

Table E-1
Ambient Air Monitoring Program - Total Detectable PCB Homologues

Sampling Date	PCB Concentration by Location (ng/m ³ in 24-hour time-weighted average) ¹																													
	24 Aerovox	25 Manomet	25 Cliftex	27 Porter	30 Fibre Leather	42 NSTAR North	43 Veranda	44 Taber	46 Coffin	Area C			Area D			53 Dredge	55 Aerovox West	56 Acushnet Park	57 Riverside Park	58 Pearl	59 Popes	60 Washburn	61 South Fence	62 Century House	63 Boathouse	64 Pilgrim	65 LHCC Dredge	66 Huttleston	67 Revere	68 Marsh Island
09/26/17	NS	NS		NS	NS	NS	34	6	NS	42.9/25d	NS	NS	46	NS	NS	NS	NS	NS	NS	6	13	48			15	33	ND	26	NS	2017 Lower Harbor Best Value remedial event. Unlaided Results.
09/13/17	NS	82		35	41	30	NS	NS	8/15d	NS	NS	16	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS		NS	NS	NS	NS	NS	2017 Cable Crossing background event. Unlaided Results.	
08/24/17	NS	NS		NS	NS	NS	NS	7.57/24 .4d	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	3.82			NS	NS	NS	16.9	38.6	2017 Marsh Island Excavation results. Unlaided Results	
07/19/17	NS	NS		NS	NS	NS	70.8	21.1	NS	34.2/18.8 d	NS	NS	9.38	NS	NS	NS	NS	NS	NS	14.0	13.0	44.7			42.4	NS	26.8	17.6	49.4	2017 Lower Harbor Best Value/Marsh Island background event. Station 50 Area D ran for 878 minutes, but was retained because it ran for more than 12 hours. Unlaided Results.
04/03/17	NS	4.79		ND _R	NS	NS	3.60	ND _R	2.54	2.88	NS	NS	ND _R	NS	NS	ND _R	NS	NS	ND _R	ND _R	3.01	ND _R		ND _R	NS	ND _R	ND _R		2017 Upper Harbor Dredging-Lower Harbor CAD Cell filling. The pump at Area D failed by mid-afternoon. The pump used on the dredge was removed after 8 hours and placed at Area D. Both Area D and the dredge were monitored for their full time intervals. The pump for the duplicate at Area C shut down sometime after inspection. Because it didn't run for at least 12 hours, the sample was discarded. Due to a laboratory error, all ND results (less than 1.39 ng/m ³) were rejected as a result of data validation. These are indicated by ND _R .	
03/29/17	NS	NS		NS	NS	NS	5.94	NS	ND	7.15/7.67 d	NS	NS	NS	NS	NS	NS	ND	NS	NS	NS	NS			NS	NS	NS	NS		2017 Upper Harbor Excavation PMC results. Unlaided Results.	
03/08/17	NS	6.92		11.5	NS	NS	29.9	2.00	15.2	<1.37/ <1.39d	NS	NS	<1.39	NS	NS	71.9	NS	NS	NS	<1.39	<1.39	<1.38			12.8	NS	5.35	<1.39		2017 Upper harbor dredging lower harbor CAD cell placements. Note Pearl (#58) pump had stopped in mid-collection. The dredge pump (#53) had only run for 40 minutes prior to shutdown. The dredge pump (#53) was placed at #58 Pearl for remainder of day to collect a 6.5 m ³ sample. The dredge pump (#53) was placed onboard the dredge the following day (3/9/17) to collect a total sample of 2.15 m ³ . This was also the first round that was analyzed entirely by the low resolution mass spec method.
02/23/17	NS	NS		NS	NS	NS	4.03	NS	22.7	2.40	NS	NS	NS	NS	NS	NS	1.68	NS	NS	NS				NS	NS	NS	NS		2017 Upper Harbor Excavation PMC results. The duplicate pump for Station #47 Area C failed and no duplicate sample was submitted for analysis. Unlaided results.	
01/25/17	NS	4.53		2.57	NS	NS	11.4	2.67	9.41	2.43 / 2.65d	NS	NS	2.66	NS	NS	6.35	NS	NS	NS	0.803	NS	6.58			2.91	NS	3.84	3.07		2017 Upper harbor dredging lower harbor CAD cell placements.
01/12/17	NS	NS		NS	NS	NS	18.2	NS	15.9	1.90/1.90 d	NS	NS	NS	NS	NS	NS	<0.061	NS	NS	NS				NS	NS	NS	NS		2017 Upper Harbor Excavation PMC results.	
12/06/16	NS	NS		NS	NS	NS	3.56	0.679	NS	5.32/5.10 d	NS	NS	5.41	NS	NS	NS	NS	NS	NS	1.57	6.08			1.14	11.7	0.48	4.86		2016 Lower Harbor Dredging in Moby Dick Marina Area A36.	
12/01/16	NS	NS		NS	NS	NS	19.7	NS	1.04	1.10 / 1.21d	NS	NS	NS	NS	NS	NS	0.0007	NS	NS	NS				NS	NS	NS	NS		2016 Upper Harbor Excavation PMC results.	
11/10/16	NS	NS		NS	NS	NS	13.7	NS	4.72	1.64/1.63 d	NS	NS	NS	NS	NS	NS	0.658	NS	NS	NS				NS	NS	NS	NS		2016 Upper Harbor Pre- excavation PMC results.	
11/07/16	NS	NS		NS	NS	NS	6.26	4.07	NS	3.38	NS	NS	5.82/3.75d	NS	NS	NS	NS	0.416	3.55	7.29				2.10	3.19	NS	5.57		2016 Lower Harbor Dredging in Area A34. Dredge was sampled.	
10/19/16	NS	NS		NS	NS	NS	85.2	18.2	NS	26.2	NS	NS	21.1/24.4d	NS	NS	NS	NS	3.89	13.0	30.2				10.6	17.1	NS	22.9		2016 Lower Harbor Dredging in Area A34. Dredge was sampled.	
09/20/16	NS	NS		NS	NS	NS	35.3	18.9	NS	21.4	NS	NS	20.6/22.0d	NS	NS	NS	NS	2.50	NS	59.5				15.7	37.4	NS	25.9		2016 Lower Harbor Dredging in Area A34. Dredge was sampled.	
08/18/16	NS	NS		NS	NS	NS	97.6	19.1	NS	17.1/17.1 d	NS	NS	6.56	NS	NS	NS	NS	3.24	10.5	12.6				11.6	30.1	11.6	9.95		2016 Lower Harbor Dredging in Area 35B. Dredge was sampled.	
08/11/16	NS	61.1		32.2	35.2/39.2d	35.6	NS	NS	NS	NS	NS	NS	NS	NS	NS	704	NS	NS	NS	NS	NS	NS		NS	NS	NS	NS		2016 Upper Harbor Debris Removal. Debris Barge was sampled.	

