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 sub-slab investigation and indoor air quality monitoring of properties surrounding the JC Cleaners facility during December of 2019 and February 2020. Semi-annual well sampling continued in April 2021. DEP is currently pursuing alternatives, including but not limited to, installation of a vapor mitigation system. 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 reevaluate 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 reevaluation, DEP is considering options that would not require demolition of buildings and relocation of the business. DEP prepared 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 polycyclic aromatic hydrocarbons (PAHs).	DEP evaluated remedial alternatives, obtained county health department approval, and prepared an Analysis of Alternatives and Engineering Design to address additional control of site-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 and ongoing monthly screening shows that landfill gas is being successfully intercepted from migrating offsite along the trench alignment areas.
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 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. DEP is awaiting access in order to proceed.
Sto-Rox Groundwater Investigation	SW	Allegheny	27,45	42	Soils and groundwater are contaminated with toxic volatile organic compounds (VOCs). There is a threat of vapor intrusion to nearby residences.	The Site is approximately 150-acres of developed industrial, commercial and residential buildings. Two commercial properties went through Act2 and obtained relief of liability for some contaminates of concern. However, VOC contamination was attributed to other potential off property sources. Further investigation by DEP and contractors has begun.
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. A contractor was assigned to the site to complete the few remaining tasks to finish the site investigation. Additional groundwater sampling and a conceptual site model report was completed.

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. No Further Work is Planned.
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. Once the soil vapor points are installed the preferential pathway for vapor can be determined.
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. No Further Work is Planned.
Algonquin Chemical	SC	Berks	124	29	Groundwater and soils have been contaminated by toxic volatile organic compounds (VOCs).	A Semiannual groundwater monitoring program has been in place since 2018 to observe concentrations of site-related VOCs. Concentrations remain above the nonresidential used aquifer statewide health standards in groundwater at the site. A review of the monitoring well results since 2018 found that trends appear to be either decreasing or stable. Monitoring of the groundwater will continue until Act 2 standards for groundwater can be demonstrated at the site. 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 in 2013 to address residential well contamination. Affected residential water supply wells were equipped with Point of Entry Treatment Systems. Property owners have since connected to a public water supply. Vapor intrusion sampling was conducted in 2021 and early 2022, which found no exceedances of screening criteria. Additional work at the Site will concentrate on evaluating the method, cost, and implementation of providing an alternate water source to the impacted houses along Ben Franklin Highway. Annual groundwater sampling for VOCs will continue along Riga Lane to monitor any plume migration and the need to supply an alternate water supply.
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 2022, 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 in 2014 and three areas of contamination were found. Remedial work was completed in September 2019 and included a combination of soil excavation and soil capping to eliminate threats from the contamination. Environmental covenants are being prepared for 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 and DEP determined that additional groundwater injections were warranted. Additional injections were performed in late 2021 and early 2022. The semi-annual residential treatment system sampling was conducted in May 2022.

Sayre TCE and PCE	NC	Bradford	110	23	Soil and groundwater are contaminated with trichloroethylene (TCE) and tetrachloroethylene (PCE).	Previous investigations of groundwater and soil contamination 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. Data from several soil gas sampling points were above indoor air screening levels. Therefore, DEP conducted indoor air sampling in the vicinity of these monitoring points. A vapor mitigation system was installed in one residential and one business building. Groundwater monitoring for the "south plume" indicated potential indoor air issues in an additional five buildings. One residential building contained elevated indoor air levels for TCE, and a vapor mitigation system is being recommended for that building. Twelve additional groundwater monitoring wells were installed in the "north plume" to delineate the groundwater plume containing chlorinated solvents in this plume area. Upon sampling of these new wells, a determination will be made as to whether soil gas and/or indoor air sampling will be needed.
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).	As of May 2022, all 11 homes that have exceeded the 70 ppt have had treatment systems installed or upgraded by DEP. Between November 2021 and May 2022, DEP completed Site-wide sampling. To date, results remained consistent with previous sampling events; however, three new homes were found to have concentrations above 70 ppt and treatment systems for the homes were installed. Samples were collected from the new treatment systems to ensure the systems are operating effectively. For more information please visit: www.dep.pa.gov/eastonroad

