Commonwealth of Massachusetts

Executive Office of Environmental Affairs ■ MEPA Office

ENF Environmental Notification Form

For Office Use Only *Executive Office of Environmental Affairs*
EOEA No.: 13541
MEPA Analyst: W. Gage
Phone: 617-626- 1025

The information requested on this form must be completed to begin MEPA Review in accordance with the provisions of the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: **Former Salem MGP Property Remediation Project at Collins Cove**		
Street: **20 Pierce Avenue**		
Municipality: **Salem**	Watershed: **North Shore Coastal Drainage Area**	
Universal Tranverse Mercator Coordinates: **N: 4710673 m; E: 345355 m**	Latitude: **42 31' 57"** Longitude: **70 53' 04"**	
Estimated commencement date: 11/01/05	Estimated completion date: 02/01/06	
Approximate cost: $400,000.00	Status of project design: **25%complete**	
Proponent: **Massachusetts Electric Co.**		
Street: **25 Research Drive**		
Municipality: **Westborough**	State: **MA**	Zip Code: **01582**
Name of Contact Person From Whom Copies of this ENF May Be Obtained: **Ken Fields**		
Firm/Agency: **BSC Group**	Street: **15 Elkins Street**	
Municipality: **Boston**	State: **MA**	Zip Code: **02127**
Phone: **617-896-4300**	Fax: **617-896-4301**	E-mail: **Kfields@bscgroup.com**

Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?
☐Yes ☒No

Has this project been filed with MEPA before?
☐Yes (EOEA No._____) ☒No

Has any project on this site been filed with MEPA before?
☐Yes (EOEA No._____) ☒No

Is this an Expanded ENF (see 301 CMR 11.05(7)) requesting:

a Single EIR? (see 301 CMR 11.06(8))	☐Yes	☒No
a Special Review Procedure? (see 301CMR 11.09)	☐Yes	☒No
a Waiver of mandatory EIR? (see 301 CMR 11.11)	☐Yes	☒No
a Phase I Waiver? (see 301 CMR 11.11)	☐Yes	☒No

Identify any financial assistance or land transfer from an agency of the Commonwealth, including the agency name and the amount of funding or land area (in acres):
The project does not require any financial assistance or land transfer from a Commonwealth agency.

Are you requesting coordinated review with any other federal, state, regional, or local agency?
☒Yes (Specify **DEP Waterways Program**) ☐No

List Local or Federal Permits and Approvals:
Order of Conditions, Salem Conservation Commission; PGP Authorization, Category 2, US ACOE

Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11.03):

- ☐ Land
- ☐ Water
- ☐ Energy
- ☐ ACEC
- ☐ Rare Species
- ☐ Wastewater
- ☐ Air
- ☐ Regulations
- ☒ Wetlands, Waterways, & Tidelands
- ☐ Transportation
- ☐ Solid & Hazardous Waste
- ☐ Historical & Archaeological Resources

Summary of Project Size & Environmental Impacts	Existing	Change	Total
LAND			
Total site acreage	20.7		
New acres of land altered		1.9	
Acres of impervious area	-	-	-
Square feet of new bordering vegetated wetlands alteration		0	
Square feet of new other wetland alteration		+/-81,000 s.f. (Coastal Beach) +/-11,250 s.f. (+/-775 l.f.) (Coastal Bank)	
Acres of new non-water dependent use of tidelands or waterways		0	
STRUCTURES			
Gross square footage	-	-	-
Number of housing units	-	-	-
Maximum height (in feet)	-	-	-
TRANSPORTATION			
Vehicle trips per day	-	-	-
Parking spaces	-	-	-
WATER/WASTEWATER			
Gallons/day (GPD) of water use	-	-	-
GPD water withdrawal	-	-	-
GPD wastewater generation/ treatment	-	-	-
Length of water/sewer mains (in miles)	-	-	-

State Permits & Approvals

- ☒ Order of Conditions
- ☐ Superseding Order of Conditions
- ☒ Chapter 91 License
- ☐ 401 Water Quality Certification
- ☐ MHD or MDC Access Permit
- ☐ Water Management Act Permit
- ☐ New Source Approval
- ☐ DEP or MWRA Sewer Connection/ Extension Permit
- ☐ Other Permits (*including Legislative Approvals*) – Specify:

CONSERVATION LAND: Will the project involve the conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97?

