CITY OF NEW BEDFORD

Department of Public Infrastructure

Ronald H. Labelle
Commissioner

Frederick M. Kalisz, Jr.
Mayor

Water Division
Wastewater Division
Highways Division

August 14, 2003

Stephen Wood
Environmental Science Services, Inc.
401 Wampanoag Trail, Suite 400
E. Providence, RI 02915

Cindy - please review to make sure there are no exceedances

CC: C. Costhabury
D. Dwight
File # 118
Sullivan's Ledge
3rd party Convey

Dear Mr. Wood:

Enclosed please find July's monthly report reflecting activities at the Sullivan's Ledge Groundwater Wastewater Treatment Facility.

Included are summaries of daily logs and water levels, an auxiliary log briefly noting equipment failures and maintenance efforts, the latest sludge disposal record, and applicable monitoring reports.

Should you have any questions, please contact me at 508-979-1556.

Sincerely,

Vincent D. Furtado
Wastewater Superintendent

Cc: Evelina Vaughan
David Lederer
Donald Dwight
James Heckathorne

Enclosures

Superfund Records Center
SITE: SULLIVAN'S LEDGE
BREAK: 7.6
OTHER: 560837

1105 Shawmut Avenue
New Bedford, MA 02746
508-979-1556
508-961-3054 (fax)
RONALD L@WWW.CI.NEW-BEDFORD.MA.US

SDMS DocID 560837

SULLIVAN'S LEDGE AUXILIARY MONTHLY LOG

JULY 2003

8TH	At ~ 10:00, quartz tube and lamp blew out, causing system shutdown. New lamp and tube were installed. Process was back on-line at 13:30.
9th	Corroded phalange on chemical cleaning tank feed line was replaced.
11th	Process shut down at 16:53. Very humid. Condensation dripped onto uv ox leak detector. Process back on-line at 08:30.
15th	Process down at 20:27 on July 14. Condensation on leak detector. Dried detector, restart system. Fans purchased and placed near leak detector in an attempt to combat humidity. Process back on-line at 08:10.
	Ordered 2500 gallons of 25% NAOH
16th	Process shut down at 13:10 due to wiper fault on uv ox system. Repaired actuator switch on #3 (not making contact). Installed new lamp. Repaired broken contact wire. 13:55 process back on- line.
17th	Received 2500 gallons of 25% NAOH
18th	Process shut down due to condensation on leak detector at 18:28 on July 17. Process back-on line at 08:55.
20th	Process shut down at 15:03 on July 19 due to condensation on leak detector. System dried and restarted at 20:02.
21st	System down due to low flow at uv ox at 21:56 on July 20. There was a partial blockage in feed line from chem mix tank to flash mix tank that caused this low flow situation. Tank lines were cleaned and influent transfer lines were acid washed. Back on-line at 08:20.
22nd	Cleaned and calibrated all pH probes of uv ox and clarifier flash mix.
23rd	Process down due to moisture on leak detector...very humid again. Put dry wood blocks under detector. Dried detector. Excess moisture from and around uv ox was removed. System back on-line at 0950.
25th	Process down due to moisture on leak detector. Process back on-line at 12:30.

25th	Quartz tube cracked....replaced
28th	Process down at 16:40 on July 27...high humidity...moisture on leak detector. System dried and back on-line at 08:35
30th	Process down at 19:20 on July 29 due to humidity...moisture on leak detector. System dried and back on-line at 09:50.
	Air energy rep in plant to investigate air dryer. Compressor needs repair.

SULLIVAN'S LEDGE SUPERFUND SITE

Ground Water Treatment Plant

Performance Data

Summary

Day	Month/ 2003	Influent Total (gals)	Effluent Total (gals)	Flow Average	Effluent pH Low / High	Chemicals Used....gals Acid	Caustic	Peroxide	City Water	
1	JULY	68663	62756	44	6.0	33	166	15	180	Process on line.
2	JULY	68300	62125	43	6.1	31	165	16	284	Process on line.
3	JULY	67603	61205	43	6.1	34	159	16	163	Process on line.4 day avg.
4	JULY	67603	61205	43	6.1	34	159	16	163	Process on line. 4 day avg.
5	JULY	67603	61205	43	6.1	34	159	16	163	Process on line. 4 day avg.
6	JULY	67603	61205	43	6.1	34	159	16	163	Process on line. 4 day avg.
7	JULY	66354	61765	43	6.1	32	150	16	367	Process on line.
8	JULY	58084	54535	38	6.2	29	132	14	157	Down @ 10:00 a.m. lamp#4 failure. Replaced-on line13:30
9	JULY	47647	43504	30	6.2	27	135	10	247	Down @ 22:00 Loss of power?
10	JULY	59052	56033	39	6.2	30	128	15	194	Process on line.
11	JULY	32740	31708	22	6.3	20	117	15	568	Process went down. 3 day avg.
12	JULY	32740	31708	22	6.3	20	117	15	568	Process went down. 3 day avg.
13	JULY	32740	31708	22	6.3	20	117	15	568	Processing. 3 day avg.
14	JULY	40211	37480	26	6.2	27	101	8	352	Process down. Restarted
15	JULY	58945	55395	38	6.2	32	154	15	396	Process on line.
16	JULY	70885	65196	45	6.0	33	159	17	471	Process on line.
17	JULY	35985	32830	23	6.3	18	127	9	389	Down @ 18:28. Ondensation. Restarted
18	JULY	35247	21784	15	6.5	23	123	8	391	Process on line. 3 day avg.
19	JULY	35247	21784	15	6.5	23	123	8	391	Process went down. 3 day avg.
20	JULY	35247	21784	15	6.5	23	123	8	391	Process went down. 3 day avg.
21	JULY	63778	60127	42	6.5	32	158	15	277	Process on line.
22	JULY	29246	26956	19	6.7	24	128	7	1009	Process went down, restated.
23	JULY	58632	56658	39	6.5	24	124	15	284	Process on line.
24	JULY	42013	38461	27	6.6	24	79	10	307	Process went down. Restarted.
25	JULY	47511	45197	31	6.7	30	158	12	362	Process on line. 3 day avg.
26	JULY	47511	45197	31	6.7	30	158	12	362	Process on line. 3 day avg.
27	JULY	47511	45197	31	6.7	30	158	12	362	Process went down. 3 day avg.
28	JULY	60755	64055	44	6.1	40	131	16	583	Process on line.
29	JULY	35241	33585	23	6.7	22	113	8	396	Process went down. Restarted.
30	JULY	55555	52348	36	6.6	24	132	15	464	Process on line.
31	JULY	51638	46355	32	6.5	24	131	12	419	Process went down. Restarted.
	TOTAL	1587890	1451051	33.58914		861	4243	402	11391	
	YTD TOTAL	8135874	7065012							

