

April 1, 2019

89 Crawford Street

Leominster, Massachusetts 01453

Tel: 774.450.7177 Fax: 888.835.0617 www.lrt-llc.net

Dewatering GP Processing
Industrial Permit Unit (OEP 06- 4)
5 Post Office Square – Suite 100
Boston, MA 02109-3912

US Environmental Protection Agency

Reference: Notice of Intent (NOI) - Dewatering General Permit (DGP)

233 Hancock Street

Dorchester, Massachusetts

Dear Sir/Madam:

On behalf of Haycon, Inc (Haycon), Lockwood Remediation Technologies, LLC (LRT) has prepared this Notice of Intent (NOI) requesting a determination of coverage under the United States Environmental Protection Agency's (EPA's) Dewatering General Permit (DGP), pursuant EPA's National Pollutant Discharge Elimination System (NPDES) program. This NOI was prepared in accordance with the general requirements of the NPDES and related guidance documentation provided by EPA. The completed NOI Form is provided in **Appendix A**.

Site Information

This NOI has been prepared for the management of water that will be generated during dewatering activities associated with the construction of a new five-story mixed use building located at 233 Hancock Street Dorchester, Massachusetts (the Site). The Site is not listed as a disposal site with the Massachusetts Department of Environmental Protection (MassDEP). A Site Locus is provided as **Figure 1** and a Site Plan is provided as **Figure 2**.

Work Summary

The project includes the construction of a new five story building. To complete portions of the footing and foundation excavations in the dry, dewatering is required to lower the groundwater table as the work is being performed. To do this, a series of sumps within the work area will be utilized, and the water generated during dewatering (source water) will be pumped to a water treatment system prior to discharge to a Storm drain which drains to Dorchester Bay. To characterize groundwater from the proposed excavation area, LRT collected representative groundwater samples from one onsite test pit (Sample 1) on March 26, 2019.

Discharge and Receiving Surface Water Information

A summary of the laboratory analytical results is provided in **Table 1**. The laboratory analytical summary tables and the laboratory analytical reports area included in **Appendix B**. The laboratory results for the source water sample summarize that all analyzed constituent concentrations are below the respective NPDES Effluent Limitations. Details of the water treatment system are provided below.

Water Treatment System

Source water will be pumped to a treatment system with a design flow of up to 100 gallons per minute (gpm); the average effluent flow of the system is estimated to be 50 gpm, and the maximum flow will not exceed 100 gpm. Source water will enter one 10,000-gallon weir tank at head of the system. From the weir tank, the water will be pumped to a dual bag filter skid (with two single bag filters). Discharge from the bag filters will pass through a flow/totalizer meter prior to direct discharge into a strom drain as depicted on **Figure 2**. A water treatment system schematic is provided as **Figure 3**.

Consultation with Federal Services

LRT reviewed online electronic data viewers and databases from the Massachusetts Geographical Information System (MassGIS), the Massachusetts Division of Fisheries and Wildlife (MassWildlife; Natural Heritage and Endangered Species Program), and the U.S. National Parks Service Natural Historic Places (NPS). Based on this review, the Site and the point where the proposed discharge reaches the receiving surface water body are not located within an Area of Critical Environmental Concern (ACEC) and is not listed as a National Historic Place. Documentation is included in **Appendix D**.

Coverage under NPDES DGP

It is our opinion that the proposed discharge is eligible for coverage under the NPDES DGP. On behalf of Haycon, LRT is requesting coverage under the NPDES DGP for the discharge of treated water to a Strom drain which drains to Dorchester Bay in support of construction dewatering activities that are to take place at 233 Hancock Street, MA.

The enclosed NOI form provides required information on the general site conditions, discharge, treatment system, receiving water, and consultation with federal services. For this project, LRT is considered the Operator and has operational control over the construction plans and specifications, including the ability to make modifications to those plans and specifications.

Please feel free to contact us at 774-450-7177 if you have any questions or if you require additional information.

Sincerely,

Lockwood Remediation Technologies, LLC

Jacob Jennings

Paul Lockwood

Jacob Jennings Estimator Paul Lockwood President

Encl: Figure 1 - Locus Plan

Figure 2 - Site Plan

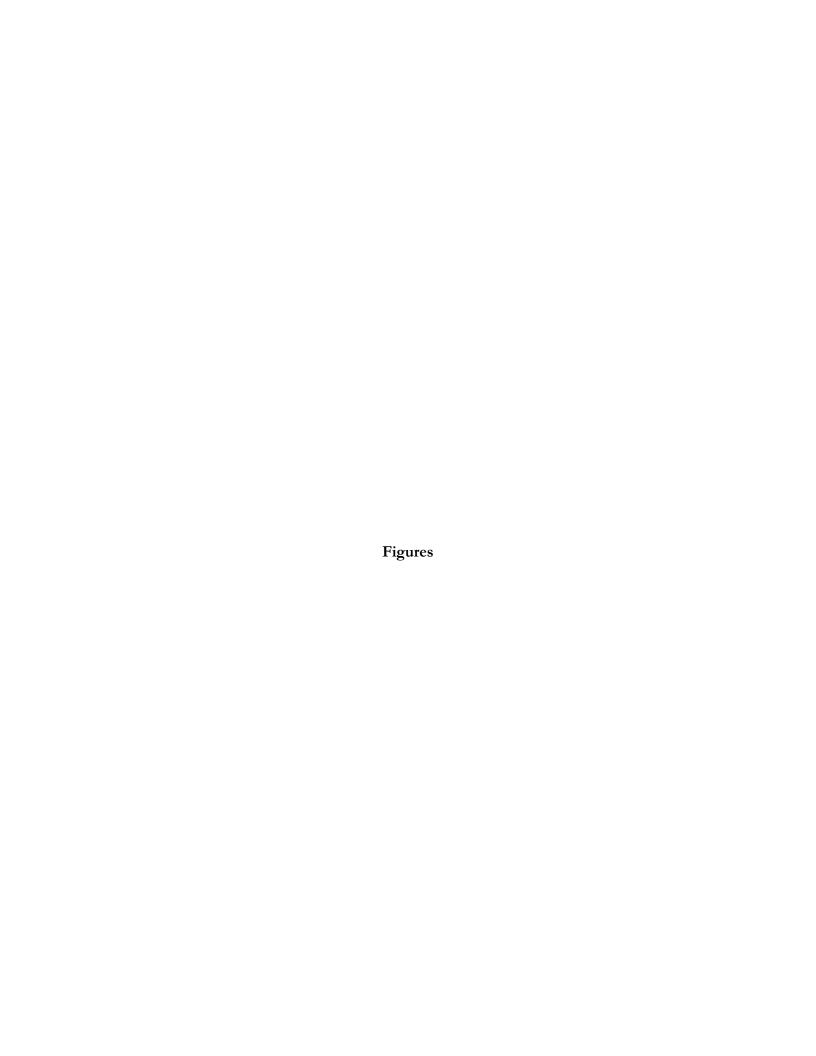
Figure 3 - Water Treatment System Schematic

