Appendix B Source Control Review

ENVIRON reviewed publicly available information pertaining to several properties near Otter Creek, to evaluate whether there may be significant ongoing sources of contaminants of concern (PAHs and petroleum hydrocarbons) to the creek. Information sources included the following:

- Environmental Data Resources (EDR) database search
- Ohio EPA file review (see Attachment 1 for public records request)
- Site closure documentation provided by Chevron for the property currently owned by BOC Americas
- Online information sources

Properties evaluated in this review are shown in Figure 1. Specific documents reviewed and findings are summarized in the following table.

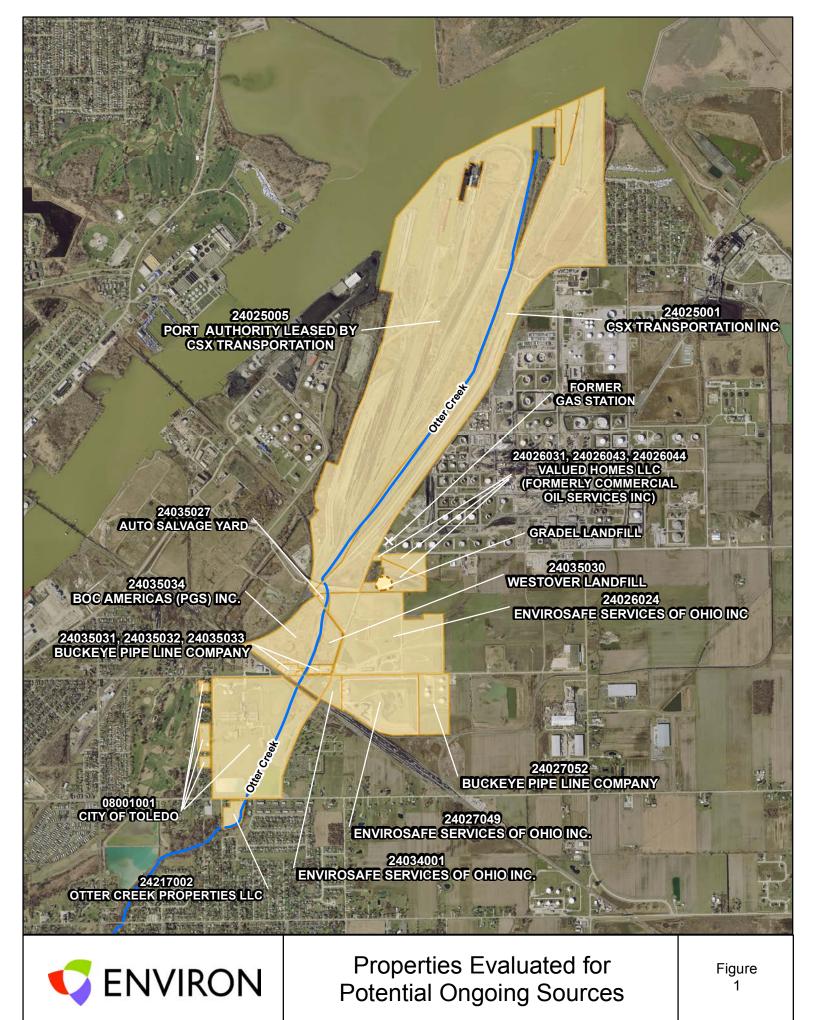
Property	Files Reviewed	Conclusions/Data Gaps
Auto salvage yard	No files were provided by OEPA for review	 It is unknown whether the site may contribute contaminants to Otter Creek. Site is small.
BOC Americas (PGS), Inc. (Formerly Chevron U.S.A (Gulf Refinery))	 Phase I ESA (September 9, 1996) Delineation Work Plan (1997) Technical Memorandum for the Otter Creek Soil Remedy Basis of Design (September 23, 1998) Final Documentation Report for Shallow Impacted Soils Remedial Activities (May 28, 1999) 	 A tank farm was historically located west of Otter Creek. In 1996 soil and groundwater investigations were completed which found TPH in soil adjacent to Otter Creek. Impacted soil removal adjacent to Otter Creek was completed in 1999.
Buckeye Pipeline Company	BUSTR records 1991-2007 NPDES permit records	 During a 2007 diesel fuel tank removal, sheen was noted on water collecting in the excavation that had seeped from excavation walls. In 2009, storm water exceeded oil and grease limits set by the NPDES permit. No groundwater monitoring data was available from OEPA.

