DATA TRACKING AND TECHNICAL FACT SHEET

PERMIT #: UI0000355 **APPLICATION #:** 201205475

DISCHARGER NAME AND ADDRESS DATA

Permittee: The Whitby School, Inc.

Mailing Address:	**Location Address:**
Street: 969 Lake Avenue	Street: 969 Lake Avenue
City: Greenwich ST: CT Zip: 06381	City: Greenwich St. CT Zip: 06381
Contact Name: Robert Curtis	**Contact Name:**

PERMIT DURATION

5 YEAR ( ) 10 YEAR (X) 30 YEAR ( )

DISCHARGE CATEGORIZATION

POINT( ) NON-POINT(X) GIS #_____

NPDES( ) PRETREAT( ) GROUND WATER(UIC)(X) GROUND WATER (OTHER)( )

MAJOR( ) SIGNIFICANT MINOR( ) MINOR(X)

COMPLIANCE SCHEDULE **YES** X **NO**

POLLUTION PREVENTION( ) TREATMENT REQUIREMENT( ) WATER CONSERVATION( )

PERMIT STEPS ( ) WATER QUALITY REQUIREMENT( ) REMEDIATION( ) AUDIT LANGUAGE(X)

OTHER( )

OWNERSHIP CODE

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

UIC PERMIT INFORMATION

Total Wells 1 Well Type 5W12

PERMIT FEES

DISCHARGE CODE 312000a REPRESENTING DSN 301-2 ANNUAL FEE $1,110.00

DRAFT

DEEP STAFF ENGINEER/ANALYST

Ramona Goode

PERMIT TYPE

New( ) Reissuance(X) Modification( ) Subsection-e( )

NATURE OF BUSINESS GENERATING DISCHARGE

The school is a Montessori school for kindergarten through eighth grade.

PROCESS AND TREATMENT DESCRIPTION (by DSN) **AT (X) Recycle (X)**

DSN 301-2 represents the discharge from the existing alternative sewage treatment process consisting of septic tanks, pump chamber, flow equalization tank, Zenon Municipal Systems Wastewater Treatment and Recycling System, and an engineered leaching system. The Zenon system consists of aerobic and anoxic biological treatment processes, membrane filtration, and ultraviolet disinfection, and has a process capacity of 6,600 gallons per day. A maximum of 2,310 gallons per day of pretreated effluent may be discharged to the engineered leaching system, and any remaining pretreated effluent is returned within the Zenon system and/or reused as flush water.

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RESOURCES USED TO DRAFT PERMIT

__ Federal Effluent Limitation Guideline_40CFR_____
name of category

__ Performance Standards

__ Federal Development Document
name of category

__ Treatability Manual

X Department File Information

X Connecticut Water Quality Standards

__ Anti-degradation Policy

__ Coastal Management Consistency Review Form

__ Other - Explain

BASIS FOR LIMITATIONS, STANDARDS OR CONDITIONS

X Best Professional Judgement (See Other Comments)

X Case by Case Determination (See Other Comments)

OTHER COMMENTS

Whitby School had been experiencing hydraulic problems, largely related to system infiltration and inflow from various sources, leading to exceedances of the permitted daily discharge limit for the engineering leaching system. In 2014, after completing an extensive I/I field study, the school retrofitted low lying manholes with water tight covers and further evaluated pumps and conveyances for potential I/I through additional inspection and testing. During the Fall 2014 and Spring 2015, the school also undertook several Department approved initiatives necessary to further reduce I/I and improve the hydraulics of the existing subsurface sewage treatment and disposal system. These actions, which have substantially addressed system hydraulic problems, included:

- Installation of a 9,000 gallon equalization tank to improve flow management within the pretreatment system,
- Installation of groundwater controls upgradient of the engineered leaching system to intercept and redirect groundwater around the leaching area,
- Expansion of the engineered leaching system to increase system depth, ensure a minimum 3 foot vertical separating distance to mounded seasonal high groundwater and eliminate any potential toe-of-slope discharge,
- Isolate and redirect gymnasium water treatment wastewaters away from the domestic sewage pretreatment plant to a dedicated subsurface dispersal structure, and
- Installation of automatic flow regulators on all indoor faucets to reduce wastewater flow to the pretreatment system.

In addition, the wastewater treatment plant now employs a new programmable control panel that monitors flow for all lines coming into the plant and all lines leaving the plant, and physically limits the daily discharge flow to the engineered leaching field to under 2,310 gpd and maximizes the volume of pretreated wastewater recycled back to the school for use as flushwater.

The Zenon treatment plant serving DSN 301-2 is required to meet limits on BOD, TSS, bacteria, and total nitrogen and phosphorus prior to being discharged to the engineered leaching field.

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PROJECT HISTORY

Application received on July 9, 2012
Notice of Sufficiency signed on September 20, 2012
Treatment system modification 22a-430-3(i)(3) approved on December 26, 2014