

9000 AREA PLANNING DOCUMENTATION

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9100 - AREA COMMITTEE CHARTER & MEMBERSHIP
(Refer to Section 1300)

9200 - PLAN REVIEW & EXERCISE PROCESS
(Refer to Section 1700-1800)

9300 - RISK ASSESSMENT AND PLANNING ASSUMPTIONS

9310 Navigational Hazards

There are many coastal and inland navigational hazards to consider when planning for an oil spill. Each is unique and the dynamic conditions of tide, current and weather can make them all the more dangerous.

Coastal hazards include the approach to San Francisco Bay. All vessels must pass under the Golden Gate Bridge, which is marked by two headlands, Point Bonita on the north and Point Lobos on the south. Outside the span of the bridge the distance between the two points is approximately 2 miles.

The San Francisco Bar has been created by the sediment from rivers entering San Francisco Bay. It is semicircular in shape with depths less than 36 feet over much of the area. The shallowest portion follows a curve of radius approximately 7 miles from the Golden Gate Bridge. When large swells from offshore storms encounter the shallow water, they make the bar and main ship channel extremely dangerous. At mean low water, the main ship channel entering San Francisco Bay has a project depth of 55 feet. It has been dredged through the bar from the San Francisco Approach Lighted Horn Buoy.

Point Reyes is approximately 25 miles northwest of Point Bonita and is marked by Point Reyes Light (265 feet above the water). It is also approximately 1.7 miles from the northern outbound traffic lane used by vessels leaving the traffic separation scheme (TSS). Rocks extend offshore of the point, but depths do increase rapidly, with the 30-fathom line being less than a mile offshore. Point Reyes is part of a National Marine Sanctuary.

Together with Point Reyes, the Farallon Islands are also part of a National Marine Sanctuary. The islands are 23 miles west of the San Francisco Bay entrance, and Southeast Farallon Island is nearly 15 miles from the San Francisco Approach Lighted Horn Buoy. At 358 feet above the water, Farallon Light is on the highest peak of Southeast Farallon Island. The Farallon Islands and associated shoal waters extend approximately 10 miles northwest of Southeast Farallon Island to Fanny Shoal.

Fanny Shoal is the largest of the many shoals, which are located around and between the islands. It is located 9.8 miles northwest of Farallon Light and 14 miles southwest of Point Reyes.

The TSS precautionary area is a 6 mile circle centered on the San Francisco Approach Lighted Buoy. The buoy is located at 37_45.0'N and 122_41.6'W, approximately 10 miles west of the Golden Gate Bridge. The eastern portion of the area does overlap the San Francisco Bar. Within the precautionary area, there is a circular separation zone, mile in radius, centered on the buoy for the buoy's own protection. The pilot boat cruising area is 1 mile east of the buoy. The TSS can be congested at times since all major incoming and outgoing vessels pass through it.

Other hazards in the area include the San Francisco Approach Lighted Buoy itself. Potatopatch Shoal is to the north of the approach and has reported depths of < 23 feet. Approximately a mile south of Point Lobos are Mile Rocks. Continuing south are Piller Point, Colorado Reef, Point Montara, Pescadero Point, Bolsa Point, Pigeon Point (marked by a light), and Ano Nuevo Point. The shoreline is generally shoal and rocky, particularly so around Ano Nuevo Island off Ano Nuevo Point.

Inland hazards include the Golden Gate Bridge. It has a clearance of 225 feet at the center of the span, which is marked by a fixed green light with three fixed white lights above it. The distance between the piers of the bridge is < 0.7 mile. Significant currents, winds, and fog can be experienced while transiting this area.

Alcatraz Island is 2 miles east of the Golden Gate Bridge. Alcatraz is 148 feet high and marked by Alcatraz Light, which is 214 feet above the water. Due to strong tidal influences heavy riptides occur in the vicinity of Alcatraz Island. Deep-draft vessels inbound and making for the deep-water anchorages north and south of the San Francisco-Oakland Bay Bridge, with the permission of the Vessel Traffic Service, pass north of Alcatraz Island in opposition to the established TSS. A passenger ferry, which operates frequently, uses a dock on the southeast side of the island. There are rocky patches in 33 to 35 feet of water northwest of the island that should be avoided by deep-draft vessels. The northwesternmost of these is Harding Rock, which is marked by a lighted buoy.

Angel Island is 3 miles northeast of the Golden Gate Bridge. It is separated from the mainland at Tiburon by Raccoon Strait. Raccoon Strait is nearly mile wide and is used by ferries and pleasure craft. Tidal currents within the strait can be strong with riptides and swirls at times. Large vessels usually avoid the strait.

Yerba Buena Island is 2 miles southeast of Alcatraz Island and is connected by a causeway to Treasure Island, a low area of fill to the northeast. The San Francisco-Oakland Bay Bridge runs through Yerba Buena Island. The midspan clearance for the segment of bridge on the San Francisco side is 204 feet. The midspan clearance for the segment of bridge on the Oakland side is 220 feet; however, this distance may be up to 10 feet less under conditions of heavy vehicle traffic and high temperatures. The bridge experiences large current eddies near the foundation piers that may cause ships to shear off course.

The Richmond-San Rafael Bridge is 8.8 miles northeast of the Golden Gate Bridge. It has a fixed span at each end. The west span has a 1,000 foot opening and a clearance of 185 feet. The east span has an opening of 970 feet and is 135 feet high. This well lighted bridge has channels to it marked with navigational aids. There are various rocks and shoals in the Richmond area, including Red Rock and Castro Rocks.

The Carquinez Bridge spans Carquinez Strait. The channel on either side of the center pier is 998 feet wide. The clearance for the north span is 146 feet and the southern span is 134 feet.

There is also a fixed highway bridge and a rail bridge between Benicia and Martinez, the Benicia-Martinez Bridges, which span the Carquinez Strait at its eastern end. The highway bridge has a clearance of 135 feet. The rail bridge is a drawbridge. It has a clearance of 70 feet closed, 135 feet open.

In the south bay, the San Mateo-Hayward Bridge connects these two communities. The fixed center span has a height of 135 feet.

9320 Potential Spill Risks

To fully understand the potential magnitude or possibility of a spill, the quantity and type of petroleum products transferred, as well as, the number of transfers that occur within the area is needed. The following data was compiled for the month of January 1994. It was compiled from transfer notifications given to Marine Safety Office San Francisco Bay and a phone survey of refineries and other waterfront facilities. Most facilities reported that the numbers for January 1994 were somewhat below their average monthly totals.

The numbers reflect the total amount and number of transfers, not necessarily what was actually transported into San Francisco Bay. For example, if a tanker enters the Bay and lighters 750,000 barrels of crude to another tanker and then that vessel transports this amount to a facility and off-loads the cargo, the total amount transferred would be 1.5 million barrels and would be counted as two transfers. This

method was used to describe the risk more accurately. Figures E-II-B-1 and B-2 graphically display the total amount transferred by product and operation.

1. Total Number of Transfers in January 1994:

<u>Type of Product</u>	<u>Lighter</u>	<u>Bunker</u>	<u>Facs.</u>	<u>Mobile</u>	<u>Totals:</u>	
Crude	17	0	355	0	372	
Diesel	5	67	125	31	228	
Gas		0	0	130	0	130
Jet Fuel		2	9	57	0	68
Lube	0	8	60	10	78	
Bunkers		0	1	140	0	141
<u>Totals:</u>		<u>24</u>	<u>85</u>	<u>867</u>	<u>41</u>	<u>1017</u>

2. Total Amount Transferred: (In Barrels)

<u>Type of Product</u>	<u>Lighter</u>	<u>Bunker</u>	<u>Facs.</u>	<u>Mobile</u>	<u>Totals:</u>	
Crude	4.35 M	035.4 M	0	39.9 M		
Diesel	178000	701000	9.8 M	8216	10.6 M	
Gas		0	0	10 M	0	10 M
Jet Fuel		11524	37572	1.1 M	0	1.15 M
Lube	0	549	1.2 M	530	1.2 M	
Bunkers		0	20000	4.8 M	0	4.8 M
<u>Totals:</u>		<u>4.5 M</u>	<u>759648</u>	<u>62.5 M</u>	<u>8746</u>	<u>67.7 M</u>

The following statistics for 1998 are based upon information compiled from notice of arrivals and transfer notices received by MSO San Francisco Bay:

Bunkering: 1,639,600 metric tons = 11,780,088 barrels
 Lightering: 5,255,255 metric tons = 38,363,365 barrels
 Bulk Terminal Cargoes: 240,428,000 barrels

Total Petroleum Products
 Transferred over water: 290,571,453 barrels

9400 - SPILL & DISCHARGE HISTORY

9410 North Coast

Spill history for the North Coast Area was obtained primarily from the Coast Guard's MSIS Marine Pollution Information Product. Data was retrieved via the G-MRI Field Access Reporting System for the period 1 January 1984 through 30 June 1991. Data for the period 1 July 1991 through the present cannot be accessed and, therefore, have not been analyzed as part of the area spill history. EPA, State and local records supplied no additional data and have records that are less complete and detailed than the MSIS data.

Analysis of the spill history shows that 150 spill cases were documented during the aforementioned period for a total of 11,516 gallons. Based on these figures, the average spill size was calculated to be 77 gallons (1.8 barrels). The highest volume spill, 60,000 gallons, was not included in this average slice it would significantly skew results. The second largest spill volume, 3,000 gallons, was included, though. The majority of spills were in the 5 to 25 gallon range.

Humboldt Bay is the only harbor between San Francisco and Coos Bay with channels deep enough to permit passage of large, commercial oceangoing vessels. In 1991, Humboldt Bay received 227 commercial vessels; 104 foreign cargo ships, 42 cargo barges, and 80 chemical and petroleum vessels. Approximately 2.5 million barrels of petroleum products are delivered annually via tank barges and tank vessels to three petroleum-receiving facilities (Chevron, UNOCAL, and PG & E).

Although Humboldt Bay is the only harbor with petroleum facilities and tank vessel and tank barge traffic, it is clear that the possibility of a large petroleum spill exists along the entire North Coast. Heavy coastwise tanker traffic transits this area on runs between Alaska and the ports of San Francisco and Los Angeles. While it is recognized that the majority of this tanker traffic has voluntarily agreed to transit 50 miles off the California coast, many vessels transit much closer. Furthermore, tugs with tank barges typically do not transit 50 miles offshore when making runs between various ports along the West Coast.

Based on definitions contained in Encl (I) to COMDTNOTE 16471, the most probable and maximum most probable spill amounts for the North Coast Area would be 1.8 barrels and 71 barrels, respectively.

9420 San Francisco Bay and Delta

9421 Summary of Statistical Data

All the data below came from the Coast Guard Marine Safety Information System.

Year 1987-1991

Spill Size in Gallons	# of Spills	% of Total
0-50	1,171	92%
51-100	94	7%
100-1000	14	1%
1000-10000	0	0%
10000+	0	-

Location:	# of Spills	% of Total
San Francisco Bay	872	68%
San Pablo Bay	97	8%
Carquinez Strait	35	3%
Suisun Bay/Delta	118	9%
Coastal	157	12%

Causes of Spills

Unknown	658
Unintended Discharge	309
Equipment Failure	88
Sinking	72
Structural Failure	32
Container or Tank Spill	29
Intended Discharge	29
Natural seepage	3
Other Causes	88

1987-91 (cont'd)

Substance Spilled	# of Spills	% of Total
Diesel	645	50%
Waste Oil	197	15%
Gasoline	142	11%
Lube Oil	93	7%
Motor Oil	47	4%
Crude Oil	37	3%
JP5	28	2%
No. 4 Fuel Oil	24	2%
Misc. Oils	66	5%

Year 1992-1993

Spill Size in Gallons	# of Spills	% of Total
0-50	799	95%
51-100	17	2%
100-1000	16	2%
1000-10000	5	1%
10000+	0	-

Location:	# of Spills	% of Total
San Francisco Bay	307	37%
San Pablo Bay	190	23%
Carquinez Strait	46	5%
Suisun Bay/Delta	95	11%
Coastal	199	24%

Causes of Spills

Unknown	793
Unintended Discharge	22
Equipment Failure	9
Sinking	6
Structural Failure	3
Grounding	2
Personnel Casualty	1
Allision	1

1992-93 (cont'd)

Substance Spilled Total	# of Spills	% of Total	Gallons Spilled	% of
Diesel	270	32%	10205	46%
Waste Oil	175	21%	4732	21%
Unknown Oil	148	18%	859	4%
Lube Oil	83	10%	418	2%
Gasoline	76	9%	665	3%
Motor Oil	19	2%	25	-
Hydraulic Fluid	18	2%	36	-
No. 6 Fuel Oil	17	2%	1235	6%
Aviation Fuel	11	1%	1084	5%
Crude Oil	11	1%	166	1%
Misk. Oils	5	1%	29	-
No. 4 Fuel Oil	4	-	2566	12%

Year 1994

All quantities are in gallons

Service/Catagory	Amount Spilled Largest Spill	% of Total	# of Spills
<i>Maritime Industry</i>			
Freight Ship	69	-	15
Public Vessel	980	7%	19
Industrial vsl/barge	54	-	5
Passenger	52	-	10
Tank Barge	52	-	4
Tank Ship	50	-	1
Towboat/Tugboat	152	-	8
Waterfront Facility	3460	15%	23
Total:	4871	22%	85
<i>Other Marine Activities</i>			
Commercial	19	-	3
Fishing Boat	2188	10%	67
Marina	5	-	3
Motor Vehicle	130	-	30
Municipal Facility	306	1%	4
Recreational	375	2%	88
Unclassified Vsl	488	2%	147
Total:	3511	15%	342

1994 (cont'd)*Non-Marine Source*

Aircraft	3000	12%	3
Land Fac/Non Marine	5576	24%	6
Pipeline	6156	27%	5
Total:	14372	63%	14

Other Sources

Shoreline	42	-	22
Other	10	-	8
Total:	52	-	30

Grand Total:	22806	100%	471
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Year 1995*All quantities are in gallons*

Service/Catagory	Amount Spilled Largest Spill	% of Total	# of Spills	
<i>Maritime Industry</i>				
Freight Ship	51	2%	4	42
Public Vessel	66	2%	12	20
Passenger	9	-	5	5
Tank Barge	5	-	1	5
Tank Ship	2	-	1	2
Towboat/Tugboat	25	1%	9	10
Waterfront Facility	55	2%	10	25
Total:	213	7%	42	42
<i>Other Marine Activities</i>				
Commercial	205	7%	6	100
Fishing Boat	734	32%	38	275
Marina	10	-	2	10
Motor Vehicle	215	7%	14	100
Municipal Facility	10	-	2	10
Recreational	655	21%	69	200
Unclassified Vsl	466	15%	113	100
Total:	2295	72%	244	275

1995 (cont'd)

Non-Marine Source

Aircraft	38	1%	1	38
Land Fac/Non Marine	70	3%	7	60
Pipeline	30	1%	1	30
Railroad	0		1	0
Total:	138	5%	10	60

Other Sources

Shoreline	210	7%	12	200
Other	311	9%	2	300
Total:	522	16%	14	300

Grand Total:	3168	100%	310	300
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9422 Description of Major Oil Spills

The following four major oil spills are of historical importance to this planning area:

Date of Spill	Name of Spill
1/18/71	Oregon Standard & Arizona Standard
10/31/84	Puerto Rican
4/23/88	Shell Carquinez
10/27/96	Cape Mohican

Oregon Standard & Arizona Standard (18 January 1971)

Size of Spill: 27,600 barrels (1,159,200 gallons).

Type of Oil: Bunker fuel oil

Location of Spill: Golden Gate Bridge

Trajectory of Oil: "Within a few hours, oil had been transported with the flood tide to the north side of Angel Island. Soon after, the current started to ebb carrying most of the spilled oil out to sea. Most of the oil left inside the bay was stranded on the northern shore area of the San Francisco peninsula. Some oil impacted the western shore of the South Bay down to 3 mi south of the Oakland Bay Bridge. Oil was also found on the south shore of the Tiburon peninsula and a small amount entered Richardson Bay. The South Bay was not impacted due to its sluggish circulation and north moving surface flow."

"The heavy concentration of oil which moved seaward split after passing the bay headlands sending an estimated 50% to the north and the remainder to the south."

Amplifying Information: The spill was caused by the collision of the *Oregon Standard* and the *Arizona Standard* near the Golden Gate Bridge. 4,000 seabirds were killed as a result of the spill. The collision led to the Bridge to Bridge Radiotelephone Act, which requires all vessels to monitor Channel 13 VHF-FM.

Puerto Rican (31 October 1984)

Size of spill: 25,000-35,000 barrels (1,000,000 - 1,500,000 gallons)

Type of oil: Lubricating oil and bunker fuel oil.

Location of Spill: 11 miles south of the Farallon Islands, 25 miles west of Half Moon Bay.

Trajectory of Oil: “Although the spilled oil moved south during the first 3 days after the breakup as predicted by the NOAA spill trajectory experts and did not make landfall, suddenly, on the third night, the oil reversed direction and moved north, first encircling the Farallon Islands and then coming ashore in Bodega Bay and Bodega Harbor.”

Ecological Impacts: In the Gulf of the Farallons 1,310 oiled birds were picked up. 310 were treated and released. The remainder perished. Based on aerial survey estimates, about 4,500 murrelets and auklets were killed or disabled. 15 oiled elephant seals were observed.

Cleanup: No containment methods were used due to weather and sea conditions. Skimming and shoreline cleanup were used to recover 1,460 barrels (61,320 gallons) of oil (4-6%). 2,000 gallons of Corexit 9527 Dispersant was applied by aircraft at a rate of 2-5 gallons/acre on the leading edge of the main body of the oil slick. “The overflight conducted the next morning (November 4) revealed that 60-70% of the oil sighted on November 3 had been dispersed by a combination of the chemical dispersant and wind and sea action.”

Cause: A violent explosion on board the Puerto Rican caused the ship to break in two, with the stern section eventually sinking. Corrosion had caused a pinhole leak in a tank containing caustic chemicals. These chemicals spilled into the next void and reacted with the coating of that tank to generate Hydrogen gas, which exploded. Better inspection of voids and better accounting for cargo were implemented as a response.

Shell/Carquinez (23 April 1988)

Size of Spill: 8,700 barrels (365,400 gallons).

Type of Oil: Crude

Location of Spill: Tank farm on Shell Refinery in Martinez, about 1 mi inland from the Carquinez Strait.

Trajectory of Spill Release: “The oil drained from the open valve in the containment levee into nearby Peyton Slough and Shell Marsh and eventually out into the Carquinez Straits.

Oil discharged into the Carquinez Straits contaminated shoreline as far east as Ryer and Roe Islands and as far west as the Carquinez Bridge, a distance of about 11 miles, with heavy sheening observed further west into San Pablo Bay as far as Pt. San Pablo. Oil in the Straits was also forced up numerous small sloughs adjacent to Peyton Slough by tidal action causing extensive contamination of wetland habitat in Peyton Marsh and providing additional sources of discharge into the Straits. A total of about fifty miles of shoreline subject to tidal action was contaminated amounting to about 100 acres. In addition, about two-thirds of the 170 acre non-tidal Shell Marsh was contaminated by oil.”

Ecological Impact: 589 birds were collected of which 171 were found dead and 418 were taken to one of two wildlife cleaning centers. Fifty-five mammals were collected (mostly muskrats) of which 48 were found dead and seven were taken to cleaning centers. Mortality rates for all birds at the cleaning centers was 33% (50% for wild birds) and 57% for mammals.”

Containment Methods: “Containment methods included booming the mouths of Peyton and adjacent contaminated sloughs and the installation of four siphon dams above Peyton Slough’s tide gate. Efforts were also made to protect uncominated wetlands and marinas - with limited success.”

Cleanup Methods: Skimming, vacuum trucks, sorbents, vegetation removal.

Amount of Oil Recovered: 7,800 barrels (90%). *Duration of Response:* 107 days.

Cause of Spill: “A valve in the containment levee surrounding the tank that was allowed to remain open during periods of rainfall provided an escape route for oil leaking from the storage tank. After the spill, better monitoring of berm and floating tank roof drainage, as well as periodic testing of floating roof drain hoses were implemented.”

Cape Mohican (27 October 1996)

Size of Spill: 1,950 barrels (81,900 gallons)

Type of Oil: Intermediate Fuel Oil

Location of Spill: San Francisco Drydock, San Francisco CA

Trajectory of Spill Release: The heaviest concentration of oil was located along the SF waterfront from Pier 70 to the South Beach Marina, with patches of sheen and oil globules located between Treasure Island, Angel Island and Alcatraz Island, spreading to Bluff Point, Raccoon Strait, the SF Deep Water Ship Channel to Arch Rock, the Oakland Outer Harbor Entrance Channel, and Rincon Point. These isolated patches of oil eventually fouled ocean beaches from Ocean Beach in San Francisco to as far north as Point Reyes.

Ecological Impact: 110 birds were found dead. 50 oiled birds were captured. 1 sea turtle was found dead and one captured sea turtle had to be euthanized.

Containment Methods: 22,000 feet of boom were deployed to contain the spill and then protect sensitive sites within the Bay.

Cleanup Methods: 6 open water skimming vessels and 12 shallow water skimming vessels were employed to remove oil from the Bay. Cleanup operations along the San Francisco waterfront centered on flushing under piers with outgoing tide, maintaining in-place containment boom and recovering free-floating oil.

Cause of Spill: The inner valve of a stabilizer tank was left open by ships personnel. As a result, when the outer valve was opened by shipyard personnel in the course of the drydocking, the entire contents of the tank drained into the drydock, with a considerable percentage (from 20-80%) entering the Bay through the drydock gates.

9430 Central Coast

Information on oil spill history for the Central Coast presented here is a combination of data retrieved from the U.S. Coast Guard's Marine Safety Information System (MSIS), Marine Pollution Information product and narrative information compiled from past news articles in the San Jose Mercury News, San Francisco Chronicle, and Santa Cruz Sentinel by Save Our Shores for Monterey and Santa Cruz counties' oil spill element of their county multi-hazard emergency operations plan.

The data pulled from MSIS runs from the beginning of calendar year 1983 through May of 1994. Over the eleven year and five month period described above, there were a total of 340 reported spills which totaled 8,194 gallons, for an "average" spill of 24.1 gallons. This calculation excluded two spills; one of 16,000 gal. in 1984 and one of 18,000 gal. in 1987, so as not to unduly skew the average figure. However, even this figure is misleading, as well over 50% of the spills over that period were of five gallons or less, and many recorded "spills" were cases where a potential for pollution existed (for example, fishing vessel or pleasure boat grounding) but no actual spill occurred. The most frequent source of small spills are fishing or pleasure boats in which an automatic bilge pump kicks on and pumps oily bilge water over the side while the vessel is moored and unattended at a marina or harbor.

The circumstances of nine spills which were of a substantial amount are summarized below:

- 1) On 6 October 1986, the fishing vessel TONY K ran aground near Watsonville in Monterey Bay; as the tide receded the vessel rolled over on its side. Before the owner could have the fuel removed it all leaked out, spilling approximately 300 gallons of diesel.
- 2) On January 28 - February 2, 1986, the APEX HOUSTON, an unmanned barge towed by a tug spilled approximately 616 bbls of oil through a dislodged deck lid while in transit from Martinez to Long Beach. Since there was no grounding or collision, the incident was first known as mystery spill. Coastal areas extending between Salmon Creek in Sonoma County to Point Lobos in Monterey County were affected by the spill. Half Moon Bay and Santa Cruz were heavily oiled, especially in the vicinity of Ano Nuevo State Reserve. Approximately 9,856 birds were injured or killed.
- 3) On 10 May 1987, the 85 foot tug CHALLENGER sank approximately twenty miles offshore west of the Santa Maria river entrance. 18,000 gallons of diesel was onboard and assumed spilled, since no salvage effort was possible due to the depth of water.
- 4) On 12 August 1987, a CG helicopter on patrol sighted a patchy slick which appeared to be bunker or crude oil, in an area approximately 4-6 miles in diameter, 15 miles west of Point Lopez. The total amount of product was estimated to be 100 gallons. A vessel ten miles south of the slick was suspected but unable to be linked to the spill.
- 5) On 19 May 1989, the M/V NORTHERN LIGHTS exploded in Santa Cruz Harbor. 160 gallons of gasoline were on fire on the surface of the water. The fire was extinguished by the Fire Department and the incident was responded to by U.S. Coast Guard and CA Dept. of Fish & Game personnel, who determined that the remaining gas was not feasible for cleanup. 12 quarts of oil remaining on the vessel were removed by CG personnel.
- 6) On 15 December 1989, the Coast Guard sighted a sheen 1 to 5 miles offshore, west of Lopez Point, estimated to be three square miles in size. There was no apparent source and the sheen was judged to be not feasible for cleanup. The weather on scene included 1-2 foot seas which aided in the dissipation of the product.

7) On 8 June 1990, the F/V Hey Mama went aground at Sand Hill Bluff (south of Davenport) and ruptured its integral fuel tanks. Approximately 700 gallons of fuel entered the Pacific Ocean, but the fuel dissipated before any cleanup or recovery effort could be mounted.

8) On 15 September 1990, the F/V Slabtown sank 6 miles off the coast of Davenport. A 10' by 25' sheen was spotted from the air but was judged not feasible for cleanup.

9) On 15 October 1990, the dredge ART REIDEL sank off the coast of Pt. Pinos. Approximately 3267 gallons of diesel and lube oil was believed to have been on board, but the resulting sheen was not judged feasible for cleanup and dissipated rapidly.

The following oil spill history was compiled by Save Our Shores by searching through past news articles in the San Jose Mercury News, San Francisco Chronicle and Santa Cruz Sentinel:

1 December 1979 - The T/V ARCO ENDEAVOR spilled 80 barrels of oil into Monterey Bay while unloading at the PG&E moss landing marine terminal. Environmental impact: Beach inspection found globules of oil in Elkhorn Slough, in the wetlands of the Pajaro and Salinas Rivers, and from Sunset to Marina State Beaches. Oil soaked dead birds also washed ashore. Aerial surveys conducted on 27 February 1980 for a separate scientific study identified a remaining oil slick approximately 100 m x 200 m in size and observed 4 nmi northwest of Point Pinos at the southern margin of Monterey Bay.

May 1986 - The barge APEX HOUSTON spilled approximately 616 bbls of oil off the central California Coast. Only 420 gallons (1.6%) were recovered. Oil soaked birds washed ashore along the Santa Cruz and Monterey County coast.

December 1987 - A 300 foot barge, 13 miles off Ano Nuevo spilled 16,400 gallons of oil, leaving a three mile long, one hundred yard wide slick. No cleanup was attempted because of high seas. Luckily, the slick drifted out to sea instead of coming ashore.

