

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Emchem Glycol Spill - Removal Polrep
Final Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region VI

Subject: POLREP #1
Response Activities
Emchem Glycol Spill
Pearland, TX
Latitude: 29.5753316 Longitude: -95.2898488

To: Ragan Broyles, Superfund Division
Lawrence Stanton, Office of Emergency Management
Kelly Crunk, TCEQ

From: John Martin, OSC

Date: 10/12/2011

Reporting Period: 10/11 - 10/12/2011

1. Introduction

1.1 Background

Site Number:		Contract Number:	
D.O. Number:		Action Memo Date:	
Response Authority:	CERCLA	Response Type:	Emergency
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	10/11/2011	Start Date:	10/11/2011
Demob Date:	10/12/2011	Completion Date:	
CERCLIS ID:	TXD0980750624	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category: Emergency Response

1.1.2 Site Description: At approximately 23:30 on 10 October 2011 the Texas Commission on Environmental Quality (TCEQ) contacted the National Response Center (NRC) concerning a release of Triethylene Glycol from the abandoned Emchem Corporation.

1.1.2.1 Location: Emchem Corporation is located at 4301 Rice Drier Road, Pearland, Brazoria County, Texas.

1.1.2.2 Description of Threat: The uncontrolled release of the contents of an AST from an abandoned facility. The AST had very little to no secondary containment. The released material would have eventually migrated to a nearby tributary of Clear Creek which flows to Clear Lake. The primary chemical of concern is abandoned feedstock used to produce Trieththeylene Glycol (TEG).

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results: Based on initial assessments, triethylene glycol is leaking at a rate of 3-4 gallons per minute from a failed valve at the bottom of an 18,000 gallon Above Ground Storage Tank (AST). The cause of the leak is believed to be the result of uneven tank settling due to soft saturated ground complicated by recent a rain event on 9 October 2011. Three other 18,000 gallon ASTs have also experienced uneven settling causing concern for the overall structural integrity of those tanks.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative: At approximately 23:30 on 10 October 2011 TCEQ contacted the NRC (Incident Report # 992154) concerning the release of Triethylene Glycol (TEG) due to a leaking valve at a tank farm. Initial reports indicated that 3,000 gallons of material have been released with an estimated 1,800 gallons having flowed off-site into a drainage ditch located on the north side of the site. The leak is on-going at an approximate rate of 3-4 gallons per minute. Shortly after midnight on 11 October 2011, the EPA Phone Duty Officer activated the START and ERRS contractors to immediately respond to the site.

2.1.2 Response Actions to Date: Upon arrival at the site START and ERRS met with the TCEQ representatives on-site. TCEQ had mobilized one of their Emergency Response contractors to respond to the site, in an attempt to stabilize and prevent additional off-site migration. The TCEQ contractor was

recovering product from the leaking valve as well as free standing product from the ground. TCEQ was also concerned about the structural integrity of the tanks and a possible tank failure as a result of one of the leaning tanks.

Based on these concerns TCEQ requested that EPA assume the lead for the emergency response. EPA tasked the ERRS contractor with mobilizing a crew to the site to continue the response efforts. At approximately 06:00 hours the ERRS crew arrived on-site and transitioned the response effort with the existing TCEQ contractor.

At approximately 08:00 hours a more detailed site investigation was conducted and it was determined that no product had migrated off-site as originally reported. The ERRS contractor continued removing product from the leaking tank as well as recovering free product from the ground.

At approximately 15:00 the ERRS contractor completed the transfer of the product from the leaking tank to a Frac Tank that was mobilized to the site for temporary storage. At approximately 15:45 ERRS began transferring product from a second tank to minimize the potential for tank failure as a result of the questionable structural integrity of the ASTs.

At 17:45 approximately 8,000 gallons of product had been transferred to the Frac Tank for temporary storage. The site was secured and the EPA crews left the site at 18:00 for the night.

At 07:00 hours on 12 October 2011, EPA, START, the ERRS contractor, and TCEQ mobilized to the site to continue response actions. A second Frac Tank was mobilized to the site for temporary storage. Crews continued pump down operations to transfer product from the three remaining ASTs to the Frac Tanks. Operations continued until 15:00 hours at which time the liquids were removed from the remaining ASTs. ERRS contractors collected a sample from each Frac Tank for waste profiling analyzing for VOCs, SVOCs, Mercury, Cyanide, Hexavalent Chromium, and pH. START conducted photo documentation of the contents located inside the metal building on-site. At 16:45 hours the site was secured and the ER crew demobed from the site.

2.1.3 Enforcement Activities: The owner/operator of the facility has been deceased for two years. Prior to his death, he had been in litigation with TCEQ for more than 20 years regarding regulations pertinent to facility operations. While the family heirs decided not to take possession of the site because of liability issues, the co-executor of the estate signed site access for the EPA operations.

2.2 Planning Section

Next Steps: The approximately 26,300 gallons of TEG feedstock collected into the frac tanks will be analyzed for disposal profiling and then the waste stream will be properly disposed. A review of the facility's regulatory files will be completed and then further removal/remedial assessments conducted to address the remaining waste streams remaining onsite.

2.3 Logistics Section

Not relevant.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

Not relevant.

3. Participating Entities

Texas Commission on Environmental Quality - TCEQ
Brazoria County Emergency Management
City of Pearland Fire Marshalls

4. Personnel On Site

10/11/2011: 1 EPA OSC, 1 EPA START Contractor, 9 EPA ERRS Contractors

5. Definition of Terms

Not relevant.

6. Additional sources of information

Not relevant.

7. Situational Reference Materials

Not relevant.