Property	Files Reviewed	Conclusions/Data Gaps
BP-Husky refinery and former gas station	BP Toledo Refinery RFI report, Appendix D, Site-Wide Subsurface Stratigraphic Investigation (URS 2002) Sun/Mid Valley Pipeline Response/Soil Pit Excavation and Sampling (December 24, 1997)	 Property is not immediately adjacent to Otter Creek. Extensive investigation demonstrated that groundwater underlying the BP-Husky property is not connected to surface water. A former gas station was located north of Cedar Point Road and the Commercial Oil site, property now owned by BP-Husky. In 1997, an oily free product was observed at the base of a newly installed utility pole and was determined not to emanate from the Sun/Mid Valley pipeline. This area is maintained in a manner expected to minimize the potential for surface migration (M. Darr, personal communication).
City of Toledo	No files were provided by OEPA for review	Based on facility operations (i.e., municipal drinking water treatment), the site is not a likely source of petroleum hydrocarbons to Otter Creek.
Commercial Oil Service Inc.	 DERR spill reports 1986-2012 Final Construction Report for the Lagoon Closure Removal Action (January 16, 2000) Remedial Services Workplan: Initial Phase (June 28, 1988) Workplan for Phase I Response Actions (August 1988) 	 Surface drainage from on-site lagoons drained to a ditch and storm sewer that discharged to a wetland connected to Otter Creek. According to the Consent Order, Phase I tasks included removal of contaminated surface water and sediment in lagoons and subsequent closure by capping, and removal and disposal of tanks and drums from the site. The Final Construction Report describes the lagoon closure removal action. Although groundwater monitoring was to be implemented for one year after well installation before an OEPA waiver could be applied for, groundwater monitoring data was not available from OEPA.

Property	Files Reviewed	Conclusions/Data Gaps
CSX Transportation, Inc.	 BUSTR records 1994-1998 DERR spill reports 2002-2012 NPDES permit records OEPA correspondence 1987-1988 ODNR groundwater well logs 1899 USGS topographic map 	 Several small fuel spills have been reported at the CSX property. Spills typically did not enter Otter Creek and were excavated or remediated within 24 hours. Diesel fuel entered Otter Creek during a 1998 spill; oil booms were installed during emergency response. OEPA corresponded with CSX regarding journal lubricant leaching from tanks along the bank into Otter Creek in 1987 and 1988. During the late 1800s and early 1900s, several oil wells were located onsite, as shown in Figure 2. Little is known about the operation and closure of these oil wells. Although ODNR well logs indicate groundwater sampling has occurred, groundwater monitoring data was not available from OEPA.
EnviroSafe Services	 Corrective Measures Study (April 30, 2012) Comments on Corrective Measures Study Report 2010-2012 Hazardous Waste Groundwater Task Force Evaluation of Fondessy Enterprises, Inc. (December 1986) RCRA compliance evaluation inspection reports ODNR Division of Water monitoring well records, groundwater monitoring reports 2010-2012 NPDES permit records 	 Groundwater monitoring reports are available from 2010 through 2012; PAHs have not been detected in site groundwater. NAPL is present in a peat layer along the west side of SWMU 5 (Millard Avenue Landfill), in the Otter Creek floodplain. NAPL is present in floodplain soil but is not emanating from the landfill. As part of the Corrective Measures Program, the NAPL will be recovered to the extent practicable. At least 8 active outfalls discharge to Otter Creek from properties owned by EnviroSafe. Two of the outfalls drain to a ditch and storm sewer which discharge to a wetland connected to Otter Creek.

Property	Files Reviewed	Conclusions/Data Gaps
Gradel Landfill	 Screening Site Inspection Report (February 6, 1993) NPL Characteristics Data Collection Form (February 12, 1993) Envirosafe Corrective Measures Study (April 30, 2012) 	 The Gradel Landfill was investigated in 1993 on behalf of the USEPA. A surface water pathway and ongoing release of hazardous substances to Otter Creek wetlands were identified. Sediments in Gradel Ditch south of the landfill and in the wetland contained elevated levels of PAHs and heavy metals. Gradel Ditch drains to a ditch and storm sewer that discharge to a wetland connected to Otter Creek ENVIRON staff familiar with the area indicate the Gradel Landfill may not be maintained. Groundwater exhibits artesian conditions in the Gradel Landfill adjacent to the Envirosafe property.
		The Gradel Landfill is part of the Commercial Oil Services property, but the Commercial Oil Services remedial action focused on other parts of the property.
Millard Avenue Overpass	 Environmental Assessment and Analysis of Response Alternatives (Revised June 1993) A. Lunsey, personal communication 	 OEPA identified elevated concentrations of PAHs and TPH in surface soils. It is unknown to OEPA whether removal actions occurred during construction of the overpass, since they would have been voluntary actions.
Otter Creek Properties LLC	OEPA has no files for this property	 Property is currently undeveloped. Further investigation of former land use was not performed by ENVIRON.

Property	Files Reviewed	Conclusions/Data Gaps
Westover Landfill	 Removal Action Referral to USEPA (June 16, 2009) Site Assessment Letter Report (January 20, 2010) Interoffice memos Settlement Agreement (November 19, 2010) Completion of Work letter (July 17, 2012) Westover Landfill Site Pollution Report (POLREP) #3, Final (July 24, 2012) 	 Several leachate discharges to Otter Creek have been documented since 1990. The leachate has elevated levels of metals and benzene. The Settlement Agreement and Completion of Work letter describe measures taken to seal a leaking outfall pipe and improve leachate collection. Groundwater monitoring data was not available from OEPA. Elevated PAH concentrations were reported in sediment adjacent to the Westover Landfill and were not addressed under the Settlement Agreement. The potentially responsible party will continue to monitor leachate levels within the landfill and periodically remove leachate from the leachate collection system; perform regular maintenance on the landfill property to ensure the integrity of the landfill cap, leachate collection system, and methane venting system; and will complete an annual report for submittal to OEPA.



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1899 USGS Topographic Map Maumee Bay Quadrangle Figure 2