SULLIVAN'S LEDGE SUPERFUND SITE

Ground Water Treatment Plant **Water levels**

Day	Month/ 2003	BEI - 1	OBG -1	OBG - 2	BEI - 2	OBG - 3	BEI - 3	Pump Station	Interim Well 1	Interim Well 2
1	JULY	70.0	69.5	57.2	68.2	52.8	66.8	11.0	22.2	23.4
2	JULY	69.9	69.5	57.1	68.2	52.8	66.8	10.9	22.1	23.3
3	JULY	69.9	69.5	56.7	68.5	52.8	66.5	10.8	22.1	23.3
4	JULY									
5	JULY									
6	JULY									
7	JULY	70.0	69.6	56.5	68.2	52.7	66.7	10.7	22.0	23.2
8	JULY	69.9	69.6	56.4	68.2	52.7	66.6	10.6	21.9	23.2
9	JULY	70.0	69.5	57.4	68.1	53.0	66.3	10.5	21.9	23.3
10	JULY	70.3	70.8	59.0	69.4	61.1	68.2	11.4	22.1	23.7
11	JULY	70.0	69.5	58.4	68.0	54.5	66.1	10.6	21.9	23.6
12	JULY									
13	JULY									
14	JULY	70.0	69.2	59.0	67.8	61.3	66.1	11.0	22.2	23.9
15	JULY	70.2	70.9	60.8	69.2	65.7	69.2	12.0	22.4	24.5
16	JULY	70.1	69.5	59.6	69.2	50.1	66.2	11.1	22.1	24.1
17	JULY	70.1	69.5	58.6	67.7	49.7	65.6	10.8	21.9	23.9
18	JULY	70.5	70.9	61.7	71.3	69.7	70.2	11.9	22.3	24.5
19	JULY									
20	JULY									
21	JULY	70.1	69.9	62.3	72.5	63.3	69.1	12.6	22.9	25.1
22	JULY	64.6	68.8	59.6	67.8	52.8	65.1	11.6	22.4	24.3
23	JULY	70.3	69.9	62.5	72.0	64.2	69.3	12.6	22.9	25.2
24	JULY	66.0	68.9	59.4	67.4	51.5	64.8	11.4	22.5	24.4
25	JULY	70.8	70.5	62.5	72.6	65.8	69.3	12.3	22.8	25.0
26	JULY									
27	JULY									
28	JULY	70.6	73.1	65.2	73.7	73.6	72.4	12.3	22.6	24.8
29	JULY	70.0	69.2	58.9	68.0	54.3	64.8	11.0	22.1	24.2
30	JULY	70.4	71.4	64.6	73.4	72.2	71.8	11.8	22.5	24.6
31	JULY	70.2	68.9	58.9	68.2	53.2	64.5	10.8	22.1	23.9

R.I. Analytical

Specialists in Environmental Services

CERTIFICATE OF ANALYSIS

City of New Bedford
Attn: Mr. Vinnie Furtado
1105 Shawmut Avenue
Dept. of Public Infrastructure
New Bedford, MA 02746

Date Received: 07/17/2003
Date Reported: 07/25/2003
P.O. #:
Work Order #: 0307-09871

DESCRIPTION: SULLIVAN'S LEDGE (TWO GROUNDWATER SAMPLES)

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by 40 CFR,136/U.S. EPA approved methodologies and all NELAC requirements were met. The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015
NH-253700 A & B, USDA S-41844, NY-11726

If you have any questions regarding this work, or if we may be of further assistance, please contact us.

Approved by:

Paul Perrotti
Data Reporting Manager

enc: Chain of Custody

41 Illinois Avenue, Warwick, RI 02888
Tel: (401) 737-8500 Fax: (401) 738-1970

131 Coolidge Street, Bldg 2, Hudson, MA 01749
Tel: (978) 568-0041 Fax: (978) 568-0078

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

City of New Bedford
Date Received: 07/17/2003
Work Order #: 0307-09871

Approved by: _____
R.I. Analytical

Sample # 001
SAMPLE DESCRIPTION: FINAL EFFLUENT
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 07/16/2003 07/17/2003

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
PESTICIDES / PCBs						
Aldrin	<0.1	0.1	ug/l	SW-846 8081	07/18/2003	RML
Alpha-BHC	<0.1	0.1	ug/l	SW-846 8081	07/18/2003	RML
Beta-BHC	<0.1	0.1	ug/l	SW-846 8081	07/18/2003	RML
Delta-BHC	<0.1	0.1	ug/l	SW-846 8081	07/18/2003	RML
Gamma-BHC	<0.1	0.1	ug/l	SW-846 8081	07/18/2003	RML
Chlordane	<0.5	0.5	ug/l	SW-846 8081	07/18/2003	RML
4-4'-DDD	<0.1	0.1	ug/l	SW-846 8081	07/18/2003	RML
4-4'-DDE	<0.1	0.1	ug/l	SW-846 8081	07/18/2003	RML
4-4'-DDT	<0.1	0.1	ug/l	SW-846 8081	07/18/2003	RML
Dieldrin	<0.1	0.1	ug/l	SW-846 8081	07/18/2003	RML
Endosulfan I	<0.1	0.1	ug/l	SW-846 8081	07/18/2003	RML
Endosulfan II	<0.1	0.1	ug/l	SW-846 8081	07/18/2003	RML
Endosulfan Sulfate	<0.1	0.1	ug/l	SW-846 8081	07/18/2003	RML
Endrin	<0.1	0.1	ug/l	SW-846 8081	07/18/2003	RML
Endrin Aldehyde	<0.1	0.1	ug/l	SW-846 8081	07/18/2003	RML
Heptachlor	<0.1	0.1	ug/l	SW-846 8081	07/18/2003	RML
Heptachlor epoxide	<0.1	0.1	ug/l	SW-846 8081	07/18/2003	RML
Methoxychlor	<0.5	0.5	ug/l	SW-846 8081	07/18/2003	RML
Toxaphene	<5	5	ug/l	SW-846 8081	07/18/2003	RML
Aroclor-1016	<1	1	ug/l	SW-846 8081	07/18/2003	RML
Aroclor-1221	<1	1	ug/l	SW-846 8081	07/18/2003	RML
Aroclor-1232	<1	1	ug/l	SW-846 8081	07/18/2003	RML
Aroclor-1242	<1	1	ug/l	SW-846 8081	07/18/2003	RML
Aroclor-1248	<1	1	ug/l	SW-846 8081	07/18/2003	RML
Aroclor-1254	<1	1	ug/l	SW-846 8081	07/18/2003	RML
Aroclor-1260	<1	1	ug/l	SW-846 8081	07/18/2003	RML
SURROGATE			RANGE	SW-846 8081	07/18/2003	RML
Decachlorobiphenyl	70		60-140%	SW-846 8081	07/18/2003	RML
SEMI-VOLATILE ORGANIC COMPOUNDS						
Acenaphthene	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
Acenaphthylene	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
Anthracene	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
Benzidine	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
Benzo(a)anthracene	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
Benzo(b)fluoranthene	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
Benzo(k)fluoranthene	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
Benzo(g,h,i)perylene	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
Benzo(a)pyrene	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
Bis(2-chloroethyl)ether	<10	10	ug/l	SW-846 8270	07/24/2003	NPV

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

City of New Bedford
Date Received: 07/17/2003
Work Order #: 0307-09871

Approved by: _____
R.I. Analytical

Sample # 001
SAMPLE DESCRIPTION: FINAL EFFLUENT
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 07/16/2003 07/17/2003

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Bis(2-Chloroethoxy)methane	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
bis(2-chloroisopropyl)ether	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
Bis(2-ethylhexyl)phthalate	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
4-Bromophenyl phenyl ether	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
Butylbenzyl phthalate	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
2-Chloronaphthalene	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
4-Chlorophenyl phenyl ether	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
Chrysene	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
Dibenzo(a,h)anthracene	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
Di-n-butyl phthalate	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
1,2-Dichlorobenzene	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
1,3-Dichlorobenzene	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
1,4-Dichlorobenzene	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
3,3'-Dichlorobenzidine	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
Diethyl phthalate	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
Dimethyl phthalate	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
2,4-Dinitrotoluene	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
2,6-Dinitrotoluene	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
Di-n-octyl phthalate	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
1,2-Diphenylhydrazine	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
Fluoranthene	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
Fluorene	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
Hexachlorobenzene	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
Hexachlorobutadiene	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
Hexachlorocyclopentadiene	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
Hexachloroethane	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
Indeno(1,2,3-cd)pyrene	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
Isophorone	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
Naphthalene	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
Nitrobenzene	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
N-nitrosodimethylamine	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
N-nitrosodiphenylamine	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
N-nitrosodi-n-propylamine	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
Phenanthrene	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
Pyrene	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
1,2,4-Trichlorobenzene	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
4-Chloro-3-methylphenol	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
2-Chlorophenol	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
2,4-Dichlorophenol	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
2,4-Dimethylphenol	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
2-Methyl-4,6-dinitrophenol	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
2,4-Dinitrophenol	<10	10	ug/l	SW-846 8270	07/24/2003	NPV

