

Prewitt Abandoned Refinery

Prewitt, New Mexico

EPA Region 6
State Congressional District: 03

EPA ID# NMD980622773
Site ID: 0600877



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Background

The Prewitt Abandoned Refinery is a former crude oil refinery located on approximately 70 acres near the town of Prewitt in McKinley County, New Mexico. The Site is located approximately 20 miles northwest of Grants, New Mexico. The Site is bounded on the south by Interstate 40, and on the north by the Atchison, Topeka and Santa Fe (AT&SF) Railroad. New Mexico Highway 122 (former U. S. Highway 66) divides the Site into two tracts. The two Site tracts are jointly owned by Atlantic Richfield Company (ARCO) now part of British Petroleum (BP) and El Paso Natural Gas Company (EPNG).

The refinery was in operation between 1938 and 1957. In July 1957, the refinery was shut down and the refinery and accompanying structures were subsequently dismantled. Remnants and debris remained after the refinery was dismantled, including piping, waste pits, a separator structure, and other structural material. The Site was covered with scattered demolished structures and foundations, sparse desert vegetation, and exposed fill.



The contaminants of concern in the ground water were lead, benzene, toluene, ethyl benzene and xylenes. The contaminants in the soil were asbestos, lead and polynuclear aromatic hydrocarbons.

The remedial actions for surface media were excavation and off-site disposal of asbestos-containing materials, lead-contaminated soil, and separator contents, and removal and disposal of Separator structure. The remedial actions for the subsurface media were Soil Vapor Extraction (SVE) of NAPL, contaminated ground water migration control, and ground water remediation by extraction, treatment and re-injection.

The surface portion of the Site has been remediated and is available for reuse but is currently only used solely for remedial activities. A fence restricts access to the Site. The Phase II Subsurface Remedy for the E-Sandstone Unit consisted of batch injection of nutrients, initially at six wells, to enhance in situ biodegradation of BTEX constituents in ground water using a nutrient injection system (NIS) constructed within an enclosed trailer. The remedy also included continued ground water extraction at remediation wells as necessary to support in situ bioremediation and to maintain containment of the leading edge plume in the E-Sandstone Unit.

There are a few residences to the east and west of the Site. The area in which the Site is located is rural and approximately 75 people live within a one-mile radius of the Site.

The ROD for the Site was signed on September 30, 1992.

Current Status

The EPA through its contract with NMED completed the third Five-Year Review for the site in September 2010. EPA has determined the remedy is protective in the short-term; however, protectiveness for the long-term cannot be made at this site. EPA has recommended a number of recommendations including amending the ROD.

Benefits

Remediation of the ground water at the Prewitt Superfund Site will reduce environmental risks in the future for people living near the site including Navajo tribes.

The surface portion of the site has been remediated to allow for future residential use and has been deleted from the NPL.

National Priorities Listing (NPL) History

- NPL Proposal Date: June 24, 1998
- NPL Final Listing Date: August 30, 1990
- Location: The site is a former crude oil refinery located on approximately 70 acres near the town of Prewitt in McKinley County, New Mexico.
- Population: Approximately 75 people live within 1-mile radius of the site.
- Setting: The Site is divided into two tracts and Highway 66 separates the two tracts. To the south is I-40 and to the north the Atchinson, Topeka and Santa Fe (AT&SF) Railroad.
- Hydrology: The Site is located near the southwest edge of the Rio San Jose Basin. There are three major stratigraphic units at the Site. These are in ascending order, the San Andres/Glorieta Formation, the Lower Chinle Member and the Sonsela Sandstone Bed.

