IN THE MATTER OF : APPLICATION NO. 200203354

TOWN OF WESTON : JUNE 9, 2003

#### PROPOSED FINAL DECISION

I

#### **SUMMARY**

The Town of Weston (the applicant) has applied to the Department of Environmental Protection (DEP) for a water discharge permit in connection with a proposed sewage treatment and disposal system to serve the applicant's existing high school and middle school and a new elementary school. General Statutes §22a-430. The Commissioner has made a tentative determination that the proposed system to treat the discharge would protect the waters of the state from pollution. §22a-430(b). The DEP Bureau of Water Management, Permitting and Enforcement Division (staff) have prepared a draft permit that would authorize the discharge.

I find that the application complies with General Statutes §22a-430 and the relevant provisions of Regs., Conn. State Agencies §§22a-430-1 through 22a-430-8, the DEP Water Quality Standards and the Public Health Code. If constructed and operated as proposed, the sewage treatment and disposal system will protect the waters of the state from pollution. I therefore recommend issuance of the draft permit (Attachment A).

#### II

#### FINDINGS OF FACT

- 1. In a July 25, 2002 submission to the DEP, the applicant applied for a water discharge permit in connection with a planned sewage treatment and disposal system for the present high school and middle school, and for a proposed elementary school. There are no sanitary sewers available in Weston; all existing sanitary waste disposal is by septic tank/leach field systems. The discharge would be to the ground waters of the West Branch of the Saugatuck River. (Exs. APP-1, 2, 4, 6; exs. DEP-1, 3, 7; test. 3/27/03 S. Fairbank.<sup>1</sup>)
- 2. The applicant operates three public schools in Weston, all located on a campus along School Road east of Route 57. Because of a need to improve the existing schools and due to a projected increase in the school population, the applicant has undertaken a school building program designed to renovate the existing schools and construct a fourth school for grades three through five. Various regulations mandate an enhanced septic system to support these improvements and construction. (Exs. APP-3, 4, 7, 8; test. S. Fairbank.)
- 3. The proposed treatment plant would be located on the school campus; the subsurface treatment and disposal field would be at Bisceglie-Scribner Park (the Park) in Weston. New playing fields are planned for the site of the disposal system in the Park. (Exs. APP-1, 3-7; exs. DEP-1, 3, 6; test. S. Fairbank.)

<sup>&</sup>lt;sup>1</sup> All testimony was heard at the hearing on March 27, 2003. The testimony was recorded; no written transcript was prepared. Accordingly, references to testimony will only list the name of the witness.

- 4. The treated effluent would be piped from the treatment plant on the school campus, north along School Road, west down Lords Highway and south along Newtown Turnpike to the Park at the intersection of Routes 57 and 53 A pump station located in the Park will provide pressure distribution of the effluent to the leach field. (Exs. APP-3, 4; exs. DEP-1, 3, 6; test. S. Fairbank.)
- 5. The current daily flow of domestic sewage from the schools is 12,000 to 13,000 gallons. The design flow for the new system would be approximately 15,500 gallons per day.<sup>2</sup> Because the projected daily flow would exceed 5000 gallons, a discharge permit is required under §22a-430. (Exs. APP-1, 4, 7; exs. DEP-1, 3, 4, 6, 8; test. S. Fairbank, J. Perry.)
- 6. As is its process in larger-scale sewage treatment and disposal systems such as this proposal, the DEP worked with the applicant prior to the submission of its application. The DEP met with the prospective applicant to discuss the project and DEP engineers witnessed soil testing at multiple locations on and off the school campus, including the Park. DEP staff also reviewed and commented on the conceptual design and technical aspects of the plans, and revisions were made. The application was filed after this review and revision process was complete. The DEP published notice of its tentative determination to issue the permit on November 27, 2002. A draft permit authorizing the discharge was prepared by staff and made available for public inspection. A petition requesting a public hearing was received by the DEP on December 27, 2002. (Exs. APP-2, 7; exs. DEP-1 4; test. S. Fairbank, J. Perry.)

