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## IMMEDIATE RESPONSE ACTION STATUS REPORT

## BARGE B120 SPILL BUZZARDS BAY, MASSACHUSETTS RTN 4-17786

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February 10, 2004



# **TABLE OF CONTENTS**

1.0 INTROI	DUCTION	1
2.0 RELEAS	SE BACKGROUND AND ENVIRONMENTAL SETTING	2
2.1 SHORI	ELINE IDENTIFICATION	2
	ELINE CLASSIFICATION	
2.3 SENSI	TIVE RECEPTORS	3
3.0 RESPO	NSE ACTIONS	3
3.1 UNOIL	ED SEGMENT EVALUATION	5
	SEGMENT EVALUATION	
3.2.1 Seg	ments With Potentially Buried Oil	7
	ments That Failed the Original IRAC Screening	
	ments Not Inspected by the IRAC Team	
3.2.4 Sal	Marshes	13
	NSE TO NEW CONDITIONS	
4.0 REMED	IATION WASTE	15
5.0 SUMMA	ARY AND CONCLUSIONS	16
TABLES		
Table 1	Shoreline Status Summary	
Table 2	Shoreline Inspection Summary	
Table 3	Reports of Oil and Response Activities: September 2003 to December	r 2003
FIGURES		
Figure 1	Oiled Area Locations	
Figure 2	Shoreline Segments	
APPENDIC	ES	
Appendix A	Shoreline Assessment Forms for Unoiled Segments	
Appendix B	Shoreline Inspection Forms for IRA Inspections	
Appendix C	GPS Coordinates of Trench Locations	
Appendix D	Call Log Reports and Shoreline Inspection Forms for Reports of Oil	
Appendix E	Remediation Waste Documentation	



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### 1.0 INTRODUCTION

GeoInsight, Inc. (GeoInsight) prepared this Immediate Response Action (IRA) Status Report on behalf of Bouchard Transportation Company, Inc. ("Bouchard" or "RP") for the release of oil into Buzzards Bay, Massachusetts. The response actions described in this report were conducted pursuant to the September 15, 2003 IRA Plan (the "IRA Plan") prepared by GeoInsight. The IRA Plan was prepared in response to a September 8, 2003 Request for IRA With Interim Deadline letter from the Massachusetts Department of Environmental Protection (MADEP). Several modifications were made to the September 15, 2003 IRA Plan in consultation with MADEP, the National Oceanic & Atmospheric Administration (NOAA), and the U.S. Coast Guard (USCG). These modifications to the IRA Plan were summarized in a September 29, 2003 Errata Sheet. This status report covers the period from September 16, 2003 until December 31, 2003. Response actions conducted after December 31, 2003 will be summarized in subsequent status reports.

The activities conducted pursuant to the IRA Plan supplement the activities conducted in accordance with the May 23, 2003 Immediate Response Action: Treatment and Completion Guidelines Plan (IRATCGP) that was developed for this incident by the Unified Command. The Unified Command was comprised of representatives from the USCG, MADEP, and the RP. Field activities conducted as part of the IRATCGP were completed as of September 3, 2003. The IRA activities bridge the transition period from the end of the IRATCGP activities and the performance of post-IRA response actions conducted under the Massachusetts Contingency Plan (MCP), 310 CMR 40.0000 and the Oil Pollution Act of 1990 (OPA 1990).



#### 2.0 RELEASE BACKGROUND AND ENVIRONMENTAL SETTING

On April 27, 2003, a release of No. 6 fuel oil was reported from Bouchard Barge #120 (B.120) into Buzzards Bay, Massachusetts. The exact area where the release occurred is unknown, but the approximate location of the oil that was initially spotted on the water surface is shown on Figure 1. Wind and current moved the oil primarily to the north, northwest, and northeast and the oil came ashore on sections of shoreline abutting Buzzards Bay in Westport, Dartmouth, New Bedford, Fairhaven, Mattapoisett, Marion, Wareham, Bourne, and Falmouth. Isolated occurrences of tar balls/patties to the south and southeast on the Elizabeth Islands and in Rhode Island to the west were also observed, although some of these occurrences were later determined not to be related to the release. Figure 1 illustrates the approximate areas in Massachusetts that were oiled as a result of the release.

### 2.1 SHORELINE IDENTIFICATION

The oiled areas of shoreline were initially divided into 15 geographical divisions to facilitate cleanup operations. The divisions extending from the Elizabeth Islands and Cape Cod east of the Cape Cod Canal were labeled with an "E" prefix, and the divisions to the West of the Cape Cod Canal were labeled with a "W" prefix. As illustrated in Figure 2, the divisions were subdivided into 149 individual shoreline segments during Shoreline Cleanup Assessment Team (SCAT) reconnaissance visits. For example, shoreline segment W1E-04 corresponds to Crescent Beach in Mattapoisett (west of the Cape Cod Canal in geographical division 1E, segment 04). Of the 149 segments, 29 were subsequently confirmed to be unoiled and are not considered further under the IRA Plan.

Table 1 includes a list of the shoreline segments, the status of the segments at the completion of the IRAC inspections, and the IRA field activities that were proposed as part of the IRA Plan.



## 2.2 SHORELINE CLASSIFICATION

Individual shoreline segments were classified based upon the shoreline composition, public use, and habitat. As described in the IRATCGP, the shoreline in the vicinity of the release area was divided into the following shoreline classifications:

<b>Shoreline Classification</b>	Shoreline Type
1A	Heavily utilized, public recreational sand beaches
1B	Less utilized, semi-public and private sand beaches
1C	Mixed sand and gravel, gravel (pebble to boulder) and rip rap groins (jetties)
1D	Rip rap seawalls, bulkheads, piers, docks, and pilings
1E	Rocky shorelines
1F	Salt marshes
2	Roseate tern habitat (Ram Island, Bird Island, and Penikese Island, in particular)
3	Piping plover habitat

#### 2.3 SENSITIVE RECEPTORS

Visual oil impacts to shoreline areas occurred primarily between the high and low tide zones, with generally minor impacts in the supratidal zone primarily associated with shoreline access and staging. People use the shoreline primarily for seasonal recreational purposes, such as swimming, fishing, or walking.