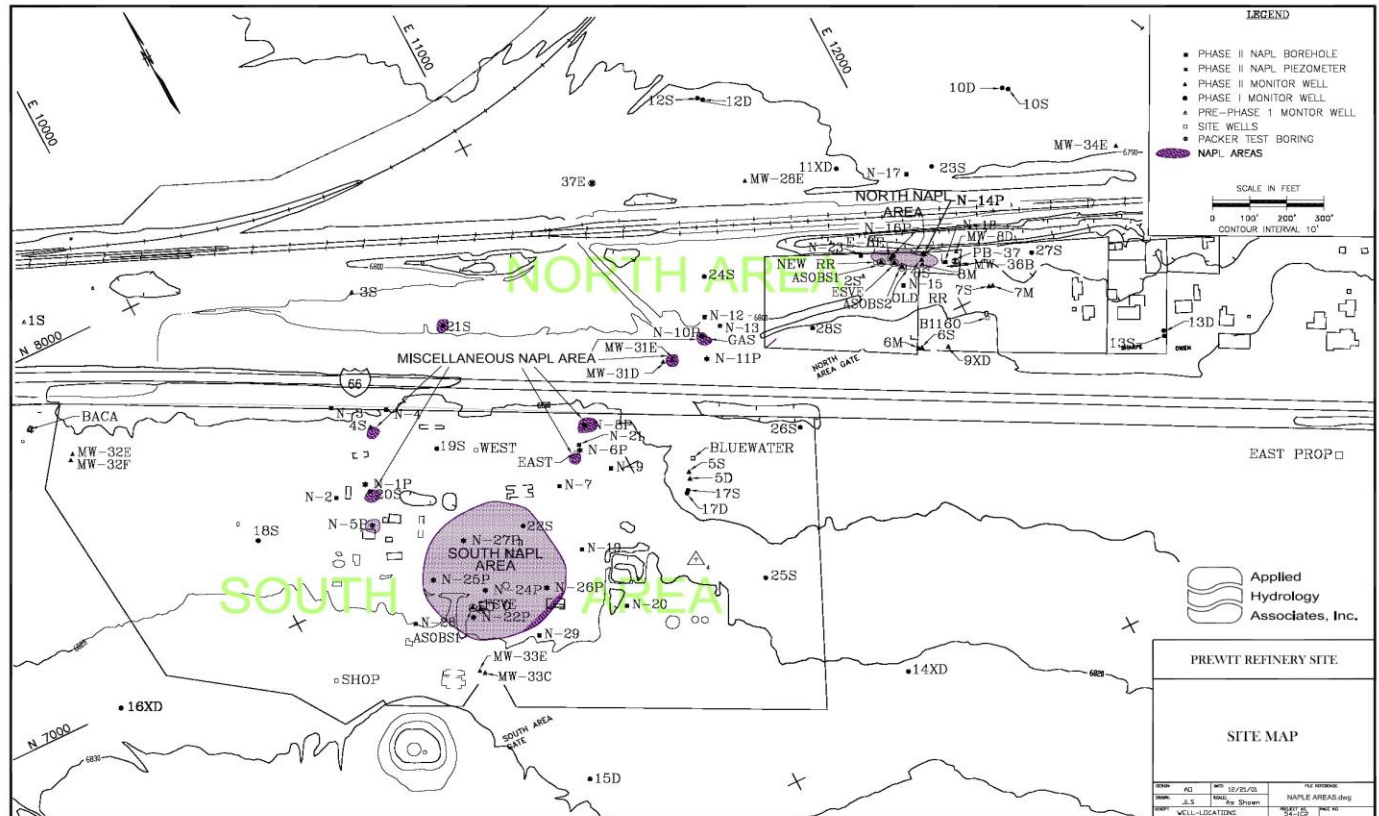
Principal Pollutants:

- Soil: Asbestos, lead and polynuclear aromatic hydrocarbons
- Other: Petroleum sludges
- Ground Water: Lead, benzene, toluene, ethyl benzene and xylenes.

Volumes:

- Recovered approximately 5,600 gallons NAPL by liquid recovery
- Removed over 520,000 lbs of (approximately 80,000 gallons) volatile hydrocarbon (NAPL), including about 21,000 lbs of BTEX by SVE
- Removed approximately 800 cubic yards of asbestos containing materials
- Removed approximately 3000 cubic yards of PAH contaminated soils
- Removed approximately 1900 cubic yards of lead contaminated soils
- Removed approximately 83 cubic yards of sludges in the separator

Site Map



Health Considerations

Five nearby residential wells have water treatment system to ensure ground water used is safe for consumption and does not exceed MCLs. Quarterly sampling is conducted prior to the treatment and after the treatment to ensure ground water is safe.

Record of Decision

The ROD for the Site was signed on September 30, 1992.

Site Contacts

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Potential Responsible Party:	ARCO and El Paso Natural Gas	
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