July 1989 - A diesel oil slick one-half mile long was spotted off Capitola. A visiting Navy ship was implicated, but no link was established.

February 1990 - In Santa Cruz County 60 oiled birds were killed with an additional 100 oiled birds surviving. The oil was fingerprinted as Alaskan crude but no source was found.

June 1990 - Twenty-five oiled birds washed ashore in Santa Cruz County. Oil Leaked from an unidentified damaged tanker under tow.

October 1990 - A dredge vessel being towed to Rio Vista for repairs sank in 250 feet of water, 1.5 miles off Pt. Pinos. A three mile long slick of 500-1,000 gallons of diesel and lube oils was observed. Beaches between Pt. Joe and Pt. Pinos were closed.

January 1991 - Approximately 100 oiled birds, mostly Murres, came ashore on San Mateo, Santa Cruz and Monterey County Beaches. Although U.S. Coast Guard fingerprinted the oil as North Slope crude, no source and no volume of oil spilled was determined.

9500 - SCENARIOS

9510 North Coast

9510.1 SCENARIO DEVELOPMENT

As required by OPA-90, a most probable discharge, a maximum most probable discharge, and a worst case discharge are presented. An additional scenario for the North Coast Area, a “Discharge of Maximum Impact”, is also included.

9510.2 MOST PROBABLE DISCHARGE

The Coast Guard has determined that 0-50 barrels is a reasonable volume for planning the most probable discharge because it is based on national operational spill data and evaluation of historical trends in smaller-sized spills. This value was adopted for consistency with Federal and State Vessel and Facility Contingency Plans.

HISTORICAL SPILL CONSIDERATIONS: The North Coast’s historical average spill size of 77 gallons (1.8 barrels) is at the lower end of the 0-50 barrel national average range. A spill of this size is considered “routine” and insufficient for planning purposes. As such, the North Coast Area Contingency Plan has adopted a larger value (approximately 33 barrels) within the 0-50 barrel range.

The most likely reason for a spill of this size is the loss of diesel fuel from a grounded or sunken vessel. Accidents of this nature normally occur as a result of human error, poor visibility, a difficult sea state, mechanical failure, or a combination thereof. Several spills involving a sunken vessel have occurred while the vessel is moored. Historically, such spills involve the failure of a fishing vessel’s automatic bilge pump and poor watertight integrity. Other possible causes for a spill of this size include tank or pipeline ruptures at petroleum facilities and overturned tank trucks spilling into creeks or storm drains.

HAZARD AND RISK ASSESSMENTS: As mentioned above, a spill of 33 barrels would likely involve a sunken or grounded fishing vessel (recreational vessels tend to have fuel capacities less than 33 barrels). In the North Coast area, fishing vessels operate from harbors located within each of the three counties and transit the entire coastline. As such, a spill of this size could occur anywhere along the North Coast.

Several navigational hazards exist in the North Coast area. The coastline is characterized by numerous rocky headlands, wave-cut platforms, submerged rocks, and sea stacks. Many of the harbor entrances are narrow and often have swift currents. Inclement weather conditions are also inherent to the North Coast. Storms with heavy rains and high winds occur throughout the year, though primarily during winter months. Summer months typically have heavy morning and late afternoon fog.

Humboldt Bay is considered the area of greatest risk due to its volume of traffic, potential navigational hazards, and size relative to other harbors along the North Coast. Furthermore, Humboldt Bay contains each of the three marine oil transfer facilities (Pacific Gas & Electric, Chevron, and UNOCAL) within the North Coast area. Other ports in the North Coast include Crescent City harbor, Trinidad harbor, Noyo River harbor and Point Arena harbor. Since Humboldt Bay was selected as the site for the Maximum Most Probable and Worst Case Discharge scenarios, Crescent City harbor was chosen as the site for this scenario.

VULNERABILITY ANALYSIS: The Environmentally Sensitive and Economically Significant Sites in or immediately near the boat basin are vulnerable to oiling (see Annex E, Appendix V, Tabs A and B).

DESCRIPTION OF THE EVENT:

MOST PROBABLE DISCHARGE

Situation: A diesel-powered fishing vessel sinks at the dock in Crescent City harbor due to failure of its automatic bilge pump and poor watertight integrity. Upon sinking, diesel fuel leaks from tank vents and loose fill caps and lube oil leaks from an open lube oil container. As a result, both are discharged into the basin.

While conducting one of the nightly security patrols, the harbor security guard notices the submerged vessel and a rainbow sheen. The smell of diesel is also very prevalent. The security guard immediately contacts the harbormaster at home. The harbormaster instructs the security guard to notify the National Response Center (NRC), State Office of Emergency Services (OES), and the vessel owner. The security guard carries out the notifications, but is unable to reach the owner. Meanwhile, the harbormaster calls another member of the harbor district, arranging to meet at the marina to deploy sorbent boom from the harbor district's supply. Coast Guard Cutter EDISTO is currently patrolling offshore and is not available for response.

Location: Crescent City harbor.

Amount: 1,400 gallons (33 barrels) of diesel fuel and 20 gallons of lube oil are discharged.

Securing Source: Since the vessel is submerged, the source can only be secured by divers or by raising the vessel.

Areas at Risk: The sensitive environments within Crescent City harbor, notably Elk Creek. Also at risk are numerous waterfront businesses and other fishing and pleasure craft.

Time of Year: early-February

Weather: Nighttime with fog.
Wind: 30 knots. SW to W.
Visibility: 1/2 mi.
Seas: 1-2 ft.
Current: Max Flood

INITIAL ACTIONS

NOTIFICATION: Key notifications are made to the National Response Center (NRC), State Office of Emergency Services (OES) and the sunken vessel's owner. NRC immediately notifies Coast Guard Marine Safety Office (MSO) San Francisco Bay via "flash fax", while State OES notifies California's Office of Oil Spill Prevention and Response (OSPR) and Del Norte County Sheriff's Office (the county's designated local emergency contact after hours). Coast Guard Group Humboldt Bay is notified by the MSO. Group Humboldt Bay recalls the MSO liaison assigned to Group and OSPR notifies the warden and biologist assigned to its Eureka office. The likelihood that a spill of this nature would be federalized prompts the MSO to begin mobilizing additional response resources. As such, Humboldt Bay Response Corporation (formerly Pacific Affiliates) and the Coast Guard Pacific Strike Team are called to respond.

ACTIVATION OF RESPONSE:

The harbormaster and harbor district employee(s) arrive on-scene and begin deploying the harbor district's sorbent boom and several sorbent pads. Meanwhile, the MSO liaison is dispatched to Crescent

City, to arrive within two hours. The warden and biologist are also dispatched from Eureka and will arrive within two hours of notification. After loading equipment, Humboldt Bay Response Corporation will arrive on-scene within three hours of notification. Pacific Strike Team personnel and equipment will be on-scene within 4-8 hours depending on mode of travel (air or truck/trailer).

The MSO establishes communications with the individual that reported the discharge to continue assessing the situation. After ensuring safety of life, further attempts to contact the vessel owner are made to no avail. Unable to determine the vessel owner's intentions regarding response to the discharge, the MSO opens the Oil Spill Liability Trust Fund (OSLTF). An initial ceiling of \$10,000 is requested. The MSO Command Duty Officer and watchstander also arrange to have an MSO pollution investigator flown to Crescent City via CG helicopter and begin contracting a local diving/salvage company to secure the discharge source and refloat the vessel. If unable to contract a local salvage outfit, a company with a Basic Ordering Agreement (BOA) contract in place will be contacted. However, the closest BOA-contracted salvage company is located in the Bay Area. As such, it could take up to 8 hours for a salvor to arrive on-scene.

INVESTIGATION: The initial investigation is conducted by the MSO liaison assigned to Group Humboldt Bay and the local OSPR warden. Once on-scene, the MSO representative will continue conducting the investigation and monitoring cleanup operations.

RESPONSE ORGANIZATION: For a spill of this size, the Unified Command System (UCS) outlined in Annex B will not be staffed. The individuals identified above carry out the response without breaking into specific sections of the UCS (i.e. Planning, Operations, Logistics and Finance). However, the MSO liaison and the local OSPR warden assume the role of Federal On-scene Coordinator (FOSC) and State On-scene Coordinator (SOSC), respectively.

CONTAINMENT, COUNTERMEASURES, AND CLEANUP STRATEGIES: The sorbent boom and pads deployed by the harbormaster and harbor district employee cannot contain the discharged product. Containment boom must also be deployed to keep the oil from spreading throughout the harbor, particularly to Elk Creek. (Details of the Elk Creek environmentally sensitive site may be found in Annex E, Appendix V.) However, since the harbor district does not have containment boom in their supply of response equipment and CGC EDISTO personnel are unavailable to unlock the response trailer, containment boom will not be deployed for at least two hours (when the MSO liaison assigned to Group arrives with the trailer keys or Humboldt Bay Response Corporation personnel and equipment arrive). Until that time, cleanup will continue with available sorbent boom and pads. A decision not to employ dispersants or in-situ burning is concurrently made based on the type and quantity of oil discharged and its location.

RESOURCES REQUIRED AND SHORTFALLS: The vessel is roughly 50 feet in length, therefore approximately 150 feet of boom would be required for containment. Due to the delays discussed above and the subsequent spreading of the oil, however, the spill will actually require 2,000-4,000 feet of boom to effectively contain the diesel. Additional boom may be required to protect Elk Creek and economically significant sites. The Elk Creek protection strategy calls for the construction of a sediment dike at Elk Creek. The backup strategy recommends that 300 feet of intertidal boom be deployed at the creek mouth to exclude oil. In order to complete the above booming in a timely manner, 2-4 small boats with at least two-person boat crews are required. In addition, one to two skimmers and 2-3 vacuum trucks are required.

Response shortfalls are addressed at the end of this section.

ESTIMATED TIME TO CLEANUP THE SPILL: The entire cleanup is expected to take 1-3 days. The spill site is considered “clean” when all the fuel is removed from the vessel and all visible product is removed from the water (no sheen).

9510.2 MAXIMUM MOST PROBABLE DISCHARGE

Model Limitations and Caveats

For this Area Plan oil spill scenario, only user-specified winds were used.

For offshore areas, current patterns are based on average seasonal conditions. Current perturbations from wind events, shelf waves, and eddy events are not predictable and therefore not included in the model. Similarly, local small scale phenomena, such as eddies off spits or in rivers and local convergences or divergences are not modeled.

Tidal information is based on NOS Tide Tables and does not reflect short term episodic events such as heavy runoff from floods or storm surges.

The model does not account for oil that picks up sediment and sinks. This occurs in high sediment rivers and along high energy sand beaches.

For large spills of the type being modeled for these scenarios, secondary sources of oil, such as refloating of oil from the shoreline, can be a significant problem. In this model, shorelines were coded so that the oil would not “stick” but would refloat after each tidal cycle. This allows more oil to move with tidal action and provides a more widespread impact. This procedure is used to enhance the “worst-case” scenario. In actual fact, wherever the model indicates shoreline impacts, the oil would mostly remain beached. However, some of the oil would refloat on high tides and be available to impact other areas.

Additional Notes

The model was run for 48 hours (May 5 - May 7, 1993) using the following spill scenario:

An accident occurs while diesel fuel is being transferred via pipelines at the Chevron Facility on Humboldt Bay. 2,500 barrels of Fuel Oil No. 2 are quickly spilled into the water.

Winds are constant at a stiff 30 knots from the WSW throughout the spill. Due to the short duration of the scenario (48 hours), only userspecified winds were used. No statistical winds were used.

The predicted tidal currents at Humboldt Bay (NOS Tidal Station No. 801), for the dates of the modeled spill, were used. The ebb and flood currents, at their maximum velocity, range from about 1.6 knots to 2.9 knots during this period. The modeled spill begins before a flood tide.

The oil type used in this scenario is No. 2 Fuel Oil, of which furnace, auto diesel, and stove fuels are common types. A spill of this kind of oil will typically form a heavy sheen, with lots of oil streamers. Shoreline impacts can usually be characterized as “bathtub ring” type stains. No. 2 Fuel Oil is toxic, so some of the fish and other marine life in the affected areas will probably be killed. In this scenario, the sensitive mud flats of Arcata Bay will probably suffer some fish kills.

Due to the strong 30 knot winds, the oil will be largely evaporated and/or dispersed after about 40 hours.

As shown on the oil spill scenario maps, the areas most probably impacted during this modeled spill will be the western and northern shores of the city of Eureka. No oil is expected to leave Humboldt Bay and impact the outer beaches. Although not shown in the results of the model run, the eastern side of Arcata Bay would also probably receive some oiling. The oil, pushed by the prevailing winds, would probably have more of a beach “staining” effect here than a more severe effect. In addition, some of the oil will probably flood back into the Elk River entrance.

Oil Budget Table

Oil Name: FUEL OIL NO.2 (DTF~EL), CHEVRDN API: 35.3

Pour Point: 0.0 F Wind Speed: Constant at 30 kn

Emul. Const.:No emulsification expected

Water Temperature: 70 F

Instantaneous release of 2500 bbl

*Insufficient distillation & emulsification data, answers may be inaccurate.

Time hours	Total Released barrels	Evaporated percent	Dispersed percent	Floating percent
0	2,500	0	0	100
3	2,500	24	1	75
6	2,500	35	4	61
9	2,500	42	8	50
12	2,500	46	12	42
15	2,500	50	16	34
18	2,500	52	20	28
21	2,500	54	23	23
24	2,500	SS	25	20
27	2,500	56	27	17
30	2,500	57	29	14
33	2,500	57	30	13
36	2,500	57	31	12
39	2,500	58	32	10

Tidal currents at Humboldt : Station No. 801

Latitude: 40 48 N

Longitude:124 11 W

Maximum Flood Direction: 016

degrees Maximum ebb Direction: 211

degrees

Time offsets

Hour:

Minimum Before Flood -01:14

Flood -01:02

Minimum Before Ebb -00:54

Ebb -00: 50

Based on San Francisco Bay E

Corrected time and currents .Humboldt

Bay Adjusted for daylight savings

time.

Date	Time	Max Vel (Knots)	Description
05/04/93 TU	16:56	.00	Min before flood
	20:03	2.22	Max flood
	23:08	.00	Min before ebb
05/05/93 WE	2:16	-2.60	Max ebb
	5:40	.00	Min before flood
	8:53	2.64	Max flood
	12:13	.00	Min before ebb
	14:47	-1.75	Max ebb
	17:42	.00	Min before flood
	20:47	2.22	Max flood
	23:48	.00	Min before ebb
05/06/93 TH	3:02	-2.85	Max ebb
	6:28	.00	Min before flood
	9:42	2.82	Max flood
	13:07	.00	Min before ebb
	15:37	-1.65	Max ebb
	18:26	.00	Min before flood
05/07/93 FR	21:31	2.6	Max flood
	0:29	.00	Min before flood
	3:48	-2.90	Max flood
	7:15	.00	Min before flood
	10:31	2.82	Max flood
	13:59	.00	Min before ebb
	16:22	-1.55	Max ebb
	19:11	.00	Min before flood
05/08/93 SA	22:13	2.04	Max Flood
	1:12	.00	Min before ebb
	4:34	-2.90	Max ebb
	8:03	.00	Min before flood
	11:17	2.70	Max flood
	14:50	.00	Min before ebb
	17:09	-1.40	Max ebb
	19:57	.00	Min before flood
05/09/93 SU	22:57	1.86	Max flood
	1:55	.00	Min before ebb
	5:17	-2.70	Max ebb
	8:52	.00	Min before flood
	12:08	2.46	Max flood

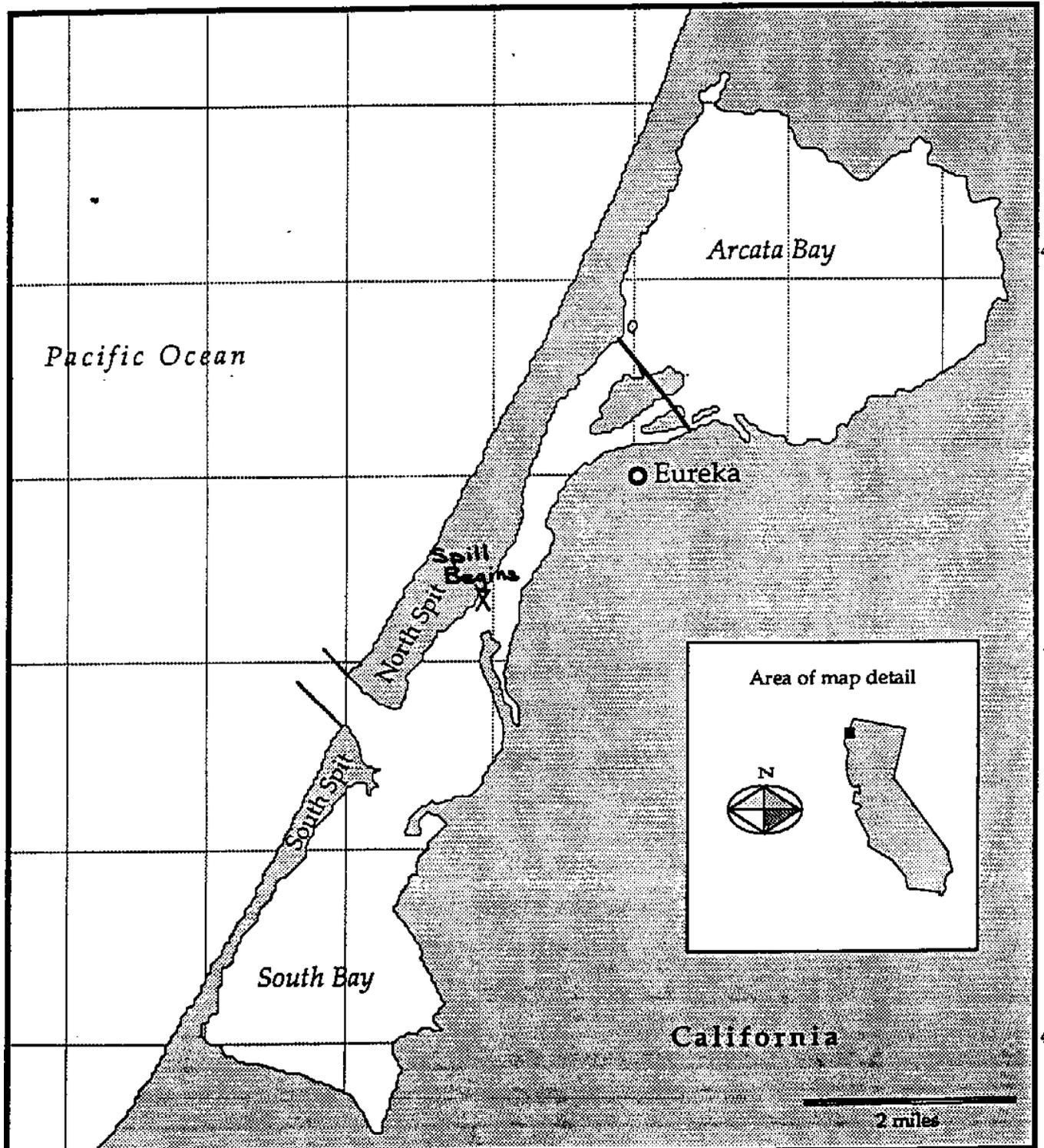
Humboldt Bay Area Plan

Oil Spill Scenario Map (Bay)
prepared by NOAA

Date/Time: 05 May 1993 / 0600

Product Spilled: 2,500 barrels, Fuel Oil
No. 2 (Diesel)

USE ONLY AS A GENERAL REFERENCE



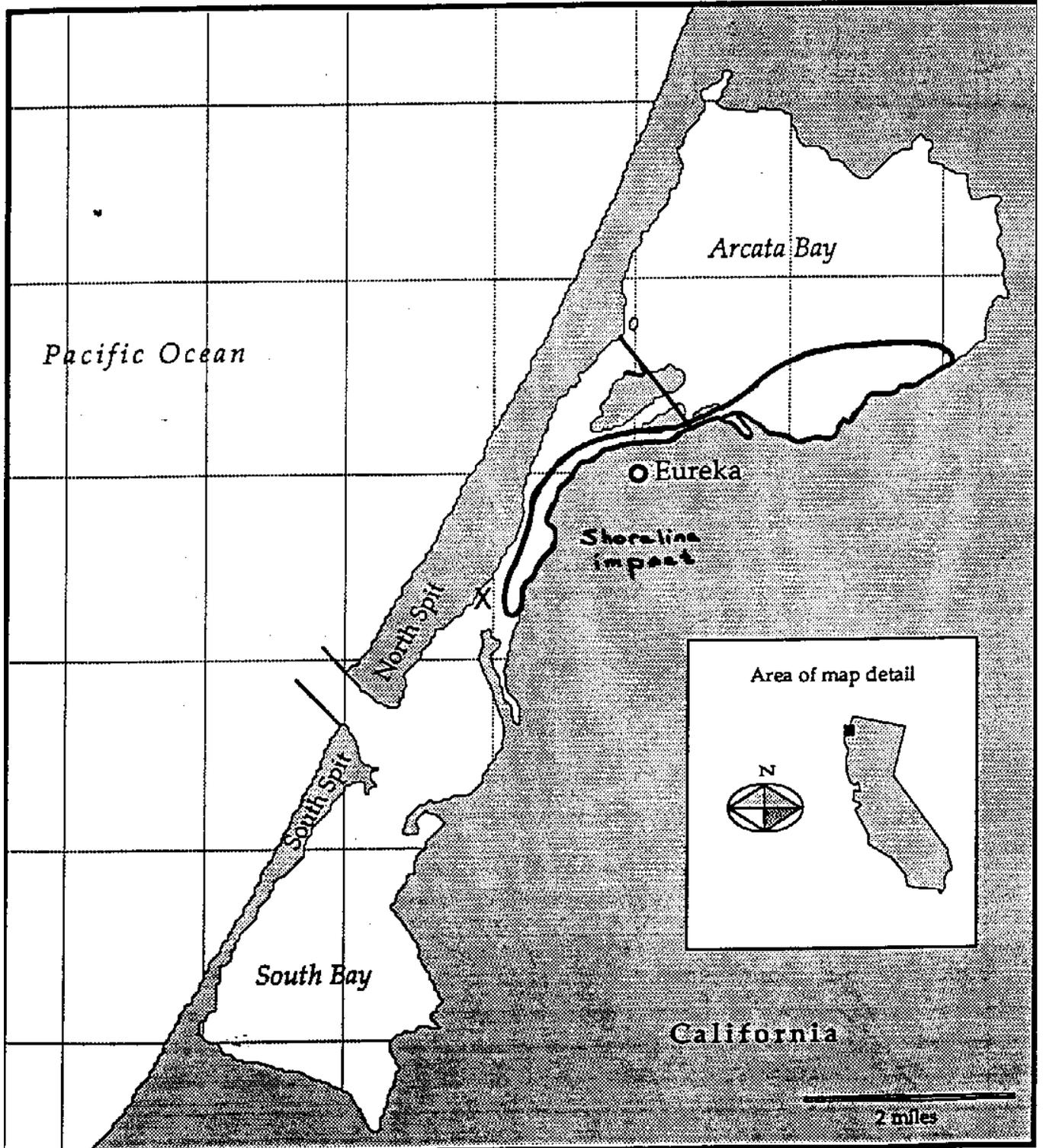
Humboldt Bay Area Plan

Oil Spill Scenario Map (Bay)
prepared by NOAA

Date/Time: 05 May 1993 / 1200

Product Spilled: 2,500 barrels, Fuel Oil
No. 2 (Diesel)

USE ONLY AS A GENERAL REFERENCE



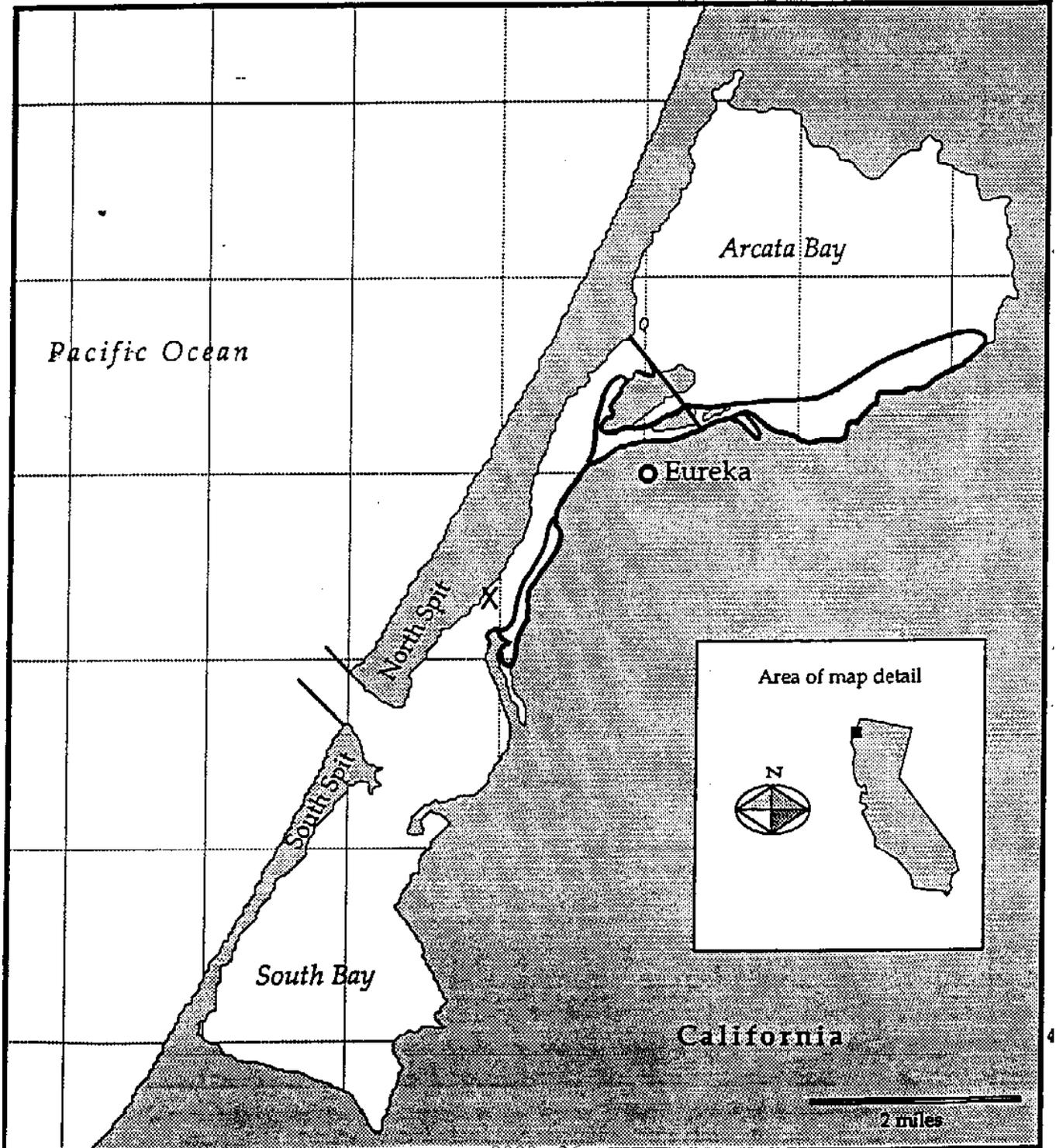
Humboldt Bay Area Plan

Oil Spill Scenario Map (Bay)
prepared by NOAA

Date/Time: 05 May 1993 / 1800

Product Spilled: 2,500 barrels, Fuel Oil
No. 2 (Diesel)