☐ Yes (Specify_____) ☒ No

Will it involve the release of any conservation restriction, preservation restriction, agricultural preservation

restriction, or watershed preservation restriction?

☐Yes (Specify_____) ☒No

RARE SPECIES: Does the project site include Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of Rare Species, or Exemplary Natural Communities?

☐Yes (Specify_____) ☒No

HISTORICAL /ARCHAEOLOGICAL RESOURCES: Does the project site include any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?

☐Yes (Specify_____) ☒No

If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?

☐Yes (Specify_____) ☐No

AREAS OF CRITICAL ENVIRONMENTAL CONCERN: Is the project in or adjacent to an Area of Critical Environmental Concern?

☐Yes (Specify_____) ☒No

PROJECT DESCRIPTION: The project description should include **(a)** a description of the project site, **(b)** a description of both on-site and off-site alternatives and the impacts associated with each alternative, and **(c)** potential on-site and off-site mitigation measures for each alternative (*You may attach one additional page, if necessary.*)

Massachusetts Electric Company ("MEC") is proposing a proactive remediation project within the Collins Cove intertidal zone including coastal beach and coastal bank that are located on MEC and adjacent KeySpan Energy Delivery New England ("KeySpan") properties. The project has been designed to eliminate the littoral transport of miscellaneous fill material that comprises the existing armoring on the MEC and KeySpan beaches to other beaches located south of the project site. Evidence shows that in the past this debris material has migrated with nearshore currents and has been transported to and deposited on adjacent beaches within Collins Cove. This project is part of remedial actions taken to address and meet the requirements for the Massachusetts Contingency Plan (MCP) (310 CMR 40.0000). The site is a Tier IB Disposal Site, assigned Release Tracking Number RTN 3-1709 by the Massachusetts Department of Environmental Protection (DEP).

(a) The properties are located along 20 Pierce Avenue and Waite Street in Salem, Massachusetts and were once the location of a manufactured gas plant. The site abuts Collins Cove to the east, Beverly Harbor to the north, and residential neighborhoods to the south and west. The project will occur on an 8.2-acre parcel owned by KeySpan and a 12.5-acre parcel owned by Massachusetts Electric Co. Miscellaneous fill material associated with the operations of the former MGP is present on the coastal beach. This miscellaneous fill material includes bricks and rubble that function as armament of the beach and bank, hardened coal tar, clinker, and cinders. This material, the hardened coal tar in particular, has been identified as a source of polycyclic aromatic hydrocarbons (PAHs) to other portions of Collins Cove because the miscellaneous fill material is susceptible to erosion, subsequent mechanical weathering into smaller particles, and the smaller particles are transported to other areas within the cove. Other portions of the beach and bank are armored with rip-rap, and a seawall armors a portion of the bank. The armored coastal bank protects utility-related structures including: an earthen containment dike that surrounds an existing liquefied natural gas (LNG) storage and distribution facility; and, electric power transmission line support tower foundations.

(b) The preferred alternative is to place a multi-layer cap that includes: placing a geotextile material over the existing beach fill materials; and, placing a riprap layer over the geotextile. This capping will restrict the transport of surface material from the beach, thereby isolating the contaminated sediment and debris from the waters of Collins Cove. The riprap layer will stabilize the beach area, protect the geotextile material from wave action, and prevent erosion by providing improved armor for the coastal beach. The riprap gradation and layer thickness will be based on analysis of stability of the riprap for the 100-year return frequency storm event. All work will be conducted at the lower end of the tide-cycle to minimize impacts to water quality.

The reinforced geotextile material will cover approximately 81,000 square feet of coastal beach. The cap will extend from the toe of the coastal beach to the top of the coastal bank. The cap will begin approximately 270 feet to the south of the Steel Tower located on the eastern edge of the property. The cap will be 100 feet wide at the southern end and will extend approximately 940 feet north along the beach. It will be approximately 110 feet

at its widest point and 60 feet in the middle at its narrowest point. The cap size will vary in width depending on the beach width. At the northern end, the cap will taper and join to meet the existing granite seawall. The capping of areas of natural beach sediment will be minimized to the extent possible.