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

City of New Bedford
Date Received: 07/17/2003
Work Order #: 0307-09871

Approved by: R.I. Analytical

Sample # 001
SAMPLE DESCRIPTION: FINAL EFFLUENT
SAMPLE TYPE: COMPOSITE **SAMPLE DATE/TIME:** 07/16/2003 07/17/2003

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
2-Nitrophenol	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
4-Nitrophenol	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
Pentachlorophenol	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
Phenol	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
2,4,6-Trichlorophenol	<10	10	ug/l	SW-846 8270	07/24/2003	NPV
SURROGATES			RANGE	SW-846 8270	07/24/2003	NPV
Phenol-d5	52		10-94%	SW-846 8270	07/24/2003	NPV
2-Fluorophenol	54		21-100%	SW-846 8270	07/24/2003	NPV
2,4,6-Tribromophenol	82		10-123%	SW-846 8270	07/24/2003	NPV
Nitrobenzene-d5	105		35-114%	SW-846 8270	07/24/2003	NPV
2-Fluorobiphenyl	66		43-116%	SW-846 8270	07/24/2003	NPV
P-Terphenyl-d14	138		33-141%	SW-846 8270	07/24/2003	NPV
TOTAL METALS						
ARSENIC	<0.1	0.1	mg/l	EPA 200.7	07/21/2003	JNB
CADMIUM	<0.005	0.005	mg/l	EPA 200.7	07/21/2003	JNB
CHROMIUM	<0.03	0.03	mg/l	EPA 200.7	07/21/2003	JNB
COPPER	<0.05	0.05	mg/l	EPA 200.7	07/21/2003	JNB
LEAD	<0.04	0.04	mg/l	EPA 200.7	07/21/2003	JNB
MERCURY	<0.0005	0.0005	mg/l	EPA 245.1	07/21/2003	SM
MOLYBDENUM	<0.05	0.05	mg/l	EPA 200.7	07/21/2003	JNB
NICKEL	<0.02	0.02	mg/l	EPA 200.7	07/21/2003	JNB
SILVER	<0.02	0.02	mg/l	EPA 200.7	07/21/2003	JNB
ZINC	0.03	0.02	mg/l	EPA 200.7	07/21/2003	JNB

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

City of New Bedford
Date Received: 07/17/2003
Work Order #: 0307-09871

Approved by: R.I. Analytical

Sample # 002
SAMPLE DESCRIPTION: FINAL EFFLUENT
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 07/17/2003 @08:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
TOTAL CYANIDE	0.06	0.01	mg/l	EPA 335.2	07/22/2003	EC
Volatile Organic Compounds						
Benzene	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
Bromobenzene	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
Bromochloromethane	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
Bromodichloromethane	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
Bromoform	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
Bromomethane	<10	10	ug/l	SW-846 8260	07/23/2003	BAS
n-Butylbenzene	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
sec-Butylbenzene	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
tert-Butylbenzene	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
Carbon Tetrachloride	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
Chlorobenzene	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
Chloroethane	<5	5	ug/l	SW-846 8260	07/23/2003	BAS
Chloroform	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
Chloromethane	46	5	ug/l	SW-846 8260	07/23/2003	BAS
2-Chlorotoluene	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
4-Chlorotoluene	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
Dibromochloromethane	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
1,2-Dibromo-3-Chloropropane	<2	2	ug/l	SW-846 8260	07/23/2003	BAS
1,2-Dibromoethane(EDB)	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
Dibromomethane	<2	2	ug/l	SW-846 8260	07/23/2003	BAS
1,2-Dichlorobenzene	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
1,3-Dichlorobenzene	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
1,4-Dichlorobenzene	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
Dichlorodifluoromethane	<5	5	ug/l	SW-846 8260	07/23/2003	BAS
1,1-Dichloroethane	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
1,2-Dichloroethane	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
1,1-Dichloroethene	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
cis-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
trans-1,2-Dichloroethene	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
1,2-Dichloropropane	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
1,3-Dichloropropane	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
2,2-Dichloropropane	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
1,1-Dichloropropene	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
Ethylbenzene	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
Hexachlorobutadiene	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
Isopropylbenzene	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
p-Isopropyltoluene	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
Methylene Chloride	<5	5	ug/l	SW-846 8260	07/23/2003	BAS
Naphthalene	<1	1	ug/l	SW-846 8260	07/23/2003	BAS

R.I. Analytical Laboratories, Inc.

CERTIFICATE OF ANALYSIS

City of New Bedford
Date Received: 07/17/2003
Work Order #: 0307-09871

Approved by: R.I. Analytical

Sample # 002
SAMPLE DESCRIPTION: FINAL EFFLUENT
SAMPLE TYPE: GRAB **SAMPLE DATE/TIME:** 07/17/2003 @08:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
n-Propylbenzene	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
Styrene	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
1,1,1,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
1,1,2,2-Tetrachloroethane	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
Tetrachloroethene	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
Toluene	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
1,2,3-Trichlorobenzene	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
1,2,4-Trichlorobenzene	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
1,1,1-Trichloroethane	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
1,1,2-Trichloroethane	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
Trichloroethene	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
Trichlorofluoromethane	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
1,2,3-Trichloropropane	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
1,2,4-Trimethylbenzene	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
1,3,5-Trimethylbenzene	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
Vinyl Chloride	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
o-Xylene	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
m&p-Xylene	<1	1	ug/l	SW-846 8260	07/23/2003	BAS
MTBE	<2	2	ug/l	SW-846 8260	07/23/2003	BAS
SURROGATES			RANGE	SW-846 8260	07/23/2003	BAS
Dibromofluoromethane	101		86-118%	SW-846 8260	07/23/2003	BAS
Toluene-d8	89		88-110%	SW-846 8260	07/23/2003	BAS
4-Bromofluorobenzene	101		86-115%	SW-846 8260	07/23/2003	BAS
1,2 Dichloroethane-d4	98		80-120%	SW-846 8260	07/23/2003	BAS

PESTICIDE & PCB ORGANICS METHOD BLANK DATA SHEET

Lab Name: RI ANALYTICAL CLIENT: CITY OF NEW BEDFORD

Date: 07/22/03 W.O #: 0307-09871

COMPOUND		CONCENTRATION UNITS: ug/l
alpha-BHC		<0.1
beta-BHC		<0.1
delta-BHC		<0.1
gamma-BHC (Lindane)		<0.1
Heptachlor		<0.1
Aldrin		<0.1
Heptachlor epoxide		<0.1
Endosulfan I		<0.1
Dieldrin		<0.1
4,4'-DDE		<0.1
Endrin		<0.1
Endosulfan II		<0.1
4,4'-DDD		<0.1
Endosulfan sulfate		<0.1
4,4'-DDT		<0.1
Methoxychlor		<0.5
Endrin aldehyde		<0.1
Chlordane		<0.5
Toxaphene		<5
Aroclor-1016		<1
Aroclor-1221		<1
Aroclor-1232		<1
Aroclor-1242		<1
Aroclor-1248		<1
Aroclor-1254		<1
Aroclor-1260		<1
Decachlorobiphenyl	(60-140%)	84

PESTICIDE & PCB ORGANICS LCS DATA SHEET

Lab Name: RI ANALYTICAL

Client: CITY OF NEW BEDFORD

W.O. # 0307-09871

COMPOUND	SPIKE ADDED ug/l	AMOUNT DETECTED ug/l	% RECOVERY
Aroclor-1016	10	10.03	100
Aroclor-1260	10	8.97	90
Decachlorobiphenyl (60-140%)			69

