

## Underground Injection Control Program Fact Sheet

### SECTION 1.0 FACILITY SUMMARY

<b>APPLICANT</b>	Woodlake Tax District
<b>PERMIT NO.</b>	UI0000185
<b>APPLICATION NO.</b>	200401494
<b>DATE APPLICATION RECEIVED</b>	May 6, 2004
<b>LOCATION ADDRESS</b>	57 Clubhouse Drive, Woodbury, CT 06798
<b>FACILITY CONTACT</b>	Phil Mahler  Office Phone: 203 263 5303 Email: manager@woodlakect.com
<b>MAILING ADDRESS</b>	57 Clubhouse Drive, Woodbury, CT 06798
<b>PERMIT TERM</b>	10 Years
<b>PERMIT TYPE</b>	Renewal
<b>PERMIT CATEGORY</b>	UIC Class V Injection Well
<b>TREATMET DESCRIPTION</b>	5W12 Advanced Treatment
<b>OWNERSHIP</b>	Municipal
<b>COMPLIANCE SCHEDULE</b>	Yes
<b>RECENT ENFORCEMENT HISTORY</b>	NA
<b>RECEIVING WATERBODY</b>	Hessekey Brook Watershed
<b>WATER QUALITY CLASSIFICATIONS</b>	GA
<b>DISCHARGE LOCATIONS</b>	DSN 301-2
<b>DEEP STAFF ENGINEER</b>	Stephen Edwards, <a href="mailto:steve.edwards@ct.gov">steve.edwards@ct.gov</a>

## **SECTION 2.0 PERMIT FEES**

Discharge Code: 312000a    Representing: DSN 301-2    Annual Fee: \$1,100

## **SECTION 3.0 PROJECT HISTORY**

### 3.1 Renewal Application

Application No. 200401494 was received on May 6, 2004, to reissue a permit for the discharge of domestic sewage to a subsurface sewage treatment and disposal treatment and disposal system from the existing Woodlake Tax District (“WTD”), in Woodbury (“WTD”), Connecticut. On October 29, 2004, the DEEP issued a Notice of Sufficiency for the application.

Application No. 200401494 included a request from the applicant to increase the average monthly flow limit from 70,000 gpd to 75,000 gpd and the maximum daily flow limit from 90,000 gpd to 120,000 gpd. An engineering evaluation commissioned by the applicant in 2021 determined “while some upgrades and improvements were made in the 1980s to expand capacity to keep pace with the buildup of the WTD development, the existing treatment facility is old with much of it at or near the end of its useful life” and the existing wastewater treatment system is inadequate and needs to be upgraded. During the technical review of the renewal application, DEEP evaluated the operationals and historical records and found the existing system is not being operated or maintained consistently to protect the waters of the state.

### 3.2 Site Visit

On September 6, 2024, DEEP staff performed a site visit with representatives of the permittee, their consultants, and the operators of the alternative treatment system. It was observed that one of the two stacks of the alternative treatment system and the UV system were inoperable. According to representatives of WTD, they were unable to find replacement parts after the company that manufactured the UV system went out of business; hence the UV system has been inoperable for at least five (5) years. Based on the historical record, the UV system was required to be installed because the infiltration beds are too close to Radey Pond to provide the minimum treatment required in DEEPs “*Guidance for Design of Large-Scale On-Site Wastewater Renovation Systems*” (February 2006), requiring 21 days of travel time to protect waters of the state at the point of environmental concern for bacteria.

Given DEEPs findings of the historical record, observations from the site visit, and the current state of the treatment system; DEEP is denying the applicants request for an increase in flow and requiring immediate remediation of the treatment system. The proposed permit includes compliance schedules for the permittee to conduct and submit a comprehensive engineering report for the replacement of the alternative treatment system. The permittee may evaluate an increase in flow during that evaluation.

## **SECTION 4.0 NATURE OF BUSINESS GENERATING DISCHARGE**

Woodlake Tax District is a 400-condominium unit complex with an estimated maximum population of 1,330 residents.

