

DATA TRACKING AND TECHNICAL FACT SHEET

WPED PRETREATMENT PERMIT REISSUANCE

APPLICANT	Tweed – New Haven Airport Authority
PERMIT NO.	SP0002421
APPLICATION NO.	201709813
DATE APPLICATION RECEIVED	November 9, 2017
LOCATION ADDRESS	155 Burr Street New Haven, CT 06512
FACILITY CONTACT	Felipe Suriel, Assistant Airport Manager Office Phone: (203) 466-8833 Email: fsuriel@flytweed.com
MAILING ADDRESS	155 Burr Street New Haven, CT 06512
DMR CONTACT	Felipe Suriel, Assistant Airport Manager Office Phone: (203) 466-8833 Email: fsuriel@flytweed.com
PERMIT TERM	10 Years
PERMIT CATEGORY	PRETREATMENT MINOR (MI)
SIC CODE(S)	4581
PERMIT TYPE	Reissuance
OWNERSHIP	Private
PUBLICLY OWNED TREATMENT WORKS (“POTW”) THAT RECEIVES THE DISCHARGE	Discharge to the Greater New Haven Water Pollution Control Authority (“GNHWPCA”) via its collection system to the East Shore Water Pollution Abatement Facility. The GNHWPCA discharges to the New Haven Harbor, as authorized by NPDES Permit No. CT0100366
DEEP STAFF ENGINEER	Laura Gaughran
TENTATIVE DECISION FACT SHEET DATE	December 26, 2019

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: \$1,300.00	Date Paid: November 9, 2017
Processing Fee	Cost: \$6,300.00	Date Paid: February 27, 2018

Annual Fee:

DISCHARGE CODE	WASTEWATER CATEGORY* (per 22a-430-7)	MAXIMUM Gallons Per Day ("GPD") or CATEGORY	DSN	ANNUAL FEE (per 22a-430-7)
5080000	Stormwater Wastewater	NA	201-1	\$2,912.50
NA	Vehicle Service Floor Drain Wastewater	NA	201-1	\$0.00
TOTAL		36,000		\$2,912.50

*The Applicant was previously classified as "Transportation (0-50,000GPD)" (Discharge Code: 501064y) which is defined under the RCSA Section 22a-430-6(b) as wastewaters generated by the manufacturing of equipment for transportation of passengers or cargo by land, air, or water. In this issuance the classification will be changed to a combination of "Stormwater", defined as wastewater consisting of precipitation runoff; and "Vehicle Service Floor Drain Wastewater", defined as wastewater generated from floor washdown and drippings from vehicles in vehicle service areas. This classification is more representative of the Applicant's discharge which consists of stormwater wastewater; and deicing fluid, which is sprayed onto the airplanes in a designated area and the drippings are collected via the drainage below. This classification is used as a basis for necessary permit fee calculations, and monitoring frequency.

I. APPLICANT

On November 9, 2017 the Department of Energy and Environmental Protection ("DEEP") received an application (Application No. 201709813) from the Tweed – New Haven Airport Authority seeking a renewal of Permit No. SP0002421 authorizing the discharge of wastewater associated with aircraft deicing at its facility in New Haven. This application was public noticed in the New Haven Register on October 20, 2017. On March 15, 2018, the application was determined to be timely and administratively sufficient.

II. NATURE OF THE BUSINESS GENERATING THE DISCHARGE

Tweed-New Haven Airport Authority deices planes as required by the Federal Aviation Administration when freezing conditions occur.

The applicant seeks authorization for the following:

DSN	PROPOSED AVERAGE MONTHLY FLOW (gpd)	PROPOSED MAXIMUM DAILY FLOW (gpd)	PROPOSED WASTESTREAMS	TREATMENT TYPE	DISCHARGE TO
201-1	24,000	36,000 ¹	Air Craft Deicing Fluid (mixture of a propylene glycol – based deicer mixed with water, at a ratio that is weather dependent) mixed with stormwater	pH Adjustment: The wastewater will be run through a recirculation loop to confirm average pH levels. The system adjusts the pH, as necessary, until the pH is within permitted limits. ²	Greater New Haven Water Pollution Control Authority ("GNHWPCA")

Footnotes

¹The Maximum Daily Flow is not the Design Flow, the Design Flow is 72,000 gpd.

²Tweed – New Haven Airport Authority submitted Application No. 201912429 on October 15, 2019 to install the proposed treatment system. Application No. 201912429 was approved on December 2, 2019.

