DC MA6910108

"Petras, James" <James.Petras@m-e.aecom.com>
10/21/2005 03:40 PM

To GeneralPermits NPDES/R1/USEPA/US@EPA
cc Robert.Kubit@state.ma.us, "Moura, Stephanie" <Stephanie.Moura@mwra.state.ma.us>, Mark.Radville@mwra.state.ma.us, "Shreve, Betsy"
bcc
Subject Notice of Intent for NPDES Remediation General Permit (RGP) - MWRA Pleasure Bay Stormwater Relocation Project

On behalf of the MWRA, attached please find an application for coverage under the RGP for a treated contaminated groundwater discharge associated with the construction of the Pleasure Bay Stormwater Relocation project in South Boston, MA.

A paper copy (to EPA and MA DEP) will follow in the mail early next week.

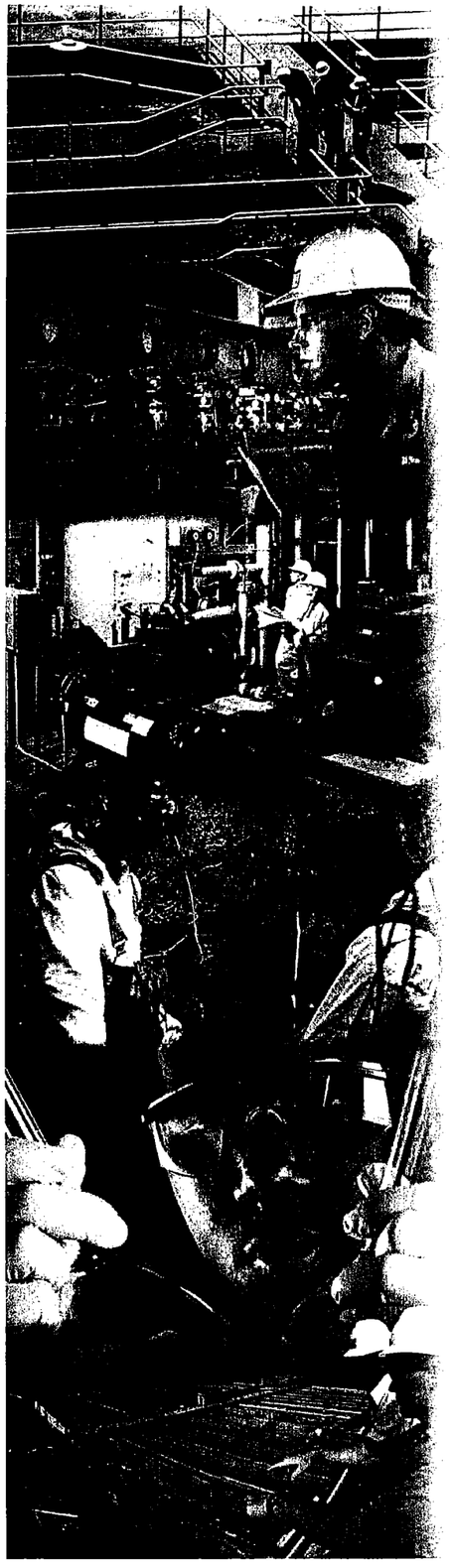
If you have any questions, please do not hesitate to call.

<<NOI for Coverage under RGP - MWRA Pleasure Bay.pdf>>

James Petras
Senior Environmental Scientist
METCALF & EDDY | AECOM
701 Edgewater Drive
Wakefield, MA 01880

Phone: 781-224-6012
Fax: 781-224-5986
www.aecom.com
www.m-e.com

NOI for Coverage under RGP - MWRA Pleasure Bay.pdf



Pleasure Bay
Stormwater Relocation

Notice of Intent for NPDES Remediation General Permit for Construction Dewatering Activities

Prepared for:
Massachusetts Water Resources Authority

Prepared by:

Submitted to:
MA Department of Environmental Protection
US Environmental Protection Agency

October 21, 2005

PARSONS BRINCKERHOFF QUADE & DOUGLAS, INC.
AND METCALF & EDDY, INC., A JOINT VENTURE
701 EDGEWATER DRIVE, WAKEFIELD, MA 01880
TEL: 781-246-5200 • FAX: 781-224-5986

October 21, 2005

EPA New England
RGP-NOC Processing
Municipal Assistance Unit (CMU)
1 Congress Street, Suite 1100
Boston, MA 02114-2023

MA Department of Environmental Protection
Division of Watershed Management
627 Main Street, 2nd Floor
Worcester, MA 01608

Subject: MWRA Design Contract No. 6220
MWRA Construction Contract No. 7012
Pleasure Bay Stormwater Relocation
Remediation General Permit (RPG) for Construction Dewatering Activities

Dear EPA:

As you may recall, we submitted a request for a NPDES Exclusion for this project, on behalf of the Massachusetts Water Resources Authority (MWRA), in May 2005. In response, EPA granted NPDES Exclusion #MA-05I-072 on June 22, 2005. Since that time, MWRA has advertised the project for bid and selected a Contractor (the Dow Company). MWRA recently issued a Notice to Proceed (NTP) to the Contractor, who has begun mobilization. Although construction (and thus groundwater discharge) has not yet been initiated, it is expected to begin in the near future. In compliance with EPA's recent (September 15, 2005) letter announcing the availability of the Remediation General Permit, we are providing the enclosed Notice of Intent (NOI) seeking coverage under the RGP for dewatering activities associated with the Pleasure Bay Stormwater Relocation project (Attachment 1).

Since known groundwater contamination exists within and nearby the northwest portion of the proposed construction area, contaminated water may be encountered during dewatering activities in this location. In addition, several parameters listed in Appendix III of the RGP have been detected in monitoring wells installed along the Day Boulevard portion of the proposed pipeline route. However, based on the available groundwater data, with the exception of silver none of the detected parameters exceed the Appendix III effluent limitations.

The proposed project (the Pleasure Bay Stormwater Relocation), is a component of the MWRA's Long-Term CSO Control Plan for North Dorchester Bay and Reserved Channel (EOEA #10335, April 2004). The Pleasure Bay Stormwater Relocation project is being designed and constructed by the MWRA; however, the Massachusetts Department of Conservation and Recreation (DCR), which owns/manages the majority of the affected property, will be responsible for the long-term operation and maintenance of the pipeline.

The project entails diverting Pleasure Bay stormwater drainage away from the beach area and into the Reserved Channel requiring the construction of approximately 4,600 feet of new drain piping ranging from 18 to 48 inches. The locus map provided with the NOI identifies the entire project area (Attachment 1, Figure 1). The work would occur within streets or parkland managed

by DCR and the Massachusetts Port Authority (Massport), just south of Massport's Conley Terminal Facility. The new Pleasure Bay storm drains would run along Day Boulevard and Shore Road, and would connect into the existing BOS080 outfall just north of East 1st Street (Figure 1). In addition, to alleviate current flooding/ponding issues related to a failed drainage outfall, five catch basins collecting stormwater along the southern portion of Marine Park, in the vicinity of Kelly's Landing, will be connected by a proposed 24-inch diameter, 680-foot pipeline and re-routed to BOS 081, which discharges to North Dorchester Bay, in the short-term. This pipeline would later be incorporated into the near-surface stormwater piping to convey flows to the proposed North Dorchester Bay Storage Tunnel, which is currently in design.

The storm drains will be constructed by cut-and-cover excavation at a depth ranging from approximately 6 to 15 feet below ground surface. Existing catch basins will be removed and replaced with deep sump catch basins, each having a minimum sump of 4 feet. Existing laterals will be replaced, and oil trap hoods will be installed on all new lateral outlets. To comply with the latest MA DEP guidelines for stormwater management, an offline particle separator will also be provided for the treatment of relocated stormwater discharge to the Reserved Channel.