## **SECTION 5.0 PROCESS AND TREATMENT DESCRIPTION (by DSN)**

Conventional Treatment ()    Alternative Treatment ()    RECYCLE ()

DSN 301-2 represents discharge from the existing alternative sewage treatment system consisting of two stacks consisting of three-stage aeration and a settling tank, two sludge storage tanks, dosing chamber, and an ultraviolet disinfection (“UV”) unit. The treated water is then discharged to one of six engineered infiltration basins.

The treatment system is comprised of two (2) 60,000 gpd stacks for a total design flow of 120,000 gpd. Each stack consists of a three-stages: aeration tank, a settling tank, and a sludge/scum storage tank. Sewage enters the treatment system through a splitter box that divides the wastewater between the two stacks. From the splitter box, sewage is sent to a grit chamber, followed by a comminutor. The comminutor grinds larger particles into small particles and then the wastewater flows to the stacks. Following the stacks, wastewater is directed to a UV system for disinfection and then to a dosing siphon where it is discharged to one of six (6) infiltration beds. Each bed is dosed for one (1) to two (2) days. Sludge and solids are stored in an on-site tank and approximately 2,500 to 3,500 gallons of sludge is disposed of off-site on a weekly basis.

## **SECTION 6.0 COMPLIANCE SCHEDULE**

Does the permit include a compliance schedule?      YES (X)      NO ( )

The proposed permit includes the following compliance schedules:

1. To record the permit in the town's land records;
2. A compliance schedule has been included in the permit to bring the facility back into compliance with the permit terms and conditions.
  - a) To submit a comprehensive engineering report evaluating the performance and operation of the on-site sewage treatment and disposal system and a corrective action plan. The report must include plans and specifications and propose a detailed schedule to implement such actions.
  - b) Upon approval from DEEP, install the remedial actions identified in the action plan.
  - c) To verify in writing that the modified alternative sewage treatment technology is operating in accordance with the approved plans and specifications and is achieving compliance with all permit limits and conditions.
3. To submit the results of a detailed permit compliance audit every two (2) years.

## **SECTION 7.0 BASIS FOR LIMITATIONS, STANDARDS AND CONDITIONS**

In accordance with section 22a-430, DEEP's "Guidance for Design of Large-Scale On-Site Wastewater Renovation Systems" (February 2006), and based on a review of the permit application, site investigation and hydraulic capacity modeling, and pollutant analyses of the wastewater, a determination has been made that there is a need for an advanced wastewater treatment system to protect ground waters from pollution. The advanced wastewater treatment is designed to treat wastewater and remove pollutants prior to being discharged to the leaching beds.

The following limits and condition were developed to assure the protection of the waters of the state and that all regulatory requirements are achieved.

### **7.1 Alternative Wastewater Treatment**

The wastewater discharging to the alternative treatment system and entering the infiltration bed was designed to meet the following parameters:

- Average daily flow: 70,000 gallons per day
- Maximum daily flow (design): 90,000 gallons per day
- Daily minimum and maximum pH range: 6.0 – 9.0 S.U. (Table C2 only)

**Table C1:**

Parameter	Average Monthly Limit	Maximum Daily Limit
Biochemical Oxygen Demand <sub>5-day</sub>	30 mg/L	30 mg/L
Total Suspended Solid	30 mg/L	30 mg/L

On the thirty seventh month after the effective date of the permit, the effluent quality must meet the following parameters:

**Table C2:**

Parameter	Average Monthly Limit	Maximum Daily Limit
Biochemical Oxygen Demand <sub>5-day</sub>	20 mg/L	30 mg/L
Total Suspended Solid	20 mg/L	30 mg/L
Total Nitrogen	10 mg/L (12-month rolling average)	NA

Monitoring of additional parameters, such as: ammonia nitrogen, nitrate nitrogen, nitrite nitrogen, total Kjeldahl nitrogen, and phosphorus; has been included in the permit to quantify pollutant loading and to validate the design criteria of the treatment system.

## **7.2 Infiltration Beds**

There are six (6) infiltration beds consisting of a 12-inch layer of sand with an effective grain size of 0.3 to 0.6 millimeters overlying a native material. Groundwater depth ranges from six (6) to twelve (12) feet below infiltration beds.

## **7.3 Groundwater Monitoring**

Table D in the permit requires quarterly groundwater monitoring to ensure the treated domestic wastewater does not cause pollution.

