

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Rock Creek Gas Plant Fish Kill - Removal Polrep
Final Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region VI

Subject: POLREP #2
Final
Rock Creek Gas Plant Fish Kill

Borger, TX
Latitude: 35.6732500 Longitude: -101.4109111

To:
From: Adam Adams, OSC
Date: 1/6/2014
Reporting Period: 12/29/2013-01/06/2014

1. Introduction

1.1 Background

| | | | |
|----------------------------|------------|--------------------------------|------------|
| Site Number: | A6HZ | Contract Number: | |
| D.O. Number: | | Action Memo Date: | |
| Response Authority: | CERCLA | Response Type: | Emergency |
| Response Lead: | PRP | Incident Category: | |
| NPL Status: | Non NPL | Operable Unit: | |
| Mobilization Date: | 12/27/2013 | Start Date: | 12/27/2013 |
| Demob Date: | 12/28/2013 | Completion Date: | |
| CERCLIS ID: | | RCRIS ID: | |
| ERNS No.: | 1069539 | State Notification: | |
| FPN#: | | Reimbursable Account #: | |

1.1.1 Incident Category

Emergency Response / CERCLA

1.1.2 Site Description

The site is located at Rock Creek Gas Plant located at the west end of 10th Street in Borger, Hutchinson County, TX. The area surrounding the plant to the east consist of residential homes and open fields to the west. The plant processes natural gas from fields located near Dumas, Tx. Rock Creek Gas Plant is owned and operated by DCP Midstream.

1.1.2.1 Location

Site is located at 1000 West 10th Street, Borger, Texas 79007.

Latitude: 35° 40' 23.5" N
Longitude: 101° 24' 39.4" W

1.1.2.2 Description of Threat

Approximately 100 bbls of monoethanolamine (MEA) were released due to an equipment malfunction at the plant amine contact unit. The corrosive MEA migrated to the southeast and off-site via the plant outfall into an unnamed creek which flows to the west and north circling the facility property and into Rock Creek, which flows into the Canadian River. The incident caused a fish kill impacted small minnows, small brim, and small catfish.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

The potentially responsible party, PRP, bermed the creek at the further-most section of impacted creek, approximately one creek mile from release point. The slow moving creeks vary in width from a few feet to approximately 10 feet and depth from inches to a few feet.

As a heavier than water substance, MEA has pooled in pockets of the creeks. The PRP also installed a rock berm approximately one half mile from release point to further minimize migration. Several fish have been observed impacted from the incident, from minnows to small brim and catfish, as well as turtles.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

On December 27, 2013 EPA received notification (NRC#1069539) of a release of approximately 100 bbl of monoethanolamine (MEA) from the Rock Creek Gas Plant located in Borger, Hutchinson County, TX. At 1300 hours OSC Adam Adams activated START and began mobilization. Facility representatives reported that at 2215 on December 26, 2013 workers discovered a leak in the MEA contact unit/recirculation system. After gauging the MEA recovery tanks, workers determined that approximately 100 bbl were missing. The released MEA flowed down-gradient following stormwater runoff pathways offsite and entered a tributary of Rock Creek.

2.1.2 Response Actions to Date

On the morning of the December 28, the DCP Midstream (PRP) mobilized a total of six fractionation tanks and staged them adjacent to the final earthen dam at the furthest extent of the release pathway. Workers utilizing portable pumps, pumped the impacted water from the dammed creek into the tanks. In addition, areas of pooled MEA were pumped downstream for recovery due to the difficulty of the terrain and ability to get equipment further upstream. By the 29th the area upstream of the dam was drained the majority of water and was then flushed using wastewater released from the Rock Creek Plant and the City of Borger Wastewater Plant. DCP, EPA, and the Texas Railroad Commission (RRC) have agreed that wastewater upstream of the dam is classified as E&P exempt waste and approved the transport of the water from the fractionation tanks to a class II injection well for disposal. The flush water was analyzed at multiple locations for dissolved oxygen and pH to determine if the water quality meets standards to allow it to be released downstream or need to be hauled to a disposal well. DCP determined the flush water was suitable to be released downstream with EPA, TCEQ, and RRC approval. All released water had a dissolved oxygen level greater than 3% and pH is less than 9.

Final samples of the water in the creek directly upstream of the earthen dam had a pH in the range of 7.5-8. Upon EPA, TCEQ, and RRC approval the water was allowed to overtop the dam allowing for further aeration before flowing downstream.

On 31 December, 2013, the initial sample results were received of the facilities onsite NPDES permitted waste water skimmer ponds indicating a TOC of 184 mg/l and was an indicator that some of the MEA did get into the skimmer pond. Utilizing a vacuum truck, DCP began removing water from the bottom of the skimmer pond in 240 bbl increments. Following each removal action, DCP resampled. This activity continued until the TOC samples from the skimmer pond taken January 22nd and 24th indicated TOC of 15.8 mg/l and 14.7 mg/l, indicating that the facility is back in compliance with the permit BOD limitation of 30 mg/l.

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

The PRP at this time, is DCP Midstream.

2.1.4 Progress Metrics

No wastes reported at this time.

2.2 Planning Section

2.2.1 Anticipated Activities

PRP will continue to remove impacted soils from the release pathway and monitor creek.

No further EPA response actions planned.

2.2.2 Issues

No issues at this time.

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

In addition to the PRP and EPA, TCEQ and TxRRC were supporting this response.

DOI has also been notified of this incident.

4. Personnel On Site

In addition to PRP personnel and contractors, EPA, TCEQ, TxRRC are on site as warranted by the incident.

5. Definition of Terms

No information available at this time.

6. Additional sources of information**6.1 Internet location of additional information/report**

Information can be found at www.epaosc.org/rockcreekfishkill.

6.2 Reporting Schedule

No further POLREPs will be submitted.

7. Situational Reference Materials

No information available at this time.