The shoreline is also a habitat for animal species, such as shorebirds, marine invertebrates, and plants. Portions of the Buzzards Bay area are nesting habitat for two sensitive bird species: the roseate tern (*Sterna dougallii*), which is listed as an endangered species under Massachusetts and Federal law, and the piping plover (*Charadrius melodus*), which is listed as a threatened species under Massachusetts and Federal law.



## 3.0 RESPONSE ACTIONS

The objectives of the IRA Plan are to address potential Imminent Hazards, if present, and to respond to time-critical conditions that necessitate immediate response actions. These objectives were developed to meet the applicable General Provisions for Immediate Response Actions listed in 310 CMR 40.0411(1), which are to assess the release, threat of release, or site conditions and, where appropriate, contain, isolate, remove or secure a release or threat of release of oil in order to:

- (a) abate, prevent or eliminate any Imminent Hazard to health, safety, public welfare or the environment; and/or
- (b) respond to any other time-critical release, threat of release and/or site conditions.

The IRA response action strategies include:

- 1. Removing potentially mobile oil (oil that has the potential to mobilize and impact other areas); and
- 2. Addressing potential Imminent Hazards to human health, public welfare, safety, and the environment, as listed in 310 CMR 40.0321.

Field assessments were conducted during this reporting period to evaluate whether IRA criteria were satisfied in segments that had not passed IRAC criteria, assess the presence of buried oil, and respond to public concerns. The assessment specifically focused on the potential for mobile oil to mobilize and exacerbate current environmental conditions if not removed immediately. An example of a condition that could warrant accelerated response actions under this IRA includes potentially buried oil that is exposed at a beach surface by storm erosion that could migrate to other areas causing new oiling of that area or oiling of unaffected environmental media in the immediate area. If potentially mobile oil that could exacerbate existing environmental conditions was discovered, the oil would be removed, as feasible, using techniques outlined in the IRA Plan.



In addition, tar balls and oil patties discovered during inspections of these areas were removed during the inspection, where feasible.

Rock surfaces in areas such as rocky shorelines, groins, jetties, etc. that may still contain "wipeable" oil as defined in the Unified Command's IRATCGP document would not be removed if the oil was not mobile and did not pose an Imminent Hazard. It is expected that natural attenuation and scouring during the fall and winter storm season would reduce or eliminate this condition and these areas will be re-inspected during post-IRA assessments.

#### 3.1 UNOILED SEGMENT EVALUATION

A total of 29 shoreline segments were considered to be unoiled, based upon the data collected by the SCAT and environmental unit field inspections. The unoiled segments are identified in Table 1; refer to Figure 2 for the locations of these segments. Inspections of these segments, with the exception of segment W2B-99 (New Bedford Harbor, Inner) were conducted by environmental unit personnel (either Kevin Malamma of RAM Environmental Engineering Services, Inc. or Chris Pfeiffer of ENTRIX) between August 12 to August 27, 2003. Field sheets completed by the environmental unit are included in Appendix A. Evidence of oiling was not encountered during these inspections and therefore these segments were considered to be unoiled and not considered to be part of the disposal site.

Segment W2B-99 was not inspected by the environmental field unit because this segment is located in New Bedford Harbor behind a hurricane barrier constructed of large boulders, with only a relatively small opening in the hurricane barrier to let ships through. SCAT inspections conducted at segment W2A-1 (which includes the hurricane barrier) on May 7 and May 8, 2003 observed that oil was not found on the hurricane barrier, indicating that oil did not pass through the hurricane barrier into the inner harbor.



Because these segments were unoiled, these segments are also not considered to be part of the disposal site, as defined in the MCP. Therefore additional response actions at these segments are not required under the MCP.



#### 3.2 OILED SEGMENT EVALUATION

Inspections of the oiled segments were conducted in accordance with the IRA Plan. A summary of the shoreline inspections is included in Table 2 and copies of the inspection forms are included in Appendix B.

## 3.2.1 Segments With Potentially Buried Oil

Based upon data from SCAT reports and discussions with MADEP, GeoInsight identified the following eight shoreline segments to be periodically inspected for the presence of potentially buried oil:

Segment Identification	Segment Name
E1-11	Scraggy Neck South
W1F-01	Brandt Beach
W1F-02	Brandt Island West
W2A-12	Rocky Point to East Cove (Fairhaven Town Beach)
W3A-02	Salter's Point West
W3A-04	Salter's Point East
W3A-05	Round Hill Beach West
W3C-04	Barney's Joy (East of Barbed Wire)

On November 24, 2003, segment W3A-06 (Round Hill Beach East) was added to the list of locations to inspect for potentially buried oil based upon concerns raised by MADEP.

As described in the September 15, 2003 IRA Plan, reconnaissance activities were scheduled to be conducted at these segments by November 2003 and will be conducted in January 2004 and April 2004. In addition to the scheduled surveys, inspections of these segments were planned in response to significant storm events with beach erosion and also in response to homeowner



complaints. Post-storm inspections were conducted on selected segments on September 23, 2003, after Hurricane Isabel, and December 10, 2003 after a nor'easter. GeoInsight has not received reports from homeowners or municipal officials about observing buried oil during this reporting period.

During each reconnaissance, the entire length of the shoreline segment was inspected by the field teams to check for visible oil on the beach surface and trenches were excavated on the beach to visually check for potentially buried oil. The only exception to this procedure was during the December 11, 2003 inspection at segment W3C-04 (Barney's Joy, East of Barbed Wire). During this field inspection, the field teams only inspected the portion of the segment between the western boundary of the segment (barbed wire fence) and Barney's Joy Point (located approximately at 41° 30.534' north latitude and 70° 58.990' west longitude), because this was the portion of the segment that was oiled and oil was not observed during two previous surveys of the eastward-facing shore (October 22, 2003 and November 16, 2003). Locations of trenches excavated prior to November 2003 were estimated based upon the distance from shoreline features. The locations of trenches excavated beginning in November 2003 were recorded using hand-held global positioning system (GPS) units. Trench locations and GPS coordinates are included in Appendix C.

