

October 16, 2009  
Project 09150-0

10/20/09  
received  
GEI Consultants  
MAG910438

Environmental Protection Agency  
RGP NOI Processing  
Municipal Assistance Unit (CMU)  
One Congress Street, Suite 1100  
Boston, MA 02114-2023

Dear Sir or Madam:

Re: **Notice of Intent**  
**NPDES Remediation General Permit**  
**WTTC – Moran Terminal**  
**100 Terminal Street**  
**Charlestown, Massachusetts**

On behalf of the Massachusetts Port Authority (Massport), GEI Consultants, Inc. has prepared this Notice of Intent (NOI) for coverage under the National Pollutant Discharge Elimination System (NPDES) Remediation General Permit (RGP), Massachusetts General Permit (MAG910000). This NOI was prepared in accordance with the general requirements of the NPDES RGP under Federal Register, Vol. 70, No. 147, and related guidance documentation provided by the U.S. Environmental Protection Agency (EPA). The completed NOI form is provided in Appendix A.

### Site Information

This NOI has been prepared for the management of dewatering operations during construction of the proposed Wind Technology Testing Center (WTTC) located at 100 Terminal Street in Boston (Charlestown), Massachusetts (the Property; Fig. 1). The WTTC project site is located within Moran Terminal, which is owned by Massport, and is bounded by the Mystic River to the north and west and paved parking areas to the south and east (Figs. 1 and 2).

The WTTC project site is within the "Former Schiavone Property" disposal site, a former junkyard that was located on the Moran Terminal property from 1964 until Massport removed it in 1987. The Former Schiavone Property is a Massachusetts Department of Environmental Protection (DEP) disposal site tracked by Release Tracking Number (RTN) 3-0694 (the Disposal Site). Environmental investigations conducted in the 1980s and 1990s to evaluate contamination at the Disposal Site identified polychlorinated biphenyls (PCBs) at concentrations up to 187 milligrams per kilogram (mg/kg) in soil.

The junkyard was dismantled and capped with an approximately 15-inch to 18-inch-thick concrete slab in 1987-1988. The slab was placed over the former junkyard to eliminate human contact with PCB-contaminated soil that remained on the Disposal Site. Massport submitted a Massachusetts Contingency Plan Class (MCP) A-3 Response Action Outcome (RAO) for the Disposal Site in 1997. The entire Disposal Site, including the WTTC project site, has an Activity

and Use Limitation (AUL) on it, which identifies restrictions on the use of the Disposal Site and on contact with sub-slab soils. Soil and groundwater management activities that are planned at the Disposal Site will be conducted as a Release Abatement Measure (RAM) per the MCP.

### **Discharge and Receiving Surface Water Information**

We evaluated the proposed influent by collecting two groundwater samples from the WTTC project site area. We collected groundwater samples from monitoring wells WTTC09-1 and GW-4 on July 10, 2009 (Fig. 2). Both water samples were analyzed for the parameters required under the NPDES RGP. In addition, the pH of the proposed influent was measured to evaluate existing conditions. The laboratory data report for these samples is provided in Appendix B. The analytical results indicated the presence of total suspended solids (TSS), cyanide, acetone, five PAHs (acenaphthene, anthracene, fluoranthene, naphthalene, and phenanthrene), and six metals (arsenic, trivalent chromium, iron, lead, nickel, and selenium). Acetone may not be representative of site conditions since it is a common laboratory contaminant and it was detected in only one groundwater sample at a very low concentration. PCBs, a contaminant of concern in soil at the Disposal Site, were not detected above laboratory reporting limits. Although unlikely, we are conservatively assuming that PCBs could be detected in the influent; however, this is not anticipated based on the sampling results in Appendix B and the solubility characteristics of PCBs.

The measured pH of the groundwater within the WTTC project site area ranged from 6.3 to 7.8 standard units. The lower range (6.3) is outside the RGP effluent limit for Massachusetts waters (6.5 to 8.3). Therefore, we request an expanded effluent limit range of 6.3 to 8.3 due to the naturally low pH in groundwater at the WTTC project site area.

During construction, the collected water will be treated to remove suspended solids, and, if necessary, volatile organic compounds (VOCs), cyanide, and metals prior to discharge. The proposed treatment system is shown in the process flow diagram in Fig. 3. The treated water will be discharged to one or two storm drains at the WTTC project site. The storm drains are identified as Proposed Discharge Points #1 and #2 in Fig. 2 and discharge to the Mystic River, which is directly adjacent to the WTTC project site. These storm drains do not appear to be part of the Boston Water and Sewer Commission (BWSC) or Massachusetts Water Resources Authority (MWRA) stormwater drainage systems.

### **Consultation with Federal Services**

We reviewed the Massachusetts Geographical Information System (MassGIS) online data viewer. Based on this review, neither the Property nor the point where the proposed discharge reaches the receiving surface water body are Areas of Critical Environmental Concern (ACEC) or Habitats of Rare Wetland Wildlife. We also reviewed the Massachusetts Division of Fisheries and Wildlife (MassWildlife; Natural Heritage and Endangered Species Program) online data viewer. Based on this review, neither the Property nor the point where the proposed discharge reaches the receiving surface water body are Priority Habitats of Rare Species or Estimated Habitats of Rare Wildlife. Based on this information, consultation with federal and/or state officials was deemed not to be necessary.

We reviewed the U.S. National Parks Service Natural Historic Places (NPS) electronic database. Based on this review, neither the Property nor the point where the proposed discharge reaches the receiving surface water body is a listed National Historic Place. Based on this information, consultation with federal and/or state officials was deemed not to be necessary.

### Coverage Under NPDES RGP

It is our opinion that the proposed discharge is eligible for coverage under the NPDES RGP based on the requirements of the NPDES RGP and our evaluation of the available site-specific information. On behalf of Massport, we are requesting coverage under the NPDES RGP for the discharge of recovered water during construction activities to the surface waters of the Mystic River via the on-site storm drains.

The enclosed NOI form provides required information on the general site conditions, discharge, treatment system, receiving water, and consultation with federal services (Appendix A). For this project, Massport is the owner and has operational control over the construction plans and specifications, including the ability to make modifications to those plans and specifications. Turner Construction Company, Inc. (Turner Construction) of Boston, Massachusetts has been contracted by Massport and will direct the personnel responsible for the implementation and day-to-day operations and activities that are necessary to ensure compliance with the NPDES RGP, including operation, inspection, monitoring, and reporting.

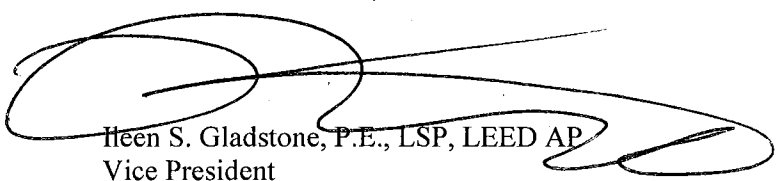
Discharge of treated water is scheduled to begin in mid to late October 2009, pending authorization from the EPA.

The excavation and dewatering will be conducted as a RAM in accordance with the MCP (310 CMR 40.0000). Therefore, completion and submittal of the DEP Bureau of Resource Protection Water Management (BRP WM 12) form and fee payment to the Commonwealth of Massachusetts are not required.

Please contact me at 781.721.4012 or [igladstone@geiconsultants.com](mailto:igladstone@geiconsultants.com) if you have any questions.

Very truly yours,

GEI CONSULTANTS, INC.



