

United States Environmental Protection Agency
Region IV
POLLUTION REPORT

Date: Wednesday, October 14, 2009
From: Steve Spurlin, On-Scene Coordinator

Subject: Fund Lead Completion & PRP Initiation
Biological Processors of Alabama
611 Finley Island Road, Decatur, AL
Latitude: 34.6217000
Longitude: -87.0519000

POLREP No.:	9	Site #:	A4XX
Reporting Period:	9/17/09 - 01/05/10	D.O. #:	
Start Date:	1/22/2009	Response Authority:	CERCLA
Mob Date:	6/8/2009	Response Type:	Time-Critical
Demob Date:	11/24/2009	NPL Status:	Non NPL
Completion Date:		Incident Category:	Removal Action
CERCLIS ID #:	ALR000037929	Contract #	
RCRIS ID #:			

Site Description

Biological Processors of Alabama (BPA) located in the industrial area of Decatur, Alabama and was referred to the Emergency Response and Removal Branch by the Alabama Department of Environmental Management (ADEM). BPA is a centralized waste treatment facility that collected, treated wastes from facilities throughout northern Alabama. The facility utilized oil/water separators, precipitation of wastes and neutralization in preparation for discharging to the Decatur Waste Water Treatment Plant.

The facility started operations in the Fall of 2004 and ceased operations in the Fall of 2008.

The site consists of 35 frac tanks, 16 above-ground storage tanks (ASTs), 1 tanker truck, an open pit, secondary containments, process equipments, numerous drums and totes, and many laboratory reagents. There are more than 1 million gallons of wastewaters containing hazardous substances abandoned at the site.

The site cleanup actions will consist of 2 phases. Phase 1 will be initiated in an EPA fund-led removal action to address conditions at the Site which pose of release. (ASTs, secondary containment, piping, containers, and soils). Phase 2, which is anticipated to be completed by a group of Potentially Responsible Parties under a EPA Consent Order, includes frac tanks, totes, drums and process equipment inside building. Phase 2 will be intiaed after completion of Phase 1.

Current Activities

EPA-funded Phase 1 removal actions at the BPA site began on June 9, 2009, and concluded on November 16, 2009 with final loadout of waste material. During this time, WRS - another EPA ERRS contractor - completed phase I of the removal action, which included removing wastewater and sludge from the open top ASTs, process equipment, containment areas, and leaking frac tanks that could fill with rainwater and overflow. This section summarizes these activities.

WRS began by procuring six rental frac tanks to utilize as holding tanks for the wastewater from the containment areas. The upper containment area (also known as the influent tank containment area) was completely inundated with oily emulsified water where the four large oily water tanks (OWT) had accumulated enough rainwater to spill over into the containment area. WRS was tasked to transfer the water from the upper containment area to the rental frac tanks. During this time, in order to profile the materials and determine where the wastes could be shipped for disposal, WRS was also tasked to collect samples of the water from the upper containment area, as well as samples of the contents of the four OWTs, the three special waste tanks, and the heavy oil separator.

Once water from the upper containment area had been transferred, WRS began cleaning the interior concrete with hot water pressure washers and Simple Green™, an industrial petroleum solvent. The Simple Green™ was sprayed on the concrete and scrubbed in, then allowed to dry. Once dry, the

pressure washers were used to remove the oil staining. Pumps were in place to transfer the washwater into the rental frac tanks. This process was repeated several times until sheening from oil was no longer visible when the containment area filled with rainwater. WRS subsequently collected a confirmation sample of accumulated rainwater from the upper containment area.

The lower containment area (also known as the equalization and effluent tank containment areas) was observed to be clean and had accumulated only a slight amount of rainwater. None of the ASTs in the lower containment area had overflowed. During the ER, CMC installed a drain pipe with a valve into the side of the lower containment area so that accumulated rainwater could be drained when necessary.