PESTICIDE & PCB ORGANICS DUPLICATE DATA SHEET

Lab Name: RI ANALYTICAL

Client: CITY OF NEW BEDFORD

Duplicate Sample # 0307-09871-001

W.O. #: 0307-09871

COMPOUND		SAMPLE RESULT ug/l	DUPLICATE SAMPLE RESULT ug/l	MEAN	REPORTED VALUE	RPD
alpha-BHC		<0.1	<0.1	<0.1	<0.1	0
beta-BHC		<0.1	<0.1	<0.1	<0.1	0
delta-BHC		<0.1	<0.1	<0.1	<0.1	0
gamma-BHC (Lindane)		<0.1	<0.1	<0.1	<0.1	0
Heptachlor		<0.1	<0.1	<0.1	<0.1	0
Aldrin		<0.1	<0.1	<0.1	<0.1	0
Heptachlor epoxide		<0.1	<0.1	<0.1	<0.1	0
Endosulfan I		<0.1	<0.1	<0.1	<0.1	0
Dieldrin		<0.1	<0.1	<0.1	<0.1	0
4,4'-DDE		<0.1	<0.1	<0.1	<0.1	0
Endrin		<0.1	<0.1	<0.1	<0.1	0
Endosulfan II		<0.1	<0.1	<0.1	<0.1	0
4,4'-DDD		<0.1	<0.1	<0.1	<0.1	0
Endosulfan sulfate		<0.1	<0.1	<0.1	<0.1	0
4,4'-DDT		<0.1	<0.1	<0.1	<0.1	0
Methoxychlor		<0.5	<0.5	<0.5	<0.5	0
Endrin aldehyde		<0.1	<0.1	<0.1	<0.1	0
Chlordane		<0.5	<0.5	<0.5	<0.5	0
Toxaphene		<5	<5	<5	<5	0
Aroclor-1016		<1	<1	<1	<1	0
Aroclor-1221		<1	<1	<1	<1	0
Aroclor-1232		<1	<1	<1	<1	0
Aroclor-1242		<1	<1	<1	<1	0
Aroclor-1248		<1	<1	<1	<1	0
Aroclor-1254		<1	<1	<1	<1	0
Aroclor-1260		<1	<1	<1	<1	0
Decachlorobiphenyl	(60-140%)	70	45*			

* Below acceptance limits.

SOIL PESTICIDE & PCB MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: RI ANALYTICAL Client: CITY OF NEW BEDFORD

W.O. #: 0307-09871

Matrix Spike - EPA Sample No.: 0307-09871-001

COMPOUND	SPIKE ADDED (ug/l)	SAMPLE CONCENTRATION (ug/l)	MS CONCENTRATION (ug/l)	MS % REC #	QC. LIMITS REC.
Aroclor-1016	20.0	<1	16.8	84	46-127
Aroclor-1260	20.0	<1	20.9	104	35-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: N/A out of N/A outside limits

Spike Recovery: 0 out of 2 outside limits

COMMENTS:

METHOD 8260

VOLATILE ORGANICS METHOD BLANK DATA SHEET

Lab Name: RI ANALYTICAL

Client: CITY OF NEW BEDFORD

W.O. # 0307-09871

COMPOUND	CONCENTRATION UNITS: ug/l
Dichlorodifluoromethane	<5
Chloromethane	<5
Vinyl Chloride	<1
Bromomethane	<10
Chloroethane	<5
Trichlorofluoromethane	<1
1,1-Dichloroethene	<1
Methylene Chloride	<5
Methyl tert-Butyl Ether (MTBE)	<2
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
2,2-Dichloropropane	<1
Bromochloromethane	<1
Chloroform	<1
1,1,1-Trichloroethane	<1
1,1-Dichloropropene	<1
Carbon Tetrachloride	<1
Benzene	<1
1,2-Dichloroethane	<1
Trichloroethene	<1
1,2-Dichloropropane	<1
Dibromomethane	<2
Bromodichloromethane	<1
Toluene	<1
1,1,2-Trichloroethane	<1
Tetrachloroethene	<1
1,3-Dichloropropane	<1
Dibromochloromethane	<1
1,2-Dibromethane (EDB)	<1
Chlorobenzene	<1
Ethylbenzene	<1
1,1,1,2-Tetrachloroethane	<1
m&p-Xylene	<1
o-Xylene	<1
Styrene	<1
Bromoform	<1

METHOD 8260

VOLATILE ORGANICS METHOD BLANK DATA SHEET

Lab Name: RI ANALYTICAL Client: CITY OF NEW BEDFORD

W.O.#: 0307-09871

COMPOUND	CONCENTRATION UNITS: ug/l
Isopropylbenzene	<1
1,1,2,2-Tetrachloroethane	<1
Bromobenzene	<1
n-Propylbenzene	<1
1,2,3-Trichloropropane	<1
2-Chlorotoluene	<1
1,3,5-Trimethylbenzene	<1
4-Chlorotoluene	<1
tert-Butylbenzene	<1
1,2,4-Trimethylbenzene	<1
sec-Butylbenzene	<1
p-Isopropyltoluene	<1
1,3-Dichlorobenzene	<1
1,4-Dichlorobenzene	<1
n-Butylbenzene	<1
1,2-Dichlorobenzene	<1
1,2-Dibromo-3-chloropropane	<2
1,2,4-Trichlorobenzene	<1
Hexachlorobutadiene	<1
Naphthalene	<1
1,2,3-Trichlorobenzene	<1
Dibromofluoromethane	100
1,2-Dichloroethane-d4	98
Toluene-d8	102
4-Bromofluorobenzene	100

METHOD 8260

VOLATILE ORGANICS LCS DATA SHEET

Lab Name: RI ANALYTICAL

Client: CITY OF NEW BEDFORD

W.O. # 0307-09871

COMPOUND	SPIKE ADDED ug/L	AMOUNT DETECTED ug/L	% RECOVERY
Dichlorodifluoromethane	50	54	108
Chloromethane	50	56	112
Vinyl Chloride	50	57	114
Bromomethane	50	67	134
Chloroethane	50	56	112
Trichlorofluoromethane	50	51	102
1,1-Dichloroethene	50	42	84
Methylene Chloride	50	48	96
Methyl tert-Butyl Ether (MTBE)	50	54	108
trans-1,2-Dichloroethene	50	51	102
1,1-Dichloroethane	50	52	104
cis-1,2-Dichloroethene	50	53	106
2,2-Dichloropropane	50	51	102
Bromochloromethane	50	52	104
Chloroform	50	53	106
1,1,1-Trichloroethane	50	52	104
1,1-Dichloropropene	50	52	104
Carbon Tetrachloride	50	53	106
Benzene	50	53	106
1,2-Dichloroethane	50	54	108
Trichloroethene	50	53	106
1,2-Dichloropropane	50	54	108
Dibromomethane	50	53	106
Bromodichloromethane	50	53	106
Toluene	50	53	106
1,1,2-Trichloroethane	50	54	108
Tetrachloroethene	50	52	104
1,3-Dichloropropane	50	54	108
Dibromochloromethane	50	54	108
1,2-Dibromoethane (EDB)	50	54	108
Chlorobenzene	50	52	104
Ethylbenzene	50	52	104
1,1,1,2-Tetrachloroethane	50	51	102
m&p-Xylene	100	103	103
o-Xylene	50	52	104
Styrene	50	53	106
Bromoform	50	53	106