<sup>2</sup> A conventional septic tank/leach field system was designed, permitted by the DEP, and installed to serve the existing elementary school. (Ex. APP-7.)

- 7. A hearing was held at the Weston Town Hall on March 27, 2003. The applicant and staff presented evidence and testimony that addressed the relevant statutory and regulatory criteria, the DEP Water Quality Standards (WQS) and the applicable provisions of the Public Health Code. Public speakers expressed support as well as opposition to the proposed system, and its planned and possible impacts. Speakers questioned the selection of the Park for the disposal field, and expressed concern that the discharge could threaten ground waters. Speakers questioned why Revson field was not to be used as an alternative site and were worried that as an engineered system, the proposed structures could fail. A few speakers who claimed that this could impact the system and its discharge noted the use of fertilizers and other chemicals on the proposed ball fields. Evidence was also introduced that the Weston Conservation Commission recently denied the Town's application to use the Park for the disposal system, the playing fields and related activities.<sup>3</sup> (Exs. APP-7, 8; exs. DEP-1-3, 5-11; exs. SPKR-1, 24; test. S. Fairbank, J. Perry, and sworn public speakers.)
- 8. Extensive soil testing and evaluation was conducted on the school campus, the Park and other sites in the general area to identify a suitable location for a leach field capable of handling the sanitary discharge from the three schools. The soils had to be capable of accepting, treating and dispersing effluent to a drinking water quality standard. The Park and Revson Field on the school campus appeared to have the hydraulic capacity to handle the planned discharge of approximately 15,500 gallons per day. However, final design calculations for Revson Field could not be completed without seasonal high water

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<sup>&</sup>lt;sup>3</sup> An inland wetlands permit from the Town is listed as a related permit on the application. (Ex. APP-1.)
<sup>4</sup> A speaker offered videotape that he represented as showing runoff and pooling of runoff from the Park onto his property. The tape was not formally admitted into the evidentiary record, however, on April 10, 2003, DEP staff, a representative from the applicant, and I viewed the videotape.

table predictions that were impossible due to drought conditions during the testing period in the spring of 2002.<sup>5</sup> As a result, the only suitable site was the Park. In order for the site to accommodate the anticipated flow, it was necessary to design a subsurface sanitary disposal constructed fill system. This system, a sand fill, creates the soil conditions able to accommodate the flow. It also does not depend on natural soil conditions for effluent transport and renovation, which are vulnerable to seasonal ground water fluctuations. (Exs. APP- 3, 4, 7; exs. DEP-6, 7, 11; test. S. Fairbank.)

- 9. The WQS set objectives for existing and future water quality and establish a program based on a system of ground water classifications to implement these goals. To be consistent with these classifications, the DEP requires that an applicant demonstrate that wastewater will be treated to a level necessary to prevent pollution and maintain a high water quality. The applicant's property is located in the watershed of the West Branch of the Saugatuck River. The ground water on its property is Class GA; the River is Class A. The proposed system must therefore be designed so that effluent from the leach field will meet drinking water quality standards prior to contacting any "point of concern" (POC), which may be a body of water, well, property line or other feature determined by the DEP to require protection from pollution. The nearest POC in this instance is the wetlands and adjacent property line south of the proposed leach field or disposal site at the Park. (Exs. APP-3, 4, 6; exs. DEP-6, 7, 9, 10; test. S. Fairbank.)
- 10. The DEP evaluates the hydraulics of a proposed site and system. An applicant must be able to demonstrate that a selected site will be large enough to install a

<sup>&</sup>lt;sup>5</sup> Soil conditions in the area of the high and middle schools were considered marginal without seasonal high ground water monitoring to document maximum water table conditions. These conditions could not be determined during the spring of 2002 due to drought conditions. (Ex. APP-7.)