Concurrent with the cleaning of the upper containment area, WRS procured the services of Clean Harbors to begin hauling wastewater off-site to its facility in Chattanooga, Tennessee, for disposal. Clean Harbors began activities by removing wastewater from the OWTs (1 through 4). Once wastewater from an OWT was removed, WRS accessed and removed the sludge by way of a hatch on the side of each tank. WRS also procured the services of United States Environmental Services (USES) to assist in the sludge removal. Due to the thickness of the sludge, USES used a vacuum truck that was capable of pumping the sludge from the OWTs.

Sludge boxes were delivered to the site for temporary storage of sludge until solidification activities were performed. Wastewater and sludge removal activities were also performed on other ASTs in the upper and lower containment areas, as well as on frac tanks and a tanker truck present at the site. The following list provides a brief summary of tanks that were addressed during wastewater and sludge removal activities:

Upper Containment Area

- OWTs 1 through 4: Included removal of wastewater and sludge. Wastewater was removed from the site by Clean Harbors for disposal at its facility in Chattanooga, Tennessee, and sludges were transported to the Morris Farm Landfill in Hillsboro, Alabama.
- Special Waste Tanks 5 and 6: Included removal of wastewater and sludge. Due to elevated concentrations of selenium identified in Special Waste Tanks 5 and 6, their contents were segregated for disposal at the MDI facility, a Resource Conservation and Recovery Act (RCRA) Subtitle C facility in Belleville, Michigan.
- Special Waste Tank 7: Included removal of wastewater and sludge. Wastewater was removed from the site by Clean Harbors for disposal at its facility in Chattanooga, Tennessee, and sludges were transported to the Morris Farm Landfill in Hillsboro, Alabama.
- Heavy Oil Separator: Included removal of wastewater, which was transported by Clean Harbors to its facility in Chattanooga, Tennessee.
- Waste Oil Collection Tank: Included removal of wastewater, which was transported by Clean Harbors to its facility in Chattanooga, Tennessee.

Lower Containment Area

- Equalization Tank: Included removal of wastewater and sludge. Wastewater was removed from the site by Clean Harbors for disposal at its facility in Chattanooga, Tennessee, and sludges were transported to the Morris Farm Landfill in Hillsboro, Alabama.
- PIH Tanks (2): Included removal of wastewater and sludge. Wastewater was removed from the site by Clean Harbors for disposal at its facility in Chattanooga, Tennessee, and sludges were transported to the Morris Farm Landfill in Hillsboro, Alabama.
- Sulfuric Acid Tank: Included transfer of remaining acid into a poly tote for storage on site pending future PRP removal action activities.
- Fine Oil Separators (2): Included transfer of wastewater into poly totes and drums for storage on site pending future PRP removal action activities.
- Decant Tank: Included transfer of wastewater into poly totes and drums for storage on site pending future PRP removal action activities.
- Waste Oil Tank: Included removal of wastewater, which was transported by Clean Harbors to its facility in Chattanooga, Tennessee.

Frac Tanks

- Rental Frac Tanks: Included removal of wastewater from the six frac tanks procured by WRS during the removal action and the five frac tanks procured by EPA during the ER.
- Frac Tank 2516EA: During the removal action, this frac tank overflowed due to several heavy rain events and inadequate closure on the top of the tank that allowed rainwater to accumulate inside the tank. Analytical results indicated that the contents were non-hazardous, and the wastewater was removed from the site by Armor Environmental Services, Inc., and transported to its facility in Mount Pleasant, Tennessee. WRS then pumped the remaining sludge into a sludge box for solidification.
- T-Tanks: Six frac tanks (FM221, G429D, G180C, G394D, 1746EA, and 765NEA), identified as T-

tanks and located along the western fenceline of the property, did not have adequate closure on the top of the tanks, which raised concerns that rainwater could accumulate inside and cause the contents to overflow. Analytical results for samples collected from these tanks indicated that the contents were nonhazardous. As a result, the wastewater from these frac tanks was transported by Clean Harbors to its facility in Chattanooga, Tennessee.