Heen S. Gladstone, P.E., LSP, LEED AP  
Vice President

MWS/RSH/ISG:dcs

Enclosures

c: Dan Arons, Architerra, Inc.  
Nhuy Hoang, Massport  
Division of Watershed Management, MA DEP



**SITE COORDINATES:**

Latitude: N 42° 23' 01.43"  
 Longitude W 71° 31' 24.64"  
 UTM: 4,694,440mN  
 (Zone 19) 330,632mE



This Image provided by MassGIS is from U.S.G.S.  
 Topographic 7.5 X 15 Minute Series  
 Boston North, MA Quadrangle, 1985.  
 Datum is National Geodetic Vertical Datum (NGVD).  
 Contour Interval is 3 Meters.



MASSACHUSETTS  
 QUADRANGLE LOCATION

Remediation General Permit - Notice of Intent  
 Proposed WTTTC Building - Moran Terminal  
 Charlestown, Massachusetts

Massachusetts Port Authority  
 Boston, Massachusetts

GEI



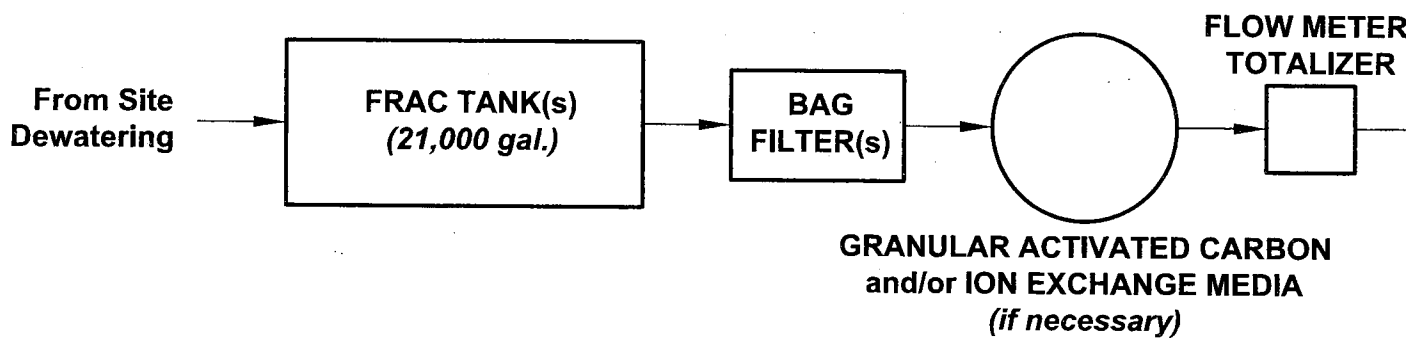
Consultants

SITE LOCATION MAP

Project 09150-0

October 2009

Fig. 1



**PROCESS FLOW DIAGRAM**  
*Not to Scale*

Remediation General Permit - Notice of Intent  
 Proposed WTTTC Building - Moran Terminal  
 Charlestown, Massachusetts

Massachusetts Port Authority  
 Boston, Massachusetts



Project 09150-0

PRO

October

# **B. Suggested Form for Notice of Intent (NOI) for the Remediation General Permit**

1. General site information. Please provide the following information about the site:

|                                                                                                                                                                                                   |                                                                                                               |                             |                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|-----------------------------|-----------------|
| a) Name of facility/site: WTTTC - Moran Terminal                                                                                                                                                  |                                                                                                               | Facility/site address:      |                 |
| Location of facility/site:<br>Longitude: 71.5233 latitude: 42.3836                                                                                                                                | Facility SIC code(s): 4491                                                                                    | Street: 100 Terminal Street |                 |
| b) Name of facility/site owner: Massachusetts Port Authority                                                                                                                                      |                                                                                                               | Town: Charlestown           |                 |
| Email address of owner: nhong@massport.com                                                                                                                                                        |                                                                                                               | State: MA                   | County: Suffolk |
| Telephone no. of facility/site owner: 617-568-5976                                                                                                                                                |                                                                                                               | Zip: 02129                  |                 |
| Fax no. of facility/site owner: 617-568-5999                                                                                                                                                      | Owner is (check one): 1. Federal <input type="checkbox"/> 2. State/Tribal <input checked="" type="checkbox"/> |                             |                 |
| Address of owner (if different from site):                                                                                                                                                        | 3. Private <input type="checkbox"/> 4. other, if so, describe:                                                |                             |                 |
| Street: Logan Office Center, One Harborside Drive                                                                                                                                                 |                                                                                                               |                             |                 |
| Town: East Boston                                                                                                                                                                                 | State: MA                                                                                                     | Zip: 02128                  | County: Suffolk |
| c) Legal name of operator:<br>Turner Construction Company                                                                                                                                         | Operator telephone no: 617-247-6400                                                                           |                             |                 |
|                                                                                                                                                                                                   | Operator fax no.: 617-247-5416                                                                                |                             |                 |
| Operator email: bventura@tcco.com                                                                                                                                                                 |                                                                                                               |                             |                 |
| Operator contact name and title: Brendt Gonsalves, Project Superintendent                                                                                                                         |                                                                                                               |                             |                 |
| Address of operator (if different from owner):                                                                                                                                                    |                                                                                                               |                             |                 |
| Town: Boston                                                                                                                                                                                      | State: MA                                                                                                     | Zip: 02210                  | County: Suffolk |
| d) Check "yes" or "no" for the following:                                                                                                                                                         |                                                                                                               |                             |                 |
| 1. Has a prior NPDES permit exclusion been granted for the discharge? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> if "yes," number:                                       |                                                                                                               |                             |                 |
| 2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> if "yes," date and tracking #:              |                                                                                                               |                             |                 |
| 3. Is the discharge a "new discharge" as defined by 40 CFR 122.2? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>                                                             |                                                                                                               |                             |                 |
| 4. For sites in Massachusetts, is the discharge covered under the MA Contingency Plan (MCP) and exempt from state permitting? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |                                                                                                               |                             |                 |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>e) Is site/facility subject to any State permitting or other action which is causing the generation of discharge? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>If "yes," please list:<br/>         1. site identification # assigned by the state of NH or MA: RTN 3-0694<br/>         2. permit or license # assigned:<br/>         3. state agency contact information: name, location, and telephone number:<br/>         MADEP, NERO, Wilmington, MA, 978-694-3200</p> | <p>f) Is the site/facility covered by any other EPA permit, including:<br/>         1. multi-sector storm water general permit? Y <input type="checkbox"/> N <input checked="" type="checkbox"/>, if Y, number:<br/>         2. phase I or II construction storm water general permit? Y <input checked="" type="checkbox"/> N <input type="checkbox"/>, if Y, number: MAR100000<br/>         3. individual NPDES permit? Y <input type="checkbox"/> N <input checked="" type="checkbox"/>, if Y, number:<br/>         4. any other water quality related permit? Y <input type="checkbox"/> N <input checked="" type="checkbox"/>, if Y, number:</p> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**2. Discharge information.** Please provide information about the discharge, (attaching additional sheets as needed) including:

a) Describe the discharge activities for which the owner/applicant is seeking coverage:

Discharge of water recovered during construction-related dewatering and stormwater management.