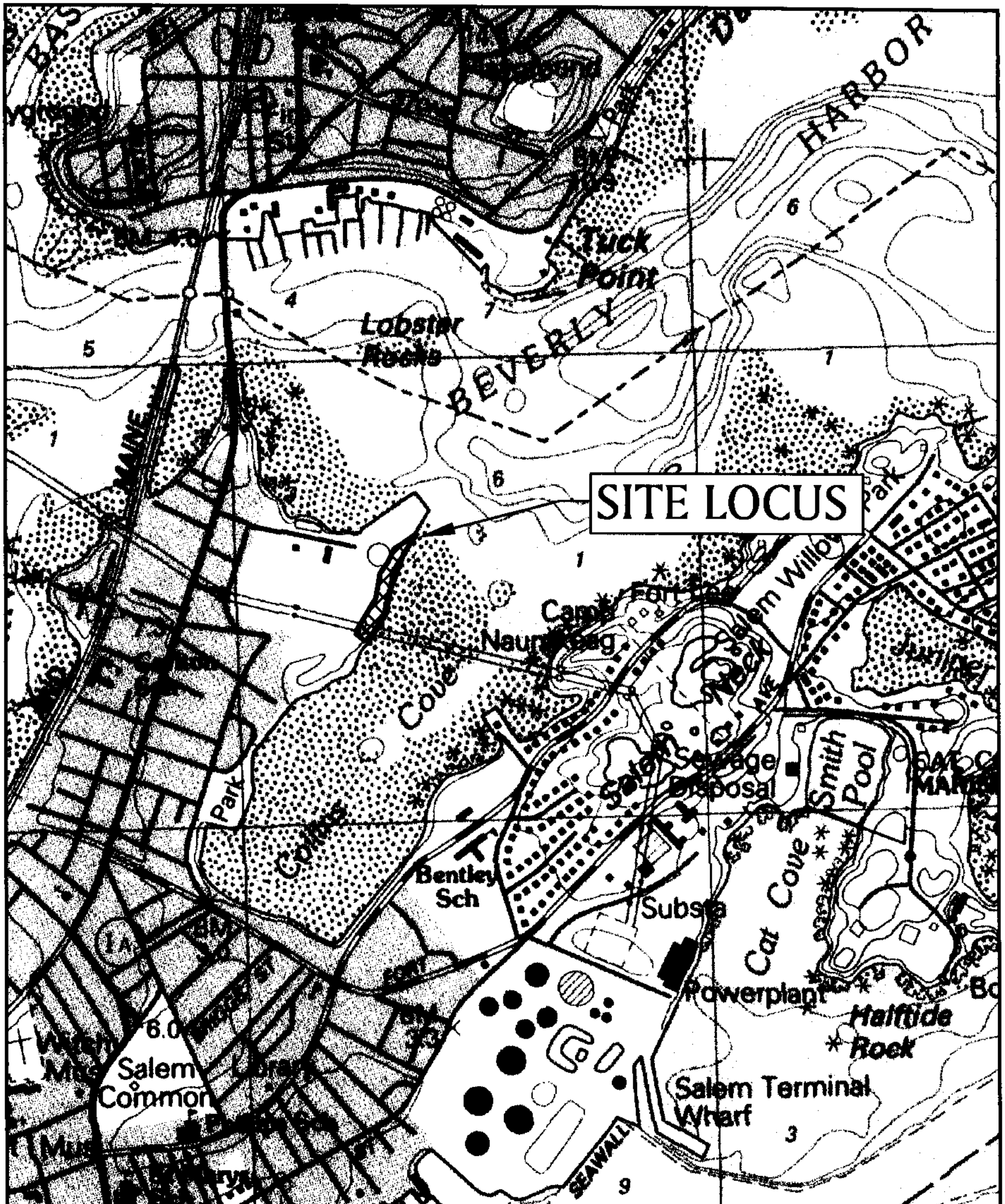
This alternative will continue to allow for beach nourishment from an offshore sediment source to pass over the armored beach to down drift sites. A barrier beach exists south of the project site due to the sediment being carried via long shore drift past the project site. The proposed stabilization expects only to affect the eroded material transport from the project site and will minimize transporting the contaminants associated with this material, reducing impacts to the down drift beaches. This alternative will stabilize and improve protected resource areas, and serve to meet the goals of the MCP.