Miscellaneous

- Tanker Truck T255: Analytical results indicated the presence of high amounts of halogens. Because the tanker truck was not road-worthy, WRS hired Thunderbird Trucking Company to remove and transport the contents to Pollution Control Industries in Millington, Tennessee, for disposal.
- Truck Wash Tank: While transferring drums from beneath the canopy area in the lower containment area, EPA's contractor inadvertently impacted the truck wash tank, resulting in a breach and release of approximately 3,000 gallons of wastewater. The release was contained using sand berms, and WRS pumped the wastewater into a rental frac tank.

Once most of the sludge and residual material was transferred out of the ASTs, WRS was tasked to begin cleaning the ASTs to prevent future contamination of accumulated rainwater. WRS used a man lift to access the top portions of the ASTs. Cleaning was performed on both the inside and outside of the tanks using Simple Green™. Washwater from the cleaning activities was transferred to one of the rental frac tanks pending transportation and disposal. After the ASTs were cleaned, WRS collected confirmation samples from rainwater that had accumulated in the clean tanks. In addition to cleaning the ASTs, WRS cleaned numerous frac tanks and a tanker truck present at the site after their contents had been removed. Cleaning activities involved uses of level B personal protective equipment (PPE), pressure washers, and scrub brushes; and air monitoring conducted by Tetra Tech with a four-gas meter prior to and during tank entry. During the removal action, the following tanks were cleaned using Simple Green™:

- OWTs 1 through 4
- Equalization Tank
- PIH Tanks (2)
- Rental Frac Tanks: Included the six procured by WRS during the removal action and five procured by EPA during the ER phase.
- Frac Tank 2516EA: WRS cleaned this frac tank to prevent potential contamination of rainwater during future rain events.

The Process Area is located within the building at the site. It was observed that the integrity of several of the tanks in the Process Area had deteriorated over time, and leaking was evident. As a result, WRS was tasked to pump down these tanks and transfer the contents into poly totes for storage on site. During the removal action, the contents of the following tanks in the Process Area were transferred to totes, which were stored inside the Process Area pending future PRP removal activities:

- Ferric Chloride Tanks: Included three stainless steel tanks adjacent to the Liquid Caustic Tanks and one poly tank adjacent to the Pre Coat Tank. These tanks were also cleaned with a pressure washer to remove residual materials.
- Liquid Caustic Tanks: Included three poly (Snyder) tanks adjacent to the Ferric Chloride Tanks. These tanks were also cleaned with a pressure washer to remove residual materials.
- Pre Coat Tank: Included one poly tank adjacent to the poly Ferric Chloride Tank that was also cleaned with a pressure washer to remove residual materials.
- Lamella Clarifier Tank: Included one steel tank along the north side of the Process Area.

Initially, sludges removed from ASTs at the site were transferred to sludge boxes that were transported directly to the Morris Farm Landfill in Hillsboro, Alabama, for off-site solidification and disposal. Sludge boxes were emptied at the landfill and then returned to the site for cleaning. However, based on the large volume of sludge encountered during the removal action, EPA determined that it was more cost-effective to solidify sludges on site prior to transportation and disposal.

On-site sludge solidification activities were performed in the Solidification Pit adjacent to the upper containment area and involved use of certified clean pulp ash procured from a local vendor. Solidified sludges were then loaded into roll-off containers, which were transported to the Morris Farm Landfill in Hillsboro, Alabama, for disposal.

During the removal action, sludges were removed from the following tanks for solidification and disposal:

- OWTs 1 through 4: Sludges were transferred to sludge boxes that were transported to the Morris Farm Landfill in Hillsboro, Alabama, for off-site solidification.

- Special Waste Tank 7: Sludges were transferred to sludge boxes that were transported to the Morris Farm Landfill in Hillsboro, Alabama, for off-site solidification.
- PIH Tanks 100 and 200: Sludges were removed and solidified on site before being transported to the Morris Farm Landfill in Hillsboro, Alabama.
- Equalization Tank: Sludges were removed and solidified on site before being transported to the Morris Farm Landfill in Hillsboro, Alabama.
- Frac Tank 2516EA: Sludges were removed and solidified on site before being transported to the Morris Farm Landfill in Hillsboro, Alabama.

