

United States Environmental Protection Agency
Region I
POLLUTION REPORT

Date: Wednesday, November 23, 2005

From: Gary Lipson

Subject: Roosevelt Drive Oil Site
140 Roosevelt Drive, Derby, CT
Latitude: 41.3228000
Longitude: -73.0958000

POLREP No.:	10	Site #:	696
Reporting Period:		D.O. #:	
Start Date:	8/25/1994	Response Authority:	OPA
Mob Date:		Response Type:	Time-Critical
Demob Date:		NPL Status:	
Completion Date:		Incident Category:	Removal Action
CERCLIS ID #:		Contract #	
RCRIS ID #:		Reimbursable Account #	01R0X08302D91CHRZ108
FPN#	014504		

Site Description

The site is located at 140 Roosevelt Drive in Derby, Connecticut at the former site of the Hull Dye and Print industrial complex.

On August 25, 1994, USEPA received a call from the Connecticut Department of Environmental Protection (DEP), requesting access to the Oil Spill Liability Trust Fund in order to conduct removal actions to prevent the continuing discharge of oil to the Housatonic River from the facility.

The responding EPA OSC opened FPN # 014504 and with the National Pollution Fund Center (NPFC) Case Officer, prepared a Pollution Removal Funding Authorization (PRFA) which was issued to the DEP to initiate cleanup operations.

In the area of the riverbank immediately down gradient of the facility where the subsurface oil was leaching to the river, 10,000 gallons of oil and 1,500 cubic yards of oil saturated sediments were removed. An interceptor trench and recovery well system were then installed to contain and collect additional oil, thereby preventing the continued discharge to the river. This system (Derby-1) is still operating and recovering oil.

On August 20, 1999, DEP received a new report of an oil sheen on the river, apparently emanating from the tailrace of the facility. It appeared that oil was discharging to the river upgradient of the recovery trench. A subsequent investigation indicated that the oil was migrating under and around the facility (and under the tailrace) from oil storage tanks on the other side of the facility that had been leaking for an unknown amount of time. Removal operations to recover oil from the source area began on December 6, 1999.

This oil recovery system (Derby-2) consists of a series of five 24" diameter recovery wells installed 25 to 30 feet deep in an approximate 350 foot long trench. Each of the recovery wells contains a skimmer that recovers oil into a 50 gallon day tank, which is then pumped into an above ground storage tank and subsequently shipped off site for disposal. The groundwater is pumped to a frac tank and then through activated carbon cells prior to discharge to the River. Since it was installed in 2000 and in conjunction with Derby-1, approximately 160,000 gallons of oil have been recovered. Although the wells are continuously recovering subsurface oil, there has still been significant sheening emanating from the tailrace. Hard containment boom and sorbent boom, which is changed out on a regular basis, are used to contain the oil from reaching the river.

Due to the continuing flow of oil from the tailrace and a number of unanswered questions regarding the oil pathway(s), the OSC requested the assistance of the EPA Environmental Response Team (ERT) and their Response Engineering and Analytical Contract (REAC) personnel in conducting an investigation which was performed in August of 2004. There were a number of findings documented during this investigation

as well as subsequent recommendations which can be seen in the Lockheed Martin report titled “Roosevelt Drive Oil Spill Site: 2004, Assessment of Subsurface Free Product Oil Plume and Recovery System”, currently located in the site file.

In 2005, OSC Gary Lipson replaced Thomas Condon who had been the OSC since 1994.

Current Activities

Tasks that have been conducted under the auspices of the DEP and their contractors under the existing PRFA include regular site inspections; ongoing system maintenance; groundwater treatment and discharge; and periodic transportation and disposal of collected oil, saturated boom, and spent carbon. Due to the additional workload presented by some of the recommendations made by ERT and REAC and in light of DEP’s regular workload, EPA and DEP agreed that EPA would assume responsibility for oversight of any site work as of July 19, 2005. Since that time, oil-saturated boom has been replaced twice, filter bags and the carbon in the groundwater treatment system have been replaced, and the oil in the above ground storage tanks has been pumped out for transportation and disposal. In addition, the computer hardware which was designed to allow for tracking of the Derby 2 oil recovery system has been updated.

On November 3, 2005, the EPA OSC met with representatives of McCallum Enterprises I Limited Partnership, the owners of the power generating units located in the Hull Dye building. At the request of EPA, the turbines had been taken off line a number of years previous as their operation appeared to be exasperating the release of oil to the river. The meeting was held because the company is interested in bringing the turbines back on line and wished to discuss their options with EPA. Due to EPA’s plans to address a number of outstanding issues (see Planned Removal Actions Section of this POLREP), McCallum Enterprises has agreed to wait approximately one year before they invest additional resources in attempting to bring the turbines back on line.

Planned Removal Actions

EPA’s immediate plans include the installation of an underflow dam at the end of the tailrace and two monitoring wells immediately up-gradient of the tailrace. The purpose of the dam is to raise the head in the tailrace, creating a ‘false high tide’ condition. The majority of oil that has been seen migrating into the river from the tailrace has done so under low tide conditions. Creating a high tide within the race should minimize the amount of oil migrating into the race and eventually the river. The dam would also create a pool behind it allowing for an easier collection of oil if it is still migrating through the walls and floor of the race. The new monitoring wells will be used to determine if the dam and increased water pressure in the race will force the oil to seek an alternate pathway to the river.

At this time, the oil being recovered from the Derby 1 system is contained in a small day tank which when full, causes the system to shut down until the tank is emptied. Due to the large volume of oil that is apparently still being recovered from this system, 1 or 2 above ground storage tanks (ASTs) will be installed into which the day tank will pump. This will allow the Derby 1 system to continue to recover oil and not go into a shut down mode. These new ASTs should also be able to accommodate oil being pumped from the pool created by the dam.

EPA’s contractor will also be purchasing a new software package to improve remote analysis of the system and its individual components. The software should also make it easier to examine the existing data, plot and document the cycles and seasonal fluctuations, and recommend changes as necessary.

Planned activities for the spring of 2006 include the installation of additional monitoring wells and potentially adding a new recovery well(s).

www.response.epa.gov/rooseveltdrive