

OCS EIS/EA
BOEM 2023-049



**Empire Offshore Wind
Final Environmental
Impact Statement
Volume 6 Part B EAF Appendices A, B, and C
September 2023**



BOEM
Bureau of Ocean Energy
Management

**Appendix A USACE South Brooklyn Marine Terminal Port
Infrastructure Upgrades Letter, March 21, 2022**



This report shall not be reproduced, except in its entirety, without the written approval of SGS.
Test results relate only to samples analyzed.

Dayton, NJ

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody
- Summa Canister and Flow Controller Log



AIR CHAIN OF CUSTODY

SGS North America Inc. - Dayton
2235 Route 130, Dayton, NJ 08810
TEL 732-329-0200 FAX 732-329-3499
www.sgs.com/enhsusa

FED-EX Tracking #
Bottle Order Control #
SGS Quote #
SGS Job # JD 36521

Client / Reporting Information
Company Name: TETRA TECH
Address: 6 CENTURY DR
City: BROOKLYN, State: NY
Project Name: 2nd Ave # 3rd St
Project Contact: BOB CANTAGALLO
Phone #: (973) 630-4045
Sampler(s) Name(s): A. VALU & CHRIS BEERS

Table with columns: Lab Sample #, Field ID / Point of Collection, Air Type, Sampling Equipment Info, Start Sampling Information, Stop Sampling Information. Contains 10 rows of sampling data.

Turnaround Time (Business days)
Standard - 15 Days
Approved By:
Date:
Data Deliverable Information
All NJDEP TO-15 is mandatory Full T1

Sample Custody must be documented below each time samples change possession, including courier delivery.
Relinquished by: [Signature]
Received By: [Signature]
Date Time: 12/09/14 12:00





AIR CHAIN OF CUSTODY

SGS North America Inc - Dayton
2235 Route 130, Dayton, NJ 08810
TEL 732-329-0200 FAX 732-329-3499
www.sgs.com/en/susa

Form containing client/reporting information, project info, weather parameters, sampling data table, data deliverable information, and chain of custody signatures.

Client/Reporting Information: Company Name TETRA TECH, Project Name 2ND AVE # 33RD, Address 6 CENTURY DR, Parsippany NJ 07954, City BROOKLYN NY.

Weather Parameters: Temperature (Fahrenheit) Start/Stop, Atmospheric Pressure (inches of Hg) Start/Stop.

Table with 14 columns: Lab Sample #, Field ID / Point of Collection, Air Type, Sampling Equipment Info, Start Sampling Information, Stop Sampling Information.

Turnaround Time (Business days) and Data Deliverable Information section.

Requested Analysis: VTO 15 NYSVLL

Comments / Remarks: CANISTER/PC (A1357/PC917) DOESN'T APPEAR TO BE ACTING PROPERLY. FC179 - READS 4" HIGHER THAN ACTUAL.

Chain of Custody table with columns: Relinquished by, Date Time, Received By, Date Time, Relinquished By, Date Time, Received By, Date Time.



AIR SAMPLING EQUIPMENT RETURN FORM

CLIENT: Tetra Tech

PROJECT: 2nd Ave & 3rd St.

CONTROL# _____

JOB # JD 36521

ADDITIONAL SUMMA CANISTERS

15 A1360

ADDITIONAL CONTROLLERS

FC730

RELINQUISHED BY: 1 <u>SGS</u>	DATE & TIME: <u>12/9/21</u> <u>17:33</u>	RECEIVED BY: 2 <u>Jeemit Patel</u>	DATE & TIME: <u>JD36521: Chain of Custody</u> <u>Page 3 of 4</u>
RELINQUISHED BY: 3 _____	DATE & TIME: _____	RECEIVED BY: 4 _____	DATE & TIME: _____
CUSTODY SEAL #'S: _____		# OF BOXES OR PIECES IN DELIVERY _____	

NOTES:

5.1



**Parks, Recreation,
and Historic Preservation**

KATHY HOCHUL
Governor

ERIK KULLESEID
Commissioner

March 21, 2022

Christopher Minck
Project Manager
USACE
26 Federal Plaza
16-406
New York, NY 10278

Re: USACE
South Brooklyn Marine Terminal Port Infrastructure Upgrades
22PR01402
NAN-2021-01202-EMI

Dear Christopher Minck:

Thank you for requesting the comments of the New York State Historic Preservation Office (SHPO). We have reviewed the provided documentation in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic/Cultural resources. They do not include other environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the National Environmental Policy Act and/or the State Environmental Quality Review Act (NY Environmental Conservation Law Article 8).

