

Table E-1
Ambient Air Monitoring Program - Total Detectable PCB Homologues
New Bedford Harbor Superfund Site
Current as of 07/16/2019

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	69 North Street	74 Beach St	
										47	48	49	50	51	52																		
06/26/19	28.9	49.7		NS	30.0	18.9	9.18		NS	27.4/21.3 d	NS	NS	16.8	NS	NS	112	NS						NS										
06/05/19	153	46.8		NS	49.7	29.6	35.8		NS	26.9/32.4 d	NS	NS	27.6	NS	NS	123	NS						NS										
04/23/19	17.5	25.0		NS	18.5	7.17	4.44		NS	11.4/10.0 d	NS	NS	13.0	NS	NS	137	NS						NS										
03/26/19	NS	26.7		NS	26.4	20.7	12.4		NS	9.61/2.50 d	NS	NS	6.13	NS	NS	59.0	NS						NS										
02/26/19	NS	<1.39		NS	<1.39	40.4J	17.5		NS	<1.39/<1.39d	NS	NS	<1.39	NS	NS	NS	NS						NS										
12/19/18	32.6	NS		NS	19.6	19.4	NS		NS	23.6/22.1 d	NS	NS	20.8	NS	NS	114	NS						15.0										2018 Dredge Areas I, N, & O remedial event and Aerovox Capping remedial event results.
11/28/18	<1.39	NS		NS	<1.39	17.6	NS		NS	<1.39/<1.39d	NS	NS	1.60	NS	NS	15.1	NS						3.88										2018 Dredge Areas I, N, & O remedial event and Aerovox Capping remedial event results.
10/24/18	3.3	NS		NS	<1.39	23.2	NS		NS	4.31/3.75 d	NS	NS	4.97	NS	NS	71.5	<1.39						<1.39										2018 Dredge Areas I, N, & O remedial event and Aerovox Capping remedial event results.
10/10/18	63.3	NS		NS	NS	NS	NS		NS	NS	NS	NS	NS	NS	NS	NS	11.3/10.3d						42.1										2018 Aerovox Capping remedial event results.
09/24/18	74.0	NS		NS	34.9	17.9	NS		NS	37.5/32.4 d	NS	NS	31.4	NS	NS	146	NS						1.43										2018 Dredge Areas I, N, & O remedial event.
08/24/18	123	NS		NS	32.9	39.4	NS		NS	31.5/15.4 d	NS	NS	23.5	NS	NS	141	NS						5.79										2018 Dredge Areas I, N, & O remedial event.
07/24/18	317	NS		NS	264	8.21	NS		NS	135/143d	NS	NS	38.5	NS	NS	371	NS						16.7										2018 Dredge Areas I, N, & O remedial event and Between the Bridges remedial event.
05/30/18	72.9	NS		NS	67.9	5.47	NS		NS	42.6/37.8 d	NS	NS	22.2	NS	NS	NS	NS						24.4										2018 Dredge Areas I,N,&O background event.
05/17/18	NS	NS		NS	NS	NS	NS	14.0/18.3 d	NS	NS	NS	NS	NS	NS	NS	NS	NS						7.71	NS	NS	22.2	7.93						2018 North Street Salt Marsh remedial event.
04/23/18	NS	31.3		7.4	46.8	16.3	NS	NS	38.5/42.4 d	NS	NS	16.4	NS	NS	82.3	NS							NS	NS	NS	NS	NS						2018 Cable Crossing remedial event.
03/27/18	NS	41.5		6.79	22.9	12.2	11.1	11.7	NS	19.0	NS	NS	21.5/24.3d	NS	NS	611	NS						NS	NS	NS	NS	NS	NS				2018 Cable Crossing and Between the Bridges remedial events. The pump on Station 65-Lower Harbor Dredge, stopped prematurely and did not run long enough to collect a valid sample.	
02/21/18	NS	NS		NS	NS	NS	5.21	4.03	NS	17.2	NS	NS	17.8	NS	NS	NS	NS						3.56	4.53	12.3			5.18	12.7	3.53	1.89	NS	2018 Lower Harbor Best Value remedial event. The pump for the duplicate sample at Station #47 did not run for the prescribed period and the sample was not submitted for analysis.
01/25/18	NS	NS		NS	NS	NS	<1.39	<1.39	NS	<1.39/<1.39d	NS	NS	<1.39	NS	NS	NS	NS						<1.39	<4.50	<1.39	<1.39	<1.39	<1.39				2018 Lower Harbor Best Value remedial event. This event also included a background sample for Station 69-North Street to support remediation of the North Street Salt Marsh.	
12/19/17	NS	NS		NS	NS	NS	27.8	9.64	NS	9.39/12.6 d	NS	NS	11.2	NS	NS	NS	NS						<1.39	2.82	<1.39			14.2	4.87	12.6	<1.39		2017 Lower Harbor Best Value remedial event.
12/13/17	NS	<1.39		8.1	2.0	13	NS	NS	1.4/1.39 d	NS	NS	9.6	NS	NS	191	NS						NS	NS	NS	NS	NS	NS						2017 Cable Crossing remedial event.
11/28/17	NS	NS		NS	NS	NS	11	22	NS	48/29d	NS	NS	6.8	NS	NS	NS	NS						18	5.2	13			1.7	6.5	2.5	9.3		2017 Lower Harbor Best Value remedial event.
11/15/17	NS	29		1.5	43	4.8	NS	NS	31/34d	NS	NS	25	NS	NS	825	NS						NS	NS	NS	NS	NS	NS						2017 Cable Crossing remedial event.
10/23/17	NS	NS		NS	NS	NS	5	24	NS	75/120d	NS	NS	32	NS	NS	NS	NS						5	22	97			16	45	2	35		2017 Lower Harbor Best Value remedial event.