Based on historic land uses in and near the northwest portion of the project area, the potential exists for some of the MWRA construction dewatering activities to encounter contaminated groundwater. Considerable data from subsurface sampling wells (Attachment 1, Figure 2), associated with remedial investigations conducted by others, were reviewed. The anticipated chemical constituents and concentrations of the contaminants within the groundwater in this area are provided in Section 3.0 of the NOI. The analytical data used to develop this section of the NOI are provided in Attachment 2. The anticipated dewatering activities and the type of treatment proposed are described in the NOI (Section 4.0). The Contractor will not be permitted to cause groundwater drawdown outside the excavation, so as not to exacerbate any existing groundwater contamination plume or adversely impact any operating off-site groundwater treatment system.

For most of the length of the new pipelines, the excavation/trenching will be shallow, and thus it will be unlikely that groundwater will be encountered. However, construction of the deeper portions of the pipeline alignment, as well as the construction of the off-line particle separator and connection to BOS080, is anticipated to encounter groundwater. In these locations, in order to safely construct the pipeline, it is anticipated that groundwater will be pumped from the trench. As described in the NOI (Section 5.0), groundwater from the excavation and trench will be discharged to a mobile treatment train consisting of an oil/water separator and a GAC filter. Based on proximity to the dewatering activity, treated water will then be discharged to either BOS080 or one of 13 Pleasure Bay outlets (Attachment 1, Figure 3).

If you have any questions or require additional information relative to this NOI, please contact Stephanie Moura at the MWRA (617-788-4399) or me (781-224-6172).

Sincerely,

for Betsy Shreve-Gibb
Project Manager

cc: S. Moura (MWRA)
B. Kubit (MA DEP)

ATTACHMENT 1

NOTICE OF INTENT

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**: Pleasure Bay Stormwater Relocation Project		**Facility/site** address: Shore Road and Farragut Road; and the eastern terminus of Day Boulevard South Boston, MA 02127		
Location of **facility/site**: longitude: 71°1'18.88 latitude: 42°20'15.10	Facility SIC code(s):	Street:		
b) Name of **facility/site owner:** Massachusetts Water Resources Authority		Town: Boston		
Email address of owner: stephanie.moura@mwra.state.ma.us		State: MA	Zip: 02129	County: Suffolk
Telephone no.of facility/site **owner**: (617) 788-4399				
Fax no. of facility/site **owner**: (617) 788-4888		**Owner** is (check one): 1. Federal____ 2. State/Tribal ✔ 3. Private_____ 4. other, if so, describe:		
Address of **owner** (if different from site):				
Street: 100 First Avenue, Charlestown Navy Yard, Building 39				
Town: Boston	State: MA	Zip: 02129	County: Suffolk	
c) Legal name of **operator**: Massachusetts Water Resources Authority	**Operator** telephone no: (617) 788-4399			
	Operator fax no.: (617) 788-4888	**Operator** email: stephanie.moura@mwra.state.ma.us		
Operator contact name and title: Stephanie Moura, Project Manager				

Address of **operator** (if different from owner):	Street:		
Town:	State:	Zip:	County:

d) Check "yes" or "no" for the following:
1. Has a prior NPDES permit exclusion been granted for the discharge? Yes ✔ No___, if "yes," number: MA-05I-072
2. Has a prior NPDES application (Form 1 & 2C) ever been filed for the discharge? Yes___ No ✔, if "yes," date and tracking #:
3. Is the discharge a "new discharge"as defined by 40 CFR 122.2? Yes___ No ✔
4. For sites in Massachusetts, is the discharge covered under the MA Contingency Plan (MCP) and exempt from state permitting? Yes__ No ✔

e) Is site/facility subject to any State permitting or other action which is causing the generation of discharge? Yes___ No ✔ If "yes," please list: 1. site identification # assigned by the state of NH or MA: 2. permit or license # assigned: 3. state agency contact information: name, location, and telephone number:	f) Is the site/facility covered by any other EPA permit, including: 1. multi-sector storm water general permit? Y___ N ✔, if Y, number: 2. phase I or II construction storm water general permit? Y ✔ N___, if Y, number: 3. individual NPDES permit? Y___ N ✔, if Y, number: 4. any other water quality related permit? Y___ N ✔, if Y, number:

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

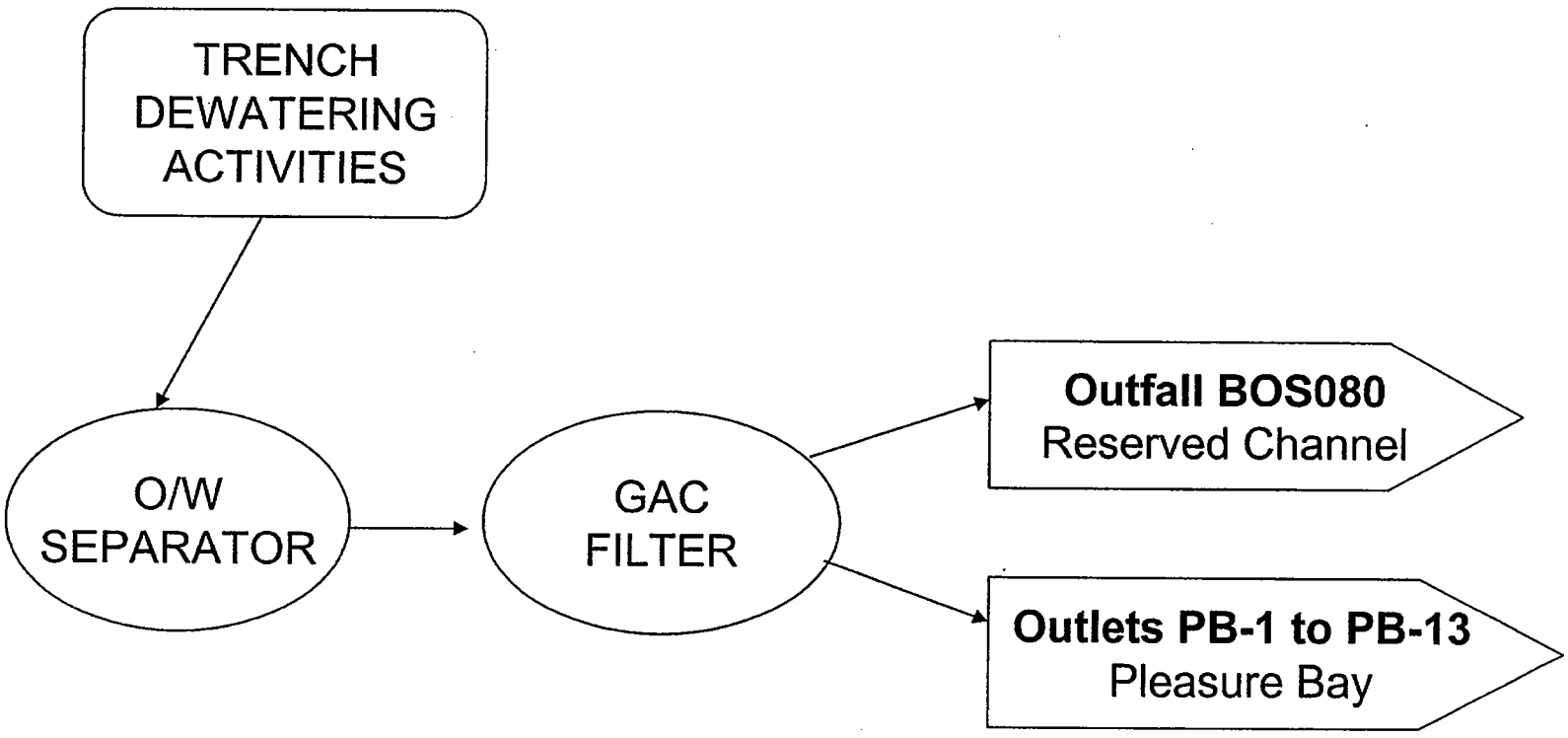
a) Describe the discharge activities for which the owner/applicant is seeking coverage:
Dewatering associated with excavation of trenches for construction of stormwater pipeline and associated particle separator.

