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USEPA New England Region, Office of Site Remediation and Restoration

New Bedford Harbor
7.2
Doc# 25328

Memorandum

Date: September 26, 2001

From: David Dickerson, Co Remedial Project Manager DDD
New Bedford Harbor Superfund Site

To: File

Subj: October 2000 through July 2001 Air Monitoring Results at Sawyer Street

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Attached are ten monthly data reports showing the air monitoring results for four stations at Sawyer Street (02, 03, 06 and 17) for the period October 2001 through July 2001.

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read Instructions on reverse side prior to initiating this form)

DATE	TRANSMITTAL NO:
5/22/01	02.03.02 -003- 001

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS(This section will be initiated by the Contractor)

TO:	FROM:	CONTRACT NO:	CHECK ONE:
US Army Corps of Engineers 103 Sawyer Street New Bedford,MA 02746 Attention:	Foster Wheeler Environmental Corp. 103 Sawyer Street New Bedford, MA 02746	DACW33-94-D-0002	X THIS IS A NEW TRANSMITTAL ___ THIS IS A RESUBMITTAL OF TRANSMITTAL ___

SPECIFICATION SECTION: (Cover only one section with each transmittal) N/A

PROJECT TITLE AND LOCATION: NBH T.O.#23 - WTP O&M/Site Facil

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type, size, model number, etc.) b.	MFG. OR CONTR. CAT CURVE DRAWING OR BROCHURE NO. (See instruction No. 8) c.	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT SPEC.PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See instruction No. 6) h.	FOR CE USE CODE i.
	Title: Monthly Air Data (10/4/00)	FWENC	2	—	—	FIO		F
	CF FWENC w/ Report RHunt w/o Report L Simeone w/o Report HBRO w/ Report							

REMARKS

Distribution:

M. BEAUDOIN (2)
J. KRAYCIK/R. FRANCISCO- Site (1)
G. CERBONE- Boston File (1)

H.Ferro

File: 8.1

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I certify that the above submitted items have been reviewed in detail and correct and in strict conformance with the contract drawings and specifications except as otherwise stated.

J. Kraycik [signature] 05-22-01

NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by Item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE
	Pauline Beaudoin PE Resident Engineer COR	08/14/01

ENG FORM 4025, MAY 91 (ER 415-1-10) EDITION OF AUG 89 IS OBSOLETE (Proponent: CEMP-CE)

FOSTER WHEELER ENVIRONMENTAL CORPORATION

NEW BEDFORD HARBOR AIR SAMPLES
DATA REVIEW

Project:	NE TERC – T017	Prepared by: Heather Ferro	Date: 3/28/01
Source:	AXYS Analytical Services		
Analysis:	Total PCB Homologues	Reviewed by:_____	Date:_____
SDG:	L2783 (1-2) L2796 (1-2) L2822 (1-2)	Reviewed by:_____	Date:_____

Total Homologues:

L2783(1-2): 09190028, 09190028B

L2796(1-2): 09250028, 09250028B

L2822(1-7): 10040002, (10040003, 10040003D, field duplicates), 10040006,10040009,10040017, 10040002B

A data review was performed on the organic analytical data for air samples collected by The Kevric Company from the New Bedford Harbor site. The samples were extracted and analyzed using EPA Method 1668.

The data review is based on the following parameters:

* Sample Preservation and Technical Holding times
* Method Blank Analysis
Field and Equipment Blanks
* Surrogate Recovery
Field Duplicates
Initial Calibration
Continuing Calibration
* Retention Time Check
* Internal Standard Recovery
* Alternate Standard Recovery

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* - All criteria were met for this parameter
NA – Not applicable to this SDG

Blank Contamination

The blank action level is the concentration of contamination for any compound in the blank, multiplied by five (5). If a positive result for that compound in a sample is less than the blank action level then it should be considered non-detect. If a concentration for that compound in the sample is greater than the blank action level then it is not affected.

See attached worksheet for blank contamination/action table.

Field Duplicate RPD

See attached worksheet for field duplicate RPD exceedences.

Initial Calibration

The internal standards PentaCB #111L and HeptaCB #178L have ion abundance ratios less than the required QC limits. Each of the samples in this data package (all three SDGs) are associated with this ICAL, but neither 111L or 178L were used to quantitate the samples. The other ICALs in the data package as well as the CCAL analyses are within criteria. This has no impact on the reported data.

Continuing Calibration

TriCB #37 had a concentration in the CCAL that was slightly over (65.6ng) the allowable concentration range of 35.0 – 65.0ng. This may mean that triCB results in the associated samples (09190028, 09190028B, 09250028, 09250028B, 10040017) are over estimated because #37 is used to quantitate the associated samples. Overall it does not appear to have a significant impact on the reported data.

Summary:

The data in this SDG are acceptable for project use. There is some low concentration field blank contamination that caused two previously positive octaCB results to be qualified as non-detect. A slight ICAL exceedence occurred for two external standards, but it does not impact the data. A CCAL exceedence of IS #37 occurred which may mean associated results are overestimated. Unacceptable field duplicate results from 10/4/00 are the result of a sampler pump problem. Results from the original sample are low because the sample pump turned off too early to obtain an accurate reading. Data from the duplicate sample are acceptable for use in evaluating concentrations relative to overall project action levels, but should be disregarded for summary information (results from station 03 should not be used for average or maximum concentration calculations).

Sample Event Date	10/4/2000	**Sample Number**	10040002	**Prevailing Wind Direction**	SSW
Lab Sample ID	L2822-1	**Preliminary Flow (slpm)**	225	**Average Temperature (°F)**	64.2
Station ID/Name	02/E Side of CDF	**Run Time (hours)**	26.31	**Average Solar Radiation (w·m²)**	177
Sample Type	Normal Sample	**Sample Volume (m³)**	355.185	**Total Precipitation (inches H_2O)**	0.11

Analyte	Detsym	Detection Limit (ng)	Mass (ng)	EMPC*	QFlag	Concentration (ng/m³)	TEF	TEQ† (ng/m³)
PCB Homologue Groups								
Total MonoCB	=	0.119	57.5	—		0.162		
Total DiCB	=	0.937	2380	—		6.7		
Total TriCB	=	0.573	6180	—		17.4		
Total TetraCB	=	0.634	3220	—		9.07		
Total PentaCB	=	0.274	1030	—		2.9		
Total HexaCB	=	0.184	203	—		0.572		
Total HeptaCB	=	0.409	12.6	—		0.0355		
Total OctaCB	=	0.156	0.554	—		0.00156		
Total NonaCB	<	0.7	—	—	U	0.001		
DecaCB (#209)	<	0.23	—	—	R	—		
Homologue Groups Sum			**13100**			**37**		

* M indicates all or a portion of the result has a calculated EMPC value.
† TEQ is the product of the concentration and its TEF value.

Sample Event Date	10/4/2000	**Sample Number**	10040002B	**Prevailing Wind Direction**	---
Lab Sample ID	I.2822-7	**Preliminary Flow (slpm)**	0	**Average Temperature (°F)**	---
Station ID/Name	02/E Side of CDF	**Run Time (hours)**	0	**Average Solar Radiation (w·m²)**	---
Sample Type	Field Blank	**Sample Volume (m³)**	0	**Total Precipitation (inches H_2O)**	---

Analyte	Detsym	Detection Limit (ng)	Mass (ng)	EMPC*	QFlag	Concentration ng	TEF	TEQ† ng
PCB Homologue Groups								
Total MonoCB	<	0.0398	—	—	U	—		
Total DiCB	<	1.21	—	—	U	—		
Total TriCB	=	0.0601	0.303	—		---		
Total TetraCB	=	0.0759	0.215	—		—		
Total PentaCB	=	0.0984	0.659	—		—		
Total HexaCB	<	0.0721	—	—	U	—		
Total HeptaCB	<	0.217	—	—	U	—		
Total OctaCB	<	0.136	—	—	U	—		
Total NonaCB	<	0.486	—	—	U	—		
DecaCB (#209)	<	0.0808	—	—	R	---		
Homologue Groups Sum			**2.26**					

* M indicates all or a portion of the result has a calculated EMPC value.
† TEQ is the product of the concentration and its TEF value.

Sample Event Date	10/4/2000	**Sample Number**	10040003	**Prevailing Wind Direction**	SSW
Lab Sample ID	L2822-2	**Preliminary Flow (slpm)**	225	**Average Temperature (°F)**	64
Station ID/Name	03/N Side of CDF	**Run Time (hours)**	24	**Average Solar Radiation (w•m²)**	166
Sample Type	Normal Sample	**Sample Volume (m³)**	324	**Total Precipitation (inches H_2O)**	0.11

Analyte	Detsym	Detection Limit (ng)	Mass (ng)	EMPC*	QFlag	Concentration (ng/m³)	TEF	TEQ† (ng/m³)
PCB Homologue Groups								
Total MonoCB	=	0.0917	47.3	—		0.146		
Total DiCB	=	1.01	1190	—		3.67		
Total TriCB	=	0.401	2200	—		6.8		
Total TetraCB	=	0.398	918	—		2.83		
Total PentaCB	=	0.106	253	—		0.781		
Total HexaCB	=	0.115	40.3	—		0.124		
Total HeptaCB	=	0.285	0.662	—		0.00204		
Total OctaCB	<	0.121	—	—	U	0.0002		
Total NonaCB	<	0.47	—	—	U	0.0007		
DecaCB (#209)	<	0.18	—	—	R	—		
Homologue Groups Sum			**4650**			**14**		

* M indicates all or a portion of the result has a calculated EMPC value.
† TEQ is the product of the concentration and its TEF value.

Sample Event Date	10/4/2000	**Sample Number**	10040003D	**Prevailing Wind Direction**	SSW
Lab Sample ID	L2822-3	**Preliminary Flow (slpm)**	225	**Average Temperature (°F)**	64.1
Station ID/Name	03D/N Side of CDF Dup	**Run Time (hours)**	24.67	**Average Solar Radiation (w·m²)**	166
Sample Type	Field Duplicate	**Sample Volume (m³)**	333.045	**Total Precipitation (inches H_2O)**	0.11

Analyte	Detsym	Detection Limit (ng)	Mass (ng)	EMPC*	QFlag	Concentration (ng/m³)	TEF	TEQ† (ng/m³)
PCB Homologue Groups								
Total MonoCB	=	0.14	147	—		0.441		
Total DiCB	=	0.805	3830	—		11.5		
Total TriCB	=	1	9220	—		27.7		
Total TetraCB	=	0.738	4010	—		12		
Total PentaCB	=	0.296	1000	—		3		
Total HexaCB	=	0.251	181	—		0.543		
Total HeptaCB	=	0.448	10.2	—		0.0306		
Total OctaCB	<	0.177	—	—	U	0.0003		
Total NonaCB	<	0.671	—	—	U	0.001		
DecaCB (#209)	<	0.203	—	—	R	—		
Homologue Groups Sum			**18400**			**55**		

* M indicates all or a portion of the result has a calculated EMPC value.
† TEQ is the product of the concentration and its TEF value.

Sample Event Date	10/4/2000	**Sample Number**	10040006	**Prevailing Wind Direction**	SSW
Lab Sample ID	L2822-4	**Preliminary Flow (slpm)**	225	**Average Temperature (°F)**	64.2
Station ID/Name	06/W Side of CDF	**Run Time (hours)**	26.64	**Average Solar Radiation (w•m²)**	177
Sample Type	Normal Sample	**Sample Volume (m³)**	359.64	**Total Precipitation (inches H_2O)**	0.11

Analyte	Detsym	Detection Limit (ng)	Mass (ng)	EMPC*	QFlag	Concentration (ng/m³)	TEF	TEQ† (ng/m³)
PCB Homologue Groups								
Total MonoCB	=	0.121	56.1	—		0.156		
Total DiCB	=	1.19	2200	—		6.1		
Total TriCB	=	0.487	4380	—		12.2		
Total TetraCB	=	0.418	2310	—		6.42		
Total PentaCB	=	0.284	1030	—		2.86		
Total HexaCB	=	0.138	246	—		0.684		
Total HeptaCB	=	0.398	16.8	—		0.0467		
Total OctaCB	=	0.123	0.477	—		0.00133		
Total NonaCB	<	0.544	—	—	U	0.0008		
DecaCB (#209)	<	0.155	—	—	R	—		
Homologue Groups Sum			**10200**			**28**		

* M indicates all or a portion of the result has a calculated EMPC value.
† TEQ is the product of the concentration and its TEF value.

Sample Event Date	10/4/2000	**Sample Number**	10040009	**Prevailing Wind Direction**	SSW
Lab Sample ID	L2822-5	**Preliminary Flow (slpm)**	225	**Average Temperature (°F)**	64
Station ID/Name	09/Coffin Avenue	**Run Time (hours)**	24.72	**Average Solar Radiation (w•m²)**	166
Sample Type	Normal Sample	**Sample Volume (m³)**	333.72	**Total Precipitation (inches H_2O)**	0.11

Analyte	Detsym	Detection Limit (ng)	Mass (ng)	EMPC*	QFlag	Concentration (ng/m³)	TEF	TEQ† (ng/m³)
PCB Homologue Groups								
Total MonoCB	=	0.0746	21	—		0.063		
Total DiCB	=	0.712	1190	—		3.57		
Total TriCB	=	0.457	3810	—		11.4		
Total TetraCB	=	0.439	1850	—		5.54		
Total PentaCB	=	0.175	495	—		1.48		
Total HexaCB	=	0.147	105	—		0.315		
Total HeptaCB	=	0.422	8.91	—		0.0267		
Total OctaCB	=	0.127	0.12	—		0.00036		
Total NonaCB	<	0.58	—	—	U	0.0009		
DecaCB (#209)	<	0.169	—	—	R	—		
Homologue Groups Sum			**7480**			**22**		

* M indicates all or a portion of the result has a calculated EMPC value.
† TEQ is the product of the concentration and its TEF value.

Sample Event Date	10/4/2000	**Sample Number**	10040017	**Prevailing Wind Direction**	SSW
Lab Sample ID	L2822-6	**Preliminary Flow (slpm)**	225	**Average Temperature (°F)**	64.2
Station ID/Name	17/S Side of CDF	**Run Time (hours)**	26.52	**Average Solar Radiation (w•m²)**	177
Sample Type	Normal Sample	**Sample Volume (m³)**	358.02	**Total Precipitation (inches H_2O)**	0.11

Analyte	Detsym	Detection Limit (ng)	Mass (ng)	EMPC*	QFlag	Concentration (ng/m³)	TEF	TEQ† (ng/m³)
PCB Homologue Groups								
Total MonoCB	=	0.0891	51	—		0.14		
Total DiCB	=	7.73	2450	—		6.84		
Total TriCB	=	0.463	5760	—		16.1		
Total TetraCB	=	0.451	2780	—		7.76		
Total PentaCB	=	0.316	1100	—		3.1		
Total HexaCB	=	0.162	190	—		0.53		
Total HeptaCB	=	0.339	13	—		0.036		
Total OctaCB	=	0.0873	0.276	—		0.000771		
Total NonaCB	<	0.372	—	—	U	0.0005		
DecaCB (#209)	<	0.109	—	—	R	—		
Homologue Groups Sum			**12300**			**34**		

* M indicates all or a portion of the result has a calculated EMPC value.
† TEQ is the product of the concentration and its TEF value.