III. BACKGROUND/PERMIT HISTORY

Tweed – New Haven Airport Authority is an airport that performs aircraft deicing. The treatment system is used to treat wastewater from the aircraft deicing. This wastewater is discharged to the Greater New Haven Water Pollution Control Authority by way of DSN 201-1 under this proposed permit.

Compliance/Enforcement

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

NOV No. WRIN19011 was issued to Tweed – New Haven Airport Authority on March 18, 2019 to address (1) failure to report the results of all discharge monitoring; (2) failure to notify the Director of a failure or malfunction of the pH sensor; (3) failure to notify the Director of violations of the limitations specified within the permit; (4) failure to properly operate and maintain adequate process controls and quality assurance procedures to achieve compliance with the terms and conditions of the permit; (5) the maintaining of a discharge to a POTW which contained pollutants with a pH value of less than 5.0 S.U.; and (6) the violation of the effluent limitations specified in Permit No. SP0002421 issued on March 25, 2008.

The Applicant must correct item numbers 4, 5, and 6 from NOV No. WRIN19011 (all other items have been addressed and corrected). These remaining items address the wastewater which has been discharged at a pH below permitted levels. The Applicant intends to correct these items through the installation and use of the treatment system described in the table above.

NOV No. WRIN19011 will be closed upon issuance of the proposed permit.

Does the Permit contain a compliance schedule? Yes No

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

“Section 7: Special Conditions” of the proposed permit requires internal compliance audits be performed during the months of: January, February, and December within one (1) year of this permit’s effective date to ensure the Applicant’s compliance with all applicable provisions of sections 22a-430-3 and 22a-430-4 of the RCSA and the terms and conditions of this permit.

“Section 8: Compliance Schedule” of the proposed permit requires the Applicant to submit a revised Operation and Maintenance Plan along with a revised “Attachment I: Operation and Maintenance of the Collection and Treatment Systems: General Description, Plan Checklist and Certification” on or before ninety (90) days after the permit.

Modifications

Within the last five years, have there been any permit modifications? Yes No

Application No. 201912429 for a Wastewater Treatment System Modification was submitted on October 15, 2019, to install a system to verify and adjust the pH of the wastewater. This modification to add treatment is referenced above in Section II. Footnotes and Section III. Compliance/Enforcement.

IV. THE ON-SITE WASTEWATER TREATMENT SYSTEM

The wastewater is collected within the designated aircraft deicing area, pumped to two (2) 12,000 on-site tank, where the wastewater to be recirculated and the pH of the wastewater to be raised to permitted levels prior to being discharged to the sanitary sewer.

The modification proposed and approved through Application No. 201912429 and described in Section III. Modifications will allow for the wastewater to be recirculated and the pH of the wastewater to be raised to permitted levels prior to discharge.

Treatment system diagram is included as Attachment A.

V. EFFLUENT GUIDELINES

There is no specific category within the Regulations of the Connecticut State Agencies (“RCSA”) or the Code of Federal Regulations (“CFR”) that is applicable to the Applicant’s discharge. The Federal Categorical Standard for Aircraft Deicing in 40 CFR 449 applies only to direct dischargers to surface water.

VI. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

BASIS FOR LIMITS, STANDARDS OR CONDITIONS		REGULATION	DISCHARGE POINT
<input checked="" type="checkbox"/>	Federal Effluent Limitation Guideline (“ELG”)	40 CFR 403	201-1
<input type="checkbox"/>	Pretreatment Standards for Existing Sources (“PSES”)		
<input type="checkbox"/>	Pretreatment Standards for New Sources (“PSNS”)		
<input type="checkbox"/>	Performance Standards		
<input type="checkbox"/>	Section 22a-430-4(s) of the Regulations of Connecticut State Agencies (“RCSA”)		
<input checked="" type="checkbox"/>	Case-by-Case Determination using Best Professional Judgment (“BPJ”)	RCSA Sections 22a-430-4(l)(1)(D) 22a-430-4(m)	201-1
<input checked="" type="checkbox"/>	Other (i.e. Department File Information)		201-1