b) Provide the following information about each discharge:	1) Number of discharge points: 14	2) What is the **maximum** and **average flow rate** of discharge (in cubic feet per second, ft^3/s)? Max. flow 0.9 Average flow TBD Is maximum flow a **design value**? Y___ N ✔ 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:

PB-1: Lat 71° 0' 52.51" W	Long 42° 20' 17.83" N	PB-8: Lat 71° 1' 15.80" W	Long 42° 20' 16.94" N
PB-2: Lat 71° 0' 53.06" W	Long 42° 20' 18.48" N	PB-9: Lat 71° 1' 18.88" W	Long 42° 20' 15.10" N
PB-3: Lat 71° 0' 56.84" W	Long 42° 20' 18.94" N	PB-10 Lat 71° 1' 20.82" W	Long 42° 20' 12.86" N
PB-4: Lat 71° 1' 0.87" W	Long 42° 20' 19.00" N	PB-11 Lat 71° 1' 24.24" W	Long 42° 20' 6.16" N
PB-5: Lat 71° 1' 4.68" W	Long 42° 20' 18.76" N	PB-12 Lat 71° 1' 22.83" W	Long 42° 20' 3.86" N
PB-6: Lat 71° 1' 8.52" W	Long 42° 20' 18.57" N	PB-13 Lat 71° 1' 20.77" W	Long 42° 20' 1.29" N
PB-7: Lat 71° 1' 12.16" W	Long 42° 20' 18.06" N	BOS080 Lat 71° 1' 31.12" W	Long 42° 20' 29.56" N

4) If hydrostatic testing, total volume of the discharge (gals): N/A	5) Is the discharge intermittent ✓ or seasonal ____? Is discharge ongoing Yes ____ No ✓ ?
c) Expected dates of discharge (mm/dd/yy): start 10/28/05 end 04/30/06	
d) Please attach a line drawing or flow schematic showing water flow through the facility including: 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 min-imum)**	**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. Total Residual Chlorine										
3. Total Petroleum Hydrocarbons		✔	3	grab	EPH by MADEP Method 1.0	110 ug/l	594 (a)	1.30E+0	384	8.37E-1
4. Cyanide										
5. Benzene	✔									
6. Toluene	✔									
7. Ethylbenzene	✔									
8. (m,p,o) Xylenes	✔									
9. Total BTEX[4]	✔									

[4]BTEX = Sum of Benzene, Toluene, Ethylbenzene, total Xylenes.

a.) OW98-359

PARAMETER	Believe Absent	Believe Present	# of Samples (1 min-imum)	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 (1,2- Dibromo-methane)										
11. Methyl-tert-Butyl Ether (MtBE)		✔	4	grab	VPH by MADEP Method 1.0	2 ug/l	2.5 (b)	5.45E-3	1.4	3.05E-3
12. tert-Butyl Alcohol (TBA)										
13. tert-Amyl Methyl Ether (TAME)										
14. Naphthalene	✔									
15. Carbon Tetra-chloride	✔									
16. 1,4 Dichlorobenzene	✔									
17. 1,2 Dichlorobenzene	✔									
18. 1,3 Dichlorobenzene	✔									
19. 1,1 Dichloroethane	✔									
20. 1,2 Dichloroethane	✔									
21. 1,1 Dichloroethylene										
22. cis-1,2 Dichloro-ethylene										
23. Dichloromethane (Methylene Chloride)	✔									
24. Tetrachloroethylene										

b.) M&E-5

PARAMETER	Believe Absent	Believe Present	# of Samples (1 min-imum)	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	✔									
26. 1,1,2 Trichloroethane	✔									
27. Trichloroethylene										
28. Vinyl Chloride	✔									
29. Acetone										
30. 1,4 Dioxane										
31. Total Phenols										
32. Pentachlorophenol										
33. Total Phthalates [5] (Phthalate esthers)										
34. Bis (2-Ethylhexyl) Phthalate [Di-(ethylhexyl) Phthalate]										
35. Total Group I Polycyclic Aromatic Hydrocarbons (PAH)										
a. Benzo(a) Anthracene	✔									
b. Benzo(a) Pyrene	✔									
c. Benzo(b)Fluoranthene	✔									
d. Benzo(k) Fluoranthene	✔									
e. Chrysene	✔									

[5]The sum of individual phthalate compounds.

PARAMETER	Believe Absent	Believe Present	# of Samples (1 min-imum)	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	✔									
g. Indeno(1,2,3-cd) Pyrene	✔									
36. Total Group II Polycyclic Aromatic Hydrocarbons (PAH)										
h. Acenaphthene	✔									
i. Acenaphthylene	✔									
j. Anthracene	✔									
k. Benzo(ghi) Perylene	✔									
l. Fluoranthene		✔	4	grab	MADEP Method 1.0	1.1 ug/l	5.2 (c)	1.13E-2	1.7	3.71E-3
m. Fluorene	✔									
n. Naphthalene-		✔	4	grab	MADEP Method 1.0	2.0 ug/l	10.7 (c)	2.33E-2	3.4	7.41E-3
o. Phenanthrene		✔	4	grab	MADEP Method 1.0	1.1 ug/l	5.2 (c)	1.13E-2	1.7	3.71E-3
p. Pyrene		✔	4	grab	MADEP Method 1.0	1.1 ug/l	5.5 (c)	1.20E-2	1.8	3.93E-3
37. Total Polychlorinated Biphenyls (PCBs)										
38. Antimony	✔									
39. Arsenic		✔	3	grab	SW-846 6000/7000	2.4 ug/l	13.0 (a)	2.83E-2	5.1	1.11E-2
40. Cadmium		✔	3	grab	SW-846 6000/7000	2.2 ug/l	3.2 (a)	6.98E-3	1.8	3.93E-3
41. Chromium III										
42. Chromium VI										

c.) M&E-319

PARAMETER	Believe Absent	Believe Present	# of Samples (1 min-imum)	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	✔									
44. Lead	✔									
45. Mercury	✔									
46. Nickel		✔	3	grab	SW-846 6000/7000	8.5 ug/L	8.6 (d)	1.88E-2	8.6	1.88E-2
47. Selenium	✔									
48. Silver		✔	3	grab	SW-846 6000/7000	3.6 ug/l	3.6 (d)	7.85E-3	3.6	7.85E-3
49. Zinc	✔									
50. Iron										
Other (describe):										

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

Step 1: Do any of the metals in the influent have a **reasonable potential** to exceed the effluent limits in Appendix III (i.e., the limits set at zero to five dilutions)? Y_✔_ N____	If yes, which metals? Ni and Ag. However, the proposed discharges are to saltwater (Reserved Channel and Pleasure Bay)
Step 2: For any metals which have **reasonable potential** to exceed the **Appendix III** limits, calculate the **dilution factor (DF)** 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. What is the dilution factor for applicable metals? Metals:_____ DF: _____	Look up the limit calculated at the corresponding dilution factor in **Appendix IV.** Do any of the metals in the **influent** have the potential to exceed the corresponding **effluent** limits in Appendix IV (i.e., is the influent concentration above the limit set at the calculated dilution factor)? Y____ N____ If "Yes," list which metals:

d.) OW98-365

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:

The system will entail a comercially-manufactured portable oil/water separator and a GAC filter system capable of producing an effluent within limits established by EPA.

b) Identify each applicable treatment unit (check all that apply):	Frac. tank	Air stripper	Oil/water separator ✔	Equalization tanks	Bag filter	GAC filter ✔
	Chlorination	Dechlorination	Other (please describe):			

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:
Average flow rate of discharge TBD Maximum flow rate of treatment system 400 Design flow rate of treatment system _____

d) A description of chemical additives being used or planned to be used (attach MSDS sheets):

N/A

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 ✔	River/brook____	Wetlands_____	Other (describe): Pleasure Bay and Reserved Channel

b) Provide a narrative description of the discharge pathway, including the name(s) of the receiving waters:

Groundwater from the excavation/trenching associated with the proposed 4,600 feet (approx.) of new drain piping will be discharged to a mobile treatment train. Treated water will then be discharged to one CSO outfall, or one of 13 outlets, based on proximity to the excavation.

c) Attach a detailed map(s) indicating the site location and location of the outfall to the receiving water:
1. For multiple discharges, number the discharges sequentially.
2. For indirect dischargers, indicate the location of the discharge to the indirect conveyance and the discharge to surface water
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 Reserved Ch SBCSO; Pleasure Bay SB,

e) Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water_____cfs
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____ No✔ If yes, for which pollutant(s)?

