

United States Environmental Protection Agency
Region IV
POLLUTION REPORT

Date: Wednesday, July 16, 2008

From: Leo Francendese

Subject: HoltraChem

636 John L Riegel Rd., Riegelwood, NC

POLREP No.:	8	Site #:	A47J
Reporting Period:		D.O. #:	
Start Date:	5/19/2008	Response Authority:	CERCLA
Mob Date:	5/19/2008	Response Type:	Time-Critical
Demob Date:		NPL Status:	Non NPL
Completion Date:		Incident Category:	Removal Action
CERCLIS ID #:	NCD991928631	Contract #	
RCRIS ID #:			

Site Description

The HoltraChem Site (also known as Acme Alkali) is comprised of approximately 24 acres and is located at 636 John L. Riegel Road in Riegelwood, Columbus County, North Carolina. It is surrounded on three sides by International Paper (IP), which is comprised of approximately 1,500 acres. Both HoltraChem and IP border the Cape Fear River. The surrounding area is a mixture of industrial, residential and commercial uses.

The area subject to this removal action includes neighboring IP's North Bay treatment pond, also known as Cell #2. IP formerly accepted process water generated during chlorine production from the Holtra Chem facility. HoltraChem operated as a chlor-alkali facility using the mercury cell process from 1963 to 1999, when facility operations ceased. HoltraChem was originally constructed to provide chlorine gas, caustic soda, and bleach to the IP facility. Process water from the former HoltraChem facility was reportedly discharged to the northwest corner of Cell #2 via a 16-inch diameter, corrugated galvanized steel pipe from approximately 1963 to the late 1970s or early 1980s.

A time-critical removal action was conducted at the HoltraChem Site during 2003 – 2004, during which containerized hazardous waste and the former cell building were removed. In 2004, an Engineering Evaluation / Cost Analysis (EE/CA) investigation began at the Site. During the EE/CA, the primary contaminants of concern were identified as mercury and PCB Aroclor 1268. Sampling conducted by IP identified PCB Aroclor 1268 at concentrations up to 5,100 mg/kg in Cell #2. PCB contamination extends to a depth of approximately 12 feet below the ground surface. PCB contamination has been found in the adjacent Cape Fear River sediments. IP needs to utilize Cell #2 for the expansion of their landfill sooner than the EE/CA will be completed. Therefore, a Time-Critical Removal Action is being taken to excavate the contaminated Wastewater Treatment Solids (WWTS) from Cell #2 and place the WWTS with concentrations exceeding 50 mg/kg in temporary storage on the HoltraChem Site until the final cleanup plan is selected for HoltraChem. The estimated volume of this material is 6,500 cubic yards. The cleanup goal for this removal action is 11 mg/kg based on the Human Health Risk Assessment for the Holtra Chem Site. WWTS with concentrations between 11 mg/kg and 50 mg/kg will also be excavated, but will be placed in IP's landfill Cell #1. The estimated volume WWTS with PCB concentrations between 1 mg/kg and 49 mg/kg is 93,500 cubic yards.

The Enforcement Action Memorandum for this time-critical removal action was signed on May 13, 2008. The Effective Date of the Administrative Order on Consent for this removal action was May 20, 2008.

Current Activities

RPM Samantha Urquhart-Foster provided oversight of removal activities during this reporting period (July 7 - 13, 2008).

* Note: Cell #2 was divided into 100'x100' and 50'x50' grids during the investigation phase. Grids are labeled with a letter and a number. Grid locations can be found in a Figure in the Action Memo.

Activities conducted by the PRPs' contractors during this reporting period included:

Excavation Activities:

* During July 9 - 12, 2008, approximately 1,188 cubic yards of material with PCB concentrations exceeding 50 mg/kg was excavated and transported from IP to the engineered stockpile on the HoltraChem facility. This material originated in Grids I-5 and I-6.

Dewatering Activities:

* Rain fell on the Site on four days during this reporting period with measurements ranging from 0.13 to 1.23 inches per day.

* During July 7-8, approximately 137,700 gallons of water from Cell #2 was pumped, treated, and discharged to IP. The system was shut down after receipt of analytical results on 7/9 that exceeded treatment requirements. The laboratory reported contamination in the method blank. Re-analysis indicated that the original data was erroneous and the PCB concentrations in the water was below the method detection limit. The total volume of water treated since treatment operations began on 6/18/08 is approximately 1,242,500 gallons.

Construction Activities:

* The engineered stockpile is at/near capacity with an estimated 7,700 cubic yards of PCB-contaminated soils. Therefore, construction began this week on a second engineered stockpile. Berms were constructed and a 40-mil liner was placed over the former "vault" at the HoltraChem Site, in accordance with the Work Plan.

Sampling Activities:

* Water treatment system samples were collected on July 7th.

* Waste characterization samples were collected on July 8th (samples are collected approximately every 1,000 cubic yards).

Analytical Data:

* Results from water treatment samples collected on July 7th were initially reported at 3.7 ug/L for one of the two samples, with a notation that the method blank was contaminated. Re-analysis of the sample indicated concentrations below the laboratory detection limit of 0.24 ug/L.

* Results from confirmation sampling of Grid H-5 indicated that PCB concentrations remaining in the base of the excavation was 2.8 mg/kg, which is well below the cleanup goal of 11 mg/kg. However, each of the sidewalls sampled exceeded the cleanup goal with concentrations ranging from 850 mg/kg to 13,000 mg/kg.

* Results from confirmation sampling of Grid I-4 indicated that PCB concentrations remaining in the base of the excavation was 4.1 mg/kg, which is well below the cleanup goal of 11 mg/kg. However, two of the three sidewalls sampled exceeded the cleanup goals. Sidewall concentrations were 1.2 mg/kg, 1800 mg/kg and 13,000 mg/kg.

* Results from confirmation sampling of Grid J-5 indicated that PCB concentrations remaining in the base of the excavation and the sidewall were below the cleanup goal of 11 mg/kg. Results ranged from 0.089 J mg/kg to 1.4 mg/kg.

* Results from confirmation sampling of Grid K-5 indicated that PCB concentrations remaining in the base of the excavation was 2.3 mg/kg, which is well below the cleanup goal of 11 mg/kg. However, two of the three sidewalls sampled exceeded the cleanup goals. Sidewall concentrations were 0.1 mg/kg, 6400 mg/kg and 16,000 mg/kg.

Planned Removal Actions

David Mattison of the North Carolina Department of Environment and Natural Resources will provide oversight during the next reporting period, July 14-20, 2008. Activities planned for the next reporting period include:

- * Continue excavation/transport of > 50 mg/kg material to the engineered stockpile
- * Conduct waste characterization sampling/analysis per 1000 cubic yards placed in the engineered stockpile.
- * Excavate overburden material beyond the original grid limits, as well as buffer material that can be transported directly to IP's landfill (based on confirmation sample analytical results).
- * Confirmation sampling/analysis of grids following waste removal.
- * Material management sampling/analysis of overburden material to determine transport location.
- * Continue pumping water from Cell No. 2 to IP and continue water sampling/analysis.

Next Steps

Removal activities have been conducted according to schedule, with a few weather delays. However, the schedule has been extended. The schedule has been revised to change the demobilization date to September 5, 2008. The schedule extension is primarily due to:

- * required removal of additional material
- * rain delays
- * construction/repair of access road to the engineered stockpile
- * deconstruction and reconstruction of a decon pad on the Holtrachem site
- * construction of a second engineered stockpile to accommodate the increased volume of WWTS

containing PCBs at concentrations exceeding 50 mg/kg.

response.epa.gov/holtrachemWWTs