We note that the South Brooklyn Marine Terminal is not eligible for listing in the State and National Registers of Historic Places. We further note that the following State and National Register eligible or listed resources are adjacent to the project area: the Bush Terminal Historic District, the American Can Company building, the Gowanus Expressway Viaduct, Storehouse #2, U.S. Navy Fleet Supply Base, and Intermediate School 136. We have reviewed the report submitted to our office on March 1st, 2022. Based upon our review, it is SHPO's opinion that the proposed work will have No Adverse Effect upon historic properties.

If you have any questions, I am best reached via e-mail.

Sincerely,

Olivia Brazee
Historic Site Restoration Coordinator
olivia.brazee@parks.ny.gov

via e-mail only

cc: A. Sutherland, Maritime Administration
A. Rachleff and N. Stehling, AECOM

Appendix B Photographs of Historic Resources



Looking west toward Pier 7 in National Register-eligible Bush Terminal Historic District from SBMT 39th Street "Pier." Dredging would occur in the "interpier" basin between remnants of Pier 7 and 39th Street "Pier." Improvements would be made to the 39th Street "Pier."



Looking south from 39th Street "Pier" at SBMT toward remnants of Pier 7 and Bush Terminal Historic District Buildings along waterfront.



Looking east from SBMT toward contributing buildings within Bush Terminal Historic District. Buildings face proposed upland improvements and dredging activity in the Project Area.



Looking northwest toward Gowanus Bay and SBMT 39th Street, east of First Avenue. Buildings on left side of photograph are contributing resources within Bush Terminal Historic District.



Looking southwest toward existing building structures at SBMT (39th Street "Pier"). SBMT has been determined not eligible for listing in the National Register. Structures and paving will be removed, and the area will be repaved.



Looking northwest toward existing building structure at SBMT (39th Street "Pier"); structure will be removed.



Looking west toward buildings at SBMT that will be removed (39th Street "Pier").



Looking east toward Tower Building at SBMT (land side of 35th Street "Pier"). Building will be removed.



Looking west toward Tower Building at SBMT; building will be removed. Pavement will be removed and new paving and structures installed.



Looking north from 35th Street "Pier" at SBMT toward contemporary recycling facility at 29th Street "Pier."
35th Street "Pier" will be repaved, a wharf installed into the "interpier" basin, and the basin will be dredged, as will the area to the west of the 35th Street "Pier."



Looking east from 39th Street "Pier" at SBMT toward National Register-listed Navy Storehouse No. 2 (shorter building). "Interpier" basin will be dredged and new paving and structures will be installed.



Close-up of Storehouse No. 2 from 39th Street "Pier" at SBMT. "Interpier" basin will be dredged and new paving and structures will be installed on the "pier".



Looking west toward National Register-eligible American Can Company at northeast corner of Second Avenue and 43rd Street. View between building and SBMT is obstructed by intervening development.



Looking toward east façade of American Can Company; façade faces Second Avenue.



Looking toward National Register-eligible Gowanus Expressway viaduct from Third Avenue. Views are intermittently blocked by intervening development.



View beneath Gowanus Expressway above Third Avenue.



National Register-eligible I.S. 136 at the corner of Fourth Avenue and 41st Street. Building is approximately 1,600 ft removed from SBMT. Looking northward from the south sidewalk of 41st Street



Looking south toward I.S. 136 from north side of 40th Street.

Appendix C Full Benthic Macroinvertebrate Data

FULL BENTHIC MACROINVERTEBRATE DATA - Collected at South Brooklyn Marine Terminal
 Individuals collected from 3 x 0.1 meter-squared VanVeen grabs taken July 2020