Is there a TMDL? Yes____ No✔ If yes, for which pollutant(s)?

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____No✔
Has any consultation with the federal services been completed ? Yes ✔ No___ or is consultation underway? Yes No____
What were the results of the consultation with the U.S. Fish and Wldlife Service and/or National Marine Fisheries Service (check one):
a "no jeopardy" opinion? _____or written concurrence✔ 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✔ No_____ Have any state or tribal historic preservation officer been consulted in this determination (Massachusetts only)? Yes✔ No_____

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.

Attachment 1: NOI and Figures 1, 2, and 3

Attachment 2: Analytical Data

Facility/Site Name: Pleasure Bay Stormwater Relocation

Operator signature: Ralph M Wallace

Title: Director, CSO Program/Energy

Date: October 21, 2005

Enter your transmittal number → W 069822
Transmittal Number

Your unique Transmittal Number can be accessed online: http://www.mass.gov/dep/counter/trasmfrm.shtml or call DEP's InfoLine at 617-338-2255 or 800-462-0444 (from 508, 781, and 978 area codes).

Massachusetts Department of Environmental Protection

Transmittal Form for Permit Application and Payment

1. Please type or print. A separate Transmittal Form must be completed for each permit application.

2. Make your check payable to the Commonwealth of Massachusetts and mail it with a copy of this form to: DEP, P.O. Box 4062, Boston, MA 02211.

3. Three copies of this form will be needed.

Copy 1 - the original must accompany your permit application. **Copy 2** must accompany your fee payment. **Copy 3** should be retained for your records

4. Both fee-paying and exempt applicants must mail a copy of this transmittal form to:

DEP
P.O. Box 4062
Boston, MA
02211

*** Note:**
For BWSC Permits, enter the LSP.

A. Permit Information

BRP WM 12 — 1. Permit Code: 7 or 8 character code from permit instructions
Remediation General Permit – Construction Dewatering — 2. Name of Permit Category
Construction Dewatering: Pipeline – Installation of approximately 4,600 feet of new drain piping ranging from 18 to 48 inches. Known groundwater contamination, from urban fill, as well as a petroleum spill, exists within portions of the construction area which will require dewatering. — 3. Type of Project or Activity

B. Applicant Information – Firm or Individual

Massachusetts Water Resources Authority — 1. Name of Firm - Or, if party needing this approval is an individual enter name below:
100 First Avenue, Charlestown Navy Yard, Building 39 — 5. Street Address

Boston	MA	02129	617-788-4399	
6. City/Town	7. State	8. Zip Code	9. Telephone #	10. Ext. #

c/o Stephanie Moura — 11. Contact Person
stephanie.moura@mwra.state.ma.us — 12. e-mail address (optional)

C. Facility, Site or Individual Requiring Approval

Pleasure Bay Stormwater Relocation Project — 1. Name of Facility, Site Or Individual
Primarily within eastern terminus of Day Boulevard and Shore Road — 2. Street Address

Boston	MA	02127	N/A	
3. City/Town	4. State	5. Zip Code	6. Telephone #	7. Ext. #

8. DEP Facility Number (if Known)	9. Federal I.D. Number (if Known)	10. BWSC Tracking # (if Known)

D. Application Prepared by (if different from Section B)*

Metcalf & Eddy — 1. Name of Firm Or Individual
701 Edgewater Drive — 2. Address

Wakefield	MA	01880	781-224-6172	
3. City/Town	4. State	5. Zip Code	6. Telephone #	7. Ext. #

c/o Betsy Shreve-Gibb — 8. Contact Person
9. LSP Number (BWSC Permits only)

E. Permit - Project Coordination

1. Is this project subject to MEPA review? ☒ yes ☐ no
   If yes, enter the project's EOEA file number - assigned when an Environmental Notification Form is submitted to the MEPA unit: 10335 (Certificate issued 7/16/04) — EOEA File Number

F. Amount Due

DEP Use Only

Permit No:

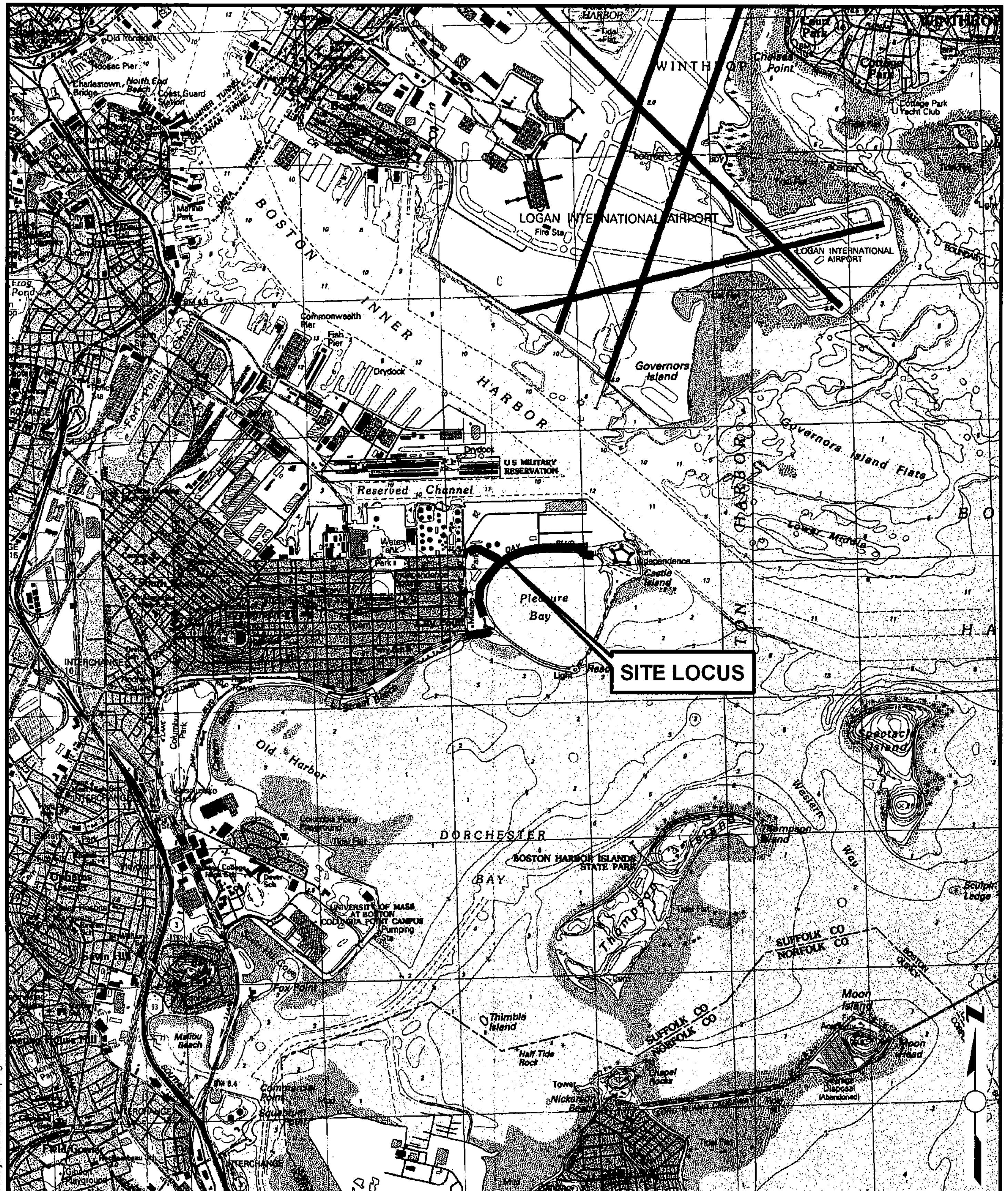
Rec'd Date:

Reviewer:

Special Provisions:

1. ☐ **Fee** Exempt (city, town or municipal housing authority)(state agency if fee is $100 or less). *There are no fee exemptions for BWSC permits, regardless of applicant status.*
2. ☐ Hardship Request - payment extensions according to 310 CMR 4.04(3)(c).
3. ☐ Alternative Schedule Project (according to 310 CMR 4.05 and 4.10).
4. ☐ Homeowner (according to 310 CMR 4.02).

Check Number	$775	
	Dollar Amount	Date



0 0.15 0.3 0.6 0.9 Miles

1" = 3,000'

Date: January 31, 2005

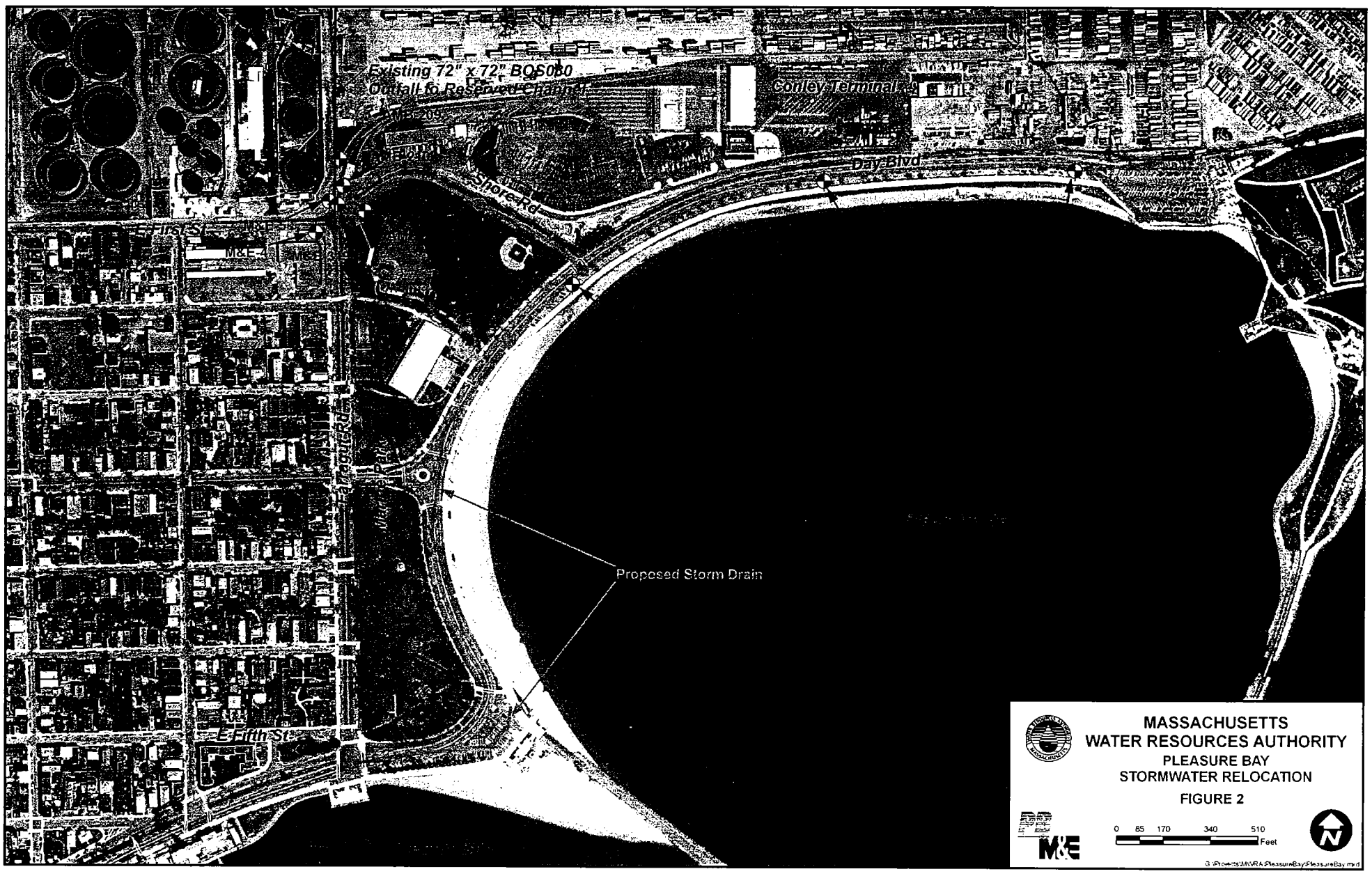
LOCUS MAP

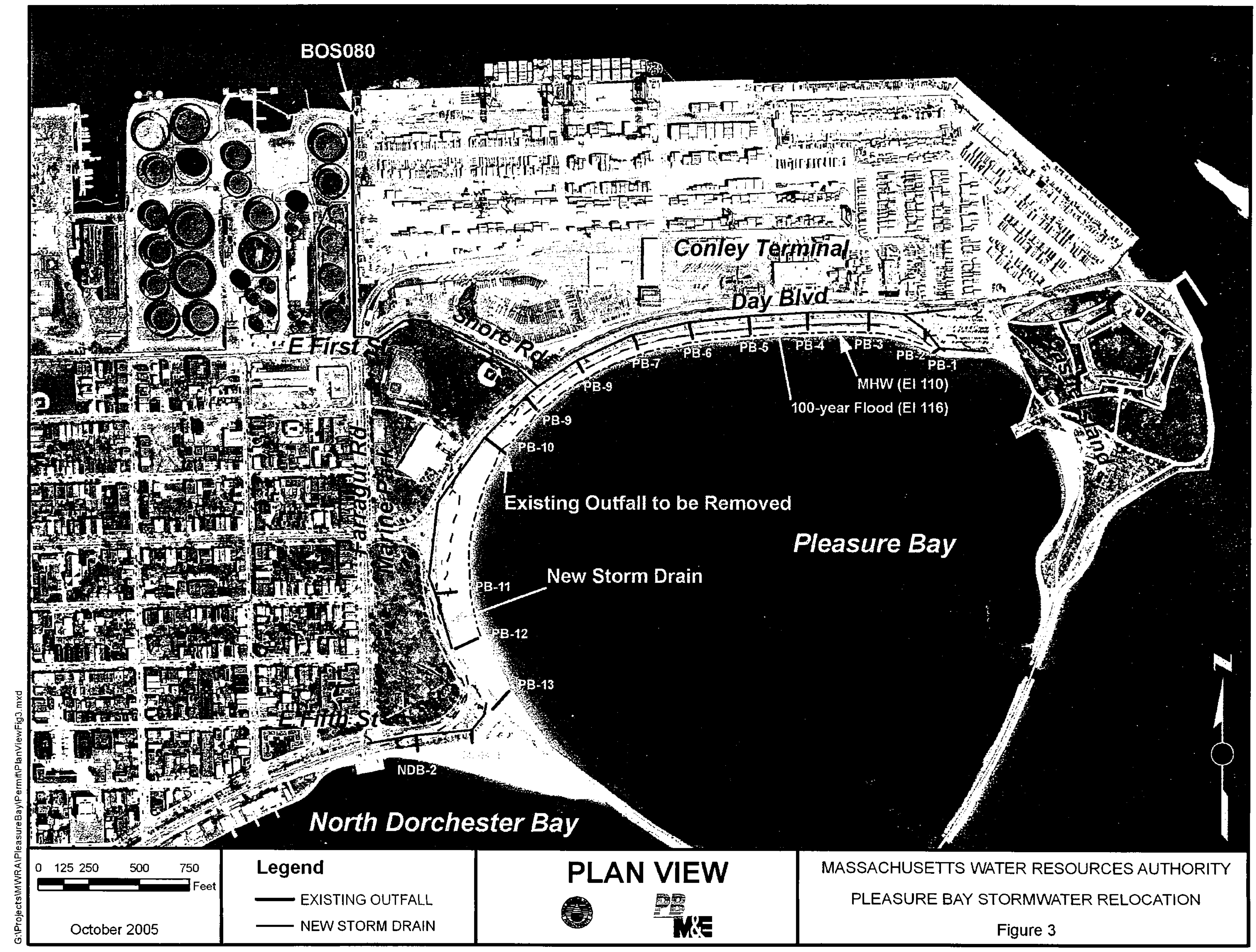
MASSACHUSETTS WATER RESOURCES AUTHORITY

PLEASURE BAY STORMWATER RELOCATION

Figure 1

G:\Projects\MWRA\PleasureBay\Permit\LocusMapFig1.mxd


Existing 72" x 72" BOS080
Outfall to Reservation Channel
Conley Terminal
Day Blvd
Shore Rd
E First St
Proposed Storm Drain
E Fifth St
MASSACHUSETTS
WATER RESOURCES AUTHORITY
PLEASURE BAY
STORMWATER RELOCATION
FIGURE 2
0 85 170 340 510
Feet


BOS080
Conley Terminal
Day Blvd
E First St
Shore Rd
Farragut Rd
Marine Park
E Fifth St
PB-1
PB-2
PB-3
PB-4
PB-5
PB-6
PB-7
PB-9
PB-9
PB-10
PB-11
PB-12
PB-13
NDB-2
MHW (El 110)
100-year Flood (El 116)
Existing Outfall to be Removed
New Storm Drain
Pleasure Bay
North Dorchester Bay
N
0 125 250 500 750
Feet
October 2005
Legend
EXISTING OUTFALL
NEW STORM DRAIN
PLAN VIEW
MASSACHUSETTS WATER RESOURCES AUTHORITY
PLEASURE BAY STORMWATER RELOCATION
Figure 3
G:\Projects\MWRA\PleasureBay\Permit\PlanViewFig3.mxd

ATTACHMENT 2

ANALYTICAL DATA

TABLE D-13
DETECTED CONCENTRATIONS IN GROUNDWATER SAMPLES
SUPPLEMENTAL EXPLORATION PROGRAM: PLEASURE BAY STORM DRAIN

WELL ID:			OW98-359	OW98-362	OW98-365
WELL LOCATION:	REPORTABLE CONCENTRATIONS	FEDERAL SDWA	Pleasure Bay	Pleasure Bay	Pleasure Bay
SAMPLE DELIVERY GROUP:	GW2 (1)	MCLs (2)	S49	S49	S49
SHEET NUMBER:					
BORING TYPE:					
SCREENED INTERVAL (FT BGS):			5 - 15	0.5 - 17.5	5 - 15
