Cabot Supermetals

P.O. Box 1608 County Line Road Boyertown, PA 19512-1608 Congressional District 6 EPA ID #: PAD002335545 Last Updated: 12/17/2008

Current Progress at the Site

The bioremediation pilot study has been very successful in increasing the degradation of chlorinated solvents, mainly trichloroethene (TCE), in groundwater from the Cabot Supermetals facility (Facility) since its inception in July 2008. It is anticipated that, if the pilot study continues to be successful through its completion in January 2009, a full-scale system will be designed and implemented within two years to remediate groundwater beneath the Facility.

Analysis of 15 years of groundwater sample data show that overall concentrations of parent volatile organic compounds (VOCs) and their primary degradation products in many well locations have declined at the Facility. The bioremediation study is intended to speed up the decline of contaminant concentrations by enhancing natural attenuation processes that are already occurring in the aquifer beneath the Facility.

Environmental Indicators have been met for the Facility; several investigations have revealed that there are no realistic receptors for Facility groundwater and that geologic features control its migration. The Facility will continue annual groundwater monitoring for natural attenuation indicators and TCE and its primary degradation products. The Facility also will continue to monitor Swamp Creek to ensure that contamination from the facility is not impacting surface waters and sediments.

Site Description

Cabot Supermetals is located on County Line Road in Boyertown, PA. The Facility occupies 190 acres in an agricultural and industrial area. Facility operations began in 1950. The Facility manufactures tantalum (Ta) and niobium (Nb) metals through the processing of raw ore. The final products are metal powder, wire, or sheet products used in the electronics and medical fields. The chemicals used in the production include uranium ores, methyl isobutyl ketone (MIBK), hydrofluoric acid (HF), ammonia, and sodium. The residual slurry left over from the manufacturing process is neutralized and sent to two on-site lined surface impoundments to settle. The discharge from the surface impoundments goes to Swamp Creek and to the Berks-Montgomery County sewage treatment plant. The residual solid metal salts are shipped off-site.

Site Responsibility

RCRA Corrective Action activities at the Facility are being conducted under the direction of EPA Region 3 with assistance from the PADEP.

Contaminants

The groundwater in the area is impacted by specific natural conditions, agricultural activities, and the Facility. The main contaminants in the groundwater at the southern portion of the site are fluoride and TCE and its degradation products.

Residential locations are not affected by contaminants from the Facility; the potential concern for human health in the residential wells is due to natural sources. The majority (about 70%) of residential drinking water wells exhibit an increased boron concentration. A number of these wells contain contamination (aluminum, arsenic, boron, copper, fermium, manganese, lead, selenium, vanadium) above levels of potential concern for human health due to natural sources.

Several Streams - Swamp Creek, Middle Creek and the tributaries in the area of the Facility were sampled by EPA in 1999-2000. An Aquatic Biology Investigation of Swamp Creek indicated good overall stream quality. The March 1999 monitoring of the Facility's discharges of treated process water into Swamp Creek for fluoride, molybdenum, selenium, zinc, and other monitored pollutants met NPDES Permit levels. The Facility's groundwater has no measurable impact on Swamp Creek surface water quality. Sediment sampling from Swamp Creek shows that "the controlled discharge [from the Facility] does not pose a threat to the aquatic environment."

Soil in the southern part of the Facility is contaminated with niobium, tantalum, lead, selenium and zinc. A few soil samples registered elevated levels of uranium, manganese, aluminum, magnesium, cobalt, barium and copper. In the EPA Region III November 2000 Removal Assessment Report, EPA concluded that "no soil cleanup is necessary to protect human health" and "the air release is not determined to pose a threat to human health or the environment."

Institutional Controls

No institutional controls are necessary at this time.

Government Contacts

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For more information about EPA's corrective action web page, including Environmental

Indicators, please visit our site at: www.epa.gov/reg3wcmd/correctiveaction.htm

Facility Contact

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