Waste Management Administration • Environmental Restoration & Redevelopment Program

EXXON COMPANY
Baltimore, Maryland

Site Location

The Exxon Company, U.S.A. site covered 130 acres in downtown Baltimore, on the east side of the North West Harbor. The site address was 3801 Boston Street, Baltimore, Maryland 21224. The area surrounding the former refinery area is industrial and includes other oil companies. The west side of the site is adjacent to the Inner Harbor and a small area is within the 100-year flood plain of the Patapsco River. The Patapsco River is one mile south of the site.

Current Exxon operations occupy two areas in West Baltimore. The main terminal and storage area extends eastward from the harbor to Haven Street and northward to O’Donnell Street. A former bulk storage area referred to as the 14th Street West parcel is located in an area bounded on the north by Boston Street, on the east by Newkirk Street and on the south by I-895.

Site History

Exxon Company, U.S.A. operated one of the first oil refineries in the United States on Boston Street. The refinery operated from 1865 until 1965 when the site was converted to an Exxon Marketing Terminal for storing bulk petroleum products. During the time the refinery was in operation it had docking, pumping and storage facilities adjacent to the Baltimore Inner Harbor. Prior to 1977, the terminal received petroleum products from sea-based transport. In 1977, the facility was hooked into a spur from Colonial Pipeline and barge traffic was eliminated. Between circa 1965 and 1985 the site was used as a bulk storage facility. In 1985, Exxon began a program to dismantle many of the former bulk storage tanks. Asphalt was manufactured at the terminal for an unknown period of time. Production ceased in 1984.

Waste materials were disposed of, degraded and used in ways typical of the times. The facility routinely weathered and buried solid waste materials on site by placing them on the ground surface and allowing them to weather for several months. The solid waste materials consisted of separator sludge, leaded tank bottoms, slop oil emulsions, and heat exchanger bundle cleaning sludge. The weathered sediments were then tilled into the soil. The contaminants of concern associated with these wastes are hexavalent chromium and lead. Reports differ on where the wastes were placed to weather. One report stated wastes were placed in the dike areas, another claimed they were placed throughout the refinery and terminal area, and a third report speculated that the probable area of burial was the area developed into a travel plaza and truck stop on the east side of the property. Exxon discontinued the weathering and burial of tank bottoms circa 1975. It was also reportedly a typical practice to burn almost all liquid waste products because of the economic incentives involved in producing heat for use in the refinery.

Fill material was placed at the waterfront on North West Harbor and the Patapsco River and also in a wide band that roughly parallels the Harbor Tunnel Throughway that runs through the site. The thickness of fill is estimated to be between 10 and 15 feet. Between 1966 and
1981, the physical layout of the facility changed as the refinery equipment was torn down and eliminated and I-95 was built through the eastern portion of the site in 1977.

In 1979, the company experienced problems with oil seepage from the ground. Wells were installed to control and recover the oil. In 1983, seven wells were operational and had recovered 103,200 gallons of oil through the first quarter of 1983. By mid-2001, the company had recovered 1,250,000 gallons of petroleum products in this way.

The property in the area of the present Baltimore Travel Park, called the Brickyard Tank Field by Exxon, was purchased from a brick manufacturer after World War II and used as a tank farm by the former oil refinery. An anecdotal report claimed there were deep holes on the property where the clay had been excavated, and apparently various kinds of industrial wastes were dumped into the holes. When Exxon purchased the property in 1865, they did some kind of soil treatment to neutralize any acids before building storage tanks. The tanks were removed in the mid-1960s. Exxon regraded the site circa 1969-70 due to complaints of children playing in the pits or in the berms left behind when the tanks were removed. The site remained vacant until circa 1978-1979 when the City of Baltimore purchased the property. At the time of the sale the city drilled extensive soil borings and tested the soils in the area; however, neither the city nor Exxon possess the results of the sampling. The Baltimore Truck Plaza, referred to as the Ponca Street Tank Field by Exxon, is located southwest of the O’Donnell Street Cut-Off and north of Boston Street opposite the Baltimore Travel Park. Most of the tanks in this area were torn down to make way for I-95 and all were removed by the mid-1980s. Exxon sold the property in 1985 to the Baltimore Truck Plaza.

Environmental Investigations and Actions

The intensive use of the Boston Street Terminal area for refining, transport and storage of petroleum products over the years has resulted in various spills and accidents involving transport vehicles and the bulk storage areas. In 1981 Exxon Corporation filed a Notification of Hazardous Waste Site form with the U.S. Environmental Protection Agency (EPA) for the Terminal. In December 1983, a draft Preliminary Assessment (PA) report was prepared for EPA that concluded the site was low priority for a site investigation. In November 1988, a Non-Sampling Site Reconnaissance Summary Report of the site was prepared for the EPA. Site observations were presented but the report gave no conclusions or recommendations. Subsequent investigations and environmental assessments by Exxon have revealed large-scale areas of contaminated soil and monitoring wells in nine areas with floating petroleum product a foot or more thick.

The State of Maryland has overseen tank removal and site remediation since implementation began. In addition to subsurface contamination, the Maryland Department of the Environment (MDE) has responded to petroleum discharges into the harbor from storm-drain outfalls, with the great number and extent of product pipes and storm drains exacerbating the problem.

In April 1997, MDE and Exxon signed a Consent Agreement in regard to site remediation.
Current Status

This site is on the state Master List that identified potential hazardous waste sites in Maryland. The Master List includes sites currently identified by the 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. Site remediation of petroleum hydrocarbons was initiated in April 1997, and is currently ongoing.

Planned or Potential Future Action

Upon completion of the large scale dismantling and removal of above and underground storage tanks, additional remediation activities will be undertaken at the Boston Street Terminal.

Facility Contacts

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Last Update: September 2004