Appendix A - NOI Form Appendix B - Laboratory Data

Appendix C - Water Treatment System Appendix D - Supplemental Information

cc: Mark Pappas, Haycon – via email

Francis M. McLaughlin, Boston Water and Sewer Commission – via email





 $Source: MassGIS, Oliver\ Mapping\ Tool$

Notes

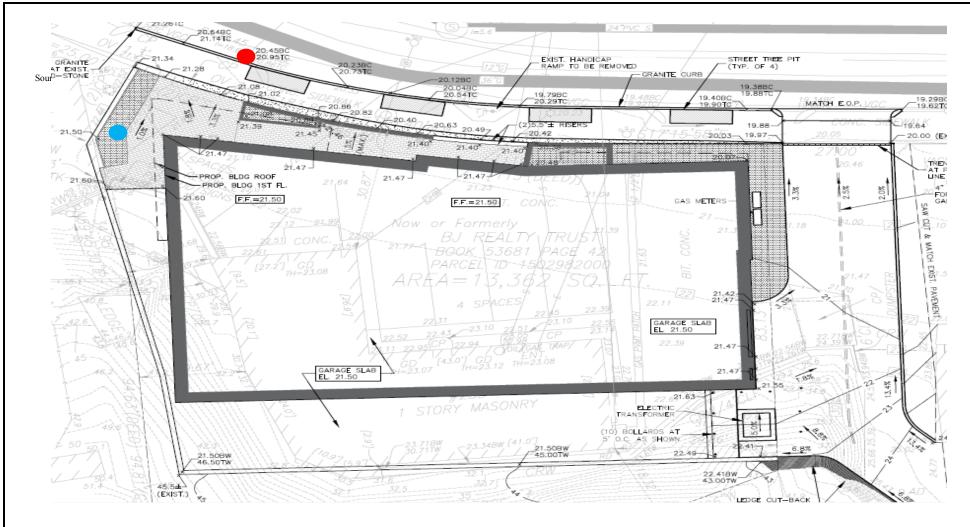
1. Figure is not to scale.





89 Crawford Street Leominster, Massachusetts 01453 Tel: 774.450.7177

Tel: 774.450.7177 Fax: 888.835.0617 www.lrt-llc.net Figure 1 – Locus Plan 233 Hancock Street Dorchester, Massachusetts



Source: 233 Hancock st. Drawing set

Notes

1. Figure is not to scale

Key

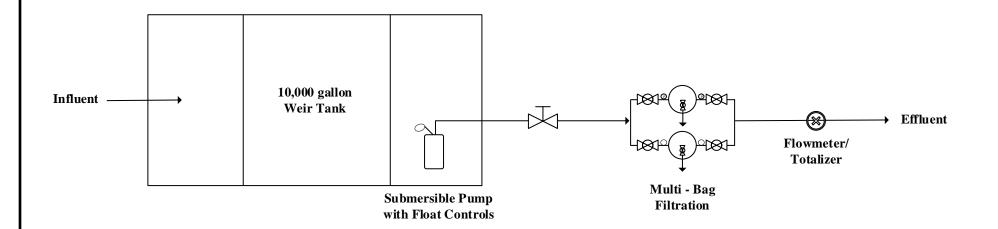
Discharge location

Water Treatment System location



89 Crawford Street Leominster, Massachusetts 01453 Tel: 774.450.7177

Tel: 774.450.7177 Fax: 888.835.0617 www.lrt-llc.net Figure 2 – Site plan 233 Hancock Street Dorchester, Massachusetts



Notes:

1.) Figure is not to scale

2.) System rated for 100 GPM

3.) Sampling ports located on all treatment system components

Key:

Piping/Hose ———



Lockwood Remediation Technologies, LLC Leominster, Massachusetts 01453 Office: 774-450-7177

DESIGNED BY: LRT DRAWN BY: B. Watkins

CHECKED BY: KG DATE:

Water Treatment System Schematic

Figure 3

233 Hancock Street Dorchester, Massachusetts PROJECT No. 2-1826

2-1826 FICTIBE No. Appendix A

NOI Form

II. Suggested Notice of Intent (NOI) Format

1. General facility information. Please provide the following information.	tion about the facility.	
a) Name of facility:	Mailing Address for the Facility	y:
233 Hancock Street	233 Hancock Street, Doi	rchester MA
b) Location Address of the Facility (if different from mailing address):	Facility Location	Type of Business:
	longitude:71.060267 latitude: _42.309421	Facility SIC codes:
c) Name of facility owner: 233 Hancock LLC	Owner's email: dmoll@a	ırxurban.com
Owner's Tel #: (617) 957-3444	Owner's Fax #:	
Address of owner (if different from facility address) 25 Fayette Stree	et, Unit 1 Boston, MA	
Owner is (check one): 1. Federal 2. State 3. Private Legal name of Operator, if not owner: Mark Angelo Pappas Operator Contact Name: Mark Pappas		
	ımber:	
Operator's email: mpappas@haycon-inc.com		
Operator Address (if different from owner)		
35 Batchelder Street Boston, MA 0	2119	
d) Attach a topographic map indicating the location of the facility and	the outfall(s) to the receiving war	ter. Map attached?
e) Check Yes or No for the following: 1. Has a prior NPDES permit been granted for the discharge? Yes 2. Is the discharge a "new discharger" as defined by 40 CFR Section 3. Is the facility covered by an individual NPDES permit? Yes 4. Is there a pending application on file with EPA for this discharge?	1 122.2? Yes ✓ No No If Yes, Permit Num	nber

2. Discl	narge information. Please provide information about the discharge, (attaching additional sheets as needed)
a)	Name of receiving water into which discharge will occur: Dorchester Bay
	te Water Quality Classification: SB Freshwater: Marine Water: Yes
	Describe the discharge activities for which the owner/applicant is seeking coverage: 1. Construction dewatering of groundwater intrusion and/or storm water accumulation. 2. Short-term or long-term dewatering of foundation sumps. 3. Other.
c)	Number of outfalls _1
For	each outfall:
d)	Estimate the maximum daily and average monthly flow of the discharge (in gallons per day – GPD). Max Daily Flow 144000 GPD Average Monthly Flow 72000 GPD
e.)	What is the maximum and minimum monthly pH of the discharge (in s.u.)? Max pH <u>8.5</u> Min pH <u>6.5</u>
f.)	Identify the source of the discharge (i.e. potable water, surface water, or groundwater). If groundwater, the facility shall submit effluent test results, as required in Section 4.4.5 of the General Permit.
g.)	What treatment does the wastewater receive prior to discharge?
h.)	Is the discharge continuous? Yes No If no, is the discharge periodic (P) (occurs regularly, i.e., monthly or seasonally, but is not continuous all year) or intermittent (I) (occurs sometimes but not regularly) or both (B) If (P), number of days or months per year of the discharge and the specific months of discharge April 2019 through July 2019 ; If (I), number of days/year there is a discharge Mo
	If yes, approximate start date of dewatering 4/15/2019 approximate end date of dewatering 7/15/2019
i.)	Latitude and longitude of each discharge within 100 feet (See http://www.epa.gov/tri/report/siting_tool): Outfall 1: long. 42.306026 lat71.053376; Outfall 2: long lat
j.)	If the source of the discharge is potable water, please provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water and attach any calculation sheets used to support stream flow and dilution calculations cfs (See Appendix VII for equations and additional information)

