water Protection and Land Reuse (Attn: Aquatic Toxicity). Results of all tests, whether valid or invalid, shall be reported.

- (C) If the results of any sample analysis show a total copper concentration of greater than 15 parts per billion (ug/l), the sampled discharged shall be stopped, and the Permittee shall submit for the review and written approval of the Commissioner a proposal to treat the discharge to reduce the copper concentration below the trigger limit. Such proposal shall be submitted within 14 days of the Permittee becoming aware of the results of the sample analysis.
- (D) 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.
- (E) <u>Dates.</u> 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.

- (F) 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 and written approval 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.
- (G) <u>Notice to Commissioner of changes</u>. 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.
- (H) <u>Submission of documents.</u> Any document, other than a discharge monitoring report, required to be submitted to the Commissioner under this section of the permit shall, unless otherwise specified in writing by the Commissioner, be directed to:

Karen Allen, Sanitary Engineer 3
Department of Environmental Protection
Bureau of Materials Management and Compliance Assurance
Water Permitting and Enforcement Division
79 Elm Street
Hartford, CT 06106-5127

This permit is hereby issued on April 17, 2008.

/s/ GINA MCCARTHY
Gina McCarthy
Commissioner

GM/kla

# DATA TRACKING AND TECHNICAL FACT SHEET

Permittee: Tweed-New Haven Airport Authority

PAMS Company ID: 114931

# PERMIT, ADDRESS, AND FACILITY DATA

PERMIT #: <u>CT0030457</u> APPLICATION #: <u>200600317</u> FACILITY ID. <u>093-292</u>

Mailing	ling Address:							<b>Location Address:</b>					
Street:	Admin.	. Bldg., 155	Stree	t		Street:	155 Bu	5 Burr Street					
City:	New H	aven	ST:	СТ	Zip:	06512	City:	New Haven ST: CT Zip: 06512				06512	
Contact	Name:	Eric Billov	vitz, A	Airpoi	t Mana	ager	DMR Co	DMR Contact Eric Billowitz, Airport Manager					nger
Phone N	No.:	203-466-8	833				Phone N	0.:	203-466-8833				
PERMI	T INFO	ORMATIO	<u>N</u>										
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	NPDES MAJOR (MA)  NPDES SIGNIFICANT MINOR or PRETREAT SIU (SI)  NPDES or PRETREATMENT MINOR (MI)  PRETREAT SIGNIFICANT INDUS USER (SIU)  PRETREAT CATEGORICAL (CIU)  Note: If it's a CIU then check off SIU												
	POLLUTION PREVENTION MANDATE _ ENVIRONMENTAL EQUITY ISSUE								Ξ				
COMP	COMPLIANCE ISSUES												
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	POLLI	UTION PR	EVEN	IOIT	٧	TREATM	IENT RE	QUIRE	MENT	_WA	ΓER (	CONSE	ERVATION
	WATER QUALITY REQUIREMENT REMEDIATION OTHER- Completion of Attachment O of the permit application												
	IS TH	E PERMIT	TEE	SUB.	IECT :	TO A PEN	DING E	VFORG	CEMENT A	ACTIO	ON?	NO	X YES _

# **OWNERSHIP CODE**

Private X	Federal	State I	Municipal (town	only)	Other public

# DEP STAFF ENGINEER Karen Allen

# **PERMIT FEES**

Discharge Description	DSN	Annual Fee
Dewatering of groundwater and soil stockpiles (fees equivalent to groundwater recovery system)	101/102 Table A	\$4087.50
Dewatering of groundwater and soil stockpiles	103/104 Table B	NA
Dewatering of groundwater and soil stockpiles	105-109 Table C	NA
Dewatering of cofferdam during tide gate reconstruction	110 Table D	NA
Dewatering of soil stockpiles	111 Table E	NA
Stormwater associated with construction	112 Table F	\$2662.50

# FOR NPDES DISCHARGES

Drainage basin Code: 5000 Present/Future Water Quality Standard: A and SB/SA

# NATURE OF BUSINESS GENERATING DISCHARGE

The facility is an active airport. The discharges to be generated are stormwater and dewatering wastewaters associated with construction activities. The following construction activities are proposed:

Runway 2 Safety Area

Construction of a 1,000-foot by 500-foot runway safety area Relocation of Morris Creek

#### Runway 20 Safety Area

Construction of a 1,000-foot by 500-foot runway safety area

Rechannelization of Tuttle Brook/Morris Creek with a 584-foot long segment of the creek placed in a culvert under the runway safety area

Relocation of Dodge Avenue

Taxiway 'B' and Taxiway 'E'

Reconstruction and strengthening of existing taxiways 'B' and 'E'

Extension of Taxiway 'B'

# PROCESS AND TREATMENT DESCRIPTION (by DSN)

#### DSN 101 and 102

Dewatering wastewaters from excavations and stockpiles during construction of the Runway 20 safety area at the north end of the site. The wastewaters will be directed into a settling basin for sediment removal then allowed to overflow to a grassed swale prior to discharging to Morris Creek. Drainage from the stockpiles is proposed to first pass through a layer of sand and into a filter-fabric wrapped perforated pipe before discharging to the settling basin.