SAMPLING DATE:			11/16/99	11/16/99	11/16/99
MCP REPORTING CATEGORY :			GW2	GW2	GW2
VOLATILE ORGANICS (µg/L)			None Detected	None Detected	None Detected
VOLATILE PETROLEUM HYDROCARBONS (µg/L)					
C5-C8 Aliphatics (excludes BTEX and MTBE)	1,000	NL	< 100	< 100	< 100
C9-C12 Aliphatics	1,000	NL	< 25	< 25	< 25
C9-C10 Aromatics	4,000	NL	< 25	< 25	< 25
Targeted VPH Analytes:					
Methyl-tert-butyl ether (MTBE)	50,000	NL	< 2	< 2	< 2
Benzene	2,000	5	< 2	< 2	< 2
Toluene	6,000	1,000	< 2	< 2	< 2
Ethylbenzene	4,000	700	< 2	< 2	< 2
m-&p-Xylenes			< 2	< 2	< 2
o-Xylene	6,000	10,000	< 2	< 2	< 2
Naphthalene	6,000	NL	< 2	< 2	< 2
EXTRACTABLE PETROLEUM HYDROCARBONS (µg/L)					
C9-C18 Aliphatics	1,000	NL	J 210	< 110	< 110
C19-C36 Aliphatics	20,000	NL	180	< 110	190
C10-C22 Aromatics (excludes Targeted PAH Analytes)	30,000	NL	300	< 110	130
Targeted PAH Analytes:					
Acenaphthene	5,000	NL	< 1.1	< 1.1	< 1.1
Acenaphthylene	3,000	NL	< 1.1	< 1.1	< 1.1
Anthracene	600	NL	< 1.1	< 1.1	< 1.1
Benzo(a)anthracene	3,000	NL	< 1.1	< 1.1	< 1.1
Benzo(a)pyrene	3,000	0.2	< 1.1	< 1.1	< 1.1
Benzo(b)fluoranthene	3,000	NL	< 1.1	< 1.1	< 1.1
Benzo(g,h,i)perylene	3,000	NL	< 1.1	< 1.1	< 1.1
Benzo(k)fluoranthene	3,000	NL	< 1.1	< 1.1	< 1.1
Chrysene	3,000	NL	< 1.1	< 1.1	< 1.1
Dibenz(a,h)anthracene	3,000	NL	< 1.1	< 1.1	< 1.1
Fluoranthene	200	NL	< 1.1	< 1.1	< 1.1
Fluorene	3,000	NL	< 1.1	< 1.1	< 1.1
Indeno(1,2,3-c,d)pyrene	3,000	NL	< 1.1	< 1.1	< 1.1
Naphthalene	6,000	NL	< 1.1	< 1.1	< 1.1
Phenanthrene	50	NL	< 1.1	< 1.1	< 1.1
Pyrene	3,000	NL	< 1.1	< 1.1	< 1.1
2-Methylnaphthalene	3,000	NL	< 1.1	< 1.1	< 1.1
DISSOLVED PRIORITY POLLUTANT METALS PLUS BARIUM, IRON, AND MANGANESE (7) (µg/L)					
Antimony	300	6	< 2.0	< 2.0	< 2.0
Arsenic	400	50	13.02	< 2.4	< 2.4
Barium	30,000	2,000	131	182	88.4
Beryllium	50	4	< 0.40	< 0.30	< 0.30
Cadmium	10	5	3.2	<J 2.2	<J 2.2
Chromium	2,000	100	< 7.8	< 3.3	< 3.3
Copper	100,000	1,300 (5)	< 6.2	< 6.2	< 6.2

