Appendix A

DEP Investigations, Cleanups and Monitoring Funded under HSCA

Sites are listed alphabetically by County.

Site Name	Region	County	House	Senate	Threat	Status of Work
ADSCO	SC	Adams	91	33	Groundwater is contaminated with toxic volatile organic compounds (VOCs) from landfill leachate. Private water supply wells are impacted.	DEP is maintaining the residential water supply treatment system, the landfill cap, methane control systems, and the leachate collection and treatment system. An NPDES permit was obtained in June 2020 for the Site. Currently, iron and manganese appear to be the only two constituents that exceed the Statewide health standard. 1,4- Dioxane has been added to the list of constituents to be monitored.
Gettysburg Foundry	SC	Adams	91	33	Soil and groundwater are contaminated with salt and metals from the operation of this closed metal smelting facility.	DEP has completed remedial actions at the Site and will periodically monitor groundwater to determine whether contamination levels are declining naturally. In 2013, DEP recorded land use restrictions on some areas of the property with Adams County. There has been some interest to use the property for a regional sewage treatment plant or a business park.
JC Cleaners	SC	Adams	91	33	Soil and groundwater are contaminated with toxic volatile organic compounds (VOCs), including tetrachloroethylene (PCE). The contamination threatens a public water supply well.	DEP performed additional sub-slab investigation and indoor air quality monitoring of properties surrounding the JC Cleaners facility during December of 2019 and February 2020. DEP is currently pursuing alternatives, including but not limited to, vapor mitigation. The groundwater investigation continues, and one well was abandoned.
Keystone Metals Reduction	SW	Allegheny	33	38	Soils have been contaminated with uranium ore tailings from past radium recovery activities dating back to 1921.	The onsite business owner has not agreed to be temporarily relocated. DEP has decided to re- evaluate potential remedial options that could still be protective of human health and the environment. DEP has completed a re-evaluation using a numeric model to determine health-based risk at the Site. Based on the results of this re- evaluation, DEP is considering options that would not require demolition of buildings and relocation of the business. DEP is preparing a site summary to brief the owners and discuss the new remedial options.
Mazzaro-McKees Rocks Landfill	SW	Allegheny	45	42	Soils and groundwater have been contaminated with toxic volatile organic compounds (VOCs), metals, polychlorinated biphenyls (PCBs) and	DEP evaluated remedial alternatives, obtained county health department approval, and prepared an Analysis of Alternatives and Engineering Design to address additional control of site-

					polycyclic aromatic hydrocarbons (PAHs).	derived gases. A lateral trench system design was chosen to address gas migration as a supplement to the existing gas venting system. Construction of the remediation system was completed in early 2021. The initial post-construction performance monitoring shows that landfill gas is being successfully intercepted from migrating offsite along the trench alignment areas. Additional screening is underway to verify the long-term efficacy of the system.
Natrona Heights Gas Odors	SW	Allegheny	33	38	Soils and groundwater are contaminated with toxic volatile organic compounds (VOCs).	DEP investigations into soil and groundwater contamination began in February 2019. Six monitoring wells have been installed and the first round of quarterly sampling revealed VOC- impacted groundwater in the uppermost detected aquifer. Ground penetrating radar surveys revealed possible corroded underground storage tanks. Soil samples were non-detect, but groundwater showed exceedances and is therefore the medium of concern at the Site. Vapor appears to be migrating via groundwater and underground utilities.
CBS-Vanport	SW	Beaver	15	47	Soils and groundwater are contaminated with trichloroethylene (TCE). The contamination threatens the Vanport Township Municipal Authority public water system.	The Responsible Party stopped paying for the operation of air stripping towers at the Vanport Township Municipal Authority's water treatment plant where TCE contamination still exists in the aquifer. DEP's Site investigation is underway. Soil and surface water sampling have been conducted and groundwater monitoring wells have been installed in the quarry where sampling was completed in 2019. A new contractor was assigned to the site to complete the few remaining tasks to finish the site investigation.
Kuhn's Landfill	SW	Beaver	14	47	Exposed unknown industrial waste and abandoned drums are present at this former landfill.	DEP issued a Statement of Decision in June 2015. The chosen remedy included covering the exposed waste and areas that exceeded direct contact standards, and removal and disposal of the gel-type waste. Remediation at the site is complete. Environmental covenants and cost recovery are now under consideration.

LTV Benzol Tank Area	SW	Beaver	16	46	Groundwater and soils have been contaminated by toxic volatile organic compounds (VOCs).	Site Investigation activities began in 2015. High levels of benzene in wells and soil vapor monitoring points prompted investigation of the nearby residential neighborhood. Due to access issues with the City of Aliquippa, the additional soil and vapor sampling has not been conducted.
Pool Doctor/Beaver Alkali	SW	Beaver	16	47	Soils are contaminated with a variety of extremely hazardous substances, oxidizers, and strong acids and bases.	DEP initiated a prompt interim response on July 1, 2019, to remove and properly dispose of chemicals at the Site. On July 12, 2019, a chemical reaction occurred and caused a fire and subsequent release of low-level chlorine vapors. Once the fire was extinguished and the risk of additional reactions was minimized, DEP moved forward with proper chemical removal and disposal. As of April 2020, all known chemicals at the site were removed and transported to approved disposal facilities. Final site restoration activities were completed in June 2020.
Algonquin Chemical	SC	Berks	124	29	Groundwater and soils have been contaminated by toxic volatile organic compounds (VOCs).	In-situ treatment of the groundwater was initiated in December 2003. Groundwater monitoring is on-going. A review of historic lab reports indicated a slight increase in the residual VOCs in some wells and stabilization in others. An addendum work plan was prepared to sample the wells on a semi-annual basis for an additional two-year period followed with a data trend analysis to determine if VOC concentrations are continuing to increase or stabilize. Institutional Controls will be used to prevent the use of groundwater onsite and on the adjacent vacant property to the west the Site.
DeMarco Landscaping	SC	Berks	130	44	Groundwater is contaminated with tetrachloroethylene (PCE). Several residential wells are impacted.	DEP conducted a prompt interim response to address residential well contamination. All affected residential water supply wells were equipped with Point of Entry Treatment Systems. Additional work at the Site will concentrate on evaluating the method, cost, and implementation of extending public water to the impacted houses along Ben Franklin Highway. Additional 3 to 5- year sampling for VOCs will continue along Riga Lane to monitor any plume migration and need to extend public water.