Groundwater leaving the site boundaries must meet the primary maximum contaminant levels (MCLs) contained in the Safe Drinking Water Act.

Parameter	Limit	Units
Total Coliform	0.0	Col/100ml
Nitrate Nitrogen	1.0	mg/l
Nitrite Nitrogen	1.0	mg/l
pH	6.0 – 9.0	S.U.

Groundwater will also be monitored quarterly for the following additional parameters: depth to groundwater (feet), ammonia nitrogen, total Kjeldahl nitrogen, total nitrogen, and total phosphorus.

## **7.4 Inspection, and Maintenance**

Table E in the permit established a minimum inspection, monitoring, and maintenance schedule for the water treatment system.

## **SECTION 8.0 VARIANCES AND WAIVERS**

The permit contains no variances or waivers.

## **SECTION 9.0 E-REPORTING**

The permittee is required to electronically submit discharge monitoring reports.

## **SECTION 10.0 PUBLIC PARTICIPATION PROCESS**

### **10.1 Information Requests**

Interested persons may obtain copies of the application from Phil Mahler at 203 263 5303, [manager@woodlakect.com](mailto:manager@woodlakect.com) or Woodlake Tax District, 57 Clubhouse Drive, Woodbury, CT 06798.

The application is available for inspection by contacting Steve Edwards at 860-4243838 or [steve.edwards@ct.gov](mailto:steve.edwards@ct.gov), at the Department of Energy and Environmental Protection, Bureau of Materials Management and Compliance Assurance, 79 Elm Street, Hartford, CT 061065127 from 8:30 to 4:30, Monday through Friday.

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

### **10.2 Public Comment**

Prior to making a final decision to approve or deny any application, the Commissioner shall consider written comments on the application from interested persons that are received within thirty (30) days of this public notice. Written comments should be directed to Steve Edwards, Bureau of Materials Management and Compliance Assurance, Department of Energy and Environmental Protection, 79 Elm Street, Hartford, CT 06106-5127 or [DEEP.UICPermitting@ct.gov](mailto:DEEP.UICPermitting@ct.gov). The Commissioner may hold a public hearing prior to approving or denying an application if in the Commissioner's discretion the public interest will be best served thereby and shall hold a hearing upon receipt of a petition signed by at least twenty-five persons. Notice of any public hearing shall be published at least thirty (30) days prior to the hearing.

### **10.3 Petitions For Hearing**

Petitions for a hearing shall be submitted within thirty (30) days from the date of publication of this public notice and should include the application number noted above and also identify a contact person to receive notifications. Petitions may also identify a person who is authorized to engage in discussions regarding the application and, if resolution is reached, withdraw the petition. The Office of Adjudications will accept electronically-filed petitions for hearing in addition to those submitted by mail or hand-delivered. Petitions with required signatures may be sent to [deep.adjudications@ct.gov](mailto:deep.adjudications@ct.gov); those mailed or delivered should go to the DEEP Office of Adjudications, 79 Elm Street, Hartford, CT 06106. If the signed original petition is only in an electronic format, the petition must be submitted with a statement signed by the petitioner that the petition exists only in that form. Original petitions that were filed electronically must also be mailed or delivered to the Office of Adjudications within thirty (30) days of electronic submittal. Additional information can be found at [www.ct.gov/deep/adjudications](http://www.ct.gov/deep/adjudications).

The Connecticut Department of Energy and Environmental Protection is an Affirmative Action/Equal Opportunity Employer that is committed to complying with the requirements of the Americans with Disabilities Act (ADA). If you are seeking a communication aid or service, have limited proficiency in English, wish to file an ADA or Title VI discrimination complaint, or require some other accommodation, including equipment to facilitate virtual participation, please contact the DEEP Office of Diversity and Equity at 860-418-5910 or by email at [deep.accommodations@ct.gov](mailto:deep.accommodations@ct.gov). Any person needing an accommodation for hearing impairment may call the State of Connecticut relay number - 711. In order to facilitate efforts to provide

accommodation, please request all accommodations as soon as possible following notice of any agency hearing, meeting, program, or event.

DRAFT