

United States Environmental Protection Agency
Region V
POLLUTION REPORT

Date: Tuesday, May 26, 2009

From: Brian Kelly

Subject: Continue PRP Removal
Southern Illinois Railcar
7570 Ottawa Road, Cairo, OH
Latitude: 40.8470000
Longitude: -84.0830000

POLREP No.:	7	Site #:	B5QP
Reporting Period:	5/11/09 to 5/22/09	D.O. #:	
Start Date:	12/2/2008	Response Authority:	CERCLA
Mob Date:	12/2/2008	Response Type:	Emergency
Demob Date:		NPL Status:	Non NPL
Completion Date:		Incident Category:	Removal Action
CERCLIS ID #:		Contract #	
RCRIS ID #:			

Site Description

The Southern Illinois Railcar (SIR) Site is located at 7570 Ottawa Road, Cairo, Allen County, Ohio 45807. The facility is a former fertilizer plant adjacent to the Warrington Ditch a tributary of Rattlesnake Creek and Little Auglaize River. The Site is currently owned and operated by Southern Illinois Railcar as a railcar repair facility.

Current Activities

See POLREP #1 for initial response.

On Monday May 11, 2009, AES constructed a berm at the former South Warehouse on the north and west side of the excavation area using soil from within the excavation area to control and contain surface water. AES graded out the excavation area within the former South Warehouse before moving to the South Ditch to begin soil excavation activities. AES started excavation activities on the west end of the South Ditch by excavating a 1' to 1.5' cut using an excavator to remove ammonia impacted soil from the ditch. Ammonia impacted soils excavated from the ditch were transported to the stockpile which is located west of the landfarm for future landfarming activities. Two small 3-inch diameter clay pipes were encountered in the west end of the South Ditch during excavation activities. The clay pipes were filled with soil and had very slight water drainage into the ditch. AES patched the clay pipes with cement to stop any further drainage before adding clean fill in the ditch. One 20 cubic yard roll-off box containing granular urea and soil from the Ag Lime Storage Bin was removed and transported off site to County Environmental Landfill of Wyandot, in Carey, OH. AES loaded out 3,000 gallons of ammonia water and transported off site to Lima Wastewater located in Lima, OH.

On Tuesday May 12, 2009 AES completed soil excavation activities at the South Ditch. Excavated ammonia impacted soil from the ditch was placed on the stockpile for future landfarming activities. No odor or visual staining was noted on any of the soil after excavating to a depth of 1' to 1.5' in the ditch. AES placed clean fill in the ditch and compacted and graded out the fill to promote positive drainage. AES started excavation activities at the North Warehouse on the northeast corner of the building. A 6-inch to 1 foot cut was used to excavate soil in the northeast corner of the North Warehouse. One 20 cubic yard roll-off box containing granular urea and soil from the Ag Lime Storage Bin was transported off site to County Environmental Landfill of Wyandot in Carey, OH. A total of 6,000 gallons of ammonia water was transported to Lima Wastewater.

AES vacuumed out standing water from underneath the weigh scales at the site. AES collected one water sample for ammonia concentration from the standing water. A Hach Ammonia Field Kit was used to measure ammonia readings. A reading of 0.25 to 0.3 ppm was recorded.

On Wednesday May 13, 2009 AES placed grass seed and straw matting down at the South Ditch. Additionally, AES cleaned out the sewer drain pipe using a sewer jetting tool from the weigh scale

area down to the discharge outfall at the South Ditch. All water generated from the sewer cleaning was vacuumed out and containerized for proper disposal. AES used a sewer camera to determine that the pipe from the weigh scales that discharges to the South Ditch is clean and in good condition. AES also attempted to clean out a 3" yellow corrugated plastic tile pipe next to the railroad tracks but were only able to clean out approximately 80 feet due to an obstruction or collapsed pipe. The sewer camera indicated that the yellow tile pipe was pulled apart at approximately 39'. No ammonia water was transported offsite on this date.

On Thursday May 14, 2009 AES did not conduct excavation activities due to heavy rain and thunderstorms at the site overnight. AES worked on water management across the site.

AES collected surface water samples from Warrington Ditch to monitor water quality for pH, temperature, and ammonia concentration upstream and downstream of the site. A water sample was collected at Hook-Waltz Road (upstream) on the north side of the road next to the outfall pipe. The following readings were recorded: pH 7.41, temperature 22.2 degrees Celsius, and 0.0 ppm ammonia concentration. Additionally, a downstream water sample was collected from north of the railroad spur. The following readings were recorded: pH 7.17, temperature 19.20 degrees Celsius, and 0.0 ppm ammonia concentration, respectively. A Hach Ammonia Field Kit was used to collect ammonia readings and an Oakton pH meter was used to collect pH data. All instrumentation was calibrated before sampling.

A total of 3,000 gallons of ammonia water was transported to Lima Wastewater and 30,000 gallons of ammonia water was transported to United Wastewater, respectively.