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	47	48	49	50	51	52																								
07/27/16	NS	NS		NS	NS	NS	42.9	23.7	NS	18.1/16.5 d	NS	NS	12.3	NS	NS	NS	NS	NS	0.416	7.36	32.4			11.1	83.1	6.42	13.4			
07/20/16	NS	95.1		22.8	56.9/52.0 d	33.2	NS	NS	25.3	NS	NS	NS	NS	NS	513	NS			NS	NS	NS			NS	NS	NS	NS			
06/27/16	NS	NS		NS	NS	NS	21.8	32.8	NS	14.4/13.4 d	NS	NS	8.15	NS	NS	NS	NS	NS	0.473	9.53	48.6			13.92	63.0	6.63	8.96			
06/13/16	NS	10.0		14.4	NS	NS	36.5	NS	0.630	6.37/5.45 d	NS	NS	NS	NS	47.1	NS			NS	NS	NS			NS	NS	NS	NS			
05/23/16	NS	NS		NS	NS	NS	11.9	1.88	NS	28.2	NS	NS	23.8/24.0d	NS	NS	NS	NS	NS	5.59	3.38	22.1			3.93	15.1	1.32	21.9			
05/16/16	NS	5.89		11.8	NS	NS	41.7	NS	3.96	3.86/2.40 d	NS	NS	NS	NS	34.9	NS			NS	NS	NS			NS	NS	NS	NS			
04/25/16	NS	NS		NS	NS	NS	10.9	6.02	NS	14.7	NS	NS	6.55/6.46d	NS	NS	NS	NS	NS	2.26	7.43	11.6			6.28	8.57	3.43	6.04			
03/22/16	NS	NS		NS	NS	NS	12.6	7.48	NS	2.38/2.16 d	NS	NS	0.578	NS	NS	NS	NS	NS	0.0804	2.53	0.553			6.38	8.81	5.25	0.379			
02/18/16	NS	NS		NS	NS	NS	4.88	1.34	0.114	2.69	NS	NS	0.979/1.13d	NS	NS	NS	NS	NS	0.00	1.33	1.10			0.864	3.36	1.62	0.870			
01/26/16	NS	NS		NS	NS	NS	14.1	4.39	NS	4.82	NS	NS	0.867/1.08d	NS	NS	NS	NS	NS	0.208	2.04	0.965			4.75	NS	2.07	0.278			
01/21/16	NS	NS		NS	NS	NS	2.81	0.787	0.076	0.916	NS	NS	NS	NS	NS	NS	NS	NS	NS	0.071			NS	NS	NS	NS				
01/18/16	0.216	0.329		NS	0.0185	11.9	1.68	0.496	0.138	0.298	NS	NS	0.102/0.117 d	NS	NS	NS	0.00348		NS	NS	NS			1.87	NS	NS	NS			
12/15/15	NS	NS		NS	NS	NS	NS	NS	NS	NS	NS	NS	5.12	NS	NS	NS	NS	NS	0.707	NA	4.55			6.35	13.5/13.2d	13.4	1.47			
11/18/15	14.6	NS		NS	12.6	4.13	NS	3.11	6.27	14.0	NS	NS	13.7	NS	NS	35.4/38.4 d	2.30		NS	NS	NS			2.13	NS	NS	NS			
11/02/15	NS	NS		NS	NS	NS	NS	13.2	NS	NS	NS	NS	34.9	NS	NS	NS	NS	NS	5.68	9.72	25.4			12.8	NS	10.9	23.5			
10/14/15	22.6	16.4		17.4	4.48	13.0	42.8	19.5	7.32	23.6	NS	NS	17.4	NS	NS	186	0.352							11.4						
09/23/15	150	180		3.9	57/50d	8.1	19	16	50	63	NS	NS	42	NS	NS	300	7.4							7.5						
8/26/2015	62	46/35d		22	19	34	84	13	21	35	NS	NS	32	NS	NS	1900	1.2							15						
7/21/2015	44	48		10	44	20	37	19	27	16	NS	NS	11/15d	NS	NS	NS	7.2							11						
6/3/2015	45	38		0.97	17	4.2	8.6	1.2	5.6	13/14d	NS	NS	16	NS	NS	NS	1.9	1.1						1.2	NS					
4/22/2015	52	26		NA	20	3.4	16	7.6	12	0.016	NS	NS	3.6	NS	NS	4.9	NS							5.7	NS					
4/6/2015	NS	NS		NS	NS	NS	NS	5.1	NS	NS	NS	NS	8.5	NS	NS	NS	NS	NS												
3/11/2015	NS	0.55/0.39d		NS	0.19	NS	NS	0.53	0.15	1.00	NS	NS	0.56	NS	NS	0.12	NS							0.53	2.4					
2/6/2015	NS	NS		NS	NS	NS	NS	0.14/0.17	NS	NS	NS	NS	0.099	NS	NS	NS	NS	NS						0.15	NS					
1/13/2015	0.58	0.55		0.16	0.11/0.15d	0.87	1.4	0.17	0.075	0.43	NS	NS	1.3	NS	NS	NS	0.05	0.12						0.230	2.48					
12/29/2014	NS	NS		NS	NS	NS	NS	0.98	NS	NS	NS	NS	0.5	NS	NS	NS	NS	NS						1.6/1.9d	3.5					
12/18/2014	NS	NS		NS	NS	NS	NS	1.0	NS	NS	NS	NS	0.49	NS	NS	NS	NS	NS						2.3	3.5/4.6d					
12/15/2014	6.7	7.2		0.73	5.6	2.3	3.6	1.6	2.7	4.4	NS	NS	3.7/4.3d	NS	NS	NS	1.6	0.51						1.1	4.7					
11/4/2014	43	21.4		9.9	26.8	8.9	17.4	24.2	21	4.85	NS	NS	7.43	NS	NS	4.38	7.05							15.7/5.1 9d	NS					
10/6/2014	150	98/110d		5.2	180	3.6	17	21	70	21	NS	NS	21	NS	NS	90	NS	NA						12	NS					
9/3/2014	91	44		9.1	39	36	52.8	12/10d	10.1	20.4	NS	NS	11	NS	NS	100	NS	3.8						11						
8/5/2014	75	72		8	61	17	37	17	4																					