system of the size proposed as determined by its design flow rate. The site must also have adequate permeability, and must have the capacity to move the effluent below ground for a sufficient distance to meet treatment goals, which are based on the WQS and applicable regulations and health codes. The DEP also conducts a pollution renovation criteria analysis. These criteria require the absence of bacteria or viruses, the removal or dilution of nitrogen, and the removal of phosphorus that is not naturally occurring. The application must include evidence that the planned system will include various methods to satisfy these criteria. The soils must be able to move the effluent under ground for at least twenty-one days, the travel time necessary to allow the system to successfully remove bacteria from the waste. To prevent any viruses or bacteria in the effluent from entering the ground water, the system must have at least two feet of unsaturated soils between the bottom of its leaching structure and the mounded seasonal water table. The soils of the site must be able to accept the anticipated discharge without premature breakout and must be able to absorb at least six months of anticipated phosphate discharges to successfully remove phosphorous from the system's effluent. milligrams per liter (mg/l) is the maximum allowable level of nitrogen in public or private drinking water supplies.<sup>6</sup> Nitrogen compounds must therefore be removed or diluted to levels of 10mg/l or less prior to meeting a POC. (Exs. APP-3, 4, 6, 7; exs. DEP-6, 7, 9, 10, 11; test. S. Fairbank, J. Perry.)

11. The area of the disposal facility site is of sufficient size to accommodate the proposed system and the site has the capacity to move effluent below ground for a sufficient distance without breakout. The system will provide for a twenty-one day travel time from the leach field to any POC to ensure the removal of pathogenic bacteria from

<sup>&</sup>lt;sup>6</sup> Regs., Conn. State Agencies §19-13B102(e)(2).

the discharge. To meet the requirement of a two-foot vertical separation between the bottom of the disposal structure and the mounded seasonal ground water table, ten feet of fill will be placed under the leach fields. The proposed leach field will be elevated at least two feet above the anticipated mounded seasonal ground water table and will move effluent under ground for a distance of 170 feet. The soils in the constructed fill, also called a "lateral sand filter", will be capable of absorbing six months of phosphorus concentrations at estimated levels. A 180-foot level spreader of modified stone riprap at the toe of the slope of the disposal field will provide further treatment for any leachate that might "bleed out" from the system. If necessary, the width and design of the level spreader could handle the entire daily flow of approximately 15, 500 gallons. (Exs. APP-1, 3-7; exs. DEP-1, 3-11; test. S. Fairbank, J. Perry.)

- 12. The proposed sewage treatment plant will treat all sanitary waste from the schools prior to discharge to the leach field. In order to meet the nitrogen discharge criteria, a biological process will convert the nitrogen compounds to nitrate or nitrite form and reduce the levels to less than 10 mg/l. To provide a margin of safety, the plant has been designed to handle as much as 20,000 gallons per day. The treatment plant will also reduce the amount of suspended solids going to the leach field, which will expand the longevity of the field and improve the process of effluent dispersal. (Exs. APP-4, 5; test. S. Fairbank.)
- 13. The permit, issued for a period of ten years, will require ongoing monitoring and maintenance of all of the components of the treatment and disposal system for the life of the permit. This will include all necessary measures to ensure that the plant will operate within the permit limits. The treatment plant will be monitored

every other week and quarterly reports will be submitted to the DEP. The condition of the leach field will be inspected quarterly and it will be maintained to assure that the surface of the field is kept clear. Ground water monitoring will also be required; wells for this purpose will be installed and will be tested quarterly. Required regular maintenance will include typical procedures such as periodic pumping of the tanks and various maintenance procedures at the treatment plant. A licensed operator must be hired to run the treatment plant. (Ex. DEP-4; test. J. Perry.)

#### III

#### **CONCLUSIONS OF LAW**

Before any municipality may discharge any substance into the waters of the state it must obtain a permit from the Commissioner pursuant to the provisions of §22a-430 of the General Statutes. §22a-430(a).<sup>7</sup> No such permit can be issued unless the Commissioner determines that "the proposed system to treat such discharge will protect the waters of the state from pollution".... §22a-430(b). The Commissioner may establish appropriate procedures, criteria and standards for determining if a discharge would cause pollution to the waters of the state and if a proposed treatment system is adequate to protect the waters of the state from pollution. §22a-430(b). See Regs., Conn. State Agencies §§ 22a- 430-1 through 22a-430-8.