Mt. Laurel Road Battery	SC	Berks	5	11	Soil is contaminated with lead from battery casings.	DEP completed response actions at the Site, including removal of 3,102 tons of contaminated soil. Environmental covenants are being placed on properties where contamination remains above the cleanup standard. No Further Work Is Planned.
Noll Lane Battery Casing	SC	Berks	5	11	Soil is contaminated with lead from battery casings.	DEP conducted an interim response at the Site. Excavation of contaminated soil was completed in October 2017. In December 2018, additional work was conducted to reinforce the drainage swale. There are 12 properties where contamination exists above the cleanup standard and environmental covenants (ECs) are necessary. As of May 2021, 10 of the 12 required ECs have been recorded.
Northern Berks Battery Casings	SC	Berks	124	29	Soil is contaminated with lead from battery casings at three separate properties on Site.	DEP completed the Site Investigation and three areas of contamination were found. Work was completed in September 2020 and included a combination of soil excavation and soil capping to eliminate threats from the contamination. Environmental covenants need to be prepared on all 3 areas.
Topton Site	SC	Berks	134, 187	11, 24	Groundwater is contaminated with toxic volatile organic compounds (VOCs). Private water supply wells are impacted.	DEP is maintaining residential groundwater treatment systems and performing groundwater remediation through permanganate injections. Post injection groundwater samples were collected in March and May 2021. DEP reviewed lab data from several sampling events and determined that additional groundwater injections are warranted. Groundwater injection in select wells (including recirculation of amended groundwater) is tentatively scheduled for July 2021.
Sayre TCE and PCE	NC	Bradford	110	23	Soil and groundwater are contaminated with trichloroethylene (TCE) and tetrachloroethylene (PCE).	Investigations of groundwater and soil contamination have been ongoing by the property owners and DEP since the 1990s. These investigations have shown that there may be multiple sources of the TCE/PCE contamination. The area is served by public water. DEP installed shallow groundwater monitoring wells and soil gas monitoring points. The groundwater well data is being evaluated, but no risk to human health in the area has been identified. Data from several soil gas sampling points were above indoor air

						screening levels. Therefore, DEP's contractor conducted indoor air sampling in homes in the vicinity of these monitoring points. One business building was found to contain levels of TCE above the non-residential indoor air screening level and one private home was found to contain levels of TCE above the residential indoor air screening level. A vapor mitigation system was installed in the basement of the residence. DEP is awaiting a signed access agreement for installation of a vapor mitigation system for the impacted business.
Easton Road PFC	SE	Bucks	143	10	Groundwater is contaminated with per- and polyfluoroalkyl substances (PFAS). Specifically, perfluorooctanic acid (PFOA) and perfluorooctane sulfanic acid (PFOS).	In August 2020, DEP completed the installation of Granular Activated Carbon filter systems on 2 homes and the inspection and upgrade of 6 additional properties that had existing treatment systems. In April 2021, DEP completed 6-month post installation/upgrade sampling of 7 homes with known concentrations of PFOA/PFOS above the health advisory level. Results indicated that the treatment systems were operating effectively, and DEP ceased bottled water deliveries. DEP continues to sample the monitoring wells on a semiannual basis. The next round of monitoring well sampling is scheduled for summer 2021.
Furlong and Vandor Manufacturing	SE	Bucks	29, 143	10	Groundwater and soils are contaminated with trichloroethylene (TCE), tetrachloroethene (PCE), 1,1- dichloroethylene (1,1-DCE), and 1,4- dioxane. Private water supply wells are impacted.	A public waterline extension serving the property owners affected by the TCE contamination at the Sites was completed in Fall 2018. DEP last sampled the monitoring wells in May 2019. Results showed most wells had concentrations of TCE, PCE, 1,1-DCE, and 1,4-dioxane below DEP's respective medium-specific concentrations for those compounds. High concentrations of VOCs remain in groundwater at the Furlong property. All monitoring wells at the Sites were abandoned in October 2020. DEP is working to enact land use restrictions through an environmental covenant or a HSCA 512 Order.
Jacksonville TCE	SE	Bucks	178	6	The groundwater is contaminated with toxic volatile organic compounds (VOCs), including trichloroethylene (TCE). Private water supplies are impacted.	DEP installed a waterline to 107 affected residences in 2013. In February 2017, DEP sent letters to the owners of the suspected source properties providing them with the opportunity to address the contamination through the PA Land

						Recycling and Environmental Remediation Standards Act (Act 2). In July 2020, DEP sampled 20 monitoring wells (MW) at the Site, with TCE results ranging from non-detect (ND) to as high as 180 ug/l. Sixteen of the 20 wells sampled showed results of ND. In previous sampling events, these same wells have also been ND. Due to these consistently low concentrations, DEP is in the process of
Nockamixon TCE	SE	Bucks	143	24	The groundwater is contaminated with toxic volatile organic compounds (VOCs) and 1,4-dioxane. Private water supplies are impacted.	 decommissioned. DEP continues to monitor groundwater in the area. 1,4-dioxane was detected in two source area monitoring wells. Several home wells in the area were sampled for the compound. 1,4-dioxane was detected in three of the residential wells, but only one was above the Statewide health standard. DEP is currently evaluating the performance of the existing treatment systems for addressing 1,4-dioxane. Samples collected in January and February 2021 revealed that 1,4-dioxane continues to be removed by the treatment systems, but some breakthrough of the first carbon tanks was noted. DEP is also evaluating alternative emerging treatment technologies. Follow up indoor air sampling has confirmed that the vapor intrusion (VI) mitigation systems have effectively addressed VI at both homes. A large area of soil contamination has been identified and characterized, which contains the highest concentrations of TCE. DEP is planning a phased Remedial Investigation and Remedial Alternatives Analysis, to address source area media at the Site.
Perkasie Area TCE	SE	Bucks	145	10	Groundwater in the area is contaminated with trichloroethylene (TCE) from multiple sources. Vapor intrusion is the main pathway of concern.	In June 2020, DEP finalized a consent order and agreement (CO&A) with one current property owner to address the contamination. In May 2021, DEP reached a CO&A pending public comments, with another Responsible Party to settle DEP's response costs. The notice of the CO&A was published in the <i>PA Bulletin</i> . Another property owner agreed to enter property into the Act 2 program and demonstrate attainment of one of the

