

Underground Injection Control Program Fact Sheet

SECTION 1.0 FACILITY SUMMARY

APPLICANT	Quarry Ridge Associates, LLC
PERMIT NO.	UI0000446
APPLICATION NO.	200602963
DATE APPLICATION RECEIVED	November 27, 2006, modified on May 5, 2023
LOCATION ADDRESS	201 Turkey Roost Road, Monroe 06468
FACILITY CONTACT	David Bienashki
MAILING ADDRESS	20 Founders Way, Monroe, CT 06468
PERMIT TERM	10 Years
PERMIT TYPE	New
PERMIT CATEGORY	UIC Class V Injection Well
TREATMET DESCRIPTION	5W12 Advanced Treatment
OWNERSHIP	Private
COMPLIANCE SCHEDULE	Yes
RECENT ENFORCEMENT HISTORY	None (new facility)
RECEIVING WATERBODY	Groundwater
WATERQUALITY CLASSIFICATIONS	GA
DISCHARGE LOCATIONS	DSN 301-2
DEEP STAFF ENGINEER	Antoanela Daha, Antoanela.daha@ct.gov

Underground Injection Control Program Fact Sheet

SECTION 2.0 PERMIT FEES

Discharge Code: 312000a Representing: DSN 301-2 Annual Fee: \$1,110

SECTION 3.0 PROJECT HISTORY

Application No. 200602963 was received on November 27, 2006, for a permit to discharge to a subsurface sewage treatment and disposal system from a ninety (90), two (2) bedroom unit age restrictive residential development in Monroe, Connecticut. Following the review of the application and supporting documentation, the DEEP issued a Notice of Tentative Determination on June 26, 2007 (Appendix A). No comments were received during the public comment period and on October 3, 2007, the DEEP issued a Final Determination requiring submittal of construction plans and specifications for the proposed system for the DEEP's review and written approval (Appendix B). In accordance with 22a-430-4, the applicant may not construct the treatment plant nor can DEEP issue a discharge permit until plans and specifications have been received and approved; and the treatment plant has been built and DEEP has evaluated the final treatment system to ensure it was constructed properly; respectively. No such plans were received and on May 19, 2019, the DEEP issued a notice requiring the submittal of plans and specification or the application may be denied.

A set of construction plans and specifications were received on October 30, 2019. Following review, discussions and negotiations, the applicant submitted an amendment to the application on May 5, 2023, proposing a change from the age restrictive development to a residential development comprising of forty-five (45) detached residences. The proposed change does not change the average or maximum discharge flows or the proposed treatment and disposal system previously approved in the 2007 Final Determination.

SECTION 4.0 NATURE OF BUSINESS GENERATING DISCHARGE

Quarry Ridge is a 45 single-family residential development and will discharge domestic sanitary wastewater.

SECTION 5.0 PROCESS AND TREATMENT DESCRIPTION (by DSN)

Conventional Treatment () Advanced Treatment (X) RECYCLE ()

DSN 301-2 represents the discharge from the proposed alternative sewage treatment system consisting of a collection system, pre-treatment tank, equalization tank, mixing chamber, anoxic tank, aerobic tank and membrane bioreactor followed by a 18,750 sq. ft (50ft x 375ft) pressure dosed leaching field with an application rate of 1.08 gpd per sq. ft.

SECTION 6.0 COMPLIANCE SCHEDULE

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

The proposed permit includes the following compliance schedules:

1. Permittee shall record on the land records of the Town of Monroe a document indicating

Underground Injection Control Program Fact Sheet

the location of the zone of influence created by the subject discharge, as reflected in the application and approved plans and specifications for this permit,

2. Permittee shall record a copy thereof on the land records in the Town of Monroe, and
3. The proposed permit will require the evaluation and submittal for a Permit Compliance Audit to be submitted every two years.

SECTION 7.0 BASIS FOR LIMITATIONS, PERMIT STANDARDS OR CONDITIONS

In accordance with section 22a-430, DEEPs “Guidance for Design of Large-Scale On-Site Wastewater Renovation Systems,” (February 2006) and based on 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 the ground water from pollution. The advanced wastewater treatment is designed to treat wastewater and remove pollutants before being discharged to the pressure distribution leaching bed.

7.1 Advanced Wastewater Treatment

The wastewater discharging to the advanced treatment plant and entering the leaching bed is designed to meet the following parameters:

- Average daily flow: 13,500 gallons per day
- Maximum daily flow: 20,250 gallons per day
- Daily minimum and maximum: pH: 6.0 – 9.0 s.u.

Parameter	Average Monthly Limit	Maximum Daily Limit
Biochemical Oxygen Demand _{5-day}	20 mg/L	30 mg/L
Total Suspended Solid	20 mg/L	30 mg/L
Total Nitrogen	10 mg/L (12-month rolling average)	N/A

Monitoring of additional parameters, such as nitrate, has been included in the permit to quantify nitrogen loading and to validate design criteria and year-round operations of the treatment system.

7.2 Leaching Bed Requirements

The leaching bed is designed based on an application rate of 1.08 gallons per day per square feet with a total area is 18,750 square feet.

The leaching bed and the unsaturated zone beneath it are designed to absorb phosphorus and the absorption rate has been demonstrated through calculations thus limiting the discharge significant concentrations of phosphorus to the groundwater.

Bacteria and virus inactivation is achieved as partially treated wastewater continues to flow through the unsaturated area under the leaching bed and downgradient of it. In accordance with

Underground Injection Control Program Fact Sheet

the DEEPs design criteria, the minimum required travel time for the wastewater to all points of environmental concern is not less than 21 days.

7.3 Groundwater Monitoring Requirements

Groundwater monitoring at the edge of the property is required to ensure the treated domestic wastewater does not cause pollution. Groundwater leaving the site boundaries must meet the primary maximum contaminant levels (MCLs) in the Safe Drinking Water Act. Groundwater will be monitored for the following parameters: depth to groundwater (feet), nitrate, as N (mg/L), nitrite, as N (mg/L), ammonia, as N (mg/L), total Kjeldahl nitrogen, as N (mg/L), and total nitrogen, as N (mg/L), total phosphorus as P (mg/l), pH (standard units), and total coliform.

SECTION 8.0 VARIANCES AND WAIVERS

The facility did not request a variance or a waiver.

SECTION 9.0 E-REPORTING

The permittee is required to electronically submit discharge monitoring reports.

SECTION 10.0 PUBLIC PARTICIPATION PROCEDURES

10.1 Information Requests

Interested persons may obtain copies of the application from J Edwards Associates, LLC, 227 Stepney Road, Easton, CT 06612 Phone No.: 203-268-4205

The application is available for inspection by contacting Antoanela Daha at 860-424-3876 or antoanela.daha@ct.gov, at the Department of Energy and Environmental Protection, Bureau of Materials Management and Compliance Assurance, 79 Elm Street, Hartford, CT 06106-5127 from 8:-30 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 Antoanela Daha, Bureau of Materials Management and Compliance Assurance, Department of Energy and Environmental Protection, 79 Elm Street, Hartford, CT 06106-5127 or antoanela.daha@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.

Underground Injection Control Program Fact Sheet

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; 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.

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. 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.