Taxa/species	1	2	3	4	5	6	7	8	Ref 1	Ref 2
ANNELIDS										
<i>Alitta succinea</i>	0	0	1	4	1	1	1	11	1	0
<i>Ampharete oculata</i>	0	0	2	0	0	0	1	0	1	0
<i>Amphitrite ornata</i>	0	0	0	1	0	0	0	0	0	0
<i>Capitella capitata</i>	0	0	0	0	0	0	0	1	0	0
Cirratulidae sp.	0	3	3	1	2	9	0	0	0	1
<i>Cossura</i> sp.	0	0	21	9	0	2	0	4	0	5
<i>Diopatra cuprea</i>	0	0	5	11	2	1	0	1	0	0
<i>Dipolydora socialis</i>	0	0	1	0	0	0	0	0	0	0
<i>Eumida sanguinea</i>	0	0	0	0	9	3	0	2	0	0
<i>Exogone dispar</i>	0	0	0	1	0	0	0	0	0	0
<i>Fabricia stellaris</i>	0	0	0	0	0	0	0	1	0	0
<i>Glycera americana</i>	0	1	8	1	8	4	1	0	0	0
<i>Glycera</i> sp.	0	0	4	13	2	2	0	0	0	0
<i>Glycinde solitaria</i>	0	0	76	128	32	114	0	0	0	0
<i>Gyptis vittata</i>	0	0	6	2	1	0	0	2	0	2
<i>Harmothoe imbricata</i>	0	0	0	0	0	0	0	1	0	0
<i>Heteromastus filiformis</i>	0	0	20	27	0	0	0	0	0	0
<i>Hypereteone heteropoda</i>	0	0	3	2	0	1	0	2	1	0
<i>Leitoscoloplos robustus</i>	0	0	1	0	0	3	0	0	0	0
<i>Leitoscoloplos</i> sp.	0	1	6	10	17	28	2	16	0	0
<i>Lepidonotus sublevis</i>	0	0	0	1	0	0	0	0	0	0
Maldanidae sp.	0	1	2	0	0	1	0	0	0	0
<i>Mediomastus ambiseta</i>	0	6	133	294	6	39	11	27	11	5
<i>Nephtys incisa</i>	14	12	15	15	0	5	16	1	12	2
Nephtyidae sp.	0	0	0	0	0	1	0	1	0	0
<i>Oligochaeta</i> sp.	5	66	1374	1445	2	82	74	17	39	23
Onuphidae sp.	0	1	0	0	0	0	0	0	0	0
<i>Odontosyllis fulgurans</i>	0	0	0	1	0	0	0	0	0	0
<i>Paranaitis speciosa</i>	0	0	0	1	0	0	0	0	0	0
<i>Paraprionospio pinnata</i>	0	0	3	0	1	0	0	0	0	0
<i>Parasabella microphthalma</i>	0	0	1	7	0	2	0	15	0	0
<i>Pectinaria gouldii</i>	0	0	179	150	44	125	0	1	0	0
<i>Phyllodoce arenae</i>	0	0	0	0	1	0	0	0	0	0
<i>Polydora cornuta</i>	0	0	0	1	0	0	3	14	1	0
<i>Prosphaerosyllis longicauda</i>	0	0	0	1	0	0	0	0	0	0
<i>Sabaco elongatus</i>	1	1	8	43	0	22	7	0	0	0
Sabellidae sp.	0	0	0	1	0	0	0	3	0	0
<i>Salvatoria clavata</i>	0	0	0	1	0	0	0	1	0	0
<i>Sige fusigera</i>	0	0	0	0	1	0	0	0	0	0
<i>Spiochaetopterus costarum oculis</i>	0	0	33	17	21	28	0	0	0	0
Spionidae sp.	1	3	0	0	0	0	2	1	0	0
<i>Sthenelais limicola</i>	0	0	1	0	0	0	0	0	0	0
<i>Streblospio benedicti</i>	1	9	2	0	0	0	2	3	21	1
NEMATODA (ROUND WORMS)										
<i>Nematoda</i> sp.	0	0	39	86	5	54	1	124	0	0
NEMERTEA (RIBBON WORMS)										
<i>Nemertea</i> sp.	0	0	91	112	12	16	0	2	0	0

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 Individuals collected from 3 x 0.1 meter-squared VanVeen grabs taken July 2020