MASSACHUSEITS FACILITIES: See Section 3.4 and Appendix 1 of the General Permit for more information on Areas of Critical Environmental Concern (ACEC):
k.) Does the discharge occur in an ACEC? Yes No
If yes, provide the name of the ACEC:
3. Contaminant Information
a) Are any pH neutralization and/or dechlorination chemicals used in the discharge? If so, include the chemical name and manufacturer; maximum and average daily quantity used as well as the maximum and average daily expected concentrations (mg/l) in the discharge, and the vendor's reported aquatic toxicity (NOAEL and/or LC ₅₀ in percent for aquatic organism(s)).
b) Please report any known remediation activities or water-quality issues in the vicinity of the discharge.
4. Determination of Endangered Species Act Eligibility: Provide documentation of ESA eligibility as required at Part 3.4 and Appendix IV. In addition, respond to the following questions.
a) Which of the three eligibility criteria listed in Appendix IV, Criterion (A, B, or C) have you met? A
b) Please attach documentation with your NOI supporting your response. Please see Appendix IV for acceptable documentation
5. Documentation of National Historic Preservation Act requirements: Please respond to the following questions:
a) See Screening Process in Appendix III and respond to questions regarding your site and any historic properties listed or eligible for listing on the National Register of Historic Places. Question 1: Yes No / ; Question 2: No / Yes
b) Have any State or Tribal historic preservation officers been consulted in this determination? Yes or No 🗸 If yes, attach the results of the consultation(s).
c) Which of the three National Historic Preservation Act eligibility criterion listed in Appendix III, Criterion (A, B, or C) have you met?
d) Is the project located on property of religious or cultural significance to an Indian Tribe? Yes or No 🗸 If yes, provide that name of the Indian Tribe associated with the property
6. Supplemental Information: Please provide any supplemental information. Attach any analytical data used to support the application. Attach any certification(s) required by the general permit
7. Signature Requirements: The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22 (s ee below) including the following certification:
Page 8 of 9

I certify under penalty of law that (1) no biocides or other chemical additives except for those used for pH adjustment and/or dechlorination are used in the dewatering system; (2) the discharge consists solely of dewatering and authorized pH adjustment and/or dechlorination chemicals; (3) the discharge does not come in contact with any raw materials, intermediate product, water product or finished product; (4) if the discharge of dewatering subsequently mixes with other permitted wastewater (i.e. stormwater) prior to discharging to the receiving water, any monitoring provided under this permit will be only for dewatering discharge; (5) where applicable, the facility has complied with the requirements of this permit specific to the Endangered Species Act and National Historic Preservation Act; and (6) this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Facility Name: 233 Hancock Street

Operator signature: Mah M

Print Full Name and Title: Mark Pappas, Project Manager

Date: 03/27/2019

Federal regulations require this application to be signed as follows:

- 1. For a corporation, by a principal executive officer of at least the level of vice president;
- 2. For partnership or sole proprietorship, by a general partner or the proprietor, respectively, or,
- 3. For a municipality, State, Federal or other public facility, by either a principal executive officer or ranking elected official.

Appendix B

Laboratory Data

TABLE 1

Precharacterization Data Summary Table 233 Hancock Street Dorchester, Massachusetts

	Sample Date	3/26/2019
	Discharge Standard	
Analysis	Sample ID	Sample 1
рН	6.5-8.3	6.8
Total Suspended Solids (TSS) (mg/l)	30	<2
Hardness (mg/l)	Monitor Only	182
Chloride (mg/l)	Monitor Only	785
Total Metals		
Arsenic	104	<10
Cadmium	10.2	<5
Chromium	74	<10
Copper	9.0	9.0
Iron	1,000	60
Mercury	0.739	< 0.2
Nickel	52	<5
Lead	160	<5
Antimony	206	<5
Silver	3.2	<1
Zine	120	22
Hexavalent Chromium	11	<10

Note:

Discharge Standards are NPDES 2017 RGP Standards All data reported as ug/L unless otherwise specified.

-- = Not Analyzed



REPORT OF ANALYTICAL RESULTS

NETLAB Work Order Number: 9C26047 Client Project: 2-1826 - 233 Hancock St, Dorchester, MA

Report Date: 01-April-2019

Prepared for:

Kim Gravelle Lockwood Remediation Technologies LLC 89 Crawford St Leominster, MA 01432

> Richard Warila, Laboratory Director New England Testing Laboratory, Inc. 59 Greenhill Street West Warwick, RI 02893 rich.warila@newenglandtesting.com

Samples Submitted:

The samples listed below were submitted to New England Testing Laboratory on 03/26/19. The group of samples appearing in this report was assigned an internal identification number (case number) for laboratory information management purposes. The client's designations for the individual samples, along with our case numbers, are used to identify the samples in this report. This report of analytical results pertains only to the sample(s) provided to us by the client which are indicated on the custody record. The case number for this sample submission is 9C26047. Custody records are included in this report.

Lab ID	Sample	Matrix	Date Sampled	Date Received
9C26047-01	Sample 1	Water	03/26/2019	03/26/2019

Request for Analysis

At the client's request, the analyses presented in the following table were performed on the samples submitted.

Sample 1 (Lab Number: 9C26047-01)

<u>Analysis</u>	<u>Method</u>
Antimony	EPA 6010C
Arsenic	EPA 6010C
Cadmium	EPA 6010C
Calcium	SM3120-B
Chloride	SM4500CI-B
Copper	EPA 6010C
Hexavalent Chromium	SM3500-Cr-B
Iron	EPA 6010C
Lead	EPA 6010C
Magnesium	SM3120-B
Mercury	EPA 7470A
Nickel	EPA 6010C
Silver	EPA 6010C
Total Suspended Solids	SM2540-D
Zinc	EPA 6010C

Method References

Methods for the Determination of Metals in Environmental Samples EPA-600/R-94/111, USEPA, 1994 Standard Methods for the Examination of Water and Wastewater, 20th Edition, APHA/ AWWA-WPCF, 1998

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, USEPA

Case Narrative

Sample Receipt

The samples were all appropriately cooled and preserved upon receipt. The samples were received in the appropriate containers. The chain of custody was adequately completed and corresponded to the samples submitted.