USE ONLY AS A GENERAL REFERENCE



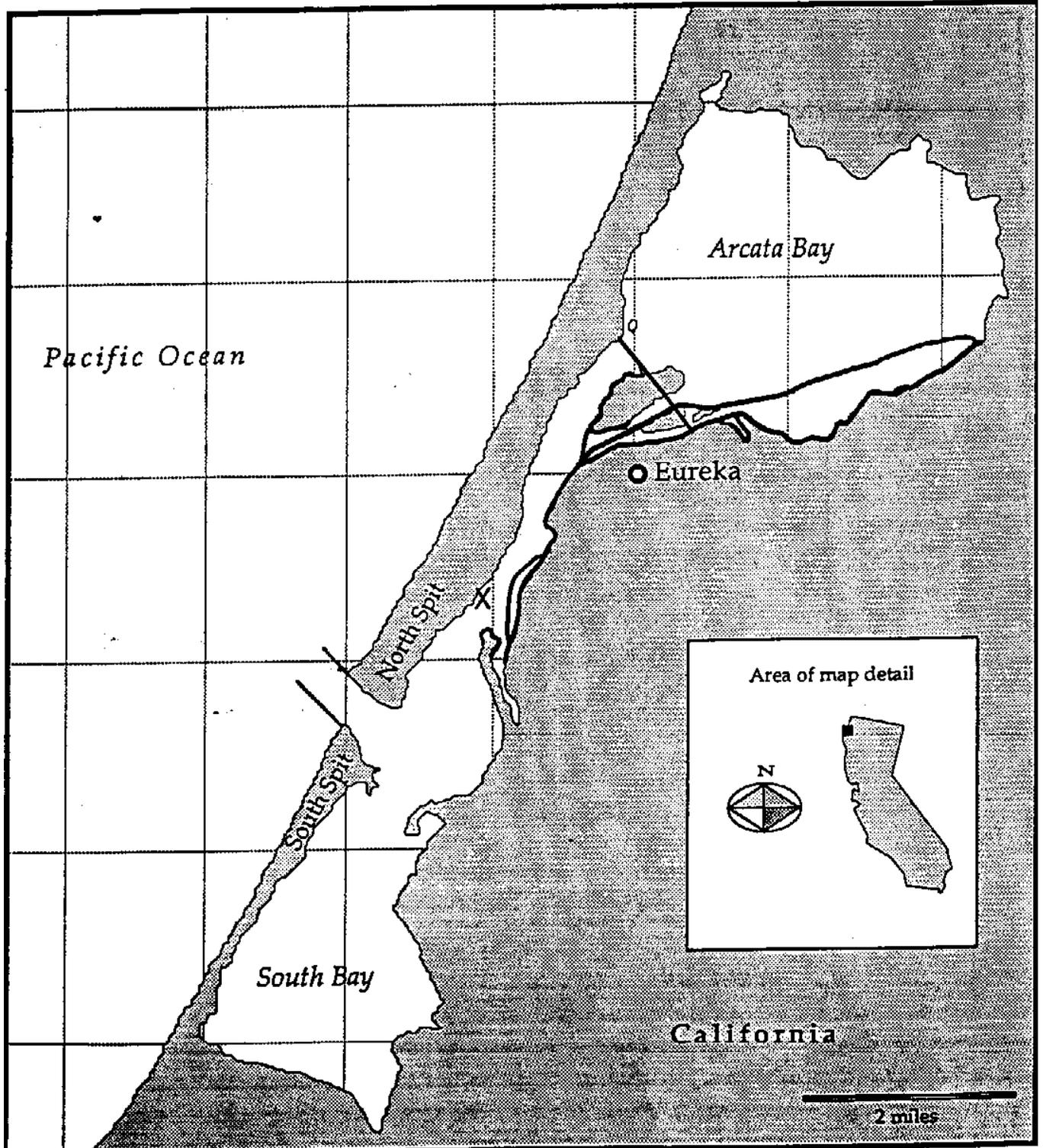
Humboldt Bay Area Plan

Oil Spill Scenario Map (Bay)
prepared by NOAA

Date/Time: 06 May 1993/0000

Product Spilled: 2,500 barrels, Fuel Oil
No. 2 (Diesel)

USE ONLY AS A GENERAL REFERENCE



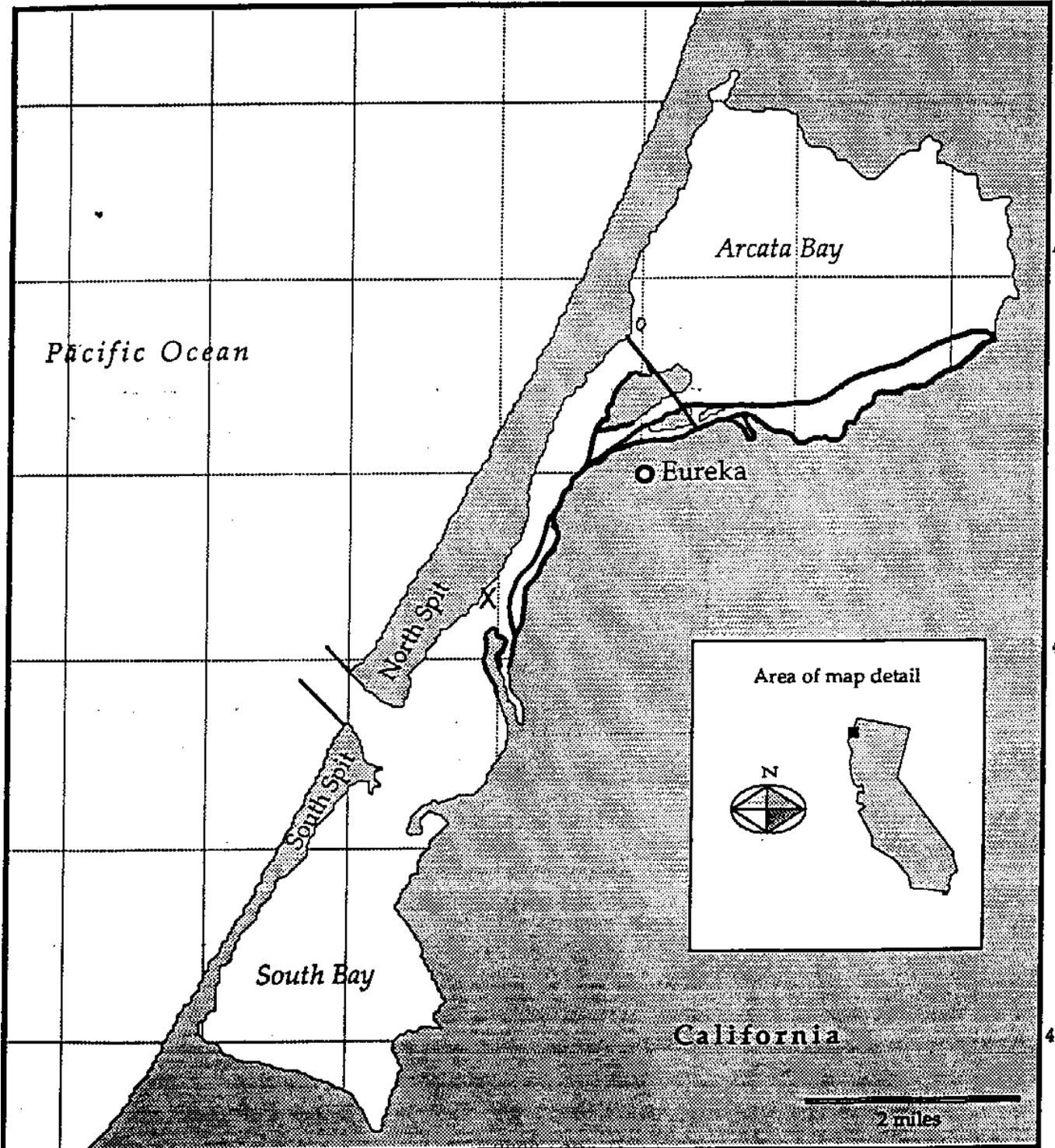
Humboldt Bay Area Plan

Oil Spill Scenario Map (Bay)
prepared by NOAA

Date/Time: 06 May 1993/0600

Product Spilled: 2,500 barrels, Fuel Oil
No. 2 (Diesel)

USE ONLY AS A GENERAL REFERENCE



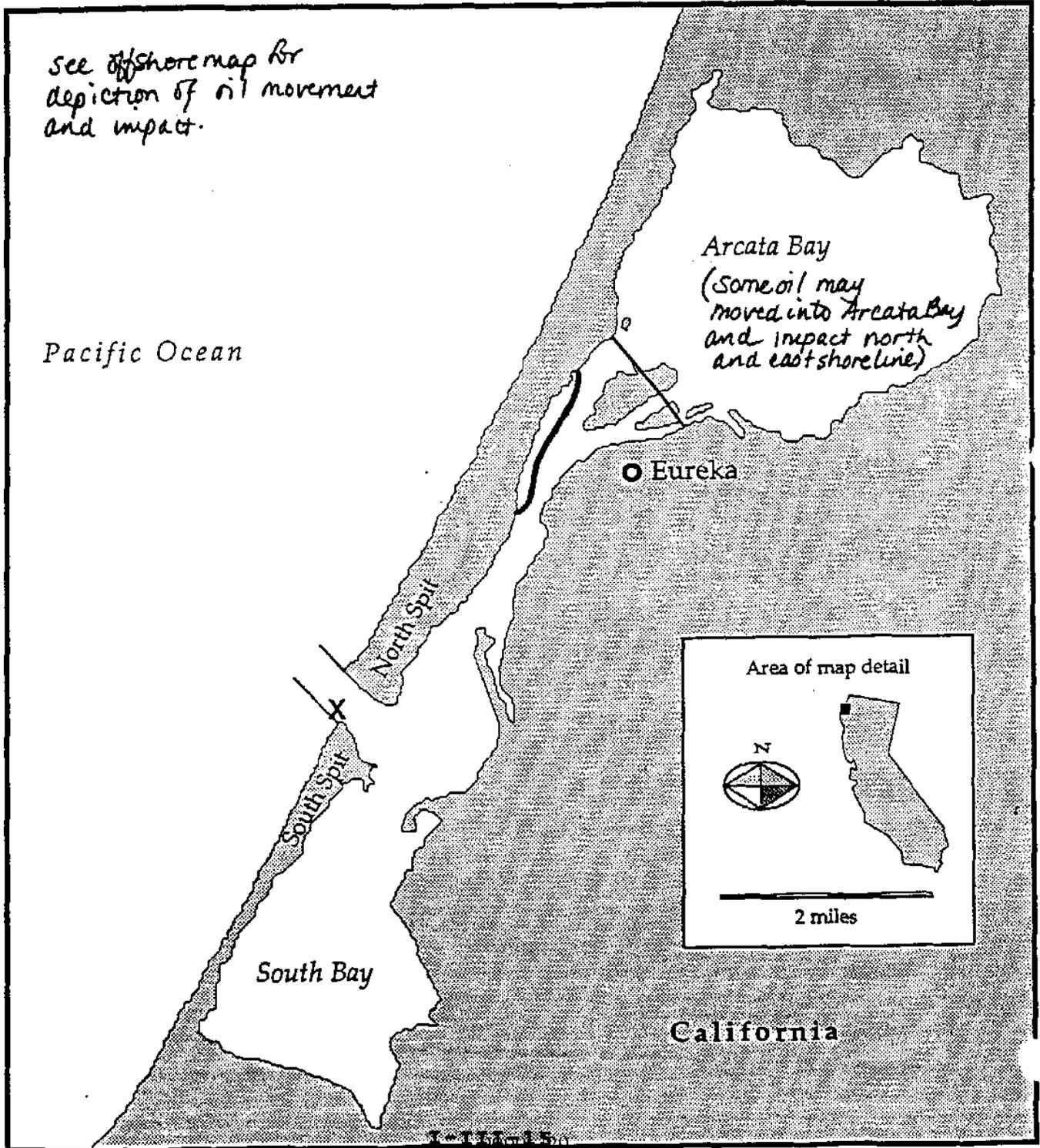
Humboldt Bay Area Plan

Oil Spill Scenario Map (Bay)
prepared by NOAA

Date/Time: 4 Feb. 1992 0600

Product Spilled: 40,000 barrels, No. 6
Fuel Oil (Bunker C)

USE ONLY AS A GENERAL REFERENCE



Humboldt Bay Area Plan

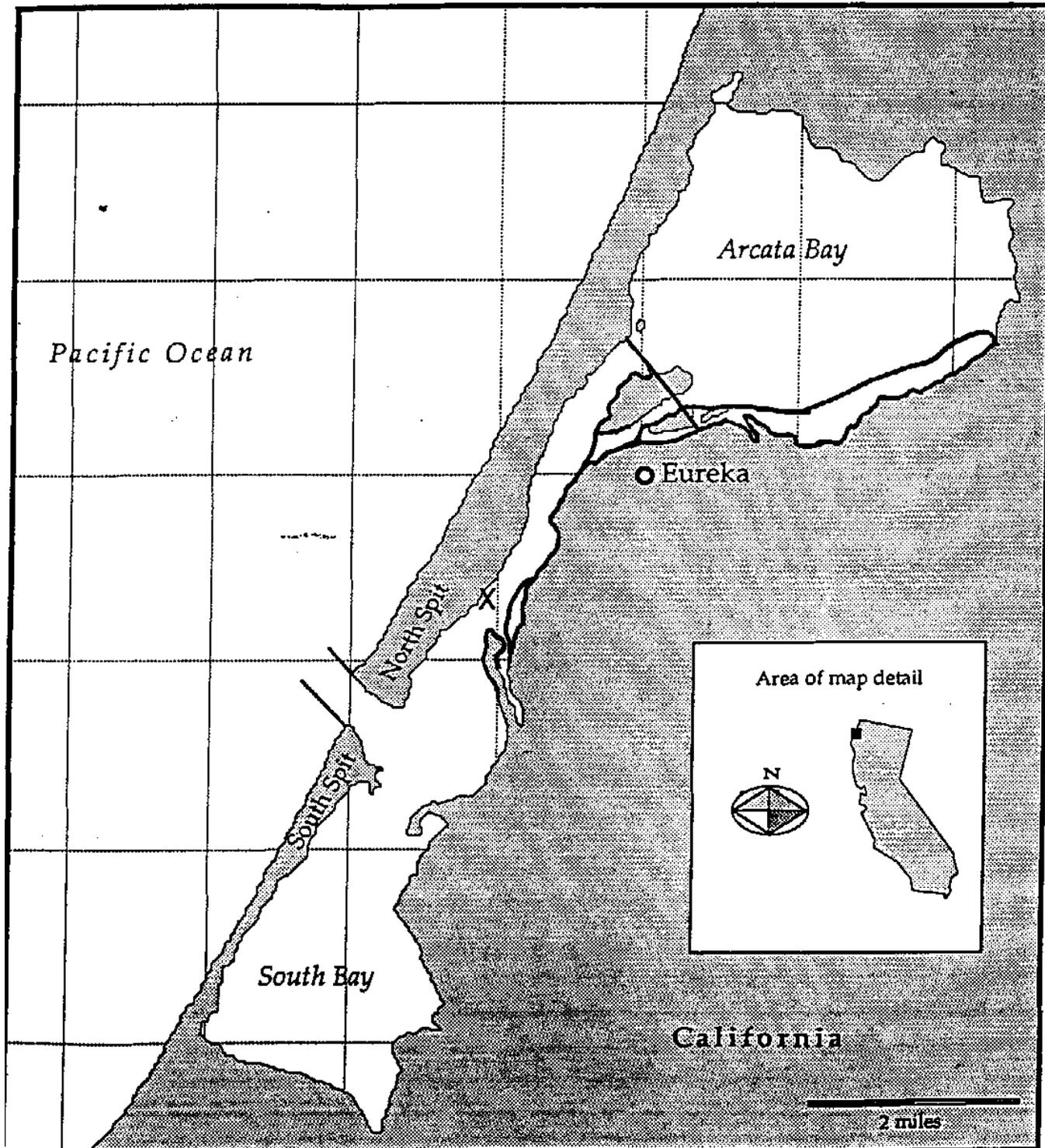
Oil Spill Scenario Map (Bay)

prepared by NOAA

Date/Time: 06 May 1993/1800

Product Spilled: 2,500 barrels, Fuel Oil No. 2 (Diesel)

USE ONLY AS A GENERAL REFERENCE



9510.3 MAXIMUM MOST PROBABLE DISCHARGE

The maximum most probable discharge takes into account such factors as the size of the largest recorded spill, traffic flow through the area, hazard assessment, risk assessment, seasonal considerations, spill histories, and operating records of facilities and vessels in the area.

HISTORICAL SPILL CONSIDERATIONS: Spill history indicates a maximum most probable spill of approximately 3000 gallons (71 barrels). While this value is greater than the value adopted for the most probable spill discussed in the preceding pages, it is considered insufficient for planning purposes. A higher value (2,500 barrels) within the national average of 50-2,500 barrels has therefore been adopted for planning considerations.

There are very few potential sources for a discharge of this size within the North Coast. However, the possibility of such a spill cannot be disregarded. Possible causes include a tank or pipeline rupture at one of the three North Coast marine oil transfer facilities, a catastrophic error during transfer operations between a facility and a tank barge or tank vessel, and the holing of a loaded tank barge or tank vessel.

HAZARD AND RISK ASSESSMENT: As mentioned above, a discharge of this magnitude would likely involve a marine oil transfer facility, tank barge or tank vessel. Humboldt Bay is the only port within the North Coast that contains marine oil transfer facilities. It is also the only port in the area that receives tank vessels or tank barges. As such, it is considered the area of greatest risk.

The expanse of waters offshore is another possible location for a 2,500 barrel spill of diesel. Tank vessels and tugs with tank barges frequently transit the coast going to and from Alaska, San Francisco, Los Angeles and other West Coast ports. Although many tank vessels have voluntarily agreed to transit fifty or more nautical miles offshore, many transit within fifty nautical miles. Furthermore, coastwise tug and tank barge traffic almost exclusively transits within fifty nautical miles, as the short voyages relative to those of tankers make such measures unrealistic and tremendously cost prohibitive.

Several navigational hazards exist in these waters. The coastline is characterized by numerous rocky headlands, wave-cut platforms, submerged rocks, and sea stacks. Inclement weather conditions are also inherent to the entire North Coast. Storms with heavy rains and high winds occur throughout the year, though primarily during winter months. Summer months typically have heavy morning and late afternoon fog.

While the maximum most probable spill could occur as a result of any of the previously discussed accidents, a mishap during transfer operations was selected for this scenario. The relative ease in securing the spill source during transfer operations (versus tank ruptures and vessel groundings or collisions) make it the logical choice. Vessel scenarios were selected for both the worst case discharge and discharge of maximum impact.

VULNERABILITY ANALYSIS: Most of the numerous environmentally sensitive sites throughout Humboldt Bay are at risk. These sites include wildlife refuges, sheltered tidal flats, salt marshes, commercial oyster beds and farmed wetlands.

SCENARIO: MAXIMUM MOST PROBABLE DISCHARGE

Situation: An accident occurs during the transfer of diesel from a tank barge to the Chevron Facility in Eureka. Diesel is discharged into Humboldt Bay for several minutes until the transfer line is secured. (The facility was chosen at random and the fact that it is used in this scenario should not be interpreted to mean that historical spill data indicates a potentially higher risk at this facility.) The two barge

personnel begin deploying boom in an effort to contain the spill. Meanwhile, the Chevron employee calls the terminal manager to inform him of the spill. The terminal manager initiates notifications by calling the National Response Center (NRC), State of California Office of Emergency Services (OES), and Humboldt Bay Response Corporation (formerly Pacific Affiliates). Although not required by law, the terminal manager would likely call Coast Guard Group Humboldt Bay as well.

Location: Humboldt Bay, Chevron Facility

Amount: 2,500 barrels of diesel enter the water. (Note: Due to the ability to secure the source at a transfer facility, it is recognized that a spill at a facility could arguably be less than the 2,500 barrel volume. However, this value was chosen as the maximum most probable quantity for planning purposes.)

Securing Source: Transfer piping is secured by the Chevron employee overseeing the transfer operation.

Areas at Risk: All of Humboldt Bay is at risk. Due to weather and tidal conditions, the areas in the immediate vicinity and north of the Chevron facility are particularly at risk. These areas include Palco Marsh, Indian, Woodley and Daby Islands, Eureka Slough, Elk River, and the entire North Bay (Arcata Bay).

Time of Year: Early-May

Weather: Nighttime with fog.
Wind: 30 knots, SW to W
Visibility: 1/2 mi.
Seas: 1-2 ft.
Current: Max Flood

INITIAL ACTIONS:

NOTIFICATION: As mentioned above, key notifications are made by the terminal manager to NRC, State OES, CG Group Humboldt Bay, and Humboldt Bay Response Organization. NRC notifies Coast Guard Marine Safety Office (MSO) San Francisco Bay via “flash fax”. Coast Guard Group also notifies the MSO, recalls the MSO liaison assigned to the Group, and notifies the local State Office of Oil Spill Prevention and Response (OSPR) warden. State OES notifies

OSPR headquarters in Sacramento and Humboldt County Sheriff’s Dispatch Center (the county’s designated local emergency contact). MSO San Francisco notifies the Eleventh Coast Guard District Office and alerts the Pacific Strike Team.

ACTIVATION OF RESPONSE: The facility implements their facility response plan and initiates appropriate response actions. The major questions to be answered, after ensuring the safety of life, are:
Has the source been secured? and
How much time remains to effectively boom the area?

The facility has 1100 feet of boom which is immediately deployed to contain as much oil as possible. Marine Safety Office San Francisco Bay’s liaison (attached to Group Humboldt Bay) is dispatched to assess the situation, arriving on scene within 30 minutes. The local OSPR warden and a Humboldt Bay Response Corporation representative also arrive on scene within 30 minutes to assess the situation. Upon arriving on scene, these individuals meet with the Chevron’s Incident Commander to develop immediate strategies and priorities (taking into consideration wind and sea state) to minimize the spread of oil. The local OSPR Biologist is called to assist with this prioritization.

The MSO arranges to fly 2-3 command representatives to the scene via CG helicopter. The MSO Command Duty Officer (CDO) and watchstander issue a Broadcast Notice to Mariners, establish a safety zone to prevent vessel traffic from transiting the area, and open the Oil Spill Liability Trust Fund (OSLTF) requesting an initial ceiling of \$25,000. Inbound traffic is monitored by Coast Guard Station Humboldt Bay.

Pre-loaded equipment from Humboldt Bay Response Corporation is transported to the site via tractor trailers and/or small boats launched from the City of Eureka boat launch (east side of Route 255 bridge) or the Fields Landing launch ramp. The personnel and equipment arrive on scene within 1.5 hours.

With a spill of this magnitude, a significant quantity of oil will likely spread from the source. As such, additional personnel and equipment are requested from nearby facilities, Coast Guard Group Humboldt Bay, California Conservation Corps, Coast Guard Pacific Strike Team, Marine Spill Response Corporation and local fishermen's organizations. Nearby facilities could have their personnel and equipment on scene within 1.5 hours of notification. CG personnel and equipment could arrive within 2 hours of notification. Trained response personnel from California Conservation Corps could arrive within 2 hours of notification. Personnel and equipment from the Pacific Strike Team and MSRC are dispatched via truck to arrive in approximately 5-8 hours. Local fishing vessels capable of deploying MSRC or CG VOSS systems are outfitted with a VOSS and ready to be deployed within 5 hours.

INITIAL RESPONSE ACTIONS: On-water recovery of product at the leading edge of the slick will be performed by MSRC skimming vessels and fishing vessels equipped with a VOSS. However, time delays in the deployment of will be experienced. MSRC has no personnel in Humboldt Bay and Humboldt Bay Response Organization personnel have not yet been trained in the use of MSRC equipment. Also, as mentioned above, VOSS systems generally take 5-7 hours to install and will not be available for initial response. As such, booming strategies allowing for shoreside collection and skimming of product (vacuum trucks) must be implemented.

The three Palco Marsh culverts north of the Chevron facility should be closed immediately to prevent oiling of sensitive marshlands. These culverts currently have no floodgates; therefore, they must be manually blocked using sandbags, sediment or rocks. Exclusionary booming should also be performed at each of these culverts and at Elk River.

Preventing oil from entering the northern portion of Humboldt Bay (Arcata Bay) should be given a very high priority. Not only is the area extremely sensitive, but it is comprised mainly of shallow water and mud flats, which significantly reduce the ability to respond. Deflection booming could be implemented at locations south of Woodley Island, south of Indian Island, and along the Eureka waterfront to deflect product toward various collection sites south of Arcata Bay. Due to natural pooling in the area, the southwestern tip of Woodley Island should receive consideration as a site to collect and skim recovered product. Additional collection and skimming sites in this area might include the Louisiana Pacific and Simpson docks along the Samoa Peninsula.

As much skimming and protective booming as possible is completed during the night with available boom. At first light, a CG Group Humboldt Bay helicopter conducts an overflight with CG, State of California and Responsible Party representatives aboard. Planning for any adjustments to the initial response strategies occurs immediately.

RESPONSE ORGANIZATION: The response organization is a modified Unified Command System (UCS) involving primarily the Operations and Planning sections. A public information team is also part of the response organization. Until additional personnel arrive from Alameda and Sacramento,

respectively, the MSO liaison will assume the role of Federal On-Scene Coordinator (FOSC) and the local OSPR warden will assume the role of State On-Scene Coordinator (SOSC). The Responsible Party's Incident Commander will likely be the terminal manager until a member of the company's regional headquarters or corporate spill management team arrives.

The Operations section will be staffed primarily by Humboldt Bay Response Corporation personnel with Coast Guard and State of California monitors. A command post could be located either at the facility at one of the command center sites detailed in Annex F. The forward staging area is located at the Humboldt Bay Response Corporation/MSRC dock.