The two other alternatives examined as part of this filing include: "no action" and dredging the miscellaneous fill material. The alternative of "no action" would perpetuate the transport of the contaminated sediment onto abutting properties and into Collins Cove. Because the "no action" alternative will not meet remediation goals under the MCP, it is not acceptable. The third alternative would be to dredge or excavate the miscellaneous fill material and remove it to an upland landfill. Dredging in this area would tend to undermine adjacent structures. Stabilization is of particular importance in areas where the armored shoreline supports the adjacent fire access roadway for the LNG facility, the seawall protecting the gas storage tank, and the foundation for the support tower for the electrical power transmission lines. The preferred alternative is expected to provide better protection for the utility structures while accomplishing the remedial objective of containing the miscellaneous fill material. A dredging alternative would also be expected to create greater disturbance to the area, increase turbidity and suspend contaminated sediment, and expose subsurface Non-Aqueous Phase Liquid (NAPL). In order to stabilize the coastline after dredging, some armament would still be required for a dredging alternative. The potential for destabilization of the above mentioned structures and the potential for increased negative environmental impacts make the dredge alternative unacceptable.

(c) The project is a mitigation project designed to address historic uses of the site that have led to the current potential for off site contamination. The capping will prevent the further spreading of sediment contaminants into the ocean habitat and to abutting properties along the shoreline. The preferred alternative includes measures designed to mitigate for the impacts to the coastal resource areas. Following the placement of the cap, riprap will be added to stabilize the cap and to protect the cap from wave action and prevent erosion. The riprap material will also contain sufficient void spaces to provide rocky intertidal habitat areas and to allow for the natural movement of passing sediment (i.e. not contaminated from the site) for the continued nourishment of down drift coastal beaches. Construction related impacts will be minimized through tide sensitive work schedules, and the temporary placement of layered sand bags on the seaward side of the work area. A haybale and silt fence barrier will be used to protect a nearby salt marsh during construction.

There are three other MCP directed projects within the same Collins Cove area. Two temporary pilot tests projects in the inter-tidal area will test alternative methods for treating NAPL in the sediments. Neither Project triggers MEPA review thresholds, as they impact smaller areas. They are described here to provide the reviewer information relative to overall combined impacts. The first project will test in-situ bioremediation, which involves the mixing of the inter-tidal flat sediment with microbial nutrients used to stimulate indigenous micro-organisms that biodegrade the existing NAPL located within the top three feet of tidal flat sediments. The second project proposes to install three temporary concrete trenches along the toe of the armored coastal beach to test the volume of NAPL that can be collected and the frequency of required maintenance that would be needed should this become the selected alternative. The test trenches will be ten feet long, three feet wide, by three feet deep (10' x3' x3') and will be oriented parallel to the shoreline. These test trenches will contain a sorbent material used to collect the NAPL present in the sediment. The trenches will be covered by a removable Triton Mattress® cap.

A landside project involving the installation of a 4.93-acre geocomposite liner cap system is in the final stages of completion. Of the capped area, 210,500 sq ft of the ground surface is paved while the remainder is covered with gravel. The landside-capping project was designed to reduce the amount of precipitation infiltrating into the subsurface and the subsequent migration of compounds of concern to coastal resource areas.



APPLICANT:
MASSACHUSETTS ELECTRIC COMPANY
25 RESEARCH DRIVE
WESTBOROUGH, MA 01582

OWNER:
BOSTON GAS COMPANY
(D/B/A KEYSPAN ENERGY DELIVERY)
52 SECOND AVENUE
WALTHAM, MASSACHUSETTS 02451

FORMER MGP PROPERTY
20 PIERCE AVENUE

USGS MAP
SALEM, MASSACHUSETTS

BSC GROUP
15 Elkins Street
Boston, Massachusetts
02127
617 896 4300

Job No.: 12883.20
Date: 03/17/05
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Sheet: 1 of 1

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