Metals

All analyses were performed according to NETLAB's documented Standard Operating Procedures, within all required holding times, and with appropriate quality control measures. All QC was within laboratory established acceptance criteria. The samples were received, processed, and reported with no anomalies.

Wet Chemistry

All samples were analyzed within method specified holding times and according to NETLAB's documented standard operating procedures.

Results: General Chemistry

Sample: Sample 1

Lab Number: 9C26047-01 (Water)

			Reporting			
Analyte	Result	Qual	Limit	Units	Date Prepared	Date Analyzed
Chloride	785		50	mg/L	03/27/19	03/27/19
Hexavalent chromium	ND		0.01	mg/L	03/26/19 16:00	03/26/19 16:00
Total Suspended Solids	ND		2	ma/L	03/27/19	03/27/19

Results: Total Metals

Sample: Sample 1

Lab Number: 9C26047-01 (Water)

			Reporting			
Analyte	Result	Qual	Limit	Units	Date Prepared	Date Analyzed
Total Hardness	182		0.125	mg/L	03/27/19	03/28/19
Antimony	ND		0.005	mg/L	03/27/19	03/28/19
Arsenic	ND		0.01	mg/L	03/27/19	03/28/19
Cadmium	ND		0.005	mg/L	03/27/19	03/28/19
Calcium	60.1		0.05	mg/L	03/27/19	03/28/19
Copper	0.009		0.005	mg/L	03/29/19	03/29/19
Iron	0.06		0.05	mg/L	03/27/19	03/28/19
Lead	ND		0.005	mg/L	03/27/19	03/28/19
Magnesium	7.77		0.05	mg/L	03/27/19	03/28/19
Mercury	ND		0.0002	mg/L	03/28/19	03/28/19
Nickel	ND		0.005	mg/L	03/27/19	03/28/19
Silver	ND		0.001	mg/L	03/29/19	03/29/19
Zinc	0.022		0.020	mg/L	03/27/19	03/28/19

Quality Control

General Chemistry

			Reporting		Spike	Source		%REC		RPD
Analyte	Result	Qual	Limit	Units	Level	Result	%REC	Limits	RPD	Limi
Batch: B9C0966 - Chloride										
Blank (B9C0966-BLK1)					Prepared 8	& Analyzed: 0	3/27/19			
Chloride	ND		1	mg/L						
LCS (B9C0966-BS1)					Prepared 8	& Analyzed: 0	3/27/19			
Chloride	62		1	mg/L	60.6		103	90-110		
Duplicate (B9C0966-DUP1)	S	Source: 9	C25025-03		Prepared 8	& Analyzed: 0	3/27/19			
Chloride	31		1	mg/L		31			0.00	20
Matrix Spike (B9C0966-MS1)	S	Source: 9	C25025-03		Prepared 8	& Analyzed: 0	3/27/19			
Chloride	96		2	mg/L	60.6	31	108	80-120		
Batch: B9C0971 - TSS										
Blank (B9C0971-133					Prepared 8	& Analyzed: 0	3/27/19			
Total Suspended Solids	ND		2	mg/L	·					
LCS (B9C0971-BS1)					Prepared 8	& Analyzed: 0	3/27/19			
Total Suspended Solids	1010		10	mg/L	1000		101	90-110		
Duplicate (B9C0971-DUP1)	S	Source: 9	C21033-03		Prepared 8	& Analyzed: 0	3/27/19			
Total Suspended Solids	50		2	mg/L		51			0.985	20
Batch: B9C0989 - Hexavalent C	hrome									
Blank (B9C0989-BLK1)					Prepared 8	& Analyzed: 0	3/26/19			
Hexavalent chromium	ND		0.01	mg/L						

			-	Control						
General Chemistry (Continued)										
Analyte	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch: B9C0989 - Hexavalent Cl	hrome (Con	tinued)							
Blank (B9C0989-BLK2)					Prepared 8	& Analyzed: 0	3/26/19			
Hexavalent chromium	ND		0.01	mg/L						
LCS (B9C0989-BS1)					Prepared 8	& Analyzed: 0	3/26/19			
Hexavalent chromium	0.55		0.01	mg/L	0.500		109	90-110		
LCS (B9C0989-BS2)					Prepared 8	& Analyzed: 0	3/26/19			
Hexavalent chromium	0.09		0.01	mg/L	0.100	·	91.0	90-110		
LCS (B9C0989-BS3)					Prepared 8	& Analyzed: 0	3/26/19			
Hexavalent chromium	0.53		0.01	mg/L	0.500	,	106	90-110		
Duplicate (B9C0989-DUP1)	9	Source: 9	C26047-01		Prepared 8	& Analyzed: 0	3/26/19	·		
Hexavalent chromium	ND		0.01	mg/L		ND				20
Matrix Spike (B9C0989-MS1)		Source: 9	C26047-01		Prepared 8	& Analyzed: 0	3/26/19			
Hexavalent chromium	0.45		0.01	mg/L	0.500	ND	90.4	80-120		