A. MONITORING PARAMETERS & LIMITS:

DSN 201-1

PARAMETER	UNITS	40 CFR 403			RCSA section 22a-430-4(t)			Local Limits	BPJ		
		Average Monthly (mg/L)	Maximum Daily (mg/L)	Instantaneous (mg/L)	Average Monthly (mg/L)	Maximum Daily (mg/L)	Instantaneous (mg/L)	Instantaneous (mg/L)	Average Monthly (mg/L)	Maximum Daily (mg/L)	Instantaneous (mg/L)
Biochemical Oxygen Demand (BOD 5-Day)	mg/l	NA	NA	NA	NA	NA	NA	NA	----	----	NA
Biochemical Oxygen Demand (BOD 5-Day)	lb/day	NA	NA	NA	NA	NA	NA	NA	NA	6,000	NA
Chemical Oxygen Demand	mg/l	NA	NA	NA	NA	NA	NA	NA	----	----	NA
Flow	gpd	NA	NA	NA	NA	NA	NA	NA	----	36,000	NA
pH, Minimum	S.U.	NA	NA	5.0	NA	NA	5.0	5.5	NA	NA	6.0
pH Maximum	S.U.	NA	NA	NA	NA	NA	NA	9.5	NA	NA	10.0
Propylene Glycol	mg/l	NA	NA	NA	NA	NA	NA	NA	----	----	NA
Total Suspended Solids	mg/l	NA	NA	NA	NA	NA	NA	NA	----	----	NA

B. COMMENTS ON SPECIFIC PARAMETERS:

Neither Stormwater discharges nor the Vehicle Service Floor Drain discharges have any specific limitations or monitoring frequencies within the RCSA or the CFR. Therefore, limits present within the permit are carried over from the previous permit in accordance with the RCSA Section 22a-430-4(1)(4)(D)(vi), which does not allow higher limitations than have been present in the previous permit issuance without the basis of such limits having been changed. There is an Airport Deicing Point Source Category within 40 CFR Part 449, however, this category does not apply to discharges to the sanitary sewer.

As the Airport Deicing Point Source Category is not listed within the RCSA, the RCSA Section 22a-430-3(j)(5) applies:

“For any discharge category which is not listed in the appended Monitoring Schedule, the commissioner shall establish a frequency of monitoring which he or she determines will adequately insure that the permittee in question is in compliance with applicable statutes, regulations and permit terms and conditions.”

Minimum Frequency of Effluent Monitoring as described in the RCSA 22a-430-3: Monitoring Schedule.

The Minimum Frequency of Effluent Monitoring for Stormwater is “None”.

There is no Minimum Frequency of Effluent Monitoring for Vehicle Service Floor Drain wastewaters.

Biochemical Oxygen Demand (BOD 5-Day)

DSN 201-1: This parameter incorporates monitoring of the concentration of BOD 5-Day, and a Maximum Daily limit for BOD 5-Day in pounds per day. The limit has been carried over from the previous permit.

The limit from the previous permit was explained as follows:

“Propylene glycol contains high BOD, which can stimulate bacterial growth reducing the quantity of oxygen dissolved in the water. Based on Fuss and O’Neill’s calculations of potential ADF usage, the maximum BOD load discharged would be approximately 6,000 lbs/day. This estimate is conservative, based on having to deice heavy snow and/or ice from every flight that left Tweed airport. Therefore, a maximum daily limit of 6,000 lbs/day for BOD and monitoring only for propylene glycol are proposed in this permit. The GNHWPCA has reviewed and agreed with the proposed BOD level per the letter dated July 28, 2006 that was sent to the applicant’s consultant Fuss and O’Neill.”

In email correspondence received on February 22, 2019, the GNHWPCA stated it does not relate this loading of BOD in the discharge to any operational or compliance issues at the East Shore Water Pollution Abatement Facility.

Monitoring frequency will be maintained as Weekly, which is consistent with, and more stringent than the Minimum Frequency of Monitoring for Stormwater Wastewater from the RCSA Section 22a-430-3: Monitoring Schedule.

Daily Composite sampling is required for this parameter pursuant to 40 CFR 403.12(g)(3), and the RCSA Section 22a-430-3(j)(7).

Chemical Oxygen Demand (“COD”)

DSN 201-1: Limits have not been incorporated within this issuance as there are no limits specified within the local ordinance, the CFR, or the RCSA. Monitoring is required. This is consistent with the previous permit.

Monitoring frequency will be changed to Weekly, which is consistent with, and more stringent than the Minimum Frequency of Monitoring for Stormwater Wastewater from the RCSA Section 22a-430-3: Monitoring Schedule.

Monitoring is more frequent due to the elevated concentrations of COD associated with the wastewater. An average of 4,836 mg/l, and a Maximum Concentration of 28,000 mg/l was reported within the Summary of the Discharge Analysis in Application No. 201709813.