Taxa/species	1	2	3	4	5	6	7	8	Ref 1	Ref 2
PLATYHELMINTHES (FLAT WORMS)										
Stylochus ellipticus	0	0	1	0	0	1	0	1	0	0
GASTROPODS										
Acteocina canaliculata	5	85	419	419	154	321	36	19	8	1
Asmunda elegantula	1	0	1	2	0	43	2	1	1	0
Boonea bisuturalis	0	4	0	0	0	0	1	3	0	0
Boreotrophon clathratus	0	2	0	0	0	0	0	0	0	0
Epitonium angulatum	0	0	0	0	0	0	0	1	0	0
Gastropoda sp.	4	0	0	0	0	0	0	0	3	0
Japonactaeon punctostriatus	4	14	408	696	687	335	13	7	6	0
Odostomia eburnea	2	11	67	42	14	3	3	10	1	1
Oncchidorididae sp.	0	0	0	1	0	0	0	0	0	0
Neverita duplicata	0	0	0	0	0	1	0	0	0	0
Tritia obsoleta	0	1	12	0	0	1	8	1	6	0
Tritia trivittata	0	0	1	1	0	0	1	0	0	0
Turbonillinae sp.	0	0	0	0	0	0	0	0	1	0
Urosalpinx cinerea	0	0	0	0	0	0	0	14	0	5
BIVALVES										
Ameritilla agilis	0	0	7	1	1	0	3	1	0	0
Crepidula fornicata	0	0	0	0	0	0	1	0	0	0
Crepidula sp.	0	0	0	2	0	0	0	0	0	0
Ensis leei	0	0	0	0	0	0	1	0	0	0
Lyonsia hyalina	0	0	62	10	3	2	1	4	0	0
Macoploma tenta	0	0	0	0	0	1	0	0	0	0
Mercenaria mercenaria	0	0	2	2	0	1	0	2	0	0
Modiolus modiolus	0	0	0	0	0	0	0	0	2	0
Mulinia lateralis	0	11	3	2	8	7	32	5	1	0
Nucula proxima	0	1	5	3	0	0	1	0	0	0
Pandora inflata	0	0	23	8	3	6	0	0	0	0
Pitar morrhuanus	1	0	1	0	0	0	0	0	0	0
Turtonia minuta	0	0	3	4	1	1	0	0	0	0
Yoldia limatula	1	2	14	9	0	2	5	1	0	0
Yoldia myalis	0	0	0	0	0	0	1	0	0	0
Yoldia sapotilla	0	0	0	0	0	0	0	0	0	1
Yoldia sp.	1	0	8	3	0	2	2	2	0	0
ARTHROPODS										
Ampelisca abdita	5	73	15	11	32	15	60	7	35	7
Amphibalanus improvisus	0	0	0	2	0	0	0	0	0	0
Ampithoe longimana	0	0	0	0	0	3	0	0	0	0
Anoplodactylus petiolatus	0	10	16	68	17	13	10	2	5	1
Apocorophium acutum	0	0	0	0	0	0	0	2	0	0
Callinectes sapidus	1	1	0	0	0	0	3	4	3	0
Callipallene brevisrostris	0	0	0	3	0	2	0	3	0	0
Caprella equilibra	0	0	0	2	0	1	4	1	0	0
Caprella penantis	0	0	0	0	0	14	0	0	0	0
Cerapus sp.	0	0	5	3	1	0	0	0	0	0
Crangon septemspinosa	0	1	1	0	0	1	4	9	0	5
Dyspanopeus sayi	0	0	0	1	0	0	0	0	0	0
Edotea triloba	1	1	0	4	13	3	0	4	1	0
Elasmopus levis	0	0	0	23	0	9	0	6	1	0
Emerita talpoida	0	0	1	0	0	0	0	0	0	0
Grandidierella japonica	0	1	0	0	1	0	1	195	0	0
Hippolyte sp.	0	0	0	0	0	1	0	0	0	0
ARTHROPODS (continued)										
Incisocalloipe aestuarius	0	0	0	0	0	0	1	0	0	0
Jassa marmorata	0	0	0	1	0	0	1	0	0	0
Leucon americanus	0	0	4	2	7	0	2	0	0	1

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 Individuals collected from 3 x 0.1 meter-squared VanVeen grabs taken July 2020

Taxa/species	1	2	3	4	5	6	7	8	Ref 1	Ref 2
<i>Libinia dubia</i>	0	0	0	1	0	0	0	0	0	0
<i>Limnoria lignorum</i>	0	0	0	0	0	0	0	3	0	0
<i>Microdeutopus gryllotalpa</i>	0	0	0	0	0	0	0	79	0	0
<i>Minuca</i> sp.	0	2	0	0	0	0	0	0	6	0
<i>Oxyurostylis smithi</i>	0	0	6	5	9	3	2	1	1	0
<i>Palaemon pugio</i>	0	0	0	0	0	0	0	1	1	1
<i>Pagurus annulipes</i>	0	0	0	0	0	0	0	0	1	0
<i>Pagurus longicarpus</i>	0	0	0	0	0	0	0	0	0	1
<i>Paracaprella tenuis</i>	0	0	0	2	0	4	0	10	0	0
<i>Stenothoe</i> sp.	0	0	0	2	0	0	1	0	0	0
<i>Synidotea laevidorsalis</i>	0	0	0	1	1	2	0	0	0	0
<i>Unciola serrata</i>	0	0	0	0	2	0	0	0	0	0
CNIDARIANS										
<i>Diadumene leucolena</i>	0	0	4	13	0	1	0	25	0	2
<i>Edwardsia elegans</i>	0	0	3	5	1	3	0	0	0	0
TUNICATES										
<i>Molgula manhattensis</i>	0	0	0	2	0	0	1	199	2	14
<i>Stylela canopus</i>	0	0	0	0	0	0	0	2	0	0
TOTAL NUMBER OF ORGANISMS	48	324	3130	3742	1122	1345	322	876	172	79
Density Per Square Meter	160.0	1080.0	10433.3	12473.3	3740.0	4483.3	1073.3	2920.0	573.3	263.3
Species Richness	16	27	53	65	36	52	40	56	27	19