#### DSN 103 and 104

Dewatering wastewaters from excavations and stockpiles during construction of the Taxiway B extension and improvements at the eastern end of the site. The wastewaters will be directed into a settling basin for sediment removal then allowed to overflow to a grassed swale prior to discharging to Morris Creek. Drainage from the stockpiles is proposed to first pass through a layer of sand and into a filter-fabric wrapped perforated pipe before discharging to the settling basin.

#### DSN 105-109

Dewatering wastewaters from excavations and stockpiles during construction of the Runway 2 safety area at the south end of the site. The wastewaters will be directed into a settling basin for sediment removal then allowed to overflow to a grassed swale prior to discharging to Morris Creek. Drainage from the stockpiles is proposed to first pass through a layer of sand and into a filter-fabric wrapped perforated pipe before discharging to the settling basin.

#### **DSN** 110

Dewatering wastewater from the coffer dam installed during the tide gate reconstruction. The water will be directed into a settling basin for sediment removal then allowed to overflow to a swale lined with erosion control matting and equipped with stone check dams.

#### DSN 111

Dewatering wastewaters from soil stockpiles at the secondary soil dewatering site at the south end of the site. Drainage from the stockpiles is proposed to first pass through a layer of sand and into a filter-fabric wrapped perforated pipe before discharging to the settling basin. The water would then overflow into a grassed swale prior to discharging to Morris Creek.

#### **DSN 112**

Stormwater runoff from construction areas. The runoff will be managed with erosion and sediment controls designed, installed and maintained in accordance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, the conditions contained in Section 7 of this permit, and the Design Drawing Set entitled, "Tweed New Haven Airport Authority Runway Safety and Taxiway Improvements, Wetland Mitigation and Tide Gate Improvements" dated June 2005 and received January 10, 2006.

The application also included a proposal by the permittee to utilize mobile settling tanks ('frac' tanks) as an alternative to the settling basins, if conditions in the field warrant additional treatment to remove suspended solids from the discharges.

# RESOURCES USED TO DRAFT PERMIT

	Federal Effluent Limitation Guideline 40 CFR
	name of category Performance Standards
_	
_	Federal Development Document name of category
_	Treatability Manual
<u>X</u>	Department File Information
<u>X</u>	Connecticut Water Quality Standards
X	Anti-degradation Policy
X	Coastal Management Consistency Review Form
X	Other – DEP General Permit for the Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities

#### BASIS FOR LIMITATIONS, STANDARDS OR CONDITIONS

- X Best Professional Judgment (See Comments)
- X Case-by-Case Determination (See Comments)
- X Section 22a-430-4(s) of the Regulations of Connecticut State Agencies (See Comments)

#### **GENERAL COMMENTS**

Tables A, B, C and E contain limits on total oil and grease and total suspended solids consistent with Best Professional Judgment and a Case-by-Case Determination, and section 22a-430-4(s) of the Regulations of Connecticut State Agencies. Tables A, B, C, and E also contain a limiting range for pH consistent with a Case-by-Case Determination and Best Professional Judgement.

The need for inclusion of water quality based discharge limitations for the dewatering wastewaters was evaluated consistent with Connecticut Water Quality Standards and criteria, pursuant to 40 CFR 122.44(d). Although the results of the soils investigation do not indicate any site contamination, relevant groundwater data were not available for evaluation of consistency with the available aquatic life criteria (acute and chronic) and human health (fish consumption only) criteria. A compliance schedule was included in the permit requiring the Permittee to collect and analyze samples of the dewatering discharges upon initiation and to submit Attachment O, Part B of the permit application to provide the data necessary for such an evaluation. The compliance schedule contains both a copper concentration trigger and an aquatic toxicity limit which requires the Permittee to cease discharging and to submit a proposal for the Commissioner's review and approval to further treat the wastewater prior to discharge to Morris Creek. The copper concentration trigger was included because of the proximity of the site to tidal areas and the toxicity of copper to saltwater organisms at low concentrations.