METHOD 8260

VOLATILE ORGANICS LCS DATA SHEET

Lab Name: RI ANALYTICAL Client: CITY OF NEW BEDFORD

W.O. # 0307-09871

COMPOUND	SPIKE ADDED ug/L	AMOUNT DETECTED ug/L	% RECOVERY
Isopropylbenzene	50	52	104
1,1,2,2-Tetrachloroethane	50	55	110
Bromobenzene	50	54	108
n-Propylbenzene	50	53	106
1,2,3-Trichloropropane	50	54	108
2-Chlorotoluene	50	53	106
1,3,5-Trimethylbenzene	50	52	104
4-Chlorotoluene	50	53	106
tert-Butylbenzene	50	54	108
1,2,4-Trimethylbenzene	50	53	106
sec-Butylbenzene	50	53	106
p-Isopropyltoluene	50	52	104
1,3-Dichlorobenzene	50	54	108
1,4-Dichlorobenzene	50	51	102
n-Butylbenzene	50	51	102
1,2-Dichlorobenzene	50	51	102
1,2-Dibromo-3-chloropropane	50	53	106
1,2,4-Trichlorobenzene	50	51	102
Hexachlorobutadiene	50	50	100
Naphthalene	50	52	104
1,2,3-Trichlorobenzene	50	51	102
Dibromofluoromethane			99
1,2-Dichloroethane-d4			97
Toluene-d8			103
4-Bromofluorobenzene			100

METHOD 8260

VOLATILE ORGANICS DUPLICATE DATA SHEET

Lab Name: RI ANALYTICAL

Client: CITY OF NEW BEDFORD

Duplicate Sample # 0307-09861-003

W.O. # 0307-09871

COMPOUND	SAMPLE RESULT ug/L	DUPLICATE SAMPLE RESULT ug/L	MEAN ug/L	REPORTED VALUE ug/L	RPD
Dichlorodifluoromethane	<5	<5	<5	<5	0
Chloromethane	<5	<5	<5	<5	0
Vinyl Chloride	<1	<1	<1	<1	0
Bromomethane	<10	<10	<10	<10	0
Chloroethane	<5	<5	<5	<5	0
Trichlorofluoromethane	<1	<1	<1	<1	0
1,1-Dichloroethene	<1	<1	<1	<1	0
Methylene Chloride	<5	<5	<5	<5	0
Methyl tert-Butyl Ether (MTBE)	3	3	3	3	0
trans-1,2-Dichloroethene	<1	<1	<1	<1	0
1,1-Dichloroethane	<1	<1	<1	<1	0
cis-1,2-Dichloroethene	<1	<1	<1	<1	0
2,2-Dichloropropane	<1	<1	<1	<1	0
Bromochloromethane	<1	<1	<1	<1	0
Chloroform	4	4	4	4	0
1,1,1-Trichloroethane	<1	<1	<1	<1	0
1,1-Dichloropropene	<1	<1	<1	<1	0
Carbon Tetrachloride	<1	<1	<1	<1	0
Benzene	<1	<1	<1	<1	0
1,2-Dichloroethane	<1	<1	<1	<1	0
Trichloroethene	<1	<1	<1	<1	0
1,2-Dichloropropane	<1	<1	<1	<1	0
Dibromomethane	<2	<2	<2	<2	0
Bromodichloromethane	1	1	1	1	0
Toluene	9	9	9	9	0
1,1,2-Trichloroethane	<1	<1	<1	<1	0
Tetrachloroethene	<1	<1	<1	<1	0
1,3-Dichloropropane	<1	<1	<1	<1	0
Dibromochloromethane	<1	<1	<1	<1	0
1,2-Dibromethane (EDB)	<1	<1	<1	<1	0
Chlorobenzene	<1	<1	<1	<1	0
Ethylbenzene	<1	<1	<1	<1	0
1,1,1,2-Tetrachloroethane	<1	<1	<1	<1	0
m&p-Xylene	<1	<1	<1	<1	0
o-Xylene	<1	<1	<1	<1	0
Styrene	<1	<1	<1	<1	0
Bromoform	<1	<1	<1	<1	0

METHOD 8260

VOLATILE ORGANICS DUPLICATE DATA SHEET

Lab Name: RI ANALYTICAL Client: CITY OF NEW BEDFORD

Duplicate Sample # 0307-09861-003 W.O. # 0307-09871

COMPOUND	SAMPLE RESULT ug/L	DUPLICATE SAMPLE RESULT ug/L	MEAN ug/L	REPORTED VALUE ug/L	RPD
Isopropylbenzene	<1	<1	<1	<1	0
1,1,2,2-Tetrachloroethane	<1	<1	<1	<1	0
Bromobenzene	<1	<1	<1	<1	0
n-Propylbenzene	<1	<1	<1	<1	0
1,2,3-Trichloropropane	<1	<1	<1	<1	0
2-Chlorotoluene	<1	<1	<1	<1	0
1,3,5-Trimethylbenzene	<1	<1	<1	<1	0
4-Chlorotoluene	<1	<1	<1	<1	0
tert-Butylbenzene	<1	<1	<1	<1	0
1,2,4-Trimethylbenzene	<1	<1	<1	<1	0
sec-Butylbenzene	<1	<1	<1	<1	0
p-Isopropyltoluene	<1	<1	<1	<1	0
1,3-Dichlorobenzene	<1	<1	<1	<1	0
1,4-Dichlorobenzene	<1	<1	<1	<1	0
n-Butylbenzene	<1	<1	<1	<1	0
1,2-Dichlorobenzene	<1	<1	<1	<1	0
1,2-Dibromo-3-chloropropane	<2	<2	<2	<2	0
1,2,4-Trichlorobenzene	<1	<1	<1	<1	0
Hexachlorobutadiene	<1	<1	<1	<1	0
Naphthalene	<1	<1	<1	<1	0
1,2,3-Trichlorobenzene	<1	<1	<1	<1	0
Dibromofluoromethane	99	99			
1,2-Dichloroethane-d4	96	99			
Toluene-d8	101	102			
4-Bromofluorobenzene	103	100			

METHOD 8260

VOLATILE ORGANICS MATRIX SPIKE/MATRIX SPIKE DUPLICATE DATA SHEET

Lab Name: RI ANALYTICAL

Client: CITY OF NEW BEDFORD

Matrix Spike Sample # 0307-09871-002

W.O. # 0307-09871

COMPOUND	SAMPLE CONC. ug/L	SPIKE CONC. ug/L	MS CONC. ug/L	MS % REC.	MSD CONC. ug/L	MSD % REC.	RPD
Dichlorodifluoromethane	<5	50	74	148	82	164	10
Chloromethane	46	50	107	122	139	186	42
Vinyl Chloride	<1	50	61	122	66	132	8
Bromomethane	<10	50	67	134	76	152	13
Chloroethane	<5	50	64	128	69	138	8
Trichlorofluoromethane	<1	50	61	122	64	128	5
1,1-Dichloroethene	<1	50	42	84	45	90	7
Methylene Chloride	<5	50	43	86	48	96	11
Methyl tert-Butyl Ether (MTBE)	<2	50	43	86	47	94	9
trans-1,2-Dichloroethene	<1	50	44	88	47	94	7
1,1-Dichloroethane	<1	50	48	96	52	104	8
cis-1,2-Dichloroethene	<1	50	46	92	50	100	8
2,2-Dichloropropane	<1	50	65	130	70	140	7
Bromochloromethane	<1	50	44	88	48	96	9
Chloroform	<1	50	46	92	53	106	14
1,1,1-Trichloroethane	<1	50	48	96	53	106	10
1,1-Dichloropropene	<1	50	46	92	46	92	0
Carbon Tetrachloride	<1	50	47	94	52	104	10
Benzene	<1	50	46	92	51	102	10
1,2-Dichloroethane	<1	50	52	104	57	114	9
Trichloroethene	<1	50	47	94	51	102	8
1,2-Dichloropropane	<1	50	48	96	53	106	10
Dibromomethane	<2	50	49	98	54	108	10
Bromodichloromethane	<1	50	49	98	55	110	12
Toluene	<1	50	46	92	44	88	4
1,1,2-Trichloroethane	<1	50	50	100	55	110	10
Tetrachloroethene	<1	50	48	96	53	106	10
1,3-Dichloropropane	<1	50	50	100	55	110	10
Dibromochloromethane	<1	50	48	96	54	108	12
1,2-Dibromethane (EDB)	<1	50	48	96	54	108	12
Chlorobenzene	<1	50	47	94	52	104	10
Ethylbenzene	<1	50	47	94	45	90	4
1,1,1,2-Tetrachloroethane	<1	50	48	96	53	106	10
m&p-Xylene	<1	100	87	87	63	63	32
o-Xylene	<1	50	45	90	34	68	28
Styrene	<1	50	23	46	0.85	1.7	186
Bromoform	<1	50	50	100	55	110	10