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.	All monitoring wells at the Sites were abandoned in October 2020. In January 2022 DEP entered into a proposed Consent Order and Agreement (CO&A) with the Beierlein Family Partnership LLC (Partnership) with regard to the Furlong Manufacturing Company HSCA Site. Under the terms and conditions of the CO&A, the Partnership will record an Environmental Covenant which places certain activity and use limitations on the Site Property consistent with current or future Site conditions. In March 2022 a Notice of Effectiveness letter was issued. Payment was subsequently received. No Further Work is Planned.
Jacksonville TCE	SE	Bucks	178	6	The groundwater is contaminated with toxic volatile organic compounds (VOCs), including trichloroethylene (TCE). Private water supplies are impacted.	In 2020, select groundwater monitoring wells at the Site were sampled for PFAS by the US Navy as part of the investigation being done at the nearby former Naval Air Warfare Center Warminster. PFAS were not detected in any of the samples above 70 ppt. Due to consistently low concentrations of TCE and other Site related contaminants in monitoring wells, the decommissioning of all monitoring wells at the Site is planned to be completed in June 2022. No Further Work is Planned.
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.	DEP continues to monitor groundwater in the area. DEP tasked its contractor with evaluating alternative treatment technologies for addressing 1,4-Dioxane at three private wells. An upgrade of the system at one home with filter breakthrough is planned for the summer of 2022. Quarterly filter monitoring at the homes is continuing and has not revealed additional post-filter exceedances of the 1,4-Dioxane Statewide Health Standard. DEP has also tasked its contractor with evaluating options for addressing the source of the groundwater contamination in soil, bedrock, and groundwater. Currently, soil/rock coring is proposed at 2 source area locations to fill data gaps and help determine viable remedial approaches. Work is planned to be completed in 2022. During a March 2022 sampling event TCE was detected in a spring seep on the source property. Additional surface water

						sampling is planned for June 2022 including sampling within Nockamixon State Park.
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. In June 2022, DEP completed its annual monitoring well sampling event. A source investigation was completed at 145 Railroad Drive in July 2021, by way of a passive soil gas survey. Results of that investigation indicated that VOCs do not exceed the Residential Near-Source or Sub-Slab Soil Gas Statewide Health Standards on the property. In April 2022 DEP approved the Final Report for attainment of an Act 2 Background and Statewide Health Standard at the 141 Railroad Drive property. No Further Work is Planned.
Ridge Run PFAS	SE	Bucks	145	10	Groundwater, surface water, soil, and sediment are contaminated with perand polyfluoroalkyl substances (PFAS).	In 2016, two North Penn Water Authority wells were found to be contaminated with PFAS above 70 ppt. 15 residential properties are also impacted above 70 ppt. DEP has installed 14 treatment systems to date and is in the process of installing another. The systems are effectively removing PFAS to below 70 ppt. 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. Injections of PlumeStop® were implemented in April 2021. Groundwater sampling was conducted quarterly. Results continued to show substantial and sustained decreases of PFAS in downgradient monitoring wells. In March 2022, DEP performed a further investigation, through a combination of ground-penetrating radar and soil sampling of the stormwater retention basins at the commercial property where the fire occurred. Sampling results indicated PFOA and PFOS is present in the retention basins above 70 ppt. http://dep.pa.gov/ridgerun

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.	All remedial activities are completed. Operation and maintenance (O&M) activities were conducted as required at the Kelly Farm Disposal area and the Apple Road Site in the Summer of 2021. 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.
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. An Environmental Covenant for the Lighthouse Foundation property has been signed and recorded. DEP is currently working with the City of Butler and the Housing and Redevelopment Authority of the County of Butler to get the Environmental Covenants for their properties signed and recorded.
Shaler JTC	NW	Butler	64	41	Soils and groundwater are contaminated with toxic volatile organic compounds (VOCs) and metals.	Completed actions at the Site include demolition/disposal of structures and removal of lagoon wastes, drums, and aboveground and underground storage tanks, Contaminated soils were treated and capped with two feet of soil onsite. Bruin Borough residents were connected to the Petroleum Valley regional waterline. DEP conducts operation and maintenance activities to evaluate the effectiveness of the remedial actions. The Annual Post Closure Monitoring Report was finalized in February 2022.
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. In June 2021, the daycare owner emailed photos and a copy of the invoice to notify

						DEP that in May 2021, sod was placed over all the areas of concern on his property.
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 70ppt was found in a water supply well in 2019 during the Safe Drinking Water Program statewide sampling effort. Two other nearby water supply wells also contained PFAS exceeding 70 ppt. 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. The distribution of bottled water and installation of point of entry treatment (POET) systems was proposed in May 2022 as the prompt-interim response action for residences that have tested at or above 70 ppt and do not have a treatment system effective at removing PFAS from their drinking water. A public hearing was held in June 2022. Comments will be received through August 26, 2022.
Phillipsburg Rod and Gun Club (PRGC)	NC	Centre	77	34	Groundwater, surface water and soils are contaminated with toxic metals.	The PRGC conducted trap shooting activities until about 2018. The surface of the site displays visually apparent, large areas of lead pellets that can be inches thick. DEP has conducted several investigations to determine remediation alternatives and chose a final remedy in 2021. Working with DCNR, DEP is conducting the remedial action which consists of excavating impacted soils, screening out the lead pellets, and treating the contaminated soils to reduce the leachability of the lead to below acceptable disposal criteria. Site work is expected to be conducted beginning summer 2022 and conclude by fall 2022.