New Bedford Harbor

Meteorological Data

Hourly Summary
4 Oct - 5 Oct, 2000 (0900 EST - 1200 EST)

Date	Time	Wind Speed	Wind Direction		STD	Temp. (10m)	Temp. (2m)	Delta Temp	Solar Radiation	Batt.	Barr. Press.	Relative Humidity	Precip.
Mo. Day	EST	mph	deg	compass	deg	°F	°F	°F	w*m^2	vdc	in. Hg	%RH	in. H_2O
10/04	900	3.2	358.26	N	20.6	64.68	63.29	1.39	232.22	13.56	29	74	0
10/04	1000	5.13	158.77	SSE	11.35	68.33	67.7	0.64	407.76	13.46	29	68	0
10/04	1100	6.21	163.95	SSE	8.06	70.63	70.04	0.59	559.73	13.39	29	67	0
10/04	1200	9.09	170.29	S	9.55	72.16	72.26	-0.11	640.17	13.35	29	64	0
10/04	1300	9.79	194.17	SSW	16.42	73.83	74.76	-0.93	660.49	13.33	29	61	0
10/04	1400	10.66	189.67	S	16.63	72.88	73.69	-0.81	577.18	13.34	29	62	0
10/04	1500	9.24	220.01	SW	21.17	71.51	71.83	-0.31	267.79	13.36	29	61	0
10/04	1600	9.52	197.12	SSW	16.78	71.36	72.07	-0.71	393.17	13.38	29	62	0
10/04	1700	10.3	181.82	S	12.64	68.49	68.72	-0.23	197.12	13.39	29	68	0
10/04	1800	10.92	194.16	SSW	12.39	66.42	66.24	0.19	55.5	13.44	29	73	0
10/04	1900	8.64	197.87	SSW	15.48	65.92	65.6	0.32	1.65	13.47	29	77	0
10/04	2000	6.34	334.2	NNW	16.79	65.03	64.62	0.41	0.08	13.49	29	80	0.02
10/04	2100	3.49	291.73	WNW	31.59	63.32	62.64	0.68	0.04	13.53	29	83	0.09
10/04	2200	1.57	214.08	SW	20.38	64.04	63.21	0.82	0	13.56	29	81	0
10/04	2300	2.84	345.16	NNW	30.93	63.27	62.4	0.87	-0.01	13.58	29	84	0
10/05	2400	3.63	7.91	N	11.62	62.04	61.44	0.6	-0.02	13.58	29	87	0
10/05	100	1.86	14.82	NNE	31.05	63.56	62.94	0.62	-0.02	13.58	29	87	0
10/05	200	4.49	324.83	NW	16.02	63.1	62.56	0.54	-0.02	13.57	29	86	0
10/05	300	7.16	2.06	N	14.63	60.97	60.46	0.52	0.01	13.59	29	87	0
10/05	400	7.7	8.58	N	12.91	59.32	58.83	0.48	0	13.59	29	88	0
10/05	500	6.54	3.49	N	13.06	58.37	57.78	0.58	0	13.61	29	87	0
10/05	600	4.92	357.77	N	16.99	57.79	57.25	0.54	-0.01	13.63	29	87	0
10/05	700	4.9	353.35	N	16.21	56.89	56.58	0.31	0.44	13.64	30	86	0
10/05	800	5.28	24.52	NNE	12.31	56.96	56.37	0.59	17.34	13.65	30	87	0
10/05	900	6.91	30.36	NNE	8.95	57.82	57.43	0.39	124.07	13.65	30	85	0
10/05	1000	9.14	22.12	NNE	9.56	60.15	59.99	0.17	326.87	13.6	30	82	0
10/05	1100	9.29	51.4	NE	11.97	61.9	62.34	-0.44	328.78	13.55	30	79	0
10/05	1200	7.61	64.32	ENE	12.32	62.01	62.27	-0.26	154.15	13.55	30	79	0
Average		6.66			16.01	64.38	64.12	0.27	176.59	13.52	29.21	77.57	0
Minimum		1.57			8.06	56.89	56.37	-0.93	-0.02	13.33	29	61	0
Maximum		10.92			31.59	73.83	74.76	1.39	660.49	13.65	30	88	0.09
Total													0.11

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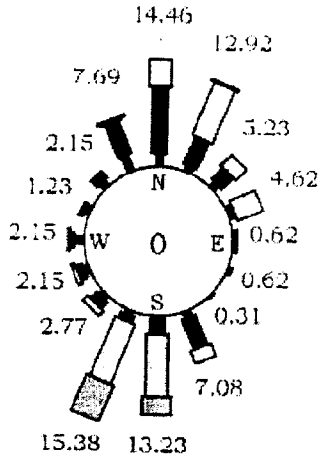
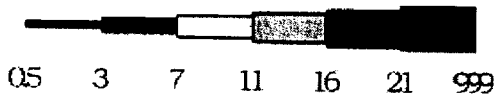
New Bedford Harbor

4 Oct - 5 Oct, 2000 (0900 EST - 1200 EST)





Scale (mph)

Wind Speed (mph) Percent Occurance

	0.5-3	3-7	7-11	11-16	16-21	>21
N	1.85	8.92	3.69	0	0	0
NNE	0.92	4	7.69	0.31	0	0
NE	0.92	2.15	2.15	0	0	0
ENE	0.31	0.62	3.69	0	0	0
E	0.31	0	0.31	0	0	0
ESE	0.62	0	0	0	0	0
SE	0.31	0	0	0	0	0
SSE	0.92	4.31	1.85	0	0	0

Wind Speed (mph) Percent Occurance

	0.5-3	3-7	7-11	11-16	16-21	>21
S	0.31	2.15	8.31	2.46	0	0
SSW	0.62	0.92	8.62	5.23	0	0
SW	0.62	1.23	0.92	0	0	0
WSW	0.62	0.92	0.62	0	0	0
W	1.23	0.62	0.31	0	0	0
WNW	0.62	0.62	0	0	0	0
NW	0.92	1.23	0	0	0	0
NNW	2.46	4.62	0.31	0.31	0	0

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on reverse side prior to initiating this form)

DATE: 5/22/01

TRANSMITTAL NO: 02.03.02 -004- 001

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS (This section will be initiated by the Contractor)

TO:
US Army Corps of Engineers
103 Sawyer Street
New Bedford,MA 02746
Attention:

FROM:
Foster Wheeler Environmental Corp.
103 Sawyer Street
New Bedford, MA 02746

CONTRACT NO: DACW33-94-D-0002

CHECK ONE:
X THIS IS A NEW TRANSMITTAL
___ THIS IS A RESUBMITTAL OF TRANSMITTAL ___

SPECIFICATION SECTION: (Cover only one section with each transmittal) N/A

PROJECT TITLE AND LOCATION: NBH T.O.#23 - WTP O&M/Site Facil

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type, size, model number, etc.) b.	MFG. OR CONTR. CAT. CURVE DRAWING OR BROCHURE NO. (See instruction No. 8) c.	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT SPEC.PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See instruction No. 6) h.	FOR CE USE CODE i.
	Title: Monthly Air Data (11/15/00)	FWENC	2	—	—	FIO		F
	CF: FWENC w/ Report							
	RHunt w/o Report							
	RSimeone w/o Report							
	NBRO w/ Report							

REMARKS

Distribution:

M. BEAUDOIN (2)
J. KRAYCIK/R. FRANCISCO- Site (1)
G. CERBONE- Boston File (1)
H. Ferro

File: 8.1

NBH SITE
AUG 15 2001
RECEIVED

I certify that the above submitted items have been reviewed in detail and correct and in strict conformance with the contract drawings and specifications except as otherwise stated.

J. Kraycik / [signature] 05-22-01
NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by Item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY
[signature] Pe
Resident Engineer COR

DATE 08/14/01

ENG FORM 4025, MAY 91 (ER 415-1-10) EDITION OF AUG 89 IS OBSOLETE

FOSTER WHEELER ENVIRONMENTAL CORPORATION

NEW BEDFORD HARBOR AIR SAMPLES
DATA REVIEW

Project:	NE TERC – T017	Prepared by: Heather Ferro	Date: 3/23/01
Source:	AXYS Analytical Services		
Analysis:	Total PCB Homologues	Reviewed by:_____	Date:_____
SDG:	L2972 (1-6)		
		Reviewed by:_____	Date:_____

Total Homologues: 11150002, 11150003, 11150003D, 11150006, 11150017, 11150003B

A data review was performed on the organic analytical data for air samples collected by The Kevric Company from the New Bedford Harbor site. The samples were extracted and analyzed using EPA Method 1668.

The data review is based on the following parameters:

* Sample Preservation and Technical Holding times
Method Blank Analysis
Field and Equipment Blanks
* Surrogate Recovery
Field Duplicates
Initial Calibration
* Continuing Calibration
* Retention Time Check
* Internal Standard Recovery

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* - All criteria were met for this parameter
NA – Not applicable to this SDG

Blank Contamination

Note: The blank action level is the concentration of contamination for any compound in the blank, multiplied by five (5). If a positive result for that compound in a sample is less than the blank action level then it should be considered non-detect. If a concentration for that compound in the sample is greater than the blank action level then it is not affected.

The maximum mass detected in the field blank and laboratory blanks and the calculated blank action level (5x the maximum mass) are:

Parameter	Mass Detected(ng)	Blank Action Level (ng/l)
MonoCB	1.31	6.55
DiCB	42.2	211.0
TriCB	58.1	290.5
TetraCB	32.5	162.5

Blank Action Table (continued):

Parameter	Mass Detected(ng)	Blank Action Level (ng)
PentaCB	12.3	61.5
HexaCB	2.16	10.8
HeptaCB	0.141	0.705
OctaCB	0.013	0.065

Samples 11150002, 11150003, and 11150003D have results for each of the above homologue groups that are greater than the blank action level. They are not affected by the blank contamination. Sample 11150006 has results for diCB and triCB that are less than the action level and they should be considered non-detect. The octa homologue group in that sample was originally reported as non-detect and is not affected. In sample 11150017 the octa homologue group had a result less than the action level and should therefore, be considered non-detect.

Field Duplicate

The following table summarizes the field duplicate data that did not meet the <50% criteria:

Homologue Group	11150003 (ng)	11150003D (ng)	RPD (%)
HeptaCB	1.49	3.57	82.2
OctaCB	0.067	0.299	127
Total PCB Homologues	2140	2280	6.3

The results for the homologue groups in the above table in both the parent and duplicate sample may be considered estimated due to the field blank exceedences. The total PCB homologue group results compare well and these results are well above the 50 ppm clean up goal, this exceedence does not have a significant impact on the reported data.

Initial Calibration

The compounds pentaCB #111L and heptaCB #178L have ion abundance ratios less than the required QC limits during one ICAL run. These compounds are not used to quantitate the samples. This exceedence does not have a significant impact on the reported data.

Summary:

The data in this SDG are acceptable for project use. There is some field and equipment blank contamination, but it does not have an affect on the reported data. A slight ICAL exceedence occurred, but it is minor and does not impact the data

Sample Event Date	11/15/2000	**Sample Number**	11150002	**Prevailing Wind Direction**	W
Lab Sample ID	L2972-1	**Preliminary Flow (slpm)**	225	**Average Temperature (°F)**	42.4
Station ID/Name	02/E Side of CDF	**Run Time (hours)**	23.37	**Average Solar Radiation (w·m²)**	—
Sample Type	Normal Sample	**Sample Volume (m³)**	315.495	**Total Precipitation (inches H_2O)**	—

Analyte	Detsym	Detection Limit (ng)	Mass (ng)	EMPC*	QFlag	Concentration (ng/m³)	TEF	TEQ† (ng/m³)
PCB Homologue Groups								
Total MonoCB	=	0.0151	12.5	—		0.0396		
Total DiCB	=	0.127	372	—		1.18		
Total TriCB	=	0.0527	799	—		2.53		
Total TetraCB	=	0.0764	377	—		1.19		
Total PentaCB	=	0.404	110	—		0.35		
Total HexaCB	=	0.0438	21.1	—		0.0669		
Total HeptaCB	=	0.00572	1.67	—		0.00529		
Total OctaCB	=	0.00483	0.109	—		0.000345		
Total NonaCB	<	0.0402	—	—	U	0.00006		
DecaCB (#209)	<	0.0299	—	—	R	—		
Homologue Groups Sum			**1690**			**5.4**		

* M indicates all or a portion of the result has a calculated EMPC value.
† TEQ is the product of the concentration and its TEF value.

Sample Event Date	11/15/2000	**Sample Number**	11150003	**Prevailing Wind Direction**	W
Lab Sample ID	L2972-2	**Preliminary Flow (slpm)**	225	**Average Temperature (°F)**	42.4
Station ID/Name	03/N Side of CDF	**Run Time (hours)**	23.12	**Average Solar Radiation (w·m²)**	—
Sample Type	Normal Sample	**Sample Volume (m³)**	312.12	**Total Precipitation (inches H_2O)**	—

Analyte	Detsym	Detection Limit (ng)	Mass (ng)	EMPC*	QFlag	Concentration (ng/m³)	TEF	TEQ† (ng/m³)
PCB Homologue Groups								
Total MonoCB	=	0.0192	17	—		0.054		
Total DiCB	=	0.134	482	—		1.54		
Total TriCB	=	0.0748	1030	—		3.3		
Total TetraCB	=	0.0903	463	—		1.48		
Total PentaCB	=	0.331	124	—		0.397		
Total HexaCB	=	0.0419	23.8	—		0.0763		
Total HeptaCB	=	0.0069	1.49	—		0.00477		
Total OctaCB	=	0.00681	0.0666	—		0.000213		
Total NonaCB	<	0.039	—	—	U	0.00006		
DecaCB (#209)	<	0.0338	—	—	R	—		
Homologue Groups Sum			**2140**			**6.9**		

* M indicates all or a portion of the result has a calculated EMPC value.
† TEQ is the product of the concentration and its TEF value.

Sample Event Date	11/15/2000	**Sample Number**	11150003B	**Prevailing Wind Direction**	—
Lab Sample ID	L2972-6	**Preliminary Flow (slpm)**	0	**Average Temperature (°F)**	—
Station ID/Name	03/N Side of CDF	**Run Time (hours)**	0	**Average Solar Radiation (w·m²)**	—
Sample Type	Field Blank	**Sample Volume (m³)**	0	**Total Precipitation (inches H_2O)**	—

Analyte	Detsym	Detection Limit (ng)	Mass (ng)	EMPC*	QFlag	Concentration ng	TEF	TEQ† ng
PCB Homologue Groups								
Total MonoCB	=	0.0118	1.31	—		—		
Total DiCB	=	0.141	42.2	—		—		
Total TriCB	=	0.0186	58.1	—		—		
Total TetraCB	=	0.0181	32.5	—		—		
Total PentaCB	=	0.31	12.3	—		—		
Total HexaCB	=	0.0386	2.16	—		—		
Total HeptaCB	=	0.0066	0.141	—		—		
Total OctaCB	=	0.00674	0.0133	—		—		
Total NonaCB	<	0.0318	—	—	U	—		
DecaCB (#209)	<	0.0121	—	—	R	—		
Homologue Groups Sum			**149**					

* M indicates all or a portion of the result has a calculated EMPC value.
† TEQ is the product of the concentration and its TEF value.