METHOD 8260

VOLATILE ORGANICS MATRIX SPIKE/MATRIX SPIKE DUPLICATE DATA SHEET

Lab Name: RI ANALYTICAL

Client: CITY OF NEW BEDFORD

Matrix Spike Sample # 0307-09871-002

W.O. # 0307-09871

COMPOUND	SAMPLE CONC. ug/L	SPIKE CONC. ug/L	MS CONC. ug/L	MS % REC.	MSD CONC. ug/L	MSD % REC.	RPD
Isopropylbenzene	<1	50	50	100	48	96	4
1,1,2,2-Tetrachloroethane	<1	50	53	106	58	116	9
Bromobenzene	<1	50	50	100	54	108	8
n-Propylbenzene	<1	50	51	102	49	98	4
1,2,3-Trichloropropane	<1	50	54	108	59	118	9
2-Chlorotoluene	<1	50	51	102	51	102	0
1,3,5-Trimethylbenzene	<1	50	40	80	7	14	140
4-Chlorotoluene	<1	50	53	106	55	110	4
tert-Butylbenzene	<1	50	51	102	56	112	9
1,2,4-Trimethylbenzene	<1	50	46	92	23	46	67
sec-Butylbenzene	<1	50	52	104	52	104	0
p-Isopropyltoluene	<1	50	51	102	41	82	22
1,3-Dichlorobenzene	<1	50	55	110	58	116	5
1,4-Dichlorobenzene	<1	50	48	96	54	108	12
n-Butylbenzene	<1	50	49	98	47	94	4
1,2-Dichlorobenzene	<1	50	49	98	54	108	10
1,2-Dibromo-3-chloropropane	<2	50	52	104	61	122	16
1,2,4-Trichlorobenzene	<1	50	48	96	55	110	14
Hexachlorobutadiene	<1	50	48	96	50	100	4
Naphthalene	<1	50	44	88	44	88	0
1,2,3-Trichlorobenzene	<1	50	49	98	56	112	13
Dibromofluoromethane				101		101	
1,2-Dichloroethane-d4				95		97	
Toluene-d8				102		100	
4-Bromofluorobenzene				109		106	

METHOD 8270

SEMI-VOLATILE ORGANICS METHOD BLANK DATA SHEET

Lab Name: RI ANALYTICAL

CLIENT: CITY OF NEW BEDFORD

W.O #: 0307-09871

COMPOUND	CONCENTRATION UNITS: ug/l
Acenaphthene	<10
Acenaphthylene	<10
Anthracene	<10
Benzidine	<10
Benzo(a)anthracene	<10
Benzo(b)fluoranthene	<10
Benzo(k)fluoranthene	<10
Benzo(g,h,i)perylene	<10
Benzo(a)pyrene	<10
Bis(2-chloroethyl)ether	<10
Bis(2-chlorethoxy)methane	<10
bis(2-Chloroisopropyl)ether	<10
Bis(2-ethylhexyl)phthalate	<10
4-Bromophenyl phenyl ether	<10
Butylbenzyl phthalate	<10
2-Chloronaphthalene	<10
4-Chlorophenyl phenyl ether	<10
Chrysene	<10
Dibenzo(a,h)anthracene	<10
Di-n-butyl phthalate	<10
1,2-Dichlorobenzene	<10
1,3-Dichlorobenzene	<10
1,4-Dichlorobenzene	<10
3,3-Dichlorobenzidine	<10
Diethyl phthalate	<10
Dimethyl phthalate	<10
2,4-Dinitrotoluene	<10
2,6-Dinitrotoluene	<10
Di-n-octyl phthalate	<10
1,2-Diphenylhydrazine	<10
Fluoranthene	<10
Fluorene	<10
Hexachlorobenzene	<10
Hexachlorobutadiene	<10
Hexachlorocyclopentadiene	<10
Hexachloroethane	<10
Indeno(1,2,3-cd)pyrene	<10
Isophorone	<10
Naphthalene	<10

METHOD 8270

SEMI-VOLATILE ORGANICS METHOD BLANK DATA SHEET

Lab Name: RI ANALYTICAL

CLIENT: CITY OF NEW BEDFORD

W.O #: 0307-09871

COMPOUND	CONCENTRATION UNITS: ug/l
Nitrobenzene	<10
N-nitrosodimethylamine	<10
N-nitrosodiphenylamine	<10
N-nitrosodi-n-propylamine	<10
Phenanthrene	<10
Pyrene	<10
1,2,4-Trichlorobenzene	<10
4-Chloro-3-methylphenol	<10
2-Chlorophenol	<10
2,4-Dichlorophenol	<10
2,4-Dimethylphenol	<10
2-Methyl-4,6-dinitrophenol	<10
2,4-Dinitrophenol	<10
2-Nitrophenol	<10
4-Nitrophenol	<10
Pentachlorophenol	<10
Phenol	<10
2,4,6-Trichlorophenol	<10
Phenol-d5	33
2-Fluorophenol	49
2,4,6-Tribromophenol	86
Nitrobenzene-d5	83
2-Fluorobiphenyl	81
P-Terphenyl-d14	94

METHOD 8270

SEMI-VOLATILE ORGANICS LCS DATA SHEET

Lab Name: RI ANALYTICAL Client: CITY OF NEW BEDFORD

W.O. # 0307-09871

COMPOUND	SPIKE ADDED ug/L	AMOUNT DETECTED ug/L	% RECOVERY
Acenaphthene	50	43	86
Acenaphthylene	50	41	82
Anthracene	50	58	116
Benzo(a)anthracene	50	56	112
Benzo(b)fluoranthene	50	68	136
Benzo(k)fluoranthene	50	57	114
Benzo(g,h,i)perylene	50	19	38
Benzo(a)pyrene	50	63	126
Bis(2-chloroethyl)ether	50	56	112
Bis(2-chlorethoxy)methane	50	58	116
bis(2-Chloroisopropyl)ether	50	52	104
Bis(2-ethylhexyl)phthalate	50	62	124
4-Bromophenyl phenyl ether	50	64	128
Butylbenzyl phthalate	50	68	136
2-Chloronaphthalene	50	45	90
4-Chlorophenyl phenyl ether	50	45	90
Chrysene	50	60	120
Dibenzo(a,h)anthracene	50	31	62
Di-n-butyl phthalate	50	51	102
1,2-Dichlorobenzene	50	49	98
1,3-Dichlorobenzene	50	46	92
1,4-Dichlorobenzene	50	49	98
Diethyl phthalate	50	44	88
Dimethyl phthalate	50	48	96
2,6-Dinitrotoluene	50	62	124
Di-n-octyl phthalate	50	66	132
Fluoranthene	50	60	120
Fluorene	50	48	96
Hexachlorobenzene	50	87	174
Hexachlorobutadiene	50	68	136
Hexachloroethane	50	55	110
Indeno(1,2,3-cd)pyrene	50	28	56
Isophorone	50	61	122
Naphthalene	50	49	98