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										47	48	49	50	51	52																	
7/8/2014	82	25		22.7	35.7	19	43.1	34	24	33/33d	NS	NS	22	NS	NS	110	NS	4.2										14.7				
6/16/2014	200	90		12/13d	100	25	35	27	50	25	NS	NS	20	NS	NS	320	NS	21										8.6				
5/7/2014	56.9	32.6		NS	33.8	10.9	29.7	24.3	38.3	13.4	NS	NS	11.0	NS	NS	194	NS	7.01										11.6				
3/18/2014	17	5.8		0.36/0.42d	4.5	2.2	1.7	0.41	ND	3.3	NS	NS	2.8	NS	NS	NS	NS	0.14										0.22				
3/18/2014									0.41				2.8															0.22	NS			
12/19/2013									2.32				3.5/3.02d																3.13	0.89		
12/4/2013									3.31/3.0d				0.643																2.16	3.57		
11/20/2013									2.17				3.55																1.68/2.0d	6.21		
9/25/2013	25.6	26.5		2.65	14.7	8.05	11.2	NS	4.1	NS	NS	13.3/12.8d	NS	NS	NS	NS	NS	NS										NS		2013 Post-Dredge Operation.		
8/20/2013	230	130		15	160	18	61	NS	60/57d	29	NS	NS	29	NS	NS	240	NS	NS										NS		2013 Hydraulic Dredging in Area P.		
7/16/2013	240	110		8.1	130	22	36	16	48	110	NS	NS	69	NS	NS	510	NS	NS										14.4		2013 Hydraulic Dredging in Area P.		
3/26/2013	14	1.4		3.2	NS	6.6	8.3	1.1	0.65	NS	NS	NS	0.49	NS	NS	NS	NS	NS										1.8/1.8d		2013 Pre-Dredge Samples for the Upper Harbor.		
3/26/2013										1.1							0.49													1.8/1.8d	NS	2013 Pre-Dredge Samples for the Lower Harbor.
10/1/2012	98	18		17/18d	25	17	87		18	NS	NS	14	0.56	NS	NS	15	NS										NA		2012 Post Dredge Operation; Sample at Station 62 had insufficient air volume and was not analyzed. Due to several vandalized samples this station has been discontinued.			
8/21/2012	67	28		23	17	19	67		14/16d	NS	NS	20	4	NS	NS	0.00033	NS									18		2012 Hydraulic Dredging in Area P; Sample at Station 53 had insufficient air volume and was not analyzed.				
7/16/2012	220	1.2		24/24d	110	36	140		26	NS	NS	57	10	NS	NS	280	10	NS								3.3		2012 Hydraulic Dredging in Area L.				
7/2/2012	NA	NA		NA	NA	NA	NA		NA	NS	NS	NA	NA	NS	NA	NA	NA	NA								NA		All samples collected were voided due to out of temperature specification upon arrival at laboratory.				
5/21/2012	51	NS	67/66d	0.81	NS	NS	NS		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS								0.0029		2012 Pre-Dredge Samples; Station 27 is a new location in 2012 season for eastern residential receptor.				
10/11/2011	36	NS	NS		42	10	18		11	NS	NS	25	17	NS	NS	420	18								0.29		2011 Post-Dredge Operation.					
9/14/2011	480	NS	NS		120	29	61		93	NS	NS	220	0.62	NS	NS	460	28	57							NS		2011 Hydraulic Dredging in Area N. Sample at Station 62 was tampered and not analyzed.					
8/23/2011	280	NS	NS		60	80	94		NS	NS	NS	220/200d	16	NS	NS	1800	48	13							52		2011 Hydraulic Dredging in Area K.					
7/26/2011	NS	NS	NS		NS	NS	NS		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS							NS	51	Excavation of Area Q.					
7/13/2011	1100	NS	NS		130	40	43		43	NS	NS	78	110	NS	NS	1000/1100d	79	25							6.7	NS	2011 Hydraulic Dredging in Area K.					
5/25/2011	56	NS	NS		NS	NS	NS		NS	NS	NS	NS	NS	NS	NS	NS	93/97d	NS								0.68	25	2011 Pre-Dredge Samples; Station 63 is a new location in 2011 season for Area Q.				
10/13/2010	80	NS	NS		36	9	7.4		21	NS	NS	24	4.4	NS	NS	19	5.9								1.1	NS	2010 Post-Dredge Operation.					
8/18/2010	1800	NS	NS		300	25	36		31	NS	NS	130	37	NS	NS	560/580d	200	11							13							
7/20/2010	270	NS	NS		29	NS	26		47	NS	NS	79/73d	37	NS	NS	450	93	26							2.7		2010 Hydraulic Dredging.					
6/30/2010	120	NS	NS		7.3	0.0013	82		13	NS	NS	32	3.3	NS	NS	230	3.2	12							44/41d		2010 Pre-Dredge Samples.					
5/21/2010	86	NS	NS		NS	0.042	NS		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS								ND/NDd						
5/13/2010	void	NS	NA		NS	void	NS		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS								void		2010 pre-dredge samples. Sample location at Century House Restaurant (#62) in Acushnet added at the direction of the EPA. Samples taken on 5/13/10 were damaged during shipment.				
12/16/2009	3.3	NS	NS		0.134	23.8	9.12		0.171	NS	NS	1.78	NS	0.18	NS	0.372/0.353d	0.63													2009 Post-Dredge Operation.		
11/9/2009	45.2	NS	NS		20.4/31d	25.3	55.2		32.8	NS	NS	51.8	NS	2.92	NS	205	8.31	17.2													2009 Hydraulic Dredging.	
10/14/2009	48.8	NS	NS		11																											