During these inspections, surface or buried oil was only observed in the following instances:

• On October 22, 2003, field team personnel observed small (1/8-inch to 1/4-inch diameter) tarballs in the intertidal zone of the beach surface at segment W3C-03 (Barney's Joy, West of Barbed Wire) on the walk out to segment W3C-04. The tarballs were located within about 100 yards from the segment boundary at the barbed wire fence. The field team also observed several smaller (less than 1/8-inch diameter) tarballs in one of the excavated trenches (Trench 3), in segment W3C-04. To the extent feasible, tarballs were cleaned up by the inspection team.



- During the November 19, 2003 and December 11, 2003 inspections of segment W3C-04, field personnel observed some small (1/8-inch to 1/4-inch diameter) tarballs in the intertidal zone of segment W3C-03 (in the same area where tarballs were previously observed). However, on these dates, there were significantly fewer tarballs than previously observed during the October 22, 2003 inspection and removal efforts were deemed to be not feasible.
- During the November 5, 2003 potentially buried oil inspection, the field team encountered an area of oil and tar balls on the ground surface at Howard Beach in Mattapoisett, which is located on the edge of segment W1F-02. The amount of oil on the shore was more than the reconnaissance team could readily remove, so Fleet Environmental Services, Inc. (Fleet) was contacted to remove the exposed oil. On November 7, 2003 the Fleet cleanup crew arrived at the location and removed the exposed oil. Tarballs, oiled sediment, and rocks, were removed on this day and placed in plastic bags along with sorbent pads used by the cleanup team for proper disposal at the American Ref-Fuel (Semass) facility in West Wareham, Massachusetts. Waste disposal information is summarized in Section 4.0.
- On December 10, 2003, the inspection team noticed a petroleum odor and a petroleum sheen on the water in a small area near a groin in segment W3A-02 (Salter's Point West). The inspection team did not observe separate-phase oil on the shore and was not able to determine the source of the petroleum odor and sheen. However, it is probable that this observation was not related to the B.120 release as the released B.120 oil would not likely produce a significant sheen or odor at this time (after nearly 8 months of weathering).

### 3.2.2 Segments That Failed the Original IRAC Screening

GeoInsight conducted inspections of segments that failed the original IRAC screening where the IRAC team indicated that further treatment was considered to be feasible. As described in the September 15, 2003 IRA Plan, segments that failed the IRAC inspection where treatment was



not feasible were not specifically evaluated as part of this investigation, but will be evaluated as part of post-IRA response actions.

The following segments failed IRAC screening with further treatment considered feasible:

Segment Identification	Segment Name
E1-11	Scraggy Neck South
E1-13	Nye's Neck
W1C-01	Butler's Point
W1E-03	Strawberry Point West
W2B-05	Fort Taber

In addition to the segments listed above, segment W1F-06 (Mattapoisett Neck South), which failed IRAC inspection with further treatment not considered feasible, was also inspected by the reconnaissance teams in response to agency concern.

Reconnaissance teams inspected these segments between November 5, 2003 and December 4, 2003 and evaluated these segments relative to the IRA Plan criteria. Copies of the field inspection sheets are included in Appendix B. As described in the field inspection sheets, some residual oil, generally adhered to rock surfaces, was encountered at each of these segments. The reconnaissance teams conducted limited cleanup of tarballs and oil on rocks where feasible. However, the residual oil at these locations did not present an Imminent Hazard and was not mobile. Based upon the criteria established in the September 15, 2003 IRA Plan, IRA remedial measures were not necessary. Note that segment E1-11 (Scraggy Neck South) is one of the segments listed for potentially buried oil inspections (as described above in Section 3.2.1), and the field teams are scheduled to inspect this segment in January 2004 and April 2004, and also after significant storm events.

It is important to note that these segments will also be evaluated as part of the post-IRA response actions and additional remedial measures may be conducted after the IRA activities are complete.



## 3.2.3 Segments Not Inspected by the IRAC Team

As previously identified, some shoreline segments were not originally inspected by the IRAC teams prior to September 3, 2003. Most of these segments were not inspected because the initial oiling was light or very light, and there had been no reports of continued oiling concerns. Three of the segments were not inspected by IRAC because cleanup efforts were continuing (W1C-02, W3B-02, and W3C-04). The following segments were not inspected by the IRAC teams:

Segment Identification	Segment Name
E2-01	Falmouth Cliffs
E2-02	West Falmouth Harbor
E3-01	Penikese Island
E3-02	Cuttyhunk Island
E3-03	Nashaweena Island
E3-04	Pasque Island
E3-05	Naushon Island
E3-06	Uncatena Island
E3-07	Weepecket Islands
W1C-00	Bird Island
W1C-02	Planting Island Causeway
W1C-13	Little Ram Island
W3B-02	Mishaum Point West
W3C-04	Barney's Joy (East of Barbed Wire)

With the exception of segments E3-03 and E3-04, GeoInsight conducted reconnaissance activities at these segments between October 7, 2003 and November 20, 2003 to evaluate the degree of oiling relative to the IRA criteria. Inspection of Naushon Island (E3-05) was also conducted in response to a report of oil.



The Naushon Island inspection conducted on October 7, 2003 focused on evaluating the extent of oil along the shoreline, but limited cleanup of tarballs and tar patties was conducted in the Kettle Cove area and on Uncatena Island, and along the northern portion of Naushon Island. On the remainder of the northwestern side of the island where cleanup was determined to be not feasible at that time, the field teams observed a total of less than 50 tar patties generally ranging in size from 4 inches to 6 inches in diameter. The field teams also observed significant amounts of old petroleum payement not related to the B120 release that, based on observations of the weathered character of the oil and discussions with Bruce Bagley (Naushon Island caretaker) and MADEP representatives, is believed to be old No. 6 fuel oil derived from the *Bermuda Star* accident in 1990. The field inspection teams concluded that the residual oil and wrack patties from the B120 release on Naushon Island was not mobile and did not present an Imminent Hazard, and, therefore, this segment met the IRA Plan cleanup criteria. However, even though this segment met the IRA Plan cleanup criteria, it was decided to arrange for a cleanup team to visit the island and remove the remaining tar patties. On October 21, 2003 Fleet and a field team visited the island and removed tar patties and residual oil associated with the B.120 release for subsequent proper disposal.

