

POLREP 71
NanoChemonics Site
4 Magnox Drive
Pulaski, Pulaski County, Virginia 24301

Lat: N 37.04718
Long: W 80.79146

ATTN: RRC
VADEM - Tolbert
VADEQ - Lohman
EPA - G. Heston

I. SITUATION (October 20, 2015 through August 25, 2016)

EVENT: Removal Response Action Completion

- A. Refer to previous POLREPs for site background information. Additional information is available in the routine progress reports submitted to EPA contained within the EPA Site file.
- B. STNP, the owner of the NanoChemonics property, conducted a removal response action and cleanup of the Site under an Administrative Settlement and Order (Order) with EPA that was signed on April 8, 2011. In brief, the response action involved the removal of hazardous substances from the Site and included the removal of such substances found in the debris created during demolition of the buildings comprising the former manufacturing facility at the Site. The action also included the management and treatment of wash waters and storm waters at the Site that were directed into 4 lagoons during the response action and then discharged into nearby Peak Creek. The response action also included the removal of the sludge from within the 4 lagoons and the consolidation and covering of the sludge in a drying bed located at the Site.
- C. This POLREP documents the completion of the Work requirements of the Order as they are itemized in Section 8.3 of the Order as further summarized below. STNP completed the Work during the week of August 15, 2016 and demobilized all personnel and equipment from the Site by August 19, 2016. The OSC inspected Site conditions and deemed all Work completed on August 25, 2016.

II. ACTIONS

- A. STNP contractors re-mobilized to the Site on September 29, 2015 to conduct storm water sampling. EPA collected splits during this storm water sampling event. The sampling was conducted to further examine the quality of storm waters which may run off the Site into nearby surface waters.
- B. On October 15, 2015, STNP contractor McAdams reported that they had received PCB congener results for the storm water samples collected in September. McAdams reported a total PCB congener concentration of 213 nanograms per liter (ng/L) for the MO pad composite sample (previously 476 ng/L) and 1.54 ng/L for the Copperas area sample (previously 30 ng/L). The

results indicate that the PCBs levels that might exist in storm water discharges from the MO area are reducing and that pad cleaning was likely effective at addressing the PCBs contaminated caulk located within the joints in MO pad (STNP had conducted additional caulk removal and cleaning of the MO pad between the two sampling events).

- C. EPA's sampling of the stormwater indicated results of 240 ng/L on the MO pad and 1.4 ng/L in the copperas area. These results are commensurate with the STNP results. The OSC found these results to demonstrate that removal response activities were effective at minimizing the potential for PCBs to migrate from the Site.
- D. STNP mobilized to the Site in mid October 2015 to conduct the final "closure" activities relating to the lagoon system. Through modifications to the Response Action Plan required by the Order, the sludges from the lagoons were removed, placed into the drying bed, dried, spread, and covered (the original plan called for the drying and placement and covering of the sludges within the lagoons). The drying bed now contained all the sludge removed from the lagoon system at the Site. The sludge had suitably dried such that the material could be spread and covered with soil and then seeded. The cover soil was obtained from berms surrounding the former drying bed and from the hill area along the south side of the drying bed. A laser level was used to assure grade and drainage. STNP contractor ARG then completed final grading and compaction of the drying bed cover. ARG seeded the drying bed cover and applied straw over the area.
- E. The OSC inspected the drying bed area and the remainder of the Site on November 5, 2015. The drying bed appeared to be satisfactorily covered excepting the possibility of two low spots that might hold water. These low spots would need to be verified and addressed. The OSC also requested that remaining contractor piping, a mixing tank, drums, and silt fencing at the Site be removed. VADEQ also expressed the desire to have the lagoons filled in to their grade whereas they were now open (albeit cleaned) depressions. STNP indicated an unwillingness to fill these depressions since the ability to get proper equipment and suitable fill into the area was limited by the inadequate structure of the nearby bridge. The "cleaned" condition of the former lagoon depressions was also a factor in the reluctance to fill the depressions.
- F. The Site was again visited in February 2016. The OSC noted that the remaining equipment items identified the previous fall had been removed. STNP was obligated to collect samples of storm water moving through the cleaned lagoon system in order to verify the quality of water before it could potentially discharge (as a means to verify satisfactory completion of lagoon cleanout). The samples were collected by STNP 2/5/16. The analytical results for the lagoon water samples indicated that all parameters were less than the limits set in the Order except for an exceedance for iron in the sample collected from Lagoon 4. The Lagoon 4 sample had iron detected at 1.7 mg/L, exceeding listed limit of 1 mg/L. Another sample was requested. The lagoon waters were not discharging.
- G. Throughout the remainder of 2016 to the present, STNP waited for the right time to fill the low spots on the drying bed and collect one additional sample of water from Lagoon 4. A rain event on July 14, 2016 enabled STNP to specifically locate the low spots on the vegetated drying bed.

- H. On July 15, 2016, STNP contractors collected a second sample from the lagoon system to evaluate the levels of iron in waters of lagoon #4. The results were received on August 3, 2016 and indicated that the concentrations of monitored parameters were below the limits required in the Order.
- I. During the week of August 15, 2016, STNP contractors completed actions relating to the filling of small low spots in the cover placed over the sludge in the drying bed. Soil was placed into the depressions, seeded and mulched with straw. This activity represents the last field activity required in accordance with the Order. As such, the Respondent STNP demobilized personnel and equipment from the Site.
- J. The OSC inspected the Site on August 25, 2016 and verified that the Work requirements of the Order were completed. The surface waters from the former Facility were being directed in Lagoon #3. There was an estimated 1.5 feet of water in this Lagoon. The other lagoons contained only small amounts of water.
- K. EPA has established a public repository of site documents at the local library in Pulaski. EPA will also provide public information updates for the site on the EPA site website at: www.epaosc.org/nanochemonics.

III. FUTURE ACTIONS

- A. STNP is required to prepare and submit a Final Report summarizing the activities conducted to complete the requirements of the Order.
- B. The EPA OSC will prepare and issue a Final POLREP to summarize the response action and the status of the Site. The OSC will also determine the final status of the EPA Order. No further EPA removal response activity is anticipated to occur.

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