TABLE D-13
DETECTED CONCENTRATIONS IN GROUNDWATER SAMPLES
SUPPLEMENTAL EXPLORATION PROGRAM: PLEASURE BAY STORM DRAIN

WELL ID:			OW98-359		OW98-362		OW98-365	
WELL LOCATION:	REPORTABLE CONCENTRATIONS	FEDERAL SDWA	Pleasure Bay		Pleasure Bay		Pleasure Bay	
SAMPLE DELIVERY GROUP:	GW2 (1)	MCLs (2)	S49		S49		S49	
SHEET NUMBER:								
BORING TYPE:								
SCREENED INTERVAL (FT BGS):			5 - 15		0.5 - 17.5		5 - 15	
SAMPLING DATE:			11/16/99		11/16/99		11/16/99	
MCP REPORTING CATEGORY :			GW2		GW2		GW2	
Iron	NL	300 (4)	NA		NA		NA	
Lead	30	15	<J	0.84	<J	0.84	<J	0.84
Manganese	NL	50 (4)	NA		NA		NA	
Mercury	1	2	<	0.10	<	0.10	<	0.10
Nickel	80	NL	<	8.5	<	8.5		8.6
Selenium	80	50	<J	1.8	<J	1.8	<J	9.0
Silver	7	100 (4)	<	3.5	<	3.5		3.6
Thallium	400	2	<J	1.5	<J	1.5	<J	7.5
Zinc	900	5,000 (4)	<	28.0	<	28.0	<	28.0

NOTES :

(1) Reportable Concentrations are from the MCP (MADEP, 1995 and revisions through 10/31/97).
(2) Federal Safe Drinking Water Act Maximum Contaminant Levels. These values are included as an aid in evaluating the need for treatment of water generated from dewatering of excavations, prior to discharge to surface water. Such discharges are regulated under the National Pollutant Discharge Elimination System (NPDES). Although their use is not codified in regulation or specifically stated in policy, MCLs are generally used by EPA when stating NPDES permit limits for discharge to a water body.
(3) MCL is for total trihalomethanes.
(4) MCL for chloride, iron, manganese, silver, sulfate, total dissolved solids, and zinc is a secondary MCL (non-enforceable and established for aesthetic reasons).
(5) Treatment technique. 90% of tap samples must meet this "no action" level for copper.
(6) Samples were collected by EPA low-flow method and were NOT filtered in the field or in the laboratory before analysis.
(7) Samples were collected by EPA low-flow method and were field-filtered before being bottled, preserved and submitted to the laboratory for analysis.
< The analyte was not detected at this concentration; value presented is the sample detection limit.
J Value is approximate due to limitations identified in the quality control review.
R Value rejected due to limitations identified in the quality control review.
NA Not Analyzed or Not Applicable.
ND None Detected
NL No MCP Reportable Concentration or no SDWA MCL
NR No Reading due to instrument malfunction
2,000 Concentration exceeds the GW2 reportable concentration.
2,000 Concentration exceeds the federal SDWA MCL.

AMRO

LABORATORY REPORT
VOLATILE ORGANIC COMPOUNDS-EPA METHOD 8260B

Client: Metcalf & Eddy
Client I.D.: MWRA Contract No. 6220 North Dorchester Bay/CSO 98-359
AMRO I.D.: 24809-02
Date sampled: 11/16/99 Date Received: 11/17/99
Date prepared: 11/18/99 Date Analyzed: 11/18/99
Sample Qty/Type: 1/Water

Test Parameter	Results (ug/L)	Reporting Limit (ug/L)
Chloromethane	ND	5.0
Bromomethane	ND	2.0
Vinyl Chloride	ND	2.0
Dichlorodifluoromethane	ND	5.0
Chloroethane	ND	5.0
Methylene Chloride	ND	5.0
Trichlorofluoromethane	ND	2.0
1,1-Dichloroethene	ND	1.0
Bromochloromethane	ND	2.0
1,1-Dichloroethane	ND	2.0
cis-1,2-Dichloroethene	ND	2.0
trans-1,2-Dichloroethene	ND	2.0
Chloroform	ND	2.0
Dibromomethane	ND	2.0
1,2-Dichloroethane	ND	2.0
2,2-Dichloropropane	ND	2.0
1,1,1-Trichloroethane	ND	2.0
Carbon Tetrachloride	ND	2.0
Bromodichloromethane	ND	2.0
1,2-Dichloropropane	ND	2.0
1,1-Dichloropropene	ND	2.0
Trichloroethene	ND	2.0
Dibromochloromethane	ND	2.0
1,1,2-Trichloroethane	ND	2.0
Benzene	ND	2.0
1,3-Dichloropropane	ND	2.0
Bromoform	ND	2.0
1,1,1,2-Tetrachloroethane	ND	2.0
Tetrachloroethene	ND	2.0
1,2-Dibromoethane	ND	2.0
1,1,2,2-Tetrachloroethane	ND	2.0
Toluene	ND	2.0
Chlorobenzene	ND	2.0
Ethylbenzene	ND	2.0
Bromobenzene	ND	2.0
Isopropylbenzene	ND	2.0
Styrene	ND	2.0
n-Propylbenzene	ND	2.0

Cont. next page

AMRO

LABORATORY REPORT
VOLATILE ORGANIC COMPOUNDS-EPA METHOD 8260B

Client: Metcalf & Eddy
Client I.D.: 98-359
AMRO I.D.: 24809-02

Test Parameter	Results (ug/L)	Reporting Limit (ug/L)
cis-1,3-Dichloropropene	ND	1.0
trans-1,3-Dichloropropene	ND	1.0
Xylene (total)	ND	2.0
1,2-Dibromo-3-chloropropane	ND	5.0
tert-Butylbenzene	ND	2.0
2-Chlorotoluene	ND	2.0
Hexachlorobutadiene	ND	2.0
4-Chlorotoluene	ND	2.0
sec-Butylbenzene	ND	2.0
1,3-Dichlorobenzene	ND	2.0
1,2-Dichlorobenzene	ND	2.0
1,4-Dichlorobenzene	ND	2.0
1,2,3-Trichloropropane	ND	2.0
n-Butylbenzene	ND	2.0
4-Isopropyltoluene	ND	2.0
Naphthalene	ND	2.0
1,2,4-Trimethylbenzene	ND	2.0
1,3,5-Trimethylbenzene	ND	2.0
1,2,3-Trichlorobenzene	ND	2.0
1,2,4-Trichlorobenzene	ND	2.0
Methyl-tert-butyl ether (MTBE)	ND	2.0

ND = Not Detected at or above the reporting limit.

The Reporting Limit is defined as the lowest concentration the laboratory can accurately quantitate.

Analyzed By: JSL

TABLE 1. DETECTED CONCENTRATION IN GROUNDWATER SAMPLES FROM THE NORTHWEST PORTION OF THE PLEASURE BAY STORMWATER RELOCATION PROJECT

WELL ID: / WELL LOCATION:	AMB-208 Pleasure Bay	AMB-209 Pleasure Bay	AMB-210 Pleasure Bay	M&E-4 Pleasure Bay	M&E-5 Pleasure Bay	M&E-319 Pleasure Bay
VOLATILE PETROLEUM HYDROCARBONS (µg/L)						
C5-C8 Aliphatics (excludes BTEX and MTBE)	nd	nd	nd	nd	nd	nd
C9-C12 Aliphatics	nd	nd	nd	nd	nd	nd
C9-C10 Aromatics	nd	nd	nd	nd	nd	nd
Targeted VPH Analytes:	nd	nd	nd	nd	nd	nd
Methyl-tert-butyl ether (MTBE)	nd	nd	nd	nd	2.5	nd
Benzene	nd	nd	nd	nd	nd	nd
Toluene	nd	nd	nd	nd	nd	nd
Ethylbenzene	nd	nd	nd	nd	nd	nd
m-&p-Xylenes	nd	nd	nd	--	--	--
o-Xylene	nd	nd	nd	--	--	--
Naphthalene	nd	nd	nd	nd	nd	10.7
EPH and Target PAH Analytes (µg/L)						
C9-C18 Aliphatics	nd	nd	nd	nd	nd	nd
C19-C36 Aliphatics	nd	nd	nd	nd	nd	nd
C11-C22 Aromatics (excludes Targeted PAH Analytes)	nd	nd	270	nd	nd	185
Acenaphthene	nd	nd	nd	nd	nd	nd
Acenaphthylene	nd	nd	nd	nd	nd	nd
Anthracene	nd	nd	nd	nd	nd	nd
Benzo(a)anthracene	nd	nd	nd	nd	nd	nd
Benzo(a)pyrene	nd	nd	nd	nd	nd	nd
Benzo(b)fluoranthene	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)perylene	nd	nd	nd	nd	nd	nd
Benzo(k)fluoranthene	nd	nd	nd	nd	nd	nd
Chrysene	nd	nd	nd	nd	nd	nd
Dibenzo(a,h)anthracene	nd	nd	nd	nd	nd	nd
Fluoranthene	nd	nd	nd	nd	nd	5.2
Fluorene	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-c,d)pyrene	nd	nd	nd	nd	nd	nd
Naphthalene	nd	nd	nd	nd	nd	nd
Phenanthrene	nd	nd	nd	nd	nd	5.2
Pyrene	nd	nd	nd	nd	nd	5.5
2-Methylnaphthalene	nd	nd	nd	nd	nd	nd