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	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	69 North Street
10/19/17	NS	34		23	22	28	NS	NS	29	NS	NS	15	NS	NS	171	NS			NS	NS	NS				NS	NS	NS	NS	NS	NS	
09/26/17	NS	NS		NS	NS	NS	34	6	NS	42.9/25d	NS	NS	46	NS	NS	NS	NS		6	13	48			15	33	ND	26				
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		
08/24/17	NS	NS		NS	NS	NS	NS	7.57/24.4d	NS	NS	NS	NS	NS	NS	NS		NS	NS	3.82				NS	NS	NS	16.9	38.6		2017 Marsh Island Excavation results.		
07/19/17	NS	NS		NS	NS	NS	70.8	21.1	NS	34.2/18.8d	NS	NS	9.38	NS	NS	NS	NS		14.0	13.0	44.7			42.4	NS	26.8	17.6	49.4			
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		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	7.15/7.67d	NS	NS	NS	NS	NS	NS	NS		ND	NS	NS			NS	NS	NS	NS	NS	NS		
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	<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	4.01	NS	22.7	2.38	NS	NS	NS	NS	NS	NS	NS		1.68	NS	NS			NS	NS	NS	NS	NS	NS		
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	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	1.90/1.90d	NS	NS	NS	NS	NS	NS	NS		<0.061	NS	NS	NS		NS	NS	NS	NS	NS	NS		
12/06/16	NS	NS		NS	NS	NS	3.56	0.679	NS	5.32/5.10d	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	NS		0.0007	NS	NS	NS		NS	NS	NS	NS	NS	NS		
11/10/16	NS	NS		NS	NS	NS	13.7	NS	4.72	1.64/1.63d	NS	NS	NS	NS	NS	NS	NS		0.658	NS	NS	NS		NS	NS	NS	NS	NS	NS		
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	17.1/17.1d	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		
07/27/16	NS	NS		NS	NS	NS	42.9	23.7	NS	18.1/16.5d	NS	NS	12.3	NS	NS	NS	NS		0.416	7.36	32.4			11.1	83.1	6.42	13.4		2016 Lower Harbor Dredging. Dredge was sampled.		
07/20/16	NS	95.1		22.8	56.9/52.0d	33.2	NS	NS	25.3	NS	NS	NS	NS	NS	NS	513	NS		NS	NS	NS			NS	NS	NS	NS	NS	NS		
06/27/16	NS	NS		NS	NS	NS	21.8	32.8	NS	14.4/13.4d	NS	NS	8.15	NS	NS	NS	NS		0.473	9.53	48.6			13.92	63.0	6.63	8.96		2016 Lower Harbor Debris Removal. Debris Barge was sampled.		
06/13/16	NS	10.0		14.4	NS	NS	36.5	NS	0.630	6.37/5.45d	NS	NS	NS	NS	NS	47.1	NS		NS	NS	NS			NS	NS	NS	NS	NS	NS		