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	47	48	49	50	51	52																										
10/6/2005	1,820	NS	251		NS	119			130	NS	60.1	114	81.7	NS	NS	6,320	222	180														
9/29/2005	383	NS	104		NS	5.28			124	NS	17.3	44.2	24.2	NS	NS	391	87	77.9														
9/23/2005	178	NS	35.2		NS	83.3			115	NS	19.1	97	0.26	NS	NS	780	2.64	23.9														
9/15/2005	1490	NS	58.2		NS	22.5			99.8	NS	14.9	83.6	0.52	NS	NS	1280	37.6	102														
8/11/2005	216	NS	103		NS	25.9			37.2	NS	NS	29.3	NS	NS	21.3	NA	42.1	49.9														
12/3/2004	30	NS	27		NS	40			15	22	NS	26	22	NS	31	NA	9.33	1.52														
11/5/2004	578	NS	61		NS	73			80	NS	NS	28	NS	NS	NS	351	28.4	39.1														
10/19/2004	559	NS	259		NS	NS			36	47	48	66	17	74	100	704	NS	NS														
9/28/2004	9,560	NS	423		NS	NS			342	35	165	207	80	75	115	2,730	NS	NS														
9/23/2004	588	NS	97		NS	NS			5	7	10	17	6	5	19	1,210	NS	NS														
9/14/2004	1,450	NS	229		NS	NS			48	64	64	86	38	39	61	98	NS	NS														
9/9/2004	1,020	NS	167		NS	NS			145	28	37	56	20	16	47	723	NS	NS														
6/29/2004	2,290	NS	NS		NS	NS			NS	NS	NS	NS	NS	NS	56	NS	NS	NS														
March-May 2000	76	NS	35		NS	29			35	61	61	61	6.8	6.8	6.8		NS	NS														
Dec 1999-Feb 2000	32	NS	3.2		NS	9.9			3.2	89	89	89	3.4	3.4	3.4		NS	NS														
Sept-Nov 1999	67	NS	22		NS	24			22	43	43	43	5.9	5.9	5.9		5.2	5.2														
June-August 1999	130	NS	46		NS	31			46	33	33	33	12	12	12		NS	NS														