CONTAINMENT, COUNTERMEASURES, AND CLEANUP STRATEGIES: Prior to implementing any cleanup operations, the FOSC ensures that personnel involved in these operations have the appropriate level of training and are using appropriate personal protective equipment.

Containment is accomplished by implementing the booming strategies discussed above. The goals of containment are to hold and recover the spilled product to minimize shoreline impact. Since this spill is within the bay, it is decided not to use dispersants or in-situ burning. The open-water recovery is accomplished by skimmers and sorbents. The Pacific Strike Team may deploy the Coast Guard On-water Containment and Recovery System (OWCRS) for skimming operations within Humboldt Bay, if appropriate towing vessels are available and if water depths permit. One difficulty encountered in open water recovery is the shallowness of certain areas in the bay, which are often left exposed at low tide. Considering that more severe damage may result, the Unified Command should decide to what extent any impacted marshlands will be cleaned. If shoreline cleanup is necessary, it will involve the usual raking and shoveling of debris and product.

RESOURCES REQUIRED AND ESTIMATED SHORTFALLS: The facility's boom and boat is likely to be overwhelmed by a spill of this size. Humboldt Bay Response Organization can supply approximately 10,000 feet of boom, in addition to the facility boom. Depending on the success of initial containment efforts, additional boom and skimmers, in excess of that available from Humboldt Bay Response Corporation, may be required. MSRC and the CG have pre-staged additional boom and skimming equipment at the Humboldt Bay Response Corporation warehouse. The local MSO trailer can provide an additional 2,700 feet of boom and the CGC EDISTO (homeported in Crescent City) has 1,800 feet.

Four to eight skimmers, storage bladders, and roughly five tank trucks would be required.

Additional personnel will most likely be required for a spill of this magnitude. California Conservation Corps should be contacted to augment the personnel that Humboldt Bay Response Organization and local facilities provide. Personnel from MSRC, MSO San Francisco Bay and the Pacific Strike Team will also be required.

Response shortfalls are addressed at the end of this section.

ESTIMATED TIME TO CLEANUP THE SPILL: The time to complete cleanup will depend on the effectiveness of the initial containment efforts. Open water recovery will take approximately 2 weeks, while shoreline cleanup can be expected to take 30-45 days.

WORST CASE DISCHARGE

Model Limitations and Caveats

For the Area Plan oil spill scenarios a combination of user-specified and statistical winds are often used. The user-specified winds can be fine tuned to some degree to imitate an actual storm event. However, the statistical winds used in the model are **based on** wind histograms taken from the U.S. Navy Marine Climatic Atlas. Using **the histogram** data, the model generates a simulation of it that is random, but has the same statistical distribution. It must be understood, however, that using statistical wind patterns in a scenario gives an illustration of what areas could possibly be impacted, not what areas will be impacted. Also, statistical winds do not take into account local topographic-induced effects that could significantly alter wind patterns.

For offshore areas, the current patterns are based on average seasonal conditions. Current perturbations from wind events, shelf waves, and eddy events are not predictable and therefore not included in the model. Similarly, local small scale phenomena, such as eddies off spits or in rivers and local convergences or divergences are not modeled.

Tidal information is based on NOS Tide Tables and does not reflect short term episodic events such as heavy runoff from floods or storm surges.

For large spills of the type being modeled for these scenarios secondary sources of oil, such as refloating of oil from the shoreline, can be a significant problem. While the model does allow the oil to refloat the details are not exact.

The model does not account for oil that picks up sediment and sinks. This occurs in high sediment rivers and along high energy sand beaches.

Finally, and most important, moderate to large sized spills of a heavy oil (e.g., Bunker C or heavy crudes) will persist for weeks or months after the initial spill event. Depending on local wind and current conditions, these spills can impact shoreline several hundred miles downstream from the source. For these scenarios, even **though** the model is run for only one week and for one specific area does not mean **that there** will not be impacts felt far afield.

Additional notes

The model was run for 72 hours (2/3 - 2/6/92) using the following scenario:

A towed barge containing 40,000 barrels of Bunker C oil (bound for the power plant) was inbound into Humboldt Bay. The barge ended up on the south jetty **of the entrance to the bay** and before it could be pulled off it lost its entire cargo.

SE winds (30 knots with higher gusts) were blowing in advance of strong cold front at the time of the spill. These winds continued to blow for 24 hours until the frontal passage. The winds began to & finish at this point and shift to the W and NW at 20 knots. The winds continued to blow from the NW for the remainder of the model run.

NOTE: User-specified winds were the only winds used for this scenario. Due to the **short duration of the scenario** (72 hours) no statistical winds were used. This particular weather scenario was chosen because it provide a realistic wind pattern for this particular area during the winter season (reference: John Henderson, Marine Forecaster, National Weather Service, Long Beach, California).

The product spilled was 40,000 barrels of Bunker C fuel oil.

The time of the spill (0600 hr's on 2/3/92) was chosen to occur during a flood tide cycle.

Shorelines were coded so that the oil would not “stick” but would refloat after each tidal cycle. This allows more oil to move with tidal action and provide a more widespread impact. This procedure is used to enhance the “worst-case” scenario.

The model indicates that any remaining floating oil will be taken out to sea during the first ebb tide after the spill. However, the winds were such that the heavy oiling along the western shore of North Bay Channel from the southern end of North Spit to Samoa will remain along the shore. Once the winds changed direction (from SE to W to NW) the oil spread onto the eastern shore and was taken out to sea on subsequent ebb tides. Towards the end of the scenario the exact movement of the oil in Humboldt Bay was unclear especially through the bay entrance.

The model indicated little or no impact in South Bay due to the strong southerly winds used in the model. Oiling in Arcata Bay, to the north, was relatively minor, according to the model, because most of the oil beached along the western side of North Bay Channel.

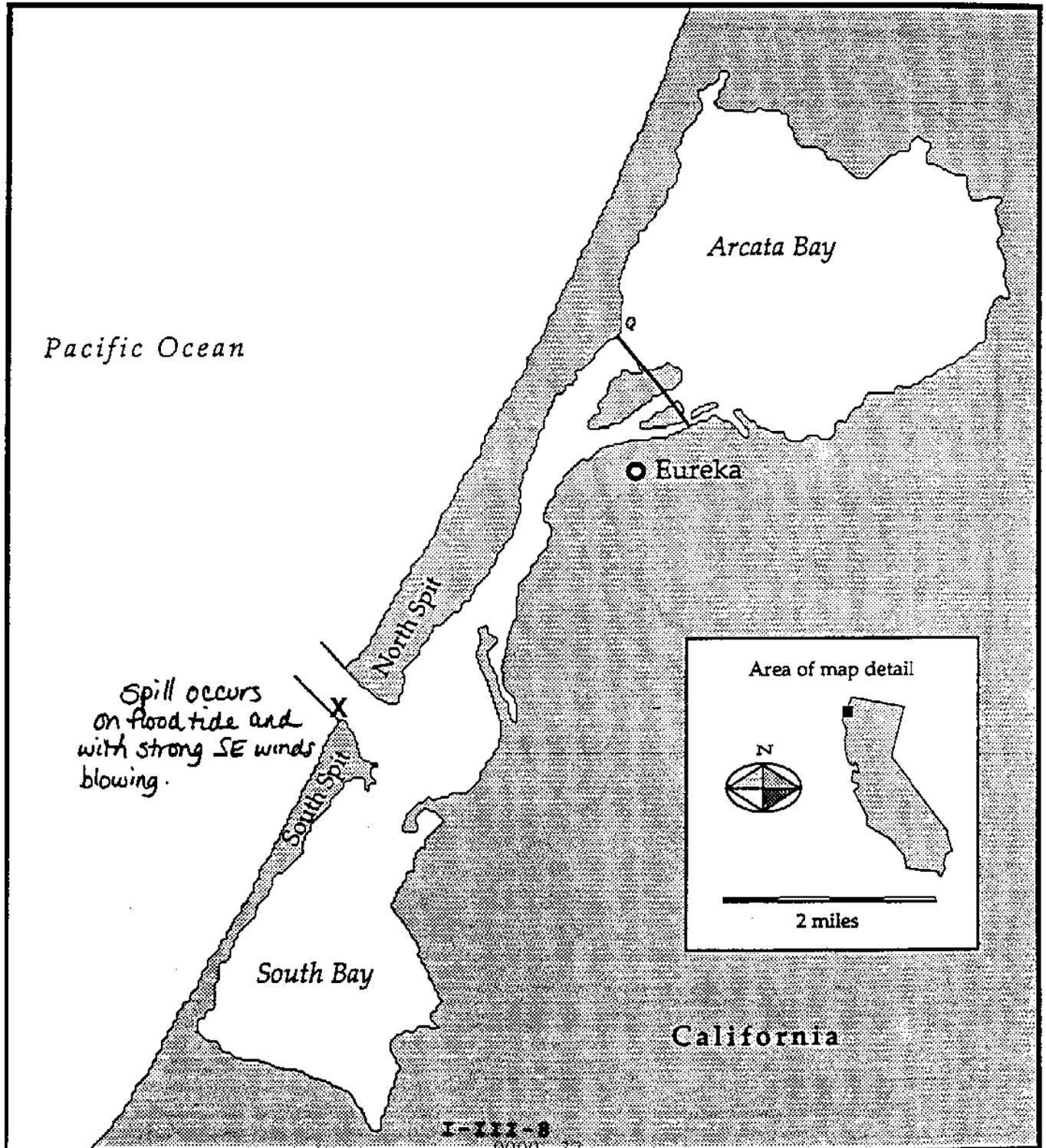
Humboldt Bay Area Plan

Oil Spill Scenario Map (Bay)
prepared by NOAA

Date/Time: 3 Feb. 1992 0600

Product Spilled: 40,000 barrels, No. 6
Fuel Oil (Bunker C)

USE ONLY AS A GENERAL REFERENCE



I-III-B

9500-21

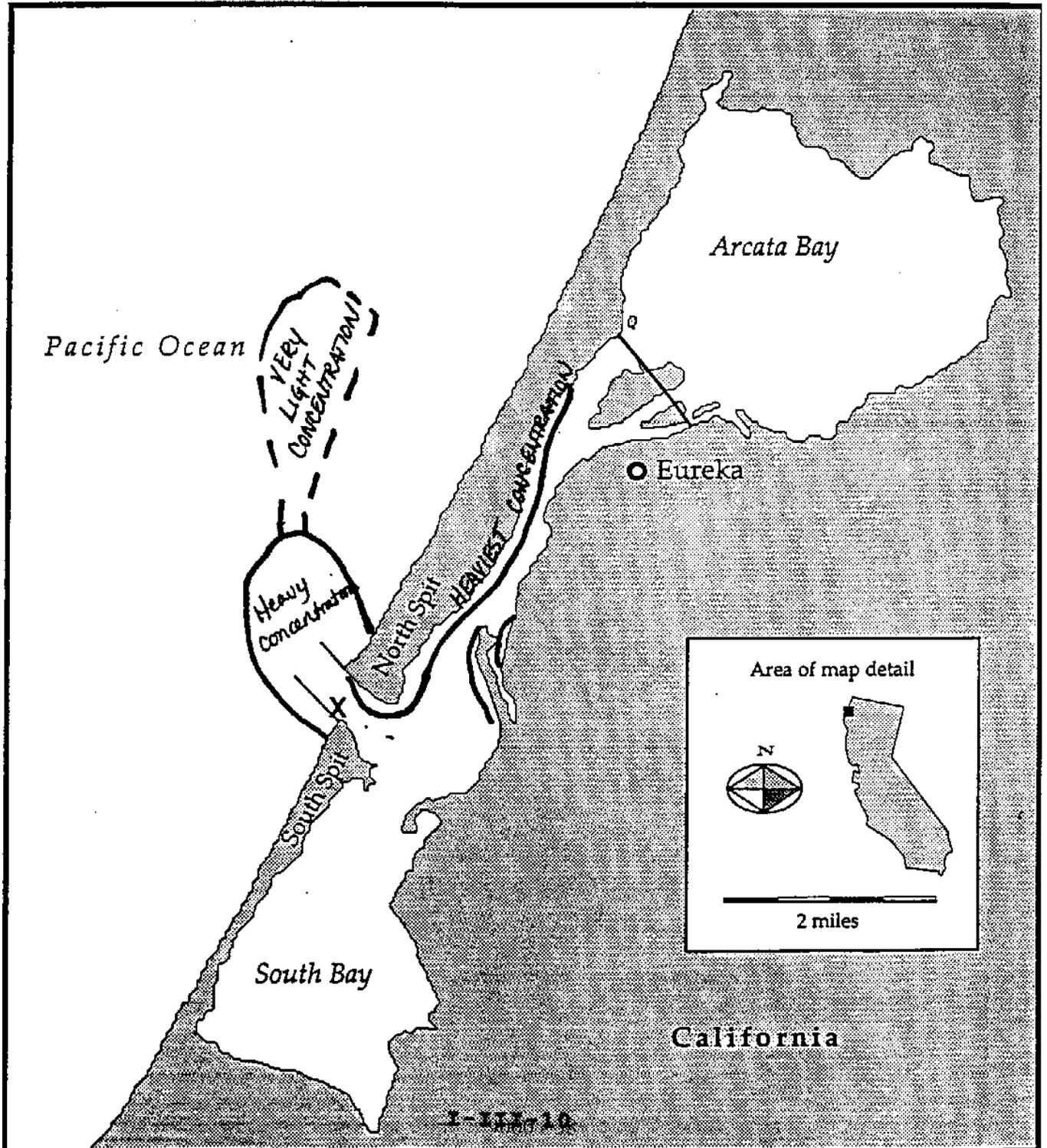
Humboldt Bay Area Plan

Oil Spill Scenario Map (Bay)
prepared by NOAA

Date/Time: 3 Feb. 1992 1200

Product Spilled: 40,000 barrels, No. 6
Fuel Oil (Bunker C)

USE ONLY AS A GENERAL REFERENCE



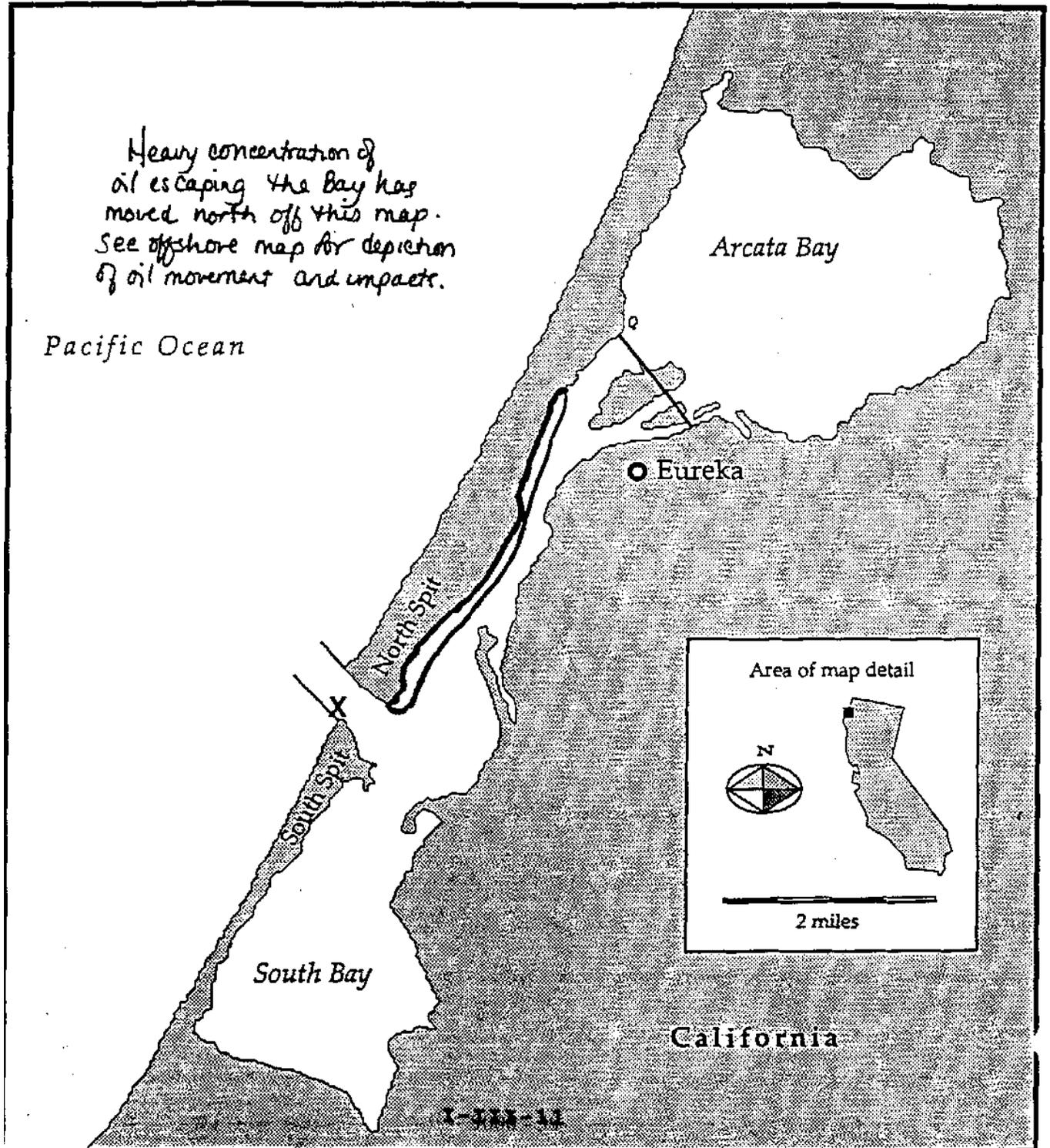
Humboldt Bay Area Plan

Oil Spill Scenario Map (Bay)
prepared by NOAA

Date/Time: 3 Feb. 1992 1800

Product Spilled: 40,000 barrels, No. 6
Fuel Oil (Bunker C)

USE ONLY AS A GENERAL REFERENCE



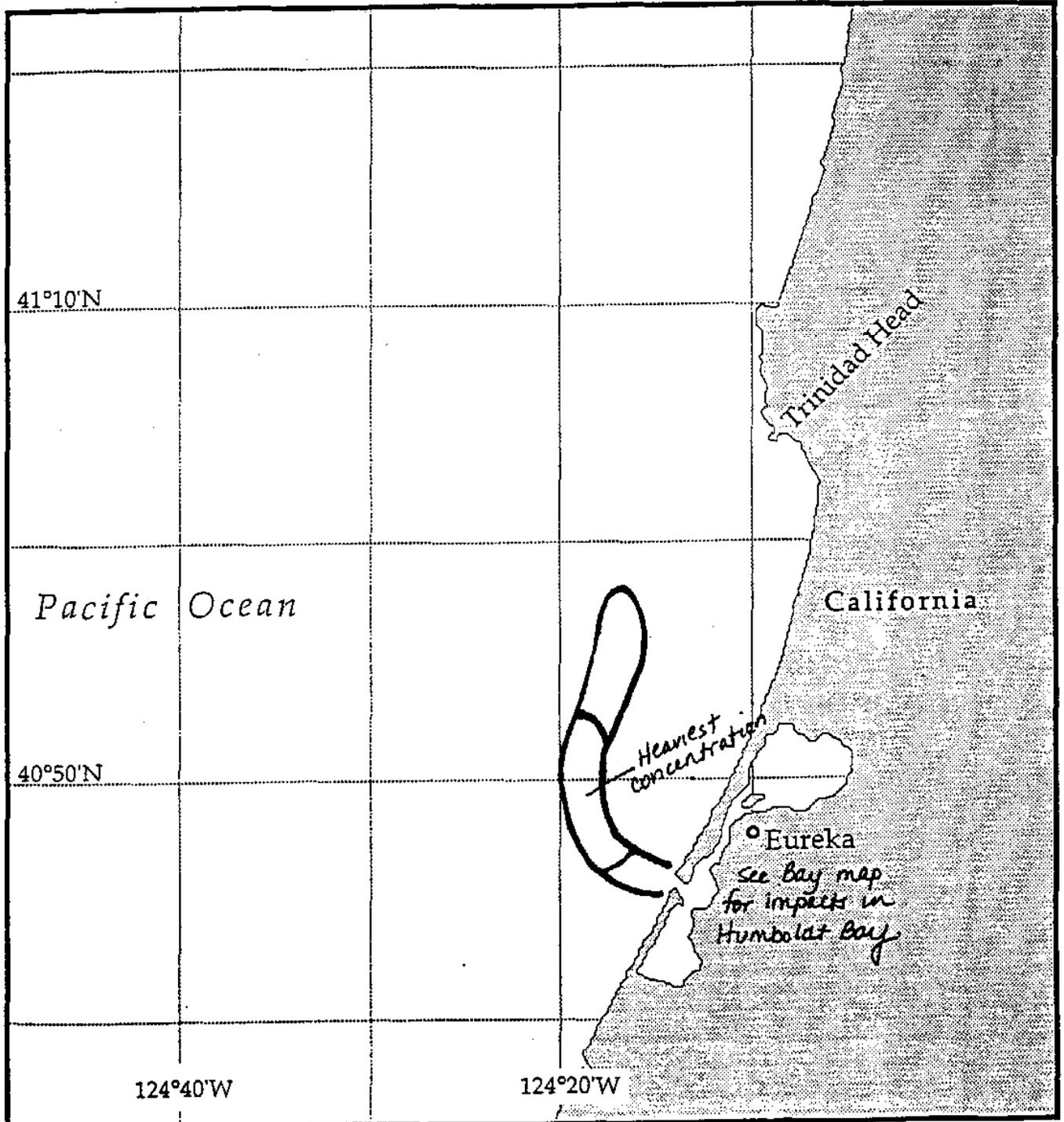
Humboldt Bay Area Plan

Oil Spill Scenario Map (Offshore)
prepared by NOAA

Date/Time: 3 Feb. 1992 1800

Product Spilled: 40,000 barrels, No. 6
Fuel Oil (Bunker C)

USE ONLY AS A GENERAL REFERENCE



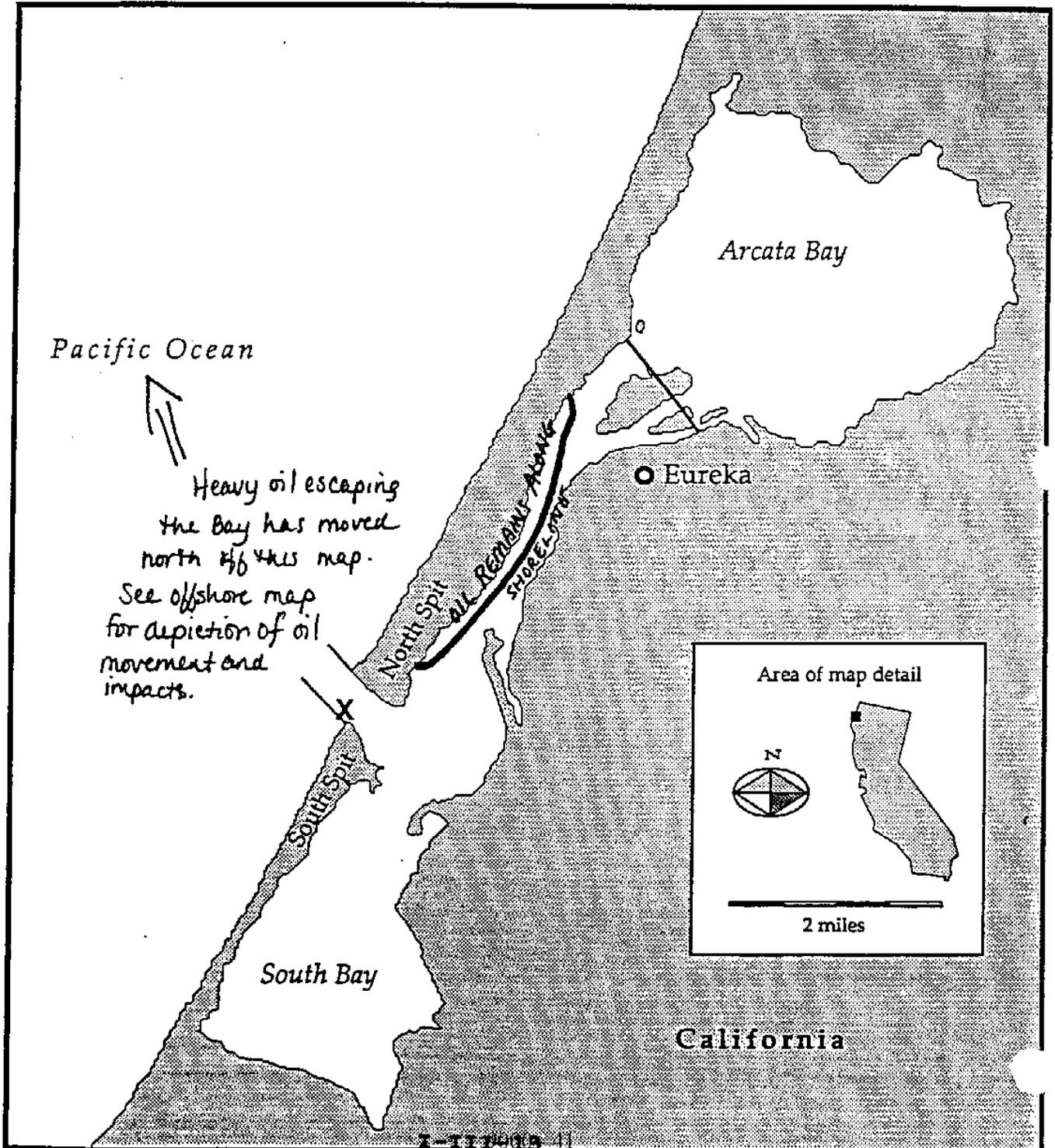
Humboldt Bay Area Plan

Oil Spill Scenario Map (Bay)
prepared by NOAA

Date/Time: 4 Feb. 1992 0000

Product Spilled: 40,000 barrels, No. 6
Fuel Oil (Bunker C)

