

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
SW Energy Ruby Ranch Road Blowout - Removal Polrep
Initial Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region VIII

Subject: POLREP #1
Initial
SW Energy Ruby Ranch Road Blowout
Z8FF
Green River, UT
Latitude: 38.8099500 Longitude: -110.0616400

To: David Ostrander, EPA
Laura Williams, EPA

From: Steve Merritt, OSC

Date: 5/22/2014

Reporting Period: May 21-24, 2014

1. Introduction

1.1 Background

Site Number:	Z8FF	Contract Number:	
D.O. Number:		Action Memo Date:	
Response Authority:	OPA	Response Type:	Emergency
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	5/21/2014	Start Date:	5/21/2014
Demob Date:		Completion Date:	
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:	E14810	Reimbursable Account #:	

1.1.1 Incident Category

Classic Emergency Response - Oil Spill

1.1.2 Site Description

The site is a well operated by S.W. Energy. A well blowout occurred sometime between the evening of Tuesday, May 20, 2014 and the morning of Wednesday, May 21, 2014, when a bull plug on a valve attached to the well casing below grade failed and resulted in an uncontrolled release of crude oil and production water at a rate of roughly 100 bbls/hr. The spill was tracked for about 3.5 miles down a dry wash that is a tributary to the Green River, but initially did not reach the waterway. The name of the well is GOVT SMOOT 3 and it is located in the Salt Wash Field of the Paradox Basin.

1.1.2.1 Location

The well pad is in a remote area of eastern Utah. The setting of this particular well pad is in an arid area of canyons and sandstone rock formations upland within the lower Green River watershed. A variety of heavily eroded box canyons lead toward the river and are generally dry except for precipitation events. The site is 14 miles southeast of Green River, Utah, and 165 miles southeast of Salt Lake City, Utah.

1.1.2.2 Description of Threat

The spill occurred in a dry river bed which flows 4.5 miles to the Green River. Some smaller communities and numerous agricultural water users get water downstream of the spill location on the Green River. The area of the river potentially impacted by the spill is rich with sensitive habitats and contains endangered environmentally sensitive areas. Spring runoff is also a critical time period for spawning for the endangered and sensitive sucker species and their larvae.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

When OSC Steve Merritt arrived on the morning after the spill occurred three ponds had been built roughly 300-feet from the well to capture the discharging fluids. Crews were reinforcing the berms, one of which had failed during the night, and were pumping out the ponds into vacuum trucks near the ponds and these fluids

were hauled off site to a permitted disposal facility called Danish Flats. Equipment and resources were being ordered by BLM and UT DNR - DOGM on behalf of the RP to kill the well and attempt to stop the flow.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

Response actions during this first operational period included joining in Unified Command with the RP, BLM and UT DNR - DOGM representatives on site, working to shore up temporary storage ponds and recover spilled material, supporting efforts to secure the source and preparing contingency plans in case these efforts were unsuccessful, assessing the impacts of the spill within the dry wash, and discussing required actions and endpoints with the responsible party to prevent the oil from getting to the Green River.

2.1.2 Response Actions to Date

After failing to kill the well with brackish fluid during the evening of May 21, 2014, the BLM and DOGM representatives made arrangements with the RP's representative on site to bring in well servicing contractors and "kill mud" to stop the blowout. The contractor pumping equipment arrived along with truckloads of the higher density "kill mud" during the morning of May 22, 2014. During this time, KSue Construction was working to reinforce earthen berms downstream of the well pad and pump off stored oily water for proper disposal. During the night, one of the berms failed and the contents flowed into a structure downstream, so KSue constructed a second primary containment area in the main drainage near the service road. Discussions with BLM during this time included an assessment of cultural, historic, and T&E species that might be impacted between the well pad and the Green River. DOI was notified and EPA spoke with USFWS staff during the morning to discuss the implications of the spill reaching the Green River and the need to protect spawning underway.

By around noon on May 22, 2014, the well servicing contractors began the operation to pump the "kill mud" into the well and casing via the tubing to stop the gas and oily water from blowing off. Almost as soon as this operation began, the pressure escaping the well noticeably reduced and within about 25 minutes, the well was back under control. Contractors moved in and determined that previously unknown valve below grade had been left open with only a bull plug to prevent pressure in the well casing from being released. Over time the bull plug had corroded and ultimately failed, leading to the blowout. The contractors replaced the corroded valve and the remnants of the old bull plug with a new temporary valve and bull plug.

