

LOT O-32: Site Assessment Background and Current Status
September 2022

Report to the Selectboard by Mary Anne Antonellis
September 12, 2022

Extensive Environmental Assessments and testing have been conducted at Lot O-32.

1. July 14, 2010 Fuss and O'Neill Environmental Transaction Screen.

Historic use of property:

- Single family residence with 3-bay black garage used as automotive repair shop.
- 13 dumpsters of automotive and household debris removed prior to town's acquisition of the property.
- "Based on site topography, the inferred direction of groundwater flow in the area of the subject site is to the southeast."
- Three Potential Environmental Concerns (PECs) identified.
 - a. Historic dumping (empty drums)
 - b. Former residential fuel Underground Storage Tank (UST)
 - c. Former commercial gasoline UST

2. December 29, 2010 Fuss and O'Neill Updated Environmental Transaction Screen.

- The removal of the fuel oil UST and piping was performed on September 1, 2004 was observed by Shutesbury Fire Chief Walter Tibbets. The UST was closed in accordance with 527 CMR 9.00 and there was no evidence of tank failure or leakage.
- Regarding the second UST which was also removed, a UST Removal Report dated 9/10/2004, prepared by ATC Associates, Inc. of Woburn, MA states that the tank was

observed to be structurally intact and in good condition. Soil samples collected from the sidewalls and base of the UST had no detectable concentrations of total organic vapors.

- The report concludes that one PEC requires further investigation.

3. September 8, 2010 O'Reilly, Talbot & Okun geotechnical engineering report: assessment of soil conditions and recommendations for building on site

4. April 26, 2012 Cold Spring Environmental Consultants (CSEC) site assessment:

- Investigation Recognized Environmental Conditions (RECs) identified:
 - a. former UST – fuel oil
 - b. former UST – gasoline
 - c. Open floor drain with unknown terminus that exited on the east wall of the building.
 - d. Debris pile to the south of the building with one 55-gallon drum partially filled with petroleum.
 - e. One additional debris pile southwest of the building and other areas of debris along the road that extends south
- Actions in response to RECs included:
 - a. Installation of four test borings and PVC monitoring wells adjacent to the former USTs, the floor drain terminus, and the debris pile behind the building.
 - b. Soil samples and groundwater taken were analyzed for Volatile Petroleum Hydrocarbons, Extractable Petroleum Hydrocarbons, Volatile Organic Compounds with all results below the reportable concentrations with one exception.
 - c. Polychlorinated Biphenyls (PCBs) were detected in a soil sample collected from beneath the drum that contained petroleum.
 - d. In response to the presence of PCBs in the soil sample under the drum, groundwater samples in the

monitoring wells next to the drum and at the terminus of the floor drain were collected in April, 2012. PCBs in the well adjacent to the drum were 0.544 parts per billion which exceeds the reportable level of 0.50 parts per billion.

e. Other water and soil samples in the vicinity of the drum were analyzed for PCBs with all results below reportable levels.

f. The results were reported to Anthony Kurpaska at DEP on April 24, 2012 who approved an Immediate Response Action Plan that consisted of identifying and sampling any drinking water wells within 500 feet of the site as well as sampling all on-site monitoring wells for PCBs. Additionally, soil samples beneath the former drum at the depth of two to three feet below grade should be analyzed for PCBs.

5. May 30, 2012 CSEC report:

a. Samples collected from the four monitoring wells and below the former drum were analyzed for PCBs with all results below reportable levels.

b. site conditions do not pose a threat of release of oil or hazardous materials.

6. June 5, 2012 CSEC report:

a. Samples collected from five private residences and the Highway Department show no PCB impact from Lot O-32.

7. June 2021: Town staff consult with DEP regarding demolition of garage, removal of debris, and recommended testing. DEP advises contracting with a Licensed Site Professional to test soil under the garage, in any location likely to be excavated during construction, and in the location of the removed debris piles.

8. August 2021:

a. Demolition of garage and removal of debris piles completed

- b. Licensed Site Professional, OTO performs eight borings in vicinity of garage and likely location of the new library and three in locations where debris piles had been removed.
 - c. Samples were analyzed for Volatile Organic Compounds, Polychlorinated Biphenyls, and Volatile and Extractable Petroleum Hydrocarbons. Nine of the ten samples tested negative. A tenth sample taken at the location now called B9, also the location of a former Airforce Radio Tower, and a location of one of the removed debris piles, showed reportable levels of chemicals commonly found in gasoline prompting a required notification to DEP.
 - d. A groundwater sample collected from the Town's monitoring well at Lot O-32 was analyzed for VOCs, PCBs, and PFAS, none of which were detected.
9. Fall 2021 – Winter 2022: Town Administrator researches history of removal of radio tower and underground fuel storage tank at the site. In 1994 – 1995 the tank was removed along with 100 tons of contaminated soil. The USACE questions the need for further testing.
10. June 2022: Town hires Licensed Site Professional, Fuss and O'Neill to do a desktop review of all environmental assessment and testing conducted thus far and do further testing at B9 in compliance with DEP.
11. July 2022 – Sept 2022 Conservation Commission requires a wetland delineation prior to further testing at B9. Fuss and O'Neill arranges for delineation which is completed and currently under review by Shutesbury Conservation Commission.

Outstanding tasks

1. Continue to review history of site and assessment testing done thus far. (Fuss and O'Neill)

2. Work with the Conservation Commission to determine steps necessary to access B9 to do required follow-up testing. This may include an RDA or NOI. (Fuss and O'Neill)
3. Application to Selectboard for ARPA funding to (1) complete RDA and ANRAD application to Shutesbury Conservation Commission, (2) to undertake additional testing to comply with DEP underground injection control program and (3) to perform limited PFAS testing at north east property boundary of Lot O-32 if review of current DEP data warrants it. (Mary Anne Antonellis)
4. Complete soil borings and install monitoring well at B9 and complete reporting to DEP by January 2023 (Fuss and O'Neill)
5. Undertake additional testing at site of former garage to comply with DEP underground injection control program (Fuss and O'Neill)
6. Complete RDA and ANRAD application regarding wetlands delineation at Lot O-32. (Fuss and O'Neill)
7. Consult with Licensed Site Professionals about residual debris at Lot O-32 to determine if additional action is indicated. (Mary Anne Antonellis).

In summary, since 2011, several rounds of environmental testing have been completed at Lot O-32. Early results showing reportable levels of PCBs could not be duplicated in 2012 or 2021. All testing for Volatile Petroleum Hydrocarbons, Extractable Petroleum Hydrocarbons, Volatile Organic Compounds and PFAS on the north-east portion of the parcel thus far has been negative and as such, currently no remediation is indicated. Further testing is required at the location of the former radio tower has been planned and will begin once the Conservation Commission approves a plan for accessing the site. Further testing to comply with the DEP underground injection control program has been proposed by our licensed site professionals and will be undertaken in the very near future. Fuss and O'Neill continues their review of the environmental assessments and the data collected thus far. Based on results Fuss and O'Neill's review and of

further testing, Fuss and O'Neill, in consultation with DEP, will recommend next steps if any are warranted.