Result Result Reporting Result Reporting Limit Units Result Result							Quality (Conti			
Result Qual Limit Units Level Result %REC Limits										Total Metals
Prepared: 03/27/19 Analyzed: 03/28/19	RPD	%REC		Source	Spike		Reporting			
Prepared: 03/27/19 Analyzed: 03/28/19	RPD Limit	Limits	%REC	Result	Level	Units	Limit	Qual	Result	Analyte
Prepared: 03/27/19 Analyzed: 03/28/19 Magnesium ND 0.05 mg/L								vaters	id digestion v	Batch: B9C0947 - Hot plate ac
Calcium ND 0.05 mg/L Zinc ND 0.020 mg/L Nickel ND 0.005 mg/L Antimony ND 0.005 mg/L Lead ND 0.005 mg/L Iron ND 0.05 mg/L Cadmium ND 0.005 mg/L Arsenic ND 0.01 mg/L LCS (B9C0947-BS1) Prepared: 03/27/19 Analyzed: 03/28/19 Calcium 10.1 0.05 mg/L 1.00 101 85-115 Zinc 0.977 0.020 mg/L 1.00 97.7 85-115 Antimony 1.01 0.005 mg/L 1.00 97.7 85-115 Antimony 1.01 0.005 mg/L 1.00 96.0 85-115 Antimony 1.01 0.005 mg/L 1.00 95.7 85-115 Antimony 1.01 0.005 mg/L 1.00 95.7 85-115			d: 03/28/19	7/19 Analyze	epared: 03/27	Pro			-	-
Calcium ND 0.05 mg/L Zinc ND 0.020 mg/L Nickel ND 0.005 mg/L Antimony ND 0.005 mg/L Lead ND 0.005 mg/L Iron ND 0.05 mg/L Cadmium ND 0.005 mg/L Arsenic ND 0.01 mg/L LCS (B9C0947-BS1) Prepared: 03/27/19 Analyzed: 03/28/19 Calcium 10.1 0.05 mg/L 1.00 101 85-115 Zinc 0.977 0.020 mg/L 1.00 97.7 85-115 Antimony 1.01 0.005 mg/L 1.00 97.7 85-115 Antimony 1.01 0.005 mg/L 1.00 96.0 85-115 Antimony 1.01 0.005 mg/L 1.00 97.7 85-115 Antimony 1.01 0.005 mg/L 1.00 95.7 85-115						mg/L	0.05		ND	Magnesium
Zinc ND 0.020 mg/L							0.05		ND	Calcium
Nickel ND 0.005 mg/L						-	0.020		ND	Zinc
Antimony Lead ND 0.005 mg/L Iron ND 0.005 mg/L Cadmium ND 0.005 mg/L Arsenic ND 0.005 mg/L Arsenic ND 0.005 mg/L Prepared: 03/27/19 Analyzed: 03/28/19 Calcium 10.1 0.05 mg/L I.00 101 85-115 Zinc 0.977 0.020 mg/L 1.00 97.7 85-115 Antimony 1.01 0.005 mg/L 1.00 97.7 85-115 Nickel 0.960 0.005 mg/L 1.00 96.0 85-112 Lead 0.957 0.005 mg/L 1.00 95.7 85-115 Nickel 0.960 0.005 mg/L 1.00 95.7 85-115 Iron 9.72 0.05 mg/L 1.00 95.7 85-115 Iron 9.78 0.05 mg/L 1.00 97.2 85-115 Iron 9.78 0.05 mg/L 1.00 97.2 85-115 Iron 9.78 0.05 mg/L 1.00 97.2 85-115 Iron 9.78 0.05 mg/L 1.00 97.8 85-115 Iron 9.78 0.05 mg/L 1.00 96.4 85-115 Arsenic 0.20 0.01 mg/L 0.200 98.1 85-115 Cadmium 0.964 0.005 mg/L 1.00 96.4 85-114						-	0.005		ND	Nickel
Lead ND 0.005 mg/L Iron ND 0.05 mg/L Cadmium ND 0.005 mg/L Arsenic ND 0.01 mg/L Prepared: 03/27/19 Analyzed: 03/28/19 Calcium 10.1 0.05 mg/L 10.0 101 85-115 Zinc 0.977 0.020 mg/L 1.00 97.7 85-115 Antimony 1.01 0.005 mg/L 1.00 97.7 85-115 Nickel 0.960 0.005 mg/L 1.00 96.0 85-112 Lead 0.957 0.005 mg/L 1.00 95.7 85-115 Magnesium 9.72 0.05 mg/L 10.0 97.2 85-115 Iron 9.78 0.05 mg/L 10.0 97.8 85-115 Arsenic 0.20 0.01 mg/L 0.200 98.1 85-115 Cadmium 0.964 0.005 mg/L						-	0.005		ND	Antimony
Iron ND 0.05 mg/L Cadmium ND 0.005 mg/L Arsenic ND 0.01 mg/L Prepared: 03/27/19 Analyzed: 03/28/19 LCS (B9C0947-BS1) Prepared: 03/27/19 Analyzed: 03/28/19 Calcium 10.1 0.05 mg/L 10.0 101 85-115 Zinc 0.977 0.020 mg/L 1.00 97.7 85-115 Antimony 1.01 0.005 mg/L 1.00 101 85-115 Nickel 0.960 0.005 mg/L 1.00 96.0 85-112 Lead 0.957 0.005 mg/L 1.00 95.7 85-115 Magnesium 9.72 0.05 mg/L 10.0 97.2 85-115 Iron 9.78 0.05 mg/L 10.0 97.8 85-115 Arsenic 0.20 0.01 mg/L 1.00 96.4 85-115 Cadmium 0.9						-	0.005		ND	Lead
Cadmium Arsenic ND N						-	0.05		ND	Iron
Arsenic ND 0.01 mg/L Prepared: 03/27/19 Analyzed: 03/28/19 Calcium 10.1 0.05 mg/L 10.0 101 85-115 Zinc 0.977 0.020 mg/L 1.00 97.7 85-115 Antimony 1.01 0.005 mg/L 1.00 101 85-115 Nickel 0.960 0.005 mg/L 1.00 96.0 85-112 Lead 0.957 0.005 mg/L 1.00 95.7 85-115 Magnesium 9.72 0.05 mg/L 10.0 97.2 85-115 Iron 9.78 0.05 mg/L 10.0 97.8 85-115 Arsenic 0.20 0.01 mg/L 0.200 98.1 85-115 Cadmium 0.964 0.005 mg/L 1.00 96.4 85-114 Prepared & Analyzed: 03/28/19						-	0.005		ND	Cadmium
Calcium 10.1 0.05 mg/L 10.0 101 85-115 Zinc 0.977 0.020 mg/L 1.00 97.7 85-115 Antimony 1.01 0.005 mg/L 1.00 101 85-115 Nickel 0.960 0.005 mg/L 1.00 96.0 85-112 Lead 0.957 0.005 mg/L 1.00 95.7 85-115 Magnesium 9.72 0.05 mg/L 10.0 97.2 85-115 Iron 9.78 0.05 mg/L 10.0 97.8 85-115 Arsenic 0.20 0.01 mg/L 0.200 98.1 85-115 Cadmium 0.964 0.005 mg/L 1.00 96.4 85-114 Blank (B9C1044 - Hot plate acid digestion waters Blank (B9C1044-BLK1) Prepared & Analyzed: 03/28/19							0.01		ND	Arsenic
Zinc 0.977 0.020 mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L			d: 03/28/19	7/19 Analyze	epared: 03/27	Pro				LCS (B9C0947-BS1)
Antimony 1.01 0.005 mg/L 1.00 101 85-115 Nickel 0.960 0.005 mg/L 1.00 96.0 85-112 Lead 0.957 0.005 mg/L 1.00 95.7 85-115 Magnesium 9.72 0.05 mg/L 10.0 97.2 85-115 Iron 9.78 0.05 mg/L 10.0 97.8 85-115 Arsenic 0.20 0.01 mg/L 0.200 98.1 85-115 Cadmium 0.964 0.005 mg/L 1.00 96.4 85-114 Batch: B9C1044 - Hot plate acid digestion waters Blank (B9C1044-BLK1)		85-115	101		10.0	mg/L	0.05		10.1	Calcium
Nickel 0.960 0.005 mg/L 1.00 96.0 85-112 Lead 0.957 0.005 mg/L 1.00 95.7 85-115 Magnesium 9.72 0.05 mg/L 10.0 97.2 85-115 Iron 9.78 0.05 mg/L 10.0 97.8 85-115 Arsenic 0.20 0.01 mg/L 0.200 98.1 85-115 Cadmium 0.964 0.005 mg/L 1.00 96.4 85-114 Blank (B9C1044 - Hot plate acid digestion waters Blank (B9C1044-BLK1) Prepared & Analyzed: 03/28/19		85-115	97.7		1.00	mg/L	0.020		0.977	Zinc
Lead 0.957 0.005 mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L		85-115	101		1.00	mg/L	0.005		1.01	Antimony
Magnesium 9.72 0.05 mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L		85-112	96.0		1.00	mg/L	0.005		0.960	Nickel
Iron 9.78 0.05 mg/L 10.0 97.8 85-115 Arsenic 0.20 0.01 mg/L 0.200 98.1 85-115 Cadmium 0.964 0.005 mg/L 1.00 96.4 85-114 Batch: B9C1044 - Hot plate acid digestion waters Blank (B9C1044-BLK1) Prepared & Analyzed: 03/28/19		85-115	95.7		1.00	mg/L	0.005		0.957	Lead
Arsenic 0.20 0.01 mg/L 0.200 98.1 85-115 Cadmium 0.964 0.005 mg/L 1.00 96.4 85-114 Batch: B9C1044 - Hot plate acid digestion waters Blank (B9C1044-BLK1) Prepared & Analyzed: 03/28/19		85-115	97.2		10.0	mg/L	0.05		9.72	Magnesium
Cadmium 0.964 0.005 mg/L 1.00 96.4 85-114 Batch: B9C1044 - Hot plate acid digestion waters Blank (B9C1044-BLK1) Prepared & Analyzed: 03/28/19		85-115	97.8		10.0	mg/L	0.05		9.78	Iron
Blank (B9C1044 - Hot plate acid digestion waters Blank (B9C1044-BLK1) Prepared & Analyzed: 03/28/19		85-115	98.1		0.200	mg/L	0.01		0.20	Arsenic
Blank (B9C1044-BLK1) Prepared & Analyzed: 03/28/19		85-114	96.4		1.00	mg/L	0.005		0.964	Cadmium
Blank (B9C1044-BLK1) Prepared & Analyzed: 03/28/19										
								vaters	id digestion v	Batch: B9C1044 - Hot plate ac
			3/28/19	Analyzed: 03	Prepared &					Blank (B9C1044-BLK1)
						mg/L	0.0002		ND	
LCS (B9C1044-BS1) Prepared & Analyzed: 03/28/19			3/28/19	Analyzed: 03	Prepared &					LCS (B9C1044-BS1)
Mercury 0.0011 0.0002 mg/L 0.00100 106 85-115		85-115	106	•	0.00100	mg/L	0.0002		0.0011	•