During the removal action, numerous drums, totes, and small laboratory containers from the site were encountered. These containers were initially staged in a central location to facilitate inventorying, sampling, and hazard categorization testing. Where appropriate, chemically compatible laboratory wastes were consolidated with wastewater and sludges discussed in previous sections of this report. Once wastestreams were identified for the laboratory wastes, the containers were staged on site based on compatibility, pending future removal actions to be conducted by the PRP. The following list briefly summarizes these containers:

- Totes and drums removed from two storage trailers (white trailer and Louisiana Environmental trailer).
- Totes (numbers 1, 18, 34, 35, and 37) deemed in poor condition and containing only solid waste and rainwater; these were drained into the Solidification Pit and consolidated with other sludges for solidification.
- Totes and drums formerly stored beneath the canopy at the lower containment area.
- Totes and drums formerly stored in the truck wash area at the western end of the Process Building.
- Totes generated during transfer activities to address tanks inside the Process Area.
- Drums formerly stored along the western side of the upper containment area.
- Small laboratory containers from the process building; these were characterized and labpacked based on compatibility, then transported and disposed at the Pollution Control Industries facility in Chicago, Illinois as part of EPA's Phase 1 removal.

During the removal action, a former BPA employee informed EPA of an area outside the western fenceline (back lot) where BPA representatives had reportedly buried waste materials. EPA tasked WRS to excavate test pits in the area to further investigate the claim. During these activities, personnel encountered highly stained soils with a black color and a chemical odor. Concentrations of volatile organic compounds (VOC) in the soil spiked at 7.6 parts per million (ppm) as measured by the photoionization detector. WRS collected a composite sample from the stained soil, which was shipped for laboratory analyses. Analytical results indicated the presence of polycyclic aromatic hydrocarbons (PAH) and barium, but no analytes were present at concentrations above removal action levels. Nevertheless, EPA determined it was appropriate to remove and dispose of the material, and directed WRS to excavate the stained soil, which was placed in roll-off boxes and transported to the Morris Farm Landfill in Hillsboro, Alabama, for disposal. Following completion of this excavation, Tetra Tech collected a confirmation sample (BPA-CONFIRM-BL-100409) from the area.

In addition to the back lot excavation, an area of gray-stained soil was observed around a polyvinyl chloride (PVC) pipe sticking out of the ground in the vicinity of a local municipal sewer line outside the southern fenceline of the property. It was unclear whether the staining had been caused by runoff from the area or by something that may have been dumped down the pipe. WRS collected a composite sample from the stained soil, which was shipped for laboratory analyses. Analytical results indicated the presence of PAHs, but no analytes were present at concentrations above removal action levels. Nevertheless, EPA determined that the drainage pathway leading directly off site likely had been impacted by hazardous substances and, to prevent potential off-site migration, directed WRS to excavate the stained soil. The soil was placed in rolloff boxes and transported to the Morris Farm Landfill in Hillsboro, Alabama, for disposal. Following completion of this excavation, Tetra Tech collected a confirmation sample (BPA-CONFIRM-DITCH-100409) from the area.

Planned Removal Actions

Phase 2 will address the remaining hazardous substances at the Site. The PRP group will have the lead for the Phase 2 cleanup activities at site. EPA will oversee the work. Work to be performed under the Order includes, but is not limited to, the following:

- 1) 29 frac tanks containing about 600,000 gallons with approximately 2 feet of sludge in each one.
- 2) Roll off, DAF unit, and caustic solids found in the Process Equipment area.
- 3) Soils from potential sources such as the containment area and spills. Surficial and subsurface soils will

need to be assessed.

4) Sumps and other areas in the building need to be assessed to ensure no threat of release.

5) Drums, totes, roll-offs, carbon filters, household wastes, and poly tanks that remain on site need to be sent for disposal.

6) Oil water separators, tank next to oil water separators, black tank, horizontal blue tank, 3 special waste tanks, 2 sludge thickeners, 6 T-frac tanks, and Tanker 255 need to be cleaned.

Next Steps

AOC has been signed by a number of parties and became effective 12/31/2009. The AOC requires PRP representative to submit a workplan for EPA approval for Phase 2 work.

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