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. 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). Decommissioning of the Site's monitoring wells was completed in May 2022. An Environmental Covenant has been prepared to prevent groundwater use and to ensure that the VI pathway is addressed 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 included a partially demolished, collapsed, and fire-damaged structure (Facility) that contained uncovered friable and non-friable asbestos containing material (ACM). DEP completed a Prompt Interim Response in November 2021, which included building demolition and off-site disposal of all ACM to an appropriate landfill or waste facility. Disturbed areas were graded, seeded, and fertilized. The property was sold at the Clarion County tax sale in December 2021 to a nearby private school with a plan to construct athletic fields on the property.
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. Based on results, it was recommended to install product recovery systems, which were completed in May 2022. Systems will intercept and remove the product prior to discharge into the Susquehanna River. A subsequent site inspection will be completed to ensure units are operating as designed.

Saegertown PFAS	NW	Crawford	6	50	Groundwater is contaminated with Per- and polyfluoroalkyl substances (PFAS).	DEP plans to conduct a groundwater site investigation to begin in late Summer 2022.
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 DEP settled its lien on the property. An environmental covenant was placed on the property with land and groundwater use restrictions. DEP continues to monitor the effectiveness of remedial actions.
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 has initially met with the City of Corry regarding additional investigation activities and plans to continue these discussions in the upcoming year.

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.
Erie Coke	NW	Erie	1	49	Tanks, drums, and piping on site contain PCBs, mercury, solvents, and corrosive liquids.	In Fall 2020, EPA initiated a Removal Action to address hazardous substances remaining in tanks, containers and piping posing the greatest threat to public health, welfare, and the environment. EPA's response actions should be completed in August 2022. EPA removal actions will not investigate or manage contamination in surface water, soil, and sediment, or subsurface groundwater and soil. As a result, DEP will perform a site investigation to assess the level and extent of contaminants at the Site. DEP anticipates that the field investigation will begin in Summer 2022.
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.
Hirtzel Road TCE	NW	Erie	4	49	Groundwater is contaminated with toxic volatile organic compounds (VOCs).	DEP plans to begin the characterization of site groundwater and soils in the summer of 2022.
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 and currently does not intercept any of the potable water supply wells. The samples at the pond had no detections of contaminants. The indoor air sampling events proved to be inconclusive, so DEP is reviewing treatment technologies to improve the indoor air quality. DEP abandoned 77 monitoring wells that are no longer necessary and will monitor the groundwater plume with those that remain.
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 operates and maintains 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 annually gauges and samples the monitoring well network of approximately 50 wells. Each year, DEP 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 for further Site investigation and a removal action. DEP is negotiating a consent order and agreement for cleanup with a likely responsible party (RP) who has been collecting samples from the dust pile for disposal cost estimating purposes.
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. No further monitoring of the groundwater plume 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 was completed in 2018 with a grant from DEP to Washington Township and all affected residences are connected to the borough's public water supply. An additional investigation will be initiated in Suer 2022 to determine the current and future impacts 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.	Following EPA's initial site study and interim cleanup, DEP pursued additional investigative activities to evaluate all potential sources and exposure pathways. In 2006, DEP addressed the removal and off-site disposal of residual soil contamination, as well as waste materials found in floor pits that drained to the alleyway inside a former electroplating facility. That facility and one home were demolished and disposed off-site. Contaminated soils were removed, and all affected areas were backfilled and re-vegetated. DEP installed vapor remediation systems on two affected homes. DEP conducted two vapor intrusion studies in June 2018 and January 2019, and five homes participated in an indoor air quality (IAQ) study. All samples came back below DEP's IAQ screening limits. Although area residents use public water, DEP will continue annual monitoring of the groundwater for 3 years and then reevaluate.
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 2021 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. A Site visit occurred in March 2022 with DEP and its contractor to review the Site and go over objectives and additional work to

	ME		110	22		fill in data gaps and to fully delineate the horizontal and vertical extent of contaminants at the areas of concern. DEP is also 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. An access and maintenance agreement was signed to allow for property access and ensure future owners were made aware of the contamination.
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 full-scale in-situ chemical oxidation (ISCO) groundwater injections in 2018 and 2019. Post-injection groundwater sampling determined that VOC levels were not decreasing. Based upon the failure of the ISCO and Site characteristics, DEP and EPA agree that monitored natural attenuation is a more appropriate means of remediation. In December 2021, the vapor mitigation systems at 11 residences were inspected and confirmed to be working as designed. Groundwater was sampled in April 2022.
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. Annual UNT sampling shows 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. In August 2021, DEP completed repairs to the three check dams and a thorough maintenance of the aerator system to further reduce TCE concentrations in the UNT. The City of Lancaster is preparing a redevelopment plan for the Conestoga Pines Park.