The Commissioner must also consider whether the proposed discharge would be consistent with the standards set forth in the DEP Water Quality Standards (WQS). \$22a-430-4(1)(4)(E). The applicant's property is classified as Class GA. The WQS

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<sup>&</sup>lt;sup>7</sup> For proposed discharges of more than 5000 gallons per day. §22a-430.

specifically authorize certain discharges into Class GA ground waters as long as such discharges pose no threat to pollution of ground water. The WQS and applicable sections of the Public Health Code set standards for the quality of the discharge; here, the proposed release must be drinking water quality.

The applicant proposes to treat and dispose of approximately 15,500 gallons per day of domestic effluent to ground water in the west branch of the Saugatuck River. The applicant has demonstrated that the site will accommodate the proposed system and will transport the treated effluent for a sufficient distance below ground without surfacing or breakout so that bacteria will be removed before the effluent is dispersed. The design of the leach field will eliminate viruses from the effluent before it reaches a POC. The soils of the constructed fill system will absorb at least six months of phosphorus concentrations and the treatment plant will remove or dilute nitrogen compounds to acceptable concentration levels.

The proposed treatment and disposal system will prevent pollution to the waters of the state and maintain a high water quality, the treatment goals of the WQS and the Public Health Code. The design of the proposed treatment and disposal system is such that effluent from the leach field will meet drinking water quality standards prior to contacting any POC. The permit will require on-going monitoring and regular maintenance to ensure that this treatment and disposal system operates within the limits of the permit.

Many public speakers addressed the need for the playing fields that will be placed on top of the disposal site in the Park. The criteria and standards that guide my decision on this application do not include an assessment of the need for the ball fields that are planned for the top of the disposal field. Although comments were made regarding the possibility of an environmental impact from the use of fertilizers and other substances in connection with the fields, my analysis is limited to whether the applicant has presented sufficient evidence to demonstrate that the proposed system will adequately treat and dispose of the waste from the three schools so that any discharge will meet applicable water quality standards. No evidence was presented that the use of the site for ball fields will impact the effectiveness of the proposed sewage treatment and disposal system. The use of the site after the disposal structure is constructed is therefore not relevant to my decision on the merits of this application. The evidence presented by the applicant and supported by DEP staff demonstrates that any discharge will not threaten the Saugatuck River or its watershed.

Speakers opposed to the application challenged the selection of the Park as the site for disposal and commented on their concern that the discharge could threaten the Saugatuck River and its watershed. Speakers questioned why Revson field could not be used as an alternative site and indicated their unease with the fact that the proposed system would be an engineered structure.

The site selection process is relevant to my decision only insofar as it relates to whether the site selected will be able to accept, treat and disperse effluent to a drinking water quality standard as required by the WQS. In other words, I must determine if the design of the system to be placed on this site will comply with the criteria and standards that guide my decision.

The selection of the Park for the disposal field was made following extensive soil testing and evaluation of several sites. The constructed fill disposal system that was designed for the Park is part of a proposed treatment and disposal system that satisfies these relevant criteria and standards. This engineered structure is an acceptable method for sewage treatment and disposal, and will be monitored and maintained to ensure that it will function as planned and permitted.

Speakers' comments and evidence indicated that the Weston Conservation Commission recently denied the Town's application to use the Park for the disposal field and the construction of playing fields. The decision of the Weston Conservation Commission on the application filed with it by the applicant does not directly impact this determination as to whether the application filed with the DEP presents a proposal that satisfies the relevant statutory and regulatory criteria for issuance of a water discharge permit under the provisions of \$22a-430 and applicable regulations. Municipalities implement the Inland Wetlands and Watercourses Act through shared jurisdiction with the DEP. See General Statutes \$\$22a-36 through 22a-45. Municipalities and the DEP do not have such joint responsibility for the issuance of water discharge permits.