						cleanup standards set forth in Act 2 pursuant to a specific schedule and agreed to reimburse the DEP's past response costs. DEP is currently reviewing a Remedial Investigation Report that was submitted to DEP for review in April 2021.
Railroad Drive TCE	SE	Bucks	29, 178	6	Groundwater is contaminated with trichloroethylene (TCE).	Through a grant from DEP, the Township installed a public waterline to affected residences in June 2017. The highest overall concentrations of TCE were found in wells serving four businesses along Railroad Drive. In fall 2020, select monitoring wells (MWs) were sampled for polyfluoroalkyl substances (PFAS) and there were no detections in any of the samples above any health advisory levels. In July 2020, DEP completed its annual MW sampling event. Based on information received from DEP's requests and preliminary work completed as part of an ongoing Act 2 investigation at one property, DEP plans to conduct a source investigation by way of a passive soil gas survey in the Summer 2021. DEP recently secured an access agreement with the property owner.
Ridge Run PFAS	SE	Bucks	145	10	Groundwater, surface water, soil, and sediment are contaminated with per- and polyfluoroalkyl substances (PFAS).	In 2016, two North Penn Water Authority wells were found to be contaminated with PFAS above the USEPA Health Advisory Level (HAL). 15 residential properties are also impacted above the HAL. DEP has installed 14 water treatment systems to date and is in the process of installing another. Sampling of the systems has found them to be effectively removing PFAS to below the HAL. DEP installed monitoring wells at nine locations to further delineate PFAS in the groundwater. In January 2021, DEP initiated the pilot study of the installation of a permeable reactive barrier utilizing PlumeStop® to prevent the further migration of PFAS from a source area.
Sellersville Landfill	SE	Bucks	145	10	Soils and groundwater are contaminated with radium 226 and trichloroethylene (TCE).	DEP conducted an interim response action in 1997 to address radium soil contamination. TCE is now the remaining primary contaminant of concern at the Site. The responsible party and the Bucks County Redevelopment Authority (BCRDA) will be taking the Site through Act 2.

						BCRDA submitted a cleanup plan, which calls for targeted removal of contaminated soils and continued groundwater monitoring. Cleanup is being funded through an Industrial Sites Reuse Program (ISRP) grant. No Further DEP Work is Planned.
Bear Creek Chemical Site	NW	Butler, Armstrong	11, 63, 64	41	Groundwater and soils are contaminated with resorcinol and sulfonic acids. Private water wells and a public water system were impacted. Contamination has been detected in streams throughout the disposal area.	Operation and maintenance (O&M) activities occurred at the Kelly Farm Disposal area in the Summer of 2018. O&M activities were completed at the Apple Road Site in the Summer of 2019. Cost recovery efforts and settlement proceedings have been completed for both Kelly Farm and Spitzer Pines sites through the approval and issuance of an Administrative Order and a Consent Order and Agreement. Site inspections and potential O&M activities are scheduled for the summer of 2021.
Franklin Glass	NW	Butler	11	21	Residential and recreation area soils are contaminated with arsenic from a glass manufacturing facility.	DEP completed an interim response to address contamination in Coal Run in September 2013. DEP continues to monitor the Site for vegetation and erosion issues. DEP drafted environmental covenants for the residential and recreational area properties and plans to reach out to the property owners to get these recorded in 2021.
Shaler JTC	NW	Butler	64	41	Soils and groundwater are contaminated with toxic volatile organic compounds (VOCs) and metals.	DEP's contractor has been conducting operation and maintenance activities in accordance with approved work plans for both the Shaler JTC and the adjacent Bruin Lagoon Site. The work plan calls for the review and evaluation of existing information regarding the Site; development and implementation of a post-closure monitoring plan; and assisting DEP in evaluating the effectiveness of the remedial action. The work plan was implemented in September 2020. The Annual Post Closure Monitoring Report was finalized in December 2020.
AZR-ATSDR Investigation	NE	Carbon	122	14	Soil is contaminated with metals. Lead in play areas is the main concern.	Soil sampling for metals occurred in 2018 and three samples had exceedances of the Statewide health standards. Soil sampling at a daycare and park occurred in Summer 2019 and lead concentrations did not exceed EPA's lead soil concentrations in play areas. DEP, EPA, ATSDR, and PA Department of Health (PADOH)

						discussed the results and agreed that the risk at the park is low and the daycare can minimize the risk to prevent direct contact by adding soil, sod, mulch, etc. The PADOH finalized and published the Letter Health Consultation - Public Health Evaluation of Surface Soil Data at the Palmerton Borough Park and a Palmerton-Area Daycare Facility in July 2020.
Quehanna Wild Area Waste Dump Sites	NC	Cameron, Clearfield, Elk	67, 73, 75	35, 25	Low-level radiological wastes were disposed of in the Wild Area.	DEP installed monitoring wells, is investigating groundwater contamination, and evaluating the data.
Benner Township	NC	Centre	34	76	Groundwater is contaminated with per- and polyfluoroalkyl substances (PFAS).	PFAS contamination above EPA's HAL was found in a water supply well in the Summer of 2019 during the Safe Drinking Water Statewide sampling plan. AFFF was used at the airport nearby for required testing. Two other water supply wells nearby were found with PFAS exceeding the HAL. DEP's contractor is currently working to determine the source of the contamination by collecting surface and sub- surface soil samples at suspected properties in the vicinity.
Phillipsburg Rod and Gun Club (PRGC)	NC	Centre	77	34	Groundwater, surface water and soils are contaminated with toxic metals.	PRGC and the PA Department of Conservation and Natural Resources (DCNR) have reached a legal agreement. PRGC has vacated the property. In 2015 pilot testing of a selected remedy failed. In 2020, DEP's contractor re-evaluated remedial alternatives outlined in a 2013 report. A Re- Evaluation of Remedial Alternative Costs report was submitted in April 2021. The report will be used as a guide for DCNR to choose a remediation alternative as they have funding set aside for cleanup work at the site. The goal is to attain a Statewide health standard to leave the site with unrestricted use and no post-remediation maintenance required. A Memorandum of Understanding is currently being drafted by DCNR, to be reviewed by DEP, that will outline the remediation alternative and the obligations of each agency moving forward.

