

United States Environmental Protection Agency
Region IV
POLLUTION REPORT

Date: Monday, June 12, 2006

From: Kevin Misenheimer

Subject: Final POLREP

Quality Carriers, Inc - Pesticide Release
4953 Virginia Avenue, North Charleston, SC
Latitude: 32.8869900
Longitude: -79.9732700

POLREP No.:	2	Site #:	A4MC
Reporting Period:	5/9 to 5/11/2006	D.O. #:	
Start Date:	5/8/2006	Response Authority:	CERCLA
Mob Date:	5/8/2006	Response Type:	Emergency
Demob Date:		NPL Status:	Non NPL
Completion Date:	5/11/2006	Incident Category:	Removal Action
CERCLIS ID #:	SCD045633096	Contract #	EP-W-05-054
RCRIS ID #:			

Site Description

At approximately 2130 hours on 7 May 2006, the miticide Propargite (a.k.a. Omite) was released to the land and air from a 7,000 gallon capacity intermodal container. An estimated 3,000 gallons of material was released. The intermodal container was situated on the Quality Carriers, Inc. facility (aka Quala Systems) in the City of North Charleston, South Carolina. The facility is located at 4953 Virginia Avenue, across the street from the Shell Oil Lubricants terminal, on the Cooper River.

While the specific cause of the incident is unknown, the release occurred due to an over pressurization of the intermodal tank which breached the top hatch and compromised the integrity of the tank. The material (Propargite and degradation products) sprayed onto the Quality Carriers, Inc. facility, Virginia Avenue, Kinder Morgan facility and down wind properties, including the Shell Lubricants terminal. At the time of the release, a ship was undergoing a product transfer at the Shell terminal. Workers there reported a pungent odor and complained of symptoms of exposure including nausea and fainting. Transfer operations aboard were ceased, and the Shell facility evacuated all personnel. The Coast Guard closed maritime transport on that section of the Cooper River.

USGC and the North Charleston Fire Department were the initial responders. The fire department evacuated nearby businesses as a pre-cautionary measure. Virginia Avenue was closed to traffic in both directions. SCDHEC emergency response personnel also responded to the scene. Two National Response Center reports were filed (NRC 796418 / 796423). OSC Kevin Misenheimer and START were dispatched to provide assistance to the local responders and to oversee the Potentially Responsible Party's (PRP) actions.

See Initial Polrep for further details.

Current Activities

During the period of 9 May to 11 May 2006, Quality Carriers, Inc. (the Potentially Responsible Party) continued response activities to clean up and mitigate the release of Propargite at and around the facility located at 4953 Virginia Avenue (the Site). Contractors Moran Environmental Recovery, Inc. (MER) and S&ME, Inc. continued work for Quality Carriers, Inc. at the Site. Formal Unified Command (UC) meetings were established each day at 0900 and 1700 hours. Unified Command members included Quality Carriers, Inc (and contractors), South Carolina Department of Health and Environmental Control (DHEC), City of North Charleston Fire Department, the United States Coast Guard, Sector Charleston and the Environmental Protection Agency (EPA). The meetings were designed to report and discuss progress at the Site as well as to set incident objectives for future operations. Representatives from Shell Lubricants were also included in meetings due to the impacts of the spill on the Shell facility. Representatives from Chemtura, Inc. (the manufacturer of the Propargite) also arrived on site on 9 May 2006 and participated in the UC meetings as a technical specialist with specific knowledge of the chemical of concern and its degradation products. EPA and START continued monitoring of PRP activities during this period.

Because Propargite is a marine pollutant, the UC determined that the primary objective of the response would be to limit potential impacts to surface and storm water, and subsequent down stream receptors in the nearby Cooper River. Other objectives were developed to provide a framework for organizing the response during this reporting period. The primary objectives are listed here:

Develop and implement a storm water control plan to limit and/or control the migration of potentially contaminated storm water during a rainfall event;

Assess the extent of Propargite contamination on impacted properties (Kinder Morgan, Virginia Avenue and Shell Lubricants);

Mitigate the contaminant source areas on the Site, including removal of contaminated soil, decontamination of vehicles and equipment and stabilization of the inter-modal container which still contained Propargite product/waste material;

Decontaminate impacted properties (Kinder Morgan, Virginia Avenue and Shell Lubricants);

Develop and implement a site sampling plan to assess storm water, waste water and soils contamination.

In order to better organize the response, improve the management of resources and to monitor progress, the PRP divided the Site and impacted areas into zones. The zones established were as follows: Zone 1 – Quality Carriers, Inc property (the Site), Zone 2 – Virginia Avenue, Zone 3 – Shell Lubricants facility (portions within Shell storm water catchment system), Zone 4 – North Tract including the area east of Virginia Avenue and north of Graham Street. The Kinder Morgan facility, while impacted by the Propargite release, was not assigned to a specific zone.