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 transferred the system over to Leacock Township in September 2021. In the Spring of 2021, DEP initiated another 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. Each July, DEP continues to perform annual 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 2022. 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 was performing operations and maintenance (O&M) on the residential water supply treatment systems. Sampling occurred in April 2022, Environmental Covenants (ECs) were placed on the affected properties and in accordance with the ECs, the owners will be responsible for O&M.

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).	DEP and its contractor conducted a Site reconnaissance visit in May 2021 which included a monitoring well inspection, drum inspection and count, and a boom recovery and deployment in the are of the prior noted seep of the larger pond. In September 2021, DEP visited the Site to verify conditions of the vegetation, wells, booms, and the drummed investigation derived waste materials. Further site investigation and work is ongoing.
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 2021. Brush clearing, well installation, soil sampling, survey work, groundwater sampling, and surface water sampling occurred. DEP's contractor completed a Preliminary Site Characterization Report in April 2022.
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 has been regularly sampled to ensure effectiveness of the systems. Indoor air was evaluated, and a vapor mitigation system was installed in one home. The system maintenance was turned over to the homeowners in December of 2021 after a final inspection of each system. Three homeowners, with TCE concentrations in groundwater greater than the SHS, were requested to sign an Environmental Covenant to ensure that the consumptive use of drinking water is restricted unless treated. Monitoring wells were abandoned, and the project was closed out in March 2022.
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. Further investigation is planned in 2022 to assess any remaining source areas of VOCs, which continue to impact groundwater or surface water.
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.
Alderfer Landfill	SE	Montgomery	53	12	Groundwater is impacted with volatile organic compounds (VOCs), Metals, polycyclic aromatic hydrocarbons (PAHs), and alpha- and beta-emitting thorium slag.	There was no annual report entry in 2021 for this Site because there was no activity at that time. In March 2022, DEP's contractor is planned to clear overgrown vegetation from the fence line and abandon the monitoring wells in summer 2022. PennDOT's contractor has reached out to the DEP regarding plans to widen the Township Line Road in order to connect Route 309 and PA Turnpike.
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.	A tentative agreement allowing the potentially responsible party (PRP) group to provide a monetary settlement to address the costs to implement the closure plan and long-term operations and maintenance (O&M) at the Site is in final negotiations. In October 2021, sampling revealed that PFAS were present in the landfill's leachate ponds and are discharging into Minister Creek above the Act 2 MSCs. Concentrations of PFAS in Minister Creek downstream of the discharge are below the MSCs. In 2020 and 2022 PFOA and PFOS exceeded applicable MSCs in monitoring wells along the landfill's northern border. In winter 2022, DEP and contractor conducted a surface and sub-surface investigation

						of the landfill gas that indicated that methane and hydrogen sulfide were present and emitting from the landfill's leachate collection system into the air; sub-surface migration of methane was not detected.
Hoff VC	SE	Montgomery	147	24	Groundwater is contaminated with toxic volatile organic compounds (VOCs). Private home wells are impacted.	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 continued throughout 2021 to monitor the effectiveness of the injections. In September 2021, DEP began a passive phase of a pilot study to determine the effectiveness of in-situ slow-release chemical sleeves as a method of long-term remediation of the contaminants. In December 2021, contaminant concentrations had rebounded in the source area, and DEP decided to perform a second set of injections using a slightly different persulfate mixture. The injections occurred in May 2022.
Limekiln PCE	SE	Montgomery	151	12	Groundwater is contaminated with toxic volatile organic compounds (VOCs). Private home wells are impacted.	In December 2021 DEP initiated contract services to decommission the monitoring wells on Site. In May 2022 the Navy agreed to decommission the wells following their off-Site investigation of PFAS associated with the NAWC and the requisition was subsequently closed out. No Further Work is Planned.
Macoby Creek	SE	Montgomery	131	24	Groundwater is contaminated with toxic volatile organic compounds (VOCs). A private water supply well is impacted.	DEP installed a carbon filtration system on the one residential property, where concentrations of TCE exceeded its MCL. DEP conducted a VI study that included the property with the carbon filter, and three additional residential properties near the Site. A combination of sub-slab and indoor air sampling of those homes found that VI did not pose a significant risk. 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, and concentrations of VOCs have decreased more than 90% sitewide. DEP