|                                                                                                                                                                                                                                                           |                                     |                                                                                                                                                                                                                                                                                                                                                                                |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| b) Provide the following information about each discharge:                                                                                                                                                                                                | 1) Number of discharge points:<br>2 | 2) What is the maximum and average flow rate of discharge (in cubic feet per second, ft <sup>3</sup> /s)? Max. flow 0.112<br>Average flow 0.067 Is maximum flow a design value? Y <input type="checkbox"/> N <input checked="" type="checkbox"/><br>For average flow, include the units and appropriate notation if this value is a design value or estimate if not available. |
| 3) Latitude and longitude of each discharge within 100 feet: pt.1: long. 71.0577 lat. 42.3842 ; pt.2: long. 71.0569 lat. 42.3844 ; pt.3: long. lat. ; pt.4: long. lat. ; pt.5: long. lat. ; pt.6: long. lat. ; pt.7: long. lat. ; pt.8: long. lat. ; etc. |                                     |                                                                                                                                                                                                                                                                                                                                                                                |
| 4) If hydrostatic testing, total volume of the discharge (gals):<br>NA                                                                                                                                                                                    |                                     | 5) Is the discharge intermittent <input checked="" type="checkbox"/> or seasonal <input type="checkbox"/><br>Is discharge ongoing Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>                                                                                                                                                                          |
| c) Expected dates of discharge (mm/dd/yy): start 10/15/09 end 06/30/10                                                                                                                                                                                    |                                     |                                                                                                                                                                                                                                                                                                                                                                                |
| d) Please attach a line drawing or flow schematic showing water flow through the facility including:<br>1. sources of intake water, 2. contributing flow from the operation, 3. treatment units, and 4. discharge points and receiving waters(s).         |                                     |                                                                                                                                                                                                                                                                                                                                                                                |

3. Contaminant information. In order to complete this section, the applicant will need to take a minimum of one sample of the untreated water and have it analyzed for all of the parameters listed in Appendix III. Historical data, (i.e., data taken no more than 2 years prior to the effective date of the permit) may be used if obtained pursuant to: i. Massachusetts' regulations 310 CMR 40.0000, the Massachusetts Contingency Plan ("Chapter 21E"); ii. New Hampshire's Title 50 RSA 485-A: Water Pollution and Waste Disposal or Title 50 RSA 485-C: Groundwater Protection Act; or iii. an EPA permit exclusion letter issued pursuant to 40 CFR 122.3, provided the data was analyzed with test methods that meet the requirements of this permit. Otherwise, a new sample shall be taken and analyzed.

a) Based on the analysis of the sample(s) of the untreated influent, the applicant must check the box of the sub-categories that the potential discharge falls within.

|                                 |                             |                                   |                           |                                 |                                        |                                    |
|---------------------------------|-----------------------------|-----------------------------------|---------------------------|---------------------------------|----------------------------------------|------------------------------------|
| Gasoline Only                   | VOC Only                    | Primarily Metals                  | Urban Fill Sites          | Contaminated Sumps              | Mixed Contaminants                     | Aquifer Testing                    |
| Fuel Oils (and Other Oils) only | VOC with Other Contaminants | Petroleum with Other Contaminants | Listed Contaminated Sites | Contaminated Dredge Condensates | Hydrostatic Testing of Pipelines/Tanks | Well Development or Rehabilitation |

b) Based on the analysis of the untreated influent, the applicant must indicate whether each listed chemical is **believed present** or **believed absent** in the potential discharge. Attach additional sheets as needed.

| PARAMETER                       | Believe Absent | Believe Present | # of Samples (1 minimum) | Type of Sample (e.g., grab) | Analytical Method Used (method #) | Minimum Level (ML) of Test Method | Maximum daily value  |           | Avg. daily value     |           |
|---------------------------------|----------------|-----------------|--------------------------|-----------------------------|-----------------------------------|-----------------------------------|----------------------|-----------|----------------------|-----------|
|                                 |                |                 |                          |                             |                                   |                                   | concentration (ug/l) | mass (kg) | concentration (ug/l) | mass (kg) |
| 1. Total Suspended Solids       |                | ✓               | 2                        | grab                        | 2540D                             | 5,000                             | 48,000               | 13.10     | 34,000               | 5.57      |
| 2. Total Residual Chlorine      | ✓              |                 | 2                        | grab                        | 4500CL-D                          | 20                                | <20                  | <0.000    | <20                  | <0.000    |
| 3. Total Petroleum Hydrocarbons | ✓              |                 | 2                        | grab                        | 1664                              | 5,000                             | <4,000               | <1.09     | <4,000               | <0.66     |
| 4. Cyanide                      |                | ✓               | 2                        | grab                        | 4500 CN-CE                        | 10                                | 494                  | 0.135     | 274.5                | 0.045     |
| 5. Benzene                      | ✓              |                 | 2                        | grab                        | 624                               | 2                                 | <1.0                 | <0.000    | <1.0                 | <0.000    |
| 6. Toluene                      | ✓              |                 | 2                        | grab                        | 624                               | 2                                 | <1.0                 | <0.000    | <1.0                 | <0.000    |
| 7. Ethylbenzene                 | ✓              |                 | 2                        | grab                        | 624                               | 2                                 | <1.0                 | <0.000    | <1.0                 | <0.000    |
| 8. (m,p,o) Xylenes              | ✓              |                 | 2                        | grab                        | 624                               | 10                                | <2.0                 | <0.001    | <2.0                 | <0.000    |
| 9. Total BTEX <sup>4</sup>      | ✓              |                 | 2                        | grab                        | 624                               | 2                                 | <1.0                 | <0.000    | <1.0                 | <0.000    |

<sup>4</sup>BTEX = Sum of Benzene, Toluene, Ethylbenzene, total Xylenes.

| PARAMETER                                                  | Believe Absent | Believe Present | # of Samples (1 minimum) | Type of Sample (e.g., grab) | Analytical Method Used (method #) | Minimum Level (ML) of Test Method | Maximum daily value  |           | Avg. daily value     |           |
|------------------------------------------------------------|----------------|-----------------|--------------------------|-----------------------------|-----------------------------------|-----------------------------------|----------------------|-----------|----------------------|-----------|
|                                                            |                |                 |                          |                             |                                   |                                   | concentration (ug/l) | mass (kg) | concentration (ug/l) | mass (kg) |
| 10. Ethylene Dibromide <sup>5</sup> (1,2- Dibromo-methane) | ✓              |                 | 2                        | grab                        | 504.1                             | 0.01                              | <0.019               | <0.000    | <0.019               | <0.000    |
| 11. Methyl-tert-Butyl Ether (MTBE)                         | ✓              |                 | 2                        | grab                        | 624                               | 5                                 | <20                  | <0.005    | <20                  | <0.003    |
| 12. tert-Butyl Alcohol (TBA)                               | ✓              |                 | 2                        | grab                        | 624                               | 100                               | <100                 | <10.027   | <100                 | <0.016    |
| 13. tert-Amyl Methyl Ether (TAME)                          | ✓              |                 | 2                        | grab                        | 624                               | NA                                | <20                  | <0.005    | <20                  | <0.003    |
| 14. Naphthalene                                            | ✓              |                 | 2                        | grab                        | 8270C                             | 2                                 | 0.32                 | 0.000     | 0.21                 | 0.000     |
| 15. Carbon Tetra-chloride                                  | ✓              |                 | 2                        | grab                        | 624                               | 2                                 | <1.0                 | <0.000    | <1.0                 | <0.000    |
| 16. 1,4 Dichlorobenzene                                    | ✓              |                 | 2                        | grab                        | 624                               | 2                                 | <5.0                 | <0.001    | <5.0                 | <0.001    |
| 17. 1,2 Dichlorobenzene                                    | ✓              |                 | 2                        | grab                        | 624                               | 2                                 | <5.0                 | <0.001    | <5.0                 | <0.001    |
| 18. 1,3 Dichlorobenzene                                    | ✓              |                 | 2                        | grab                        | 624                               | 2                                 | <5.0                 | <0.001    | <5.0                 | <0.001    |
| 19. 1,1 Dichloroethane                                     | ✓              |                 | 2                        | grab                        | 624                               | 1                                 | <1.5                 | <0.000    | <1.5                 | <0.001    |
| 20. 1,2 Dichloroethane                                     | ✓              |                 | 2                        | grab                        | 624                               | 2                                 | <1.5                 | <0.000    | <1.5                 | <0.000    |
| 21. 1,1 Dichloroethylene                                   | ✓              |                 | 2                        | grab                        | 624                               | 2                                 | <1.0                 | <0.000    | <1.0                 | <0.000    |
| 22. cis-1,2 Dichloro-ethylene                              | ✓              |                 | 2                        | grab                        | 624                               | 2                                 | <1.0                 | <0.000    | <1.0                 | <0.000    |
| 23. Dichloromethane (Methylene Chloride)                   | ✓              |                 | 2                        | grab                        | 624                               | 2                                 | <5.0                 | <0.001    | <5.0                 | <0.001    |
| 24. Tetrachloroethylene                                    | ✓              |                 | 2                        | grab                        | 624                               | 2                                 | <1.5                 | <0.000    | <1.5                 | <0.000    |

