

United States Environmental Protection Agency
Region IV
POLLUTION REPORT

Date: Tuesday, June 18, 2002
From: Warren Dixon, David Andrews
To: Angie R. Jones, SCDHEC

Subject: Continuation of Removal Action
Cardinal Chemical
2010 South Beltline Blvd., Columbia, SC

POLREP No.:	14	Site #:	A45T
Reporting Period:	4/18-6/18/2002	D.O. #:	0204-F4-0002
Start Date:		Response Authority:	CERCLA
Mob Date:	4/18/2002	Response Type:	Time-Critical
Demob Date:		NPL Status:	Non NPL
Completion Date:		Incident Category:	Removal Action
CERCLIS ID #:	SCD003394447	Contract #	68-S4-02-04
RCRIS ID #:			

Site Description

The site is composed of two plants. Plant 1 housed the manufacturing facility and Plant 2 produced waxes and served as a storage lot. EPA activities in plant 1 is mostly related to waste water management. EPA activities in Plant 2 were related to the disposal of waste water found in frac tanks and stannic chloride cylinders. All of the Frac tanks were removed from Plant 2 (please see pollution reports 1-13 concerning this activity). These two facilities are divided by another company unrelated to the site.

Current Activities

- On April 18, 2002, the OSC visited the site to check on conditions, and discovered a plum of hydrochloric acid gas surrounding several stannic chloride cylinders that were being stored out in the open in Plant 2. Upon inspection, the OSC noted several cylinders had ruptured and stannic chloride was released into the atmosphere. The stannic chloride was reacting with the moisture in the air and thus producing hydrochloric acid. The OSC was concerned that the plum might affect two businesses and a major road that were at close proximity to the cylinders. Because of this hazardous situation, an emergency delivery order was issued to an EPA ERRS contractor, CMC, Inc. Personnel was mobilized from a nearby site (Wayside Aerial Spraying Services). CMC applied a generous amount of water to the cylinders and moved the ruptured and degraded cylinders out of the elements.

- Under the emergency delivery order, CMC also took over the waste water management duties. On May 14, CMC disposed of 31,288 gallons of waste water. On May 15, CMC disposed of 72,262 gallons of waste water. On May 16, CMC disposed of 36,600 gallons of waste water. On May 17, CMC disposed of 15,352 gallons of waste water. On May 20, CMC disposed of 65,799 gallons of waste water. On May 21, CMC disposed of 71,399 gallons of waste water. On May 22, CMC disposed of 64,882 gallons of waste water. The total amount of waste water disposed so far has been 357,582 gallons.

- CMC moved containers in out of the way in Plant 1 to facilitate the waste water removal operation. Additionally, another 8-inch line was added to the above ground storage tank in order to allow the loading of two tanker trucks at the same time.

- ERRS conducted an inventory of stannic chloride cylinders in Plant 1 and 2. There are 124 cylinders in Plant 1 and 892 cylinders in Plant 2. The total cylinders found were 1,016. It is estimated that 723 cylinders are empty. Cylinders were identified as empty if they had missing bungs and/or weighed the same as an empty one. The rest of the cylinders are believed to contain stannic chloride and/or residues.

- ERRS contractor finished constructing a treatment system for the stannic cylinders. A vessel containing tributyltin (TBT) will be connected to a vacuum system. The stannic chloride from inside the cylinders will be sucked into the TBT and deactivated. Reagens USA provided the TBT at no cost and will take back the TBT and stannic chloride mixture back. Reagens USA is the company that bought the Cardinal Chemical assets from the bank and is moving the facility to Texas. Reagens USA will deliver the TBT

from Italy by the end of July.

- During the period of June 16-18, 2002, CMC destroyed approximately 116 cylinders with the use of hydraulic shears. The metal is being decontaminated and a local recycler has agreed to purchase the scrap metal. The decontaminated water will be collected and neutralized with sodium hydroxide.

Planned Removal Actions

- ERRS will continue managing the waste water in plant 1.
- ERRS will continue disposing empty cylinders in plant 2.
- CMC will continue identifying empty cylinders in Plant 1 and will move them to 2.
- ERRS will prepare site for shutdown during July 4th week.

Disposition of Wastes

Waste Water: 357,582 gallons

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