WASHINGTON STATE DEPARTMENT OF ECOLOGY

INITIAL INVESTIGATION FIELD REPORT

LUST ID: 1549 FS ID: 19946925 Site ID: 97277

SITE NAME Unocal 5471

SITE LOCATION INFORMATION

Contact Person Name	*Title*	*Phone Number*

Mailing Address	*City*	*Zip + 4*
1700 E Madison	Seattle	98122

Site Location	*Closest City*	*County*
1700 E Madison	Seattle	

Quarter-Quarter	*Section*	*Township*	*Range*
Latitude:	*Degree*	*Minute*	*Second*
Longitude:	*Degree*	*Minute*	*Second*

INSPECTION INFORMATION

Inspection Date			*Inspection Time*	*Type of Entry Notice*	
Photographs	*Yes*	*No*	*Weather:* *Clear*	*Partly Cloudy*	*Overcast*
Videotape	*Yes*	*No*	*Precipitation*	*Temperature*	
Samples	*Yes*	*No*	*Wind Direction*	*Wind Speed*	

RECOMMENDATION

No Further Action:

Yes for TPH and BTEX (Unocal's part of the contamination) nut no for the PCE from the adjacent dry cleaner's plume.

Release or threatened release does not pose a threat	*Site Hazard Assessment*
No release or threatened release	*Interim Action*
Educational Mailing	*Emergency Action Plan*
Refer to another program/agency	*Independent Cleanup Action*

	In Progress	*Completed*

CONTAMINANT(S) (See Page 3 for details)

Soil	Yes	Gas, BTEX, solvents, WO
Groundwater	Yes	

DEPARTMENT REVIEW

Investigator *Date*

Approved by

Unit Supervisor REO *Date* 4/15/14

Section Manager *Date*

COMMENTS

Problems at this station started in 1988 when several phases of subsurface investigation identified free product (as gas), gas, and BTEX above MTCA in soil and GW samples from numerous soil borings and nine wells advanced/installed on-site. GW was encountered in wells at 55 to 59 ft bgs. Free product found floating on water on the basement of the station building was identified as motor oil. Product recovery was instituted by hand bailing product from the impacted well. The origin of the release is assumed to be from historical leaks from older tanks since the USTs at the station are only a year old and

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the fingerprinting results indicated aged gas. A VES system was installed in 1988 to help remediate the TPH impacts in soil and GW and operated for 13 mo. Three USTs (gas, WO), associated product lines, dispensers, three hydraulic lifts, two sumps, a sediment trap, and floor drains were removed from this property and the building was demolished in 1990. Approximately 950 cy of PCS were overexcavated to 22 feet bgs and treated on-site with the VES system. The treated soil was used as backfill. Residual soil impacts remained in place in three areas of the site due to space and time constraints. These areas were the center of the building basement excavation, the SW wall of the basement excavation, and the tank pit. Additional PCS was overexcavated in 1993 and treated on-site. The PCS was from excavation conducted on the extreme SW corner of the property, from test pits, and from a removal of a pre-1987 CIP tank found at the site. GW monitoring wells were sampled and PCE was encountered for the first time in two wells. A PCE source was not identified. Additional PCS overexcavation in the SW and W property boundary was not conducted because it needed shoring. Several of the 13 site wells were abandoned due to excavation. An additional subsurface investigation was conducted in 1995 which included installation of replacement wells and GW sampling in addition to continued PCS treatment. TPH nor halogenated hydrocarbons were detected in the soil samples collected from the replacement wells. GW samples obtained from the accessible wells at the site indicated that gas and BTEX were ND or below MTCA, diesel and oil were above MTCA in several wells, and PCE (5 to 56 ppb) and 1,2-DCE (3.1 ppb) were detected above MTCA in several wells. A potential source of solvents was identified in solvents used in the shop but no specific chemicals were identified. The used of PCE for parts cleaning seemed unlikely due to PCE's high cost compared to mineral spirits or Stoddard solvent. In 1998 the site requested an IRAP review and Ecology provided an NFA to the site after a restrictive covenant for the PCE in GW was filed with the County Auditor in 1998. The site was redeveloped in 2003, 2004 with a 6-story, mixed use building with one level of underground parking garage which required excavation to 13 feet bgs. Several wells were abandoned during the new building construction and replacement wells were installed in2005. The site was under quarterly monitoring from 1995 to 2008 but quarterly report only observed until 7/2005. Results indicated that PCE (240 ppb) was above MTCA in one well. In 2006, the site entered the VCP again to relieve the site from the RC and continued monitoring of the site. The site has been cleaned up from all TPH problems related to the station and the only contaminant in GW is the PCE clearly originating from the adjacent and upgradient Dry Cleaning facility in operation since 1958. In October 2006, Ecology issued a Partial sufficiency and FA letter to the site indicating that the site's contamination for TPH, and BTEX in soil and GW were cleaned up to the State regulatory standards but because of the PCE contamination above MTCA in GW the 1998 NFA was rescinded and the PCE needs to be remediated. In 2008, as a result of the revoking of the NFA, Unocal's consultant wrote a letter to Ecology indicating their intent of removing the two wells left at the site in the grounds that the wells were installed to remediate and monitor Unocal's releases and not the PCE plume discovered at the adjacent Dry Cleaner and impacting the site. Unocal's stated that although the PCE plume had been discovered over 8 years prior, the owner had not conducted any cleanup and Unocal was not willing to continue with the liability of having the wells and responsibility of continued monitoring of a plume that was not being addressed. The wells were decommissioned in 2008, and Ecology removed the site from the VCP in 2009 for lack of cleanup.