				Control inued)						
Total Metals (Continued)										
Arrabar	Result	Qual	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPC Limi
Analyte	Result	Quui	2	06						
Batch: B9C1073 - Hot plat										
						& Analyzed: 0				
Batch: B9C1073 - Hot plat			0.005	mg/L						
Batch: B9C1073 - Hot plat Blank (B9C1073-BLK1)	e acid digestion v									
Batch: B9C1073 - Hot plat Blank (B9C1073-BLK1) Silver	re acid digestion w		0.005	mg/L	Prepared 8		3/29/19			
Batch: B9C1073 - Hot plat Blank (B9C1073-BLK1) Silver Copper	re acid digestion w		0.005	mg/L	Prepared 8	& Analyzed: 0	3/29/19	85-115		

Notes and Definitions

<u>Item</u>	Definition
Wet	Sample results reported on a wet weight basis.
ND	Analyte NOT DETECTED at or above the reporting limit.



New England Testing Laboratory 59 Greenhill Street West Warwick, RI 02893

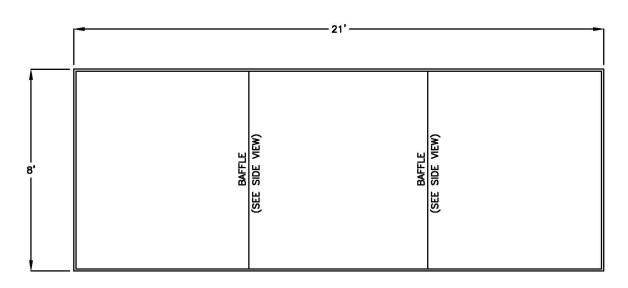
1-888-863-8522

Chain of Custody Record

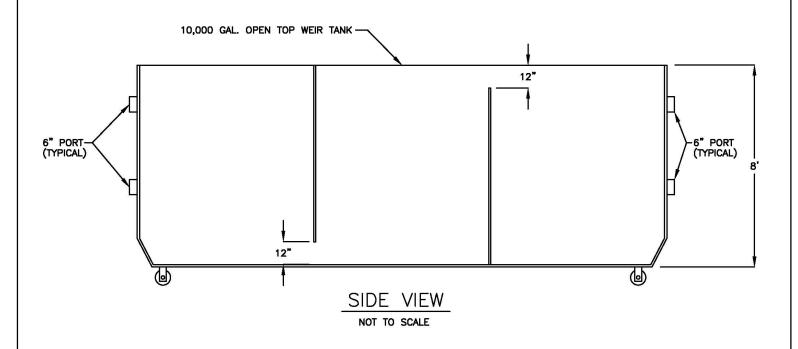
Project No. Project Name/Location:						F	Tests**	*	
Client Cockwood Reneduation tech.		>	θ	,6∧, 1)					
Report To: Kalavelle Olet- 11c. net			vijsv	∄ ,9∃,uĆ				· · · ·	
Invoice To: Na (avelle @) 11+-116. het	s	No. of	ıəsəıd),bጋ,aA,				VI	
ว Sample I.D.	euoeupA Soil	Other Containing of the Contai	l	metals (Sb, dq,nZ	Hardness	Chloride TSS	Mercury	Chromium	
6/18 (1).00	×	9		×	×	X	×	×	
						-		,	
								,	
						-			
					H	H			
					+	-			į
					+	+			
						-			
Sampled By: Date/Time Received By:	Date/Time	Laboratory Remarks:		Special Instructions:	struct	ons:			
Senning	3.36			NPC	可	2	5	7	NPDES RIP TACKE
3.7.	2h7.)			Star Star	7	77	5	2	`
Relinquished By: Date/Time Received By: $(2, 3) - 10$	3/26/K	0			Ş	(5)			
Med Les / My	1500	Temp. Received:- $l \delta^{\mathcal{O}}$	100						
1 = 0	TOC, Asbe	stos, UCMRs, Percl	nlorate,	L& Hoo	DO 6-1	Σ́υ	Siness	S Days	الرمد. Business Days]: ق Days

Appendix C

Water Treatment System



TOP VIEW NOT TO SCALE





LOCKWOOD REMEDIATION TECHNOLOGIES LLC

89 Crawford Street Leominster, MA 01453

TEL.: 774.450.7177 FAX: 888.835.0617 www.lrt-llc.net

OPEN TOP 10,000 GALLON WEIR TANK

SCALE:	NOT TO SCALE		DR. BY: K. HAZEL
DATE:	6/20/11	APP. BY: PL	JOB NO.:
CLIENT:			
SITE			FIGURE 1



LB Series

Top discharge provides maximum motor cooling while allowing continuous duty operation.