<sup>5</sup>EDB is a groundwater contaminant at fuel spill and pesticide application sites in New England.

| PARAMETER                                                    | Believe Absent | Believe Present | # of Samples (1 minimum) | Type of Sample (e.g., grab) | Analytical Method Used (method #) | Minimum Level (ML) of Test Method | Maximum daily value  |           | Avg. daily Value     |           |
|--------------------------------------------------------------|----------------|-----------------|--------------------------|-----------------------------|-----------------------------------|-----------------------------------|----------------------|-----------|----------------------|-----------|
|                                                              |                |                 |                          |                             |                                   |                                   | concentration (ug/l) | mass (kg) | concentration (ug/l) | mass (kg) |
| 25. 1,1,1 Trichloroethane                                    | ✓              |                 | 2                        | grab                        | 624                               | 2                                 | <2.0                 | <0.001    | <2.0                 | <0.001    |
| 26. 1,1,2 Trichloroethane                                    | ✓              |                 | 2                        | grab                        | 624                               | 2                                 | <1.5                 | <0.000    | <1.5                 | <0.000    |
| 27. Trichloroethylene                                        | ✓              |                 | 2                        | grab                        | 624                               | 2                                 | <1.0                 | <0.000    | <1.0                 | <0.000    |
| 28. Vinyl Chloride                                           | ✓              |                 | 2                        | grab                        | 624                               | 2                                 | <2.0                 | <0.000    | <2.0                 | <0.000    |
| 29. Acetone                                                  |                | ✓               | 2                        | grab                        | 624                               | 50                                | 11                   | 0.003     | 8                    | 0.001     |
| 30. 1,4 Dioxane                                              | ✓              |                 | 2                        | grab                        | 624                               | 50                                | <2000*               | <0.546    | <2000*               | <0.327    |
| 31. Total Phenols                                            |                |                 | 2                        | grab                        | 420.1                             | 1                                 | <30                  | <0.008    | <30                  | <0.005    |
| 32. Pentachlorophenol                                        |                |                 | 2                        | grab                        | 8270C-SIM                         | 5                                 | <0.80                | <0.000    | <0.80                | <0.000    |
| 33. Total Phthalates <sup>6</sup> (Phthalate esters)         | ✓              |                 | 2                        | grab                        | 8270C-SIM                         | 10                                | <5.0                 | <0.001    | <5.0                 | <0.001    |
| 34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate] | ✓              |                 | 2                        | grab                        | 8270C                             | 5                                 | <5.0                 | <0.001    | <5.0                 | <0.001    |
| 35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)     |                |                 | NA                       | NA                          | NA                                | NA                                | NA                   | NA        | NA                   | NA        |
| a. Benzo(a) Anthracene                                       | ✓              |                 | 2                        | grab                        | 8270C-SIM                         | 10                                | <0.2                 | <0.000    | <0.2                 | <0.000    |
| b. Benzo(a) Pyrene                                           | ✓              |                 | 2                        | grab                        | 8270C-SIM                         | 10                                | <0.2                 | <0.000    | <0.2                 | <0.000    |
| c. Benzo(b) Fluoranthene                                     | ✓              |                 | 2                        | grab                        | 8270C-SIM                         | 10                                | <0.2                 | <0.000    | <0.2                 | <0.000    |
| d. Benzo(k) Fluoranthene                                     | ✓              |                 | 2                        | grab                        | 8270C-SIM                         | 10                                | <0.2                 | <0.000    | <0.2                 | <0.000    |
| e. Chrysene                                                  | ✓              |                 | 2                        | grab                        | 8270C-SIM                         | 10                                | <0.2                 | <0.000    | <0.2                 | <0.000    |

\* The RGP minimum level for 1,4 dioxane is 50 µg/L, the laboratory's reporting limit is 2,000 µg/L (as shown in Appendix B). However, the method detection limit for 1,4 dioxane is 448 µg/L, and the compound was not measured above the MDL. It is unlikely that 1,4-dioxane is present above the RGP minimum level since 1,4 dioxane is not a contaminant of concern at the site.

<sup>6</sup> The sum of individual phthalate compounds.

| PARAMETER                                                 | Believe Absent | Believe Present | # of Samples (1 minimum) | Type of Sample (e.g., grab) | Analytical Method Used (method #) | Minimum Level (ML) of Test Method | Maximum daily value  |           | Average daily value  |           |
|-----------------------------------------------------------|----------------|-----------------|--------------------------|-----------------------------|-----------------------------------|-----------------------------------|----------------------|-----------|----------------------|-----------|
|                                                           |                |                 |                          |                             |                                   |                                   | concentration (ug/l) | mass (kg) | concentration (ug/l) | mass (kg) |
| f. Dibenzo(a,h)anthracene                                 | ✓              |                 | 2                        | grab                        | 8270C-SIM                         | 10                                | <0.2                 | <0.000    | <0.2                 | <0.000    |
| g. Indeno(1,2,3-cd)Pyrene                                 | ✓              |                 | 2                        | grab                        | 8270C-SIM                         | 10                                | <0.2                 | <0.000    | <0.2                 | <0.000    |
| 36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH) |                |                 | NA                       | NA                          | NA                                | NA                                | NA                   | NA        | NA                   | NA        |
| h. Acenaphthene                                           |                | ✓               |                          | grab                        | 8270C-SIM                         | 1                                 | 0.24                 | 0.000     | 0.17                 | 0.000     |
| i. Acenaphthylene                                         | ✓              |                 | 2                        | grab                        | 8270C-SIM                         | 10                                | <0.2                 | <0.000    | <0.2                 | <0.000    |
| j. Anthracene                                             |                | ✓               | 2                        | grab                        | 8270C-SIM                         | 10                                | 2.2                  | 0.001     | 1.23                 | 0.000     |
| k. Benzo(ghi) Perylene                                    | ✓              |                 | 2                        | grab                        | 8270C-SIM                         | 5                                 | <0.2                 | <0.000    | <0.2                 | <0.000    |
| l. Fluoranthene                                           |                | ✓               | 2                        | grab                        | 8270C-SIM                         | 1                                 | 0.25                 | 0.000     | 0.18                 | 0.000     |
| m. Fluorene                                               | ✓              |                 | 2                        | grab                        | 8270C-SIM                         | 10                                | <0.2                 | <0.000    | <0.2                 | <0.000    |
| n. Naphthalene-                                           |                | ✓               | 2                        | grab                        | 8270C-SIM                         | 2                                 | 0.32                 | 0.000     | 0.21                 | 0.000     |
| o. Phenanthrene                                           |                | ✓               | 2                        | grab                        | 8270C-SIM                         | 5                                 | 0.38                 | 0.000     | 0.24                 | 0.000     |
| p. Pyrene                                                 | ✓              |                 | 2                        | grab                        | 8270C-SIM                         | 10                                | <0.20                | <0.000    | <0.20                | <0.000    |
| 37. Total Polychlorinated Biphenyls (PCBs)                |                | ✓               | 2                        | grab                        | 608                               | 0.5                               | <0.269               | <0.000    | <0.269               | <0.000    |
| 38. Antimony                                              | ✓              |                 | 2                        | grab                        | 6020                              | 50                                | <2.5                 | <0.001    | <2.5                 | <0.000    |
| 39. Arsenic                                               |                | ✓               | 2                        | grab                        | 6020                              | 5                                 | 9.0                  | 0.002     | 5.85                 | 0.001     |
| 40. Cadmium                                               | ✓              |                 | 2                        | grab                        | 6020                              | 5                                 | <1.0                 | <0.000    | <1.0                 | <0.000    |
| 41. Chromium III                                          |                | ✓               | 2                        | grab                        | 6020                              | 10                                | 3.5                  | 0.001     | 2.38                 | 0.000     |
| 42. Chromium VI                                           | ✓              |                 | 2                        | grab                        | 3500CR-D                          | 10                                | <10                  | <0.003    | <10                  | <0.002    |

