

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Chevron Bonanza Pipeline Release - Removal Polrep
Final Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region VIII

Subject: **POLREP #4**
Final PolRep - Summary of Remediation Activities
Chevron Bonanza Pipeline Release
Z8CS
Bonanza, UT
Latitude: 40.0886800 Longitude: -109.3135800

To:
From: OSC Steven Way
Date: 3/29/2010
Reporting Period: 3/31/2009 - 3/31/2010

1. Introduction

1.1 Background

Site Number:	Z8CS	Contract Number:	EP-W-05-050
D.O. Number:		Action Memo Date:	
Response Authority:	OPA	Response Type:	Emergency
Response Lead:	PRP	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	1/8/2009	Start Date:	1/8/2009
Demob Date:	1/9/2009	Completion Date:	3/29/2010
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:	EO9802	Reimbursable Account #:	

1.1.1 Incident Category
Active Production Facility

1.1.2 Site Description
See PolRep 3.

1.1.2.1 Location
See PolRep 3.

1.1.2.2 Description of Threat
See PolRep 3.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results
See PolRep 3.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

Since the last PolRep, Chevron Pipe Line (CPL), the PRP, has completed the bulk of the remediation goals outlined in the Remediation Work Plan for Contaminated Soils that was submitted to EPA and BLM last year.

2.1.2 Response Actions to Date

For information about previous actions taken at the site, please see POLREPs #1, #2 and #3.

The bioremediation of the petroleum hydrocarbons in the contaminated soils from the roadside ditch and the arroyo was the established method for conducting the removal action. Soil removal from the road side ditch, the main channel, and other impacted areas of the site commenced in late February 2009 and the bioremediation cell construction was completed in July 2009. The final dimensions of the bioremediation cell were 114 feet wide by 413 feet long, with an average height of 6 feet above ground surface. The total volume of impacted soils included in the bioremediation cell was 9,500 cubic yards. The cell was constructed atop a large plastic sheet that was covered with shredded alfalfa hay to aide in moisture

retention, although locally available hay supplies ran out midway through construction. Required nutrients were added to the contaminated soils in-situ with a small tractor and 8-foot wheel implement before being excavated and transported to the cell. The contaminated soil was placed in 24" lifts on the plastic sheet and soaked with a water truck to achieve the appropriate moisture level, and a network of perforated drain pipe was placed across the level cell to aerate and ventilate the contaminated soils. Additional 24" lifts were placed on the cell and the perforated pipe was installed atop that with 8-foot spacing and vertical risers fitted with attic vents that extended above the finished height of the cell. This cell was bounded by a perimeter fence and covered with plastic to retain moisture and encourage microbial activity. It will be left in place until further analysis reveals successful bioremediation of petroleum contaminants in the soils to a total petroleum hydrocarbon - diesel range organics (TPH-DRO) concentration of 5000 mg/kg.

In addition to the construction of the bioremediation cell, CPL conducted confirmatory sampling throughout the site following excavation to ensure all residual soils contained less than 5000 mg/kg TPH-DRO. Analytical results indicated all areas were actually less than 500 mg/kg TPH-DRO. CPL also conducted a comprehensive reclamation of the impacted drainages and dam areas that had been constructed to prevent further migration of product into undisturbed areas. This effort included regrading excavated drainages to match existing terrain slopes within the channels, dismantling underflow dams and containment structures built during the period immediately following the release, and preparing the site for seeding to enable rapid revegetation. The BLM certified the revegetation plan put forth by CPL and monitored the application of a native seed mix throughout the disturbed areas of the site. The seeds were applied using a seed drill implement towed behind a tractor in areas of the site flat enough to use this technology. In areas where slopes made seed drilling impossible, CPL applied the seed mixture using hand broadcasting. Seeding was completed in October 2009 under the direction of BLM and a double application of seed was applied to 8.25 acres of impacted land to facilitate higher survival rates and more effective vegetation distribution.

CPL has committed to performance monitoring of the bioremediation cell and the reclaimed impacted land until the remediation goals are achieved and the bioremediation cell can be disassembled. This is outlined in the Work Plan and is scheduled to occur three times per calendar year, in April, July, and October. The bioremediation cell is expected to take more than two years to reduce the concentrations in the impacted soils below the target cleanup goal and data collected from periodic samples will aid CPL in refining this prediction and tracking performance of the bioremediation cell. Once the target cleanup goal has been achieved, CPL will notify BLM and EPA that the process is complete, request permission to dismantle the bioremediation cell, and begin the final phase, which consists of spreading treated soils uniformly throughout the 18 acres surrounding the original spill location and the bioremediation cell. Following this, CPL is committed to submitting a final progress report to EPA and BLM that will request a determination of No Further Action at the site. This final progress report will be included in the site file for this site.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

See PolRep 3.

2.1.4 Progress Metrics

<i>Wastestream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
<i>crude oil</i>	<i>soil</i>	<i>9500 cy</i>		<i>onsite biocell</i>	

2.2 Planning Section

2.2.1 Anticipated Activities

BLM will continue monitoring CPL removal and remediation efforts within the impacted drainage. CPL will operate the bioremediation cell until contamination levels in contaminated soils have been brought down to cleanup levels. BLM will work with CPL to monitor revegetation progress and restore impacted portions of the ecosystem as long-term monitoring of the site continues.

2.2.1.1 Planned Response Activities

No further EPA8 response activities are anticipated.

2.2.1.2 Next Steps

BLM will continue monitoring CPL progress toward meeting objectives outlined in the approved workplan for the site and provide technical assistance, as requested.

2.2.2 Issues

None.

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
TAT/START	\$7,500.00	\$7,500.00	\$0.00	0.00%
Intramural Costs				
USEPA - Direct	\$2,500.00	\$2,500.00	\$0.00	0.00%
Total Site Costs	\$10,000.00	\$10,000.00	\$0.00	0.00%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

2.6 Liaison Officer

2.7 Information Officer

2.7.1 Public Information Officer

2.7.2 Community Involvement Coordinator

3. Participating Entities

3.1 Unified Command

3.2 Cooperating Agencies

Bureau of Land Management - Vernal Field Office
Utah Department of Environmental Quality - Air Program
TriCounty Health Department - Vernal Office
Chevron Pipe Line Company - Rangely Pump Station
EarthFax Engineering - PRP Technical Contractor
EnviroCare - PRP Removal Contractor

4. Personnel On Site

None.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

6.1 Internet location of additional information/report

For additional information please refer to <http://www.epaosc.net/chevronbonanzapipelinespill>.

6.2 Reporting Schedule

7. Situational Reference Materials

No information available at this time.