Quality Service Cleaners	SE	Chester	13	19	Groundwater and soils are contaminated with toxic volatile organic compounds (VOCs). A private well and municipal supply well are affected.	DEP permanently replaced impacted water supplies, which include a private well and municipal supply well, and completed soil excavation in 2016. DEP is currently conducting quarterly groundwater monitoring but plans to turn the monitoring wells over to the property owner. During the winter of 2017 and 2018, DEP collected indoor air samples from 3 nearby homes and no properties were determined to be impacted by vapor intrusion (VI). An environmental covenant may be necessary for the former dry cleaner property to prevent groundwater use and address the VI pathway when redevelopment occurs.
Porter Elementary School Asbestos Site	NW	Clarion	63	21	Site contains uncovered friable and non-friable asbestos containing material (ACM).	The Site is approximately 0.5-acre in size and includes a partially demolished, collapsed, and fire-damaged structure (Facility) that contains uncovered friable and non-friable asbestos containing material (ACM). The Facility has an approximate 0.39-acre building footprint and was formerly known as the Porter Elementary School. DEP approved a Response Justification Document in April 2021 and an Analysis of Alternatives and Proposed Response in May 2021. The Prompt Interim Response will include a building demolition and off-site disposal of all ACM to an appropriate landfill or waste facility.
Berwick Seep	NC	Columbia	109	27	Petroleum products seep into the Susquehanna River.	Rainbow sheens and bubbles of an oily product with a strong petroleum odor coming from the bank of the Susquehanna River adjacent to South Oak Street have been reported. In October 2020, monitoring wells from the previous investigation were located and additional monitoring wells were installed in April 2021. The first round of samples was collected in mid-June 2021 and data are currently being evaluated. DEP's contractor has proposed several treatment options in the wells along the riverbank/rail bed to intercept and remove the product prior to discharge into the Susquehanna River.

Schiller Site	NW	Crawford	6	50	Soil and groundwater are contaminated with toxic volatile organic compounds (VOCs) and metals.	DEP previously completed soil and groundwater remedial actions and continues to monitor treatment systems installed on private residential wells. The property was purchased, and an agreement was signed to settle DEP's lien on the property. DEP continues to monitor the effectiveness of remedial actions. An environmental covenant was placed on the property with land use and groundwater use restrictions.
Ridgway Borough Municipal Landfill	NW	Elk	75	25	Soil and groundwater are contaminated with toxic volatile organic compounds (VOCs) and metals.	Since 2018, meetings have been ongoing with representatives for the Responsible Parties (RPs) to discuss necessary remedial actions to close out the landfill. The RPs and their contractor, have completed several steps over the past year including: a preliminary feasibility investigation of useable soils found on the property that could be used as soil cover for the closure of the landfill; a general closure plan for the landfill by construction of a landfill cap; and one round of groundwater and surface water samplings. DEP is working through the appeals of the Consent Order and Agreement with the Borough and Authority.
Corry Avenue A Landfill	NW	Erie	4	50	Soil and groundwater are contaminated with toxic volatile organic compounds (VOCs), metals, arsenic and benzo(a)pyrene and have potentially migrated to adjacent wetlands, and two nearby creeks.	The Site was used as a disposal facility for industrial, municipal and demolition wastes in the 1940s and 1950s. Over one hundred (100) deteriorating 55-gallon drums, exposed wastes and scrap metal were observed. DEP completed a Site investigation in 2019, which included: installing monitoring wells; sampling of groundwater, surface water and sediment; and digging test pits to identify the types, level and extent of contamination on-Site. A final Site Investigation report was completed in March 2020. DEP plans to contact the City of Corry to discuss additional investigation.

Currie Landfill	NW	Erie	3	49	Soils, groundwater and surface water are contaminated with toxic volatile organic compounds (VOCs).	DEP completed a remedial action at the Site. Consolidation of wastes and cleanup of Cascade Creek were completed in October 2013. The Site was turned over to the Millcreek Youth Athletic Association for use as athletic fields. DEP is working with the township to address the UPS property that has not been properly characterized. DEP is currently conducting annual groundwater sampling on the Site.
Filmore	NW	Erie	3	49	Soils, groundwater and surface water are contaminated with metals.	DEP completed Site cleanup. Contaminated soil was excavated, isolated, and covered with two feet of clean soil and vegetation. DEP installed one additional monitoring well and completed groundwater sampling in the Summer of 2017. Property maintenance and groundwater monitoring is ongoing.
Lake City VOC	NW	Erie	17	49	Groundwater is contaminated with trichloroethylene (TCE). Public water supply wells are potentially threatened.	DEP conducted a comprehensive sampling event that started in October 2020 and was completed in March 2021. The sampling included 95 monitoring and potable wells, surface water and sediments from a local pond, and indoor air samples from one participating home. The groundwater plume has remained relatively stable, and approximately the same size. Currently the plume does not intercept any of the potable water supply wells. The samples at the pond had no detections of contaminants. The indoor air sampling proved to be inconclusive, so DEP will complete additional indoor air sampling at the home in Fall 2021 during the heating season. DEP will begin the removal of approximately 90 monitoring wells that are no longer necessary.
Presque Isle Chemical	NW	Erie	3	50	Soils and groundwater are contaminated with toxic volatile organic compounds (VOCs) and polychlorinated biphenyls (PCBs) from a defunct waste processing operation. Private water supplies were impacted.	DEP completed remedial actions for the soil and groundwater contamination. DEP and its contractor maintain on a weekly basis the groundwater treatment plant, which treats approximately 100,000 gallons of water per week. Treated water is sampled twice per month for NPDES permit compliance. DEP and its contractor gauge and sample the monitoring well network annually (approximately 50 wells). Each