| PARAMETER         | Believe Absent | Believe Present | # of Samples (1 minimum) | Type of Sample (e.g., grab) | Analytical Method Used (method #) | Minimum Level (ML) of Test Method | Maximum daily value  |           | Avg. daily value     |           |
|-------------------|----------------|-----------------|--------------------------|-----------------------------|-----------------------------------|-----------------------------------|----------------------|-----------|----------------------|-----------|
|                   |                |                 |                          |                             |                                   |                                   | concentration (ug/l) | mass (kg) | concentration (ug/l) | mass (kg) |
| 43. Copper        | ✓              |                 | 2                        | grab                        | 6020                              | 5                                 | <2.5                 | <0.001    | <2.5                 | <0.000    |
| 44. Lead          |                | ✓               | 2                        | grab                        | 6020                              | 40                                | 2.8                  | 0.001     | 2.03                 | 0.000     |
| 45. Mercury       | ✓              |                 | 2                        | grab                        | 245.1                             | 0.2                               | <0.2                 | <0.000    | <0.2                 | <0.000    |
| 46. Nickel        |                | ✓               | 2                        | grab                        | 6020                              | 10                                | 4.4                  | 0.001     | 4.25                 | 0.001     |
| 47. Selenium      |                | ✓               | 2                        | grab                        | 6020                              | 50                                | 29                   | 0.008     | 19                   | 0.003     |
| 48. Silver        | ✓              |                 | 2                        | grab                        | 6020                              | 10                                | <2.0                 | <0.001    | <2.0                 | <0.000    |
| 49. Zinc          | ✓              |                 | 2                        | grab                        | 6020                              | 10                                | <25                  | 0.007     | <25                  | <0.004    |
| 50. Iron          |                | ✓               | 2                        | grab                        | 200.7                             | NA                                | 18,000               | 4.911     | 10,350               | 1.694     |
| Other (describe): |                |                 |                          |                             |                                   |                                   |                      |           |                      |           |

c) For discharges where metals are believed present, please fill out the following:

|                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><i>Step 1:</i> Do any of the metals in the influent have a <b>reasonable potential</b> to exceed the effluent limits in Appendix III (i.e., the limits set at zero to five dilutions)? Y <input checked="" type="checkbox"/> N <input type="checkbox"/></p>                                                                                                                                                                                    | <p>If yes, which metals? <b>Ni &amp; Fe</b></p>                                                                                                                                                                                                                                                                                                                                                                      |
| <p><i>Step 2:</i> For any metals which have <b>reasonable potential</b> to exceed the <b>Appendix III</b> limits, calculate the <b>dilution factor (DF)</b> using the formula in Part I.A.3.c) (step 2) of the NOI instructions or as determined by the State prior to the submission of this NOI.<br/>What is the dilution factor for applicable metals?<br/>Metals: <b>Not applicable since discharge is to saline water.</b><br/>DF: _____</p> | <p>Look up the limit calculated at the corresponding dilution factor in <b>Appendix IV</b>. Do any of the metals in the <b>influent</b> have the potential to exceed the corresponding <b>effluent</b> limits in Appendix IV (i.e., is the influent concentration above the limit set at the calculated dilution factor)?<br/>Y <input type="checkbox"/> N <input type="checkbox"/> If "Yes," list which metals:</p> |

**4. Treatment system information.** Please describe the treatment system using separate sheets as necessary, including:

|                                                                                                                                                                                                                                                                                   |                                                |                |                                             |                    |                                                |                                                |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|----------------|---------------------------------------------|--------------------|------------------------------------------------|------------------------------------------------|
| a) A description of the treatment system, including a schematic of the proposed or existing treatment system:                                                                                                                                                                     |                                                |                |                                             |                    |                                                |                                                |
| b) Identify each applicable treatment unit (check all that apply):                                                                                                                                                                                                                | Frac. tank <input checked="" type="checkbox"/> | Air stripper   | Oil/water separator                         | Equalization tanks | Bag filter <input checked="" type="checkbox"/> | GAC filter <input checked="" type="checkbox"/> |
|                                                                                                                                                                                                                                                                                   | Chlorination                                   | Dechlorination | Other (please describe): Ion Exchange Media |                    |                                                |                                                |
| c) Proposed average and maximum flow rates (gallons per minute) for the discharge and the design flow rate(s) (gallons per minute) of the treatment system:<br>Average flow rate of discharge 30 Maximum flow rate of treatment system 50 Design flow rate of treatment system 50 |                                                |                |                                             |                    |                                                |                                                |
| d) A description of chemical additives being used or planned to be used (attach MSDS sheets): None planned                                                                                                                                                                        |                                                |                |                                             |                    |                                                |                                                |

**5. Receiving surface water(s).** Please provide information about the receiving water(s), using separate sheets as necessary:

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |        |                 |                                                 |             |          |                   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----------------|-------------------------------------------------|-------------|----------|-------------------|
| a) Identify the discharge pathway:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Direct | Within facility | Storm drain <input checked="" type="checkbox"/> | River/brook | Wetlands | Other (describe): |
| b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters:<br><b>Discharge will be to on-site stormwater drains to the Mystic River</b>                                                                                                                                                                                                                                                                                                                                                                                 |        |                 |                                                 |             |          |                   |
| c) Attach a detailed map(s) indicating the site location and location of the outfall to the receiving water:<br>1. For multiple discharges, number the discharges sequentially.<br>2. For indirect discharges, indicate the location of the discharge to the indirect conveyance and the discharge to surface water<br>The map should also include the location and distance to the nearest sanitary sewer as well as the locus of nearby sensitive receptors (based on USGS topographical mapping), such as surface waters, drinking water supplies, and wetland areas. |        |                 |                                                 |             |          |                   |
| d) Provide the state water quality classification of the receiving water <b>SB</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |        |                 |                                                 |             |          |                   |
| e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water <b>26.11</b> cfs<br>Please attach any calculation sheets used to support stream flow and dilution calculations.                                                                                                                                                                                                                                                                                                                                                          |        |                 |                                                 |             |          |                   |
| f) Is the receiving water a listed 303(d) water quality impaired or limited water? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, for which pollutant(s)? <b>See Below*</b><br>Is there a TMDL? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, for which pollutant(s)?                                                                                                                                                                                                                                         |        |                 |                                                 |             |          |                   |