Sample Event Date	11/15/2000	**Sample Number**	11150003D	**Prevailing Wind Direction**	W
Lab Sample ID	L2972-3	**Preliminary Flow (slpm)**	225	**Average Temperature (°F)**	42.4
Station ID/Name	03D/N Side of CDF Dup	**Run Time (hours)**	23.13	**Average Solar Radiation (w·m²)**	—
Sample Type	Field Duplicate	**Sample Volume (m³)**	312.255	**Total Precipitation (inches H_2O)**	—

Analyte	Detsym	Detection Limit (ng)	Mass (ng)	EMPC*	QFlag	Concentration (ng/m³)	TEF	TEQ† (ng/m³)
PCB Homologue Groups								
Total MonoCB	=	0.0181	15.3	—		0.0490		
Total DiCB	=	0.12	480	—		1.5		
Total TriCB	=	0.0601	1120	—		3.59		
Total TetraCB	=	0.1	496	—		1.59		
Total PentaCB	=	0.329	137	—		0.439		
Total HexaCB	=	0.0504	32.8	—		0.105		
Total HeptaCB	=	0.006	3.57	—		0.0114		
Total OctaCB	=	0.00562	0.299	—		0.000958		
Total NonaCB	<	0.0332	—	—	U	0.00005		
DecaCB (#209)	<	0.0209	—	—	R	—		
Homologue Groups Sum			**2280**			**7.3**		

* M indicates all or a portion of the result has a calculated EMPC value.
† TEQ is the product of the concentration and its TEF value.

Sample Event Date	11/15/2000	**Sample Number**	11150006	**Prevailing Wind Direction**	W
Lab Sample ID	L2972-4	**Preliminary Flow (slpm)**	225	**Average Temperature (°F)**	42.4
Station ID/Name	06/W Side of CDF	**Run Time (hours)**	23	**Average Solar Radiation (w·m²)**	—
Sample Type	Normal Sample	**Sample Volume (m³)**	310.5	**Total Precipitation (inches H_2O)**	—

Analyte	Detsym	Detection Limit (ng)	Mass (ng)	EMPC*	QFlag	Concentration (ng/m³)	TEF	TEQ† (ng/m³)
PCB Homologue Groups								
Total MonoCB	=	0.0153	8.11	—		0.0261		
Total DiCB	<	0.101	154	—	U	0.248		
Total TriCB	<	0.033	287	—	U	0.462		
Total TetraCB	=	0.0378	173	—		0.557		
Total PentaCB	=	0.312	99.2	—		0.319		
Total HexaCB	=	0.0335	28.9	—		0.0931		
Total HeptaCB	=	0.00553	3.69	—		0.0119		
Total OctaCB	<	0.00511	—	—	U	0.000008		
Total NonaCB	=	0.028	0.0452	—		0.000146		
DecaCB (#209)	=	0.022	0.0666	—	R	—		
Homologue Groups Sum			**533**			**1.7**		

* M indicates all or a portion of the result has a calculated EMPC value.
† TEQ is the product of the concentration and its TEF value.

Sample Event Date	11/15/2000	**Sample Number**	11150017	**Prevailing Wind Direction**	W
Lab Sample ID	L2972-5	**Preliminary Flow (slpm)**	225	**Average Temperature (°F)**	42.4
Station ID/Name	17/S Side of CDF	**Run Time (hours)**	23.54	**Average Solar Radiation (w•m²)**	—
Sample Type	Normal Sample	**Sample Volume (m³)**	317.79	**Total Precipitation (inches H_2O)**	—

Analyte	Detsym	Detection Limit (ng)	Mass (ng)	EMPC*	QFlag	Concentration (ng/m³)	TEF	TEQ† (ng/m³)
PCB Homologue Groups								
Total MonoCB	=	0.0156	14.8	—		0.0466		
Total DiCB	=	0.11	280	—		0.88		
Total TriCB	=	0.0383	371	—		1.17		
Total TetraCB	=	0.0439	167	—		0.526		
Total PentaCB	=	0.4	67.5	—		0.212		
Total HexaCB	=	0.045	20.6	—		0.0648		
Total HeptaCB	=	0.00767	2.65	—		0.00834		
Total OctaCB	<	0.00584	0.0628	—	U	0.0000988		
Total NonaCB	<	0.0369	—	—	U	0.00006		
DecaCB (#209)	=	0.0139	0.0436	—	R	—		
Homologue Groups Sum			**924**			**2.9**		

* M indicates all or a portion of the result has a calculated EMPC value.
† TEQ is the product of the concentration and its TEF value.

New Bedford Harbor

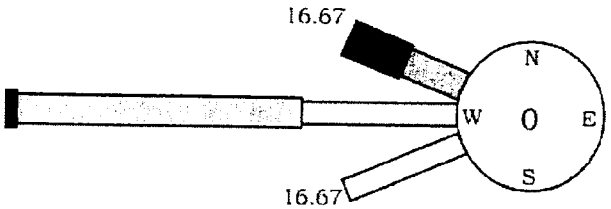
Meteorological Data

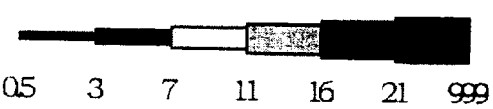
Hourly Summary
15 Nov - 16 Nov, 2000 (0900 EST - 0900 EST)

Date	Time	Wind Speed	Wind Direction		STD	Temp. (10m)	Temp. (2m)	Delta Temp	Solar Radiation	Batt.	Barr. Press.	Relative Humidity	Precip.
Mo. Day	EST	mph	deg	compass	deg	°F	°F	°F	w*m^2	vdc	in. Hg	%RH	in. H_2O
11/15	953	15	280	W	—	—	44	—	—	—	29.6	58	—
11/15	1053	13	270	W	—	—	46	—	—	—	29.58	54	—
11/15	1153	15	290	WNW	—	—	48	—	—	—	29.57	48	—
11/15	1253	20	290	WNW	—	—	48	—	—	—	29.57	44	—
11/15	1353	20	270	W	—	—	47	—	—	—	29.59	42	—
11/15	1453	16	290	WNW	—	—	47	—	—	—	29.61	41	—
11/15	1553	18	280	W	—	—	45	—	—	—	29.63	44	—
11/15	1653	15	290	WNW	—	—	44	—	—	—	29.65	47	—
11/15	1753	9	270	W	—	—	43	—	—	—	29.68	53	—
11/15	1853	15	270	W	—	—	43	—	—	—	29.7	53	—
11/15	1953	14	270	W	—	—	42	—	—	—	29.72	58	—
11/15	2053	13	260	W	—	—	42	—	—	—	29.73	58	—
11/15	2153	13	270	W	—	—	42	—	—	—	29.75	58	—
11/15	2253	10	270	W	—	—	42	—	—	—	29.77	60	—
11/15	2353	12	260	W	—	—	41	—	—	—	29.78	62	—
11/16	53	10	260	W	—	—	40	—	—	—	29.79	63	—
11/16	153	9	260	W	—	—	40	—	—	—	29.8	63	—
11/16	253	10	240	WSW	—	—	38	—	—	—	29.8	65	—
11/16	353	9	260	W	—	—	39	—	—	—	29.81	65	—
11/16	453	10	250	WSW	—	—	38	—	—	—	29.82	68	—
11/16	553	9	250	WSW	—	—	38	—	—	—	29.83	68	—
11/16	653	9	250	WSW	—	—	37	—	—	—	29.85	70	—
11/16	753	14	260	W	—	—	40	—	—	—	29.86	65	—
11/16	853	12	270	W	—	—	43	—	—	—	29.87	58	—
Average		12.92			—	—	42.38	—	—	—	29.72	56.88	—
Minimum		9			—	—	37	—	—	—	29.57	41	—
Maximum		20			—	—	48	—	—	—	29.87	70	—
Total													0

New Bedford Harbor

15 Nov - 16 Nov, 2000 (0900 EST - 0900 EST)





Scale (mph)

Wind Speed (mph) Percent Occurance

	0.5-3	3-7	7-11	11-16	16-21	>21
N	0	0	0	0	0	0
NNE	0	0	0	0	0	0
NE	0	0	0	0	0	0
ENE	0	0	0	0	0	0
E	0	0	0	0	0	0
ESE	0	0	0	0	0	0
SE	0	0	0	0	0	0
SSE	0	0	0	0	0	0

Wind Speed (mph) Percent Occurance

	0.5-3	3-7	7-11	11-16	16-21	>21
S	0	0	0	0	0	0
SSW	0	0	0	0	0	0
SW	0	0	0	0	0	0
WSW	0	0	16.67	0	0	0
W	0	0	20.83	37.5	8.33	0
WNW	0	0	0	8.33	8.33	0
NW	0	0	0	0	0	0
NNW	0	0	0	0	0	0

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on reverse side prior to initiating this form)

DATE: 5/22/01

TRANSMITTAL NO: 02.03.02 -005- 001

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS(This section will be initiated by the Contractor)

TO:
US Army Corps of Engineers
103 Sawyer Street
New Bedford,MA 02746
Attention:

FROM:
Foster Wheeler Environmental Corp.
103 Sawyer Street
New Bedford, MA 02746

CONTRACT NO: DACW33-94-D-0002

CHECK ONE:
X THIS IS A NEW TRANSMITTAL
____ THIS IS A RESUBMITTAL OF TRANSMITTAL ____

SPECIFICATION SECTION: (Cover only one section with each transmittal) N/A

PROJECT TITLE AND LOCATION: NBH T.O.#23 - WTP O&M/Site Facil

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type, size, model number, etc.) b	MFG. OR CONTR. CAT. CURVE DRAWING OR BROCHURE NO. (See instruction No. 8) c	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT SPEC.PARA. NO. e	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f	FOR CONTRACTOR USE CODE g	VARIATION (See instruction No. 6) h	FOR CE USE CODE i
	Title: Monthly Air Data (12/13/00)	FWENC	2	—	—	FIO		F
	CF: FWENC w/ Report R Hunt w/o Report R Simeone w/o Report NBRO w/ Report							

REMARKS

Distribution:

M. BEAUDOIN (2)
J. KRAYCIK/R. FRANCISCO- Site (1)
G. CERBONE- Boston File (1)

M. Ferro

File: 8.1

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I certify that the above submitted items have been reviewed in detail and correct and in strict conformance with the contract drawings and specifications except as otherwise stated.

J. Kraycik/1. [signature] 05-22-01
NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by Item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY: Melissa Sprague PE
Resident Engineer COR

DATE: 08/14/01

ENG FORM 4025, MAY 91 (ER 415-1-10) EDITION OF AUG 89 IS OBSOLETE

(Proponent: CEMP-CE)

FOSTER WHEELER ENVIRONMENTAL CORPORATION

NEW BEDFORD HARBOR AIR SAMPLES
DATA REVIEW

Project:	NE TERC – T017	Prepared by: Heather Ferro	Date: 3/23/01
Source:	AXYS Analytical Services		
Analysis:	Total PCB Homologues	Reviewed by:_____	Date:_____
SDG:	L3046 (1-5)		
		Reviewed by:_____	Date:_____

Total Homologues: 12130002, 12130003, 12130006, 12130017, 12130006B

A data review was performed on the organic analytical data for air samples collected by The Kevric Company from the New Bedford Harbor site. The samples were extracted and analyzed using EPA Method 1668.

The data review is based on the following parameters:

*	Sample Preservation and Technical Holding times
	Method Blank Analysis
	Field and Equipment Blanks
*	Surrogate Recovery
NA	Field Duplicates
	Initial Calibration
*	Continuing Calibration
*	Retention Time Check
*	Internal Standard Recovery
*	Recovery Standard

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* - All criteria were met for this parameter
NA – Not applicable to this SDG

Blank Contamination

The maximum mass detected in the field blank and laboratory blanks and the calculated blank action level (5x the maximum mass) are:

12130006B

Parameter	Mass Detected(ng)	Blank Action Level (ng/l)
DiCB	0.088	0.440
TriCB	0.405	2.025
TetraCB	0.444	2.220
PentaCB	0.317	1.585
HexaCB	0.104	0.520
HeptaCB	0.107	0.535
OctaCB	0.030	0.150

The positive results for octaCB in each of the samples in this data packages were less than the blank action level and should be considered non-detect. Each of the remaining homologue groups listed above had results greater than the blank action level in all samples. No action is necessary.

Note: The blank action level is the concentration of contamination for any compound in the blank, multiplied by five (5). If a positive result for that compound in a sample is less than the blank action level then it should be considered non-detect. If a concentration for that compound in the sample is greater than the blank action level then it is not affected.

Initial Calibration

The internal standard compounds pentaCB #111L and heptaCB #178L have ion abundance ratios less than the required QC limits during one ICAL run. The other ICALs in the data package as well as the CCAL analyses are within criteria. This does not appear to have an impact on the reported data.

Summary:

The data in this SDG are acceptable for project use. There is some minor field and method blank contamination that causes each of the previously reported positive octaCB results to be considered non-detect. A slight ICAL exceedence occurred, but it is minor and does not impact the data

Sample Event Date	12/13/2000	**Sample Number**	12130002	**Prevailing Wind Direction**	E
Lab Sample ID	L3046-1	**Preliminary Flow (slpm)**	225	**Average Temperature (°F)**	32.1
Station ID/Name	02/E Side of CDF	**Run Time (hours)**	24.08	**Average Solar Radiation (w·m²)**	90.6
Sample Type	Normal Sample	**Sample Volume (m³)**	325.08	**Total Precipitation (inches H_2O)**	0.57

Analyte	Detsym	Detection Limit (ng)	Mass (ng)	EMPC*	QFlag	Concentration (ng/m³)	TEF	TEQ† (ng/m³)
PCB Homologue Groups								
Total MonoCB	=	0.0222	30.7	—		0.0944		
Total DiCB	=	0.102	985	—		3.03		
Total TriCB	=	0.0368	2380	—		7.32		
Total TetraCB	=	0.0495	1030	—		3.17		
Total PentaCB	=	0.291	180	—		0.55		
Total HexaCB	=	0.024	25.2	—		0.0775		
Total HeptaCB	=	0.0208	1.26	—		0.00388		
Total OctaCB	<	0.0193	0.058	—	U	0.000089		
Total NonaCB	<	0.0437	—	—	U	0.00007		
DecaCB (#209)	<	0.026	—	—	R	—		
Homologue Groups Sum			**4630**			**14**		

* M indicates all or a portion of the result has a calculated EMPC value.
† TEQ is the product of the concentration and its TEF value.

Sample Event Date	12/13/2000	**Sample Number**	12130003	**Prevailing Wind Direction**	E
Lab Sample ID	L3046-2	**Preliminary Flow (slpm)**	225	**Average Temperature (°F)**	32.9
Station ID/Name	03/N Side of CDF	**Run Time (hours)**	23.91	**Average Solar Radiation (w•m²)**	85.3
Sample Type	Normal Sample	**Sample Volume (m³)**	322.785	**Total Precipitation (inches H_2O)**	0.88

Analyte	Detsym	Detection Limit (ng)	Mass (ng)	EMPC*	QFlag	Concentration (ng/m³)	TEF	TEQ† (ng/m³)
PCB Homologue Groups								
Total MonoCB	=	0.0163	32.3	—		0.100		
Total DiCB	=	0.0963	977	—		3.03		
Total TriCB	=	0.0498	2120	—		6.57		
Total TetraCB	=	0.0407	849	—		2.63		
Total PentaCB	=	0.314	157	—		0.486		
Total HexaCB	=	0.0287	24.9	—		0.0771		
Total HeptaCB	=	0.0222	1.53	—		0.00474		
Total OctaCB	<	0.0279	0.146	—	U	0.000226		
Total NonaCB	<	0.0438	—	—	U	0.00007		
DecaCB (#209)	<	0.0184	—	—	R	—		
Homologue Groups Sum			**4160**			**13**		

* M indicates all or a portion of the result has a calculated EMPC value.
† TEQ is the product of the concentration and its TEF value.