Based upon the observations of tar patties during the Naushon Island inspection, field teams inspecting the other Elizabeth Islands were accompanied by a Fleet cleanup crew which removed tarballs and tar patties as encountered. Reconnaissance and cleanup activities are described in the Shoreline Inspection Forms attached in Appendix B.

With regard to E3-03 and E3-04 (Nashaweena and Pasque Islands, respectively), GeoInsight initially contacted the trustees of the islands to schedule field inspections in October 2003, but the trustees denied GeoInsight access because, in their opinion, these islands were not significantly oiled. In addition, the trustees also were concerned about the safety of the field crews landing on the island because the islands do not have established landing areas or docks. Because access to these islands was initially denied, these islands were not inspected as part of the October 2003 Elizabeth Island inspections. After further discussions with the island trustees and with MADEP, GeoInsight subsequently obtained permission to access to these islands in



January 2004 and inspections are scheduled for February 2004, weather-permitting. Inspection information for these islands will be summarized in the next IRA status report.

Inspections of segments E2-01, E2-02, W1C-00, W1C-02, W1C-13, W3B-02, and W3C-04 indicated that these segments met the IRA criteria and no further IRA cleanup activities are required. Copies of the field inspection logs for these segments are included in Appendix B. Note that segment W3C-04 is one of the segments that is periodically monitored for potentially buried oil and that additional inspections will be conducted at this segment.

#### 3.2.4 Salt Marshes

The following segments were identified as having salt marshes that were not inspected during the IRAC process:

Segment Identification	Segment Name
W1E-03	Strawberry Point West
W1F-04	Brandt Island Cove
W2A-19	Shaw Cove
W3B-01	Slocum's River

As part of the IRA process, field surveys were conducted in the marsh sections of these segments between November 5, 2003 and November 18, 2003. Oil was not encountered in the marsh sections in segments W2A-19 pr W3B-01. The field teams removed wrack patties encountered in the marshes at segments W1E-03 and W1F-04.

Based upon the observations of the field teams, residual oil present in these marsh areas was not mobile and did not present an Imminent Hazard and, therefore, these segments met the IRA Plan criteria and additional cleanup measures were determined not to be necessary.



### 3.3 RESPONSE TO NEW CONDITIONS

After the closure of the incident command post in September 3, 2003, callers were directed to GeoInsight for reports of oil potentially associated with the B.120 spill. Personnel from GeoInsight and a representative from Gallagher Marine Services responded to reports of oil. A summary of the phone calls and subsequent responses is included in Table 3, and the phone logs and field inspection forms are included in Appendix D.

Many of the reports of oil were, upon inspection, black algae or other marine growth that did not contain oil and were not related to the B.120 release. At locations where oil potentially from the B.120 release was encountered, GeoInsight conducted limited cleanup actions where feasible. Cleanup actions were conducted by the inspection team and consisted of removing isolated tarballs or wrack patties, wiping tacky oil from rocks using rags or other sorbent material, and removing small rocks with oil that could not be effectively wiped or cleaned. Refer to Table 2 for the segments where such cleanup activities were conducted. Remediation waste generated during these activities was placed in plastic bags or 5-gallon buckets and composited with other waste material that was properly disposed by Fleet. Refer to Section 4.0 for a summary of the waste material disposal information.



## 4.0 REMEDIATION WASTE

Remediation waste generated during IRA cleanup activities were transported by Fleet to the American Ref-Fuel (SEMASS) facility in Rochester/West Wareham, Massachusetts for disposal in accordance with applicable requirements. Documentation of remediation waste disposal is included in Appendix E. A total of 1.17 tons of remediation waste were transported to the SEMASS facility for disposal during the reporting period.



### 5.0 SUMMARY AND CONCLUSIONS

Reconnaissance and cleanup activities were completed during this IRA reporting period in accordance with the response actions described in the IRA Plan and September 29, 2003 Errata Sheet. Shoreline inspections indicated that mobile oil or imminent hazards were not present and that the inspected segments met the IRA Plan criteria and additional cleanup activities were not required. Continued evaluations for potentially buried oil are being conducted at nine segments at present and will continue to be conducted in April 2004 and also after significant storm events. GeoInsight will also continue responding to reports of new conditions. The next IRA status report will be submitted to MADEP in August 2004.



