

Schuylkill Metals Corporation
402 South Woodrow Wilson Drive
Plant City, Florida
County: Hillsborough
District: Southwest
Site Lead: EPA
Placed on National Priorities List: December 20, 1982
Delisted: August 22, 2001
HWC # 030
ERIC ID # 3803

Site Description and History

The Schuylkill Metals Corporation (SMC) is located at 402 South Woodrow Wilson Drive in Plant City, Florida, approximately 18 miles east of Tampa in Section 31, Township 28S, Range 22E at 28° 00' 39.0000" N, 82° 08' 35.0000" W. This secondary lead recovery facility was in operation on the seven-acre site from 1972 until June 1986. Prior to 1981, acidic waste waters were neutralized with lime or ammonia and discharged to an unlined disposal pond approximately 2.2 acres in size and up to 12 feet deep. In 1981, the wastewater treatment system was upgraded so that the effluent could be disposed through the Plant City municipal sewer system. The facility has been inactive since 1986.

Six priority pollutants have been detected in the pond (lead, cadmium, copper, nickel, zinc and antimony), along with elevated concentrations of ammonia, nitrate and sulfate. High concentrations of lead have also been observed in the soils associated with the processing area.

Threat

Contaminant levels in groundwater, soils, and sediments no longer pose a health or environmental threat at the site. Remediation of contaminated soils and sediments by solidification/stabilization was completed in 1997. Groundwater monitoring has confirmed that the Superfund health based cleanup goals have been met. The wetland restoration has been completed. The site was delisted in August 2001.

Response Strategy and Status

A temporary operating permit (TOP) was issued by The Florida Department of Environmental Regulation (FDER, now DEP) to SMC in July 1980. In response to a special condition in the TOP, SMC completed a removal action that included the removal of approximately ½ million pounds of sediment from the disposal lagoon, 6 million pounds of battery casings and 1 million pounds of soil beneath the casings.

In October 1983, SMC received an Industrial Operating Permit from FDER, which required SMC to evaluate the groundwater quality in both the shallow aquifer and the underlying Floridan Aquifer system by installing a network of monitoring wells at the site. The permit set forth four

phases of groundwater investigation and required a summary report for each phase. The FDER received all four reports, the last of which was an engineering report discussing whether further corrective action was necessary. In the final report, SMC's consultant, Gulf Coast Engineering, recommended that no remedial action be taken on the disposal pond at present. However, subsequent to the Phase IV report, SMC concluded that the report should be expanded to include a remedial action plan for the removal of lead from water and sediments in the disposal pond.

In January 1985, a comprehensive groundwater interim status survey was conducted by EPA's Environmental Services Division and the FDER Southwest District Office to determine SMC's RCRA status. It was subsequently concluded that SMC would have to meet both RCRA and CERCLA requirements.

In July 1986, the FDER and SMC entered into a Consent Order, which required SMC to perform a Remedial Investigation/Feasibility Study (RI/FS) as, required by CERCLA. This information was used to formulate a RCRA Closure/Post-Closure Plan for the disposal pond, and to select a remedial alternative to clean up the site. Field work for the RI was completed in April 1987. A draft RI characterizing the nature and extent of site contamination was submitted in response to FDER/EPA review comments. Additional surface water and soil samples were collected in February and March 1988 to supplement the RI. The investigations showed that elevated levels of lead were present in site soils around the processing area, in sediments in the perimeter ditch and east marsh, and in on-site surficial aquifer and surface water.

A draft FS report was submitted in July 1988, which included proposed cleanup levels for soil and ground water, and evaluated remedial alternatives. The FS report was subsequently revised to address FDER/EPA review comments. In January 1989, a treatability study work plan was submitted to evaluate chemical fixation as the proposed soil remedy. The resulting treatability study confirmed that the contaminated soils could be effectively treated by chemical fixation to prevent continued leaching of lead into the groundwater and minimize risk from direct contact with soils.

Sampling of East Marsh sediments was performed by EPA in March 1989. Results indicated the presence of elevated levels of lead over most of the marsh area. A Wetland Impact Study was completed by EPA in July 1990 to assess the probable impact of this contamination on groundwater/surface water quality and on organisms inhabiting the area. Alternatives for dealing with the marsh were evaluated in the subsequent feasibility study addendum.

A public meeting was held in August 1990 to present the proposed remedial action for the contaminated soil, groundwater, and marsh areas, and receive public comments. EPA signed the Record of Decision in September followed by FDER concurrence in October 1990. The selected remedy includes on-site chemical fixation of contaminated soils to form a solid mass, and groundwater recovery and treatment. Permanent inundation by controlled flooding of the on-site marsh was identified as necessary to prevent release of lead from sediments into the marsh water. The ROD required a determination of the appropriate method for wetlands mitigation. The RCRA closure/post-closure plan for the disposal pond was to be incorporated into the CERCLA design.

The 30% design report was completed in November 1989. The 90% design report and treatability study results were submitted in April 1991. Agency design review comments were extensive, and revisions contained in the October 1991 draft Final Design Report did not adequately address Agency comments. A design approach and schedule was developed to allow design and cleanup of site soils independent of groundwater remediation. The final soil design was approved in June 1992.

EPA issued an Explanation of Significant Difference (ESD) in June 1993, which modified the original remedy for the East and West Marshes. The revised remedy included excavation of marsh sediments exceeding 100 mg/kg lead for treatment and disposal onsite, and permanent inundation of the remaining sediments left in the marsh. Wetlands mitigation was to be accomplished via onsite restoration of existing wetlands. DEP concurred with the ESD in April 1994.

Construction began in June 1993 with the excavation of isolated areas of contaminated soils in the area slated for the treatment facility. Construction of the slurry wall to prevent groundwater flow into the onsite pond and soils excavation areas was initiated in November 1993 and completed in January 1994. Excavation and stockpiling of wetland sediments began in April 1994 and were complete in June 1994. Replanting of wetlands was conducted from November 1984 to January 1995. Construction of the soil and sediment treatment system was completed and the chemical fixation treatment system began operating in December 1994.

Discharge of pretreated groundwater to the Plant City Publicly Owned Treatment Works (POTW) was approved by the POTW in January 1994. Final design of the groundwater pretreatment system was completed in May 1994. Construction of the groundwater recovery and pretreatment system began in June 1994 and was completed in August 1994. The groundwater system was used to facilitate dewatering during the soils cleanup. Excavation and treatment of lead contaminated soils was completed in June 1997. The final Soils Remedial Action Report was submitted in December 1997. A Wetland Remediation Report was received in January 1998 and demonstrated that wetland restoration has been completed as required by the ROD. Groundwater monitoring has demonstrated that the remedial goals identified in the ROD have been met. In February 2001 DEP concurred with EPA's proposed deletion of the site from the NPL. Final site delisting was completed in August 2001. EPA will review the status of the site at 5-year intervals.