Sample Event Date	12/13/2000	**Sample Number**	12130006	**Prevailing Wind Direction**	E
Lab Sample ID	L3046-3	**Preliminary Flow (slpm)**	225	**Average Temperature (°F)**	32.9
Station ID/Name	06/W Side of CDF	**Run Time (hours)**	23.94	**Average Solar Radiation (w•m²)**	85.3
Sample Type	Normal Sample	**Sample Volume (m³)**	323.19	**Total Precipitation (inches H_2O)**	0.88

Analyte	Detsym	Detection Limit (ng)	Mass (ng)	EMPC*	QFlag	Concentration (ng/m³)	TEF	TEQ† (ng/m³)
PCB Homologue Groups								
Total MonoCB	=	0.0209	27.4	—		0.0848		
Total DiCB	=	0.0816	911	—		2.82		
Total TriCB	=	0.0392	2110	—		6.53		
Total TetraCB	=	0.0459	901	—		2.79		
Total PentaCB	=	0.172	191	—		0.591		
Total HexaCB	=	0.0247	31.6	—		0.0978		
Total HeptaCB	=	0.0181	2.04	—		0.00631		
Total OctaCB	<	0.022	0.124	—	U	0.000192		
Total NonaCB	<	0.038	—	—	U	0.00006		
DecaCB (#209)	<	0.0202	—	—	R	—		
Homologue Groups Sum			**4170**			**13**		

* M indicates all or a portion of the result has a calculated EMPC value.
† TEQ is the product of the concentration and its TEF value.

Sample Event Date	12/13/2000	**Sample Number**	12130006B	**Prevailing Wind Direction**	—
Lab Sample ID	L3046-5	**Preliminary Flow (slpm)**	0	**Average Temperature (°F)**	—
Station ID/Name	06/W Side of CDF	**Run Time (hours)**	0	**Average Solar Radiation (w·m²)**	—
Sample Type	Field Blank	**Sample Volume (m³)**	0	**Total Precipitation (inches H_2O)**	—

Analyte	Detsym	Detection Limit (ng)	Mass (ng)	EMPC*	QFlag	Concentration ng	TEF	TEQ† ng
PCB Homologue Groups								
Total MonoCB	<	0.012	—	—	U	—		
Total DiCB	<	0.117	—	—	U	—		
Total TriCB	=	0.0125	0.405	—		—		
Total TetraCB	=	0.0145	0.444	—		—		
Total PentaCB	=	0.0189	0.105	—		—		
Total HexaCB	=	0.00698	0.104	—		—		
Total HeptaCB	=	0.00722	0.107	—		—		
Total OctaCB	<	0.0077	—	—	U	—		
Total NonaCB	<	0.0393	—	—	U	—		
DecaCB (#209)	<	0.00721	—	—	R	—		
Homologue Groups Sum			**1.25**					

* M indicates all or a portion of the result has a calculated EMPC value.
† TEQ is the product of the concentration and its TEF value.

Sample Event Date	12/13/2000	**Sample Number**	12130017	**Prevailing Wind Direction**	E
Lab Sample ID	L3046-4	**Preliminary Flow (slpm)**	225	**Average Temperature (°F)**	32.1
Station ID/Name	17/S Side of CDF	**Run Time (hours)**	23.99	**Average Solar Radiation (w·m²)**	90.6
Sample Type	Normal Sample	**Sample Volume (m³)**	323.865	**Total Precipitation (inches H_2O)**	0.57

Analyte	Detsym	Detection Limit (ng)	Mass (ng)	EMPC*	QFlag	Concentration (ng/m³)	TEF	TEQ† (ng/m³)
PCB Homologue Groups								
Total MonoCB	=	0.0196	23.3	—		0.0719		
Total DiCB	=	0.0577	736	—		2.27		
Total TriCB	=	0.041	1660	—		5.13		
Total TetraCB	=	0.0417	719	—		2.22		
Total PentaCB	=	0.345	145	—		0.448		
Total HexaCB	=	0.0311	24.5	—		0.0756		
Total HeptaCB	=	0.0232	1.46	—		0.00451		
Total OctaCB	<	0.0275	0.0766	—	U	0.000118		
Total NonaCB	<	0.0494	—	—	U	0.00008		
DecaCB (#209)	<	0.0329	—	—	R	—		
Homologue Groups Sum			**3310**			**10**		

* M indicates all or a portion of the result has a calculated EMPC value.
† TEQ is the product of the concentration and its TEF value.

New Bedford Harbor

Meteorological Data

Hourly Summary
13 Dec - 14 Dec, 2000 (0900 EST - 1000 EST)

Date	Time	Wind Speed	Wind Direction		STD	Temp. (10m)	Temp. (2m)	Delta Temp	Solar Radiation	Batt.	Barr. Press.	Relative Humidity	Precip.
Mo. Day	EST	mph	deg	compass	deg	°F	°F	°F	w•m^2	vdc	in. Hg	%RH	in. H_2O
12/13	900	9.67	332.79	NNW	12.34	23.44	23.34	0.09	151.46	12.01	30	57	0
12/13	1000	10.65	358.53	N	14.57	25.32	25.48	-0.15	280.96	12.03	30	52	0
12/13	1100	6.66	349.08	N	19.08	28.27	28.08	0.18	373.49	12.06	30	49	0
12/13	1200	4.64	30.73	NNE	23.78	31.29	31.29	0	415.97	12.05	30	47	0
12/13	1300	3.57	46.57	NE	31.71	33.16	33.63	-0.47	403.3	12.06	30	44	0
12/13	1400	3.58	55.32	NE	27.53	34.78	35.05	-0.27	336.16	12.02	30	42	0
12/13	1500	3.41	134.81	SE	31.11	35.48	35.52	-0.03	225.66	12.06	30	42	0
12/13	1600	4.67	140.39	SE	13.21	32.26	32.37	-0.11	66.28	12.05	30	45	0
12/13	1700	3.19	161.53	SSE	12.78	31.42	31.34	0.07	2.19	11.95	30	46	0
12/13	1800	2.64	185.27	S	16.42	31.5	31.33	0.17	0.06	11.93	30	47	0
12/13	1900	3.36	160.15	SSE	12.23	32.08	31.94	0.14	0.09	11.93	30	50	0
12/13	2000	2.2	228.07	SW	23.35	32.65	32.39	0.26	0.08	11.94	30	49	0
12/13	2100	2.45	161.84	SSE	19.74	33.03	32.77	0.26	0.04	11.97	30	49	0
12/13	2200	3.02	75.29	ENE	7.67	31.54	31.35	0.19	0.07	12	30	53	0
12/13	2300	3.69	82.15	E	7.04	30.47	30.35	0.12	0.05	12.02	30	57	0
12/14	2400	4.78	92.31	E	7.48	29.9	29.9	0.01	0.04	12.04	30	61	0
12/14	100	3.65	103.82	ESE	7.57	30.66	30.47	0.19	0.03	12.05	30	66	0
12/14	200	4.16	48.99	NE	11.15	31.2	31.02	0.18	0.01	12.03	30	71	0
12/14	300	4.76	57	ENE	8.95	31.35	31.36	-0.01	0.02	12.05	30	73	0
12/14	400	5.06	54.56	NE	8.45	31.71	31.79	-0.08	0	12.04	30	74	0
12/14	500	5.84	63.56	ENE	8.47	31.99	32.11	-0.13	-0.4	12.04	30	80	0.03
12/14	600	5.6	98.5	E	10.02	33.33	33.53	-0.19	-2.7	11.99	30	87	0.03
12/14	700	3.94	77.11	ENE	13.04	36	36.09	-0.09	-0.07	11.97	30	91	0.07
12/14	800	5.59	96.26	E	15.1	39.5	39.08	0.41	1.99	11.94	30	93	0.17
12/14	900	5	84.45	E	14.1	41.26	40.8	0.46	11.29	11.94	30	94	0.27
12/14	1000	9.53	87.68	E	9.42	42.17	42.24	-0.07	17.12	11.94	30	95	0.31
Average		4.82			14.86	32.53	32.49	0.04	87.81	12	30	62.08	0.03
Minimum		2.2			7.04	23.44	23.34	-0.47	-2.7	11.93	30	42	0
Maximum		10.65			31.71	42.17	42.24	0.46	415.97	12.06	30	95	0.31
Total													0.88

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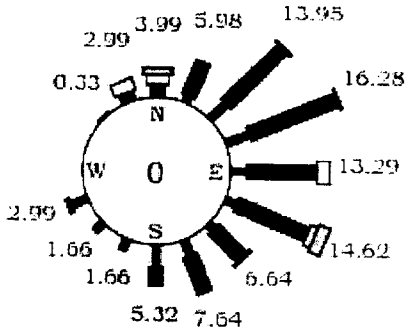
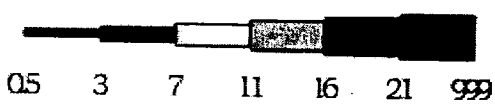
New Bedford Harbor

13 Dec - 14 Dec, 2000 (0900 EST - 1000 EST)





Scale (mph)

Wind Speed (mph) Percent Occurance

	0.5-3	3-7	7-11	11-16	16-21	>21
N	0.33	1.33	1.33	1	0	0
NNE	1	4.98	0	0	0	0
NE	2.99	10.63	0.33	0	0	0
ENE	3.32	12.62	0.33	0	0	0
E	1.99	9.63	1.66	0	0	0
ESE	1.66	10.3	1	1.66	0	0
SE	1	5.32	0.33	0	0	0
SSE	2.33	5.32	0	0	0	0

Wind Speed (mph) Percent Occurance

	0.5-3	3-7	7-11	11-16	16-21	>21
S	2.99	2.33	0	0	0	0
SSW	1.66	0	0	0	0	0
SW	1.66	0	0	0	0	0
WSW	2.33	0.66	0	0	0	0
W	0	0	0	0	0	0
WNW	0	0	0	0	0	0
NW	0	0.33	0	0	0	0
NNW	0.33	1	1.66	0	0	0

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on reverse side prior to initiating this form)*	DATE 3/23/01	TRANSMITTAL NO: 02.03.02 -002- 001

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS(This section will be initiated by the Contractor)

TO:	FROM:	CONTRACT NO:	CHECK ONE:
US Army Corps of Engineers 103 Sawyer Street New Bedford,MA 02746 Attention:	Foster Wheeler Environmental Corp. 103 Sawyer Street New Bedford, MA 02746	DACW33-94-D 0002	X THIS IS A NEW TRANSMITTAL ___ THIS IS A RESUBMITTAL OF TRANSMITTAL ___

SPECIFICATION SECTION: (Cover only one section with each transmittal)

PROJECT TITLE AND LOCATION: NBH T.O.#23 - WTP O&M/Site Facil

ITEM NO. a	DESCRIPTION OF ITEM SUBMITTED (Type, size, model number, etc.) b	MFG. OR CONTR. CAT. CURVE DRAWING OR BROCHURE NO. (See instruction No. 8) c	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT SPEC.PARA. NO. e	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f	FOR CONTRACTOR USE CODE g	VARIATION (See instruction No. 6) h	FOR CE USE CODE i
	Title: Monthly Air Data (1/15/01)	FWENC	2	—	—	FIO		F
	CF: [redacted] RSIMEONE, w/o DATA w/DATA RHUNT, w/o DATA NBRO, w/DATA							

REMARKS

Distribution:

M. BEAUDOIN (2)
J. KRAYCIK/R. FRANCISCO- Site (1)
H. FERRO- Boston (4025 only)
G. CERBONE- Boston File (1)

NBH SITE
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I certify that the above submitted items have been reviewed in detail and correct and in strict conformance with the contract drawings and specifications except as otherwise stated.

J. Kraycik / [signature] 03-23-01
NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by Item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE
	Kathleen Beaudoin PE Resident Engineer, COR	03/28/01

ENG FORM 4025, MAY 91 (ER 415-1-10) EDITION OF AUG 89 IS OBSOLETE (Proponent: CEMP-CE)

Heather Ferro

03/22/01 01:17 PM

To: dickerson.dave@epamail.epa.gov
cc: mgouveia@mindspring.com, Ray Francisco/Livingston/FWENC@FWENC, paul.g.l'heureux@usace.army.mil, Ronald Marnicio/Boston/FWENC@FWENC, Tina Berceli-Boyle/Boston/FWENC@FWENC, maurice.beaudoin@usace.army.mil, Joseph Kraycik/Boston/FWENC@FWENC
Subject: Validated Data 1/15/01

Attached is validated data for monthly air monitoring samples taken January 15, 2001 from the New Bedford Harbor site. Also attached is a memo discussing the data review. Data are acceptable for project use and final data tables are to follow. If there are any questions or comments concerning this data please contact me.

Thank You
Heather Ferro
(617)457-8400

L3113(1-6).do

----- Forwarded by Heather Ferro/Boston/FWENC on 03/22/01 09:04 AM -----

"Chari Bryan" <cbryan@sa.kevric.com>

02/21/01 11:08 AM
Please respond to cbryan

To: '"Helen Douglas \(E-mail\)"' <hdouglas@fwenc.com>
cc: "Ben Kindt" <bkindt@sa.kevric.com>, "Kevin Boyle" <kboyle@sa.kevric.com>, '"Heather Ferro \(E-mail\)"' <hferro@fwenc.com>, '"Mark Gouveia \(E-mail\)"' <magouveia@mindspring.com>, '"Mark Martinho \(E-mail\)"' <mamartinho@yahoo.com>
Subject: Preliminary Data for the Monthly Air Sampling Effort - JANUARY 2001

Dear Ms. Douglas,

The KEVRIC Company, Inc. (KEVRIC) is pleased to provide the information you requested. Attached please find the following documents for your review:

* Preliminary Data for Monthly Sampling, January 15, 2001 (Monthly5.pdf)
* Corresponding meteorological data, January 15, 2001 (Met Data 1-15-01.pdf)

Please contact me if you have any questions or comments regarding the attached information.

Sincerely,

Chari Bryan

- Met Data 1-15-01.PDF

- Monthly5.PDF

FOSTER WHEELER ENVIRONMENTAL CORPORATION

NEW BEDFORD HARBOR AIR SAMPLES
DATA REVIEW

Project:	NE TERC – T017	Prepared by: Heather Ferro	Date: 3/21/01
Source:	AXYS Analytical Services		
Analysis:	Total PCB Homologues	Reviewed by:_____	Date:_____
SDG:	L3113 (1-6)		
		Reviewed by:_____	Date:_____

Total Homologues: 01150102, (01150103, 01150103D, field duplicates), 01150106, 01150117, 01150117B

A data review was performed on the organic analytical data for air samples collected by The Kevric Company from the New Bedford Harbor site. The samples were extracted and analyzed using EPA Method 1668.

The data review is based on the following parameters:

* Sample Preservation and Technical Holding times
Method Blank Analysis
Field and Equipment Blanks
* Laboratory Control Spike/LCS Duplicate
* Surrogate Recovery
Field Duplicates
* Initial Calibration
* Continuing Calibration
* Retention Time Check
* Internal Standard Recovery
* Alternate Standard Recovery

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* - All criteria were met for this parameter
NA – Not applicable to this SDG

Blank Contamination

The maximum mass detected in the field blank and laboratory blanks and the calculated blank action level (5x the maximum mass) are:

Parameter	Mass Detected(ng)	Blank Action Level (ng/l)
MonoCB	0.086	0.430
DiCB	0.233	1.165
TriCB	0.969	4.845
TetraCB	0.340	1.700
PentaCB	1.01	5.050
HeptaCB	0.0464	0.232

The results for each of the above homologue groups, in the samples in this data package are greater than the action level. No action is needed.