						year, DEP's contractor compiles all the year's sample data and events into an annual report.
Vallimont	NW	Erie	4	49	Soil, groundwater, and surface water are contaminated with toxic metals from a disposal area.	An erosion ravine was used as a disposal area that contains about 15 feet of waste. In 2018, DEP collected surface water, sediment, and soil samples. Numerous toxic metals were identified and exceeded the Statewide health standards. DEP finalized a Response Justification Document in January 2020. DEP has identified a likely responsible party (RP) and is negotiating a cleanup by the RP.
Tomstown TCE	SC	Franklin	90	33	Groundwater is contaminated with trichloroethylene (TCE). Private water supply wells are impacted.	DEP issued a grant to Quincy Township to design and install a public water supply system at the Site. The distribution system and connections were completed in December 2016. DEP implemented a monitoring plan to track the groundwater contamination plume in the summer of 2018. Most of the monitoring wells and all private wells were abandoned in May 2019. Further sampling of the remaining 7 monitoring wells is planned.
Waynesboro TCE	SC	Franklin	90	33	The groundwater and soils are contaminated with trichloroethylene (TCE). Private water supplies wells are impacted.	The waterline extension has been completed with a grant from DEP and all affected residences are connected to the borough's public water supply. Washington Township notified DEP that all work performed under the grant agreement was completed as of August 2018. An additional investigation will be conducted to determine the current and future impact to human health from contamination at the Site.
Punxsutawney Groundwater	NW	Jefferson	66	25	Soils and groundwater are contaminated with volatile organic compounds (VOCs), toxic metals and cyanide from prior electroplating activities.	Due to the ongoing presence of the contaminated groundwater plume, DEP conducted two vapor intrusion studies in June 2018 and January 2019. The results narrowed down the area of investigation and five homes participated in an indoor air quality (IAQ) study in January and March of 2019. All samples came back below DEP's IAQ screening limits. DEP continues to

						monitor the groundwater with a round of sampling occurring in May 2021.
Marjol Battery	NE	Lackawanna	112	22	Site is contaminated with lead and other toxic metals from prior waste disposal practices.	The facility is under federal hazardous waste corrective action. DEP provided oversight of the final action at the Site. Wastes were consolidated and capped on-site. Based on the results of sampling, the wells were decommissioned in October 2020.DEP conducted the annual cap inspection in November 2020 and found the Site in good condition. Operation and maintenance activities are on-going.
Torch Lumber Mill	NE	Lackawanna	114	22	Site is contaminated with creosote and other wood preservative materials from previous operations.	DEP completed removal of contaminated soils in 2015. DEP is currently conducting site characterization activities to delineate the extent of contamination. Sampling occurred in 2017 and May 2019. DEP also began attempts for cost recovery from the Responsible Party. In 2021 a portion of the building collapsed. DEP is working closely with the mayor of Carbondale.
Winship Road	NE	Lackawanna	118	22	Groundwater is contaminated with trichloroethylene (TCE) from illegal waste disposal.	DEP completed response actions, which included removal of wastes and contaminated soil and installation of residential water supply treatment systems. DEP is currently monitoring and maintaining the residential treatment system on one property that continues to exceed the Maximum Containment Level (MCL) for TCE. A Consent Order and Agreement is being drafted for this contaminated property.
Berkley Products Plant	SC	Lancaster	43	36	Groundwater and soils are contaminated with toxic volatile organic compounds (VOCs). The contamination has caused indoor air in nearby residences to be contaminated above health-based levels. Contaminated groundwater is discharging to a nearby stream.	DEP performed an initial round of full-scale in- situ chemical oxidation (ISCO) groundwater injections in 2018 and a second occurred in May 2019. Post-injection groundwater sampling determined that VOC levels are not decreasing. Based upon the failure of the ISCO, the poor transmissivity and permeability of the bedrock aquifer, cost estimates, and the Statement of Decision, DEP will evaluate the possibility of monitored natural attenuation.

Conestoga Pines Park	SC	Lancaster	96	13	Groundwater and surface water are contaminated with trichloroethylene (TCE).	Quarterly operation and maintenance inspections of the aerator and annual sampling of the unnamed tributary (UNT) is on-going. The annual UNT sampling continues to show a significant reduction in TCE concentration from the headwaters to the swimming pool complex, however, TCE in the UNT near the swimming pool complex has occasionally exceeded 5 ppb. DEP is planning to reconstruct the improperly constructed check dams to further reduce TCE concentrations in the UNT.
Intercourse TCE Site	SC	Lancaster	100	13	Groundwater and soils are contaminated with trichloroethylene (TCE). Private water supply wells are impacted.	DEP provided a public water supply for the town of Intercourse. The first contract to install the distribution piping was completed in January 2018. The second contract for the treatment plant, water tower, and service connections was completed in September 2020. DEP plans to transfer the system over to Leacock Township in September 2021. In the Spring of 2021, DEP initiated an investigation to determine the source of the areawide TCE contamination.
Raymark Lower Mill Landfill	SC	Lancaster	37	36	Waste contains toxic metals and asbestos.	DEP completed waste removal and grading and capping of the landfill in 2005. DEP continues to perform operation and maintenance of the landfill cap, which includes mowing, tree and bamboo trimming, inspection for ruts, and groundhog mitigation.
Remacor	NW	Lawrence	10	47	Site is contaminated with flammable materials, toxic metals, and radiological materials.	DEP completed demolition and waste sorting activities in September 2019. Contamination persists in the soil and groundwater across the Site. Also, some radioactive materials remain buried. DEP has requested EPA's assistance to complete subsurface remediation utilizing dedicated funding collected through cost recovery settlements with Site responsible parties. EPA secured Site access and plans to initiate work in Summer 2021. Initial work will include an analysis of soils where on-Site buildings were previously located with the goal of removing surface soil contamination and immediate threats to human health and the environment. Future