Available in single-phase or three-phase. Pumps fit into 8-inch pipes.



LB Series Features

LB(T)-1500:

High chrome semi-open impeller resists wear for adhesive particles.

Diode motor protectors prevent stator damage in high amperage or run-dry situations.

Up to 70' shut off head

Slimline design allows pumps to fit into 8" pipes.



LB Series Features

LB-800:

Designed to fit an 8" pipe.

Up to 60' shut off head.

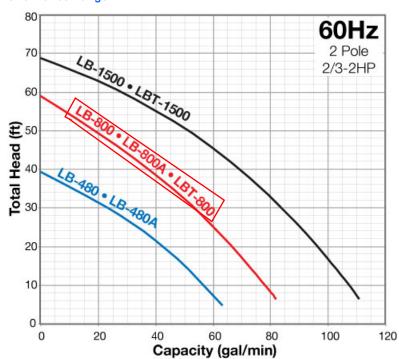
Available in 110V and 220V single-phase with 50 foot cables.

Double Inside Mechanical Seal With SiC faces provides the longest operational life.

Oil Lifter provides lubrication of the seal faces.

OPTIONAL ACCESSORIESFloat Switch for automatic operation TS-302 for 110V, TS-303 for 220V.

Performance Range



	Disabanna	Motor		Cable	Diameter	Haladat	VA/ a l au la é
Model	Discharge Size (in.)	Output (HP)	Voltage (V)	Length (ft.)	Diameter (in.)	Height (in.)	Weight (lbs.)
LB-1500	3	2	110V or 220V	50	7 3/8	23 5/16	72
LB-480	2	2/3	110V	32	7 3/8	11 1/4	28
LB-480A	2	2/3	110V	32	8 3/4	11 1/4	30
LB-800	2	1	115V or 230V	50	7 3/8	13 7/16	35
LB-800A	2	1	115 or 230	50	8 3/4	23 5/16	38
LBT-1500	2 or 3	2	230 or 460 or 575V	50	7 3/8	23 5/16	85
LBT-800	2	1	230 or 460 or 575V	50	7 3/8	13 7/16	35



Polyester Liquid Filter Bag



Features

- * Polyester liquid bag filter are available with a carbon steel ring, stainless steel ring or plastic flanges.
- * Heavy-duty handle eases installation and removal
- * Metal ring sewn into bag top for increased durability and positive sealing
- * Wide array of media fibers to meet needed temperature and micron specifications

Applications

Polyester liquid filter bags can be used in the filtering of a wide array of industrial and commercial process fluids

Sizes

Our liquid filter bags are available for all common liquid bag housings. Dimensions range from 4.12" diameter X 8" length thru 9" diameter X 32" length.

Micron Ratings

Available fibers range from 1 to 1500 microns

Options

- * Bag finish or covers for strict migration requirements.
- * Plastic top O.E.M. replacements
- * Multi-layered filtering capabilities for higher dirt holding capacities

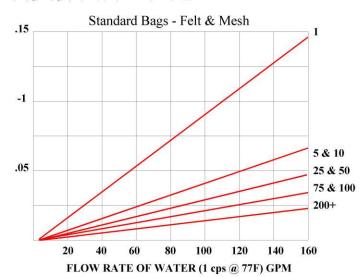
Optional Filter Media

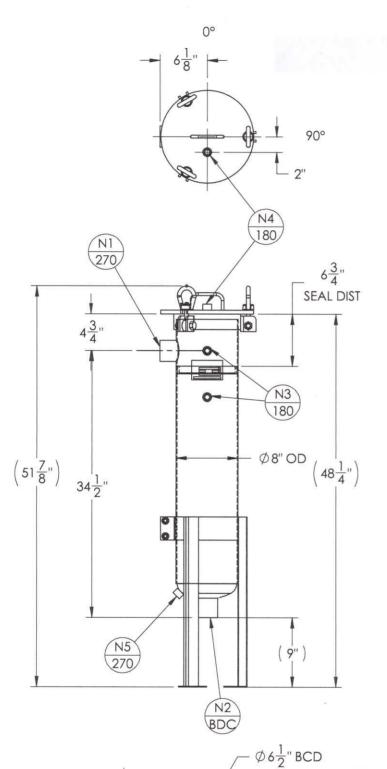
Felt: Nomex, Polyester, Polypropylene

Monofilament: Nylon, Polyester, Polypropylene

Multifilament: Nylon, Polyester

Polypropylene: Oil Removal





		NOZZLE	SCHEDULE		
MARK	QTY	SIZE	/ RATING	DESCI	RIPTION
N1	1	2" 150	# NPT	IN	LET
N2	1	2" 150)# NPT	OU.	TLET
N3	2	1/2" 30	00# NPT	PRES	SS GA
N4	1	1/2" 30	00# NPT	VE	NT
N5	1	1/2" 30	00# NPT	CLEAN	DRAIN
N6	-		-	DIRT	/ DRAIN
	VESS	SEL DESIG	N CONDITION	S	
CODE:	BES	т сомме	RCIAL PRACT	ICE	
M.A.W.P.:	150 PSI @	250°F	M.D.M.T.:	-20° F	@ 150 PS
M.A.E.P.:	15 PSI @	250°F			
CORROSION	ALLOWANCE	: NONE	HYDROTEST	PRESS:	195 PSI
STAMP:	'NC'		SERVICE:	NON I	ETHAL
PWHT:	N/A		RADIOGRAP	HY:	N/A
MATERIAL:	SS 304/	L	GASKET:	BUN	IA-N

DRY WEIGHT: 77.62 #'s FLOODED WEIGHT: 140 #'s SHIPPING WEIGHT: 100 #'s VESSEL VOLUME: 1.0 C.F.





1:1

 $otin \frac{1}{2}$ " TYP.