The following activities were completed during this reporting period:

MER submitted a Site Specific Health and Safety Plan for review by the UC. In addition, MER established access controls and work zones for site activities.

S&ME, Inc. developed a Storm Water Control Plan which was submitted to the UC for review. The plan analyzed drainage pathways in the areas impacted by contamination and recommended actions to limit the off site migration of potentially contaminated run off. The plan was reviewed and approved by the UC.

S&ME, Inc. developed a Soil and Storm Water Sampling and Analysis Plan. The plan included proposed procedures for sampling impacted soils, storm water and also included a strategy for sampling the remaining contents of the inter-modal container containing the source material. This plan was reviewed by DHEC, START and EPA and comments were provided to Quality Carriers, Inc. and S&ME.

Activities to mitigate and remove contamination were implemented in several areas. These activities are listed by geographic zone:

Zone 1 – Quality Carriers, Inc. Site

MER excavated contaminated soils on the Quality Carriers, Inc. Site. Approximately 2-4” of soil was removed from impacted areas and placed in roll off containers. MER implemented storm water control measures including the construction of an earthen berm along the drainage ditch on the northwest and southwest portions of the Site, construction of an under-flow dam in the drainage ditch and the installation of silt fencing around the eastern and northern boundaries of the Site. To support storm water control measures, MER mobilized multiple Frac tanks to the Site to be used to pump collected water during rainfall events. MER covered contaminated vehicles (tractor trailers and cars) with plastic to minimize contact to contamination in the event of a rainfall event. During the course of the response, the inter-modal container (the original source of the spill) continued to retain heat. MER personnel monitored the temperatures of the container. A water recirculation system was employed in order to reduce the temperature of the container.

Zone 2 – Virginia Avenue

MER continued decontamination of the roadway and side walks along Virginia Avenue that was impacted by the Propargite release. Several cleaning methods were employed during the reporting period. A cleaning solution was applied and mechanically rinsed and vacuumed. Visual evidence of contamination was observed after multiple cleaning attempts.

Zone 3 – Shell Lubricants Facility

Work in Zone 3 consisted of identifying the extent of contamination, decontamination of areas likely to pose the greatest threat of exposure to Shell workers, and control and mitigation of potentially contaminated storm water and run off.

S&ME teams visually assessed areas of the Shell Lubricants facility to identify areas impacted by contamination. S&ME reported that contamination was limited to the northern section of the Shell Lubricants facility. Based on these assessments, MER decontamination crews cleaned areas of the Shell facility including surfaces such as sidewalks, hand rails, vehicles and equipment.

All storm water run off from Zone 3 is captured in the Shell Lubricants collection system. Prior to the incident, Shell had approximately 1.5 million gallons of storm water stored in an open top, above ground storage tank. Due to concerns that this storm water might be contaminated from the Propargite release, Shell was instructed by DHEC and EPA to not discharge the water to the Cooper River. However, in the event of additional rainfall, Shell had no capacity to contain potentially contaminated storm water generated from areas impacted by the Propargite release. At the direction of EPA and DHEC, S&ME collected a sample from the storm water storage tank and submitted the sample for acute toxicity testing. On 11 May, acceptable results of the acute toxicity test were received and DHEC / EPA subsequently instructed Shell to discharge the stored water in anticipation of additional rainfall.

Zone 4 – North Tract

Work in Zone 4 consisted of the control and mitigation of potentially contaminated storm water. Since this Zone included drainage areas of the Shell Facility that were not a part of the storm water collection system, additional measures were taken to prevent contaminated runoff from migrating to the Cooper River. MER installed silt fences in several areas and placed containment boom in the small retention pond located across from the Kinder Morgan facility. In addition, MER mowed the lawn in areas of Zone 4 to remove potential source areas in the event of rainfall. Lawn clippings were bagged for off site disposal.

Kinder Morgan

S&ME crews assessed areas of the Kinder Morgan facility to identify areas impacted by the Propargite release. MER excavated soils on the southeastern portion of the Kinder Morgan facility. MER crews also decontaminated the parking lot.

EPA and START attended the final UC meeting at 0900 hours on 11 May. EPA transitioned all oversight and coordination of activities to DHEC. EPA and START resources demobilized from the response at approximately 1230 hours on 11 May.

Planned Removal Actions

Additional removal activities were planned by the PRP. These activities included: decontamination of vehicles impacted by the Propargite release, continued implementation of storm water controls on impacted properties, removal of the source material contained in the inter-modal tank, continued cleaning of contaminated areas and implementation of the sampling and analysis plan. MER will also develop and submit a Waste Management Plan to document procedures for characterization and disposal of wastes generated on the Site.

Next Steps

South Carolina DHEC will continue oversight and monitoring of all PRP response activities. DHEC will consult with EPA and USCG as necessary.

response.epa.gov/Quala-Intermodal