

### 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 the 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/wetland soil sampling was performed in June 2013 by EPA in order to meet monitoring requirements for OU2. Sediment samples were collected from four locations within the unnamed stream, within the area of OU2 impacted by the remedial action construction. At each unnamed stream location, four individual samples were collected and analyzed for TOC and then the sample with the TOC concentration closest to average was analyzed for PCBs. Normalized total PCB concentrations ranged from nondetect to 64 ug PCBs/g carbon. Two out of four sediment samples from the unnamed stream exceeded the sediment target level of 20 ug PCBs/g carbon, with PCB concentrations of 64 ug PCBs/g carbon (at 0.82% TOC) at location SDPC-2 and 32 ug PCBs/g carbon (at 2.58% TOC) at location SDPC-4. Compared to the previous monitoring round in 2006, location SDPC-2 had a lower unadjusted PCB concentration and a much lower TOC concentration in 2013 and location SDPC-4 had a higher unadjusted PCB concentration and a higher TOC concentration in 2013. Continued monitoring of sediments in the unnamed stream should be conducted to evaluate the protectiveness of the remedy and in particular to assess whether the PCB result for location SDPC-4 is indicative of greater impacts to the unnamed stream at that location.

Wetland soil samples were collected 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 not detected in wetland soil samples from the adjacent wetlands. PCBs were detected at concentrations ranging from 0.12 to 0.93 mg/kg in the four Middle Marsh samples. All detected PCB concentrations were well below the 15 mg/kg total PCBs cleanup level.

Sediment and wetland soil results are provided in Attachment 3.

#### 5.3.2.2 Surface Water Monitoring

Since the previous five-year review, surface water samples were collected in June 2013 by EPA from four locations within the unnamed stream and analyzed for PCBs and pH. PCBs were not detected above the detection limit in any of the samples collected.

Surface water results are provided in Attachment 3.

Table A3-4

## TOC and PCB Results for Unnamed Stream Sediment Samples Collected on June 10, 2013 by EPA

Analysis:	TOC Rep1	TOC Rep2	Avg TOC	Total PCBs	Normalized PCBs
Units:	%	%	%	mg/kg	ug PCBs/g Carbon
Sample Location SDPC-1:					
SDPC1-6/10/13-1	0.347	0.176	0.26	ND (0.06)	ND
SDPC1-6/10/13-2	0.183	0.169	0.18	--	--
SDPC1-6/10/13-3	0.236	0.194	0.22	--	--
SDPC1-6/10/13-4	0.195	0.517	0.36	--	--
Sample Location SDPC-2:					
SDPC2-6/10/13-1	0.564	0.704	0.63	--	--
SDPC2-6/10/13-1 DUP	1.04	0.776	0.91	--	--
SDPC2-6/10/13-2	0.787	0.862	0.82	0.53	64
SDPC2-6/10/13-3	0.443	0.551	0.50	--	--
SDPC2-6/10/13-4	0.582	1.42	1.00	--	--
Sample Location SDPC-3:					
SDPC3-6/10/13-1	2.02	2.66	2.34	--	--
SDPC3-6/10/13-2	0.205	0.208	0.21	--	--
SDPC3-6/10/13-3	0.732	0.724	0.73	--	--
SDPC3-6/10/13-4	0.441	1.33	0.89	0.12	14
Sample Location SDPC-4:					
SDPC4-6/10/13-1	2.44	2.73	2.59	0.83	32
SDPC4-6/10/13-2	1.95	1.57	1.76	--	--
SDPC4-6/10/13-3	3.30	4.34	3.82	--	--
SDPC4-6/10/13-4	3.04	3.52	3.28	--	--

**Notes:**

-- Not analyzed or not applicable

ND - Not detected (reporting limit provided in parentheses)

PCBs - Polychlorinated biphenyls

TOC - Total organic carbon

**THIRD FIVE-YEAR REVIEW REPORT FOR  
SULLIVAN'S LEDGE SUPERFUND SITE  
BRISTOL COUNTY, MASSACHUSETTS**



**Prepared by**

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