METHOD 8270

SEMI-VOLATILE ORGANICS LCS DATA SHEET

Lab Name: RI ANALYTICAL

Client: CITY OF NEW BEDFORD

W.O. # 0307-09871

COMPOUND	SPIKE ADDED ug/L	AMOUNT DETECTED ug/L	% RECOVERY
Nitrobenzene	50	67	134
N-nitrosodimethylamine	50	71	142
N-nitrosodi-n-propylamine	50	61	122
Phenanthrene	50	57	114
Pyrene	50	72	144
1,2,4-Trichlorobenzene	50	60	120
4-Chloro-3-methylphenol	50	53	106
2-Chlorophenol	50	49	98
2,4-Dichlorophenol	50	62	124
2,4-Dimethylphenol	50	49	98
2-Methyl-4,6-dinitrophenol	50	58	116
2-Nitrophenol	50	54	108
4-Nitrophenol	50	50	100
Pentachlorophenol	50	30	60
Phenol	50	66	132
2,4,6-Trichlorophenol	50	46	92
Phenol-d5			111
2-Fluorophenol			94
2,4,6-Tribromophenol			90
Nitrobenzene-d5			104
2-Fluorobiphenyl			82
P-Terphenyl-d14			139

METHOD 8270

SEMI-VOLATILE ORGANICS DUPLICATE DATA SHEET

Lab Name: RI ANALYTICAL

Client: CITY OF NEW BEDFORD

Duplicate Sample # 0307-09871-001

W.O. # 0307-09871

COMPOUND	SAMPLE RESULT ug/L	DUPLICATE SAMPLE RESULT ug/L	MEAN	REPORTED VALUE	RPD
Acenaphthene	<10	<10	<10	<10	0
Acenaphthylene	<10	<10	<10	<10	0
Anthracene	<10	<10	<10	<10	0
Benzidine	<10	<10	<10	<10	0
Benzo(a)anthracene	<10	<10	<10	<10	0
Benzo(b)fluoranthene	<10	<10	<10	<10	0
Benzo(k)fluoranthene	<10	<10	<10	<10	0
Benzo(g,h,i)perylene	<10	<10	<10	<10	0
Benzo(a)pyrene	<10	<10	<10	<10	0
Bis(2-chloroethyl)ether	<10	<10	<10	<10	0
Bis(2-chlorethoxy)methane	<10	<10	<10	<10	0
bis(2-Chloroisopropyl)ether	<10	<10	<10	<10	0
Bis(2-ethylhexyl)phthalate	<10	<10	<10	<10	0
4-Bromophenyl phenyl ether	<10	<10	<10	<10	0
Butylbenzyl phthalate	<10	<10	<10	<10	0
2-Chloronaphthalene	<10	<10	<10	<10	0
4-Chlorophenyl phenyl ether	<10	<10	<10	<10	0
Chrysene	<10	<10	<10	<10	0
Dibenzo(a,h)anthracene	<10	<10	<10	<10	0
Di-n-butyl phthalate	<10	<10	<10	<10	0
1,2-Dichlorobenzene	<10	<10	<10	<10	0
1,3-Dichlorobenzene	<10	<10	<10	<10	0
1,4-Dichlorobenzene	<10	<10	<10	<10	0
3,3-Dichlorobenzidine	<10	<10	<10	<10	0
Diethyl phthalate	<10	<10	<10	<10	0
Dimethyl phthalate	<10	<10	<10	<10	0
2,4-Dinitrotoluene	<10	<10	<10	<10	0
2,6-Dinitrotoluene	<10	<10	<10	<10	0
Di-n-octyl phthalate	<10	<10	<10	<10	0
1,2-Diphenylhydrazine	<10	<10	<10	<10	0
Fluoranthene	<10	<10	<10	<10	0
Fluorene	<10	<10	<10	<10	0
Hexachlorobenzene	<10	<10	<10	<10	0
Hexachlorobutadiene	<10	<10	<10	<10	0
Hexachlorocyclopentadiene	<10	<10	<10	<10	0
Hexachloroethane	<10	<10	<10	<10	0
Indeno(1,2,3-cd)pyrene	<10	<10	<10	<10	0
Isophorone	<10	<10	<10	<10	0
Naphthalene	<10	<10	<10	<10	0

METHOD 8270

SEMI-VOLATILE ORGANICS DUPLICATE DATA SHEET

Lab Name: RI ANALYTICAL Client: CITY OF NEW BEDFORD

Duplicate Sample # 0307-09871-001 W.O. # 0307-09871

COMPOUND	SAMPLE RESULT ug/L	DUPLICATE SAMPLE RESULT ug/L	MEAN	REPORTED VALUE	RPD
Nitrobenzene	<10	<10	<10	<10	0
N-nitrosodimethylamine	<10	<10	<10	<10	0
N-nitrosodiphenylamine	<10	<10	<10	<10	0
N-nitrosodi-n-propylamine	<10	<10	<10	<10	0
Phenanthrene	<10	<10	<10	<10	0
Pyrene	<10	<10	<10	<10	0
1,2,4-Trichlorobenzene	<10	<10	<10	<10	0
4-Chloro-3-methylphenol	<10	<10	<10	<10	0
2-Chlorophenol	<10	<10	<10	<10	0
2,4-Dichlorophenol	<10	<10	<10	<10	0
2,4-Dimethylphenol	<10	<10	<10	<10	0
2-Methyl-4,6-dinitrophenol	<10	<10	<10	<10	0
2,4-Dinitrophenol	<10	<10	<10	<10	0
2-Nitrophenol	<10	<10	<10	<10	0
4-Nitrophenol	<10	<10	<10	<10	0
Pentachlorophenol	<10	<10	<10	<10	0
Phenol	<10	<10	<10	<10	0
2,4,6-Trichlorophenol	<10	<10	<10	<10	0
Phenol-d5	52	45			
2-Fluorophenol	54	50			
2,4,6-Tribromophenol	82	84			
Nitrobenzene-d5	105	108			
2-Fluorobiphenyl	66	64			
P-Terphenyl-d14	138	137			

RI Analytical Laboratories, Inc.
QA/QC Report

Client: City of New Bedford
W.O. #: 0307-09871
Date: 07/28/03

-Method Blank Results-

Parameter	Units	Results	Date Analyzed
Cyanide	mg/1	<0.01	07/22/2003

Parameter	Units	Results	Date Analyzed
Arsenic	mg/1	<0.1	07/21/2003
Cadmium	mg/1	<0.005	07/21/2003
Chromium	mg/1	<0.03	07/21/2003
Copper	mg/1	<0.05	07/21/2003
Lead	mg/1	<0.04	07/21/2003
Mercury	mg/1	<0.0005	07/21/2003
Molybdenum	mg/1	<0.05	07/21/2003
Nickel	mg/1	<0.02	07/21/2003
Silver	mg/1	<0.02	07/21/2003
Zinc	mg/1	<0.02	07/21/2003

-Replicate Sample Results-

Parameter	Units	Sample #	Rep. 1 Conc.	Rep. 2 Conc.	Mean Conc.	Reported Value	RPD	Date Analyzed
Cyanide	mg/1	9871-2	0.06	0.06	0.06	0.06	0	07/22/2003

Parameter	Units	Sample #	Rep. 1 Conc.	Rep. 2 Conc.	Mean Conc.	Reported Value	RPD	Date Analyzed
Arsenic	mg/1	9912-1	<0.1	<0.1	<0.1	<0.1	0	07/21/2003
Cadmium	mg/1	9912-1	<0.005	<0.005	<0.005	<0.005	0	07/21/2003
Chromium	mg/1	9912-1	<0.03	<0.03	<0.03	<0.03	0	07/21/2003
Copper	mg/1	9912-1	<0.05	<0.05	<0.05	<0.05	0	07/21/2003
Lead	mg/1	9912-1	0.04	0.04	0.04	0.04	0	07/21/2003
Mercury	mg/1	9912-1	<0.0005	<0.0005	<0.0005	<0.0005	0	07/21/2003
Molybdenum	mg/1	9912-1	<0.05	<0.05	<0.05	<0.05	0	07/21/2003
Nickel	mg/1	9912-1	<0.02	<0.02	<0.02	<0.02	0	07/21/2003
Silver	mg/1	9912-1	<0.02	<0.02	<0.02	<0.02	0	07/21/2003
Zinc	mg/1	9912-1	<0.02	<0.02	<0.02	<0.02	0	07/21/2003