This application for a water discharge permit meets all relevant statutory and regulatory criteria and water quality and public health code standards. The proposed sewage treatment and disposal system will not cause pollution to the waters of the state.

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<sup>&</sup>lt;sup>8</sup> Municipalities regulate activities that affect the wetlands within their "territorial limits". §22a-42. Municipal agencies are authorized to act in accordance with §22a-42a; any person wishing to conduct a regulated activity must apply to the municipal agency for a permit to do so. It is only when a municipal agency fails to act or fails to timely act on an application that an application may be filed with the DEP.

IV

**RECOMMENDATION** 

I recommend that the applicant be required to submit construction plans and

specifications for the subsurface sewage treatment and disposal system, and that the

Commissioner authorize the Water Management Bureau to review such plans and

specifications. I further recommend that once it has been verified that the system has

been constructed in accordance with the approved plans and specifications, the

Commissioner issue the water discharge permit, appended to this decision as a draft

permit (Attachment A).

June 9, 2003

Date

/s/ Janice B. Deshais

Janice B. Deshais, Hearing Officer

# APPENDIX "A"

# PARTYLIST

Proposed Final Decision in the matter of Town of Weston (Application No. 2002033554)

# <u>PARTY</u>

# <u>REPRESENTED BY</u>

Town of Weston 56 Norfield Road PO Box 1007 Weston, CT 06883-1007 G. Kenneth Bernhard, Esq. Cohen & Wolf 1115 Broad St., PO Box 1821 Bridgeport, CT 06601

Department of Environmental Protection Bureau of Water Management Permitting, Enforcement and Remediation Divison 79 Elm Street Hartford, CT 06106

Jennifer Perry Zmijewski

# **UIC PERMIT**

#### issued to

Town of Weston 56 Norfield Road

**Location Address:** 

School Road and Bisceglie-Scribner

Park

Weston, CT 06883 Weston, CT 06883

Facility ID: 157-009 Permit ID: UI0000392 Permit Expires:

Watershed: West Branch of the Saugatuck River Basin Code: 7203

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

(A) This permit is issued in accordance with Section 1421 of the Federal Safe Drinking Water Act 42 USC et. seq. and section 22a-430 of Chapter 446k, Connecticut General Statutes ("CGS"), and Regulations of Connecticut State Agencies ("RCSA") adopted thereunder, as amended.

(B) The Town of Weston, ("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)(11)(C), (D), (E), and (F), (k)(3) and (4) and (b)(2) of section 22a-480-3.

#### Section 22a-43Q-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

#### 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.
- (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-157 of the CGS.
- (E) 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.
- (F) The authorization to discharge under this permit may not be transferred without prior written approval of the 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.
- (G) Nothing in this permit shall relieve the permittee of other obligations under applicable federal, state and local law.
- (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) The permittee shall, within seven days of the issuance of this permit, record on the land records, of the Town of Weston, a document indicating the location of the zone of influence created by the subject discharge, as reflected in the application for this permit. The Applicant shall obtain the Commissioner's written approval of such document before recording it.
- (J) The permittee shall, within seven days of the issuance of this permit, record a copy thereof on the land records, in the Town of Weston.

#### **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.
- (B) In addition to the above the following definitions shall apply to this permit:

"Bi-weekly" in the context of a sampling frequency, shall mean sampling is required twice per month.

"Quarterly", in the context of a sampling frequency, shall mean sampling is required in the months of February, May, August, and November.

"times per year" in the context of a maintenance frequency, shall mean the maintenance must be performed at least 3 times during the period of May to November.

"Average Limit", in the context of sampling limitations, shall mean the average of all grab samples taken during any calendar month.

