

POLREP 23
Tuscarora Oil Site – FPN 15308
Intersection of Ely and River Roads
Solebury Township, Bucks County, Pennsylvania 18938

Attention:

EPA3 - RRC
G. Heston, EPA
F. Burns, EPA
P. Ryan, USCG-NPFC
S. Sinding, PADEP

I. **SITUATION** (as of March 24, 2016)
Event – Continuing Assessment – FPN 15308

- A. The Tuscarora Oil Site (Site) is located in Solebury, Bucks County, Pennsylvania. The Site is the location of a Facility from which large volumes of oil were documented to have spilled, discharged, or burned from tanks and pipelines between approximately 1915 and 1938. The Facility is no longer operating and is mostly dismantled and removed. The area once comprising the facility is now predominantly residential property. Contamination of residential drinking water wells is documented since about 1941. Reports of petroleum-related contamination in residential wells and a surface water body near the Facility resurfaced in the early 1990s. An assessment of the oil discharges and associated odors has been conducted over many years. Involvement by an EPA OSC was initiated in 1993.
- B. On January 4, 1999, the OSC documented the end of the EPA removal assessment of the Tuscarora Site (POLREP 18 and Final). Among other things, the OSC concluded that oil had not been observed discharging to the navigable water which makes involvement by EPA to address aspects of the Site potentially outside the authority of the EPA. Instead, the PA Department of Environmental Protection (PADEP) was positioned to take the lead on the Site and work with a successor to one of the former operators of the facility to move the Site through characterization. Without an oil discharge to navigable water (or substantial threat thereof), EPA would have limited authority to respond to contamination of ground water by oil originating from the former oil Facility.
- C. An Oil Project was opened in 2004 (FPN E04322) with an initial ceiling of \$7,000. PADEP had contacted EPA to request assistance regarding continuing petroleum odors at the Site. On September 22, 2004, the OSC visited the Site with PADEP. Oil odor was detected, but no oil discharge was observed. Samples were collected and shipped for analysis by USCG Marine Safety Laboratory (Case 04-165). These actions are summarized in POLREP 19. The results indicate only that a light petroleum was detected in the water. Afterwards, EPA and its contractor initiated a search of deed information to define the facility.

- D. Between May and November 2014, and in response to an observation of oil on the footer drain of the Delaware Canal, EPA, PADEP, and a contractor for Shell coordinated and collected samples of oily material. See POLREP 20. The footer drain discharges to the Delaware River. The oil discharge was different (more substantial sheen) than previous observations by the OSC made on numerous occasions since the early 1990s. On November 11, 2014, the OSC received the analytical results from samples collected from the footer drain. Samples of the sheen atop the water showed low levels of organic contamination consistent with petroleum compounds (e.g., isopropylbenzene, methylcyclohexane, alkanes, alkenes, and TPH). Samples collected from a large amount of biomass also present in the footer drain did not show similar contaminants. The analytical data from the 2014 oil sheen event is similar to the analytical data collected from monitoring wells located west of River Road (e.g., 2005 Report by SAIC for Shell). This information, along with ground water flow direction information, indicates that oil-contaminated ground water located west of River Road is likely discharging into the footer drain and the cause of the odors and intermittent sheen events.
- E. POLREP 20 contains a summary of available background information relating to the history of operations at the Site, extensive characterization and assessment activity between 1993 and 1999, and assessment activity which occurred more recently under FPN 04322. (closed January 2, 2015).
- F. FPN 04322 was closed January 2, 2015 and FPN 15308 was opened for continuing assessment of the oil discharge at the Site. See POLREP 21 for information relating to Initiation of Assessment activity relating to FPN 15308 through March 11, 2015.
- G. Beginning in 2005, a successor (Pennzoil Quaker State (“Shell” for purposes of this Site)) to one of the former operators (National Transit Company) has conducted characterization of certain portions of the former facility. Although petroleum products have been identified in various environmental media, reports submitted to PADEP concluded that concentrations did not exceed Pennsylvania DEP Statewide Health Standards. These reports indicated the potential that ground water containing oil was likely migrating from the area of the former facility to a water body on which oil had been observed and with which oil odors are associated.

II. ACTIONS

- A. On March 24, 2016 the OSC visited the site to assess conditions at the beginning of Spring. Winds were slight and generally from a northerly direction. The footer drain was again coated with biomass not obvious during the OSC’s visit in February 2016. Also present was a sheen upon the water of the footer drain which was not visible during the OSC’s February visit. This sheen consisted of material that mostly

- appeared biological in nature (e.g., easily broken into clumps which did not coalesce upon the surface). However, some areas of this sheen appeared to contain oil since it did not clump and easily came back together on the surface when broken (e.g., behaved like oil). In addition, the odor of oil was present. The area of sheen did not extend past the road comprising the entrance to the Park.
- B. Oil odors were faint, but evident along the tow path of the Canal.
 - C. Using a PID, the OSC found no detection of volatile organic compounds or hydrogen sulfide in the air along the tow path or directly above the sheen.
 - D. The OSC forwarded the above observations to Shell.

III. FUTURE ACTIONS

- A. The OSC will continue to coordinate with PADEP, Local Government entities, and Shell and will continue to do so in order to determine the extent of (and implement the conduct of) additional assessment or other activities required in order to conclude an Assessment of the Tuscarora Oil Site in accordance with the NCP.

Michael Towle, OSC
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