

# Underground Injection Control Program Fact Sheet

## SECTION 1.0 FACILITY SUMMARY

<b>APPLICANT</b>	FedEx Ground Package System, Inc.
<b>PERMIT NO.</b>	UI0000263
<b>APPLICATION NO.</b>	200700144
<b>DATE APPLICATION RECEIVED</b>	January 23, 2007
<b>LOCATION ADDRESS</b>	FedEx Ground Package System, Inc., 350 Ruby Road, Willington, CT 06279
<b>FACILITY CONTACT</b>	William C. Moreau, Facility Maintenance Manager, Telephone: 860.684.0686 Ext. 133 <a href="mailto:william.moreau@fedex.com">william.moreau@fedex.com</a>  Evan Cucé, LSP, FedEx Ground Environmental Compliance Specialist, Mobile: 774.719.7908 <a href="mailto:evan.cuce@fedex.com">evan.cuce@fedex.com</a>
<b>MAILING ADDRESS</b>	1000 FedEx Drive Moon Township, PA 15108
<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>	Private
<b>COMPLIANCE SCHEDULE</b>	Yes
<b>RECENT ENFORCEMENT HISTORY</b>	NOVWRSA10002
<b>RECEIVING WATERBODY</b>	Groundwater, Roaring Brook Watershed
<b>WATER QUALITY CLASSIFICATIONS</b>	GA
<b>DISCHARGE LOCATIONS</b>	DSN 301-2

# Underground Injection Control Program Fact Sheet

**DEEP STAFF ENGINEER**

Antoanela Daha, [Antoanela.daha@ct.gov](mailto:Antoanela.daha@ct.gov)

## SECTION 2.0 PERMIT FEES

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

## SECTION 3.0 PROJECT HISTORY

Application No. 200700144 was received on January 23, 2007, for a permit renewal for the discharge of domestic sewage to a subsurface sewage treatment and disposal system from the existing FedEx Ground Package System Inc., in Willington, Connecticut. Following the review of the application and additional information in the administrative record, including a detailed review of the Discharge Monitoring Reports, a Notice of Violation (“NOV”) issued on April 30, 2010, for several effluent violations for the time period between December 2009 and February 2010. The applicant’s engineer submitted a response to the NOV proposing corrective action with a phased implementation to improve the treatment plant performance. An approval for treatment system modification including manipulation of biologic treatment and chemical feed, recirculation configuration, heat and enzyme addition for cold temperatures was issued on June 10, 2011. On April 16, 2020, an approval was issued to install a new septic tank for flow equalization, and effluent pretreatment. These improvements did not result in full compliance with the permit requirements and the effluent quality is still out of compliance with permit limits for TKN, nitrate and total nitrogen and occasionally for biological oxygen demand<sub>5-day</sub>, and total suspended solids; however, the ground water monitoring shows compliance with the drinking water standards.

## SECTION 4.0 NATURE OF BUSINESS GENERATING DISCHARGE

FedEx Ground Package Systems, Inc. (“FedEx Ground”) operates a truck terminal, a warehouse and a sorting facility that generates a domestic sewage discharge.

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

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

DSN 301-2 represents the discharge from the existing alternative sewage treatment system consisting of 2 BioClere trickling filters, 2 denitrification filters, a pump chamber, and a 19,200 sq. ft (40ft x 480ft) pressure dosed leaching field.

## 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 37- month compliance schedule has been included in the permit to bring the facility back into

## Underground Injection Control Program Fact Sheet

compliance with the permit terms and conditions.

- 2.a) To submit a comprehensive engineering report evaluating the performance and operation of the on-site sewage treatment and disposal system and propose an Action Plan;
  - 2.b) Upon approval from DEEP, install the remedial actions identified in the Action Plan;
  - 2.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 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 was designed to meet the following parameters:

- Average daily flow: 3,900 gallons per day
- Maximum daily flow: 5,100 gallons per day
- Daily minimum and maximum: pH: 6.0 – 9.0 s.u.

Parameter	Average Monthly Limit	Maximum Daily Limit
Biochemical Oxygen Demand <sub>5-day</sub>	30 mg/L	45 mg/L
Total Suspended Solid	30 mg/L	45 mg/L
Total Nitrogen	25 mg/L (12-month rolling average)	25 mg/L

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

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)	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.

# **Underground Injection Control Program Fact Sheet**

## **7.2 Leaching Bed Requirements**

The leaching bed was designed to accept 11,820 gallons per day in order to allow for potential expansion of the facility and has a total area of 19,200 square feet (480ft x40ft). For the purpose of the current permit, the maximum flow discharged to the leaching beds is 5,100 gallons per day.

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 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 Neil Hickey, Fuss & O'Neil, 146 Hartford Road, Manchester, CT 06040, Telephone number 860-646-2469.

The application is available for inspection by contacting Antoanela Daha at 860-424-3876 or [antoanela.daha@ct.gov](mailto: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.

## **Underground Injection Control Program Fact Sheet**

### **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 [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.