OCCIDENTAL CHEMICAL CORPORATION PROPERTY Route 7 (Principio Furnace Road) and Firestone Road Perryville, Maryland (Voluntary Cleanup Program)

Site Description

The Occidental Chemical Corporation property, consisting of 125.6 acres, is located on Firestone Road in Perryville and formerly contained a 43-acre polyvinyl chloride (PVC) production plant. The site is bounded to the north by Route 7 and to the south by woodlands. Land use west of the site includes a municipal sewage treatment plant and an oil processing plant, and east of the site, farmland, residences and an Amtrak rail yard. An unnamed tributary of Mill Creek runs along the western boundary of the property.

<u>Site History</u>

The entire property was utilized for agricultural purposes until 1966 when it was purchased by Firestone Plastics, who developed 43 acres of this 125.6 acres of land by constructing a PVC resin manufacturing facility and a compounding facility. Plant operations began in 1968 with the production of suspension resins and, in 1975, the plant was expanded to include emulsion resin production. In 1977, the compounding facility was closed. Occidental Chemical Corporation (OxyChem), formerly named Hooker Chemical, purchased the entire property in December 1980. All plant operations ceased in June 1982.

During the plant's operative years, a variety of hazardous and non-hazardous substances, such as PVC resins, vinyl chloride monomers (VCM), plasticizers, suspension resins, sulfuric acid, caustic agents, soaps, catalysts, fuel and mineral spirits, were stored on-site and utilized in the PVC manufacturing process. The plant generated a PVC sludge, containing residual VCM, that was managed as a hazardous waste prior to 1980. The sludge was stored on-site in settling basins after its reclassification as a non-hazardous waste in 1980. The plant's domestic sewage and process wastewater were discharged to the Perryville Sewage Treatment Plant.

Environmental Concerns

An environmental audit, commissioned by the site owner in October 1991, did not identify any significant environmental impact. In December 1992, an <u>Environmental Priorities Initiative</u> <u>Preliminary Assessment</u>, performed by the Maryland Department of the Environment (MDE), confirmed the removal of all polychlorinated biphenyls (PCB)-containing transformers but indicated the presence of asbestos-containing material throughout the buildings. Due to concerns about the large quantity of waste generated, poor containment structures and past improper storage practices, the report recommended a detailed subsurface investigation.

A <u>Screening Site Inspection</u>, conducted by the U.S. Environmental Protection Agency in March 1994, revealed low levels of phthalate, pesticides and PCBs in soil, sediment and surface water samples. In July 1996, a comprehensive site assessment identified elevated levels of metals in all media in addition to bis-2-ethylhexyl phthalate in groundwater and chlordane in sediment. MDE performed an <u>Expanded Site Inspection</u> in December 1996 and concluded that contamination found in soil, groundwater, surface water and sediments were not attributable to the facility's historic operations. However, a Departmental toxicological evaluation determined that groundwater contaminants, comprising principally of metals and some organic compounds (bis-2-ethylhexyl phthalate, fluoranthene, pyrene), posed a risk to drinking water receptors.

Voluntary Cleanup Program (VCP) Status

On March 5, 1998, Glenn Springs Holdings, Inc., a subsidiary of Occidental Chemical Corporation, submitted an application to the VCP. The Department confirmed Glenn Springs Holdings' status as a responsible person and issued a No Further Requirements Determination (NFRD) for the site on July 31, 1998. The NFRD was based on the results of the Department's risk evaluation, future use of the site for industrial/commercial purposes, physical maintenance requirements and a groundwater use restriction. On October 13, 1998, the NFRD was recorded on the property deed in Cecil County.

On October 18, 2001, IKEA Property, Inc., submitted an application seeking a NFRD as an inculpable person. The property was resurveyed and determined to be 120.54 acres. Development plans proposed for the property include the construction of two warehouse buildings (1.7 million and 300,000 sq. ft.), asphalt paved areas and stormwater management ponds.

On November 19, 2001, the Department determined that it had no further requirements related to the investigation or remediation of controlled hazardous substances at the property, and confirmed IKEA Property status as an inculpable person. The NFRD was issued on condition that the property be used strictly for commercial or industrial purposes, and a prohibition on the use of groundwater beneath the property. On June 2, 2002, the property deed was amended to reflect the conditions of the NFRD and recorded in the land records.

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