Segment	Segment Name	IRAC Status (as of September 3, 2003)	MCP IRA Status
E1-01	Grey Gables-Gilder Road Beach	Pass	Not Part of MCP IRA Evaluation
E1-02	Mashnee/Hog Islands North	Pass	Not Part of MCP IRA Evaluation
E1-03	Mashnee Island	Pass	Not Part of MCP IRA Evaluation
E1-04	Mashnee/Hog Islands South	Unoiled	Inspected 8/12/03
E1-05	Monument Beach	Unoiled	Inspected 8/12/03
E1-06	Phinney's Harbor South	Unoiled	Inspected 8/12/03 - 8/14/03
E1-07	Wings Neck	Pass	Not Part of MCP IRA Evaluation
E1-08	Barlow's Landing	Pass	Not Part of MCP IRA Evaluation
E1-09	Patuisset	Pass	Not Part of MCP IRA Evaluation
E1-10	Scraggy Neck North	Pass	Not Part of MCP IRA Evaluation
E1-11	Scraggy Neck South	Fail - FTF	IRA Inspection Ongoing (Buried Oil Check)
E1-12	Megansett Beach	Pass	Not Part of MCP IRA Evaluation
E1-13	Nye's Neck	Fail - FTF	Pass IRA 11/11/03
E1-14	New Silver Beach (Wild Harbor)	Pass	Not Part of MCP IRA Evaluation
E1-15	Crow Point	Pass	Not Part of MCP IRA Evaluation
E1-16	Old Silver Beach	Unoiled	Insepcted 8/14/03
E2-01	Falmouth Cliffs	Not Inspected	Pass IRA 11/3/03
E2-02	West Falmouth Harbor	Not Inspected	Pass IRA 11/3/03
E2-03	Chappaquoit Beach	Unoiled	Inspected 8/25/03
E2-04	Black Beach	Unoiled	Inspected 8/25/03
E2-05	Saconesset Beach	Pass	Not Part of MCP IRA Evaluation
E2-06	Hamlin's Point Beach	Pass	Not Part of MCP IRA Evaluation
E2-07	Wood Neck Beach	Pass	Not Part of MCP IRA Evaluation
E2-08	Racing Beach	Pass	Not Part of MCP IRA Evaluation
E2-09	Quissett Harbor	Pass	Not Part of MCP IRA Evaluation
E2-10	Long Neck to Gansett Point	Pass	Not Part of MCP IRA Evaluation
E2-11	Penzance Island	Pass	Not Part of MCP IRA Evaluation
E3-01	Penikese Island	Not Inspected	Pass IRA 10/20/03
E3-02	Cuttyhunk Island	Not Inspected	Pass IRA 10/20/03
E3-03	Nashaweena Island	Not Inspected	Access Denied
E3-04	Pasque Island	Not Inspected	Access Denied
E3-05	Naushon Island	Not Inspected	Pass IRA 10/7/03
E3-06	Uncatena Island	Not Inspected	Pass IRA 10/7/03
E3-07	Weepecket Islands	Not Inspected	Pass IRA 10/22/03
W1B-01	Taylor Point Canal	Unoiled	Inspected 8/24/03
W1B-02	Taylor Point North	Unoiled	Inspected 8/24/03
W1B-03	Butler Cove	Unoiled	Inspected 8/23/03
W1B-04	Jacob's Neck	Unoiled	Inspected 8/23/03
W1B-05	Pleasant Harbor	Unoiled	Inspected 8/23/03
W1B-06	Broad Cove (+seg 6.5)	Unoiled	Inspected 8/23/03
W1B-07	Stony Point Dike	Pass	Not Part of MCP IRA Evaluation
W1B-07	Temples Knob	Pass	Not Part of MCP IRA Evaluation
W1B-08	Little Harbor Beach	Unoiled	Inspected 8/22/03
W1B-09	Little Harbor	Unoiled	Inspected 8/22/03
** 113-11/	121001	Ononcu	1115pected 6/22/03

Segment	Segment Name	IRAC Status (as of September 3, 2003)	MCP IRA Status
W1B-12	Warren Point (MA)	Pass	Not Part of MCP IRA Evaluation
W1B-13	Indian Neck	Pass	Not Part of MCP IRA Evaluation
W1B-14	Long Beach	Pass	Not Part of MCP IRA Evaluation
W1B-15	Wareham River East Shore	Pass	Not Part of MCP IRA Evaluation
W1B-16	Minot Forest Beach	Pass	Not Part of MCP IRA Evaluation
W1B-17	Wareham Neck North	Pass	Not Part of MCP IRA Evaluation
W1B-18	Pinehurst Beach	Unoiled	Inspected 8/26/03
W1B-19	Broad Marsh River East	Unoiled	Inspected 8/26/03
W1B-20	Broad Marsh River West	Unoiled	Inspected 8/26/03
W1B-21	Swift's Neck Beach	Pass	Not Part of MCP IRA Evaluation
W1B-22	Swift's Beach	Pass	Not Part of MCP IRA Evaluation
W1B-23	Mark's Cove	Pass	Not Part of MCP IRA Evaluation
W1B-24	Nobska Beach	Pass	Not Part of MCP IRA Evaluation
W1B-25	Cromeset Beach	Unoiled	Inspected 8/27/03
W1B-26	Briarwood Beach	Unoiled	Inspected 8/25/03
W1B-27	Rose Point	Unoiled	Inspected 8/25/03
W1B-28	Weweantic River West Shore	Pass	Not Part of MCP IRA Evaluation
W1B-29	Delano Road North	Unoiled	Inspected 8/25/03
W1B-30	Delano Road South	Unoiled	Inspected 8/15/03
W1B-31	Great Hill Point	Pass	Not Part of MCP IRA Evaluation
W1B-32	Piney Point Beach	Pass	Not Part of MCP IRA Evaluation
W1B-33	Piney Point South	Pass	Not Part of MCP IRA Evaluation
W1C-00	Bird Island	Not Inspected	Pass IRA 11/7/03
W1C-01	Butler's Point	Fail - FTF	Pass IRA 11/19/03
W1C-02	Planting Island Causeway	Not Inspected	Pass IRA 11/19/03
W1C-03	Planting Island Cove	Unoiled	Inspected 8/22/03
W1C-04	Blankinship Cove	Pass	Not Part of MCP IRA Evaluation
W1C-05	Sippican Harbor East	Pass	Not Part of MCP IRA Evaluation
W1C-06	Hammet's Cove Beach	Unoiled	Inspected 8/22/03
W1C-07	Little Neck	Unoiled	Inspected 8/22/03
W1C-08	Tabor Academy Beach	Unoiled	Inspected 8/22/03
W1C-09	Marion Town Beach	Unoiled	Inspected 8/22/03
W1C-10	Silvershell Beach	Fail - NFA	Not Part of MCP IRA Evaluation
W1C-11	Sippican Harbor West	Pass	Not Part of MCP IRA Evaluation
W1C-12	Converse Point East	Fail - NFA	Not Part of MCP IRA Evaluation
W1C-13	Little Ram Island	Not Inspected	Pass IRA 11/7/03
W1D-01	Aucoot Cove	Pass	Not Part of MCP IRA Evaluation
W1D-02	Harbor Beach	Pass	Not Part of MCP IRA Evaluation
W1D-03	Holly Woods / Hiller Cove	Pass	Not Part of MCP IRA Evaluation
W1D-04	Holly Woods / Peases Point	Pass	Not Part of MCP IRA Evaluation
W1D-05	Point Connett Beach	Pass	Not Part of MCP IRA Evaluation
W1E-01	Nye Cove / Strawberry Cove	Pass	Not Part of MCP IRA Evaluation
W1E-02	Strawberry Cove	Fail - NFA	Not Part of MCP IRA Evaluation
W1E-03	Strawberry Point West	Fail - FTF	Pass IRA 11/5/03
W1E-04	Crescent Beach	Pass	Not Part of MCP IRA Evaluation