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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			5.59	3.38	22.1				3.93	15.1	1.32	21.9		2016 Lower Harbor Debris Removal. Debris Barge was sampled.
05/16/16	NS	5.89		11.8	NS	NS	41.7	NS	3.96	3.86/2.40d	NS	NS	NS	NS	NS	34.9	NS			NS	NS	NS			NS	NS	NS	NS		2016 Upper Harbor Debris Removal. Debris Barge was sampled.	
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			2.26	7.43	11.6				6.28	8.57	3.43	6.04		2016 Lower Harbor Dredging and Debris Removal. Dredge was sampled.
03/22/16	NS	NS		NS	NS	NS	12.6	7.48	NS	2.38/2.16d	NS	NS	0.578	NS	NS	NS	NS			0.0804	2.53	0.553				6.38	8.81	5.25	0.379		2016 Lower Harbor Dredging and Debris Removal. Dredge was sampled.
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			0.00	1.33	1.10				0.864	3.36	1.62	0.870		2016 Combined Lower Harbor Dredging and Parcel 265 Excavation monitoring events.
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			0.208	2.04	0.965				4.75	NS	2.07	0.278		2016 Lower Harbor Debris Removal only.
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		2016 Parcel 265 Excavation air monitoring event. Pump #21 stopped at 1033.
01/18/16	0.216	0.329		NS	0.0185	11.9	1.68	0.496	0.138	0.298	NS	NS	0.102/0.117d	NS	NS	NS	0.00348			NS	NS	NS				1.87	NS	NS	NS		2016 Upper Harbor Post-Dredge Sampling Event. Location #27 Porter not sampled due to lack of access caused by snow.
12/15/15	NS	NS		NS	NS	NS	NS	NS	NS	NS	NS	NS	5.12	NS	NS	NS	NS			0.707	NA	4.55				6.35	13.5/13.2d	13.4	1.47		2015 Lower Harbor Debris Removal only. Location #59 Popes was collected but the media was found lying on the ground so it was not analyzed. Strong winds were experienced during most of the evening.
11/18/15	14.6	NS		NS	12.6	4.13	NS	3.11	6.27	14.0	NS	NS	13.7	NS	NS	35.4/38.4d	2.30			NS	NS	NS				2.13	NS	NS	NS		2015 Hydraulic Dredging in Upper Harbor Area T.
11/02/15	NS	NS		NS	NS	NS	13.2	NS	NS	NS	34.9	NS	NS	NS	NS	NS			5.68	9.72	25.4				12.8	NS	10.9	23.5		2015 Lower Harbor Pre-debris removal.	
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					2015 Hydraulic Dredging in Upper Harbor - Area S; Samples 25, 27, 30, 42, 55 and one blank analyzed on 10 day TAT for submarine power cable removal activities. The pump for the duplicate sample at Station #50 - Area D failed to run the equivalent time of the primary sample and was voided.	
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					2015 Hydraulic Dredging in Upper Harbor Area H.	
8/26/2015	62	46/35d		22	19	34	84	13	21	35	NS	NS	32	NS	NS	1900	1.2								15					2015 Hydraulic Dredging in Upper Harbor - Area S.	
7/21/2015	44	48		10	44	20	37	19	27	16	NS	NS	11/15d	NS	NS	7.2								11					2015 Pre-Dredge Samples for the Upper Harbor. Location #56 - Acushnet Park can no longer be used as a sampling station due to frequent vandalism of pump and/or media.		
6/3/2015	45	38		0.97	17	4.2	8.6	1.2	5.6	13/14d	NS	NS	16	NS	NS	1.9	1.1							1.2	NS				2015 Off Season Data Collection.		
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				2015 Off Season Data Collection. Pump at Station #27 failed to run long enough to collect a viable sample so it was not analyzed.		
4/6/2015	NS	NS		NS	NS	NS	NS	5.1	NS	NS	NS	NS	8.5	NS	NS	NS	NS							2.2	NS				Lower Harbor CAD Cell Construction Phase II (Post Top of CAD Cell dredging); Pump at Station #50 failed to run the same duration as the duplicate so only the duplicate sample was analyzed. This sample is considered the primary sample so there is no duplicate for this post-dredge sampling event.		
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				Lower Harbor CAD Cell Construction Phase II (Top of CAD Cell dredging); Stations 24, 27, 42, and 43 were inaccessible for sampling due to obstructions from snow/ice piles.		
2/6/2015	NS	NS		NS	NS	NS	NS	0.14/0.17	NS	NS	NS	NS	0.099	NS	NS	NS	NS							0.15	NS				Lower Harbor CAD Cell Construction Phase II (Top of CAD Cell dredging); The dredge sample media was found broken at the dredge and therefore was not analyzed.		
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	0.05	0.12							0.230	2.48				Lower Harbor CAD Cell Construction Phase II (top of CAD Cell dredging).		
12/29/2014	NS	NS		NS	NS	NS	NS	0.98	NS	NS	NS	NS	0.5	NS	NS	NS	NS							1.6/1.9d	3.5				Rapid TAT data. Lower Harbor CAD Cell Construction Phase II (top of CAD Cell dredging).		
12/18/2014	NS	NS		NS	NS	NS	NS	1.0	NS	NS	NS	NS	0.49	NS	NS	NS	NS							2.3	3.5/4.6d				Rapid turn around time (TAT) data. Lower Harbor CAD Cell Construction Phase II (top of CAD Cell dredging). Reissue of data due to error in laboratory calculations.		
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	1.6	0.51							1.1	4.7				Lower Harbor CAD Cell Construction Phase II (top of CAD Cell dredging). Off-season data collection included on January 5, 2015 as received from laboratory.		
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							15.7/5.19d	NS				2014 Post-Dredge Operation for Upper Harbor. Pre-Dredge sampling for the Lower Harbor CAD Cell Phase II (#44, 50 and 64).		
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				2014 Hydraulic Dredging in Areas L & S.		
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					2014 Hydraulic Dredging in Area R-east.		
8/5/2014	75	72		8	61	17	37	17	42.2	55.1	NS	NS	23.4	NS	NS	260	NS	4.9						8.45					2014 Hydraulic Dredging in		

