Site History
Prior to 1952, the Chevron Chemical Company site was a rail yard. Between 1952 and 1985, Chevron processed consumer and agricultural products, including pesticides. Bulk materials were brought to the site and blended, reformulated and packaged for distribution. Product formulation ceased in 1985. Between 1985 and when it closed in 1990, the Chevron facility was used for product warehousing and distribution.

The primary contaminants of concern at the Chevron facility due to its operations are organochlorine pesticides (OCPs). OCPs adhere strongly to soil particles and are not very soluble in water. Extensive remedial investigation and cleanup activities have been completed at the former Chevron facility, including the excavation and off-site disposal of approximately 20,000 tons of OCP-contaminated soil. The heavily contaminated soil that was the primary source of contamination to the ground water has been removed. Ground water treatment was conducted at the former Chevron facility for several years during the late 1990s, and additional ground water remediation alternatives will be evaluated as part of required future remedial action plans. Monitoring well sampling has not identified any significant OCP contamination in the ground water beyond the perimeter of the facility, and monitoring of the ground water quality is ongoing.

Over the years, OCP-contaminated soil and sediments have migrated off site via surface water runoff to the adjacent areas listed below.

Abramson Property
The Abramson Property is a heavily wooded parcel east-southeast of the Chevron site composed of approximately twelve acres within South Plainfield Borough and three acres in Edison Township. Chevron obtained title to the South Plainfield parcel in 2008 and the Edison parcel in 2011.

Since 1993, Chevron has collected approximately 172 soil samples from 114 locations at the Abramson Property. The sampling revealed OCP contaminants minimally above soil cleanup concentrations at many of those locations. Ecological risk assessments have demonstrated that the levels of OCP contamination in the soil are acceptable for the ecological habitat. Consequently, NJDEP issued an Ecological No Further Action for the Abramson property in 2004. NJDEP’s Land Use Regulation Program approved Chevron’s Freshwater Wetlands Permit application for the well. Chevron is proposing to excavate the top two feet of contaminated soils along the spurs.

Conrail Spur Easements
Soil sampling conducted at the Conrail easement along the eastern side of the former Chevron site revealed elevated levels of OCP contamination in one area. Chevron is required to evaluate the potential impact of this contamination to the ground water by installing an additional monitoring well in this area. In November 2011, NJDEP’s Land Use Regulation Program approved Chevron’s Freshwater Wetlands Permit application for the well. Chevron is proposing to excavate the top two feet of contaminated soils along the spurs.
Hummel Chemical Company
The Hummel Chemical Company is located northeast of the former Chevron facility. In 1992, Chevron excavated the upper three feet (2,753 tons) of pesticide-contaminated soil from the southern portion of the Hummel property and disposed of it off site. Additional soil sampling was conducted in this area in 1995 to determine the extent of the remaining low level contamination. Chevron’s proposed remedy for the Hummel Property includes additional soil excavation as well as a deed notice and engineering controls (asphalt cover, storm water management and maintenance program).

United Steel Deck (USD)
The USD property is located east of the former Chevron facility. In 2003, Chevron completed a remedial investigation to evaluate potential OCP contamination in the soil around the USD building, and in the sediments and surface water in the storm water retention pond and drainage ditch. Chevron’s proposed remedy for this property includes a deed notice and excavation of OCP-contaminated material in the top two feet of the drainage ditch. Clean backfill will be used to restore the drainage ditch.

Culvert Channel, Unnamed Tributary to the Bound Brook and Associated Floodplain
OCP contamination carried by surface water runoff from the former Chevron facility travels south to an unnamed tributary of Bound Brook through culverts extending under Metuchen Road and the former Lehigh Valley Rail Road corridor. The contamination extends into an area that is part of the Woodbrook Road Dump Superfund site, which is being evaluated by USEPA.

A Baseline Ecological Risk Assessment examined the unnamed tributary, culvert channel and associated floodplain and the potential risks to ecological receptors that may result from OCP exposure. Chevron proposed excavating select areas of contaminated soil and sediments from the culvert channel and a portion of the floodplain. The remaining low-level contaminated soil will be capped and a deed notice will be established for the property.

Chevron conducted a study in 2008 to evaluate the potential for the upstream OCP-contaminated soil to become re-suspended and transported downstream to the culvert channel and unnamed tributary. Chevron has concluded that after it conducts the proposed excavations and re-seeds the excavated areas with wetland species, the estimated future maximum soil contaminant concentrations would be less than they are currently, and the modeled ecological risks will be in a range that are protective of human health and the environment.

Future
DEP has conditionally approved Chevron’s proposed remedies; however, the owners of the off-site properties are evaluating the proposed remedies to determine whether they concur, since the remedies would restrict the future uses of the properties. As part of Chevron’s proposal, the excavated materials from selected on-site areas, along with the soil removed from all of the off-site areas, will be consolidated and used for grading atop the former Chevron building slab and other areas outside of the flood hazard zone. An estimated 15,000 cubic yards of material will be capped with an impermeable liner and a two foot layer of clean soil. The soil layer will be vegetated to prevent erosion and a deed notice will be established for the property. This remedial action will ensure the contaminants in the soil are safely encapsulated and do not pose a threat to human health or the environment.

In response to concerns about the possible redistribution of contamination following Hurricane Irene flooding, Chevron has begun to conduct soil sampling on the eight residential properties on the west side of New York Avenue that abut the Abramson Property. Chevron has contacted the property owners to arrange the sampling.