Note: The blank action level is the concentration of contamination for any compound in the blank, multiplied by five (5). If a positive result for that compound in a sample is less than the blank action level then it should be considered non-detect. If a concentration for that compound in the sample is greater than the blank action level then it is not affected.

Field Duplicate

Sample 01150103 was sampled and analyzed as a field duplicate. The homologue group heptaCB had a RPD of 63.8% which is above the <50% limit. The homologue group octaCB had a non-detect result in the original sample and a positive result (0.0641ng) in the duplicate. No RPD could be calculated. The total homologue value, however was acceptable at 13.7%. Positive and non-detect results for the homologue groups heptaCB and octaCB in the samples 01150103 and 01150203D may be considered estimated. The data are not significantly impacted.

Summary:

The data in this SDG are acceptable for project use. There was some minor method and field blank contamination, but no data was affected. Two slight field duplicate exceedences occurred, but their impact on the reported data is minimal.

Preliminary Data: Do not cite or quote.

Sample Event Date	1/15/01	**Lab Sample Number**	01150102	**Prevailing Wind Direction**	N
Project Number		**Preliminary Flow (slpm)**	225	**Average Temperature (°F)**	35.6
Station	02 E Side of CDF	**Run Time (hours)**	24.21	**Average Solar Radiation (w•m²)**	12.8
Sample Type	Normal Sample	**Sample Volume (m³)**	326.835	**Total Precipitation (inches H_2O)**	0.32

Analyte	Detsym	Detection Limit (ng)	Mass (ng)	EMPC*	QFlag	Concentration (ng/m³)	TEF	TEQ† (ng/m³)
PCB Homologue Groups								
Total MonoCB	=	0.0301	8.51	—	0	0.0260		
Total DiCB	=	0.1	144	—	0	0.441		
Total TriCB	=	0.04	339	—	0	1.04		
Total TetraCB	=	0.0434	194	—	0	0.594		
Total PentaCB	=	0.207	63	—	0	0.19		
Total HexaCB	=	0.0338	13.1	—	0	0.0401		
Total HeptaCB	=	0.0333	0.669	—	0	0.00205		
Total OctaCB	<	0.0396	—	—	ND	—		
Total NonaCB	<	0.0654	—	—	ND	—		
DecaCB (#209)	=	0.0217	0.028	—	0	0.000086		
Homologue Groups Sum			**762**			**2.33**		

* M indicates all or a portion of the result has a calculated EMPC value.
† TEQ is the product of the concentration and its TEF value.

Preliminary Data: Do not cite or quote.

Sample Event Date	1/15/01	**Lab Sample Number**	01150103	**Prevailing Wind Direction**	N
Project Number		**Preliminary Flow (slpm)**	225	**Average Temperature (°F)**	35.6
Station	03 N Side of CDF	**Run Time (hours)**	23.91	**Average Solar Radiation (w•m²)**	12.8
Sample Type	Normal Sample	**Sample Volume (m³)**	322.785	**Total Precipitation (inches H_2O)**	0.32

Analyte	Detsym	Detection Limit (ng)	Mass (ng)	EMPC*	QFlag	Concentration (ng/m³)	TEF	TEQ† (ng/m³)
PCB Homologue Groups								
Total MonoCB	=	0.0334	11.1	—	0	0.0344		
Total DiCB	=	0.0558	245	—	0	0.759		
Total TriCB	=	0.0334	406	—	0	1.26		
Total TetraCB	=	0.0509	184	—	0	0.570		
Total PentaCB	=	0.263	57.5	—	0	0.178		
Total HexaCB	=	0.0305	13	—	0	0.040		
Total HeptaCB	=	0.0378	1.1	—	0	0.0034		
Total OctaCB	<	0.0456	—	—	ND	—		
Total NonaCB	<	0.0493	—	—	ND	—		
DecaCB (#209)	<	0.0359	—	—	ND	—		
Homologue Groups Sum			**918**			**2.84**		

* M indicates all or a portion of the result has a calculated EMPC value.
† TEQ is the product of the concentration and its TEF value.

Preliminary Data: Do not cite or quote.

Sample Event Date	1/15/01	**Lab Sample Number**	01150103D	**Prevailing Wind Direction**	N
Project Number		**Preliminary Flow (slpm)**	225	**Average Temperature (°F)**	35.6
Station	03D N Side of CDF Dup	**Run Time (hours)**	23.88	**Average Solar Radiation (w•m²)**	12.8
Sample Type	Field Duplicate	**Sample Volume (m³)**	322.38	**Total Precipitation (inches H_2O)**	0.32

Analyte	Detsym	Detection Limit (ng)	Mass (ng)	EMPC*	QFlag	Concentration (ng/m³)	TEF	TEQ† (ng/m³)
PCB Homologue Groups								
Total MonoCB	=	0.0269	10.3	—	0	0.0319		
Total DiCB	=	0.0492	196	—	0	0.608		
Total TriCB	=	0.0361	362	—	0	1.12		
Total TetraCB	=	0.037	165	—	0	0.512		
Total PentaCB	=	0.14	52.6	—	0	0.163		
Total HexaCB	=	0.0318	14.1	—	0	0.0437		
Total HeptaCB	=	0.0352	0.568	—	0	0.00176		
Total OctaCB	=	0.0397	0.0641	—	0	0.000199		
Total NonaCB	<	0.0576	—	—	ND	—		
DecaCB (#209)	<	0.0327	—	—	ND	—		
Homologue Groups Sum			**801**			**2.48**		

* M indicates all or a portion of the result has a calculated EMPC value.
† TEQ is the product of the concentration and its TEF value.

Preliminary Data: Do not cite or quote.

Sample Event Date	1/15/01	**Lab Sample Number**	01150106	**Prevailing Wind Direction**	N
Project Number		**Preliminary Flow (slpm)**	225	**Average Temperature (°F)**	35.6
Station	06 W Side of CDF	**Run Time (hours)**	23.93	**Average Solar Radiation (w•m²)**	12.8
Sample Type	Normal Sample	**Sample Volume (m³)**	323.055	**Total Precipitation (inches H_2O)**	0.32

Analyte	Detsym	Detection Limit (ng)	Mass (ng)	EMPC*	QFlag	Concentration (ng/m³)	TEF	TEQ† (ng/m³)
PCB Homologue Groups								
Total MonoCB	=	0.0238	9.28	—	0	0.0287		
Total DiCB	=	0.0443	150	—	0	0.46		
Total TriCB	=	0.0281	369	—	0	1.14		
Total TetraCB	=	0.0394	221	—	0	0.684		
Total PentaCB	=	0.145	82.3	—	0	0.255		
Total HexaCB	=	0.0248	19.3	—	0	0.0597		
Total HeptaCB	=	0.0358	1.63	—	0	0.00505		
Total OctaCB	=	0.0347	0.0901	—	0	0.000279		
Total NonaCB	<	0.0475	—	—	ND	—		
DecaCB (#209)	<	0.0239	—	—	ND	—		
Homologue Groups Sum			**853**			**2.64**		

* M indicates all or a portion of the result has a calculated EMPC value.
† TEQ is the product of the concentration and its TEF value.

Preliminary Data: Do not cite or quote.

Sample Event Date	1/15/01	**Lab Sample Number**	01150117	**Prevailing Wind Direction**	N
Project Number		**Preliminary Flow (slpm)**	225	**Average Temperature (°F)**	35.6
Station	17 S Side of CDF	**Run Time (hours)**	24.22	**Average Solar Radiation (w•m²)**	12.8
Sample Type	Normal Sample	**Sample Volume (m³)**	326.97	**Total Precipitation (inches H_2O)**	0.32

Analyte	Detsym	Detection Limit (ng)	Mass (ng)	EMPC*	QFlag	Concentration (ng/m³)	TEF	TEQ† (ng/m³)
PCB Homologue Groups								
Total MonoCB	=	0.0313	9.5	—	0	0.029		
Total DiCB	=	0.0541	177	—	0	0.541		
Total TriCB	=	0.032	449	—	0	1.37		
Total TetraCB	=	0.0638	278	—	0	0.850		
Total PentaCB	=	0.234	101	—	0	0.309		
Total HexaCB	=	0.0406	21.7	—	0	0.0664		
Total HeptaCB	=	0.0298	1.74	—	0	0.00532		
Total OctaCB	=	0.0321	0.102	—	0	0.000312		
Total NonaCB	<	0.0465	—	—	ND	—		
DecaCB (#209)	<	0.0281	—	—	ND	—		
Homologue Groups Sum			**1040**			**3.17**		

* M indicates all or a portion of the result has a calculated EMPC value.
† TEQ is the product of the concentration and its TEF value.

Preliminary Data: Do not cite or quote.

Sample Event Date	1/15/01	**Lab Sample Number**	01150117B	**Prevailing Wind Direction**	NE
Project Number		**Preliminary Flow (slpm)**	0	**Average Temperature (°F)**	37.5
Station	17 S Side of CDF	**Run Time (hours)**	0	**Average Solar Radiation (w•m²)**	12
Sample Type	Field Blank	**Sample Volume (m³)**	0	**Total Precipitation (inches H_2O)**	0.37

Analyte	Detsym	Detection Limit (ng)	Mass (ng)	EMPC*	QFlag	Concentration ng	TEF	TEQ† ng
PCB Homologue Groups								
Total MonoCB	=	0.0204	0.0448	—	0	—		
Total DiCB	=	0.0645	0.233	—	0	—		
Total TriCB	=	0.0246	0.969	—	0	—		
Total TetraCB	=	0.027	0.34	—	0	—		
Total PentaCB	=	0.0342	1.01	—	0	—		
Total HexaCB	<	0.0289	—	—	ND	—		
Total HeptaCB	=	0.0331	0.0464	—	0	—		
Total OctaCB	<	0.0338	—	—	ND	—		
Total NonaCB	<	0.043	—	—	ND	—		
DecaCB (#209)	<	0.0244	—	—	ND	—		
Homologue Groups Sum			**2.64**					

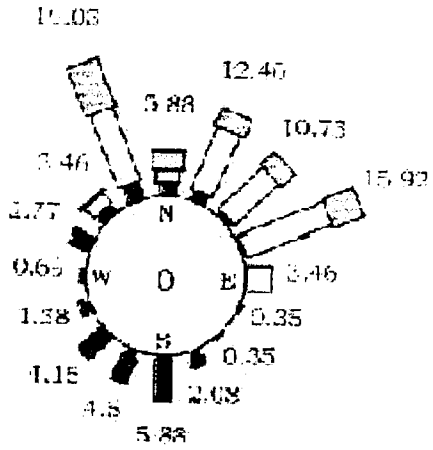
* M indicates all or a portion of the result has a calculated EMPC value.
† TEQ is the product of the concentration and its TEF value.

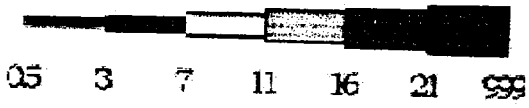
Meteorological Data

Hourly Summary
15 Jan - 16 Jan, 2001 (1000 EST - 1000 EST)

Date	Time	Wind Speed	Wind Direction		STD	Temp. (10m)	Temp. (2m)	Delta Temp	Solar Radiation	Batt.	Barr. Press.	Relative Humidity	Precip.
Mo. Day	EST	mph	deg	compass	deg	°F	°F	°F	w•m^2	vdc	in. Hg	%RH	in. H_2O
01/15	1000	7.77	26.49	NNE	7.28	38.19	37.98	0.2	17.47	11.98	30	91	0.09
01/15	1100	9.63	56.79	ENE	7.11	38.01	37.78	0.23	73.89	11.97	30	93	0.12
01/15	1200	9.09	81.64	E	8.83	38.73	38.54	0.19	80.27	11.98	30	93	0.05
01/15	1300	10.13	63.8	ENE	8.93	39.04	38.8	0.25	44.28	11.99	29	94	0.02
01/15	1400	10.3	67.22	ENE	9.8	39.19	38.92	0.27	37.8	11.99	29	94	0.02
01/15	1500	11.1	63.03	ENE	10.26	39.12	38.88	0.24	31.06	11.99	29	94	0.01
01/15	1600	10.68	50.3	NE	8.34	39.17	38.94	0.23	14.83	11.99	29	94	0.01
01/15	1700	10.1	46.35	NE	9.25	39.31	39.06	0.25	1.05	11.99	29	94	0
01/15	1800	9.79	25.54	NNE	7.5	39.38	39.11	0.28	-0.62	11.95	29	94	0
01/15	1900	11.09	12.98	NNE	8.79	39.46	39.34	0.12	-0.53	11.95	29	95	0
01/15	2000	10.33	15.68	NNE	9.22	39.65	39.53	0.12	-0.58	11.97	29	94	0
01/15	2100	11.27	351.02	N	13.38	39.13	38.97	0.16	-1.25	12.02	29	94	0
01/15	2200	12	349.89	N	12.88	34.96	35.02	-0.06	-6.17	12.03	29	93	0
01/15	2300	10.98	339.49	NNW	12.12	32.92	32.89	0.03	-2.96	12.02	29	93	0
01/16	2400	10.51	342.85	NNW	12.37	31.44	31.46	-0.02	-2.39	12.05	29	93	0
01/16	100	9.52	343.31	NNW	12	30.92	30.94	-0.02	-2.31	12.03	29	93	0
01/16	200	8.56	333.57	NNW	12.24	30.77	30.73	0.05	-2.27	12.02	29	93	0
01/16	300	6.18	358.88	N	12.89	30.81	30.7	0.11	-2.14	12.02	29	92	0
01/16	400	5.06	299.77	WNW	11.21	31.41	31.34	0.07	-2.19	11.97	29	91	0
01/16	500	4.87	354.53	N	20.75	31.69	31.55	0.15	-2.08	11.96	29	91	0
01/16	600	2.13	149.95	SSE	26.38	32.84	32.55	0.29	-2.05	11.93	29	90	0
01/16	700	3.07	179.63	S	23.44	32.98	32.7	0.28	-2.2	11.93	29	91	0
01/16	800	3.93	192.74	SSW	15.46	33.03	33	0.03	3.18	11.94	29	92	0
01/16	900	3.93	214.7	SW	19.75	35.05	34.89	0.16	32.97	11.96	29	92	0
01/16	1000	4.48	207.26	SSW	19.34	37.14	36.92	0.22	90.98	11.97	29	90	0
Average		8.26			12.78	35.77	35.62	0.15	15.92	11.98	29.12	92.72	0.01
Minimum		2.13			7.11	30.77	30.7	-0.06	-6.17	11.93	29	90	0
Maximum		12			26.38	39.65	39.53	0.29	90.98	12.05	30	95	0.12
Total													0.32

15 Jan - 16 Jan, 2001 (1000 EST - 1000 EST)





Scale (mph)

Wind Speed (mph) Percent Occurance

	0.5-3	3-7	7-11	11-16	16-21	>21
N	0.35	1.38	1.73	2.42	0	0
NNE	0.35	1.04	8.65	2.42	0	0
NE	0.35	0.35	7.61	2.42	0	0
ENE	0.35	0	11.42	4.15	0	0
E	0.35	0	3.11	0	0	0
ESE	0.35	0	0	0	0	0
SE	0.35	0	0	0	0	0
SSE	1.04	1.04	0	0	0	0

