

Iceland Coin Laundry

New Jersey

EPA ID#: NJ0001360882

EPA REGION 2

Congressional District(s): 02

Cumberland
Vineland

NPL LISTING HISTORY
Proposed Date: 7/22/1999
Final Date: 10/22/1999

Site Description

The Iceland Coin Laundry site is an area of contaminated ground water located at 1888 South Delsea Drive, in a combined commercial and residential area of the City of Vineland in Cumberland County, New Jersey. This contaminated ground water is located to the southwest of the former Iceland Coin Laundry and Dry Cleaning facility, which operated in the 1960s, and is part of the Kirkwood-Cohansey Aquifer system. Based on data from ground water samples collected in the area, the contaminated ground water plume area extends beneath South Delsea Drive, Dirk Drive, Garrison Road, Lois Lane, South Orchard Road, West Elmer Road, and West Korff Drive.

On three occasions, between September 1987 and October 1990, ground water samples were collected from a well at 1276 Garrison Road by the Vineland City Health Department. Analytical results from these samples indicated the presence of volatile organic compounds (VOCs) exceeding State and Federal Maximum Contaminant Levels (MCLs). Subsequently, between December 1990 and September 1991, the Vineland City Health Department collected drinking water well samples from 55 residences in the area. Analytical results from these sampling activities indicated the presence of VOCs, primarily tetrachloroethylene (PCE), at concentrations above State and Federal MCLs in 16 of the 55 residences samples. These 16 wells were estimated to serve approximately 44 people. Potable municipal wells which draw from the same aquifer system are located within 4 miles of the site, and serve approximately 28,770 people.

As a result of the private well contamination, in November 1991, the New Jersey Department of Environmental Protection (NJDEP) installed point of entry treatment units in the affected residences as a temporary remedial measure. Public water supply mains were extended to the area between April 1993, and July 1994. Service connections from the new mains to the residences were completed in early 1996. In 1995 and 1996, the NJDEP conducted an expanded site investigation in the area of the former Iceland Coin Laundry facility, including subsurface soil and groundwater sampling.

Site Responsibility: This site is being addressed through Federal and State actions.

Threat and Contaminants

Ground water samples in 16 residential wells contain volatile organic compounds (VOCs) and/or mercury at concentrations above State and Federal Maximum Contaminant Levels (MCLs). Primary contaminants include tetrachloroethylene (PCE), trichloroethylene (TCE), 1,2-dichloroethene (1,2-DCE) and mercury. Accidental ingestion, direct contact, or inhalation of the contaminants could subject residents to an increased exposure to carcinogenic and non-carcinogenic risks. Nearby residents down gradient of the plume using private well water also could be subject to health risks.

Cleanup Approach

The site is being addressed in two stages, immediate actions and long-term remedial phases focusing on cleanup of the site.

Response Action Status

Immediate Actions: The City of Vineland Department of Health sampled wells at the site, notified affected residents of the test results, and recommended alternate sources of safe drinking water. The New Jersey Department of Environmental Protection (NJDEP) installed point of entry treatment units in the affected residences as a temporary remedial measure. The City of Vineland has extended its public supply water mains to homes near the site that had previously used water from private wells. The majority of private potable wells in the project area have been sealed.

Long-term Response: The NJDEP conducted an expanded site investigation at the former Iceland Coin Laundry and Dry Cleaning facility. This investigation included subsurface soil and groundwater sampling. The EPA has completed a Remedial Investigation and Feasibility Study (RI/FS) for the site. PCE and TCE were found in the ground water extending approximately 4,700 feet to the southwest. The central core of the plume was approximately 2,000 feet from the facility, sixty feet beneath the surface and contained PCE at a maximum level of 290 parts per billion (ppb). TCE was found at a maximum level of 17 ppb. The Agency evaluated a number of alternatives, including a more traditional and slower cleanup method in which ground water is pumped out and put through a treatment plant before re-injecting it into the ground. EPA has conducted a treatability study where additives were injected into the ground water to break down hazardous chemicals into a form that are not harmful to people or the environment. This method will remove the threat from remaining volatile organic compounds (VOCs) in the ground water. Prior to installing this treatment (bioremediation) system, EPA collected several rounds of groundwater samples to define the boundaries and movement of the contaminated groundwater. A full scale implementation of this method of treatment (bioremediation) will commence in Summer 2011. EPA will also offer to connect to public water any residences or businesses within the area of ground water contamination that have not been connected. A vapor intrusion assessment was conducted at the facility building in the winter 2008 and 2009. No impact to the indoor air was identified.

Cleanup Progress

The City of Vineland identified the ground water contamination and notified affected residents. The NJDEP installed point of entry water treatment units as a temporary remedial measure for residents, while the City of Vineland extended public supply water mains to the affected areas. Also, private wells in the project area have been sealed. These actions significantly reduced the risk to human health and the environment. EPA has completed a remedial investigation and feasibility study that fully characterized the site contamination and documented the remedial action for the site in a September 2006 Record of Decision. EPA has conducted a treatability study where additives were injected into the ground water to break down hazardous chemicals into a form that are not harmful to people or the environment. This method will remove the threat from remaining volatile organic compounds (VOCs) in the ground water. Prior to implementing this treatment, EPA collected several rounds of groundwater samples to define the boundaries and movement of the contaminated groundwater. A full scale implementation of this treatment (bioremediation) will commence in the Summer 2011. A vapor intrusion assessment was conducted at the facility building in winter 2008 and 2009. No impact to the indoor air was identified.

Site Repositories

U.S. Environmental Protection Agency Records Center, 290 Broadway, 18th floor, New York, N.Y. 10007

Vineland City Health Department , 3rd floor, 640 East Wood Street, Vineland, N.J. 08362