Appendix D

Supplemental Information

MassDEP - Bureau of Waste Site Cleanup

Phase 1 Site Assessment Map: 500 feet & 0.5 Mile Radii

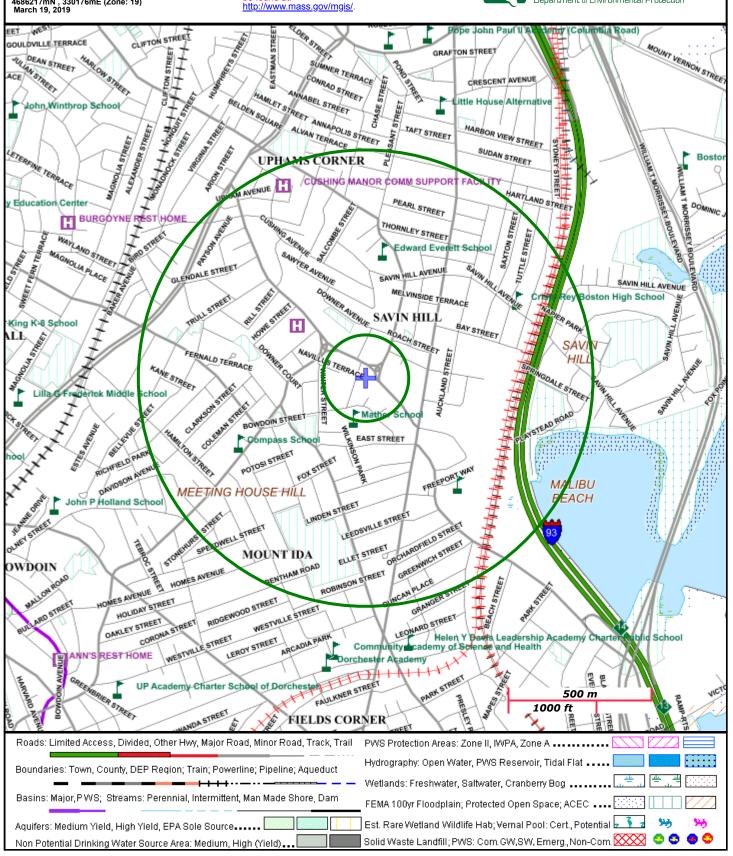
Site Information:

233 HANCOCK STREET 233 HANCOCK STREET BOSTON, MA

NAD83 UTM Meters: 4686217mN , 330176mE (Zone: 19) March 19, 2019

The information shown is the best available at the date of printing. However, it may be incomplete. The responsible party and LSP are ultimately responsible for ascertaining the true conditions surrounding the site. Metadata for data layers shown on this map can be found at:







<u>Documentation of the National Historic Preservation Act Eligibility Determination:</u>

As part of this permit, a determination was made as to whether there were any historic properties or places listed on the national register in the path of the discharge or in the vicinity of the construction of treatment systems or BMPs related to the discharge. A search on the Massachusetts Cultural Resource Information System Database and the National Register of Historic Places did not list any potential historic properties on or near the project site in the databases. Therefore, the proposed discharge will not have the potential to cause effects on historical properties.

Massachusetts Cultural Resource Information System MACRIS

MACRIS Search Results

Search Criteria: Town(s): Boston; Place: Dorchester; Street No: 233; Street Name: Hancock St; Resource Type(s): Area, Building, Burial Ground, Object, Structure;

Inv. No. Property Name Street Town Year

Friday, March 15, 2019 Page 1 of 1





<u>Documentation of the Results of the ESA Eligibility Determination:</u>

Using information in Appendix IV of the NPDES DGP, the project located at 233 Hancock Street, Dorchester, MA is eligible for coverage under this general permit under FWS Criterion C. This project is located in Suffolk County. No designated critical habitats were listed in the project area. An Endangered Species Consultation was conducted on the U.S. Fish & Wildlife Service New England Field Office ECOS IPaC webpage for the Site:

No Endangered species found at this location.



United States Department of the Interior

FISH AND WILDLIFE SERVICE

New England Ecological Services Field Office 70 Commercial Street, Suite 300 Concord, NH 03301-5094 Phone: (603) 223-2541 Fax: (603) 223-0104

http://www.fws.gov/newengland



In Reply Refer To: March 13, 2019

Consultation Code: 05E1NE00-2019-SLI-1121

Event Code: 05E1NE00-2019-E-02579 Project Name: 233 Hancock Street

Subject: List of threatened and endangered species that may occur in your proposed project

location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

New England Ecological Services Field Office 70 Commercial Street, Suite 300 Concord, NH 03301-5094 (603) 223-2541

Project Summary

Consultation Code: 05E1NE00-2019-SLI-1121

Event Code: 05E1NE00-2019-E-02579

Project Name: 233 Hancock Street

Project Type: Water Withdrawal / Depletion

Project Description: Construction Dewatering

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/42.30951490924069N71.05992769286027W



Counties: Suffolk, MA

Endangered Species Act Species

There is a total of 0 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

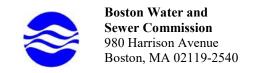
IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.



DEWATERING DISCHARGE PERMIT APPLICATION

OWNER / AUTHORIZED APPLICANT PROVIDE INFORMATION HERE:

Company Name:	Address:	
Phone Number:	Fax number:	
Contact person name:	Title:	
Cell number:	Email address:	
Permit Request (check one): □ N	Tew Application □ Permit Extension □ Other	(Specify):
Owner's Information (if different	t from above):	
Owner of property being dewatered	d:	
	1	
Location of Discharge & Propose	ed Treatment System(s):	
Street number and name:	Neighborhoo	od
Discharge is to a: Sanitary Sew	er □ Combined Sewer □ Storm Drain □ Otl	her (snecify)
	System(s):	
	Receiving Waters	
	Anticipated Dates of Discharge): From □ Tank Removal/Installation □ Test Pipe □ Hydrogeologic Testing □ Crawl Space/Footing Drain □ Non-contact/Uncontaminated Co	To □ Foundation Excavation □ Trench Excavation □ Other
number, size, make and start reading. 2. If discharging to a sanitary or combin. 3. If discharging to a separate storm drai as other relevant information. 4. Dewatering Drainage Permit will be d. Submit Completed Application to:	of the discharge and the location of the point of discharge (i.e. Note. All discharges to the Commission's sewer system will be ed sewer, attach a copy of MWRA's Sewer Use Discharge pern n, attach a copy of EPA's NPDES Permit or NOI application, o lenied or revoked if applicant fails to obtain the necessary permit Boston Water and Sewer Commission Engineering Customer Services 980 Harrison Avenue, Boston, MA 02119 Attn: Matthew Tuttle, Engineering Customer Service E-mail: tuttlemp@bwsc.org Phone: 617-989-7204 Fax: 617-989-7716	the sewer pipe or catch basin). Include meter type, meter be assessed current sewer charges. nit or application. r NPDES Permit exclusion letter for the discharge, as well
Signature of Authorized Representative 1	ior Property Owner:	Date: