#### 5.3.1.6 Wetlands Monitoring

The biological and physical goals for wetland restoration in OU1 areas were modified to align with the goals established for OU2 area. Therefore, monitoring for OU1 and OU2 areas was combined and the data was presented in single annual reports. A summary of the data review is provided in OU2 section below.

### 5.3.2 Operable Unit 2

# 5.3.2.1 Sediment and Soil Monitoring

Since the previous five-year review, sediment samples were collected in August 2003, August 2004, and September 2006 from four locations within the unnamed stream, within the area of OU2 impacted by the remedial action construction, and analyzed for PCB, and TOC. PCB concentrations ranged from nondetect to 20 ug PCBs/gC in 2003, nondetect to 8.67 ug PCBs/gC in 2004, and 7.6 to 61 ug PCBs/gC in 2006. During the 2006 monitoring event, two out of four sediment samples from the unnamed stream exceeded the sediment target level of 20 ug PCBs/gC, with PCB concentrations of 355 µg/kg or 32 µg/gC (at 1.1% TOC) and 415 µg/kg or 61 µg/gC (at 0.68% TOC), respectively (OU1 & OU2, 2005 and OU1 & OU2, 2007). These two samples showed higher PCB concentrations and lower TOC concentrations than were reported for the same locations during monitoring performed in 2003 and 2004. Although these locations exceed the target level of 20 ug/gC, these were associated with unpresentatively low TOC values. Similar observations were made in the last five-year review. Continued monitoring of sediments in the unnamed stream should be conducted to continue to evaluate the protectiveness of the remedy.

Sediment/soil samples were collected in August 2003, August 2004, and September 2006 from four locations within non-aquatic plot areas in the Middle Marsh and two locations within the adjacent wetlands and analyzed for PCBs. PCBs were detected at four of six locations in 2003, four of six locations in 2004, and two of six locations in 2006. All detected PCB concentrations were well below the 15 mg/kg total PCBs cleanup level (OU1 & OU2, 2005 and OU1 & OU2, 2007).

## 5.3.2.2 Surface Water Monitoring

Since the previous five-year review, surface water samples were collected in August 2003, August 2004, and August 2006 from four locations within the unnamed stream and analyzed for PCBs and pH. Again, PCBs were not detected above the detection limit in any of the samples collected (OU1 & OU2, 2005 and OU1 & OU2, 2007).

### 5.3.2.3 Wetlands Monitoring

Data has been submitted for wetland monitoring events that have occurred in 2003, 2004, 2005, and 2006. No data has been submitted for the year 2007.

The data were collected and compared to the various biological and physical indicators that were established prior to remediation to monitor the progress towards reaching the goal of wetland restoration. The first two columns of the following table identify the goals that were established and described in the O&M Plan for OU2 (Dames & Moore, 1999) and subsequently adopted by OU1. Comments regarding the trajectory towards meeting these goals are provided in the third

**Second Five-Year Review Report** 

for

Sullivan's Ledge Superfund Site

New Bedford,

**Bristol County, Massachusetts** 

September, 2008

PREPARED BY:

**United States Environmental Protection Agency** Region I Boston, Massachusetts

James P. Owens III, Director
Office of Site Remediation and Restoration

U.S. EPA, New England

Date: