Site Location

Mineral Pigments Corporation is located in Prince George’s County, Maryland approximately 2 miles north of Beltsville. The address is 7011 Muirkirk Road, Beltsville. The site is 500 feet southeast of the intersection of Baltimore Avenue (U.S. Route 1) and Muirkirk Road, in a predominantly commercial and industrial area. Chessie railroad tracks are to the west. Conway Road is to the east and a light industrial park is to the south. The site geographic coordinates are 39° 03’ 30” North and -76° 53’ 08” West. The site slope is less than 3 percent.

Site History

The 3 ½-acre Mineral Pigments parcel was purchased by Norman Scow just before World War II, although the exact date of purchase is unknown. Prior to Scow’s purchase, a brick-manufacturing firm owned the property. Scow founded a plant that produced chrome pigments and iron oxide. In 1972, Rockwood Industries obtained the property and Mineral Pigments became a subsidiary. Production expanded over the years and zinc phosphate, “Clear Shield” and “Form Shield” were manufactured along with the chrome pigments. These colors or pigments may be composed of either zinc chromate, barium chromate or strontium chromate.

Environmental Investigations

On July 18, 1977, the Water Resources Administration (WRA) issued Administrative Complaint and Order Nos. C-78-037 and C-0-78-037, respectively, to Mineral Pigments Corporation. These documents informed the corporation of the finding of toxic pigments that were discharged from the facility into an unnamed tributary of Indian Creek as a result of incomplete wastewater treatment. The complaint ordered Mineral Pigments to remove the inorganic pigment material from the stream and pond sediments. The facility did not comply with the order.

In October 1977, WRA obtained sediment samples upstream from Mineral Pigments and downstream from the pond area. The upstream analysis revealed the presence of zinc (24.60 parts per million [ppm]), chromium (18.00 ppm), and lead (47.50 ppm). The downstream analyses revealed elevated levels of zinc (23.9 to 7,986 ppm) chromium (41.3 to 9,749 ppm), and lead (35.8 to 10,870 ppm). The Department of Natural Resources held a hearing in Annapolis, Maryland in January 1978 with Mineral Pigments concerning chromium-bearing pigments being discharged into waters of the State. The hearing decision rescinded WRA's Complaint and Order as being unclear but ordered an intensive survey of the area.

In early 1985, the Maryland Hazardous Waste Enforcement Division completed a routine inspection of the facility and discovered extremely poor housekeeping. Samples were collected for EP toxicity testing and Mineral Pigments was ordered to take specific clean-up actions. A follow-up inspection recorded a nitric acid spill that was cleaned up, but not reported to state authorities.

Mineral Pigments conducted a site investigation in Summer 1985 and reported the results in December 1985 in the report, Investigation of Soil and Shallow Ground-Water Quality Conditions at the Mineral
Pigments Plant, Beltsville, Maryland. The investigation included installation and sampling of soil and groundwater from six monitoring wells, collection of groundwater samples from within the augers of another seven borings, and an assessment of the fill area located north of the plant. The investigation determined that degradation of shallow groundwater had occurred over much of the site, although metal levels in groundwater were generally low. EP toxicity testing of soil samples from the fill area detected less than 1.0 milligram per liter (mg/l) total chromium and lead in most samples.

In late 1985 and early 1986, the Maryland Department of the Environment (MDE) observed and supervised the excavation of approximately 20 55-gallon drums and numerous, deteriorated fiber containers from the fill area. The containers and drums held approximately 80 percent iron oxide and 20 percent paint, chrome pigments, hydrochloric acid, ferric ferrocyanide (blue pigment) and sulfuric acid. On February 19, 1986, the fill area was sampled by MDE and analyzed for EP Toxicity. Chromium levels were less than 2.0 ppm so MDE allowed the excavated fill area to be filled.

In September 1985, the facility experienced a #2 fuel oil spill of 50 to 75 gallons from a ruptured line. The product was recovered and authorities were notified.

Consent Order C-0-87-184, signed in April 1987, documented Mineral Pigments’ agreement to perform semi-annual groundwater monitoring for two years followed by annual monitoring for three years. The order stipulated that if contamination levels were significantly reduced at the end of the monitoring period, all monitoring would cease.

Consent Order CO-88-0298, signed August 1, 1988, documented Mineral Pigments’ agreement to obtain the approval of the Washington Suburban Sanitary Commission (WSSC) to discharge all process wastewater to the WSSC sanitary system and cease all surface-water discharge, which was authorized by their Discharge Permit 86-DP-0492.

An Environmental Priorities Initiative/Preliminary Assessment report prepared in February 1990 reported that although Mineral Pigments had corrected some on-site deficiencies in waste handling, poor housekeeping practices continued. The report further noted that analytical results from March 1989 revealed high concentrations of hexavalent chromium (up to 80,000 ppb) and total chromium (up to 45,600 ppb).

In 1992, Mineral Pigments drilled two more wells and collected groundwater samples because free-phase petroleum hydrocarbons had been detected on site. The new wells and the existing wells without free-phase petroleum hydrocarbons were sampled for Total Petroleum Hydrocarbons (TPH), semi-volatile organics, total chromium, and hexavalent chromium. TPH was below detection level in the new wells, although 8.6 mg/l hexavalent chromium was detected in one of the wells.

Current Status

This site is on the State Master List that identifies potential hazardous waste sites in Maryland. The Master List includes sites currently identified by the U.S. Environmental Protection Agency’s (EPA) Comprehensive Environmental Response Compensation and Liability Information System. EPA has given the site a designation of No Further Remedial Action Planned (NFRAP). The designation of NFRAP by EPA does not mean that MDE has reached the same conclusion concerning further investigation at the site. The information contained in the fact sheet presents a summary of past investigations and site conditions currently known to MDE.

Facility Contact

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