NOTES :
Method 1 Standards from 310 CMR 40.0000
nd = compound not detected above method detection limit
'--' indicates analyte test not performed

TABLE 2.
DETECTED CONCENTRATIONS IN GROUNDWATER SAMPLES
SUPPLEMENTAL EXPLORATION PROGRAM: PLEASURE BAY STORM DRAIN

WELL ID: / WELL LOCATION:	REPORTABLE CONCENTRATIONS	FEDERAL SDWA	OW98-359 Pleasure Bay	OW98-362 Pleasure Bay	OW98-365 Pleasure Bay
VOLATILE ORGANICS (µg/L)			None Detected	None Detected	None Detected
VOLATILE PETROLEUM HYDROCARBONS (µg/L)					
C5-C8 Aliphatics (excludes BTEX and MTBE)	1,000	NL	< 100	< 100	< 100
C9-C12 Aliphatics	1,000	NL	< 25	< 25	< 25
C9-C10 Aromatics	4,000	NL	< 25	< 25	< 25
Targeted VPH Analytes:					
Methyl-tert-butyl ether (MTBE)	50,000	NL	< 2	< 2	< 2
Benzene	2,000	5	< 2	< 2	< 2
Toluene	6,000	1,000	< 2	< 2	< 2
Ethylbenzene	4,000	700	< 2	< 2	< 2
m-&p-Xylenes			< 2	< 2	< 2
o-Xylene	6,000	10,000	< 2	< 2	< 2
Naphthalene	6,000	NL	< 2	< 2	< 2
EXTRACTABLE PETROLEUM HYDROCARBONS (µg/L)					
C9-C18 Aliphatics	1,000	NL	J 210	< 110	< 110
C19-C36 Aliphatics	20,000	NL	180	< 110	190
C10-C22 Aromatics (excludes Targeted PAH Analytes)	30,000	NL	300	< 110	130
Targeted PAH Analytes:					
Acenaphthene	5,000	NL	< 1.1	< 1.1	< 1.1
Acenaphthylene	3,000	NL	< 1.1	< 1.1	< 1.1
Anthracene	600	NL	< 1.1	< 1.1	< 1.1
Benzo(a)anthracene	3,000	NL	< 1.1	< 1.1	< 1.1
Benzo(a)pyrene	3,000	0.2	< 1.1	< 1.1	< 1.1
Benzo(b)fluoranthene	3,000	NL	< 1.1	< 1.1	< 1.1
Benzo(g,h,i)perylene	3,000	NL	< 1.1	< 1.1	< 1.1
Benzo(k)fluoranthene	3,000	NL	< 1.1	< 1.1	< 1.1
Chrysene	3,000	NL	< 1.1	< 1.1	< 1.1
Dibenz(a,h)anthracene	3,000	NL	< 1.1	< 1.1	< 1.1
Fluoranthene	200	NL	< 1.1	< 1.1	< 1.1
Fluorene	3,000	NL	< 1.1	< 1.1	< 1.1
Indeno(1,2,3-c,d)pyrene	3,000	NL	< 1.1	< 1.1	< 1.1
Naphthalene	6,000	NL	< 1.1	< 1.1	< 1.1
Phenanthrene	50	NL	< 1.1	< 1.1	< 1.1
Pyrene	3,000	NL	< 1.1	< 1.1	< 1.1
2-Methylnaphthalene	3,000	NL	< 1.1	< 1.1	< 1.1
DISSOLVED PRIORITY POLLUTANT METALS PLUS BARIUM, IRON, AND MANGANESE (7) (µg/L)					
Antimony	300	6	< 2.0	< 2.0	< 2.0
Arsenic	400	50	13.02	< 2.4	< 2.4
Barium	30,000	2,000	131	182	88.4

TABLE 2.
DETECTED CONCENTRATIONS IN GROUNDWATER SAMPLES
SUPPLEMENTAL EXPLORATION PROGRAM: PLEASURE BAY STORM DRAIN

WELL ID: / WELL LOCATION:	REPORTABLE CONCENTRATIONS	FEDERAL SDWA	OW98-359 Pleasure Bay	OW98-362 Pleasure Bay	OW98-365 Pleasure Bay
Beryllium	50	4	< 0.40	< 0.30	< 0.30
Cadmium	10	5	3.2	<J 2.2	<J 2.2
Chromium	2,000	100	< 7.8	< 3.3	< 3.3
Copper	100,000	1,300 (5)	< 6.2	< 6.2	< 6.2
Iron	NL	300 (4)	NA	NA	NA
Lead	30	15	<J 0.84	<J 0.84	<J 0.84
Manganese	NL	50 (4)	NA	NA	NA
Mercury	1	2	< 0.10	< 0.10	< 0.10
Nickel	80	NL	< 8.5	< 8.5	8.6
Selenium	80	50	<J 1.8	<J 1.8	<J 9.0
Silver	7	100 (4)	< 3.5	< 3.5	3.6
Thallium	400	2	<J 1.5	<J 1.5	<J 7.5
Zinc	900	5,000 (4)	< 28.0	< 28.0	< 28.0

NOTES :

(1) Reportable Concentrations are from the MCP (MADEP, 1995 and revisions through 10/31/97).
(2) Federal Safe Drinking Water Act Maximum Contaminant Levels. These values are included as an aid in evaluating the need for treatment of water generated from dewatering of excavations, prior to discharge to surface water. Such discharges are regulated under the National Pollutant Discharge Elimination System (NPDES). Although their use is not codified in regulation or specifically stated in policy, MCLs are generally used by EPA when stating NPDES permit limits for discharge to a water body.
(3) MCL is for total trihalomethanes.
(4) MCL for chloride, iron, manganese, silver, sulfate, total dissolved solids, and zinc is a secondary MCL (non-enforceable and established for aesthetic reasons).
(5) Treatment technique. 90% of tap samples must meet this "no action" level for copper.
(6) Samples were collected by EPA low-flow method and were NOT filtered in the field or in the laboratory before analysis.
(7) Samples were collected by EPA low-flow method and were field-filtered before being bottled, preserved and submitted to the laboratory for analysis.
< The analyte was not detected at this concentration; value presented is the sample detection limit.
J Value is approximate due to limitations identified in the quality control review.
R Value rejected due to limitations identified in the quality control review.
NA Not Analyzed or Not Applicable.
ND None Detected
NL No MCP Reportable Concentration or no SDWA MCL
NR No Reading due to instrument malfunction
2,000 Concentration exceeds the GW2 reportable concentration.
2,000 Concentration exceeds the federal SDWA MCL.