

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Red River Fish Kill - Removal Polrep
Final Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region VI

Subject: POLREP #4
Final
Red River Fish Kill
A6BY
Oscar, OK
Latitude: 33.9397997 Longitude: -97.7520561

To: Reggie Cheatham, EPA HQ
Ronnie Crossland, US EPA
Anthony Buck, TCEQ
Monty Elder, ODEQ

From: Adam Adams, OSC

Date: 8/25/2014

Reporting Period: 08/19/2011 to 08/25/2014

1. Introduction

1.1 Background

Site Number:	A6BY	Contract Number:	
D.O. Number:		Action Memo Date:	
Response Authority:	CERCLA	Response Type:	Emergency
Response Lead:		Incident Category:	
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	8/21/2011	Start Date:	8/19/2011
Demob Date:	8/24/2011	Completion Date:	8/25/2014
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

Emergency Response

1.1.2 Site Description

Fish Kill reported by ODEQ and ODWC in the Red River along the Texas-Oklahoma State line. ODEQ reports large fish and bottom dwellers are dying in an approximately 55 mile stretch of the Red River.

1.1.2.1 Location

Texas-Oklahoma state line along the Red River from approximately Terral, OK to Lake Texhoma.

1.1.2.2 Description of Threat

Report indicates an unknown substance potentially killing the large fish in the Red River, similar to the fish kill reported in July/August of 2011.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

EPA Region 6 was contacted by ODEQ on 08/19/2011 regarding a fish kill in the Red River near Oscar, Oklahoma. ODEQ requested assistance in assessment of the cause of the fish kill. EPA mobilized to the Red River on 08/21/2011 with START-3 contractors to conduct water and sediment samples from the Terral, OK area down to the mouth of Lake Texoma.

EPA Region 6 was contacted again on 06/12/2012 about a fish kill in the same area due to unknown causes similar to the previous fish kill reported in August 2011. ODEQ requested assistance in the assessment of the cause of this fish kill. EPA mobilized with START-3 contractors to conduct water

sampling on the Big Wichita River, Little Wichita River, and at three locations on the Red River.

2.1.2 Response Actions to Date

August 2011 Incident.

EPA collected 10 water and four sediment samples from locations along the Red River. The upgradient sample considered for background comparison was collected from the confluence of the Little Wichita River into the Red River. Six of the water samples were collected at previously established ODWC or ODEQ sample locations. Samples collected by EPA during this sampling event were shipped to a laboratory for analysis, which included VOC's, SVOC's (to include siloxane), PCB's, herbicides, TAL metals (including strontium, uranium, and cyanide), RCI, BOD, and COD. Some of the samples collected from the Ketchum Bluff area were also analyzed for dissolved gases, based on concerns communicated to EPA about off-gassing and bubbling observed.

EPA returned to the Ketchum Bluff area on 10/12/2011 to assess river conditions, gain access from both the Oklahoma and Texas sides, and to conduct recon of the reported off-gassing. River conditions were significantly different due to a rise in the river. Minimal off-gassing was observed during this Site visit. EPA also met with OCC representatives during this recon.

EPA mobilized along with START-3 to the same area on 11/02/2011 to attempt air monitoring of the off-gassing and/or collection of air samples for VOC and siloxane analyses. No off-gassing was observed during this Site visit. Additional personnel at the Ketchum Bluff area during this Site visit were ODEQ, TPWD, OCC, and a local landowner.

During this time frame, the EPA Region 6 Houston Lab was contacted to investigate samples that had been collected by ODEQ previously, in order to determine the make-up of a white gel material that formed during the extraction process by ODEQ. The EPA Region 6 Houston Lab assisted, as well as utilizing the EPA NEIC Lab and EPA ORD.

See the Emergency Response Interim Report for a summary of EPA findings prior to the June 2012 Incident.

June 2012 Incident

EPA mobilized with START-3 contractors on 12 June 2012 EPA and collected a total of five water samples. Three water samples were collected from three different locations along the Red River between the area of Terral, OK to Interstate 35. Two water samples were also collected in Texas, one from the Big Wichita River near Byers, Texas and one from the Little Wichita River near Ringgold, Texas. These samples were then shipped to a laboratory for analysis of VOC's, SVOC's, acrylonitrile, dissolved gasses, gasoline range organics, glycols, low molecular weight acids, pesticides, PCBs, herbicides, diesel range organics, ammonia, phosphorus, TKN, gross Beta radiation, Potassium-39, dissolved TAL metals (including mercury, strontium, uranium, and total cyanide), alkalinity, chlorine, sulfate, pH, total dissolved solids, nitrates, nitrites, fluorine, bromine, dissolved inorganic carbon, dissolved organic carbon, stable isotopes of water and strontium isotopes 87 and 88. Additionally, the three samples collected in the Red River were also sampled for golden algae.

EPA ORD is also providing assistance on the June 2012 response by conducting analysis and research of ODEQ collected samples.

December 2012 Air Sampling

Upon request from ODEQ, EPA met ODEQ on 12 December 2012 to assist in collecting air samples from the off-gassing that had been observed in Red Creek and the Red River. Air samples of the off-gassing were collected within Red Creek underneath the bridge at N2940 Road and within the Red River in Ketchum Bluff and were sent for analysis under the direction of ODEQ and are available from ODEQ.

Path Forward

There has been no recurring incidents, final resolution as to the cause of this incident, nor EPA field operations beyond the December 2012 sampling event.

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

No potentially responsible parties have been identified at this time.

2.2 Planning Section

2.2.1 Anticipated Activities

No further response activities are anticipated, 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

2.5.1 Safety Officer

2.6 Liaison Officer

2.7 Information Officer

Additional information can be obtained at www.epaosc.org/RedRiverFishKill.

3. Participating Entities

3.1 Unified Command

This response is an ODEQ-Lead response. EPA provided assistance and support, as requested.

3.2 Cooperating Agencies

EPA has been working with ODEQ, TCEQ, ODWC, TPWD, OCC and RRC of Texas during this emergency response assessment.

Additional agencies that EPA has been in contact with include USFWS and the Chickasaw Nation.

4. Personnel On Site

EPA and START-3 contractors were on-site, as needed.

Other agency representatives were on-site at their discretion.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

6.1 Internet location of additional information/report

Additional information can be obtained at www.epaosc.org/RedRiverFishKill.

6.2 Reporting Schedule

This is a final POLREP, and no further POLREP's will be submitted.

7. Situational Reference Materials

No information available at this time.

POLREP #4 Last Updated 9/18/2014