A Unified Command meeting was held at the site shortly after the well was secured, which included the Responsible Party, BLM, UT DEQ, UT DNR - DOGM, and EPA, and the Grand County Health Department. During this meeting the agenda included discussions of well workover and stabilization, containment and recovery of spilled material, clean-up standards for soils impacted by petroleum, and restoration of disturbed areas following clean-up. Cliff Giffen of BLM has a copy of the sign-in sheet for this meeting. BLM, UT DEQ, and EPA all went through their requirements for the next steps in the response. Based upon the fact that the discharge had been secured at the well and that the totality of the impacts were to BLM land, EPA required only three things of the RP to eliminate the threat of discharge to the Green River: (1) install an underflow dam structure below the well pad containment ponds, (2) install an underflow dam at the mouth of the wash beyond the last observed impacted soils/pools, and (3) get a clean-up contractor in to absorb and/or solidify pooled petroleum in the wash prior to any storm events occurring. BLM and UT DEQ reiterated the soil cleanup standards that must be achieved and everyone agreed that the Bureau of Land Management would taking the lead in directing the cleanup at this point based on impacts to BLM land and the limited threat to the river once the requested underflow structures were in place. UT DNR - DOGM remained engaged to ensure that the well was properly secured and/or worked-over to address pressure building, install a more permanent valve, and eliminate residual concerns about the integrity of the well casing.

Following the meeting, EPA, BLM, UT DNR - DOGM and the RP walked the entire length of the wash that afternoon to assess the impacts of the spill, taking a photographic and written inventory of all pooled oil in the channel below the well pad and attempting to ascertain how far down the discharge had traveled.

During these assessments, the degree of impact varied from stained soils to pooled and emulsified product. The end of the plume, which had soaked into the dry sediments in the wash, was approximately 0.95 miles from the confluence with the Green River at the end of the day on May 22, 2014. The assessment also helped to locate ideal spot for constructing the lower underflow dam structure, approximately 0.60 miles from the confluence. EPA reiterated to the RP that they should make every effort to bring in contractors to solidify and properly dispose of the pooled oil and emulsified oil in the wash. All agreed that getting the lower underflow structure installed was a high priority before any precipitation event. EPA provided the RP with several locally-available clean-up contractors qualified to respond and the RP initiated contact with them to make arrangements.

At the end of the day on May 22, 2014, the well was secure, most of the contents pooled behind the temporary containment berms below the well pad had been recovered and were on their way to proper disposal, and the base of the upper underflow dam had been completed below these berms. KSue Construction had the pipe materials and equipment to complete the upper and lower dam on site, and Custom Environmental Services had been ordered to mobilize to the site the following morning, May 23, 2014, to address the pooled oil in the wash.

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

The Responsible Party for this spill is S.W. Energy. Rosanne Smoot Henshaw is the POC representing the family company, based in Salt Lake City, UT. She and her 4 siblings inherited the company and the wells from their father, who was a Petroleum Engineer at the site until his death. Her contact information is listed in the contacts for this website.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>

2.2 Planning Section

2.2.1 Anticipated Activities

Provided the underflow dam structures are installed and the pooled oil is recovered from the wash, there will be no further EPA action at the site, which will primarily be overseen by BLM.

2.2.1.1 Planned Response Activities

No activities planned. Will continue to provide technical assistance, as requested to BLM and the RP as the clean-up continues.

2.2.1.2 Next Steps

Monitor the clean-up via UT DNR - DOGM and the BLM, ensuring that actions are taken to mitigate the threat to the Green River.

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	\$15,000.00	\$2,000.00	\$13,000.00	86.67%
Intramural Costs				
USEPA - Direct	\$1,500.00	\$400.00	\$1,100.00	73.33%
Total Site Costs	\$16,500.00	\$2,400.00	\$14,100.00	85.45%

* 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

Contractors on-site are being asked about HAZWOPER training, but not all have the appropriate level of training and medical monitoring to be conducting clean-up actions. The RP has been warned about the need to ensure adequate responder health and safety for contractors.

2.5.2 Liaison Officer

EPA is in contact with BLM, USFWS, UT DEQ, UT DNR - DOGM, Grand County EM, and Grand County Public Health.

2.5.3 Information Officer

There have been several media inquiries related to the site, most of which have been fielded by the OSC and the EPA Region 8 PIO.

3. Participating Entities

3.1 Unified Command

S.W. Energy - Responsible Party IC
BLM - Primary Federal IC
EPA - Deputy Federal IC
UT DEQ - Primary State IC
UT DNR - DOGM - Deputy State IC

3.2 Cooperating Agencies

Grand County Emergency Management
Grand County Public Health
Grand County Department of Transportation

USFWS
Department of Interior
BLM Utah State Office

4. Personnel On Site

See roster of participants in Unified Command meeting.

KSue Construction - 4
Monument Well Services - 6
S.W. Energy - 3
BLM - 2
UT DEQ - 3
EPA - 1
UT DNR - DOGM - 1
Grand County - 3

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.

POLREP #1 Last Updated 6/2/2014