						goals for the Site include reuse by Lawrence County.
High Quality Plating	NE	Lehigh	131	16	Groundwater is contaminated with toxic volatile organic compounds (VOCs). Private water supply wells are impacted.	DEP is monitoring and maintaining the residential water supply treatment systems and monitoring the effects of the injections and recirculation of sodium permanganate on groundwater quality. DEP signed a Prospective Purchaser Agreement for the property next to the Site and an environmental covenant was recorded.
Lower Broadway	NE	Luzerne	119	14	Groundwater and soils are contaminated with metals, PCBs, toxic volatile organic compounds (VOCs), and semi-volatile organic compounds (SVOCs).	A scope of work for an expanded Phase 2 sampling was completed and the associated activities were conducted in Fall 2019. This work included surface soil sampling, vertical soil sampling at monitoring well locations, groundwater sampling, and surface water sampling. Preliminary data indicated further characterization is necessary. The final work plan for further characterization was approved in December 2020. The supplemental Site Characterization report is being reviewed by DEP.
Mid Atlantic Coast Delivery	NE	Luzerne	119	14	Soils and groundwater are contaminated with metals, toxic volatile organic compounds (VOCs) and polychlorinated biphenyls (PCBs).	DEP sampled the groundwater and soils and found metals in the soils above cleanup standards. Sampling and further characterization of the Site occurred in the Summer and Fall of 2020. Brush clearing, well installation, soil sampling, survey work, groundwater sampling, and surface water sampling occurred. DEP's contractor is finalizing the report.
Valley View Wood Products	NE	Luzerne	116	27	Abandoned demolition waste contains lead. Soils are contaminated with lead.	DEP is developing an Analysis of Alternatives and Proposed Response. There have been inquiries about purchasing the property and remediating the Site. Potential responsible parties are being investigated.
Rose Valley Lake TCE	NC	Lycoming	84	23	Groundwater is contaminated with trichloroethylene (TCE).	Water supply treatment systems were installed on six homes in May 2018 and the drinking water is regularly sampled to ensure effectiveness of the systems in removing TCE. Indoor air was evaluated in two homes and one home exceeded the Statewide health standard, so a treatment system was installed. Monitoring wells were installed and regularly sampled to characterize the

						groundwater plume. The most recent sampling was conducted in March 2021. No further sampling is planned at the monitoring wells, and it is expected that the wells will be abandoned in 2021.
C.G. Wood	NW	Mercer	17	50	Groundwater is contaminated with toxic volatile organic compounds (VOCs).	DEP completed facility demolition and contaminated soil removal. In 2005, DEP and the current owner entered into a consent order & agreement which establishes use limitations on the Site. Groundwater, surface water and sediment contamination remain at the site. DEP has been performing operation and maintenance activities since 2012.
Yuhas Dump	NE	Monroe	176	40	There are abandoned drums and containers with unknown contents on- Site. Soils, surface water and potentially groundwater are contaminated with toxic metals and volatile organic compounds (VOCs). Waste materials are encroaching on the stream.	DEP's interim response actions at the Site are complete. Dry Saw Mill Run is now protected from further degradation, the Site is fully vegetated and stable, and the Army Corp of Engineers stream permit is satisfied. DEP will continue Site inspections and periodic operation and maintenance (O&M) until the property owner takes over the responsibilities through a Consent Order and Agreement. Environmental covenants will be implemented to protect the remedy. The O&M manual was updated in February 2021.
Boyertown Landfill	SE	Montgomery	147	24	Methane and methyl mercaptan have been detected in the ambient air at the landfill and at adjacent residential properties. Per- and polyfluoroalkyl substances (PFAS) was detected above the Health Advisory Level in the landfill leachate, groundwater, and surface water.	DEP is maintaining the methane extraction system installed in October 2003. PFAS was detected in the landfill leachate, groundwater, and surface water above EPA's Health Advisory Level (HAL). Nearby public and private water supply wells were sampled and PFAS was below the HAL. DEP performed ambient air sampling utilizing BOL's mobile lab at the landfill and the residential properties, which indicated landfill gas was migrating from the landfill. DEP's contractor is continuing investigation to mitigate the landfill gas.

Cook Technologies	SE	Montgomery	147	24	Groundwater is contaminated with toxic volatile organic compounds (VOCs), including tetrachloroethylene (PCE). Private water supply wells are impacted.	Twenty private water wells have substantial detections of PCE, warranting continued carbon filter treatment. The responsible party (RP) is sampling those homes, performing filter maintenance as needed, and sampling the 5 monitoring wells at the Site to track PCE levels. These responsibilities are outlined in a consent agreement, which was finalized in May 2017. DEP is overseeing the RP's work.
Hoff VC	SE	Montgomery	147	24	Groundwater is contaminated with toxic volatile organic compounds (VOCs). Private home wells are impacted.	In 2014, 27 properties were connected to a public waterline. Vapor intrusion was assessed and found not to be an issue. In November 2020, sodium and potassium persulfate and iron were injected into the shallow groundwater in the vicinity of the concrete pit. Initial post-injection sampling reduced VOC concentrations in the vicinity of the concrete pit by 90%. Quarterly sampling of the groundwater is planned throughout 2021 to monitor the effectiveness of the injections. DEP also plans on pilot testing the in-situ use of slow release chemical sleeves as a method of long-term remediation of the contaminants.
HZ Hot	SE	Montgomery	147	24	Surface water is contaminated with Methyl tert-butyl ether (MTBE).	There was a fire at an abandoned house located on the Site. After the fire was extinguished, the remaining structure was demolished. Soon after the demolition, the adjacent downgradient property observed oil flowing across the driveway and front lawn. The Site owner indicated that there were 2 heating oil tanks and potentially other petroleum-based liquids in the basement. A grab water sample at the drainpipe was collected which indicated that MTBE exceeded the Act 2 residential Statewide health medium-specific concentration. In February 2021, soil and water samples were collected which had detections, but no exceedances of heating oil constituents. DEP's assessment of the Site determined that there was not a potential for heating oil to reach US waterways or wetlands. No Further Work is Planned.