Segment	Segment Name	IRAC Status (as of September 3, 2003)	MCP IRA Status
W1E-05	Mattapoisett Harbor East	Pass	Not Part of MCP IRA Evaluation
W1E-06	Mattapoisett Town Beach	Pass	Not Part of MCP IRA Evaluation
W1F-01	Brandt Beach	Pass	IRA Inspection Ongoing (Buried Oil Check)
W1F-02	Brandt Island West	Fail - NFA	IRA Inspection Ongoing (Buried Oil Check)
W1F-03	Brandt Island East	Fail - NFA	Not Part of MCP IRA Evaluation
W1F-04	Brandt Island Cove	Pass	Pass IRA 11/5/03 (Marsh)
W1F-05	Mattapoisett Neck West	Pass	Not Part of MCP IRA Evaluation
W1F-06	Mattapoisett Neck South	Fail - NFA	Pass IRA 12/3/03
W1F-07	Mattapoisett Shores	Pass	Not Part of MCP IRA Evaluation
W1F-08	Mattapoisett Neck East	Pass	Not Part of MCP IRA Evaluation
W1F-09	Mattapoisett Harbor North	Pass	Not Part of MCP IRA Evaluation
W1G-00	Ram Island	Pass	Not Part of MCP IRA Evaluation
W2A-01	Fort Phoenix	Pass	Not Part of MCP IRA Evaluation
W2A-02	Harbor View	Pass	Not Part of MCP IRA Evaluation
W2A-03	Pope's Beach	Pass	Not Part of MCP IRA Evaluation
W2A-04	Manhattan Ave	Pass	Not Part of MCP IRA Evaluation
W2A-05	Sunset Beach	Fail - NFA	Not Part of MCP IRA Evaluation
W2A-06	Silver Shell Beach	Fail - NFA	Not Part of MCP IRA Evaluation
W2A-07	Sconticut Neck West	Pass	Not Part of MCP IRA Evaluation
W2A-08	Wilbur Point	Pass	Not Part of MCP IRA Evaluation
W2A-09	Sconticut Neck East	Pass	Not Part of MCP IRA Evaluation
W2A-10	Long Island and Causeway South	Fail - NFA	Not Part of MCP IRA Evaluation
W2A-11	West Island West	Pass	Not Part of MCP IRA Evaluation
W2A-12	Rocky Point to East Cove	Pass	IRA Inspection Ongoing (Buried Oil Check)
W2A-13	East Cove	Pass	Not Part of MCP IRA Evaluation
W2A-14	Pine Creek to North Point	Pass	Not Part of MCP IRA Evaluation
W2A-15	West Island North	Pass	Not Part of MCP IRA Evaluation
W2A-16	Long Island and Causeway North	Pass	Not Part of MCP IRA Evaluation
W2A-17	Sconticut Neck Northeast (Marsh)	Pass	Not Part of MCP IRA Evaluation
W2A-18	Little Bay (Marsh)	Pass	Not Part of MCP IRA Evaluation
W2A-19	Shaw Cove	Pass	Pass IRA 11/10/03 (Marsh)
W2B-01	Round Hill to Barekneed Rocks	Pass	Not Part of MCP IRA Evaluation
W2B-02	Padanaram Harbor	Pass	Not Part of MCP IRA Evaluation
W2B-03	Clarke's Cove West	Pass	Not Part of MCP IRA Evaluation
W2B-04	Clarke's Cove East	Pass	Not Part of MCP IRA Evaluation
W2B-05	Fort Taber	Fail - FTF	Pass IRA 12/4/03
W2B-06	Clarke's Point East	Pass	Not Part of MCP IRA Evaluation
W2B-99	New Bedford Harbor (inner)	Unoiled	Not Part of MCP IRA Evaluation
W3A-01	Mishaum Point East	Pass	Not Part of MCP IRA Evaluation
W3A-02	Salters Point West	Pass	IRA Inspection Ongoing (Buried Oil Check)
W3A-03	Pier Beach (Salter's Point)	Pass	Not Part of MCP IRA Evaluation
W3A-04	Salters Point East	Pass	IRA Inspection Ongoing (Buried Oil Check)
W3A-05	Round Hill Beach West	Pass	IRA Inspection Ongoing (Buried Oil Check)
W3A-06	Round Hill Beach East	Fail - NFA	Not Part of MCP IRA Evaluation
W3B-01	Slocum's River	Pass	Not Part of MCP IRA Evaluation

Segment	Segment Name	IRAC Status (as of September 3, 2003)	MCP IRA Status
W3B-02	Mishaum Point West	Not Inspected	Pass IRA 11/20/03
W3C-01	East Beach (Westport)	Pass	Not Part of MCP IRA Evaluation
W3C-02	Little Beach	Pass	Not Part of MCP IRA Evaluation
W3C-03	Barney's Joy (W of barbed)	Pass	Not Part of MCP IRA Evaluation
W3C-04	Barney's Joy (E of barbed)	Not Inspected	IRA Inspection Ongoing (Buried Oil Check)
W3C-05	Demarest Lloyd State Park Beach	Pass	Not Part of MCP IRA Evaluation
W3C-06	Demarest Lloyd State Park Marsh	Pass	Not Part of MCP IRA Evaluation
W3D-01	Quicksand Point	Pass	Not Part of MCP IRA Evaluation
W3D-02	Cockeast Pond Beach	Pass	Not Part of MCP IRA Evaluation
W3D-03	Elephant Rock Beach	Pass	Not Part of MCP IRA Evaluation
W3D-04	Horseneck Beach West	Pass	Not Part of MCP IRA Evaluation
W3D-05	Horseneck Beach East	Pass	Not Part of MCP IRA Evaluation
W3D-06	Gooseberry Neck East	Pass	Not Part of MCP IRA Evaluation
W3D-07	Gooseberry Neck West	Pass	Not Part of MCP IRA Evaluation