\*Unionized ammonia, organic enrichment/low DO, pathogens, oil & grease, taste, odor, and color, turbidity (1999 WQA Report -Boston Harbor)

**6. Results of Consultation with Federal Services:** Please provide the following information according to requirements of Part I.B.4 and Appendices II and VII.

|                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| a) Are any listed threatened or endangered species, or designated critical habitat, in proximity to the discharge? Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>                                               | Has any consultation with the federal services been completed? Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> or is consultation underway? Yes <input type="checkbox"/> No <input type="checkbox"/> |
| What were the results of the consultation with the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service (check one):                                                                                                         |                                                                                                                                                                                                                                     |
| a "no jeopardy" opinion? <input type="checkbox"/> or written concurrence <input type="checkbox"/> on a finding that the discharges are not likely to adversely affect any endangered species or critical habitat?                               |                                                                                                                                                                                                                                     |
| b) Are any historic properties listed or eligible for listing on the National Register of Historic Places located on the facility or site or in proximity to the discharge? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> | Have any state or tribal historic preservation officer been consulted in this determination (Massachusetts only)? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>                                               |

**7. 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.

**8. Signature Requirements:** The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22, including the following certification:

*I certify under penalty of law that 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/Site Name: | W TTC - Moran Terminal                                                               |
| Owner               |                                                                                      |
| Owner signature:    |  |
| Title:              | Project Manager                                                                      |
| Date:               | 10/14/09                                                                             |

6. Results of Consultation with Federal Services: Please provide the following information according to requirements of Part I.B.4 and Appendices II and VII.

|                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| a) Are any listed threatened or endangered species, or designated critical habitat, in proximity to the discharge? Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/>                                                                                                                                                            | Has any consultation with the federal services been completed? Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> or is consultation underway? Yes <input type="checkbox"/> No <input type="checkbox"/> |
| What were the results of the consultation with the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service (check one):<br>a "no jeopardy" opinion? <input type="checkbox"/> or written concurrence <input type="checkbox"/> on a finding that the discharges are not likely to adversely affect any endangered species or critical habitat? |                                                                                                                                                                                                                                     |
| b) Are any historic properties listed or eligible for listing on the National Register of Historic Places located on the facility or site or in proximity to the discharge? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>                                                                                                              | Have any state or tribal historic preservation officer been consulted in this determination (Massachusetts only)? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>                                               |

7. 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.

8. Signature Requirements: The Notice of Intent must be signed by the operator in accordance with the signatory requirements of 40 CFR Section 122.22, including the following certification:

*I certify under penalty of law that 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/Site Name:

W TTC - Moran Terminal

Operator signature:

*Bennett Gonsalves*

Title:

*Project Superintendent*

Date:

*10-15-09*

**Project Name:** WTTC MORAN TERMINAL  
**Project Number:** 091500

## SAMPLE RESULTS

Lab ID: L0909360-01  
Client ID: 091500-WTTC09-1  
Sample Location: CHARLESTOWN, MA  
Matrix: Water  
Analytical Method: 14,504.1  
Analytical Date: 07/16/09 04:24  
Analyst: JB

| Parameter                          | Result | Qualifier | Units | RDL   | Dilution Factor |
|------------------------------------|--------|-----------|-------|-------|-----------------|
| Pesticides by GC - Westborough Lab |        |           |       |       |                 |
| 1,2-Dibromoethane                  | ND     |           | ug/l  | 0.019 | 1               |
| 1,2-Dibromo-3-chloropropane        | ND     |           | ug/l  | 0.019 | 1               |

Project Name: WTTT MORAN TERMINAL  
Project Number: 091500

07200918:14  
Lab Number: L0909360  
Report Date: 07/20/09

### SAMPLE RESULTS

Lab ID: L0909360-01  
Client ID: 091500-WTTT09-1  
Sample Location: CHARLESTOWN, MA

Date Collected: 07/10/09 14:28  
Date Received: 07/10/09  
Field Prep: Not Specified

| Parameter                                    | Result | Qualifier | Units | RDL  | Dilution Factor |
|----------------------------------------------|--------|-----------|-------|------|-----------------|
| Volatile Organics by GC/MS - Westborough Lab |        |           |       |      |                 |
| 1,3-Dichlorobenzene                          | ND     |           | ug/l  | 5.0  | 1               |
| 1,4-Dichlorobenzene                          | ND     |           | ug/l  | 5.0  | 1               |
| p/m-Xylene                                   | ND     |           | ug/l  | 2.0  | 1               |
| o-xylene                                     | ND     |           | ug/l  | 1.0  | 1               |
| Xylene (Total)                               | ND     |           | ug/l  | 2.0  | 1               |
| Styrene                                      | ND     |           | ug/l  | 1.0  | 1               |
| Acetone                                      | 11     |           | ug/l  | 10   | 1               |
| Carbon disulfide                             | ND     |           | ug/l  | 5.0  | 1               |
| 2-Butanone                                   | ND     |           | ug/l  | 10   | 1               |
| Vinyl acetate                                | ND     |           | ug/l  | 20   | 1               |
| 4-Methyl-2-pentanone                         | ND     |           | ug/l  | 10   | 1               |
| 2-Hexanone                                   | ND     |           | ug/l  | 10   | 1               |
| Acrolein                                     | ND     |           | ug/l  | 8.0  | 1               |
| Acrylonitrile                                | ND     |           | ug/l  | 10   | 1               |
| Methyl tert butyl ether                      | ND     |           | ug/l  | 20   | 1               |
| 1,4-Dioxane                                  | ND     |           | ug/l  | 2000 | 1               |
| Tert-Butyl Alcohol                           | ND     |           | ug/l  | 100  | 1               |
| Tertiary-Amyl Methyl Ether                   | ND     |           | ug/l  | 20   | 1               |

| Surrogate            | % Recovery | Qualifier | Acceptance Criteria |
|----------------------|------------|-----------|---------------------|
| Pentafluorobenzene   | 102        |           | 80-120              |
| Fluorobenzene        | 95         |           | 80-120              |
| 4-Bromofluorobenzene | 100        |           | 80-120              |

Project Name: W TTC MORAN TERMINAL

Lab Number: L0909360

Project Number: 091500

Report Date: 07/20/09

## SAMPLE RESULTS

Lab ID: L0909360-02

Date Collected: 07/10/09 16:30

Client ID: 091500-GW-4

Date Received: 07/10/09

Sample Location: CHARLESTOWN, MA

Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RDL | Dilution Factor |
|-----------|--------|-----------|-------|-----|-----------------|
|-----------|--------|-----------|-------|-----|-----------------|