Landis Creek	SE	Montgomery	146	44	Groundwater is contaminated with toxic volatile organic compounds (VOCs). Private water supply wells are impacted.	In 2016, DEP installed carbon filtration systems at six homes affected by contamination. Systems have since been turned over to property owners. Environmental covenants have been placed on those properties. The responsible party (RP) is currently performing a remedial investigation under Act 2. A consent order and agreement with the RP is in negotiations.
Macoby Creek	SE	Montgomery	131	24	Groundwater is contaminated with toxic volatile organic compounds (VOCs). A private water supply well is impacted.	DEP demolished the on-site building and removed contaminated soils in 2008. DEP also installed a carbon filtration system on the one residential property found to be contaminated. DEP is monitoring and maintaining the treatment system. DEP is continuing to remediate the remaining elevated concentrations via in-situ bioremediation slow-release canisters that are installed in six wells onsite. The canisters are reported to be effective for $6 - 9$ months, however DEP is performing regular sampling to verify this. The next sampling event is scheduled for late May 2021.
Zieglerville TCE	SE	Montgomery	147	24	Groundwater and soils are contaminated with trichloroethylene (TCE). The contaminated groundwater threatens a public supply well.	DEP performed two interim response actions in the mid-1990s to extend a waterline to affected homes and to clean up the soil hotspot area. Due to the decreasing trends in contaminant concentrations in Site monitoring wells, DEP abandoned them in late September 2020. No Further Work is Planned.
American Fuel Harvesters	NE	Northampton	137	40	Site is contaminated with lead waste disposed by a defunct demolition waste processing facility.	DEP previously completed remedial actions at the Site in 1999. DEP is maintaining the landfill cap. Monitoring well sampling was conducted in October 2018. Based upon these results, which were below standards, and the trends in the wells, DEP abandoned the monitoring wells in January 2019. Vegetation control was performed in May and September 2020.

Herceg Landfill	NE	Northampton	138	40	Groundwater is contaminated with volatile organic compounds (VOCs) and inorganic metals. A private water supply well is impacted.	DEP is monitoring the impacted residential wells and maintaining the water treatment systems. DEP is operating the leachate treatment system and conducting annual sampling and operation and maintenance activities. Treatment for the high ammonia discharge began in May 2020. Lagoon sludge removal occurred in Fall 2020. Lagoon aerators were installed in December 2020.
Port Richmond Gate	SE	Philadelphia	177	5	Soil at the Site is contaminated with toxic inorganic compounds.	In 2011, DEP excavated and capped contaminated soils and implemented land use restrictions via environmental covenants at 50 properties. During the Fall of 2017, a consent agreement was finalized with a developer to settle DEP's past response costs. In the spring of 2018, a separate settlement was reached with another developer. In December 2018 and January 2019, DEP issued HSCA 512 orders to address four properties where owners refused to sign environmental covenants.
Crown Industries	NE	Pike	139	20	Groundwater and soils at this Site have been contaminated with toxic volatile organic compounds (VOCs), polychlorinated biphenyls (PCBs) and dioxins. Private water supplies were impacted.	DEP performed response actions to provide potable water to affected residences and excavate wastes and debris from the Site. Negotiations with the quarry owner to expand and take over operation and maintenance responsibilities are on- going. The quarry owner conducted a full round of sampling in January 2021 and the results indicate that there are still contaminant exceedances of both the residential and non- residential health standards.
Ashland Metals	NE	Schuylkill	123	29	Soils are contaminated with lead and toxic metals from a defunct battery and metal recycling operation.	DEP has completed remedial actions and continues to monitor the Site and maintain the landfill cap. A scope of work for operation and maintenance (O&M) activities was submitted in May 2018. O&M is on hold pending potential purchase of this Site and the Giordano Waste Materials Site.
Coaldale MGP	NE	Schuylkill	124	29	Soils are contaminated with coal gasification waste consisting of volatile and semi-volatile compounds.	DEP is proposing a limited removal action and an environmental covenant to limit the use of sub- grade soils and groundwater. DEP is reviewing the updated Site characterization report submitted in November 2018 and evaluating next steps based upon the risk analysis. An Analysis of Alternatives and Proposed Response was drafted

						and discussions regarding permitting for in-stream work is needed.
Frackville Area Site	NE	Schuylkill	123	29	Soils and groundwater are contaminated with per- and polyfluoroalkyl substances (PFAS) and toxic volatile organic compounds (VOCs), including tetrachloroethylene (PCE). Private and public water supplies were impacted.	DEP sampled residential private wells in 2020 and two wells had concentrations that exceeded EPA's HAL for PFAS. In September 2020, one impacted resident was connected to the public water supply. The other connection is being planned. Additional sampling events that included more residential wells took place in Spring 2021. Access agreements are currently being pursued with the Schuylkill County Fire Fighting Training Facility and the former St. Jude's Polymer facility to investigate, characterize and delineate the extent of PFAS contamination.
Giordano Waste Materials	NE	Schuylkill	123	29	Soils are contaminated with metals.	DEP installed a soil cap to prevent exposure and is monitoring and maintaining the cap. Semi- annual inspections of the cap are conducted. A scope of work for operation and maintenance (O&M) activities has been drafted. O&M is on hold pending potential purchase of this Site and the Ashland Metals Site.
Schuylkill Haven MGP	NE	Schuylkill	125	29	Groundwater and soils are contaminated with coal gasification waste substances. Contaminated groundwater is discharging to nearby streams and there is a threat of vapor intrusion into nearby buildings.	DEP completed the investigation and prepared an Analysis of Alternatives and Proposed Response to address the soil and groundwater contamination. The proposed response includes installation of an armored cap over the coal tar seep area and an environmental covenant to prevent disturbance of the area. A field inspection occurred in April 2021.
Former Erie Railyard	NE	Susquehanna	111	20	Groundwater and soils are contaminated with coal gasification waste substances.	The Site was selected as a Brownfields pilot project by a joint DEP/DCNR/DCED taskforce. In June 2020, Borough contractors installed the fencing, walking trails, building foundations, waste receptacles, and lighting for the future Ira Reynold Riverfront Park. Several seeding events took place. Operation, maintenance, and mowing will be maintained by the Borough. Environmental covenants are being recorded on fourteen parcels. An official park opening ceremony is tentatively scheduled for Summer 2021.