Wind Speed (mph) Percent Occurance

	0.5-3	3-7	7-11	11-16	16-21	>21
S	0.35	5.54	0	0	0	0
SSW	1.04	3.46	0	0	0	0
SW	0.35	3.81	0	0	0	0
WSW	0.69	0.69	0	0	0	0
W	0.35	0.35	0	0	0	0
WNW	0.35	2.42	0	0	0	0
NW	0	1.38	1.73	0.35	0	0
NNW	0	2.42	10.03	6.57	0	0

New Bedford Harbor

Meteorological Data

Hourly Summary
15 Jan - 16 Jan, 2001 (1000 EST - 1000 EST)

Date	Time	Wind Speed	Wind Direction		STD	Temp. (10m)	Temp. (2m)	Delta Temp	Solar Radiation	Batt.	Barr. Press.	Relative Humidity	Precip.
Mo. Day	EST	mph	deg	compass	deg	°F	°F	°F	w•m^2	vdc	in. Hg	%RH	in. H_2O
01/15	1000	7.77	26.49	NNE	7.28	38.19	37.98	0.2	17.47	11.98	30	91	0.09
01/15	1100	9.63	56.79	ENE	7.11	38.01	37.78	0.23	73.89	11.97	30	93	0.12
01/15	1200	9.09	81.64	E	8.83	38.73	38.54	0.19	80.27	11.98	30	93	0.05
01/15	1300	10.13	63.8	ENE	8.93	39.04	38.8	0.25	44.28	11.99	29	94	0.02
01/15	1400	10.3	67.22	ENE	9.8	39.19	38.92	0.27	37.8	11.99	29	94	0.02
01/15	1500	11.1	63.03	ENE	10.26	39.12	38.88	0.24	31.06	11.99	29	94	0.01
01/15	1600	10.68	50.3	NE	8.34	39.17	38.94	0.23	14.83	11.99	29	94	0.01
01/15	1700	10.1	46.35	NE	9.25	39.31	39.06	0.25	1.05	11.99	29	94	0
01/15	1800	9.79	25.54	NNE	7.5	39.38	39.11	0.28	-0.62	11.95	29	94	0
01/15	1900	11.09	12.98	NNE	8.79	39.46	39.34	0.12	-0.53	11.95	29	95	0
01/15	2000	10.33	15.68	NNE	9.22	39.65	39.53	0.12	-0.58	11.97	29	94	0
01/15	2100	11.27	351.02	N	13.38	39.13	38.97	0.16	-1.25	12.02	29	94	0
01/15	2200	12	349.89	N	12.88	34.96	35.02	-0.06	-6.17	12.03	29	93	0
01/15	2300	10.98	339.49	NNW	12.12	32.92	32.89	0.03	-2.96	12.02	29	93	0
01/16	2400	10.51	342.85	NNW	12.37	31.44	31.46	-0.02	-2.39	12.05	29	93	0
01/16	100	9.52	343.31	NNW	12	30.92	30.94	-0.02	-2.31	12.03	29	93	0
01/16	200	8.56	333.57	NNW	12.24	30.77	30.73	0.05	-2.27	12.02	29	93	0
01/16	300	6.18	358.88	N	12.89	30.81	30.7	0.11	-2.14	12.02	29	92	0
01/16	400	5.06	299.77	WNW	11.21	31.41	31.34	0.07	-2.19	11.97	29	91	0
01/16	500	4.87	354.53	N	20.75	31.69	31.55	0.15	-2.08	11.96	29	91	0
01/16	600	2.13	149.95	SSE	26.38	32.84	32.55	0.29	-2.05	11.93	29	90	0
01/16	700	3.07	179.63	S	23.44	32.98	32.7	0.28	-2.2	11.93	29	91	0
01/16	800	3.93	192.74	SSW	15.46	33.03	33	0.03	3.18	11.94	29	92	0
01/16	900	3.93	214.7	SW	19.75	35.05	34.89	0.16	32.97	11.96	29	92	0
01/16	1000	4.48	207.26	SSW	19.34	37.14	36.92	0.22	90.98	11.97	29	90	0
Average		8.26			12.78	35.77	35.62	0.15	15.92	11.98	29.12	92.72	0.01
Minimum		2.13			7.11	30.77	30.7	-0.06	-6.17	11.93	29	90	0
Maximum		12			26.38	39.65	39.53	0.29	90.98	12.05	30	95	0.12
Total													0.32

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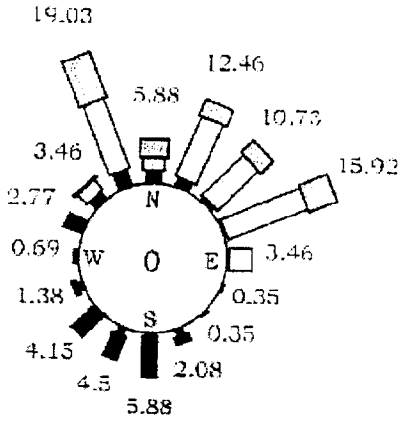
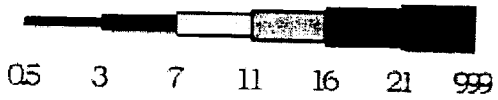
New Bedford Harbor

15 Jan - 16 Jan, 2001 (1000 EST - 1000 EST)





Scale (mph)

Wind Speed (mph) Percent Occurance

	0.5-3	3-7	7-11	11-16	16-21	>21
N	0.35	1.38	1.73	2.42	0	0
NNE	0.35	1.04	8.65	2.42	0	0
NE	0.35	0.35	7.61	2.42	0	0
ENE	0.35	0	11.42	4.15	0	0
E	0.35	0	3.11	0	0	0
ESE	0.35	0	0	0	0	0
SE	0.35	0	0	0	0	0
SSE	1.04	1.04	0	0	0	0

Wind Speed (mph) Percent Occurance

	0.5-3	3-7	7-11	11-16	16-21	>21
S	0.35	5.54	0	0	0	0
SSW	1.04	3.46	0	0	0	0
SW	0.35	3.81	0	0	0	0
WSW	0.69	0.69	0	0	0	0
W	0.35	0.35	0	0	0	0
WNW	0.35	2.42	0	0	0	0
NW	0	1.38	1.73	0.35	0	0
NNW	0	2.42	10.03	6.57	0	0

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TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE

(Read instructions on reverse side prior to initiating this form)

DATE: 5/31/01

TRANSMITTAL NO: 02.03.02 -006- 001

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS (This section will be initiated by the Contractor)

TO:
US Army Corps of Engineers
103 Sawyer Street
New Bedford,MA 02746
Attention:

FROM:
Foster Wheeler Environmental Corp.
103 Sawyer Street
New Bedford, MA 02746

CONTRACT NO: DACW33-94-D-0002

CHECK ONE:
X THIS IS A NEW TRANSMITTAL
____ THIS IS A RESUBMITTAL OF TRANSMITTAL ____

SPECIFICATION SECTION: (Cover only one section with each transmittal)

PROJECT TITLE AND LOCATION: NBH T.O.#23 - WTP O&M/Site Facil

ITEM NO. a.	DESCRIPTION OF ITEM SUBMITTED (Type, size, model number, etc.) b.	MFG. OR CONTR. CAT. CURVE DRAWING OR BROCHURE NO. (See instruction No. 8) c.	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT SPEC.PARA. NO. e.	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f.	FOR CONTRACTOR USE CODE g.	VARIATION (See instruction No. 6) h.	FOR CE USE CODE i.
	Title: Monthly Air Data 2/14/01	FWENC	2	—	—	FIO		F
	CF: FWENC (1) w/ Report R Hunt w/o Report R Limeone w/o Report NBFO w/ Report							

REMARKS

Distribution:

M. BEAUDOIN (2)
J. KRAYCIK/R. FRANCISCO- Site (1)
G. CERBONE- Boston File (1)

File: 8.1

NBH SITE
AUG 2 2 2001
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I certify that the above submitted items have been reviewed in detail and correct and in strict conformance with the contract drawings and specifications except as otherwise stated.

J. Kraycik / [signature] 05-31-01
NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by Item No.)

NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY
Marilyn Beaudoin PE
Resident Engineer COR

DATE 08/22/01

ENG FORM 4025, MAY 91 (ER 415-1-10) EDITION OF AUG 89 IS OBSOLETE

FOSTER WHEELER ENVIRONMENTAL CORPORATION

NEW BEDFORD HARBOR AIR SAMPLES
DATA REVIEW

Project:	NE TERC – T017	Prepared by: Heather Ferro	Date: 4/12/01
Source:	AXYS Analytical Services		
Analysis:	Total PCB Homologues	Reviewed by:_____	Date:_____
SDG:	L3204 (1-5)		
		Reviewed by:_____	Date:_____

Total Homologues: 02140117, 02140102, 02140103, 02140106, (02140102B, field blank)

A data review was performed on the organic analytical data for air samples collected by The Kevric Company from the New Bedford Harbor site. The samples were extracted and analyzed using EPA Method 1668.

The data review is based on the following parameters:

*	Sample Preservation and Technical Holding times
	Method Blank Analysis
	Field and Equipment Blanks
*	Surrogate Recovery
NA	Field Duplicates
	Initial Calibration
*	Continuing Calibration
*	Retention Time Check
*	Internal Standard Recovery
*	Alternate Standard Recovery

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* - All criteria were met for this parameter
NA – Not applicable to this SDG

Blank Contamination

Note: The blank action level is the concentration of contamination for any compound in the blank, multiplied by five (5). If a positive result for that compound in a sample is less than the blank action level then it should be considered non-detect. If a concentration for that compound in the sample is greater than the blank action level then it is not affected.

See attached blank action form.

Initial Calibration

The ion abundance ration for pentaCB 104 was slightly higher (1.84) than the listed window (1.32-1.78). The other QC associated with the penta homologue group results are acceptable, no action is necessary.

Summary:

The data in this SDG are acceptable for project use. There is some low level method and field blank contamination that caused some previously positive octaCB results to be qualified as non-detect. A slight ICAL exceedence occurred, but it does not significantly impact the data.

Sample Event Date	2/14/2001	**Sample Number**	02140102	**Prevailing Wind Direction**	SSW
Lab Sample ID	L3204-2	**Preliminary Flow (slpm)**	225	**Average Temperature (°F)**	43.4
Station ID/Name	02/E Side of CDF	**Run Time (hours)**	23.75	**Average Solar Radiation (w ·m²)**	86.7
Sample Type	Normal Sample	**Sample Volume (m³)**	320.625	**Total Precipitation (inches H_2O)**	0.020

Analyte	Detsym	Detection Limit (ng)	Mass (ng)	EMPC*	QFlag	Concentration (ng/m³)	TEF	TEQ† (ng/m³)
PCB Homologue Groups								
Total MonoCB	=	0.022	19.6	—		0.0611		
Total DiCB	=	0.0581	508	—		1.58		
Total TriCB	=	0.188	1580	—		4.93		
Total TetraCB	=	0.175	739	—		2.3		
Total PentaCB	=	0.116	151	—		0.471		
Total HexaCB	=	0.0176	35.4	—		0.110		
Total HeptaCB	=	0.0116	1.76	—		0.00549		
Total OctaCB	<	0.0124	—	--	U	0.00002		
Total NonaCB	=	0.0339	0.054	—		0.00017		
DecaCB (#209)	<	0.0087	—	—	R	--		
Homologue Groups Sum			**3030**			**9.5**		

* M indicates all or a portion of the result has a calculated EMPC value.
† TEQ is the product of the concentration and its TEF value.

Sample Event Date	2/14/2001	**Sample Number**	02140102B	**Prevailing Wind Direction**	---
Lab Sample ID	L3204-5	**Preliminary Flow (slpm)**	0	**Average Temperature (°F)**	---
Station ID/Name	02/E Side of CDF	**Run Time (hours)**	0	**Average Solar Radiation (w ·m²)**	---
Sample Type	Field Blank	**Sample Volume (m³)**	0	**Total Precipitation (inches H_2O)**	---

Analyte	Detsym	Detection Limit (ng)	Mass (ng)	EMPC*	QFlag	Concentration ng	TEF	TEQ† ng
PCB Homologue Groups								
Total MonoCB	=	0.0197	0.051	---		---		
Total DiCB	=	0.101	0.318	---		---		
Total TriCB	=	0.0257	0.47	---		---		
Total TetraCB	<	0.0201	---	---	U	---		
Total PentaCB	=	0.147	0.759	---		---		
Total HexaCB	=	0.0152	0.025	---		---		
Total HeptaCB	=	0.013	0.041	---		---		
Total OctaCB	=	0.0144	0.044	---		---		
Total NonaCB	<	0.0409	---	---	U	---		
DecaCB (#209)	<	0.0165	---	---	R	---		
Homologue Groups Sum			**1.74**					

* M indicates all or a portion of the result has a calculated EMPC value.
† TEQ is the product of the concentration and its TEF value.

Sample Event Date	2/14/2001	**Sample Number**	02140103	**Prevailing Wind Direction**	SSW
Lab Sample ID	L3204-3	**Preliminary Flow (slpm)**	225	**Average Temperature (°F)**	43.4
Station ID/Name	03/N Side of CDF	**Run Time (hours)**	23.73	**Average Solar Radiation (w ·m²)**	86.7
Sample Type	Normal Sample	**Sample Volume (m³)**	320.355	**Total Precipitation (inches H_2O)**	0.020

Analyte	Detsym	Detection Limit (ng)	Mass (ng)	EMPC*	QFlag	Concentration (ng/m³)	TEF	TEQ† (ng/m³)
PCB Homologue Groups								
Total MonoCB	=	0.0178	21	—		0.066		
Total DiCB	=	0.0951	535	—		1.67		
Total TriCB	=	0.207	132	—		0.412		
Total TetraCB	=	0.333	555	—		1.73		
Total PentaCB	=	0.14	120	—		0.37		
Total HexaCB	=	0.0225	32.2	—		0.101		
Total HeptaCB	=	0.0199	1.81	—		0.00565		
Total OctaCB	<	0.0155	0.156	—	U	0.000243		
Total NonaCB	<	0.0381	—	—	U	0.00006		
DecaCB (#209)	<	0.0135	—	—	R	—		
Homologue Groups Sum			**1400**			**4.4**		

* M indicates all or a portion of the result has a calculated EMPC value.
† TEQ is the product of the concentration and its TEF value.

Sample Event Date	2/14/2001	**Sample Number**	02140106	**Prevailing Wind Direction**	SSW
Lab Sample ID	I.3204-4	**Preliminary Flow (slpm)**	225	**Average Temperature (°F)**	43.4
Station ID/Name	06/W Side of CDF	**Run Time (hours)**	23.72	**Average Solar Radiation (w -m²)**	86.7
Sample Type	Normal Sample	**Sample Volume (m³)**	320.22	**Total Precipitation (inches H_2O)**	0.020

Analyte	Detsym	Detection Limit (ng)	Mass (ng)	EMPC*	QFlag	Concentration (ng/m³)	TEF	TEQ† (ng/m³)
PCB Homologue Groups								
Total MonoCB	=	0.0185	10.3	—		0.0322		
Total DiCB	=	0.0786	248	—		0.774		
Total TriCB	=	0.118	647	—		2.02		
Total TetraCB	=	0.274	328	—		1.02		
Total PentaCB	=	0.155	110	—		0.34		
Total HexaCB	=	0.021	32.5	—		0.101		
Total HeptaCB	=	0.0116	2.51	—		0.00784		
Total OctaCB	<	0.0105	0.124	—	U	0.000194		
Total NonaCB	<	0.0298	—	—	U	0.00005		
DecaCB (#209)	=	0.0102	0.029	—	R	—		
Homologue Groups Sum			**1380**			**4.3**		

* M indicates all or a portion of the result has a calculated EMPC value.
† TEQ is the product of the concentration and its TEF value.