## Volatile Organics by GC/MS - Westborough Lab

|                            |    |  |      |      |   |
|----------------------------|----|--|------|------|---|
| 1,3-Dichlorobenzene        | ND |  | ug/l | 5.0  | 1 |
| 1,4-Dichlorobenzene        | ND |  | ug/l | 5.0  | 1 |
| p/m-Xylene                 | ND |  | ug/l | 2.0  | 1 |
| o-xylene                   | ND |  | ug/l | 1.0  | 1 |
| Xylene (Total)             | ND |  | ug/l | 2.0  | 1 |
| Styrene                    | ND |  | ug/l | 1.0  | 1 |
| Acetone                    | ND |  | ug/l | 10   | 1 |
| Carbon disulfide           | ND |  | ug/l | 5.0  | 1 |
| 2-Butanone                 | ND |  | ug/l | 10   | 1 |
| Vinyl acetate              | ND |  | ug/l | 20   | 1 |
| 4-Methyl-2-pentanone       | ND |  | ug/l | 10   | 1 |
| 2-Hexanone                 | ND |  | ug/l | 10   | 1 |
| Acrolein                   | ND |  | ug/l | 8.0  | 1 |
| Acrylonitrile              | ND |  | ug/l | 10   | 1 |
| Methyl tert butyl ether    | ND |  | ug/l | 20   | 1 |
| 1,4-Dioxane                | ND |  | ug/l | 2000 | 1 |
| Tert-Butyl Alcohol         | ND |  | ug/l | 100  | 1 |
| Tertiary-Amyl Methyl Ether | ND |  | ug/l | 20   | 1 |

| Surrogate            | % Recovery | Qualifier | Acceptance Criteria |
|----------------------|------------|-----------|---------------------|
| Pentafluorobenzene   | 104        |           | 80-120              |
| Fluorobenzene        | 96         |           | 80-120              |
| 4-Bromofluorobenzene | 101        |           | 80-120              |



07200918:14

Project Name: W TTC MORAN TERMINAL

Lab Number: L0909360

Project Number: 091500

Report Date: 07/20/09

## SAMPLE RESULTS

Lab ID: L0909360-02  
 Client ID: 091500-GW-4  
 Sample Location: CHARLESTOWN, MA  
 Matrix: Water  
 Analytical Method: 5,624  
 Analytical Date: 07/13/09 15:52  
 Analyst: TT

Date Collected: 07/10/09 16:30  
 Date Received: 07/10/09  
 Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RDL | Dilution Factor |
|-----------|--------|-----------|-------|-----|-----------------|
|-----------|--------|-----------|-------|-----|-----------------|

## Volatile Organics by GC/MS - Westborough Lab

|                           |    |  |      |     |   |
|---------------------------|----|--|------|-----|---|
| Methylene chloride        | ND |  | ug/l | 5.0 | 1 |
| 1,1-Dichloroethane        | ND |  | ug/l | 1.5 | 1 |
| Chloroform                | ND |  | ug/l | 1.5 | 1 |
| Carbon tetrachloride      | ND |  | ug/l | 1.0 | 1 |
| 1,2-Dichloropropane       | ND |  | ug/l | 3.5 | 1 |
| Dibromochloromethane      | ND |  | ug/l | 1.0 | 1 |
| 1,1,2-Trichloroethane     | ND |  | ug/l | 1.5 | 1 |
| 2-Chloroethylvinyl ether  | ND |  | ug/l | 10  | 1 |
| Tetrachloroethene         | ND |  | ug/l | 1.5 | 1 |
| Chlorobenzene             | ND |  | ug/l | 3.5 | 1 |
| Trichlorofluoromethane    | ND |  | ug/l | 5.0 | 1 |
| 1,2-Dichloroethane        | ND |  | ug/l | 1.5 | 1 |
| 1,1,1-Trichloroethane     | ND |  | ug/l | 2.0 | 1 |
| Bromodichloromethane      | ND |  | ug/l | 1.0 | 1 |
| trans-1,3-Dichloropropene | ND |  | ug/l | 1.5 | 1 |
| cis-1,3-Dichloropropene   | ND |  | ug/l | 1.5 | 1 |
| Bromoform                 | ND |  | ug/l | 1.0 | 1 |
| 1,1,2,2-Tetrachloroethane | ND |  | ug/l | 1.0 | 1 |
| Benzene                   | ND |  | ug/l | 1.0 | 1 |
| Toluene                   | ND |  | ug/l | 1.0 | 1 |
| Ethylbenzene              | ND |  | ug/l | 1.0 | 1 |
| Chloromethane             | ND |  | ug/l | 10  | 1 |
| Bromomethane              | ND |  | ug/l | 5.0 | 1 |
| Vinyl chloride            | ND |  | ug/l | 2.0 | 1 |
| Chloroethane              | ND |  | ug/l | 2.0 | 1 |
| 1,1-Dichloroethene        | ND |  | ug/l | 1.0 | 1 |
| trans-1,2-Dichloroethene  | ND |  | ug/l | 1.5 | 1 |
| cis-1,2-Dichloroethene    | ND |  | ug/l | 1.0 | 1 |
| Trichloroethene           | ND |  | ug/l | 1.0 | 1 |
| 1,2-Dichlorobenzene       | ND |  | ug/l | 5.0 | 1 |



Project Name: WTTC MORAN TERMINAL  
Project Number: 091500

Lab Number: L0909360  
Report Date: 07/20/09

## SAMPLE RESULTS

Lab ID: L0909360-01  
Client ID: 091500-WTTC09-1  
Sample Location: CHARLESTOWN, MA  
Matrix: Water  
Analytical Method: 5,624  
Analytical Date: 07/13/09 14:42  
Analyst: TT

Date Collected: 07/10/09 14:28  
Date Received: 07/10/09  
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RDL | Dilution Factor |
|-----------|--------|-----------|-------|-----|-----------------|
|-----------|--------|-----------|-------|-----|-----------------|

## Volatile Organics by GC/MS - Westborough Lab

|                           |    |  |      |     |   |
|---------------------------|----|--|------|-----|---|
| Methylene chloride        | ND |  | ug/l | 5.0 | 1 |
| 1,1-Dichloroethane        | ND |  | ug/l | 1.5 | 1 |
| Chloroform                | ND |  | ug/l | 1.5 | 1 |
| Carbon tetrachloride      | ND |  | ug/l | 1.0 | 1 |
| 1,2-Dichloropropane       | ND |  | ug/l | 3.5 | 1 |
| Dibromochloromethane      | ND |  | ug/l | 1.0 | 1 |
| 1,1,2-Trichloroethane     | ND |  | ug/l | 1.5 | 1 |
| 2-Chloroethylvinyl ether  | ND |  | ug/l | 10  | 1 |
| Tetrachloroethene         | ND |  | ug/l | 1.5 | 1 |
| Chlorobenzene             | ND |  | ug/l | 3.5 | 1 |
| Trichlorofluoromethane    | ND |  | ug/l | 5.0 | 1 |
| 1,2-Dichloroethane        | ND |  | ug/l | 1.5 | 1 |
| 1,1,1-Trichloroethane     | ND |  | ug/l | 2.0 | 1 |
| Bromodichloromethane      | ND |  | ug/l | 1.0 | 1 |
| trans-1,3-Dichloropropene | ND |  | ug/l | 1.5 | 1 |
| cis-1,3-Dichloropropene   | ND |  | ug/l | 1.5 | 1 |
| Bromoform                 | ND |  | ug/l | 1.0 | 1 |
| 1,1,2,2-Tetrachloroethane | ND |  | ug/l | 1.0 | 1 |
| Benzene                   | ND |  | ug/l | 1.0 | 1 |
| Toluene                   | ND |  | ug/l | 1.0 | 1 |
| Ethylbenzene              | ND |  | ug/l | 1.0 | 1 |
| Chloromethane             | ND |  | ug/l | 10  | 1 |
| Bromomethane              | ND |  | ug/l | 5.0 | 1 |
| Vinyl chloride            | ND |  | ug/l | 2.0 | 1 |
| Chloroethane              | ND |  | ug/l | 2.0 | 1 |
| 1,1-Dichloroethene        | ND |  | ug/l | 1.0 | 1 |
| trans-1,2-Dichloroethene  | ND |  | ug/l | 1.5 | 1 |
| cis-1,2-Dichloroethene    | ND |  | ug/l | 1.0 | 1 |
| Trichloroethene           | ND |  | ug/l | 1.0 | 1 |
| 1,2-Dichlorobenzene       | ND |  | ug/l | 5.0 | 1 |