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Notes:

d = field duplicate result

NA = sample collected but not analyzed

ng/m^3 = nanograms per cubic meter of air

NS = not sampled

PCB = polychlorinated biphenyl

ND = no detections (non-detected)

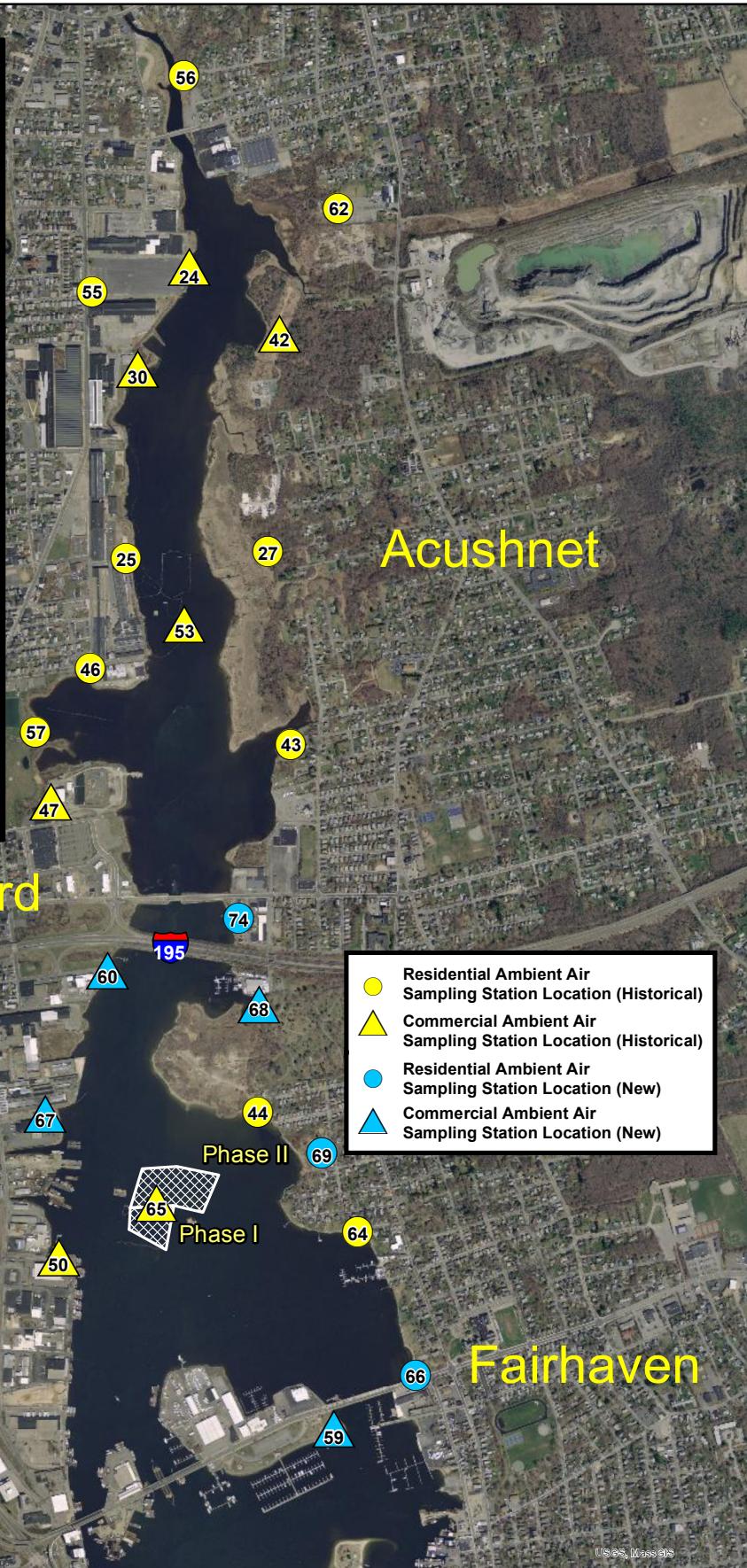
Sample station with gray

P = Pending results

¹24-hour time-weighted average does not apply to Stations #53 and #65 (dredge/barge) which are on a 8-hr collection period

of 4

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
69	North Street
74	Beach Street



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: 8/8/2018

Figure