Sample Event Date	2/14/2001	**Sample Number**	02140117	**Prevailing Wind Direction**	SSW
Lab Sample ID	L3204-1	**Preliminary Flow (slpm)**	225	**Average Temperature (°F)**	43.4
Station ID/Name	17/S Side of CDF	**Run Time (hours)**	23.76	**Average Solar Radiation (w ·m²)**	86.7
Sample Type	Normal Sample	**Sample Volume (m³)**	320.76	**Total Precipitation (inches H_2O)**	0.020

Analyte	Detsym	Detection Limit (ng)	Mass (ng)	EMPC*	QFlag	Concentration (ng/m³)	TEF	TEQ† (ng/m³)
PCB Homologue Groups								
Total MonoCB	=	0.0168	12	—		0.037		
Total DiCB	=	0.0563	296	—		0.923		
Total TriCB	=	0.0837	790	—		2.5		
Total TetraCB	=	0.165	335	—		1.04		
Total PentaCB	=	0.0561	86.4	—		0.269		
Total HexaCB	=	0.0249	26.7	—		0.0832		
Total HeptaCB	=	0.0167	1.33	—		0.00415		
Total OctaCB	=	0.0147	0.293	—		0.000913		
Total NonaCB	<	0.0354	—	—	U	0.00006		
DecaCB (#209)	=	0.0095	0.067	—	R	—		
Homologue Groups Sum			**1550**			**4.8**		

* M indicates all or a portion of the result has a calculated EMPC value.
† TEQ is the product of the concentration and its TEF value.

New Bedford Harbor

Meteorological Data

Hourly Summary
14 Feb - 15 Feb, 2001 (0900 EST - 0900 EST)

Date	Time	Wind Speed	Wind Direction		STD	Temp. (10m)	Temp. (2m)	Delta Temp	Solar Radiation	Batt.	Barr. Press.	Relative Humidity	Precip.
Mo. Day	EST	mph	deg	compass	deg	°F	°F	°F	w•m^2	vdc	in. Hg	%RH	in. H_2O
02/14	900	9.19	187.06	S	8.73	37.26	37.05	0.21	91.88	14.02	30	87	0
02/14	1000	9.08	176.76	S	7.45	40.21	39.55	0.66	324.94	13.94	30	85	0
02/14	1100	12.62	171.17	S	7.13	41.5	41.08	0.43	493.91	13.85	30	82	0
02/14	1200	15.95	190.32	S	9.68	42.33	43.81	-1.47	533.39	13.8	30	77	0
02/14	1300	15.27	192.75	SSW	8.39	41.53	42.47	-0.94	244.23	13.8	30	77	0
02/14	1400	13.45	191.36	SSW	9.18	42.04	42.49	-0.45	208.33	13.81	30	77	0
02/14	1500	12.07	188.42	S	9.25	41.45	41.7	-0.25	89.4	13.82	29	77	0
02/14	1600	10.87	192.96	SSW	8.74	41.46	41.61	-0.15	53.05	13.83	29	80	0
02/14	1700	11.64	186.64	S	9.37	41.8	42	-0.21	21.08	13.83	29	83	0
02/14	1800	8.68	197.56	SSW	16.2	43.9	43.8	0.09	0.44	13.83	29	86	0
02/14	1900	10.34	195.38	SSW	12.92	44.44	44.4	0.03	-0.31	13.81	29	86	0
02/14	2000	8.69	198.39	SSW	16.48	44.64	44.55	0.09	-0.31	13.81	29	86	0
02/14	2100	9.32	195.2	SSW	12.86	44.59	44.52	0.07	-0.32	13.81	29	86	0
02/14	2200	8.56	206.93	SSW	20.74	45.91	45.75	0.17	-0.35	13.8	29	84	0
02/14	2300	11.68	225.7	SW	15.95	45.53	45.54	-0.01	-0.33	13.79	29	84	0
02/15	2400	12.21	223.61	SW	18.58	44.5	44.52	-0.02	-0.3	13.79	29	88	0
02/15	100	11.39	243.96	WSW	17.57	45.07	44.95	0.12	-0.31	13.79	29	91	0
02/15	200	11.41	247.17	WSW	15.57	44.67	44.56	0.11	-0.25	13.79	29	92	0
02/15	300	7.6	264.1	W	15.35	44.05	43.85	0.19	-0.26	13.8	29	93	0.02
02/15	400	7.21	282.44	WNW	13.3	45.23	44.83	0.4	-0.29	13.79	29	93	0
02/15	500	8.05	289.2	WNW	10.97	45.44	45.05	0.39	-0.29	13.8	29	91	0
02/15	600	6.76	307.02	NW	11.43	44.87	44.44	0.43	-0.29	13.81	29	91	0
02/15	700	8.21	322.38	NW	10.94	44.92	44.49	0.43	0.56	13.81	29	89	0
02/15	800	9.95	343.57	NNW	13.6	44.34	43.98	0.36	23.37	13.81	29	85	0
02/15	900	14.72	346.53	NNW	15.11	43.27	43.17	0.1	85.45	13.81	29	78	0
Average		10.6			12.62	43.4	43.37	0.03	86.66	13.82	29.24	85.12	0
Minimum		6.76			7.13	37.26	37.05	-1.47	-0.35	13.79	29	77	0
Maximum		15.95			20.74	45.91	45.75	0.66	533.39	14.02	30	93	0.02
Total													0.02

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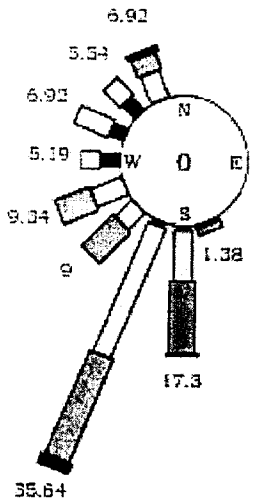
New Bedford Harbor

14 Feb - 15 Feb, 2001 (0900 EST - 0900 EST)



Scale (mph)

Wind Speed (mph) Percent Occurance

	0.5-3	3-7	7-11	11-16	16-21	>21
N	0	0	0	0	0	0
NNE	0	0	0	0	0	0
NE	0	0	0	0	0	0
ENE	0	0	0	0	0	0
E	0	0	0	0	0	0
ESE	0	0	0	0	0	0
SE	0	0	0	0	0	0
SSE	0	0	0.35	1.04	0	0

Wind Speed (mph) Percent Occurance

	0.5-3	3-7	7-11	11-16	16-21	>21
S	0	0.69	6.57	9.69	0.35	0
SSW	0	0.69	18.69	14.88	1.38	0
SW	0	0	3.11	5.88	0	0
WSW	0	0	4.5	4.84	0	0
W	0	2.77	2.42	0	0	0
WNW	0	2.08	4.84	0	0	0
NW	0	2.42	3.11	0	0	0
NNW	0	0	3.81	2.42	0.69	0

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TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on reverse side prior to initiating this form)*	DATE 6/19/01	TRANSMITTAL NO: 02.03.02 -008- 001

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS(This section will be initiated by the Contractor)

TO:	FROM:	CONTRACT NO:	CHECK ONE:
US Army Corps of Engineers 103 Sawyer Street New Bedford,MA 02746 Attention:	Foster Wheeler Environmental Corp. 103 Sawyer Street New Bedford, MA 02746	DACW33-94-D-0002	X THIS IS A NEW TRANSMITTAL ___ THIS IS A RESUBMITTAL OF TRANSMITTAL ___

SPECIFICATION SECTION: (Cover only one section with each transmittal)

PROJECT TITLE AND LOCATION: NBH T.O.#23 - WTP O&M/Site Facil

ITEM NO. a	DESCRIPTION OF ITEM SUBMITTED (Type, size, model number, etc.) b	MFG. OR CONTR. CAT. CURVE DRAWING OR BROCHURE NO. (See instruction No. 8) c	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT SPEC.PARA. NO. e	DRAWING SHEET NO. f	FOR CONTRACTOR USE CODE g	VARIATION (See instruction No. 6) h	FOR CE USE CODE i
	Title: Monthly Air Data (3/14/01)	FWENC	2	—	—	FIO		F
	CF: FWENC (1) w/ Rpt R Hunt (1) w/o Rpt R Simone (1) w/ Rpt NBRO w/ Report							

REMARKS

Distribution:

M. BEAUDOIN (2)
J. KRAYCIK / R. FRANCISCO- Site (1)
G. CERBONE- Boston File (1)
H. FERRO (4025 Only)

File: 8.1

NBH SITE
JUN 28 2001
RECEIVED

I certify that the above submitted items have been reviewed in detail and correct and in strict conformance with the contract drawings and specifications except as otherwise stated.

J. Kraycik / [signature] 06-19-01
NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by Item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE
	Pauline Beaudoin PE Resident Engineer COR	06/28/01

ENG FORM 4025, MAY 91 (ER 415-1-10) EDITION OF AUG 89 IS OBSOLETE (Proponent: CEMP-CE)

FOSTER WHEELER ENVIRONMENTAL CORPORATION

NEW BEDFORD HARBOR
TIER I MODIFIED DATA REVIEW

Project:	NBH	Prepared by:	Heather Ferro	Date:	6/01/01
Data Source:	AXYS Analytical				
Analysis:	Homologues	Reviewed by:		Date:	
SDG:	L3291(4-8)				
		Reviewed by:		Date:	

A data review was performed for samples and methods listed on the attached Sample Summary Data Review Worksheet.

The data review was based on the completeness of the SDG data package. In addition, the QC parameters specified on the Batch QC Data Review Worksheet were also evaluated. When applicable, these parameters included:

Sample Preservation and Technical Holding times
Field and Equipment Blanks
Field Duplicates
Method Blank Analysis
Surrogate Recovery
Sample Spike Recovery
Laboratory Duplicates
Laboratory Control Sample
Initial Calibration
Continuing Calibration
Retention Time Check
Internal Standard Recovery
Recovery Standard

NBH SITE
JUN 1 8 2001
RECEIVED

The QC parameters that did not satisfy the acceptance criteria are described in the comment section of the attached worksheets. No QC performance issues compromised the usability of these data.

Sample Event Date	3/14/2001	**Sample Number**	03140102	**Prevailing Wind Direction**	WNW
Lab Sample ID	L3291-4	**Preliminary Flow (slpm)**	225	**Average Temperature (°F)**	42.8
Station ID/Name	02/E Side of CDF	**Run Time (hours)**	24.18	**Average Solar Radiation (w·m²)**	168
Sample Type	Normal Sample	**Sample Volume (m³)**	326.43	**Total Precipitation (inches H_2O)**	0.00

Analyte	Detsym	Detection Limit (ng)	Mass (ng)	EMPC*	QFlag	Concentration (ng/m³)	TEF	TEQ† (ng/m³)
PCB Homologue Groups								
Total MonoCB	=	0.0455	86.2	—		0.264		
Total DiCB	=	0.112	3270	—		10		
Total TriCB	=	0.179	7660	—		23.5		
Total TetraCB	=	0.157	2610	—		8		
Total PentaCB	=	0.1	384	—		1.18		
Total HexaCB	=	0.0418	58.3	—		0.179		
Total HeptaCB	=	0.0159	2.51	—		0.00769		
Total OctaCB	=	0.016	0.060	—		0.00018		
Total NonaCB	<	0.0348	—	—	U	0.00005		
DecaCB (#209)	<	0.0129	—	—	R	—		
Homologue Groups Sum			**14100**			**43**		

* M indicates all or a portion of the result has a calculated EMPC value.
† TEQ is the product of the concentration and its TEF value.

Sample Event Date	3/14/2001	**Sample Number**	03140103	**Prevailing Wind Direction**	WNW
Lab Sample ID	L3291-8	**Preliminary Flow (slpm)**	225	**Average Temperature (°F)**	42.8
Station ID/Name	03/N Side of CDF	**Run Time (hours)**	24.18	**Average Solar Radiation (w·m²)**	168
Sample Type	Normal Sample	**Sample Volume (m³)**	326.43	**Total Precipitation (inches H_2O)**	0.00

Analyte	Detsym	Detection Limit (ng)	Mass (ng)	EMPC*	QFlag	Concentration (ng/m³)	TEF	TEQ† (ng/m³)
PCB Homologue Groups								
Total MonoCB	=	0.0355	13.2	---		0.0404		
Total DiCB	=	0.0676	406	---		1.24		
Total TriCB	=	0.0764	859	---		2.63		
Total TetraCB	=	0.159	329	---		1.01		
Total PentaCB	=	0.0923	72.1	---		0.221		
Total HexaCB	=	0.0289	14.6	---		0.0447		
Total HeptaCB	=	0.0269	0.845	---		0.00259		
Total OctaCB	<	0.0254	---	---	U	0.00004		
Total NonaCB	<	0.0427	---	---	U	0.00007		
DecaCB (#209)	<	0.017	---	---	R	---		
Homologue Groups Sum			**1690**			**5.2**		

* M indicates all or a portion of the result has a calculated EMPC value.
† TEQ is the product of the concentration and its TEF value.

Sample Event Date	3/14/2001	**Sample Number**	03140103B	**Prevailing Wind Direction**	—
Lab Sample ID	L3291-5	**Preliminary Flow (slpm)**	0	**Average Temperature (°F)**	—
Station ID/Name	03/N Side of CDF	**Run Time (hours)**	0	**Average Solar Radiation (w •m²)**	—
Sample Type	Field Blank	**Sample Volume (m³)**	0	**Total Precipitation (inches H_2O)**	

Analyte	Detsym	Detection Limit (ng)	Mass (ng)	EMPC*	QFlag	Concentration ng	TEF	TEQ† ng
PCB Homologue Groups								
Total MonoCB	<	0.029	—	—	U	—		
Total DiCB	=	0.0682	0.503	—		—		
Total TriCB	=	0.0338	0.979	—		—		
Total TetraCB	=	0.0408	0.448	—		—		
Total PentaCB	=	0.168	0.459	—		—		
Total HexaCB	=	0.0219	0.181	—		—		
Total HeptaCB	=	0.0246	0.028	—		—		
Total OctaCB	<	0.0211	—	—	U	—		
Total NonaCB	<	0.0446	—	—	U	—		
DecaCB (#209)	<	0.014	—	—	R	—		
Homologue Groups Sum			**2.65**					

* M indicates all or a portion of the result has a calculated EMPC value.
† TEQ is the product of the concentration and its TEF value.

Sample Event Date	3/14/2001	**Sample Number**	03140106	**Prevailing Wind Direction**	WNW
Lab Sample ID	L3291-7	**Preliminary Flow (slpm)**	225	**Average Temperature (°F)**	42.8
Station ID/Name	06/W Side of CDF	**Run Time (hours)**	24.15	**Average Solar Radiation (w ·m²)**	168
Sample Type	Normal Sample	**Sample Volume (m³)**	326.025	**Total Precipitation (inches H_2O)**	0.00

Analyte	Detsym	Detection Limit (ng)	Mass (ng)	EMPC*	QFlag	Concentration (ng/m³)	TEF	TEQ† (ng/m³)
PCB Homologue Groups								
Total MonoCB	=	0.0317	5.59	—		0.0171		
Total DiCB	=	0.0485	107	—		0.328		
Total TriCB	=	0.0455	277	—		0.850		
Total TetraCB	=	0.154	204	—		0.626		
Total PentaCB	=	0.15	100	—		0.31		
Total HexaCB	=	0.0271	23.3	—		0.0715		
Total HeptaCB	=	0.0241	1.34	—		0.00411		
Total OctaCB	=	0.0223	0.094	—		0.00029		
Total NonaCB	<	0.0449	—	—	U	0.00007		
DecaCB (#209)	=	0.0164	0.021	—	R	—		
Homologue Groups Sum			**718**			**2.2**		

* M indicates all or a portion of the result has a calculated EMPC value.
† TEQ is the product of the concentration and its TEF value.