Notes:

Fail - NFA Failed IRAC, Further Action Not Feasible Fail - FTF Failed IRAC, Further Treatment Feasible

Inspection Date	Segment Number	Purpose	Results Summary	IRA Criteria Met?
9/23/2003	W3A-05	Potential buried oil check	Oil not encountered.	Yes (continued checks for buried oil)
9/23/2003	W2A-12	Potential buried oil check	Oil not encountered.	Yes (continued checks for buried oil)
10/7/2003	E3-05	Shoreline inspection (not IRAC inspected)	Tarballs and tar patties encountered, cleaned two areas (remainder of shoreline cleaned on 10/21/03)	Yes
10/7/2003	E3-06	Shoreline inspection (not IRAC inspected)	Few tarballs and tar patties encountered. Cleaned by field team.	Yes
10/20/2003	E3-01	Shoreline inspection (not IRAC inspected)	Eight tar patties observed and removed.	Yes
10/20/2003	E3-02	Shoreline inspection (not IRAC inspected)	Dried splatter at Copicut Neck and some tar patties observed.  Cleaned by field team.	Yes
10/21/2003	E3-05	Continue cleanup activities	Cleaned remaining oil observed on 10/7/03	Yes
10/22/2003	E3-05	Continue cleanup activities	Cleaned remaining oil observed on 10/7/03	Yes
10/22/2003	E3-07	Shoreline inspection (not IRAC inspected)	Observed and removed approximately 30 tar patties.	Yes
10/22/2003	W3C-03	Shoreline inspection (en route to W3C-04)	Observed very small (up to 1/4-inch diameter) tarballs in lower intertidal zone near eastern boundary of segment. Removed where feasible.	Yes
10/22/2003	W3C-04	Potential buried oil check	Small (<1/8-inch diameter) tarballs observed in Trench 3).	Yes (continued checks for buried oil)
11/3/2003	E2-01	Shoreline inspection (not IRAC inspected)	B.120 oil not observed. Obsessived and collected sample from deposit of old oil (possibly from 1990 Bermuda Star accident).	Yes
11/3/2003	E2-02	Shoreline inspection (not IRAC inspected)	Observed and removed several small tar patties.	Yes
11/4/2003	W2A-12	Potential buried oil check	Oil not encountered.	Yes (continued checks for buried oil)
11/4/2003	W2A-08	Shoreline inspection	Dry splatter and stain - no wipeable oil.	Yes
11/4/2003	W2A-10	Shoreline inspection	Pavement at marsh perimeter. Hardened splatter observed on rocks at point.	Yes
11/5/2003	W1E-03	Marsh inspection	Observed and removed tar patties. Non-mobile oil present on rocks.	Yes
11/5/2003	W1F-01	Potential buried oil check	Observed minor splatter.	Yes
11/5/2003	W1F-04	Marsh inspection	Observed minor splatter.	Yes (continued checks for buried oil)
11/5/2003	W1F-02	Potential buried oil check	Observed oil patties at channel near Howard Beach. Cleaned on 11/7/03.	Cleanup required (completed 11/7/03)

Inspection Date	Segment Number	Purpose	Results Summary	IRA Criteria Met?
11/6/2003	W3A-02	Potential buried oil check	Oil not encountered.	Yes (continued checks for buried oil)
11/6/2003	W3A-04	Potential buried oil check	Oil not encountered in trenches. Trace splatter on rocks.	Yes (continued checks for buried oil)
11/6/2003	W3A-05	Potential buried oil check	Oil not encountered.	Yes (continued checks for buried oil)
11/7/2003	W1F-01	Cleanup activities	Clean up material observed on 11/5/03 (listed as W1F-02 above).	Yes
11/7/2003	W1C-13	Shoreline inspection (not IRAC inspected)	Oil not encountered on Little Island, oil splatter and tar patties observed on Ram Island cleaned by team.	Yes
11/7/2003	W1C-00	Shoreline inspection (not IRAC inspected)	One tar patty observed and removed.	Yes
11/10/2003	W1F-01	Continue cleanup activities	Continued cleanup of oil observed on 11/5/03.	Yes (continued checks for buried oil)
11/10/2003	W2A-19	Marsh inspection	Oil not encountered.	Yes
11/11/2003	E1-13	Shoreline inspection (failed IRAC with further treatment feasible)	Trace dried splatter, observed and removed 3 tar balls.	Yes
11/11/2003	E1-11	Potential buried oil check	Observed hard dried splatter suspected to be from 1990 Bermuda Star accident and not related to B.120 release. Oil not observed in trenches.	Yes (continued checks for buried oil)
11/18/2003	W3B-01	Marsh inspection	Oil stains on rocks.	Yes
11/19/2003	W1C-01	Shoreline inspection (failed IRAC with further treatment feasible)	Trace dried splatter, dried to stain.	Yes
11/19/2003	W1C-02	Shoreline inspection (not IRAC inspected)	Splatter scoured to stain, small amount of wipeable oil cleaned, immobile oil present between and under large boulders.	Yes
11/19/2003	W3C-03	Shoreline inspection (en route to W3C-04)	Observed small (1/8-inch diamter tarballs near eastern edge of segment)	Yes
11/19/2003	W3C-04	Potential buried oil check	Oil not encountered in trenches.	Yes (continued checks for buried oil)
11/20/2003	W3B-02	Shoreline inspection (not IRAC inspected)	Trace splatter.	Yes
12/3/2003	W1F-06	Shoreline inspection (agency concern)	Trace splatter.	Yes
12/4/2003	W3A-06	Potential buried oil check	Trace splatter on rocks. Oil not encountered in trenches.	Yes (continued checks for buried oil)
12/4/2003	W2B-05	Shoreline inspection (failed IRAC with further treatment feasible)	Trace splatter. Oil under rocks near western end of segment. Not mobile.	Yes

