

MD-017/102 Baltimore City
<p>The FMC Corporation site has been the location of chemical industrial activity since 1915.</p> <p>Groundwater reports, submitted since 1982, detected high levels of total organic halogens and chemicals.</p> <p>1983 SI by NUS detected significant levels of DDT, DDE, DDD, tetradifon, ethion, and dinoseb.</p> <p>Consent Order required characterization of site contamination and preparation of groundwater report; report submitted in 1988.</p> <p>Corrective Action Permit signed with EPA in 1989.</p> <p>EPA assigned NFRAP status in June 1990.</p> <p>Pump and treat system turned on in April 1997.</p>

FMC Corporation
Baltimore, MD

Site Location

The FMC Corporation is a 67.5-acre chemical manufacturing facility located at 1701 East Patapsco Avenue in a heavy industrial area of Baltimore City. Other manufacturing companies (oil, tires, chemicals) border the property to the north, northwest, and east. Curtis Bay and Stonehouse Cove define the southern and southwestern boundaries, respectively. The facility is equipped with several waste storage tanks, waste treatment systems, drum storage areas, and sump pumps, and the property is surrounded by a chain-link fence on two sides. Surface water runoff flows to the west and south to Stonehouse Cove and Curtis Bay, respectively.

Site History

From 1915 until 1954, the site property was owned and operated by the United States Industrial Alcohol Company. Until 1930, the company produced acetone and ethanol from the fermentation of molasses. The molasses was stored in an unlined pond of an unknown size prior to fermentation in fermentation buildings. From 1930-1940, the pond remained unused and was allowed to dry up; however, in 1940, Industrial Alcohol used the pond area to dispose of its production wastes (of unknown content). FMC Corporation, the current owner, purchased the property in 1954 and continued to use the unpermitted disposal area to dispose of manufacturing and general wastes until 1975,

when the area was closed by FMC because it was no longer needed. FMC waste materials included acetoacetylides dryer scrap, pilot plant wastes, 7-hydroxy tar, carbamate residues, pyrethrum flower residues, 7-nitro centrifuge bottoms, general trash and debris, butacide tar, dapon gel and polymerized monomers, and ethion filter aids and filter tubes. In 1981, a french drain system was installed under the disposal area to collect leachate and direct it to an on-site wastewater treatment system.

In 1957, a 2.87-acre unlined waste pond ("acid waste pond") was constructed to store wastewater containing hydrochloric acid generated from the production of tetradifon. In 1970, production of the insecticide ceased, and the pond was excavated and filled; no samples were obtained from this area during closure.

In 1975, a chemical manufacturing plant for "7-OH" [(7-hydroxy)-2,3-dihydro-2,2-dimethyl-7-benzofuranol] was constructed in the acid waste pond area. A 2,200-square foot storm water retention basin equipped with a single clay lining was constructed in 1976-1977 to collect surface water runoff from the area surrounding the plant. In 1985, based on sample basin

pH levels ranging from <2.0 to >12.5, the Maryland Waste Management Administration (WAS) required closure of the basin. The contents were removed to an approved facility, and the basin was filled with soil, covered with a clay cap and asphalt, and replaced with a tank neutralization system in 1988.

From 1977-1984, a 38,500-gallon clay-lined surface impoundment (surge pond) received wastewater runoff and washdown from the manufacturing area of the insecticide permethrin. In 1984, under WAS guidance, the pond was excavated, filled in, and covered. The pond was replaced with a 40,000-gallon steel above-ground tank.

Until 1972, an area used by FMC for research and development was located on the site. Waste solvents from this area were stored in a subsurface tank until removal to an approved facility in 1970. The research and development buildings were demolished in 1972, and the demolition material was removed from the site. No samples were obtained during the removal.

Currently, the FMC Corporation plant maintains Controlled Hazardous Substances (acquired prior to 1978) and National Pollutant Discharge Elimination System (acquired prior to 1983) permits.

Environmental Investigations

Quarterly groundwater reports have been submitted to WAS since 1982. High levels of total organic halogens and chemicals, which are indicative of the acetoacetylide dryer scrap disposed in the disposal area (pond) were detected in on-site monitoring wells.

In June 1983, the NUS Corporation, conducted a Site Inspection of the FMC Corporation site. Twelve split-spoon soil samples were collected and analyzed. Significant levels of DDT ($\leq 2,200$ ug/kg), DDE (≤ 950 ug/kg), and DDD ($\leq 2,000$ ug/kg) were detected. In addition, tetradifon ($\leq 3,300$ mg/kg), ethion (≤ 12 mg/kg), and dinoseb ($\leq 220,000$ mg/kg) were detected. Consequently, a Consent Order was issued to FMC Corporation in January 1986 to characterize the site contamination and to prepare a groundwater report. The report was submitted to the Environmental Protection Agency (EPA) and WAS in December 1988; however, results were not provided in the 1990 Site Inspection. A Corrective Action Permit, which was issued by EPA under RCRA authority, was signed on December 13, 1989. The groundwater treatment system that was developed pursuant to the permit was activated in April 1997.

Current Status

Based on the 1990 Site Inspection by NUS Corporation, EPA assigned the FMC Corporation site No Further Remedial Action Planned (NFRAP) status in June 1990. Current remediation is being handled under the facility's Corrective Action Permit with EPA.

Reference

Site Inspection Using Available Information of FMC Corporation, prepared by NUS Corporation, Superfund Division, for the Hazardous Site Control Division, U.S. Environmental Protection Agency, June 1990.