Hazardous Sites Cleanup Fund (HSCF) Success Story

A Successful HSCA Funded Cleanup:

Yuhas Dump Site

Pocono Township, Monroe County, PA

The Yuhas Dump Site in Pocono Township, Monroe County, contained numerous wastes which polluted the soil, groundwater and the nearby Dry Sawmill Run that cuts through the property and progresses down past Camelback Ski Area and Camel Beach Water Park. Prior to HSCA cleanup efforts, the waste pile had impaired and reduced the diversity of the macrobenthic community and affected the quality of Dry Sawmill Run. The cleanup included demolition of a dilapidated house, removal of containerized wastes, and relocation of a portion of the stream channel away from the remaining waste pile. The remaining stream bank was stabilized, covered, and vegetated using storm water controls. The action, completed in 2018, protects Dry Saw Mill Run from further degradation caused by the ongoing deposition of waste materials into the stream. DEP will continue site inspections and periodic Operation & Maintenance. Institutional controls will be implemented to protect the remedy.

Yuhas Dump Site

The Yuhas Dump Site is a 5-acre rural residential parcel located in Pocono Township, Monroe County. Dry Sawmill Run cuts through the property and progresses down past the Camelback Ski Area and Camel Beach Water Park. This stream is protected with a use designation of high-quality cold-water fishery and has an established native brook trout population. The Yuhas property has been vacant since about 2003, when the former owner passed away and the remaining members of his family left. The former residence on the property had partially burned and was vandalized over the years.

The Yuhas property was used for the unpermitted disposal of construction and demolition (C&D) waste, stumps, and possibly contaminated soil from New York, New Jersey and Connecticut. The site contained approximately 33,000 cubic yards of waste. The C&D waste pile, which covers a significant portion of the property, was decomposing, eroding and unstable. Cracks and fissures formed in the pile and venting of steam and odors were observed. The C&D waste was filled right-up to the edge of where Dry Sawmill Run traverses the property. The piles towered approximately 60 feet above the stream. Large quantities of C&D waste fell into the stream and washed downstream during significant rainfall events. Leachate discharges were visible on the side slopes and discharging directly into the stream as well.

In addition to the C&D waste, numerous containers were located on the Yuhas property. Approximately forty (40) 55-gallon drums and numerous pails and containers in varying sizes were located on the property. The drums, pails, and containers that were exposed to

Project at a Glance

Location:
Pocono Township,
Monroe County, PA

Project Size:
Approximately 5 acres

Principal Use:
Rural Residential Parcel

Total Project Cost:
$3.7 M

Consultant:
AECOM Technical Services

Project Period:
2008-2019(11 years)

Partners:
Monroe County Conservation District
US Army Corps of Engineers

the elements were mostly rusted and unlabeled with some leaking. Odors were emanating from some of the containers. The contents were initially unknown, but many were subsequently found to contain paint. DEP ordered the property owner to properly dispose of the waste materials in containers. While some containers were removed, the owner did not fully comply with the Order.

During DEP's investigation, several hazardous substances were found in the C&D waste, leachate, and surface water. Lead, arsenic, selenium, mercury, and numerous regulated organic substances were found in the C&D waste and/or native soils at concentrations above the Land Recycling and Environmental Remediation Standards Act (Act 2) Statewide health standards (SHS). Lead, aluminum, arsenic, cadmium, chromium, iron, manganese, nickel and zinc were found in the C&D waste leachate flowing into the Dry Sawmill Run at concentrations exceeding the Chapter 16 Water Quality Criteria, the Act 2 SHS for Residential Groundwater and/or the Federal Maximum Contaminant Levels (MCLs) for drinking water. Lead, copper and silver were found in the surface water at concentrations exceeding the Water Quality Criteria. The C&D waste continued to decompose and erode, making the pile unstable.

In 2008, an aquatic chemical and microbiological stream survey and benthic macroinvertebrate investigation conducted by DEP indicated that the C&D waste pile had impaired and reduced the diversity of the macrobenthic community and affected the stream quality.

DEP conducted the remedial actions needed at the Yuhas Site in two separate phases. Phase I included the characterization, transportation and proper disposal of the abandoned containerized wastes and hazardous substances located on the Yuhas property. Phase II site assessment activities included sampling and analysis of the C&D waste pile materials, leachate discharges, surface water and sediment from the stream on the property; and the development of remedial alternatives and cost estimates to address leachate discharges and to stabilize and close the waste pile.

For Phase I, completed in October 2008, DEP conducted a Prompt Interim Response to characterize, transport and properly dispose of the abandoned containerized wastes and hazardous substances located on the former Yuhas property. The hazardous and non-hazardous waste materials identified at the Yuhas Dump Site, were consolidated, containerized, characterized and properly disposed of at permitted facilities. The accumulated waste included fifty-five (55) drums using overpacks; eighteen (18) cubic yard boxes; one (1) 30-gallon overpack; five (5) 5-gallon buckets and a 20-cubic yard non-hazardous waste roll-off box. Three (3) separate, visually impacted areas of the ground surface were identified, excavated, containerized, characterized, and properly disposed of at a permitted facility. Confirmatory soil sampling was conducted in the remediated areas and the sample results met the residential SHSs. Therefore, no additional soil remediation was recommended or required.

For Phase II, completed between 2009 and 2016, DEP conducted an Interim Response action on the unpermitted disposal of C&D waste containing hazardous substances and/or contaminants that posed an ongoing threat to public health, safety and the environment. The action included demolition of the house, relocation of a portion of the Dry Sawmill Run away from the toe of the C&D waste pile, stabilization of the waste pile with the construction of a mechanically stabilized earth wall and the grading, covering and vegetation of the waste pile material with permanent post construction storm water controls. The completed action prevents ongoing sloughing of the waste pile and associated hazardous substances into Dry Saw Mill Run. The action protects Dry Saw Mill Run from further degradation caused by the ongoing deposition of waste materials into the stream. The site is now fully vegetated, stable and satisfies the Army Corp of Engineers stream permits. DEP will continue site inspections and periodic operation & maintenance (O&M) activities. DEP will require that institutional controls be implemented to protect the remedy.

Highlights:

- 33,000 cubic yards of Waste Stabilized
- Pollution prevented from entering High-Quality Cold-Water Fishery Stream
- Stream Banks: Repaired, Stable, and Vegetated

The Hazardous Sites Cleanup Fund (HSCF), a special fund established under the Hazardous Sites Cleanup Act (HSCA) (35 P.S. §6020.101 et seq.), provides the funding for the Department of Environmental Protection (DEP) to carry out a number of activities to address releases and threatened releases of hazardous substances to the environment.

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

Project Photos

Containerized waste before cleanup

Dry Sawmill Run before cleanup

Remaining waste pile stabilization

Dry Sawmill Run cleanup

After cleanup and stabilization of the remaining waste pile

Dry Sawmill Run after relocation