On Friday May 15, 2009 AES worked on water management tasks across the site. A total of 6,000 gallons of ammonia water was transported to Lima Wastewater. A total 42,000 gallons of ammonia water was loaded out and transported to United Wastewater. One 20 cubic yard roll-off box containing granular urea and soil was transported to County Environmental Landfill of Wyandot.

No work activities were conducted over the weekend (5/16/09 and 5/17/09).

On Monday May 18, 2009 AES continued excavation activities at the North Warehouse at the northeast corner of the building and in the North Ditch. Due to the presence of ammonia odors in the soil at the bottom of the 1 foot cut, AES excavated soil to 2 feet below ground surface in the northeast corner of the North Warehouse and in the North Ditch on the north side of the North Warehouse. Excavated ammonia impacted soil was placed on the stockpile for future landfarming activities. One 20 cubic yard roll-off box containing urea fertilizer and soil was transported offsite to County Environmental Landfill of Wyandot. A total of 9,000 gallons of ammonia water was transported offsite to Lima Wastewater.

On Tuesday May 19, 2009 AES scraped off the top 6 inches of soil at the former scap pile location just north of the South Ditch. Soils excavated from the area north of the South Ditch was placed in roll-off boxes for proper disposal at a landfill facility. Metal debris and ammonia odors were present in the top 6 inches of soil in this area.

AES continued excavation activities in the northeast corner of the North Warehouse and along the North Ditch on the north side of the North Warehouse. AES excavated down to 2 feet below ground surface in the northeast corner of the North Warehouse including around the building foundation. Ammonia odor and granular fertilizer was present in the upper 1.5 feet of soil in this area. AES excavated a small area to 7 feet below ground surface on the corner of the building on the northeast end of the North Warehouse to attempt to locate a drain under the building footer. A drain was not located in this area. No ammonia water was transported offsite on this date.

On Wednesday May 20, 2009 AES continued excavation activities at the North Warehouse and North Ditch. Excavated ammonia impacted soil was placed on the stockpile for future landfarming activities. After removal of the top two feet of soil at the northwest corner of the North Warehouse a small crack in the foundation leaking very strong green to brown ammonia water was observed. A 3-foot sump was dug to containerize the liquid and prevent any further migration. All soil excavated from this area was placed in a 20 cubic yard roll-off for proper disposal at a landfill disposal facility. AES collected Draeger tube air samples for ammonia down in the sump and recorded a reading of greater than 50 ppm. The breathing zone was measured at less than 5 ppm.

AES started the removal of transite debris on the north side of the Continuous Ammoniazation Building. AES used water to spray down all surfaces before and during the transite removal activities. Level C PPE was used during the transite removal activities. All transite and soil material was placed in a 20 cubic yard roll-off box lined with poly plastic.

AES transported three 20 cubic yard roll-off boxes contained scrap debris and ammonia impacted soil to County Environmental Landfill of Wyandot. A total of 18,000 gallons of ammonia water was loaded out and transported to United Wastewater.

On Thursday May 21, 2009 AES continued excavation activities at the North Warehouse removing ammonia impacted soil from the top 1 foot of soil on the west side of the building. AES determined that they will cut three 3' by 3' square holes in the concrete to dig sumps along the north side of the North Warehouse to a depth of 4' to collect ammonia water that is migrating out from underneath the cement slab to the north and possibly the west.

AES continued transite removal activities on the north side of the Continuous Ammoniazation Building. Work was performed in Level C PPE. No soil or water was transported offsite on this date.

On Friday May 22, 2009 AES cut 3' by 3' square holes in the concrete floor in the north side of the North Warehouse. A sump was located on the west inside corner along the north wall of the building, in the middle along the north wall, and on the east side of the building along the north wall. AES excavated the west sump to a depth of 4' below ground surface. Strong ammonia water accumulated in the sump. The remainder of the sumps will be excavated during the following week.

AES collected surface water samples from the Warrington Ditch to monitor pH, temperature, and ammonia concentration in the ditch. One water sample was collected from the north side of Hook-Waltz Road upstream of the site and the following readings were recorded: pH 8.10, temperature 30.3 degrees Celsius, and 0.0 ppm ammonia concentration. A downstream water sample was collected from the north side of the railroad spur. The following readings were recorded: pH 8.41, temperature 27.8 degrees Celsius, and 0.0 ppm ammonia concentration.

The storm water management task will continue during removal activities.

To date, a total of 2,722 tons of impacted stone debris has been removed and disposed at County Environmental of Wyandot located in Carey, Ohio. Additionally, 3,043,324 gallons of ammonia water has been transported offsite to United Wastewater and 213,000 gallons has been transported to Lima Wastewater.

Planned Removal Actions

Continous Ammonization Building transite and debris removal
North Warehouse soil removal
North Ditch soil removal
East Ditch soil removal

Next Steps

Complete excavation activities of the ammonia impacted soil from around the North Warehouse and in the North Ditch and stockpile soil for future landfarming purposes. Control and containerize all ammonia liquids leaking out of the foundation of the North Warehouse on the northwest corner and west sides of the building.

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