USE ONLY AS A GENERAL REFERENCE



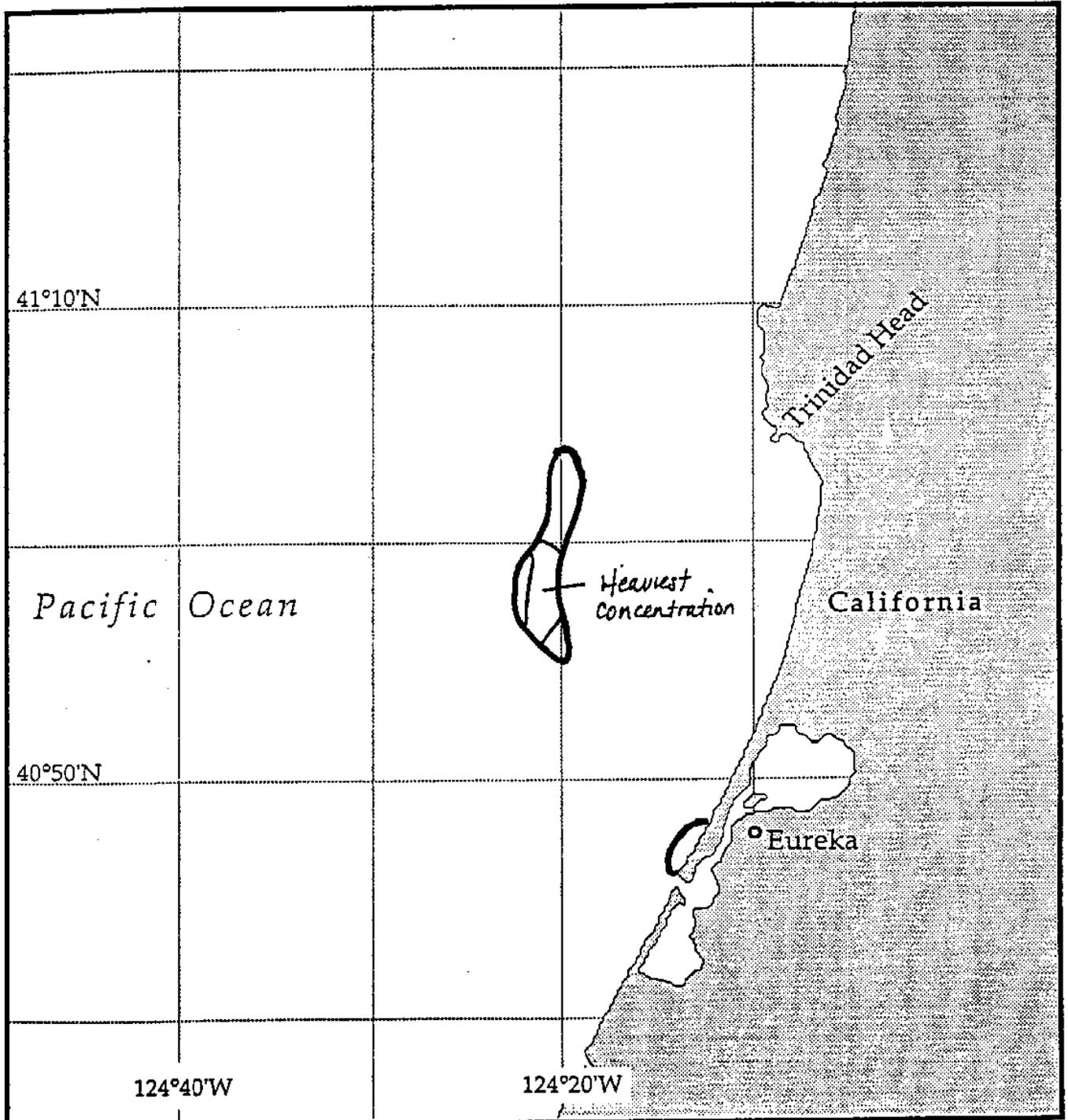
Humboldt Bay Area Plan

Oil Spill Scenario Map (Offshore)
prepared by NOAA

Date/Time: 4 Feb. 1992 0000

Product Spilled: 40,000 barrels, No. 6
Fuel Oil (Bunker C)

USE ONLY AS A GENERAL REFERENCE



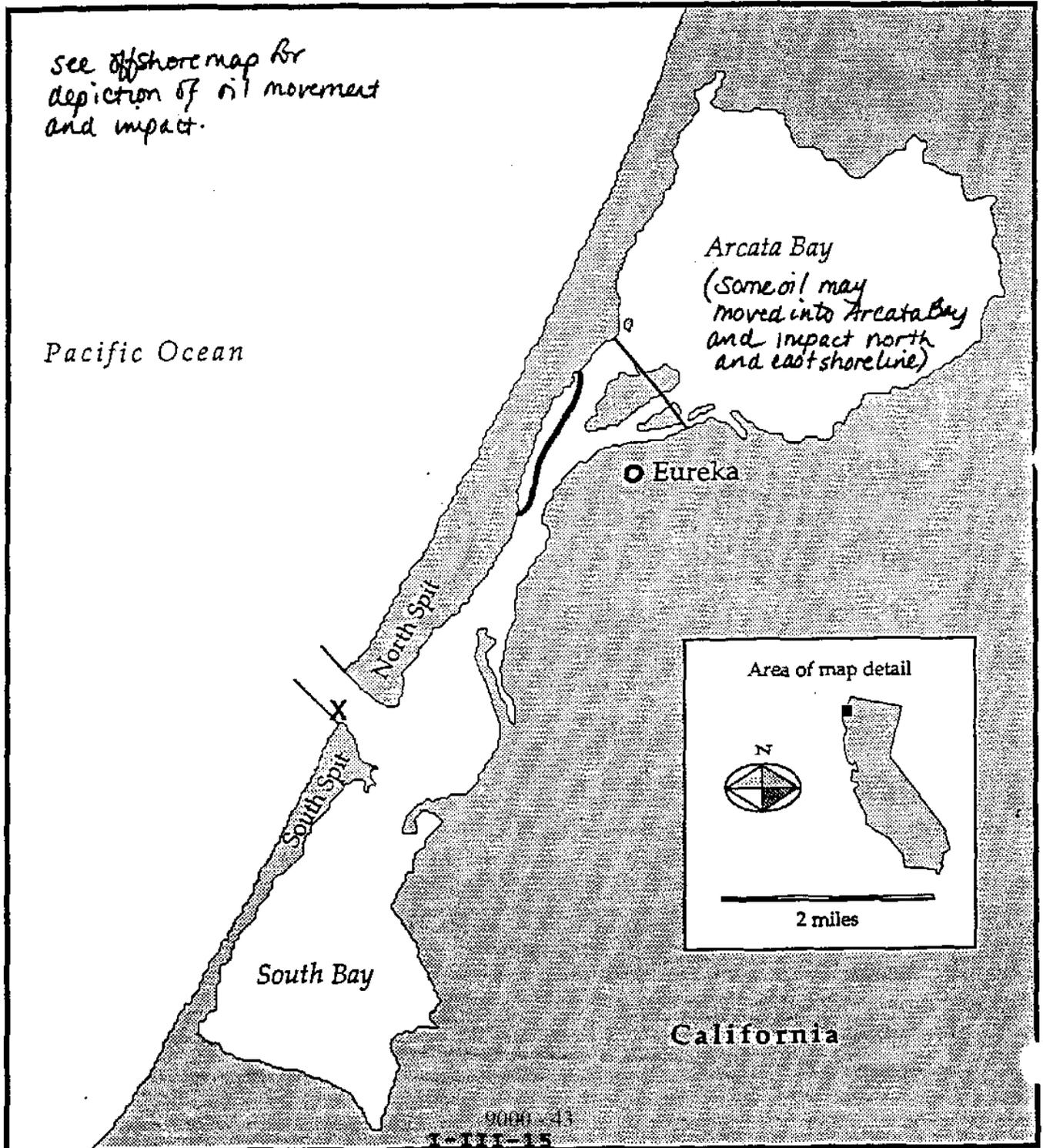
Humboldt Bay Area Plan

Oil Spill Scenario Map (Bay)
prepared by NOAA

Date/Time: 4 Feb. 1992 0600

Product Spilled: 40,000 barrels, No. 6
Fuel Oil (Bunker C)

USE ONLY AS A GENERAL REFERENCE

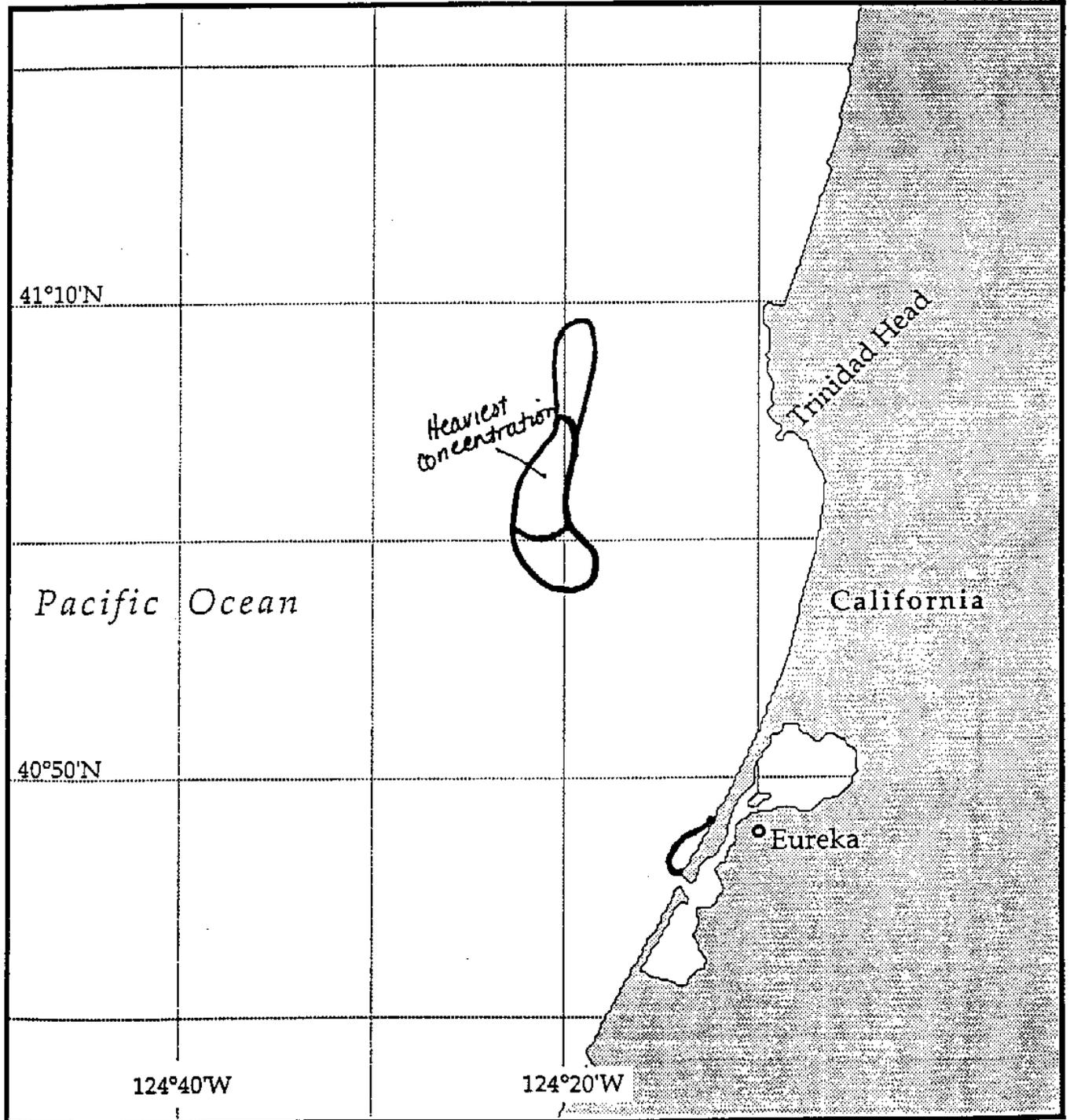


Humboldt Bay Area Plan

Oil Spill Scenario Map (Offshore)
prepared by NOAA

Date/Time: 4 Feb. 1992 0600
Product Spilled: 40,000 barrels, No. 6
Fuel Oil (Bunker C)

USE ONLY AS A GENERAL REFERENCE



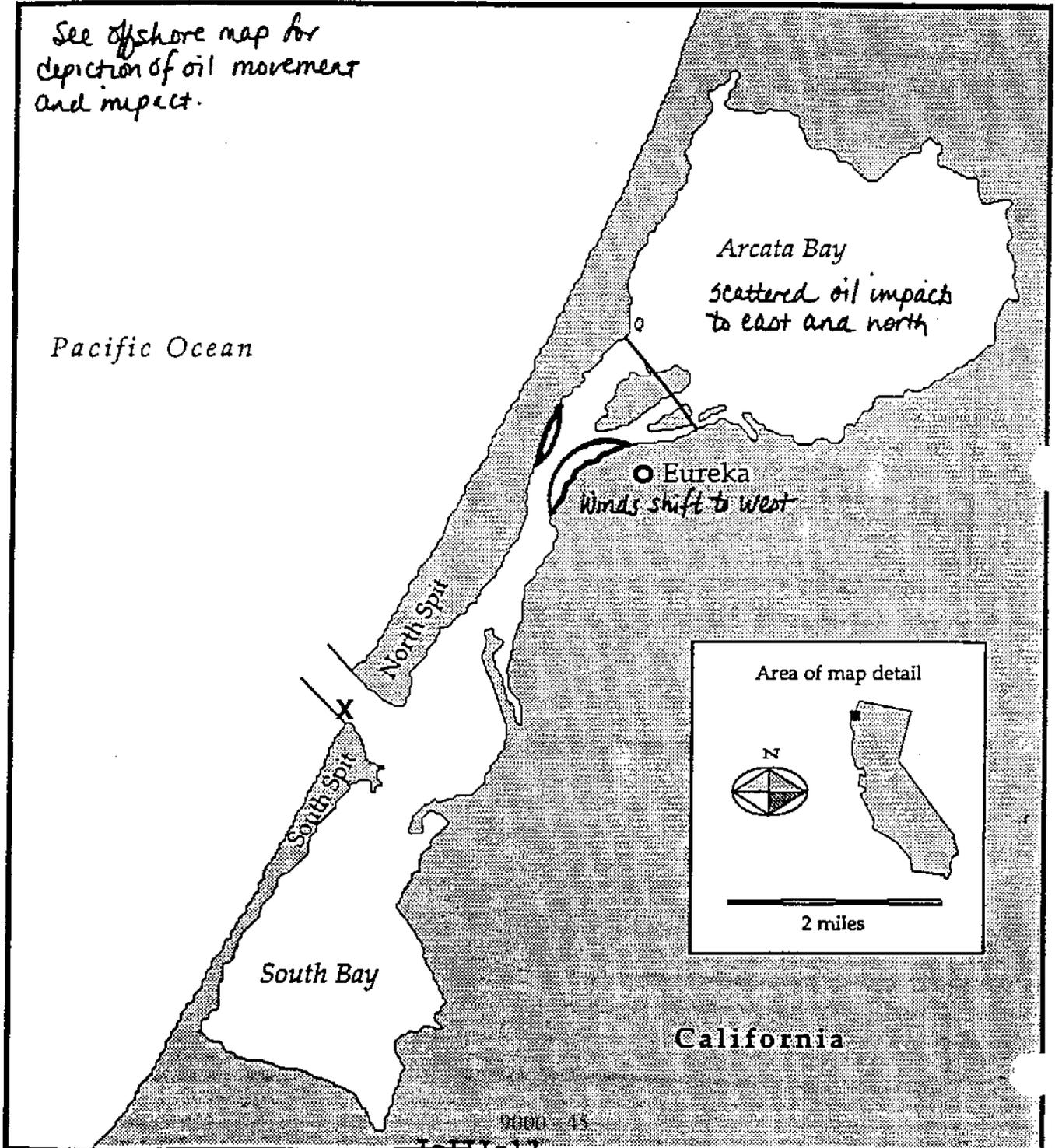
Humboldt Bay Area Plan

Oil Spill Scenario Map (Bay)
prepared by NOAA

Date/Time: 4 Feb. 1992 1200

Product Spilled: 40,000 barrels, No. 6
Fuel Oil (Bunker C)

USE ONLY AS A GENERAL REFERENCE



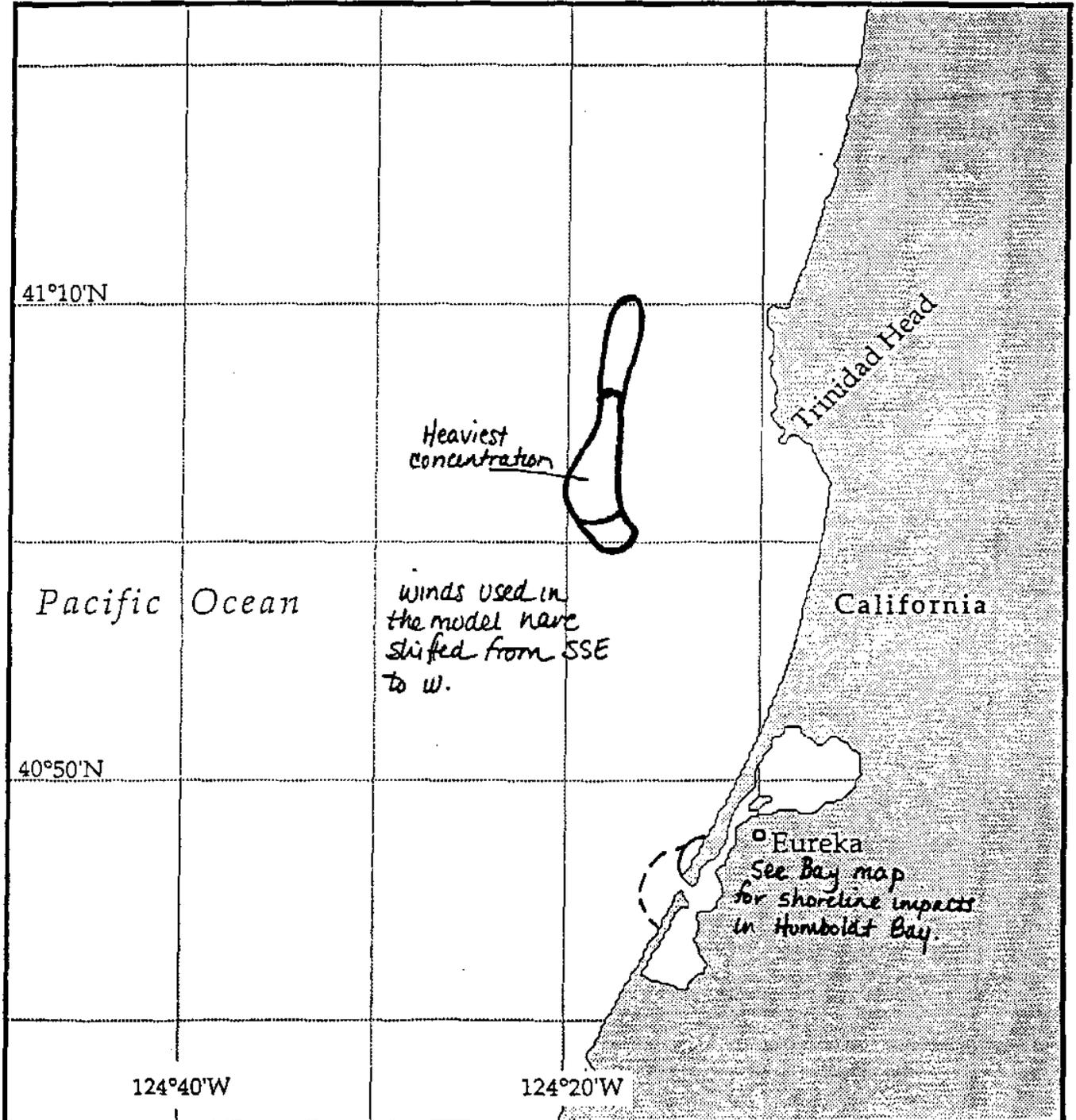
Humboldt Bay Area Plan

Oil Spill Scenario Map (Offshore)
prepared by NOAA

Date/Time: 4 Feb. 1992 1200

Product Spilled: 40,000 barrels, No. 6
Fuel Oil (Bunker C)

USE ONLY AS A GENERAL REFERENCE



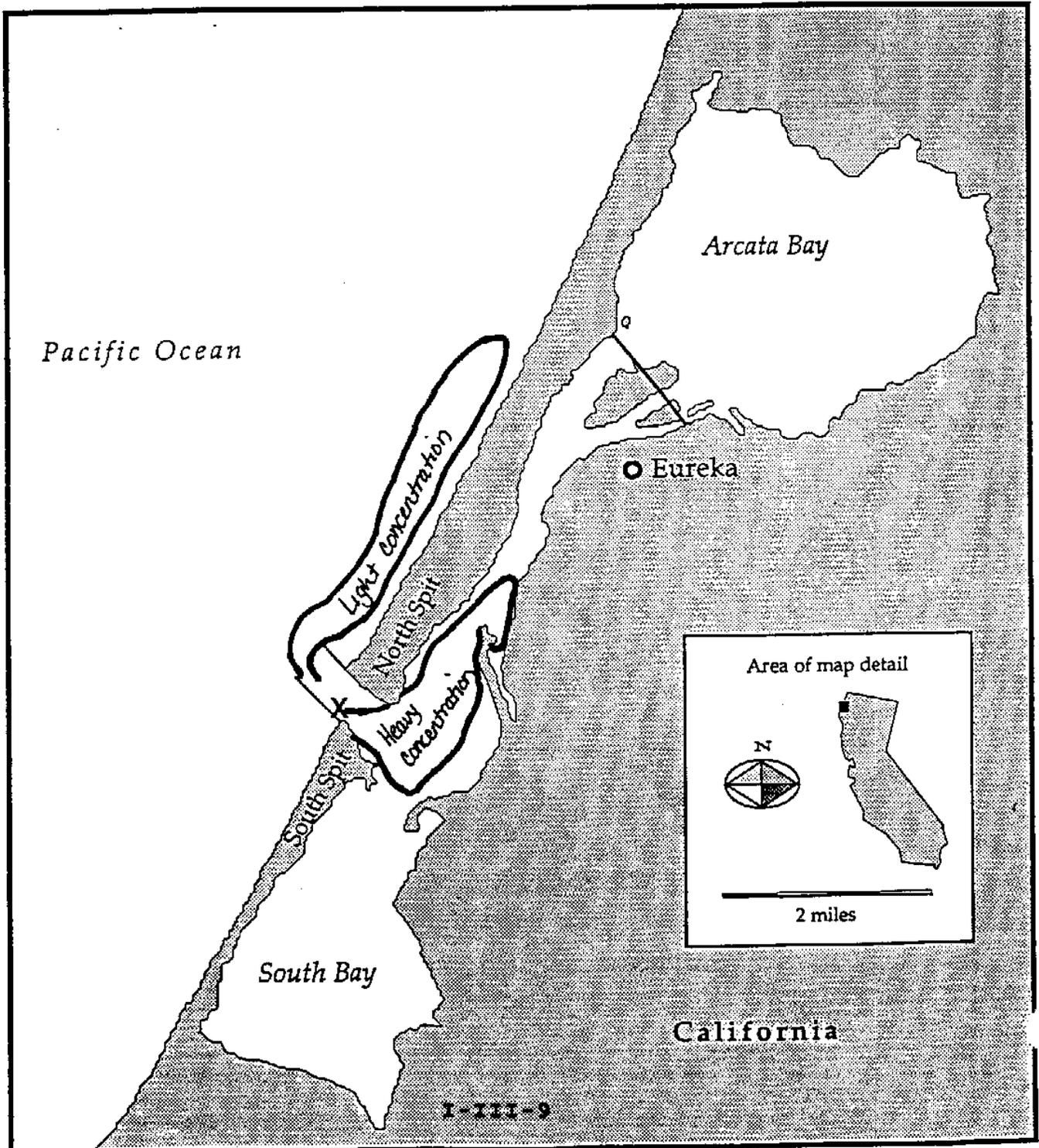
Humboldt Bay Area Plan

Oil Spill Scenario Map (Bay)
prepared by NOAA

Date/Time: 3 Feb. 1992 0900

Product Spilled: 40,000 barrels, No. 6
Fuel Oil (Bunker C)

USE ONLY AS A GENERAL REFERENCE

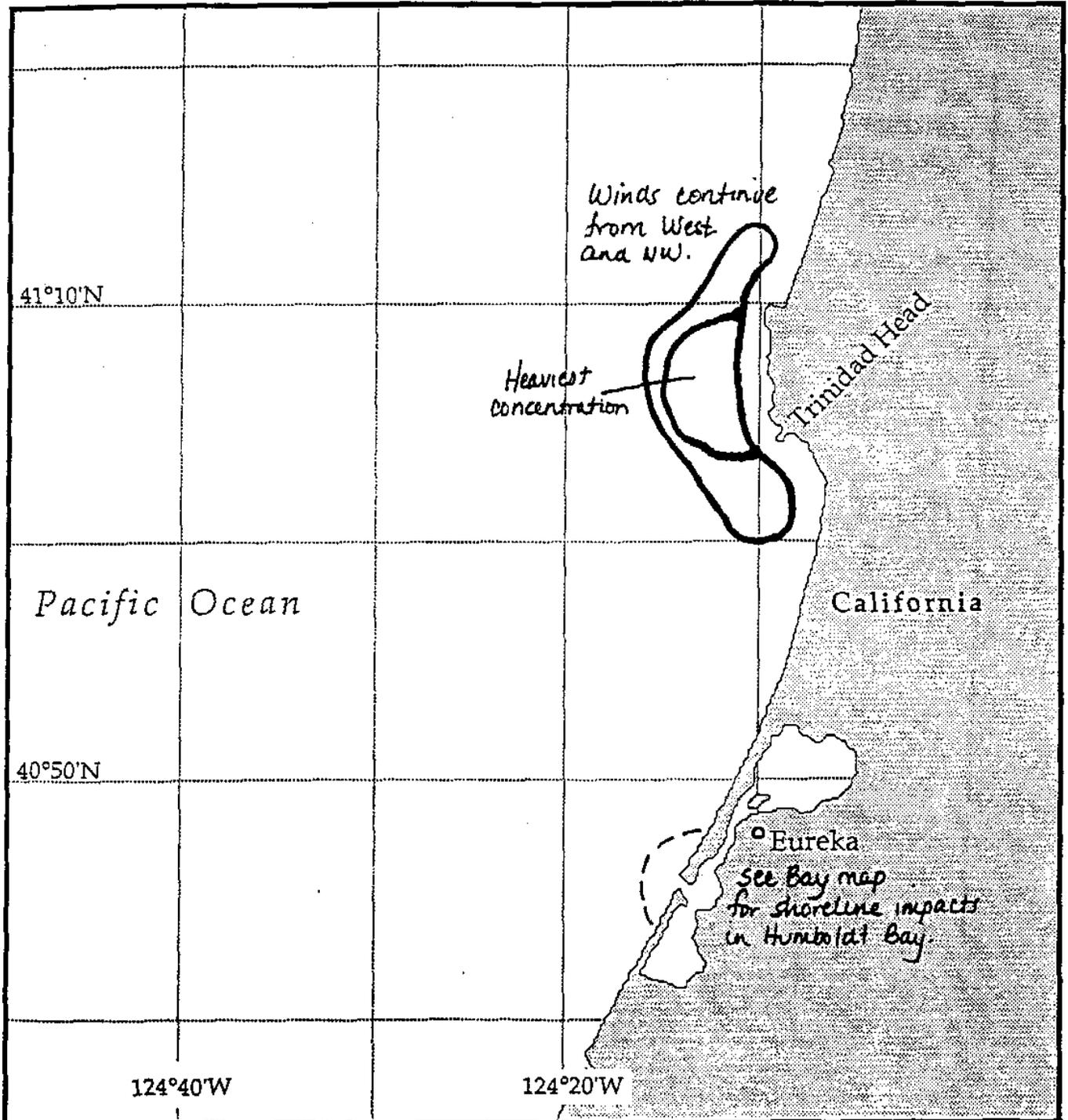


Humboldt Bay Area Plan

Oil Spill Scenario Map (Offshore)
prepared by NOAA

Date/Time: 4 Feb. 1992 1800
Product Spilled: 40,000 barrels, No. 6
Fuel Oil (Bunker C)