RI Analytical Laboratories, Inc.
QA/QC Report

Client: City of New Bedford
W.O. #: 0307-09871
Date: 07/28/03

-Matrix Spike Results-

Parameter	Units	Sample #	Sample Conc.	Spike Conc.	Detected Conc.	% Rec.	Date Analyzed
Cyanide	mg/1	9871-2	0.06	0.10	0.155	95	07/22/2003

Parameter	Units	Sample #	Sample Conc.	Spike Conc.	Detected Conc.	% Rec.	Date Analyzed
Arsenic	mg/1	9871-1	<0.1	1.0	0.99	99	07/21/2003
Cadmium	mg/1	9871-1	<0.005	1.0	0.93	93	07/21/2003
Chromium	mg/1	9871-1	<0.03	1.0	0.93	93	07/21/2003
Copper	mg/1	9871-1	<0.05	1.0	0.97	97	07/21/2003
Lead	mg/1	9871-1	<0.04	1.0	0.94	94	07/21/2003
Mercury	mg/1	9871-1	<0.0005	0.0020	0.0021	105	07/21/2003
Molybdenum	mg/1	9871-1	<0.05	1.0	0.94	94	07/21/2003
Nickel	mg/1	9871-1	<0.02	1.0	0.95	95	07/21/2003
Silver	mg/1	9871-1	<0.02	1.0	0.96	96	07/21/2003
Zinc	mg/1	9871-1	0.03	1.0	1.0	97	07/21/2003

White Copy Original (Accompanies Samples) | Yellow Copy – Collector | Pink Copy – Customer's Copy

R.I. Analytical Laboratories, Inc.

41 Illinois Avenue
Warwick, RI 02888
Phone: (800) 937-2580
Fax: (401) 738-1970

950 Boylston Street, Unit 102
Newton Highlands, MA 02461
Phone: (888) 228-3334
Fax: (617) 965-5624

CHAIN OF CUSTODY RECORD

Container Type Codes:		Preservative Codes:		Matrix Codes:	
P = Plastic	V = Vial	NP = Non preserved	S = Sulfuric	GW = Groundwater	S = Soil
G = Glass	St = Sterile	I = Cooled 4°C	H = HCl	WW = Wastewater	Sl = Sludge
AG = Amber Glass		N = Nitric	SH = NaOH	DW = Potable Water	A = Air
O = Other (describe)		M = Methanol	SB = $NaHSO_4$	O = Other (describe)	B = Bulk/Solid

Date Collected	Time Collected	Sample ID	G = Grab C = Comp.	Containers # + Code	Preservative Code	Matrix Code	Analyses Requested
7/16-17/03	0830-0830	FINAL EFFLUENT	C	2 G	NP	GW	PCB'S & PESTICIDES (8082)
"	"	" "	"	"		"	SVOCS (8270)
"	"	" "	"	1 P	N	"	METALS - AR, Cd, Cr, Cu, Pb, Mo, Ag, Ni, Zn, Hg
7/17/03	0840	" "	G	1 P	SH	"	CYANIDE
"	"	" "	"	3 V	HCL	"	VOC'S (8260)

Client Information

Company Name:	City of New Bedford, Water/Wastewater Department
Address:	1105 Shawmut Avenue
City / State / Zip:	New Bedford, MA 02746
Phone:	508-979-1556
Fax:	508-961-3054
Contact:	Mr. Vinnie Furtado

Project Information

Project Name / Location:	Sullivan's Ledge		
P.O. Number:		Project Number:	
Report To:	Mr. Vinnie Furtado	Phone: 508-979-1556	Fax: 508-961-3054
Sampled by:	Mr. Pete Scieszka		
Reference Proposal:			

Relinquished by:	Date	Time	Received by:	Date	Time
[illegible]	7/17/03	09:25	Amy Carr	7/17/03	09:25
Amy Carr	7/17/03	13:15	K Mello	7-17-03	1315

Turn Around Time:

- ☐ Normal
- ☐ 5 business days Surcharges may apply
- ☐ Rush (business days)

Project Comments:

LAMPS # 1+4
FLOW - 65,19L G.P.D

Report and invoice to above address.

RIAL USE ONLY:

- ☑ Pick-Up Only
- ☐ RIAL Sampled. Attach field hours
- ☑ Shipped on Ice

RIAL W.O. # 0307-09877

CRAPO HILL LANDFILL SHIPMENT PROFILE

Greater New Bedford Regional Refuse Management District
300 Samuel Barnet Blvd., New Bedford, MA 02745
Tel: 508-998-5674 Fax: 508-998-5676

Division of Solid Waste
Management Permit#93537
INVOICE#_____

A. Waste Generator Information

Generator Name: City of New Bedford SIC Code: _____

Facility Address (site of waste generation): 458 Hathaway Rd.

Generator City, State/Province New Bedford, MA. Zip/Postal Code: 02740

Generator USEPA/Federal ID#: N/A State/Province ID#: N/A

Licensed Site Professional Contact (LSP): N/A Phone: _____ Fax: _____

Regulatory Agency Approval Received: Yes ✓ No ____ Permit Number W 017177 Not Applicable ____

Material Safety Data Sheet Provided: Yes ____ No ____ Declassified ____ Deregulated ____ Designated MA99 ____

Generator Certification

To the best of my knowledge, the information provided is accurate and the material is not classified as a hazardous wate in accordance with current regulations.

Authorized Representative

Signature: [illegible]
Name: [illegible]
Title: [illegible]
Date: 6/1/08

B. Response Action Company:

Name: _____

Contact: _____

Address: _____

Tel: _____ Fax: _____

CERTIFICATION: I HEREBY DECLARE THAT THE CONTENTS OF THIS CONSIGNMENT ARE FULLY AND ACCURATELY DESCRIBED ABOVE BY PROPER SHIPPING NAME AND ARE CLASSIFIED,D PACKED, MARKED, AND LABELED, AND AE IN ALL RESPECTS IN PROPER CONDITION FOR TRANSPORTATION BY HIGHWAY ACCORDING TO APPLICABLE INTERNATION AND GOVERNMENT REGULATIONS. THE FOLLOWING PARAMETERS COMPLY WITH POLICY #CINN-97-001 REUSE AND DISPOSAL OF CONTAMINATED SOIL AT MASSACHUSETTS LANDFILLS, FROM DEPARTMENT OF ENVIRONMENTAL PROTECTION AND THE DISTRICT'S LOCAL POLICY FOR A LINED LANDFILL.

Signature_____ Date_____

DEP BILL OF LADING [PURSUANT TO 310 CMR 40.0030] Release Tracking Number _____

C. Transporting Company:

Name: City of New Bedford - D.P.W. Tel: 508 979-1603
Contact: James J. Ricci D.R. of OPS Fax: 508 979-1601
Address: 1105 Shawmut Ave New Bedford, MA. 02746

D. Material Information:

Waste Quantities: _____ Units: Cubic Yards 6

Frequency of Receipt: Daily ____ Weekly ____ Monthly X One Time ____ Other ____

Special handling instructions and additional information:

Source: Sullivan's Lodge G.W.T.P.

Description: Metal Hydroxide Sludge

E. Sampling Information

Sample Collector: _____ Sample Method: _____

Date of Collection: _____ Date of Analysis: _____

F. Comments

Analytical Results on File