# SECTION 3: COMMISSIONER'S DECISION

- (A) The Commissioner of Environmental Protection (hereinafter "the Commissioner") has made a final determination and found that the system installed for the treatment of the discharge, will protect the waters of the state from pollution. The Commissioner's decision is based on application # 200203354 for permit issuance received on August 12, 2002 and the administrative record established in the processing of that application.
- (B) The Commissioner hereby authorizes the Permittee to discharge 15,500 gallons per day of domestic sewage in accordance with the provisions of this permit, the above referenced application, and all approvals issued by the Commissioner or his 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 Safe Drinking Water Act or the Connecticut General Statutes or regulations adopted thereunder, as amended. The permit as modified or renewed under this paragraph may also contain any other requirements of the Federal Safe Drinking Water Act or Connecticut General Statutes or regulations adopted thereunder which are then applicable.

#### SECTION 4:EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

(A) The use of sewage system additives, as defined in section 22a-460(g) of the General Statutes, are prohibited unless such additive is registered with the Commissioner in accordance with section 22a-462-3 of the Regulations of Connecticut State Agencies. The Commissioner in no way certifies the safety or effectiveness of any registered additive.

- (B) Oils, greases, industrial or commercial wastes, toxic chemicals, wastes from water treatment systems, or other substances, that will adversely affect the operation of the subsurface sewage treatment and disposal system, or, which may pollute ground water, shall not be discharged to the subsurface sewage treatment and disposal system.
- (C) The permittee shall assure that groundwater affected by the subject discharge shall conform to the Connecticut Water Quality Standards.
- (D) Any 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 of this permit 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.

(E) The discharge shall not exceed and shall otherwise conform to specific terms and conditions listed below. The discharge is restricted by, and shall be monitored in accordance with, the tables below.

TABLE				
Discharge Serial No. 302-2		Monitoring Lo	ocation: E	
Wastewater Description: Do	omestic sewage efflue	ent from Zenon System		
Monitoring Location Descrip	otion: Post – UV diși	nfection	\	
Average Daily Flow: 10,000 gallons per day  Maximum Daily Flow: 15,500 gallons per day				
	FKOW/TIME BASED MONITORING		INSTANTANEOUS MONITORING	
PARAMETER	Average Limit	Maximum Concentration	Sample Type	Sample Frequency
Biochemical Oxygen Demand	20 mg/l	30 mg/l	Grab	Bi-weekly
Total Suspended Solids	20 mg/l	30 mg/l	Grab	Bi-weekly
Total Nitrogen		10 mg/l	Grab	Bi-weely
Total Phosphate		15 mg/l	Grab	Bi-weekly
PH			Grab	Bi-weekly
Fecal Coliform	200/100 ml	<i>'</i>	Grab	Weekly
Ethanol			Grab	Bi-weekly

TABLE B			
Discharge Serial No. 302-2		Monitoring Location: G	
Wastewater Description: Do	omestic sewage influent to Ze	non system	
Monitoring Location Descrip	ption: EQ Sump (raw influen	it)	
Average Daily Flow: 10,000 gallons per day Maxir		Maximum Daily Flow: 15,500 gallons per day	
PARAMETER	INSTANTANEOUS MONITORING		
	Sample Type		Sample Frequency
Biochemical Oxygen Demand	Grab		Bi-weekly
Total Suspended Solids	Grab		Bi-weekly
Total Kjeldahl Nitrogen	Grab		Bi-weekly

	TABLE C		
Discharge Serial No. 302-2	Monitoring Loca	Monitoring Location: P	
Wastewater Description: Don	mestic sewage influent to Zenon System		
Monitoring Location Descrip	tion: Zenon Process Tank		
Average Daily Flow: 10,000	gallons per day Maximum Daily	Flow: 15,500 gallons per day	
PARAMETER .	INSYANTANEOUS MONITORING		
	Sample Type	Sample Frequency	
рН	Grab	Bi-weekly	
Temperature	Grab	Bi-weekly	
Alkalinity	Otale	Bi-weekly	
Turbidity	Orab \	Bi-weekly	