USE ONLY AS A GENERAL REFERENCE

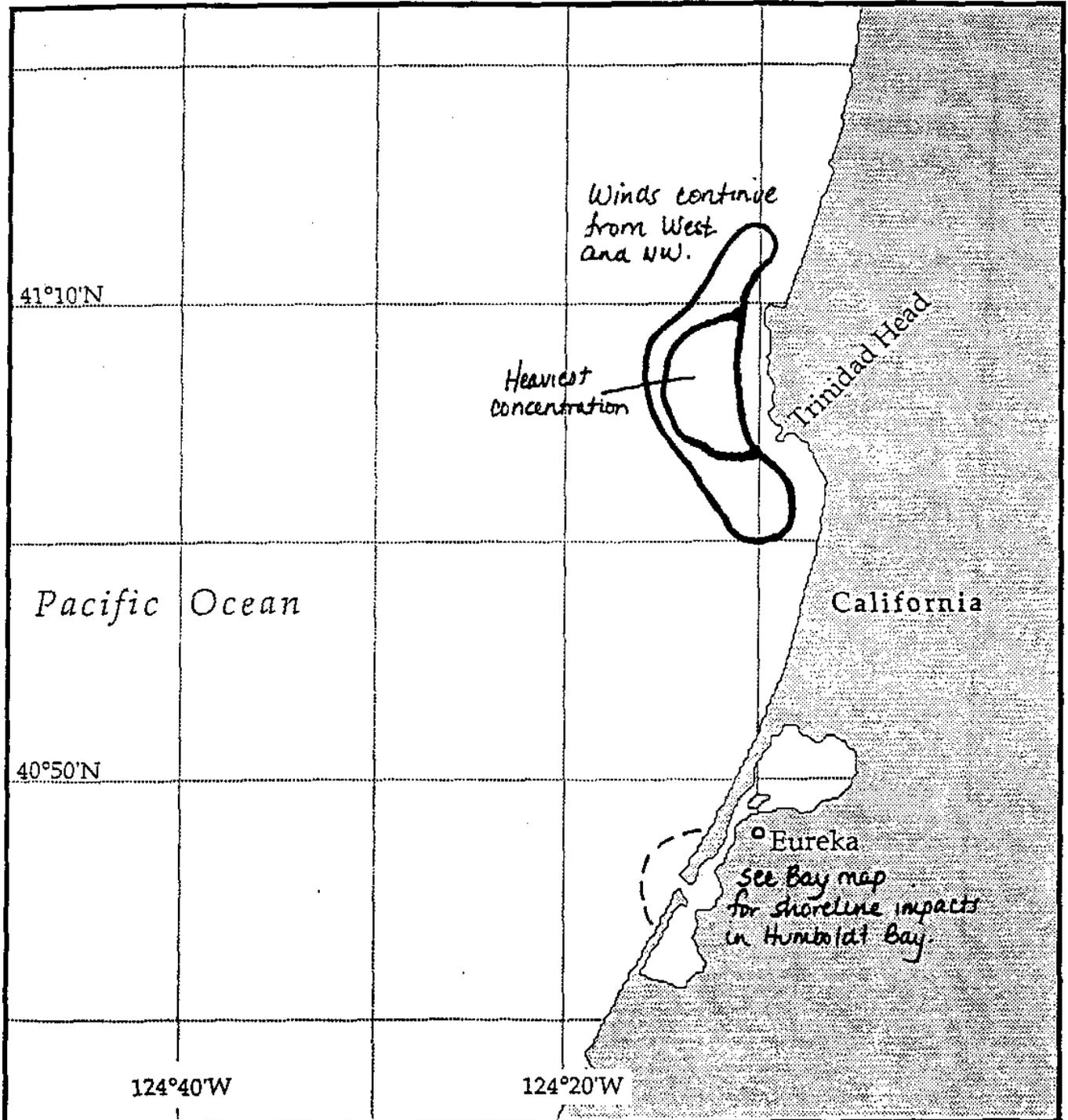


Humboldt Bay Area Plan

Oil Spill Scenario Map (Offshore)
prepared by NOAA

Date/Time: 4 Feb. 1992 1800
Product Spilled: 40,000 barrels, No. 6
Fuel Oil (Bunker C)

USE ONLY AS A GENERAL REFERENCE



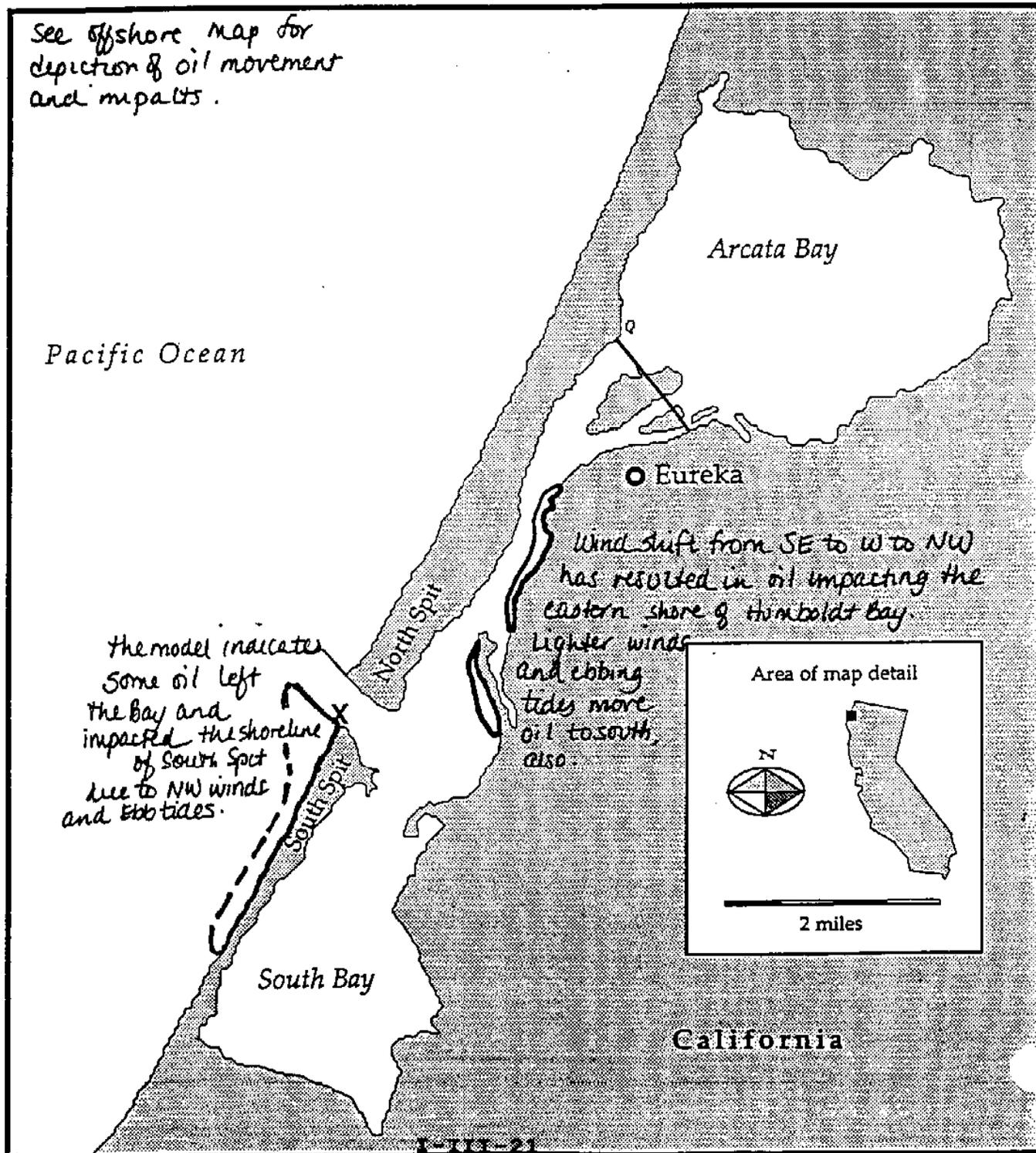
Humboldt Bay Area Plan

Oil Spill Scenario Map (Bay)
prepared by NOAA

Date/Time: 5 Feb. 1992 0000

Product Spilled: 40,000 barrels, No. 6
Fuel Oil (Bunker C)

USE ONLY AS A GENERAL REFERENCE

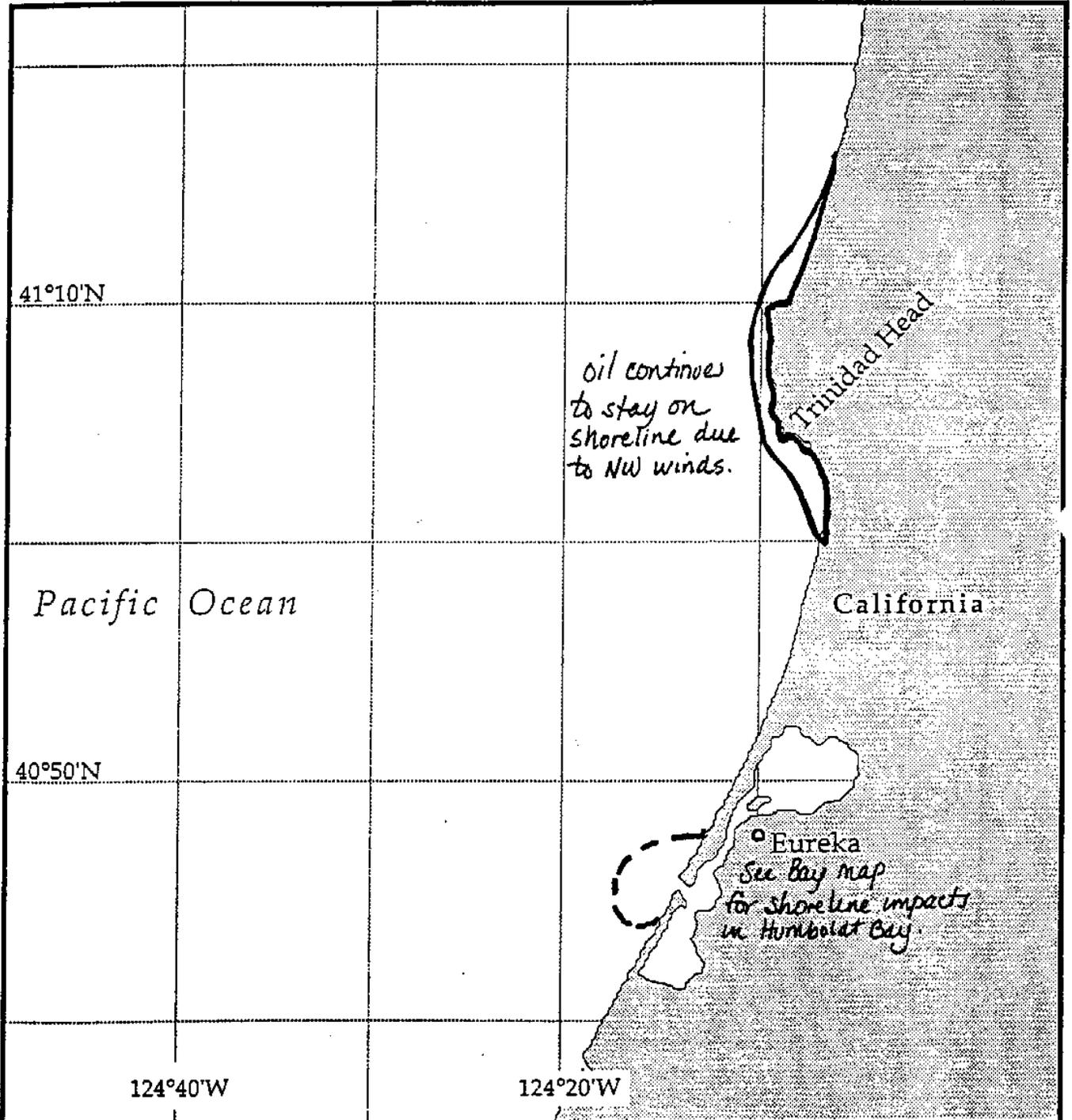


Humboldt Bay Area Plan

Oil Spill Scenario Map (Offshore)
prepared by NOAA

Date/Time: 5 Feb. 1992 0600
Product Spilled: 40,000 barrels, No. 6
Fuel Oil (Bunker C)

USE ONLY AS A GENERAL REFERENCE



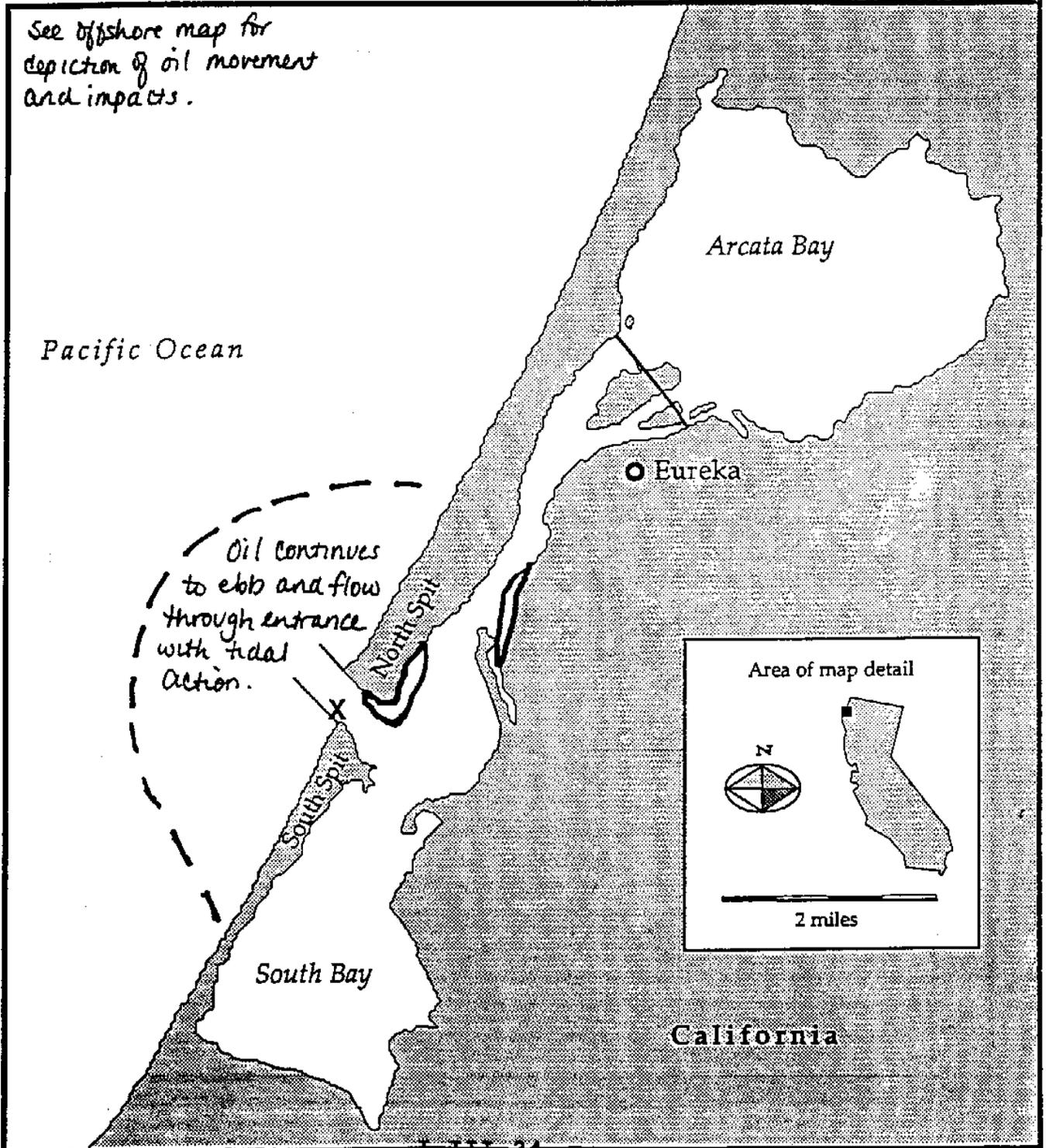
Humboldt Bay Area Plan

Oil Spill Scenario Map (Bay)
prepared by NOAA

Date/Time: 5 Feb. 1992 0600

Product Spilled: 40,000 barrels, No. 6
Fuel Oil (Bunker C)

USE ONLY AS A GENERAL REFERENCE



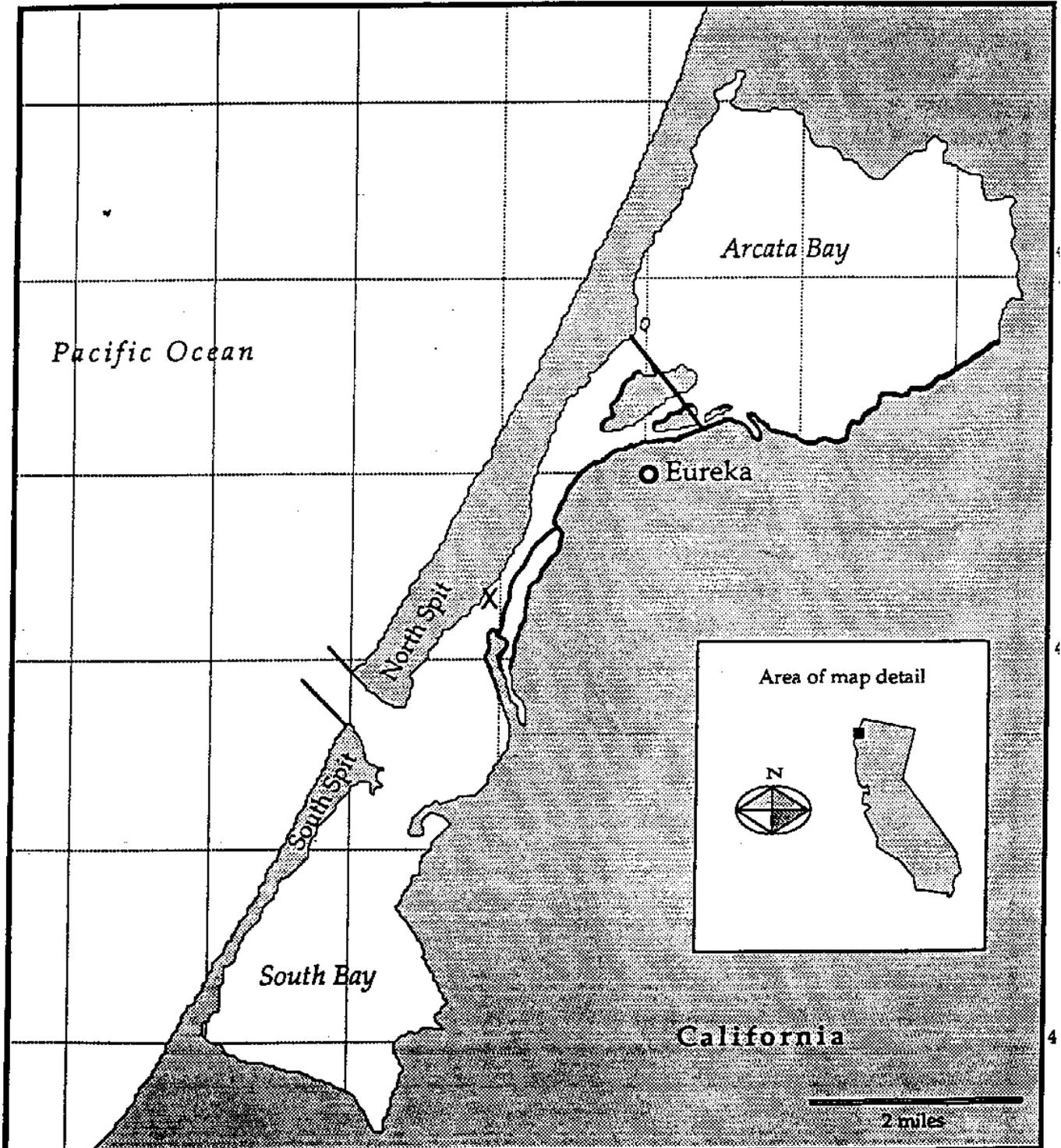
Humboldt Bay Area Plan

Oil Spill Scenario Map (Bay)
prepared by NOAA

Date/Time: 07 May 1993/0600

Product Spilled: 2,500 barrels, Fuel Oil
No. 2 (Diesel)

USE ONLY AS A GENERAL REFERENCE



9500.4 DISCHARGE OF MAXIMUM IMPACT

The Discharge of Maximum Impact occurs off Cape Mendocino when a fully laden tanker loses power and grounds spilling some of its cargo before a tug is able to arrive on scene to render assistance. This spill was chosen for the Area Committee to consider and evaluate the response actions to be taken if such a spill, however likely, was to occur.

HISTORICAL SPILL CONSIDERATIONS: Recent spill history for this area does not contain a spill of this magnitude. However, recently several serious tanker casualties have occurred throughout the world and considering tanker traffic that transits the California coast, the Area Committee chose to include a similar scenario for this area for planning purposes.

HAZARD ASSESSMENT: Large tankers transit the coastline from Alaska to call on the various California ports including San Francisco and Los Angeles. Approximately 85% of all oil tankers serving California have voluntarily agreed to remain at least 50 nautical miles from the coast when transiting up or down the California coastline. However, there are several land points that extend beyond the mainland (such as Point Arena, Punta Gorda and Cape Mendocino) that almost certainly have tankers transiting within the 50 nm range. However unlikely, it is possible that a tanker could lose power or steering and ground along the North Coast of California. It is also possible that a tanker could experience a fire or explosion while transiting similar to the T/V PUERTO RICAN or T/V MEGA BORG. Depending on the exact location, the transit time for a tug to reach a tanker in distress between Point Arena and Humboldt Bay could be up to 12 hours. Weather can play a key role in an event such as this. The Northern California coast frequently experience high winds and sea states throughout the year. The coast normally is very foggy during the summer months. The weather combined with the rugged terrain can be expected to make salvage and cleanup operations very difficult.

VULNERABILITY ANALYSIS: Essentially the entire California coastline is a highly sensitive environment. While the coast is not as sensitive to oiling as inland wetlands and marshes, it is an ecology with numerous wildlife species, including sea otters and grey whales. In addition, the coast in this area is difficult, if not impossible, to access by land. The entire list of environmentally sensitive sites is too numerous to identify individually here, but are included in detail in Annex E of this plan. Mendocino County alone, has 39 environmentally sensitive sites identified. Many of these are creeks and river inlets. The offshore environmental resources were not identified this planning cycle, but could potentially be impacted by a spill of this magnitude.

SCENARIO: DISCHARGE OF MAXIMUM IMPACT

Situation: A tanker fully laden 1.5 million barrel of North Slope crude oil experiences complete loss of power. Oceangoing tugs are not able to reach the vessel before it grounds near Cape Mendocino. The tanker sustains significant damage to its wing cargo and ballast tanks, spilling 500,000 barrels of North Slope crude oil immediately and the rest of its cargo over the next 12 hours.

Location: Cape Mendocino

Amount: 500,000 barrels North Slope Crude initially, with an additional 1 million barrels over the next 12 hours.

Securing Source: The tank vessel is unstable; tugs on scene.

Areas at Risk: Entire North Coastline. Wind and tide will likely carry the spill to impact Cape Mendocino and adjacent coastlines.

Time of Year: Winter

Weather: Cloudy

Wind: 30+ knots, with gusts to 40 SW to W

Visibility: 1/2 mi.

Seas: 10-15 feet.

Current: Max Flood

(Note: This scenario is not a required element of this plan and is a large SONS event potentially involving more than one planning area. During the next planning cycle, it is expected that additional guidance will be available on the SONS response and it is anticipated that the cascading of resources within the state will be further defined. Furthermore, an accurate trajectory was not available prior the printing deadline. Therefore, the details of the response strategy were left for the next planning cycle. However, all elements of this plan apply to this, or any similar event, if it were to actually occur.)

9520 San Francisco Bay and Delta Scenarios

These scenarios are attached to the appropriate GRPs in Vol II, Section 9973.

9530 Central Coast Scenarios

These scenarios are attached to the appropriate GRPs in Vol II, Section 9974.