Laurel Lake PCE	NE	Susquehanna	111	23	Groundwater is contaminated with toxic volatile organic compounds (VOCs). Private water supply wells are impacted.	Water treatment systems were installed in the affected homes and sampling continues. Site characterization activities were initiated in October 2019 including soil borings and monitoring well installations. The goal is to determine the extent and identify the source area of the contamination and delineate the threat to human health and environment. Some of the monitoring wells were installed in December 2020 and the remaining are planned to be installed in Summer 2021.
Keystone Castings	NW	Venango	64	21	Groundwater and soils are contaminated with metals.	A foundry was operated on Site in the 1970s. Land uses prior are unknown. In September 2019 DEP began Site investigation activities. The March 2020 report determined that Site soil and groundwater metal concentrations are above respective Statewide health standards across the Site at varying depths. A second round of groundwater sampling occurred in November 2020. A draft sampling and analysis report was submitted to Dep by the contractor in February 2021.
Laing Landfill	NW	Venango	64	21	Soils are contaminated with metals, semi-volatiles (SVOCS), polycyclic aromatic hydrocarbons (PAHs), PCBs, and pesticides. Surface water is contaminated with metals and endosulfan insecticide.	The landfill Site operations began in 1975 and were ceased in 1987 due to violations leading to suspension of the Solid Waste Permit. DEP conducted an interim response in 1996 to address drums and bulk asbestos at the Site and monitoring wells were installed. The most recent groundwater sampling event was completed in June 2020. Results from that sampling event supported the previous conclusion that there is no widespread or high concentration contamination found on the Site. All six groundwater monitoring wells were abandoned in November 2020. No Further Work is Planned.
Venango County Park	NW	Venango	64	21	Soils are contaminated with lead, arsenic, chromium, cadmium, cobalt, vanadium.	The Site is an inactive, unlined landfill that is heavily vegetated with unrestricted access. In 1995, DEP sampled soil at the Site and found lead, arsenic, chromium, cadmium, cobalt, and vanadium above Statewide health standards. DEP's contractor recently completed site investigation activities including a geophysical survey, 18 test pit excavations, installation of 6

						groundwater monitoring wells and collection of surface water and sediment samples. A final Site Characterization Report is being drafted.
American Zinc Company Site	SW	Washington	46	46	Surface piles, soil, surface water, and groundwater are contaminated with lead, zinc, cadmium, copper, antimony, arsenic, and other metals from waste generated by a former zinc smelter.	DEP signed two mixed-funding consent agreements with the responsible party (RP). DEP agreed to pay for 40% of the Site investigation, cleanup plan, and remediation costs. The RP is actively conducting Site remediation. In May 2021 DEP's Clean Water Program issued the final NPDES permit for treatment of industrial wastewater at the Site.
Lakeside PCE	NE	Wayne	111	20	Groundwater is contaminated with toxic volatile organic compounds (VOCs). Public and private water supply wells are impacted.	In 2005, DEP installed and began monitoring private residential water supply treatment systems. In 2012, the homeowners agreed to conduct the operation and maintenance of their treatment systems. DEP pre-treatment sampling events continue to be below the Statewide Health Standard. Sampling was conducted in July 2020 and both water supplies showed levels below detection limit for all contaminants in pre, mid and post treatment samples. A letter indicating that DEP would be ending sampling was sent to the homeowners in September 2020. No Further Work is Planned.
Deardorff Drive/Ridge Road	SC	York	92	48	Groundwater is contaminated with toxic volatile organic compounds (VOCs), including tetrachloroethylene (PCE). Private water supplies were impacted.	DEP replaced private wells with public water through a grant to the Planning Commission in 1992. DEP conducted a vapor intrusion study in 2010 and found no impact to properties at the Site. Groundwater sampling is conducted every two years to monitor the plumes. A site sampling event was completed in February 2018 and it was determined that the site groundwater and surface water PCE/VOC contamination levels are essentially stable. There are several EPA-installed wells on-site with the potential to be abandoned. No Further Work is Planned.
Newberry Township PFC	SC	York	92	48	Groundwater and surface water are contaminated with per- and polyfluoroalkyl substances (PFAS).	In April 2019, two of Suez Water supply wells exceeded EPA's Health Advisory Level (70 ppt). Suez addressed this problem in May 2019 by installing two carbon filtration systems. In June and July 2020, detailed sampling of 10 surface water sites resulted in total PFAS concentrations

						that ranged from approximately 25 to 928 ppt PFAS; for 5 domestic wells total PFAS concentrations ranged from < 3.6 to 33.1 ppt; PFAS concentrations at Cycle Chem monitoring wells ranged from 305 to 10,700 ppt; the lagoon had PFAS concentration of 1660 ppt; and the concrete bunker where liquid wastes are stored contained PFAS at approximately 2,800,000 ppt. Further investigation is planned.
Industrial Solvents and Chemical Company (ISCC)	SC	York	92	48	Groundwater and soils are contaminated with volatile organic compounds (VOCs). Private water supply wells were impacted.	DEP replaced impacted private water supplies and completed remedial actions for waste and soil contamination. DEP installed vapor mitigation systems. Deed notifications have been recorded with the York County Recorder of Deeds. DEP will carry out an overall assessment of the Site to determine if the site meets Act 2 cleanup standards and whether additional remedial action is necessary. On-site monitoring wells were sampled for polyfluoroalkyl substances (PFAS) and none exceed EPA's Health Advisory Level.

Key:			
Region	SE - Southeast Region SC - Southcentral Region SW - Southwest Region NE - Northeast Region NC - Northcentral Region		
	NW - Northwest Region		