and shut down over the weekend under those conditions.

5.3.1.3 Sediment Monitoring

Bi-annual sediment sampling was performed in September 2003, September 2005, and September 2007/January 2008. Sediment samples were collected from the unnamed stream, OU1 diversion swale, sedimentation basin, just downstream of the Hathaway Road culvert, and OU1 cap swale. Sediment samples were analyzed for PCBs, PAHs, TCO, metals, and percent solids. Two sediment samples exceeded the sediment target level of 20 ug PCB/g carbon. In September 2003, the sediment sample from the OU1 diversion swale exceeded the sediment target value with a PCB concentration of 91.6 ug PCB/gC (OBG, 2004a). Subsequent PCB concentrations for this location were much lower at 10.3 ug PCB/gC and 6.9 ug PCB/gC in 2005 and 2008, respectively, indicating that the 2003 result may have been an anomaly. All other sediment samples from September 2003 showed concentrations below the sediment target level. In addition, all sediment samples from September 2005 showed concentrations below the sediment target level (OBG, 2006a).

In January 2008, the sediment sample from the unnamed stream, near Pond A, exceeded the sediment target value with a PCB concentration of 64.5 ug PCB/gC (OBG, 2008a). This concentration was elevated compared to previous concentrations of 8.1 ug PCB/gC and 5.5 ug PCB/gC in 2003 and 2005, respectively, at the same location. Future monitoring data should be assessed to determine if the 2007 results was anomaly or indicative of increased impacts at this location. All other sediment samples from September 2005 were below the sediment target level.

During each of the 2003, 2005, and 2007 sediment sampling events, PAHs were detected at all sample locations including the location upstream of the former disposal area at the OU1 cap swale. Concentrations of PAHs were generally highest in the sediment sample collected from just downstream of the Hathaway Road culvert. Similarly, several metals were detected in all sediment samples including the upstream samples from the OU1 cap swale. While the downstream metals concentrations were generally higher than the upstream metals concentrations, there do not appear to be any sharp upward trends between monitoring events. Higher metals concentrations were generally found in sediment samples collected from just downstream of the Hathaway Road culvert. OBG has attributed the higher concentrations at this location to runoff from Hathaway Road.

5.3.1.4 Surface Water Monitoring

Bi-annual surface water sampling was performed in September 2003, September 2005, and September 2007. Surface water samples were generally collected from the unnamed stream, OU1 diversion swale, sedimentation basin, downstream of the Hathaway Road culvert, and OU1 cap swale (upstream location). A surface water sample could not be obtained from the sedimentation basin during the 2005 sampling event because it was dry. The surface water samples were analyzed for VOCs, PAHs, PCBs, metals, and pH.

Generally, surface water data showed similar results for each of the three sampling events. PCBs were not detected in any surface water samples. Very low concentrations of chlorinated VOCs were detected at one to two downstream locations with no increasing trends. Metals concentrations were generally similar between the three monitoring events. PAHs were not detected during the 2003 and 2005 events but were detected in 2007 at the sampling locations

Second Five-Year Review Report

for

Sullivan's Ledge Superfund Site

New Bedford,

Bristol County, Massachusetts

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