United States Environmental Protection Agency
Region I
POLLUTION REPORT

Date: Friday, August 1, 2008
From: Gary Lipson

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

POLREP No.:	16	**Site #:**	696
Reporting Period:		**D.O. #:**	ERRS Task Order #: 0042
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 on the eastern bank of the Housatonic River along Route 34 (140 Roosevelt Drive) in Derby, CT. The Site is bordered by the river to the west and south, Route 34 and a canal to the east and the Derby Cellular Products facility to the north. The facility, which was constructed along with the canal at the turn of the 20th century has served as a hydroelectric plant since its inception. It is currently non-operational due to the continuing presence of subsurface oil migrating out from under the facility into the river. The On-Scene Coordinator (OSC) has been working with the turbine owners to determine whether the turbines can be brought back on-line.

Due to the leaching of oil from the facility property into the river in the summer of 1994, EPA opened Federal Pollution Number (FPN) 014504 with the National Pollution Fund Center (NPFC) Case Officer and prepared a Pollution Removal Funding Authorization (PRFA), which was issued to the CT DEP to initiate cleanup operations. Subsequent activities included the removal of oil saturated sediment, approximately 10,000 gallons of free product, and the installation of an oil recovery well system. This system (Derby-1) is still operating and recovering oil on an intermittent basis.

In 1999, there were new reports of oil sheening on the river, apparently emanating from the tailrace of the facility. Additional efforts to recover oil from the source area began that year with the installation of a second oil recovery system (Derby-2) consisting of five recovery wells within an interceptor trench. Although the wells have been continuously recovering subsurface oil, there has still been significant sheening present within the tailrace. A sandbag dam was constructed in 2007 within the tailrace to separate it from the river and a tube skimmer used to collect the oil.

Current Activities

EPA's clean-up contractor, Shaw E & I, is continuously conducting operation and maintenance (O & M) on the two oil recovery systems (only one of the five recovery wells that make up the Derby-2 system is presently on-line), as well as on the newer oil skimmer within the tailrace. This work includes repairing or replacing pumps, heaters, motors, belts, hoses, bag filters, and computer software.

During the summer of 2007, the OSC began working with the Tennessee Valley Authority (TVA) to subcontract an engineer with expertise in horizontal well design. Since there has been difficulty in installing traditional vertical wells due to the footprint of the building and the amount of concrete in the foundation, horizontal wells are being considered a possible alternative for additional oil extraction. In June, 2007, representatives of the TVA visited the site for their initial tour.

In September, 2007, the OSC met at the site with TVA and a design engineer to discuss potential options for oil extraction. The engineer requested background data and information to begin the design process. In March and April, 2008, a series of on-site pump tests were conducted which allowed the engineer to develop a groundwater flow model. This was done to assist in predicting the effectiveness of a

horizontal well(s) for plume control and to assist in the development of well placement specifications.

In recent months, the owner of the electricity producing turbines has been working towards getting the units back on line. He has hired an engineering firm to design a modification to the tailrace (a false wall offset from the tailrace walls) that would separate the clean water used to power the turbines from the oil and oily water leaching through the tailrace walls. The OSC and EPA's design engineer have discussed a number of options for an oil collection system that would be hydraulically connected to both the space behind the new false wall and to one or more horizontal wells and/or subsurface trenches.

Planned Removal Actions

The EPA is continuing to work with the TVA subcontracted engineer on the design of horizontal wells and an oil collection system. This work will be incorporated into the proposed tailrace modification being conducted by the turbine owner so a seamless oil drainage and collection system can be put in place. The new oil collection system will be designed to minimize maintenance requirements so the facility and turbine owners and operators can continue to keep the system operating.

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