						intends to continue performing regular sampling, and replacement of the slow-release canisters at the Site.
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 2022.
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 operating the leachate treatment system and conducting annual sampling and operation and maintenance activities. Treatment for the high ammonia discharge is ongoing but is still above the NPDES discharge limits. In an attempt to reduce ammonia levels; lagoon sludge removal, installation of additional aerators in each lagoon, and installation of rip-rap in the discharge channel occurred in 2021. Ammonia levels were only slightly reduced so other options are being considered.
Milton GW Investigation	NC	Northumberland	108	27	Site groundwater is contaminated with chlorinated solvents.	DEP has retained a contractor for the purpose of performing investigation into the presence and extent of the contaminated overburden and bedrock groundwater plumes. A network of 7 overburden monitoring wells and 3 bedrock monitoring wells was installed in January 2022. The newly installed wells are strategically placed throughout the Borough of Milton, PA, North – Northwest of the Pinpoint Financial Credit Union property. In April 2022, these newly installed monitoring wells and the pre-existing monitoring well network on PFCU property were gauged and sampled; sample results remain pending.
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.

						The remaining environmental covenants are being finalized.
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. In May 2021 DEP sampled affected residences and notified them that no more sampling will occur. Negotiations with the quarry owner to expand and take over operation and maintenance responsibilities are on-going. A meeting occurred with stake holders and it was determined by the end of this meeting that additional work needed to be done in order to properly characterize the site prior to moving forward with any other plans, and that a Site walk would be conducted at a future date.
Labant Property	NC	Potter	67	25	Groundwater is contaminated with heating oil.	DEP was notified of the presence of high concentrations of heating oil in a residential water supply well in October 2021. DEP is supplying bottled water to the resident while working to install a whole house, point of entry (POET) treatment system.
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. In May 2022 DEP visited the Site. Monitoring well 3 had damage. DEP will be assessing if additional well sampling is necessary.
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 subgrade soils and groundwater. A Site Characterization Report was submitted November 18, 2018. DEP is evaluating next steps based upon the risk analysis. An Analysis of Alternatives is drafted and discussion on permitting for in stream work 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 2021 and 41 impacted residential wells have been identified. Impacted homes are being connected to the public water supply. 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. Semiannual 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. A Site visited occurred in May 2022 and it was noted that small trees in the drainage ditch will need to be removed.
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. Borough contractors installed the fencing, walking trails, building foundations, waste receptacles, and lighting for the park. Several seeding events took place. Operation, maintenance, and mowing will be maintained by the Borough. Environmental covenants (EC) were recorded on fourteen parcels in summer 2021. A rain garden was installed in the park in June 2021. An official Ira Reynolds Park opening ceremony occurred in September 2021. Site inspections occurred in February and March 2022 to determine EC status, which was in compliance.
Laurel Lake PCE	NE	Susquehanna	111	23	Groundwater is contaminated with toxic volatile organic compounds	Water treatment systems were installed in the affected homes and sampling continues. Site characterization activities were initiated in

					(VOCs). Private water supply wells are impacted.	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. The monitoring well installation and Site survey activities were completed in 2021. 16 passive diffusion bag (PDB) samplers were deployed in monitoring wells.
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, which determined that Site soil and groundwater contain metal concentrations above respective Statewide health standards across the Site at varying depths. Additional groundwater sampling occurred in November 2020. DEP is currently reviewing alternatives available to address the contamination.
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 completed site soil, groundwater, and surface water investigation activities and issued a final characterization report in 2021. A Conceptual Cost Estimate and next steps for a removal action will be discussed with the Venango County Commissioners in Summer 2022. The removal action will address the Drum Area and Foundation Debris Area.
American Zinc Company Site (AZC)	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. From May 2021 to early 2022, smelter consolidation was the primary activity at the site. Topsoil is actively being imported to the site and stockpiled to create the soil cap.

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; for 5 domestic wells total PFAS concentrations ranged from < 3.6 to 33.1 ppt; Elevated levels of PFAS concentrations were found in Cycle Chem monitoring wells, the lagoon, and the concrete bunker where liquid wastes are stored. In May 2022, letters were sent to 200 private well owners requesting permission to sample. 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 the 70 ppt standard. The property owner continues asphalt cap inspection and maintenance responsibilities.

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