Daily Composite sampling is required for this parameter pursuant to 40 CFR 403.12(g)(3), and the RCSA Section 22a-430-3(j)(7).

Flow Rate

DSN 201-1: The Maximum Daily Limit for flow reflects data provided in Application No. 201709813, which states “Maximum Daily Flow (gpd): 36,000”. This is consistent with the previous permit.

Flow monitoring frequencies are maintained from the previous permit. All frequencies are more stringent than the Minimum Frequency of Monitoring for Stormwater Wastewater from the RCSA Section 22a-430-3: Monitoring Schedule.

Daily Flow monitoring and recording is required for this parameter by the RCSA Section 22a-430-3(j)(9)(A)(2)

pH

DSN 201-1: Limits are maintained from the previous permit in accordance with the RCSA Section 22a-430-4(1)(4)(D)(vi).

In email correspondence received on December 20, 2019, the GNHWPCA commented that the limits proposed within the permit should not pose an issue to the GNHWPCA, provided that the discharge occur during the allotted “Operating Day”.

Monitoring frequency will be maintained as Weekly, which is more stringent than the Minimum Frequency of Monitoring for Stormwater Wastewater from the RCSA Section 22a-430-3: Monitoring Schedule.

pH, Minimum and pH, Maximum have continuous monitoring to ensure the pH of the discharge to the GNHWPCA is maintained at levels specified within the permit.

Propylene Glycol

DSN 201-1: Limits have not been incorporated within this issuance as there are no limits specified within the local ordinance, the CFR, or the RCSA. Monitoring is required. This is consistent with the previous permit. (See “Biochemical Oxygen Demand (BOD 5-Day)” above for further information)

Monitoring frequency will be maintained as Weekly, which is consistent with, and more stringent than the Minimum Frequency of Monitoring for Stormwater Wastewater from the RCSA Section 22a-430-3: Monitoring Schedule.

Daily Composite sampling is required for this parameter pursuant to 40 CFR 403.12(g)(3), and the RCSA Section 22a-430-3(j)(7).

Total Suspended Solids

DSN 201-1: Limits have not been incorporated within this issuance as there are no limits specified within the local ordinance, the CFR, or the RCSA. Monitoring is required. This is consistent with the previous permit.

Monitoring frequency will be maintained as Monthly, which is consistent with, and more stringent than the Minimum Frequency of Monitoring for Stormwater Wastewater from the RCSA Section 22a-430-3: Monitoring Schedule.

Daily Composite sampling is required for this parameter pursuant to 40 CFR 403.12(g)(3), and the RCSA Section 22a-430-3(j)(7).

VII. OTHER ACTIVE PERMITS

Type	Number	Status	Start Date	End Date
Permit – Flood Management	FM-201304275	Active	11/18/2013	-
Permit – Flood Management	FM-201304274	Active	11/14/2013	-
Permit – Flood Management	FM-201409080	Active	10/20/2014	10/20/2024
Permit – Stormwater Industrial Activities – GP	GSI001113	Active	10/01/2011	09/30/2021
Permit – NDDDB Listed Species Determination	201810748	Active	09/25/2018	09/25/2020
Permit – Flood Management	FM-200003053	Active	05/15/2007	-
Permit – Inland Wetlands & Watercourses	IW-2000-116	Active	05/01/2007	-
Permit – NDDDB Listed Species Determination	201804641	Active	04/16/2018	04/16/2020
Permit – NDDDB Listed Species Determination	201903537	Active	03/15/2019	03/15/2021
Permit – Flood Management	FM-201207168	Active	02/05/2013	-

VIII. COMMENTS RELATED TO THE PUBLIC NOTICE

Notice of Tentative Decision was published in ____ on _____. The comment period ended on _____. The Department has received [no] [the following] written comments on the proposed action:

The Bureau of Materials Management and Compliance Assurance staff has reviewed the written comments and does not feel that the tentative determination should be modified.

The Bureau of Materials Management and Compliance Assurance staff has reviewed the written comments and recommends the following changes in the [tentative determination] [draft permit].

Laura Gaughran was assigned this application on January 16, 2019.

Facility was sent the draft permit on December 20, 2019, and has not communicated any issues. The permitted limits are consistent with the previous permit.

POTW was sent the current draft permit on December 20, 2019, and requested the definition of “Operating Day” be maintained in the draft permit.

ATTACHMENT A