9600 - OPEN FOR DISTRICT/AREA COMMITTEE DESIGNATION

9700 - REFERENCE PLANS

9710 WILDLIFE RESPONSE PLAN FOR CALIFORNIA

9710.1. INTRODUCTION & BACKGROUND

- Federal and State Law Mandates
- Natural Resource Trustees
 - Interagency Agreements Regarding Wildlife Response Activities

9710.2. CALIFORNIA WILDLIFE OPERATIONS (WO): PERSONNEL, EQUIPMENT AND OTHER RESOURCES

- Wildlife Branch Director
- Department of Fish and Game-Office of Spill Prevention and Response (DFG-OSPR or OSPR)
- Oiled Wildlife Care Network (OWCN)
- Potential Responsible Party
- Volunteers
- Specialized WO Equipment
- Wildlife Databases

9710.3. ACTIVATION OF WILDLIFE OPERATIONS

- Activation of the OSPR's WO Resources
- Activation of OWCN
- Role of Area Contingency Plan in Initial Response
- Developing the Initial Action Plan
- Tiered Level Response

9710.4. WILDLIFE OPERATIONS PROCEDURES

9710.4.1. Prevention of Impacts to Wildlife: Considerations for Implementing Response Countermeasures

- Use of Spill Response Countermeasures in Wildlife Areas
- Human-Related Disturbance to Wildlife
- Personnel Safety During WO

9710.4.2. Wildlife Reconnaissance Group

- Aerial Survey Unit
- Boat Survey Unit
- Shoreline Survey Unit
- Use of Reconnaissance Data for Near Real-Time Survey Mapping

9710.4.3. Hazing Group

9710.4.4 Wildlife Recovery and Transportation Group

- Capture and Transport of Oiled Birds
- Capture and Transport of Marine Mammals
- Capture and Transport of Sea Otters

9710.4.5. Wildlife Processing Group

- Intake Unit
- Wildlife Impact Documentation Unit

9710.4.6. Veterinary Services Group
Bird, Pinniped and Sea Otter Units

9710.5. DEMOBILIZATION

FIGURES AND TABLES

- Figure 1 Wildlife Branch Position in the UC/ICS Organization
Figure 2 Wildlife Branch Organization
Figure 3 Map of Oiled Wildlife Care Network Facilities
- Table 1 Participating Centers of the Oiled Wildlife Care Network
Table 2 Recommended Tiered Level Response of Personnel and Equipment for WO

ATTACHMENTS: Forms

1. Wildlife Reconnaissance Survey Form
2. Chain of Custody Intake Log
3. Live Bird/Mammal Log
4. Dead Bird/Mammal Log
5. Codes for Live & Dead Bird/Mammal Logs

APPENDICES:

(Special Note. The following Appendices are not included in the hardcopy version of the Area Contingency Plan. However, they all can be found in their entirety on the CDFG-OSPR web site at www.dfg.ca.gov/ospr/index.html)

Appendix I: REFERENCE MATERIALS

- a. List of Wildlife Reference Documents
- b. Interagency Agreements
- c. List of Acronyms used in the Wildlife Response Plan

Appendix II: OILED WILDLIFE CARE NETWORK and VOLUNTEERS

- a. OWCN Mission and History
- b. Volunteers in Wildlife Operations

Appendix III: SPECIAL PROCEDURES

- a. Wildlife Intake Unit Protocols (& Forms)
 - Chain of Custody Intake Log
 - Live Bird/Mammal Log
 - Dead Bird/Mammal Log
 - Codes for OWCN/OSWRT Live & Dead Bird/Mammal Logs
 - Species Codes and Status
- b. Wildlife Hazing Plan & Equipment Resource Lists
- c. Sea Otter Oil Spill Contingency Plan

Appendix IV: FORMS

- a. Wildlife Reconnaissance Survey Form:
 - Shoreline or On-Water Observations
- b. OWCN Oiled Bird Intake Form
- c. OWCN Oiled Bird Daily Progress Form

9710 - WILDLIFE RESPONSE PLAN FOR CALIFORNIA

When oil spills occur in California, response actions concerning the identification, protection, rescue, processing and rehabilitation of oiled or threatened wildlife are performed by the Wildlife Branch, a subsection of the Operations Section within the Unified Command/Incident Command System (UC/ICS, sections 2100-2210) and commonly referred to as Wildlife Operations (WO) (Figure 1). Under the direction of the Wildlife Branch Director (WBD), WO are dedicated to prevent, reduce, document and mitigate spill impacts on wildlife.

This Area Contingency Plan's (ACP's) Wildlife Response Plan describes the responsibilities and capabilities of WO, including the procedures to be used and the personnel and equipment resources necessary to meet the wildlife protection responsibilities of the Federal and State governments in California oil spills. Section 9710.1, below, describes the statutory, policy and procedural bases for WO. Section 9710.2 describes the organizational infrastructure for wildlife response operations. Sections 9710.3 discusses initial WO activation and the factors to consider when developing a response. Section 9710.4 describes the various WO Group and Unit functions and procedures, including wildlife reconnaissance, protection, capture, transportation, veterinary treatment and rehabilitation activities in a spill. Section 9710.5 briefly addresses demobilization of WO. The Appendices include: a complete list bibliographic information on the documents cited in the text; detailed protocols for the processing and hazing groups; the Sea Otter Oil Spill Contingency Plan; Oiled Wildlife Care Network and volunteer information; and various forms to be used in WO. **Special Note.** The Appendices are not included in the hardcopy version of the Area Contingency Plan. However, they all can be found in their entirety on the USCG and CDFG-OSPR web sites at www.uscg.mil/pacarea/pm/Graphic/Response.htm and www.dfg.ca.gov/ospr/index.html, respectively.

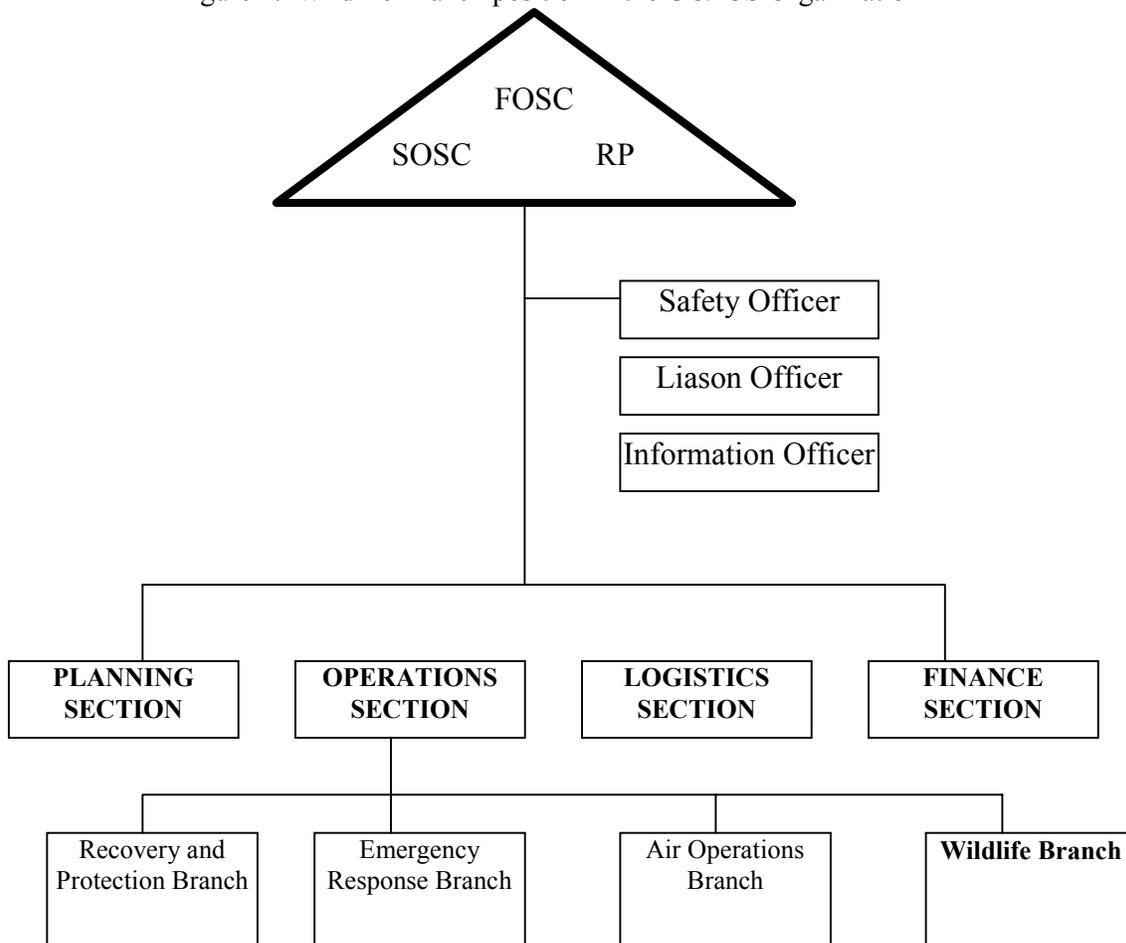
The Wildlife Response Plan for California has been developed jointly by the members of the wildlife operations subcommittee of the San Francisco Bay/Delta Area Committee. The Committee included personnel from the: California Department of Fish and Game - Office of Spill Prevention and Response, U. S. Coast Guard, U.S. Fish and Wildlife Service, National Oceanic and Atmospheric Administration, National Park Service, San Francisco Bay Conservation and Development Commission, the California Coastal Commission, Oiled Wildlife Care Network, and the Exxon Corporation. The Plan has been developed to meet the National Area Contingency Plan's Fish and Wildlife and Sensitive Environments Plan requirements set forth in 40 CFR Part 300, Section 300.210(c)(4), and to be usable throughout California.

While the Wildlife Response Plan has been designed principally to cover oil spills into marine waters as required by Federal and State law, it is applicable to inland oil and non-oil spills as well. The organizational structure, roles and responsibilities remain the same, although some functions may be altered as appropriate.

9710.1 INTRODUCTION & BACKGROUND

Marine wildlife in California is abundant and diverse, occurring in habitats that range from deep offshore waters to shallow tidelands, from steep rocky shores to sandy beaches and wetlands. About 200 species of coastal and marine birds, 33 species of cetaceans (whales and dolphins), six species of pinnipeds (seals and sea lions), and aquatic mammals including the California sea otter, river otters, and beavers are residents or migrants in the offshore, coastal,

Figure 1. Wildlife Branch position in the UC/ICS Organization



bay and estuary waters of California. Also, intertidal and subtidal habitats contain thousands of other species of fish, invertebrates and seaweeds (Leet et al., 1992). All marine wildlife species and their habitats are vulnerable to an oil spill (Bonnell, Ford and Casey, 1993).

The principle objectives of WO during spill response and cleanup are to: (1) protect wildlife and habitats from oiling; (2) protect wildlife and habitats from adverse effects of response measures; (3) minimize unavoidable injuries to wildlife and habitats; (4) rescue and rehabilitate the maximum number of impacted wildlife possible; and (5) document for the Unified Command (UC) the resources at risk and the impacts to marine wildlife. To ensure that these objectives are achieved with maximum efficiency, WO coordinates and manages the activities of the federal, state, local agencies; along with commercial and non-profit organizations responsible for marine wildlife protection and management who fall under the authority of the UC during spill response. Successful WO are accomplished within the UC by the timely and effective deployment and coordination of equipment and trained personnel who carry out established protocols to avoid and minimize wildlife casualties, document impacts, and treat affected wildlife.

Federal and State Law Mandates. The Federal Oil Spill Pollution Act of 1990 (OPA-90) requires, as part of the National Contingency Plan for oil spills, that a Fish and Wildlife and Sensitive Environment Plan be developed in consultation with the U.S. Fish and Wildlife Service (USFWS), the National Oceanic and Atmospheric Administration (NOAA), and other interested parties, including state fish and wildlife agencies (33 U.S.C. § 1321(d)(2)(M)). The plan must include "immediate and effective protection, rescue, rehabilitation of, and the minimization of risk of damage to fish and wildlife resources and habitat that are harmed or that may be jeopardized by a discharge." The requirements for this plan as an annex to Area Contingency Plans are set forth in 40 CFR Part 300, Section 300.210(c)(4). The "Wildlife Response Plan" has been written in conjunction with other sections of the Area Contingency Plan, to address the Federal requirements.

The fish and wildlife provisions of California's Lempert-Keene-Seastrand Oil Spill Prevention and Response Act (OSPRA) (Government Code §§ 8574.7, 8670.37.5) parallel or exceed the OPA-90 fish and wildlife response protection provisions in most respects. Under OSPRA, the Administrator of the California Department of Fish and Game-Office of Spill Prevention and Response (DFG-OSPR or OSPR) must develop contingency plans for the protection of fish and wildlife, assess injuries to natural resources, establish rescue and rehabilitation stations for marine wildlife, and require restoration plans for wildlife resources including habitat following spills. OSPRA also provides for the establishment and funding of the Oiled Wildlife Care Network (OWCN) (Government Code § 8670.37.5) as an essential component of California's wildlife response capability (Mazet et al., 1999).

Natural Resource Trustees. In any spill, the potential responsible party or discharger (PRP) is responsible to federal and state resource trustees, to federally-recognized Indian tribes, and to foreign trustees, all of whom are empowered to enforce remediation and seek compensation for injuries to natural resources caused by a discharge of oil (40 CFR Part 300, Subpart G). These trustee agencies also have a voice in determining the methods used so that wildlife operations comply with each trustee's governing laws and their obligations to preserve and protect wildlife and habitat. During a spill response, the wildlife trustee agencies will advise the Wildlife Branch Director (WBD) on local wildlife resources, especially sensitive species or habitats, logistical consideration, and other issues that arise.

The state and federal trustee agencies that are most likely to participate in WO decisions and response activities are as follows:

Federal:

- Department of the Interior
 - National Park Service (NPS)
 - U.S. Fish and Wildlife Service (USFWS)
- Department of Commerce
 - National Oceanic and Atmospheric Administration (NOAA)
 - National Marine Sanctuaries (NMS)
 - National Marine Fisheries Service (NMFS)
- Department of Defense (DOD)

Although they are not natural resource trustee agencies, the U.S. Coast Guard (USCG) and/or the U.S. Environmental Protection Agency (EPA) are the lead federal agencies in a spill and also participate fully in WO decisions.

The California Department of Fish and Game-Office of Spill Prevention and Response is the lead state trustee agency for wildlife and habitat during oil spills. Other California trustee agencies, or agencies that may otherwise participate in WO decisions, include:

- California Department of Fish and Game (CDFG)
- California Department of Parks and Recreation (CDPR)
- State Lands Commission (SLC)
- California Department of Water Resources (CDWR)

California State Water Resources Control Board (SWRCB)
Regents of the University of California

Interagency Agreements Regarding Wildlife Response Activities. In an effort to provide a more efficient and coordinated response to the UC and natural resources, principal federal and State fish and wildlife trustees have signed cooperative agreements regarding a variety of issues during oil and toxic substance spills. These issues include agency response roles, capture, treatment, rehabilitation, and release of impacted wildlife. The agencies involved include the CDFG, the USFWS, and the NMFS. All of the documents can be found in Appendix Ib.

The first document, “Memorandum of Understanding Designating California Department of Fish and Game as Primary Contact for Fish and Wildlife Issues in the Event of Oil or Toxic Substances Spill within the State of California,” acknowledges the fact that the USFWS and the CDFG share trustee responsibilities for endangered species, migratory birds and migratory fishes. This document identifies the CDFG to designate a primary contact person for support of the UC regarding fish and wildlife issues in the State of California during oil spill response. The stated duties of this person are to: advise on and coordinate activities related to fish and wildlife problems and issues related to the spill; advise and direct efforts to minimize injury to wildlife; coordinate efforts to recover and care for oiled wildlife; maintain communication with the USFWS; and adhere to permit conditions for both the federal and State wildlife permits. These duties correlate directly with the responsibilities of the WBD.

In a second agreement between the USFWS and the CDFG, authorization is given to the CDFG to “take” federally endangered and threatened species during emergencies. The document entitled “Cooperative Agreement Between the California Department of Fish and Game and the U.S. Fish and Wildlife Service Endangered and Threatened Fish, Wildlife and Plants,” establishes a cooperative agreement between agencies regarding the conservation and recovery of endangered, threatened and rare fish, wildlife and plants, pursuant to Section 6© of the Endangered Species Act of 1973 and the California Endangered Species Act of 1984. The agreement contains provisions for any employee or agent of the CDFG who is designated by that agency for such purposes may, when acting in the course of his official duties, take federally listed endangered and threatened fish, wildlife or plant species without a permit if such action is necessary. Those necessary actions are further defined in the Agreement in Appendix Ib. This gives the CDFG and its agents, such as the OWCN, permission to handle protected species during emergency spill response.

In a similar agreement to that with the USFWS, the CDFG has entered into an agreement with the NMFS to govern the rescue and rehabilitation of pinnipeds (seals and sea lions), cetaceans (dolphins and whales), and sea turtles. The document is entitled “Memorandum of Agreement Between the California Department of Fish and Game Office of Oil Spill Prevention and Response and the National Marine Fisheries Service Southwest Region Regarding the California Marine Mammal Stranding Network and the Oiled Wildlife Care Network” (Appendix Ib). The primary purposes of this agreement are (a) to ensure that pinnipeds, cetaceans, and sea turtles affected by oil spills in marine waters of the State receive the best achievable treatment and (b) to ensure the collection of sound biological and chemical data on such affected resources. The Agreement ensures consistency with and incorporates the NMFS guidelines and protocols on the rescue and release of live-stranded pinnipeds, cetaceans, and sea turtles into the OWCN protocols for response, rescue, rehabilitation and medical treatment of these animals, as outlined in the NMFS/OSPR Contingency Plan (Attachment A of this Memorandum). Other conditions include the required use of the California Marine Mammal Stranding Network (CMMSN) and OWCN personnel and facilities in the rescue and rehabilitation of pinnipeds, cetaceans, and sea turtles; cooperative information and data exchange programs, and the development of training materials.

9710.2 CALIFORNIA WILDLIFE OPERATIONS: PERSONNEL, EQUIPMENT AND OTHER RESOURCES

Wildlife Branch Director. All California WO during spill response are directed by the Wildlife Branch Director (WBD), who should be a representative of one of the natural resource trustee agencies (see Section 9710.1, above). The WBD is responsible for minimizing wildlife losses during spill response. The WBD coordinates early aerial, ground, and on-water reconnaissance of the wildlife in the spill area; employs wildlife hazing measures when required; ensures that a wildlife processing center is established and maintained; and recovers and rehabilitates impacted wildlife, and coordinates operations among the Federal and State trustee agencies (see Section 9710.1) and the OWCN (see below). The WBD also oversees activities of any other private wildlife care groups in addition to the OWCN, including those employed by the PRP. A full description of the WBD's duties and responsibilities is in Section 3250.

The five groups of the WO Branch -- Wildlife Reconnaissance Group, Hazing Group, Recovery and Transportation Group, Processing Group, and Veterinary Services Group -- serve under the direction of the WBD. The activities of these groups are described in Section 9710.4 below. The OWCN Supervisor and the OWCN Volunteer Coordinator also work under the direction of the WBD. Figure 2 shows the relationship of these groups within WO, and the units and teams that operate under each group. See Sections 3250 to 3255 of duty statements each position.

Because of the great sensitivity of wildlife and habitat resources and the potential dangers of working with wild animals, all WO personnel must have received any specialized training, such as animal handling training, that is necessary for safe, competent completion of their assignments. Most WO activities require the involvement of at least one professional wildlife biologist with knowledge of coastal resources and, preferably, previous oil spill response experience. Staff and volunteers trained by OWCN possess the skills and expertise to participate in many units within WO. The WBD is ultimately responsible for ensuring that each WO task is performed safely and properly by qualified personnel.

Office of Spill Prevention and Response (OSPR). Because the Department of Fish and Game is the lead state trustee agency for wildlife resources in California, it often takes the lead in the implementation of California WO. Further, as discussed previously, OSPR is subject to state statutory requirements to protect California wildlife in a spill. As principal developers and custodians of the environmentally sensitive sites listed in the ACP, OSPR biologists are uniquely knowledgeable about marine and coastal wildlife and experienced in issues during wildlife response operations. Thus, in a spill OSPR will bear significant responsibility for informed and timely decisions about the allocation and deployment of specialized wildlife protection, rescue, and rehabilitation resources. This includes decisions regarding staff, equipment, and contractors, in coordination with the trustees. In all larger California spills to date the WBD has been an OSPR employee.

Oiled Wildlife Care Network. In addition to the OSPR, the OWCN, a statewide cooperative system of specialized wildlife health centers set up by legislative mandate (see Government Code § 8670.37.5), is integral to WO. The OWCN maintains a corps of professionally trained volunteers, paid staff and veterinarians. When California wildlife are affected by an oil spill, these personnel retrieve the oiled animals, evaluate the animals' need for treatment, and remove the toxic products from the animals. OWCN personnel then rehabilitate impacted animals, locate suitable release sites, release animals, and monitor post-release survival. The OWCN has instituted 24 permanent wildlife care participant facilities along the California coast (see Figure 3 and Table 1) for use during a spill (Mazet et al., 1999). For more information on the OWCN, see Appendix IIa and the OWCN web page at www.vetmed.ucdavis.edu/OCWN.

Potential Responsible Party. The potential responsible party (PRP) or discharger may have existing agreements with the OWCN or individual wildlife rehabilitation and care organizations. The PRP may activate their own wildlife care contractors and/or designate staff to WO Branch positions. In either case, all personnel and equipment supplied by the PRP to WO will be managed by the WBD under the UC/ICS.

Volunteers. As noted above, WO personnel may include pre-identified, trained volunteers and/or “convergent” volunteers, who are not pre-identified and whose training may range from highly skilled to completely untrained. Most volunteers are provided by and/or coordinated through the OWCN. Volunteer management efforts for tasks unrelated to the OWCN volunteers (*e.g.* pre-impact beach assessments, post-spill economic impact surveys) are coordinated instead by the OSPR Statewide Volunteer Coordinator. During a spill, the WBD, in coordination with the OWCN Response Director and the Veterinary Services Group Supervisor, will appoint a Volunteer Coordinator to manage the influx of convergent and pre-identified volunteers. Convergent volunteers who wish to assist with oiled wildlife will be screened by the OWCN or the Volunteer Coordinator. Table 1 lists volunteer organizations that participate in the Oiled Wildlife Care Network, which can be activated by the OWCN as needed through the Wildlife Operations Branch. Appendix II contains a full discussion of the complexities of volunteer management specific to oiled wildlife care.

Figure 2: **Wildlife Branch Organization**

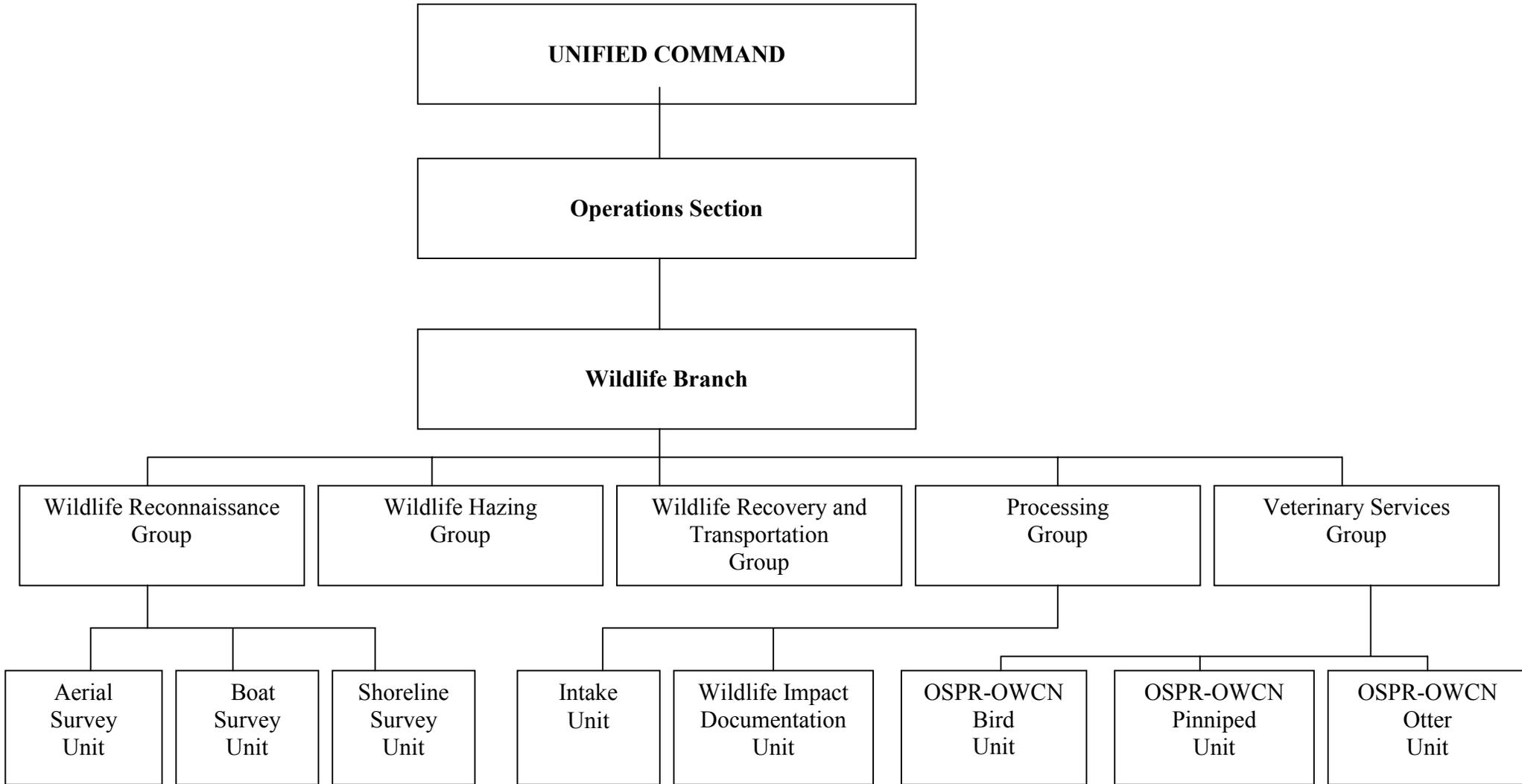


Figure 3



Table 1: Participating Centers of the Oiled Wildlife Care Network

	Organization	Primary Response Facility	Activation	Maximum Caseload
1.	North Coast Marine Mammal Center, Crescent City	*	Nov. 1995	15 marine mammals
2.	Marine Wildlife Care Center, Arcata	*	Jan. 1997	400 birds
3.	Santa Rosa Bird Rescue Center, Santa Rosa		Aug. 1995	25 birds
4.	Wildcare, San Rafael		Aug. 1995	25 birds
5.	The Marine Mammal Center, Sausalito	*	Dec. 1995	40 marine mammals 10 sea otters
6.	International Bird Rescue Research Center (existing), Berkeley		Mar. 1996	100 birds
	International Bird Rescue Research Center, Cordelia (construction of new facility)	*	May 2000	1000 - 4000 birds
7.	Lindsay Wildlife Museum, Walnut Creek		Aug. 1995	50 birds
8.	Peninsula Humane Society Wildlife Care Center, San Mateo		Aug. 1995	50 birds
9.	UC Santa Cruz Avian Facility, Santa Cruz (construction of new facility)	*	Aug. 2000	400 birds
10.	Marine Wildlife Veterinary Care Research Center, Santa Cruz	*	July 1997	125 sea otters, 50 birds, 10 other marine mammals
11.	Native Animal Rescue, Santa Cruz		Aug. 1995	25 birds
12.	Monterey Bay Aquarium, Monterey	*	Apr. 1997	10 sea otters
13.	Monterey SPCA, Monterey		Mar. 1996	25 birds
14.	Pacific Wildlife Care, San Luis Obispo (construction of new facility)	*	Apr. 2000	200 birds
15.	The California Wildlife Center		Pending	200 birds
16.	Institute of Marine Science, UC Santa Barbara, Santa Barbara		Pending	100 birds
17.	Santa Barbara Wildlife Care Network, Santa Barbara		Aug. 1995	50 birds
18.	L.A. Bird Care and Education Center, San Pedro	*	Sept. 1999	1000 birds
19.	The Marine Mammal Center at Fort MacArthur, San Pedro	*	Nov. 1995	20 marine mammals
20.	Wetlands and Wildlife Care Center of Orange Co., Huntington Beach Wetlands Conservancy, Huntington Beach	*	Mar. 1997	400 birds
21.	Friends of the Sea Lion Marine Mammal Center, Laguna Beach		Aug. 1995	5 marine mammals
22.	Sea World of California, San Diego	*	Dec. 1996	20 marine mammals including sea otters; 400 birds; sea turtles as needed
23.	Project Wildlife, San Diego		Aug. 1995	25 birds
24.	Wildlife Health Center UC Davis, School of Veterinary Medicine, Davis		June 1995	Intensive care unit: birds and endangered species as needed

Specialized WO Equipment. Some of the equipment used within the Operations Section (*e.g.*, booms, skimmers, and shallow water vessels) will serve the mission of WO and can be drawn from industry and oil spill response organization inventories. Some equipment, however, is specialized for WO and dedicated to that purpose. As with personnel, the amount of specialized equipment deployed for WO can vary from a relatively small core of items to a full-scale deployment (see Table 2 delineating three basic levels at which equipment and personnel may be deployed). Among the equipment the OSPR has dedicated for immediate deployment are:

- Air boats (1);
- All-terrain vehicles (ATVs) (3);
- Capture boats (4);
- DFG fixed wing airplane (1);
- Hazing equipment and capture equipment (various);
- Mobile vet lab (2);
- One-ton wildlife truck (1);
- Vet truck (1);
- Wildlife care trailer (2);
- Wildlife supplies trailers (4) (contain hazing, capture, and transportation equipment);
- Wildlife transport trailer (1).

