U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Chaparral Energy Alva Spill - Removal Polrep
Initial Removal Polrep

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region VI

Subject: **POLREP #1**
Initial
Chaparral Energy Alva Spill
Alva, OK
Latitude: 36.9132200 Longitude: -98.9232000

To: Lawrence Stanton, EPA HQ
Monty Elder, ODEQ
Ragan Broyles, Superfund Division

From: Mike McAteer, OSC
Date: 4/22/2013
Reporting Period: April 21 and 22, 2013

1. Introduction

1.1 Background

Site Number:		**Contract Number:**	
D.O. Number:		**Action Memo Date:**	
Response Authority:	OPA	**Response Type:**	Emergency
Response Lead:	PRP	**Incident Category:**	
NPL Status:	Non NPL	**Operable Unit:**	
Mobilization Date:	4/21/2013	**Start Date:**	4/21/2013
Demob Date:		**Completion Date:**	
CERCLIS ID:		**RCRIS ID:**	
ERNS No.:		**State Notification:**	
FPN#:	E13614	**Reimbursable Account #:**	

1.1.1 Incident Category

Emergency Response under OPA Authority. RP-lead.

1.1.2 Site Description

At approximately 1500 hours on Saturday April 20, 2013, Chaparral Energy employees discovered that oil from a storage tank battery had escaped the secondary containment around the battery and released into a nearby creek. The cause of the release appears to be due to the fact a generator failed causing the salt water tanks to overfill which then pushed the salt water into the oil tanks causing them to overfill and release out the top of the oil tanks. Oil then seeped under the north wall of the containment wall and flowed downhill approximately 200 feet into Greenleaf Creek, a tributary to the Salt Fork of the Arkansas River. Chaparral estimates about 309 bbls of oil released from the tank battery.

OSC McAteer and START were mobilized to the site on Sunday April 21.

1.1.2.1 Location

Site is located approximately 20 miles northwest of the city of Alva, Woods County, Oklahoma. It is a sparsely populated rural area of northwestern Oklahoma. Cattle ranching is the predominant land use in the immediately area.

1.1.2.2 Description of Threat

Approximately 300 barrels of crude oil discharged from this Chaparral tank battery out into Greenleaf Creek. The oil spread approximately 2,000 feet downstream in the creek before it was dammed off. The creek normally contains water except in drought periods and it may be a gaining stream fed by groundwater. The creek is occasionally used as a source of drinking by livestock (cattle).

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

On Sunday April 21, Chaparral employees and their contractors initially responded by using vac trucks to remove crude oil on the surface of the creek water. Due to a lack of resources, very few absorbent booms

or pads were used in the initial response phase (Saturday April 21). After several hours of running vac lines into the creek, the creek dried out and the oil in the creek was then deposited on the creek bed sediments. EPA advised Chaparral to increase manpower and oil removal equipment in order to remove the oil not removed by the vac trucks. Chaparral then hired an oil response contractor. who mobilzed to the site late on Saturday April 21. Absorbent boom and pads were then applied to the creek and two overflow dams were erected (upstream end and downstream end of spill pathway) overnight. Contractors also began to remove contaminated soil from the spill area around and downgradient of the tank battery and containment wall. The soil is being staged on thick visqueen upgradient of the tank battery.

On Monday April 22, Chaparral contractors continued to use boom and absorbent pads to remove pools of free product in the creek. Oiled debris (leaves, sticks, tree limbs) lying in the creek were also being removed. Following an onsite meeting with a representative of the Oklahoma Corporation Commission (OCC), it was decided that it would be best to excavate contaminated sediments in the creek bed instead of trying to wash the sediments to remove the oil. The contaminated sediments will be staged alongside the contaminated soil excavated from around the tank battery. This soil and sediment will later be bioremediated under the supervision of the OCC. A severe thunderstorm moved over the site area at about 1900 hours and work in the creek area was then suspended for the night.

2. Current Activities

2.1 Operations Section

No information available at this time.

2.2 Planning Section

2.2.1 Anticipated Activities

2.2.1.1 Planned Response Activities

All contaminated soil and sediments excavated from the impacted areas of the site are being staged onsite within an earthen berm and will later be bioremediated under the direction and supervision of the Oklahoma Corporation Commission.

2.2.1.2 Next Steps

- Continue removal of free product in the creek bed.
- Continue removal of oiled debris (leaves, limbs, etc) and stage this material for later disposal at a landfill
- Continue removal of impacted soils downgradient and surrounding the tank battery.
- Begin excavation of contaminated sediments in Greenleaf Creek. Stage these sediments along with the contaminated soil for later bioremediation

2.2.2 Issues

- Significant rain and possible snowfall is expected over next 24 hours. This may change the excavation method for removing oiled sediments from the creek bed. The situation will be assesed tomorrow (Tuesday April 23).

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

No information available at this time.

3. Participating Entities

3.1 Unified Command

3.2 Cooperating Agencies

- Chaparral Energy Inc.
  - Enviro Clean, Inc.
  - Black Sheep, Inc.
  - American Scientifc

- U.S. EPA
  - Weston Solutions, Inc (START Contractor)

- Oklahoma Corporation Commission (OCC)

4. Personnel On Site

No information available at this time.

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 4/24/2013