- The pH of the discharge shall not be less than 6.0 nor greater than 9.0 Standard Units at any time and shall be monitored on a weekly basis. The permittee shall report pH values, specifically maximum and minimum, for each day of sample collection. The pH range for each month is defined as the highest and lowest single pH reading during all operating days of the month including periods when sampling is not performed.
- (3) The permittee shall maintain at the facility a record of the total flow for each day of discharge and shall report on the discharge monitoring report the total flow and number of hours of discharge for the day of sample collection and the average daily flow for each sampling month.
- (4) All samples shall be comprised of only those wastewaters described in this schedule, therefore, samples shall be taken prior to combination with wastewaters of any other type and after all approved treatment units, if applicable. All samples taken shall be representative of the discharge during standard operating conditions.

- (5) In cases where limits and sample type are specified but sampling is not required, 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.
- (6) The permittee shall employ a licensed operator who will be responsible for the treatment plant operations.
- (7) The monitoring and sampling required within this permit is a minimum for reporting purposes only. More frequent monitoring and sampling of the treatment system may be required to operate the facility to obtain acceptable results for the parameters being monitored as required by the Operation and Maintenance Manual approved by the Commissioner.
- (F) The treatment facilities shall be monitored, inspected and maintained in accordance with the following schedule:

TABLE D		
INSPECTION, MONITORING, or MAINTENANCE	DISCHARGE SERIAL NO.	MINIMUM FREQUENCY
Mechanical inspection of pump stations	301-2	Monthly
Mechanical inspection of septic tank and grease trap baffles	301-2	Quarterly
Visual inspection of distribution chambers	301-2	Monthly
Visual inspection of surface condition of leaching fields	301-2	Quarterly
Depth of sludge in septic tank	301-2	During pump-out
Water meter readings of water usage	301-2	Weekly
Test run of emergency generator	301-2	Quarterly
Pump out trash trap	301-2	Annually
Pump out grease traps	301-2	Quarterly
Pump out pump chambers	301-2	Annually
Pump out holding tank	301-2	As needed
Depth of ponding in leachfield	301-2	Quarterly
Mow grass over leachfield	301-2	3 times per year

NOTE:

The Weston Westport Sanitarian shall be notified at least one week prior to pumping of septic tanks and grease traps. Verification of all pump outs shall be attached to the monitoring report and a copy of the report shall be sent to the Weston/Westport Director of Health.

(G) The permittee shall perform the following ground water monitoring in accordance with the monitoring plan approved by the Commissioner.

TABLE E (GROUNDWATER MONITORING)			
DISCHARGE SERIAL NO.	301 A, 301 B	MONITORING LOCATION	ON: W
GROUND WATER MONITORING WELL NO:. (as named on AS BUILT)		<b>DESCRIPTION</b> : Downgradient monitoring wells	
PARAMETER	UNITS	MINIMUM FREQUENCY OF SAMPLING	SAMPLE TYPE
Coliform, Fecal	col/100ml	Quarterly	Grab
Groundwater Depth	Ft, in	Quarterly	Instantaneous
Nitrogen, Ammonia	mg/l	Quarterly	Grab
Nitrogen, Nitrate	mg/l	Quarterly	Grab
Nitrogen, Nitrite	mg/l	Quarterly	Grab
Nitrogen, Total Kjeldahl	mg/l	Quarterly	Grab
Nitrogen, Total	mg/l	Quarterly	Grab
pН	S,U.	Quarterly	Instantaneous
Phosphorus, Total	mg/l	Quarterly	Grab

# SECTION 5: SAMPLE COLLECTION, HANDLING and ANALYTICAL TECHNIQUES AND REPORTING REQUIREMENTS

- (A) Chemical analyses to determine compliance with effluent limits and conditions established in this permit shall employ methods approved by the Environmental Protection Agency pursuant to 40 CFR 136 unless an alternative method has been approved in writing in accordance with 40CFR 136.4.
- (B) The results of chemical analysis and treatment facilities monitoring required by Section 4 shall be entered on the Discharge Monitoring Report (DMR), provided by this office, and reported to the Water Management Bureau, at the following address, by the end of the month following the month in which the samples are taken.