Inspection Date	Segment Number	Purpose	Results Summary	IRA Criteria Met?
12/10/2003	W3A-02	Potential buried oil check	Petroleum odor and sheen on water near groin. Seperate-phase oil not observed.	Yes (continued checks for buried oil)
12/10/2003	W3A-04	Potential buried oil check	Oil not observed.	Yes (continued checks for buried oil)
12/10/2003	W3A-05	Potential buried oil check	Oil not observed	Yes (continued checks for buried oil)
12/10/2003	W3A-06	Potential buried oil check	Observed and removed two tar balls.	Yes (continued checks for buried oil)
12/11/2003	W3C-03	Shoreline inspection (en route to W3C-04)	Observed small (1/8-inch diamter tarballs near eastern edge of segment)	Yes
12/11/2003	W3C-03	Potential buried oil check	Oil not encountered in trenches.	Yes (continued checks for buried oil)

## TABLE 3

## Reports of Oil and Response Activities: September 2003 to December 2003 Bouchards B120 Oil Spill Buzzards Bay, Massachusetts

Date Call Received	Date of Response	Location of Concern	Shoreline Name	Nearest Segment ID	Comments/ Observations
9/4/2003	9/5/2003	22 Alder Street, Fairhaven	West Island West, Fairhaven	W2A-11	Oil coating on rocks/ smears at touch
9/11/2003	9/11/2003	Block Island, east side	Block Island	N/A	Crescent Beach: 163 tarballs removed, avg 1"x1" Mansion Beach: 185 tarballs removed, avg 1"x1" Cow Cove: 6 tarballs removed, avg 1"x2"
9/18/2003	9/19/2003	28 Alder Street, West Island, Fairhaven	West Island West, Fairhaven	W2A-11	Splatter on seawall in interstial places, wiped and removed where feasible/ algae also observed
9/19/2003	9/19/2003	East side of West Island, Fairhaven	East Cove	W2A-13	Minor splatter on rocks wiped and removed/ container of tarballs picked up by citizen removed
9/22/2003	9/22/2003	69-73 Nakata Street, Fairhaven	Sconticut Neck East	W2A-09	Black algae on rocks/ no oil observed
9/23/2003	9/23/2003	69-73 Nakata Street, Fairhaven	Sconticut Neck East	W2A-09	Black algae on seawall/ less than trace oil splatter scoured to stain observed on seawall
9/23/2003	9/23/2003	Seawall in front of 14 Howard Beach	Brandt Beach	W1F-01	Black algae on seawall/ less than trace oil splatter scoured to stain observed on seawall
9/27/2003	9/26/2003	Round Hill/Town Beach: seaplane ramp, rocks, pitons	Round Hill Beach East	W3A-06	Seaplane ramp: algae observed/ no oil observed Rocks: trace splatter scoured to stain Algae staining/ no oil observed Piton:
9/29/2003	9/29/2003	4 Ocean View Avenue, Mattapoisett	Brandt Island East	W1F-03	Pavement and oil observed on rocks, wiped and removed/ suspect buried oil/ black algae observed
9/29/2003	9/29/2003	69-73 Nakata Street, Fairhaven	Sconticut Neck East	W2A-09	Black algae on rocks/ no oil observed (same caller as 9/22/03)
10/7/2003	10/1/7093	Timmy Point	Uncatena Island, Newport	E3-06	Trace splatter scoured to stain/ few oil wrack patties removed
10/7/2003	NA-segment recon	Naushon Island/ response to Coalition	Naushon Island	E3-05	Trace oil observed/ oil wrack patties and tar ball, avg ~2"x4" removed, sporadically found, fewer than ~50 encountered
10/20/2003	10/19/2003	Fairhaven/ east of Crow Island inside New Bedford Harbor	New Bedford Harbor (inner)	W2B-99	Sheen reported to Coast Guard/no source determined/outside of oiled area
10/20/2003	NA-segment recon	Cuttyhunk Island	Cuttyhunk Island	E3-02	Trace splatter scoured to stain at Copicut Neck
10/20/2003	NA-segment recon	Penikese Island	Penikese Island	E3-01	Trace splatter scoured to stain/eight oil wrack patties removed
10/21/2003	NA-segment recon	Kettle Cove to West Beach	Naushon	E3-05	Oil wrack patties removed west of Crescent Beach, four 5-gallon buckets full
10/22/2004	NA-segment recon	Naushon Island/ clean up of inspected area	Naushon	E3-05	Removed two 5-gallon buckets of oil wrack patties
10/28/2003	10/28/2003	44 Ocean Drive, Mattapoisett	Mattapoisett Neck South	W1F-06	Oil splatter west part of rock wall, mostly scoured to stain/algae also present
10/30/2003	10/29/2003	Mattapoisett Boat Yard, Mattapoisett	Mattapoisett Harbor East	W1E-05	Isolated 3" daimeter sheen circles around wrack/ removed one quarter-size tar ball
10/30/2003	10/30/2003	27 Pico Beach Road, Mattapoisett	Cresent Beack, Mattapoisett	W1E-04	Removed 6 ~2"X3" tar balls, one 4"x6"x2"
11/4/2003	11/3/2003	188 Balsalm Street, Fairhaven	West Island North	W2A-15	Algae observed/ no oil observed
11/4/2003	11/4/2003	34 Reservation Avenue, Fairhaven	Sunset Beach	W2A-05	Black eel grass observed/ no oil observed
11/10/2003	11/5/2003	Martha's Vineyard	Martha's Vineyard	NA	No related oil observed
11/10/2003	11/5/2003	Lobsterville Beach and Gay Head Cliffs	Martha's Vineyard	NA	Oil not observed
11/18/2003	11/6/2003	Allen's Pond, Dartmouth	Horseneck Beach, Dartmouth	W3D-04	Reported 100' boom not found
11/19/2003	11/19/2003	State Park, West Island, Fairhaven	Pine Creek to North Point, Fairhaven	W2A-14	Trace splatter observed/ removed where feasible
12/3/2003	12/3/2003	126 Brandt Island Road	Brandt Island East	W1F-03	Beach profile concern/ oil not observed



