

- Diversion and Lining of the Unnamed Stream;
- Collection and Treatment of On-site Groundwater;
- Wetlands Restoration/Enhancement;
- Long-term Environmental Monitoring and Five-Year Reviews; and
- Institutional Controls.

As stated in the ROD, the EPA determined that contaminants have contaminated on- and off-site groundwater and surface water in the unnamed stream. Due to technical impracticability, MCLs were not used as cleanup goals. Rather significant reduction of the contaminant mass and protection of surface water bodies were used as cleanup goals. A two part plan for the cleanup of on-site contaminated groundwater and seeps involved an active extraction system (bedrock extraction wells) and a passive collection system (shallow collection trench).

On July 26, 1995, EPA issued an ESD documenting changes to the remedial action specified in the OU1 ROD. The ROD called for excavation of soils within the disposal area down to the seasonal low water table, de-watering, solidification, and placement back within the disposal area under an impermeable cap. The revised remedy described in the ESD called for soils in the disposal area to remain in place, untreated, and covered by the cap. The ROD also called for soils and sediments from the unnamed stream, water hazards, and other areas of OU1 outside the disposal area that exceed cleanup standards to be excavated, treated, and disposed of under the impermeable cap within the disposal area. Under the revised remedy, excavated soils and sediments from these areas would remain untreated and would be disposed of under the impermeable cap within the disposal area.

Another ESD was issued by EPA on September 27, 2000, documenting additional changes to the remedial action specified in the OU1 ROD. The ROD described the concrete lining of about 750 feet of the unnamed stream in the portion parallel to the eastern boundary of the site. As described, the revised remedy included the permanent placement of the stream channel in an underground 72-inch PCCP, the creation of a new stream channel on the golf course, and the planting of vegetation to recreate the habitat lost. Under the ROD, passive groundwater collection along the eastern and southern boundary of the site consisted of an under drain pipe within a shallow trench. The ESD substituted this collection system with a slurry wall along a portion of the southern boundary and two recovery wells adjacent to the slurry wall.

A third ESD was issued by EPA on September 29, 2003. It incorporated methane gas collection into the remedy to comply with Massachusetts Solid Waste Management Regulations and to prevent the off-site migration of gas.

4.1.2 Operable Unit 2

The ROD for Sullivan's Ledge OU2 was issued by EPA on September 27, 1991. **The remedial action objectives listed in the ROD are:**

- **Reduce exposure of aquatic organisms to PCB-contaminated pore water and sediments either through direct contact or diet-related bioaccumulation;**

- Reduce exposure of terrestrial and wetland species to PCB-contaminated sediment/soils through direct contact or diet-related bio-accumulation;
- Prevent or reduce releases of PCBs to the unnamed stream and the Apponagansett Swamp; and
- Mitigate the impacts of remediation on wetlands.

The selected remedy, as identified in the ROD, consisted of the following components:

- Site preparation;
- Excavation of contaminated sediments and soils from portions of Middle Marsh and the Adjacent Wetland;
- Dewatering and stabilization of the excavated sediment/soils;
- Disposal of the stabilized sediment/soils beneath the cap constructed over portions of the disposal area of the site;
- Wetlands restoration;
- Institutional controls to prevent future residential use and restrict commercial use; and
- Long-term environmental monitoring.

4.2 REMEDY IMPLEMENTATION

This section summarizes the implementation of the remedial actions specified in the RODs for OU1 and OU2.

4.2.1 Operable Unit 1

The settling defendants for OU1 formed the Sullivan's Ledge Site Group led by a project management committee (PMC) and hired a design engineering firm, O'Brien & Gere Engineers, Inc. (OBG), to implement the EPA OU1 Statement of Work. In June, 1997, EPA approved the 100% design, initiating the time track for remedial action. The PMC contracted with Harding Lawson and Associates, Inc. (HLA) to implement the remedial actions. On-site construction activities for OU1 were initiated in March 1998 with Phase I mobilization.

Implementation of the remedial action for OU1 is discussed below, by component, as identified in the ROD. The information below is based primarily on the Remedial Construction Report (OBG, 2002d) for OU1.

Second Five-Year Review Report
for
Sullivan's Ledge Superfund Site
New Bedford,
Bristol County, Massachusetts

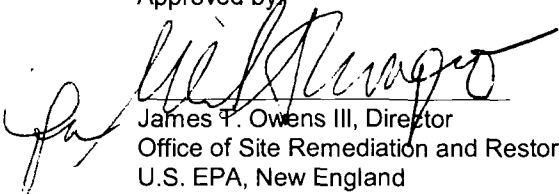
September, 2008

PREPARED BY:

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9-23-08