United States Environmental Protection Agency
Region VI
POLLUTION REPORT

Date: Wednesday, January 9, 2008
From: Nicolas Brescia

Subject: Chiltipin Creek Seep Site
N. Rachel Avenue, Sinton, TX
Latitude: 28.0425000
Longitude: -97.5103000

POLREP No.:	4	**Site #:**	NRC#549425
Reporting Period:		**D.O. #:**	
Start Date:	6/4/2001	**Response Authority:**	OPA
Mob Date:	6/4/2001	**Response Type:**	Time-Critical
Demob Date:		**NPL Status:**	Non NPL
Completion Date:		**Incident Category:**	Removal Action
CERCLIS ID #:		**Contract #**	
RCRIS ID #:		**Reimbursable Account #**	2008 HR 06L0XK3 302D91C Z6K3
FPN#	N01139		

Site Description

On November 28, 2000, the Railroad Commission of Texas (RRC) notified EPA Region 6 of a discharge of crude oil which was seeping into Chiltipin Creek from its banks on the north side of the town of Sinton, San Patricio County, Texas. The seep was first discovered in July of 1986, and was purportedly the result of poor historic oilfield practices. The seep site lies within the old West Sinton oilfield, and is also within a residential area of Sinton. The creek flows directly into Copano Bay, an inlet in the Gulf of Mexico north of Corpus Christi, Texas.

Since the seep was first discovered, the RRC has conducted numerous, extensive investigations and removal actions on its own. These actions include geotechnical assessments and installation of monitor wells, soil sampling, plugging of several abandoned oil wells in the immediate area, and removal of oil from the creek. Although there are several possibilities of the source of the seep, none have been confirmed. In January 2001, after a request for assistance from the RRC, EPA responded and issued a Pollution Removal Funding Authorization (PRFA) to the RRC for the purpose of conducting additional assessments and installing a passive recovery trench. Installation of the trench was required along 350 feet of the creek bank to intercept the oil and keep it from discharging into Chiltipin Creek. Construction of the trench was completed in May 2003 and has been highly successful, as it is actively intercepting crude oil and oily water. Active discharges of oil into Chiltipin Creek along the trench length have completely ceased. In fact, over 900 barrels of crude oil have been recovered from the trench since 2003, which is an average of 10 to 20 barrels of oil per month. Additionally, an average of 30 to 50 barrels of oily water is recovered from the trench monthly.

In 2005, well after the installation of the trench, two additional breakouts of crude oil were discovered discharging small amounts of oil from the creek's banks both upstream (west) and downstream of the trench's terminus'.

Current Activities

Upstream and Downstream Oil Breakouts - Geotechnical Investigations

In late 2005, the RRC hired Intera, an environmental consulting company, to propose a plan to investigate the upstream and downstream breakouts of oil and evaluate the subsurface plume of oil in these areas. For the west side of the trench, or upstream area, Intera proposed a plan to install up to 5 monitor wells and 28 test boreholes using SCAPS technology along the creek bank and area up-gradient of the plume. Placement of the 28 test boreholes and 5 monitor wells has been completed and the RRC is evaluating the data and observing the monitor wells. As of this date, no petroleum hydrocarbons have been observed in any of the new monitor wells. However, the original, older monitor well upstream of the trench continues to gather oil. Cost of the evaluation, borehole and monitor well installation is estimated at $83,768.

Evaluation of the downstream or east side, breakout of oil was also addressed by Intera. SCAPS technology was used in 2005 to place test boreholes in order to gather data on the subsurface plume. Twelve boreholes were installed and the RRC is still evaluating the data, which is inconclusive at this time. The RRC is preparing plans to install 2 recovery wells in the future, if needed, to recover oil and stop this breakout from the creek bank. The cost for borehole installation and skimmer system (see below) is estimated at $36,345.

In 2007, at the request of the USCG National Pollution Funds Center (NPFC), EPA commissioned a deed and title search to be conducted for the site. The deed and title search was recently completed and will be forwarded to the NPFC.

O&M - Oil collection

A measure of the success of the trench is shown by the fact that oil is no longer discharging from the bank of Chiltipin Creek along the original seep site. There is no further need for mop up operations in this area, and the previously installed recovery area (bermed ditch at the toe of the bank) will be removed and creek bank repaired. Approximately 913 barrels of crude oil have been recovered from trench recovery wells since the installation of the trench, although the volume of oil recovered appears to be declining. Vacuum trucks remove oil and oily water on a monthly basis and transport it to a Class II disposal facility for re-injection. Given the continuing oil recovery, the RRC is considering the installation of skimmers in the trench. A skimmer system would allow for continuous recovery of oil without the expense of monthly vacuum truck evacuations and also allow the RRC to collect salvageable oil and sell it, thereby realizing some income from the site. Furthermore, the RRC expects operating cost for the skimmer system to be less than the vacuum truck cost. The cost saving and oil income might offset at least some of the installation and operating costs for the skimmer system. Road repair has also been conducted at the site to allow transport trucks continued, safe access to the trench wells.

Next Steps

The RRC will continue to assess, monitor, and remove oil from the site, and will further evaluate installation of the active skimmer system. The collection and bermed ditch area at the original discharge site along the creek will be closed. EPA requests an FPN ceiling increase request of $145,000 as well as a PRFA Amendment to provide funding for the RRC's additional assessment work, oil recovery system, and site maintenance etc. The total ceiling increase will also take into account consideration for EPA deed and title work, as well as additional site travel and management costs.

Key Issues

Installation of the recovery trench has stopped discharges of oil into Chiltipin Creek along the trench length. Over 913 barrels of oil have been recovered and thereby prevented from discharging into the creek by the trench. A specific source for the oil plume has not been confirmed.

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