Sample Event Date	3/14/2001	**Sample Number**	03140117	**Prevailing Wind Direction**	WNW
Lab Sample ID	L3291-6	**Preliminary Flow (slpm)**	225	**Average Temperature (°F)**	42.8
Station ID/Name	17/S Side of CDF	**Run Time (hours)**	24.19	**Average Solar Radiation (w·m²)**	168
Sample Type	Normal Sample	**Sample Volume (m³)**	326.565	**Total Precipitation (inches H_2O)**	0.00

Analyte	Detsym	Detection Limit (ng)	Mass (ng)	EMPC*	QFlag	Concentration (ng/m³)	TEF	TEQ† (ng/m³)
PCB Homologue Groups								
Total MonoCB	=	0.0266	6.35	—		0.0194		
Total DiCB	=	0.0548	167	—		0.511		
Total TriCB	=	0.0533	365	—		1.12		
Total TetraCB	=	0.151	175	—		0.536		
Total PentaCB	=	0.13	64.9	—		0.199		
Total HexaCB	=	0.0285	17.4	—		0.0533		
Total HeptaCB	=	0.0198	1.8	—		0.0055		
Total OctaCB	=	0.0196	0.176	—		0.000539		
Total NonaCB	<	0.0349	—	—	U	0.00005		
DecaCB (#209)	=	0.0156	0.041	—	R	—		
Homologue Groups Sum			**798**			**2.4**		

* M indicates all or a portion of the result has a calculated EMPC value.
† TEQ is the product of the concentration and its TEF value.

New Bedford Harbor

Meteorological Data

Hourly Summary
14 Mar - 15 Mar, 2001 (0800 EST - 1100 EST)

Date	Time	Wind Speed	Wind Direction		STD	Temp. (10m)	Temp. (2m)	Delta Temp	Solar Radiation	Batt.	Barr. Press.	Relative Humidity	Precip.
Mo. Day	EST	mph	deg	compass	deg	°F	°F	°F	w•m^2	vdc	in. Hg	%RH	in. H_2O
03/14	800	6.26	259.86	W	15.76	43.22	42.27	0.95	175.79	13.86	29	92	0
03/14	900	9.26	263.99	W	13.82	44.7	44.3	0.4	216.04	13.81	29	85	0
03/14	1000	11.91	271.12	W	14.8	47.38	46.68	0.7	445.2	13.76	29	78	0
03/14	1100	13.59	289.1	WNW	12.62	48.86	48.27	0.59	363.01	13.7	29	73	0
03/14	1200	14.29	313.54	NW	11.74	46.91	46.57	0.34	217.66	13.72	29	70	0
03/14	1300	16.72	299.97	WNW	12.78	47.73	47.4	0.32	488.33	13.72	29	66	0
03/14	1400	16.08	293.2	WNW	12.77	47.18	46.87	0.31	336.88	13.72	29	62	0
03/14	1500	17.82	291.49	WNW	13.06	48.2	48.01	0.19	445.11	13.71	29	55	0
03/14	1600	16.7	294.53	WNW	13.13	47.1	46.89	0.21	322.48	13.72	29	53	0
03/14	1700	13.98	291.83	WNW	12.92	45.97	45.66	0.31	79.24	13.73	29	53	0
03/14	1800	12.2	290.8	WNW	12.78	44.49	44.14	0.35	25.88	13.77	29	53	0
03/14	1900	9.71	276.7	W	12.27	43.03	42.6	0.43	0	13.8	29	54	0
03/14	2000	12.47	285.3	WNW	12.7	42.48	42.07	0.41	-0.17	13.82	29	56	0
03/14	2100	12.8	292.05	WNW	12.64	41.85	41.46	0.39	-0.16	13.84	29	56	0
03/14	2200	10.54	271.48	W	15.08	41.21	40.78	0.43	-0.17	13.85	29	57	0
03/14	2300	11.29	277.03	W	13.11	40.78	40.37	0.41	-0.15	13.86	29	57	0
03/15	2400	10.09	284.99	WNW	14.45	40.18	39.77	0.41	-0.09	13.87	29	59	0
03/15	100	7.8	267.77	W	15.42	39.48	39.06	0.42	-0.1	13.88	29	60	0
03/15	200	6.91	239.24	WSW	17.1	38.42	38.1	0.32	-0.07	13.89	29	61	0
03/15	300	6.77	253.89	WSW	15.28	37.95	37.63	0.32	0.01	13.91	29	63	0
03/15	400	7.76	257.9	WSW	14.28	38.18	37.83	0.35	0.07	13.91	29	63	0
03/15	500	7.09	240.61	WSW	16.55	37.81	37.52	0.29	0.05	13.92	29	64	0
03/15	600	7.4	246.09	WSW	16.23	38.04	37.74	0.3	1.13	13.92	29	63	0
03/15	700	5.93	240.14	WSW	17.79	39.64	38.9	0.74	55.74	13.9	29	63	0
03/15	800	10.59	264.81	W	14.81	43.26	42.26	1	211.69	13.84	29	61	0
03/15	900	13.52	279.14	W	13.96	45.35	44.73	0.62	401.82	13.77	29	59	0
03/15	1000	13.45	286.04	WNW	14.32	47.26	46.35	0.9	574.29	13.72	29	56	0
03/15	1100	13.89	282.76	WNW	14.05	49.71	49.09	0.62	686.74	13.68	29	53	0
Average		11.31			14.15	43.44	42.98	0.47	180.22	13.81	29	62.32	0
Minimum		5.93			11.74	37.81	37.52	0.19	-0.17	13.68	29	53	0
Maximum		17.82			17.79	49.71	49.09	1	686.74	13.92	29	92	0
Total													0

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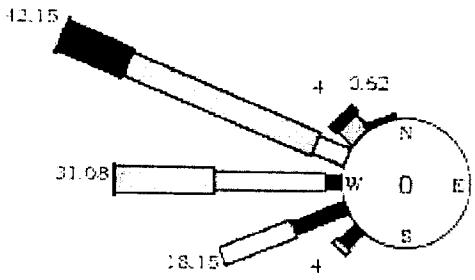
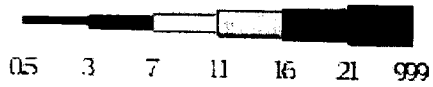
New Bedford Harbor

14 Mar - 15 Mar, 2001 (0800 EST - 1100 EST)





Scale (mph)

Wind Speed (mph) Percent Occurance

	0.5-3	3-7	7-11	11-16	16-21	>21
N	0	0	0	0	0	0
NNE	0	0	0	0	0	0
NE	0	0	0	0	0	0
ENE	0	0	0	0	0	0
E	0	0	0	0	0	0
ESE	0	0	0	0	0	0
SE	0	0	0	0	0	0
SSE	0	0	0	0	0	0

Wind Speed (mph) Percent Occurance

	0.5-3	3-7	7-11	11-16	16-21	>21
S	0	0	0	0	0	0
SSW	0	0	0	0	0	0
SW	0	3.08	0.92	0	0	0
WSW	0	7.69	10.46	0	0	0
W	0	2.15	15.08	13.54	0.31	0
WNW	0	0	4.62	27.69	9.54	0.31
NW	0	0	0	2.77	1.23	0
NNW	0	0	0	0.31	0.31	0

TRANSMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES, OR MANUFACTURER'S CERTIFICATES OF COMPLIANCE *(Read instructions on reverse side prior to initiating this form)*	DATE 6/15/01	TRANSMITTAL NO: 02.03.02 -007- 001

SECTION I - REQUEST FOR APPROVAL OF THE FOLLOWING ITEMS(This section will be initiated by the Contractor)

TO:	FROM:	CONTRACT NO:	CHECK ONE:
US Army Corps of Engineers 103 Sawyer Street New Bedford,MA 02746 Attention:	Foster Wheeler Environmental Corp. 103 Sawyer Street New Bedford, MA 02746	DACW33-94-D-0002	X THIS IS A NEW TRANSMITTAL ____ THIS IS A RESUBMITTAL OF TRANSMITTAL _____

SPECIFICATION SECTION: (Cover only one section with each transmittal)	PROJECT TITLE AND LOCATION: NBH T.O.#23 - WTP O&M/Site Facil

ITEM NO. a	DESCRIPTION OF ITEM SUBMITTED (Type, size, model number, etc.) b	MFG. OR CONTR. CAT. CURVE DRAWING OR BROCHURE NO. (See instruction No. 8) c	NO. OF COPIES	CONTRACT REFERENCE DOCUMENT SPEC.PARA. NO. e	CONTRACT REFERENCE DOCUMENT DRAWING SHEET NO. f	FOR CONTRACTOR USE CODE g	VARIATION (See instruction No. 6) h	FOR CE USE CODE i
	Title: Monthly Air Data (4/18/01)	FWENC	2	—	—	FIO		E
	CF: FWENC(1) w/Report RHUNT(1) do/Report RSMOORE(1) do/Report NBHO w/Report							

REMARKS

Distribution:

M. BEAUDOIN (2)
J. KRAYCIK / R. FRANCISCO- Site (1)
G. CERBONE- Boston File (1)
H. FERRO (4025 Only)

File: 8.1

NBH SITE

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I certify that the above submitted items have been reviewed in detail and correct and in strict conformance with the contract drawings and specifications except as otherwise stated.

J. Kraycik / [signature] 06-14-01
NAME AND SIGNATURE OF CONTRACTOR

SECTION II - APPROVAL ACTION

ENCLOSURES RETURNED (List by Item No.)	NAME, TITLE AND SIGNATURE OF APPROVING AUTHORITY	DATE
	Russell Boardman PE Resident Engineer COR	06/28/01

FOSTER WHEELER ENVIRONMENTAL CORPORATION

NEW BEDFORD HARBOR
TIER I MODIFIED DATA REVIEW

Project:	NBH	Prepared by:	Heather Ferro	Date:	5/29/01
Data Source:	AXYS Analytical				
Analysis:	Homologues	Reviewed by:		Date:	
SDG:	L3391(1-6)				
		Reviewed by:		Date:	

A data review was performed for samples and methods listed on the attached Sample Summary Data Review Worksheet.

The data review was based on the completeness of the SDG data package. In addition, the QC parameters specified on the Batch QC Data Review Worksheet were also evaluated. When applicable, these parameters included:

Sample Preservation and Technical Holding times
Field and Equipment Blanks
Field Duplicates
Method Blank Analysis
Surrogate Recovery
Sample Spike Recovery
Laboratory Duplicates
Laboratory Control Sample
Initial Calibration
Continuing Calibration
Retention Time Check
Internal Standard Recovery
Recovery Standard

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The QC parameters that did not satisfy the acceptance criteria are described in the comment section of the attached worksheets. No QC performance issues compromised the usability of these data.

Sample Event Date	4/18/2001	**Sample Number**	04180102	**Prevailing Wind Direction**	NNW
Lab Sample ID	L3391-1	**Preliminary Flow (slpm)**	225	**Average Temperature (°F)**	41.2
Station ID/Name	02/E Side of CDF	**Run Time (hours)**	24.01	**Average Solar Radiation (w·m²)**	124
Sample Type	Normal Sample	**Sample Volume (m³)**	324.135	**Total Precipitation (inches H_2O)**	0.050

Analyte	Detsym	Detection Limit (ng)	Mass (ng)	EMPC*	QFlag	Concentration (ng/m³)	TEF	TEQ† (ng/m³)
PCB Homologue Groups								
Total MonoCB	=	0.0306	113	—		0.349		
Total DiCB	=	0.247	4520	—		13.9		
Total TriCB	=	0.739	13700	—		42.3		
Total TetraCB	=	0.492	5240	—		16.2		
Total PentaCB	=	0.153	593	—		1.83		
Total HexaCB	=	0.089	137	—		0.423		
Total HeptaCB	=	0.0387	7.01	—		0.0216		
Total OctaCB	=	0.0318	0.042	—		0.00013		
Total NonaCB	<	0.0676	—	—	U	0.0001		
DecaCB (#209)	<	0.036	—	—	R	—		
Homologue Groups Sum			**24300**			**75**		

* M indicates all or a portion of the result has a calculated EMPC value.
† TEQ is the product of the concentration and its TEF value.

Sample Event Date	4/18/2001	**Sample Number**	04180103	**Prevailing Wind Direction**	NNW
Lab Sample ID	I.3391-2	**Preliminary Flow (slpm)**	225	**Average Temperature (°F)**	41.2
Station ID/Name	03/N Side of CDF	**Run Time (hours)**	24	**Average Solar Radiation (w·m²)**	124
Sample Type	Normal Sample	**Sample Volume (m³)**	324	**Total Precipitation (inches H_2O)**	0.050

Analyte	Detsym	Detection Limit (ng)	Mass (ng)	EMPC*	QFlag	Concentration (ng/m³)	TEF	TEQ† (ng/m³)
PCB Homologue Groups								
Total MonoCB	=	0.0309	26.8	—		0.0827		
Total DiCB	=	0.128	907	—		2.8		
Total TriCB	=	0.185	2330	—		7.19		
Total TetraCB	=	0.0508	843	—		2.6		
Total PentaCB	=	0.0697	113	—		0.349		
Total HexaCB	=	0.0588	29.6	—		0.0914		
Total HeptaCB	=	0.0228	1.59	—		0.00491		
Total OctaCB	=	0.0297	0.038	—		0.00012		
Total NonaCB	<	0.0627	--	—	U	0.0001		
DecaCB (#209)	<	0.0247	—	—	R	—		
Homologue Groups Sum			**4250**			**13**		

* M indicates all or a portion of the result has a calculated EMPC value.
† TEQ is the product of the concentration and its TEF value.

Sample Event Date	4/18/2001	**Sample Number**	04180103D	**Prevailing Wind Direction**	NNW
Lab Sample ID	L3391-3	**Preliminary Flow (slpm)**	225	**Average Temperature (°F)**	41.2
Station ID/Name	03D/N Side of CDF Dup	**Run Time (hours)**	24	**Average Solar Radiation (w·m²)**	124
Sample Type	Normal Sample	**Sample Volume (m³)**	324	**Total Precipitation (inches H_2O)**	0.050

Analyte	Detsym	Detection Limit (ng)	Mass (ng)	EMPC*	QFlag	Concentration (ng/m³)	TEF	TEQ† (ng/m³)
PCB Homologue Groups								
Total MonoCB	=	0.0239	23.5	—		0.0725		
Total DiCB	=	0.0749	696	—		2.15		
Total TriCB	=	0.251	2210	—		6.82		
Total TetraCB	=	0.242	832	—		2.57		
Total PentaCB	=	0.166	112	—		0.346		
Total HexaCB	=	0.0349	31.1	—		0.0960		
Total HeptaCB	=	0.0184	2.07	—		0.00639		
Total OctaCB	=	0.0209	0.064	—		0.00020		
Total NonaCB	<	0.0679	—	—	U	0.0001		
DecaCB (#209)	=	0.0205	0.045	—	R	—		
Homologue Groups Sum			**3910**			**12**		

* M indicates all or a portion of the result has a calculated EMPC value.
† TEQ is the product of the concentration and its TEF value.