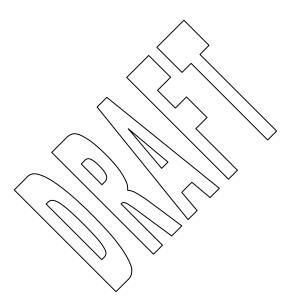
Bureau of Water Management (Attn: DMR Processing) Connecticut Department of Environmental Protection 79 Elm Street Hartford, CT 06106-5127

- (C) If any sample analysis indicates that an effluent limitation specified in Section 4 of this permit has been exceeded, a second sample of the effluent shall be collected and analyzed for the parameter(s) in question and the results reported to the Commissioner within 30 days of the exceedance.
- (D) Copies of all DMRs shall be submitted concurrently to the local Water Pollution Control Authority (hereinafter "WPCA").
- (E) Copies of all DMRs shall be submitted concurrently to the local Health Department.

The Commissioner has determined that the Town of Weston is in full compliance with Order Id. WC 5319 issued to the Town of Weston on May 15, 2001.

This permit is hereby issued on the

Arthur J. Rocque, Jr. Commissioner



cc: Angus McDonald/Gary Sharpe and Associates Weston/ Westport Health Dept.

[p:\working\jperry\permit\Weston schools draft sp]

#### DATA TRACKING AND TECHNICAL FACT SHEET

**PERMIT** #: UI0000392 **APPLICATION** #: 200203354 **DEP/WPC**#:157-009

# **DISCHARGER NAME AND ADDRESS DATA**

Permittee: Town of Weston

Mailing Address:

Street: 56 Norfield Road

Street: School Road and intersection of Routes 57 & 53

City: Weston

ST: CT Zip: 06883

Contact Name: John Conte, P.E.

Contact Name:

Contact Name: Contact Name:

# PERMIT DURATION

<u>5 YEAR ( ) 10 YEAR (XX) 30 YEAR ( )</u>

# DISCHARGE CATEGORIZATION

POINT() NON-POINT(X) GIS #\_18931\_\_\_\_

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

MAJOR $\underline{X}$  SIGNIFICANT MINOR $\underline{X}$  MINOR $\underline{X}$ 

COMPLIANCE SCHEDOLE YES \_\_\_ NO\_X

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

PERMIT STEPS () WATER QUALITY REQUIREMENT() REMEDIATION() OTHER()

#### **OWNERSHIP CODE**

 $Private(\underline{)} Federal(\underline{)} State(\underline{)} Municipal(town only)(\underline{X}) Other public(\underline{)}$ 

#### **UIC PERMIT INFORMATION**

Total Wells 1 Well Type 5W12

# **PERMIT FEES**

DISCHARGE CODE 312000a REPRESENTING DSN 301-2 ANNUAL FEE \$ 295.00

<b>DEP STAFF ENGINEER/ANALYST:</b> Jennifer L. Perry
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# PERMIT TYPE

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

# NATURE OF BUSINESS GENERATING DISCHARGE

Existing high school, middle school and proposed school for grades 3 –5.

# PROCESS AND TREATMENT DESCRIPTION (by DSN)

DSN 301-2 represents the treatment plant and subsurface sewage disposal system to serve the existing and proposed schools. Pretreatment will be by Zenon membrane filtration process and ultraviolet disinfection prior to discharge to leachfield.

# RESOURCES USED TO DRAFT PERMIT

	Federal Effluent Dimitation Guideline 40CFR
	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 Case by Case Determination (See Other Comments)

# **GENERAL COMMENTS**

Treatment plant will be required to meet limits on BOD, TSS, Total Nitrogen, Phosphates and Fecal Coliform (the pollutants of concern in domestic wastewater) prior to discharge to a constructed fill leachfield system. The leachfield system will be designed to renovate pathogens and provide additional polishing of the treated effluent.