Notes:

d = field duplicate result

P = Pending results

NA = sample collected but not analyzed

ng/m³ = nanograms per cubic meter of air

NS = not sampled

PCB = polychlorinated biphenyl

ND = no detections (non-detect)

Sample station with gray blocking is a newer station added to the air sampling program or discontinued station (no activity).

Station	Location
24	Aerovox
25	Manomet
27	Porter
30	Fibre Leather
42	NSTAR N
43	Veranda
44	Taber
46	Coffin
47	Area C Downwind
50	Area D Downwind
53	Dredge
55	Aerovox West
56	Acushnet Park
57	Riverside Park
58	Pearl
59	Popes
60	Washburn
62	Century House
64	Pilgrim
65	CAD Cell Dredge
66	Huttleston
67	Revere
68	Marsh Island

New Bedford

Acushnet

- Residential Ambient Air Sampling Station Location (Historical)
- ▲ Commercial Ambient Air Sampling Station Location (Historical)
- Residential Ambient Air Sampling Station Location (New)
- ▲ Commercial Ambient Air Sampling Station Location (New)

Phase II

Phase I

Fairhaven

Legend



EPA CAD CELL

Aerial Photography MASSGIS 2014

N

0 750 1,500
Feet

1:21,600

JACOBS

Available Ambient Air Sampling Station Locations
New Bedford Harbor Superfund Site

Name: piccolo

Date: 8/14/2017

Figure