Project Name: WTTC MORAN TERMINAL  
Project Number: 091500

Lab Number: L0909360  
Report Date: 07/20/09

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 5,624  
Analytical Date: 07/13/09 07:53  
Analyst: TT

| Parameter                                                                           | Result | Qualifier | Units | RDL |
|-------------------------------------------------------------------------------------|--------|-----------|-------|-----|
| Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG370484-6 |        |           |       |     |
| Methylene chloride                                                                  | ND     |           | ug/l  | 5.0 |
| 1,1-Dichloroethane                                                                  | ND     |           | ug/l  | 1.5 |
| Chloroform                                                                          | ND     |           | ug/l  | 1.5 |
| Carbon tetrachloride                                                                | ND     |           | ug/l  | 1.0 |
| 1,2-Dichloropropane                                                                 | ND     |           | ug/l  | 3.5 |
| Dibromochloromethane                                                                | ND     |           | ug/l  | 1.0 |
| 1,1,2-Trichloroethane                                                               | ND     |           | ug/l  | 1.5 |
| 2-Chloroethylvinyl ether                                                            | ND     |           | ug/l  | 10  |
| Tetrachloroethene                                                                   | ND     |           | ug/l  | 1.5 |
| Chlorobenzene                                                                       | ND     |           | ug/l  | 3.5 |
| Trichlorofluoromethane                                                              | ND     |           | ug/l  | 5.0 |
| 1,2-Dichloroethane                                                                  | ND     |           | ug/l  | 1.5 |
| 1,1,1-Trichloroethane                                                               | ND     |           | ug/l  | 2.0 |
| Bromodichloromethane                                                                | ND     |           | ug/l  | 1.0 |
| trans-1,3-Dichloropropene                                                           | ND     |           | ug/l  | 1.5 |
| cis-1,3-Dichloropropene                                                             | ND     |           | ug/l  | 1.5 |
| Bromoform                                                                           | ND     |           | ug/l  | 1.0 |
| 1,1,2,2-Tetrachloroethane                                                           | ND     |           | ug/l  | 1.0 |
| Benzene                                                                             | ND     |           | ug/l  | 1.0 |
| Toluene                                                                             | ND     |           | ug/l  | 1.0 |
| Ethylbenzene                                                                        | ND     |           | ug/l  | 1.0 |
| Chloromethane                                                                       | ND     |           | ug/l  | 10  |
| Bromomethane                                                                        | ND     |           | ug/l  | 5.0 |
| Vinyl chloride                                                                      | ND     |           | ug/l  | 2.0 |
| Chloroethane                                                                        | ND     |           | ug/l  | 2.0 |
| 1,1-Dichloroethene                                                                  | ND     |           | ug/l  | 1.0 |
| trans-1,2-Dichloroethene                                                            | ND     |           | ug/l  | 1.5 |
| cis-1,2-Dichloroethene                                                              | ND     |           | ug/l  | 1.0 |
| Trichloroethene                                                                     | ND     |           | ug/l  | 1.0 |
| 1,2-Dichlorobenzene                                                                 | ND     |           | ug/l  | 5.0 |
| 1,3-Dichlorobenzene                                                                 | ND     |           | ug/l  | 5.0 |



Project Name: W TTC MORAN TERMINAL  
 Project Number: 091500

Lab Number: L0909360  
 Report Date: 07/20/09

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 5,624  
 Analytical Date: 07/13/09 07:53  
 Analyst: TT

| Parameter                                                                           | Result | Qualifier | Units | RDL  |
|-------------------------------------------------------------------------------------|--------|-----------|-------|------|
| Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG370484-6 |        |           |       |      |
| 1,4-Dichlorobenzene                                                                 | ND     |           | ug/l  | 5.0  |
| p/m-Xylene                                                                          | ND     |           | ug/l  | 2.0  |
| o-xylene                                                                            | ND     |           | ug/l  | 1.0  |
| Xylene (Total)                                                                      | ND     |           | ug/l  | 2.0  |
| Styrene                                                                             | ND     |           | ug/l  | 1.0  |
| Acetone                                                                             | ND     |           | ug/l  | 10   |
| Carbon disulfide                                                                    | ND     |           | ug/l  | 5.0  |
| 2-Butanone                                                                          | ND     |           | ug/l  | 10   |
| Vinyl acetate                                                                       | ND     |           | ug/l  | 20   |
| 4-Methyl-2-pentanone                                                                | ND     |           | ug/l  | 10   |
| 2-Hexanone                                                                          | ND     |           | ug/l  | 10   |
| Acrolein                                                                            | ND     |           | ug/l  | 8.0  |
| Acrylonitrile                                                                       | ND     |           | ug/l  | 10   |
| Methyl tert butyl ether                                                             | ND     |           | ug/l  | 20   |
| 1,4-Dioxane                                                                         | ND     |           | ug/l  | 2000 |
| Tert-Butyl Alcohol                                                                  | ND     |           | ug/l  | 100  |
| Tertiary-Amyl Methyl Ether                                                          | ND     |           | ug/l  | 20   |

| Surrogate            | %Recovery | Qualifier | Acceptance<br>Criteria |
|----------------------|-----------|-----------|------------------------|
| Pentafluorobenzene   | 102       |           | 80-120                 |
| Fluorobenzene        | 97        |           | 80-120                 |
| 4-Bromofluorobenzene | 104       |           | 80-120                 |



**Project Name:** WTTT MORAN TERMINAL  
**Project Number:** 091500

**Lab Number:** L0909360  
**Report Date:** 07/20/09

**Method Blank Analysis**  
**Batch Quality Control**

**Analytical Method:** 14,504.1  
**Analytical Date:** 07/16/09 03:37  
**Analyst:** JB

| Parameter                                                                 | Result | Qualifier | Units | RDL   |
|---------------------------------------------------------------------------|--------|-----------|-------|-------|
| Pesticides by GC - Westborough Lab for sample(s): 01-02 Batch: WG371109-1 |        |           |       |       |
| 1,2-Dibromoethane                                                         | ND     |           | ug/l  | 0.020 |
| 1,2-Dibromo-3-chloropropane                                               | ND     |           | ug/l  | 0.020 |

07200918:14

Project Name: WTTC MORAN TERMINAL

Lab Number: L0909360

Project Number: 091500

Report Date: 07/20/09

## SAMPLE RESULTS

Lab ID: L0909360-02  
Client ID: 091500-GW-4  
Sample Location: CHARLESTOWN, MA  
Matrix: Water  
Analytical Method: 14,504.1  
Analytical Date: 07/16/09 04:36  
Analyst: JB

Date Collected: 07/10/09 16:30  
Date Received: 07/10/09  
Field Prep: Not Specified

| Parameter                          | Result | Qualifier | Units | RDL   | Dilution Factor |
|------------------------------------|--------|-----------|-------|-------|-----------------|
| Pesticides by GC - Westborough Lab |        |           |       |       |                 |
| 1,2-Dibromoethane                  | ND     |           | ug/l  | 0.019 | 1               |
| 1,2-Dibromo-3-chloropropane        | ND     |           | ug/l  | 0.019 | 1               |