Additional equipment can be obtained from the CDFG and from other government agencies, the OWCN, and response contractors. For example, the equipment that OWCN can provide includes four-wheel drive vehicles, ATVs, a rigid-hull inflatable boat, hand-held dip nets, herding boards, spotlights, animal carriers, cages, crates, protective clothing, and all-weather gear.

Wildlife databases. Throughout California, wildlife resources and critical habitats that are sensitive and vulnerable to oil have been identified through the ongoing, systematic collection of baseline data by OSPR, the Area Committee's Sensitive Site/Geographic Response Subcommittee, and other agencies. These baseline data are used to project the level of risk to sensitive wildlife resources under different spill scenarios (Bonnell et al, 1993, Ford and Bonnell, 1995; and Section 9973 and the Geographic Response Plan Maps in that section). The data collected include annual aerial censuses of major marine bird colonies (*e.g.*, Carter et al., 1996, etc.), intermittent comprehensive breeding marine bird surveys (Carter et al., 1992), at-sea surveys of resident and migratory marine birds and mammals, semi-annual sea otter surveys, annual pinniped rookery censuses, weekly shoreline surveys (Roletto et al., 1998), and sensitive habitat and wetlands identification (RPI, 1994, 1996, 1998).

Relevant baseline data are compiled by OSPR in computerized Geographic Information Systems (GIS). Critical wildlife habitats in the GIS and the associated protection strategies in the ACP can be quickly identified and plotted. For example, salt marshes are delineated, along with recommended booming configurations to protect them. The GIS coverages as well as the NOAA Environmental Sensitivity Index (ESI) resource information can be produced on maps. In advance of a spill, these maps can be a planning tool to determine the relative sensitivity of each coastal region of California at risk from the spill. The data and maps also can be used in conjunction with those developed from real-time data during on-scene reconnaissance to evaluate the likely wildlife impacts and to guide the response decisions of the WBD, Planning Branch, and UC in the early stages of a spill. Additionally, information from these databases has been used to plan and locate wildlife care facilities and spill response equipment.

9710.3 ACTIVATION OF WILDLIFE OPERATIONS

Activation of the OSPR WO Resources. The best time to prevent wildlife impacts after a spill has occurred is during the earliest stages of the spill response. Therefore, it is imperative that OSPR be notified in a timely manner. Under California's OSPRA, the OSPR has the mandate and the capacity to

mobilize its wildlife protection resources immediately, if necessary, to provide the best achievable protection for the state’s wildlife, in accordance with the state contingency plan and the ACP (Government Code §§ 8574.7, 8670.3(c)(1), 8670.5, and 8670.7(b)). Therefore, the ACP and the UC may anticipate that WO will be initiated by OSPR immediately upon first notification of a spill. When taking early actions, OSPR will maintain close coordination with the evolving UC. Such early, but prudent, initiation of a wildlife response will ensure timely mobilization of dedicated resources will minimize resource impacts, and will contribute to effective cost containment. In these instances, OSPR’s early WO will be guided by the ACP and will be integrated with the UC as it is formed. As soon as feasible, but in any event after the first 24 hours of a spill, the WBD will direct the development of the wildlife operations element of the Incident Action Plan (IAP) for the review and approval of the UC. Wildlife operations response activities should be described on the “Work Assignment Form” (ICS Form 204) and integrated into the daily IAP to be approved by the UC. The IAP will identify and authorize WO response actions for the duration of the spill.

Activation of the OWCN. The OWCN responds hand-in-hand with the OSPR during WO and, if needed, activation can be virtually simultaneous. Activation may be initiated by OSPR through the Duty Officer at OSPR’s Headquarters Operations Center in Sacramento, upon first notification of a spill or at some later point by the WBD or an Incident Commander (IC) in consultation with the UC. Through OWCN, dedicated wildlife operations equipment (such as shallow-water vessels) and specially trained response contractors and personnel can be deployed immediately in combinations dictated by spill-specific circumstances (see Table 2). In consultation with the UC and the WBD, the OWCN Response Director may begin early notification actions of the OWCN response personnel and facilities, placing them on stand-by and enabling them to prepare their facilities. The OSPR and OWCN can be contacted directly, regarding spill notification and WO response, or through the USCG at any one of the following telephone numbers:

CDFG-OSPR Dispatch:	(916) 445-0045
OWCN: General:	(530) 752-4167
Dr. Jonna Mazet	(916) 556-7509
or Dr. Scott Newman	(916) 523-7941
USCG-National Response Center:	1-800-424-8802
USCG-Marine Safety Office (MSO) San Francisco Port Area:	(510) 437-3073
USCG-MSO Los Angeles/Long Beach Port Area:	(562) 980-4444
USCG-MSO San Diego Port Area:	(619) 683-6470 (day)
	(619) 683-6804 (night)

Role of Area Contingency Plan in Initial Response. Under the terms of a 1997 Memorandum of Understanding (MOU) between the USCG and OSPR (see Section 9960), the ACP shall be used as the primary guidance document regarding natural resource protection in a California spill. Primary responsibility for oiled wildlife protection, rescue and rehabilitation will most likely be delegated to OSPR because of its legal mandates and specialized California wildlife expertise. Key portions of the Area Contingency Plan that will be used to identify wildlife and habitat protection concerns include “Sensitive Site Summaries and Strategies” the “Geographic Response Plans” and the “Oiled Wildlife Response Operations Plan” (this section) and their related databases, which are developed and maintained by OSPR personnel in conjunction with other Area Committee members.

Developing an Initial Action Plan. Upon spill notification the WBD must evaluate a rapidly changing situation and develop an initial action plan, often literally while on the way to the spill site. Often, all the only initial source of information is the PRP’s initial report of product, amount, and location, or observations by land managers of oiled wildlife strandings on beaches. It is a rare when all variables (*e.g.*, oil type and volume, location, geographic range of spill, wildlife at risk, etc.) are known

prior to on-site reconnaissance. This section describes some of the information and variables that the WBD must consider to create the Wildlife Branch and provide an effective response.

The WBD must evaluate the situation in light of available staff, equipment resources and deployment options within the context of the applicable ACP. In order to determine which resources to mobilize, many different factors influence the response and must be considered. Some of these factors include:

- Type of oil (including persistence and emulsification properties);
- Quantity of oil;
- Frequency of oil deposition and oiled wildlife strandings;
- Concentrations of wildlife in the spill area;
- Presence of threatened or endangered species and/or critical habitat;
- Potentially affected habitats/ESI Rankings;
- Wildlife resources at risk;
- Human health hazards (Site Characterization);
- Time of Year/Season (*i.e.*, presence of migratory or breeding birds and mammals); and
- Weather and oceanographic conditions.

After reviewing the relevant factors with WO and Planning Section personnel, the WBD can verify the resources at risk; evaluate WO resource needs; assess the available wildlife personnel and equipment resources, and develop initial response objectives, such as identifying the areas with abundant wildlife that must be protected first and the tactics that should be implemented to maximize protection; and deploy wildlife recovery teams to likely stranding locations. Using this information, the WBD can formulate the initial wildlife operations action plan, which will include prioritized response objectives, an immediate call-out and implementation of personnel and equipment, and group and unit designations and task assignments.

While the initial evaluation process is described in some detail here, in practice it may be accomplished in a matter of a few moments, capitalizing on the WBD's experience and prior knowledge of wildlife resources and protection strategies (*e.g.*, hazing). The development of WO initial response strategies and their re-evaluation throughout the spill response, is an iterative, dynamic process that calls for good information, knowledge, experience and judgement.

Tiered Level Response. Activation of personnel and equipment is based on a number of variables as was discussed above, but primarily on anticipated wildlife impacts. In California, WO experiences have been extremely varied, ranging from a catastrophic release during migratory shorebird and waterfowl season; to "mystery" spills with very little oil on the shore, but yet significant seabird impacts; to a more "typical" spill of a few barrels of petroleum resulting in a few dozen wildlife casualties. OSPR has attempted to develop a generalized response table to meet a variety of spills and WO needs. Three basic levels of WO personnel and equipment response are shown in Table 2. Most often WO will mobilize personnel and equipment at the lowest level, *i.e.*, Level I. It is important to note, however, that these categories are not rigid and that the response for each spill should be tailored on a case-by-case basis. Some extraordinary circumstances (*e.g.*, a tanker grounding and rupture, with a known discharge) would justify Level II or III (highest) mobilization at the outset. WO will notify the UC immediately of changes in the deployment of staff and equipment as they occur (see Section 9710.3).

9710.4 WILDLIFE OPERATIONS PROCEDURES

9710.4.1. Prevention of Impacts to Wildlife: Considerations for Implementing Response Countermeasures

The primary purpose of WO is to prevent injury to wildlife or habitats either from the oil spill or from the implementation of response countermeasures. The task of the WBD is to weigh the alternatives at every juncture and identify the potential strategies, including “no action,” that will produce the fewest adverse effects to wildlife and wildlife habitat. In conjunction with the Planning Section, the WBD also may be required to evaluate tradeoffs among sites and decide which sites or wildlife resources will inevitably be affected. This will help save wildlife at a different location that may have been assigned a higher response priority (see Section 9973).

Use of Spill Response Countermeasures in Wildlife Areas. The simplest means of protecting marine wildlife from an oil spill is to prevent the oil from reaching areas where they are concentrated, through ongoing coordination with the UC Planning and Operations Sections. In many cases, this can be accomplished by tailoring the use of standard spill response equipment and techniques to wildlife protection requirements. Such countermeasures include mechanical offshore recovery methods, alternative response technologies (ARTs), and shoreline recovery techniques (see Section 4500). The application of these countermeasures, whether for wildlife protection or for other aspects of spill response, should at all times be guided by the sensitivity and vulnerability of the wildlife and habitats in the spill response area. Similarly, staging areas for equipment should be selected carefully to avoid collateral impacts. Such techniques and their wildlife protection capabilities and limitations are addressed elsewhere in this ACP (see Section 4500).

The use of standard spill response countermeasures in areas supporting abundant wildlife creates a risk of adverse effects to wildlife that arise out of, but are not always directly caused by, the spilled oil. Before use, each response strategy proposed in wildlife areas should be evaluated for its potential harmful impacts. The Planning Section and the WBD should weigh the capacity of standard spill response countermeasures to aid wildlife operations against the potential of these same technologies to cause harm to wildlife, selecting the least harmful alternative. For example, if the use of helicopters is considered during response, it is important to establish minimum altitude limits and no-fly zones in environmentally sensitive areas, such as bird colonies and marine mammal haul-outs. All of this must be accomplished in an expedited time frame, consistent with the overall response needs.

Any time ARTs are considered, special attention should be paid to their potential effects on wildlife, their method of application, and monitoring during application. When in-situ burning (ISB) is considered, wildlife within the burn area should be hazed away or captured if they have already become contaminated. Moreover, the application of dispersants over concentrations of birds, sea otters, kelp forests, and other sensitive species should be avoided. Evidence suggests dispersants wash natural oils off feathers and fur, reducing insulation and buoyancy and may be directly toxic to wildlife. After dispersants have mixed with water, the risk is significantly reduced, but not entirely eliminated. Areas where concentrations of wildlife have been observed during reconnaissance flights and other wildlife operations should be eliminated from operational plans when dispersant use is considered.

Human-Related Disturbance in Wildlife Areas. Oil impacted or ill wildlife will not typically strand on a shoreline that has constant human activity, causing them to stay at sea or search for more isolated locations. This delay in stranding, causes a delay in capture and subsequent rehabilitation. In order to recover as many spill-affected animals as possible, human disturbance along oiled beaches and shorelines as well as known stranding areas should be minimized. Thus, when feasible, it is advisable for the UC to close such areas to the public, and allow access only to response personnel designated to capture oiled wildlife. Personnel involved in response activities, particularly on islands and along

shorelines in the spring and summer months, should be alerted to the presence of nesting birds, bird colonies, pinniped breeding and haul-out areas, and salt marshes, which are vulnerable to the effects of disturbances and trampling. Sensitive areas should be posted and access should be restricted.

Both response personnel and the public should be instructed not to attempt to capture, disturb, or dispose of oiled wildlife. The public should also be alerted (via the Joint Information Center) to leave both live stranded animals and dead animals in place and undisturbed so that they may be retrieved by trained response personnel. The location of live stranded animals can be flagged by response personnel to alert wildlife recovery teams and aid in expedited capture.

Table 2: Recommended Tiered Level Response of Personnel and Equipment for Wildlife Operations

Use as general guide to activate WO resources. This table has been developed from response experience to a variety of spills (*i.e.* oil type and volume, location, season), but is based primarily on expected wildlife impacts as outlined for each tier level. It represents dedicated resources to be provided by OSPR, OWCN and other natural resource trustee agencies. WO resources should be tailored specifically to meet the needs of each incident.

<p>LEVEL I (Incidents where WO projections are for at least dozens of marine birds impacted; typically a smaller geographic area with no marine mammals)</p>	
<p><u>Staff and Contractors</u> Wildlife Branch Director (1) OWCN Response Director/Veterinarian (1) Group Leader (1) OWCN Staff/Unit Personnel (6) OWCN Regional Facility</p>	<p><u>Equipment</u> Mobile Vet Lab (1) Wildlife Care Trailer (1) Vet Truck (1) One-Ton Wildlife Truck (1) ATV (2) Capture/Reconnaissance Boat (1) Air boat (1) Wildlife Supplies Trailer w/various Hazing Equipment (1) GPS Receivers Cellular phones or radios</p>
<p>LEVEL II (Incidents where WO projections are for up to low hundreds of marine birds, and a few marine mammals): All of the resources shown in Level I plus:</p>	
<p><u>Staff and Contractors</u> Deputy Wildlife Branch Director (1) Group Leaders (2) Processing Group Team (5) OSPR & Contract Veterinarian (2) OWCN/CMMSN Staff (mammals) (6) Reconnaissance/Recovery/Vet Services Group Staff (15) OWCN Trained Volunteers (15) Specialized Wildlife Experts (contractors) (4) Wildlife Aerial Response Team (3) OWCN Regional Facility (as needed)</p>	<p><u>Equipment</u> Mobile Vet Lab (1) Wildlife Care Trailer (1) ATV (2) Capture/Reconnaissance Boat (3) Wildlife Transport Trailer (1) Wildlife Supplies Trailer (2) Air boat (1) DFG Fixed Wing Aircraft (1) GPS Receivers Cellular phones or radios</p>

LEVEL III

(Incidents where WO projections are for high hundreds or thousands of marine birds and tens to dozens of marine mammals):

All of the resources shown in Levels I and II **plus:**

Staff

Contract Veterinarian (3)
Group/Unit Personnel (6)
Additional OWCN Facilities (as needed)
OWCN staff and Trained Volunteers (90)

Equipment

Capture Boat (4)
Air boat (3)
Wildlife Supplies Trailer (1)
ATV (4)
Helicopter Support

Personnel Safety During WO. Worker safety must be considered before any wildlife reconnaissance, protection or retrieval effort is conducted. The safety hazards that may confront WO personnel include toxic vapors, fire hazard, hazardous weather and seas, unsafe footing and injuries inflicted by wild animals. Therefore, all WO activities must conform to the Site Safety Plan (see Sections 2222 and 9932.1). All personnel involved in WO must have appropriate job-specific safety training for the tasks to be performed. They must be adequately protected with the appropriate personal protection equipment (PPE) (rubber boots, safety glasses, gloves, etc.) and trained in wildlife handling techniques that ensure worker safety and present the least amount of stress to wildlife (Chen Valet and Camlin, 1995). Additional training issues are addressed in the Volunteer Coordination and Management Plan (see Section 9720). The detailed protocols followed by OWCN personnel, describing the capture, transport, and rehabilitation of oiled wildlife are contained in OWCN manuals (OWCN 1998a and 1998b).

9710.4.2 Wildlife Reconnaissance Group

The WO Reconnaissance Group identifies wildlife resources at risk by collecting real-time wildlife species abundance and location information in order for the WBD to develop and implement effective wildlife response strategies (Figure 2). While baseline data, as discussed in Section 9710.2, are essential, variations from baseline conditions, due to daily and seasonal movements of birds and mammals, necessitate rapid, real-time characterization or reconnaissance of wildlife concentrations in the spill area. Depending upon the size and type of the spill and the habitats involved, real-time data will be collected using aircraft, boat and ground surveys. Specific standardized, repeatable methodologies have been developed for each type of survey (ECI, 1992).

The Wildlife Reconnaissance Group is directed by the Group Supervisor (for duties, see Section 3251). The Group Supervisor is responsible for establishing and supervising the Aerial, Boat and Shoreline Reconnaissance Units, and for making survey team assignments. Reconnaissance Group personnel include the Aerial Survey Unit Leader (for duties, see Section 3251.1); the Boat Survey Unit Leader (for duties, see Section 3251.2) and the Shoreline Survey Unit Leader (for duties, see Section 3251.3). Because these units all operate in the field collecting real-time information, it is critical that each team maintain a means of communication to the command post (*e.g.*, Unit leader, a Group supervisor, or WBD).

Reconnaissance Group staff may include professional wildlife biologists, trustee agency representatives, OWCN personnel, the OSPR Aerial Wildlife Response Team (an OSPR contingency contractor), and other trained people. If specialized surveys for threatened and endangered species are needed, additional wildlife specialists may be called in by the Reconnaissance Group Supervisor or WBD. These specialists will advise the WBD and the UC about threats to listed species, the locations and numbers of oiled animals, and the need for capture, hazing or other protection strategies. These experts will survey on foot or by boat and will use species-specific observation protocols. In 1997 and 1998, for example, such specialists conducted useful surveys of California brown pelicans, western snowy plovers and marbled murrelets during oil spills.

Aerial Survey Unit. The aerial survey team will characterize the abundance, distribution, and species identification of on-water marine birds and mammals in or near the spill area (ECI, 1992). These flights complement, but do not replace, operational overflights for mapping oil. Using a global positioning system (GPS) linked to a laptop computer, the results of observations made on flight transects can be recorded, and in some cases, may be relayed near real-time by radio to a GIS specialist to produce graphical representations of current wildlife concentrations and locations.

The OSPR Aerial Wildlife Response Team should make an initial flight covering a broad area of open water that includes the spill location and its likely trajectories. This should be done within a few

hours following WO activation. Search patterns usually involve defined transect lines perpendicular to the coast. Such flight transects will most likely be flown in a CDFG twin engine observation aircraft at an altitude of 200 feet. Reconnaissance flights should be repeated each morning and afternoon, or at appropriate intervals based on such variables as wildlife resources at risk, amount of oil on water, trajectories, weather, or as otherwise directed by the WBD. Such reconnaissance activities should be closely coordinated with Air Operations within the UC (see Section 3220).

Boat Survey Unit. On-water survey teams may be dispatched to assess oiled and at-risk wildlife in offshore or nearshore coastal waters, bays or sloughs. While boat surveys most often involve searching open water areas, they are also frequently used to search shorelines that are inaccessible by land. Teams will characterize species abundance and distribution of wildlife within the spill area. In most cases, personnel will be observing seabirds and marine mammals. Observations of other natural resources such as schooling fish, sea turtles and plankton blooms are also notable. This information is commonly known as “ephemeral” or “time-critical.”

Observers will collect information on species present and their condition -- live, dead, oiled and unoiled; basic weather and sea conditions; and any other notable occurrence which may be useful to WO or the UC response. As a guide, information can be recorded on the Wildlife Reconnaissance Survey Form (see Attachment 1 and Appendix IV) with appropriate notations of the transect location, search time and methods. In some cases, on-water survey teams may also be responsible for collecting dead wildlife and catchable live oiled animals. If this is a designated team assignment, personnel on board must have the necessary minimum qualifications, along with specialized training and equipment needed to capture animals expected to be found. Otherwise, sightings of recoverable wildlife will be relayed to the Recovery and Transportation Group for immediate follow up. In any case, teams must update their chain of command frequently regarding progress, observations, and issues.

Specific search patterns and techniques will depend on the survey type, habitat (*e.g.*, nearshore or bay) and species at risk (*e.g.*, marbled murrelets). In general, searches will be performed at constant speeds, cruising along fixed ladder-shaped or grid-pattern transect lines over a predefined search area. The search area and distance around the spill area will depend on the habitat, weather, sea conditions, water depth, and predicted tides and currents. These factors should be defined before beginning the survey. In small bays and sloughs transects may involve navigating up channels and/or following shorelines.

To effectively document search areas, track information derived from a differential GPS is recommended. Each team should also maintain appropriate communications with the Boat Unit leader, Reconnaissance Group supervisor, and/or WBD via cellular phone or VHF radio. Timely, regularly scheduled reports of observations are essential to keep the UC informed and provide the best possible response.

Boat survey teams should include more than two people for safety and search efficiency considerations. Depending on the boat and search area, two persons are minimum and three are optimal for each boat. In all cases, at least one member of the team must be qualified to operate the boat considering the habitat, weather and sea conditions that exist during the spill. Other personnel must be qualified to observe wildlife at sea and on-water.

Boat survey teams may operate from a variety of craft depending on the habitat and conditions. Any coastal surveys will be done from a boat certified for ocean use and suitable for expected weather and sea conditions. This may include 20 to 30ft work boats, such as Boston Whalers, or inflatable boats. In small bays or sloughs shallow-draft boats are preferred. These may include skiffs, inflatables, airboats, hovercraft, canoes or kayaks.

Shoreline Survey Unit. Shoreline survey team will be dispatched to gather ephemeral or time-critical information via surveys in shoreline areas that are oiled or that are expected to be oiled. These reconnaissance surveys will provide information regarding: biological resources (live and dead; oiled and non-oiled); shoreline habitats; seasonal features such as bird and pinniped rookeries; marine mammal haul-out areas; estuarine mudflats and marshes; streams blocked by natural seasonal berms and rivers flowing to the ocean.

During the initial stages of a spill, shoreline survey teams will be assembled by the WBD. One person on each team will be designated as the team leader. This person will be responsible for decisions relating to human safety and data integrity; for reporting reconnaissance information back to the Unit Leader, Group Supervisor or WBD prior to each daily pre-planning meeting; and for disseminating the following day's assignment to team members.

The Reconnaissance Group Supervisor or Shoreline Survey Unit leader will assign sections of the coast to survey and tasks to each team (Carter and Page, 1989). Each team should receive survey and reporting instructions. Reporting instructions should include the name and phone number to whom to report findings, as well as specific items which need to be reported, (*e.g.*, live vs. dead species, numbers and/or species of oiled and unoiled resources at risk, endangered and threatened species, etc.). Each team should also receive instructions on the disposition of samples or animals collected, survey forms, and the locations of intake stations. Members of the survey teams should receive a daily phone list for the WBD and his/her alternate at the Incident Command Post, the Group Supervisor, the intake station(s), and contacts to gain access to special or secure areas. Communications must be open throughout the day to provide new direction or report observations up the chain of command.

Survey teams should be provided with data on resources at risk, including environmentally sensitive site and response strategy information from Section 9973, and the Wildlife Reconnaissance Survey Form (Attachment 1 and Appendix IV). The same version of each form should be used by all shoreline survey teams. Other suggested survey equipment include Proper and necessary personnel protective equipment (PPE);

- Regional maps that include consistent beach names, numbers and access routes;
- Waterproof notebooks;
- Binoculars;
- "Clicker counters;"
- Cellular phones or VHF radios; and
- GPS receiver units.

While it is not the primary function of the Shoreline Survey Unit to collect wildlife, Reconnaissance Group teams may be paired with Recovery and Transportation Group teams (at the direction of the WBD or Group Supervisor) to increase the speed and efficiency of shoreline surveys. In such instances, survey and recovery tasks may be performed by both groups simultaneously. In any case, uncaptured, impacted wildlife sightings should be reported to the Recovery and Transportation Group leader. In past spill responses, attempts have been made to join Wildlife Reconnaissance Teams with Shoreline Cleanup Assessment Teams (SCAT). Because of their different objectives, types of information collected, and the method and speed of surveys, it is not recommended to combine these functional teams.

During moderate-sized spills, survey teams should consist of a minimum of two people for safety and to expedite the surveys, although studies (Roletto et al., 1998) have shown that on long, broad sandy beaches a survey team of three people is optimal for efficiency. Team tasks can be divided among team personnel in any number of ways (*e.g.*, by shore zone, by function, or by expertise). For example, on a two-person team, one member can conduct wildlife observations, recording numbers and species of birds

and mammals, both oiled and unoled, and assessing the potential for capture of oiled wildlife. The second member can investigate the wrack line and shore for evidence of oiling and identification of any dead oiled wildlife.

Walking beaches on foot is the most effective method for locating wildlife with little disturbance. However, vehicle use can also be effective to expedite survey search time, depending on the terrain and the size of the area to be covered. Special considerations pertaining to collateral impacts on wildlife must be addressed before reconnaissance surveys via ATVs are authorized by the WBD. Authorization from the appropriate trustee agencies also must be obtained prior to authorizing any activities using ATVs in national parks and wilderness areas. Because ATVs will potentially haze animals back into the water, caution and planning must be exercised. Close coordination with the Recovery Group should occur so as not haze injured wildlife.

Shoreline survey teams generally are staffed by professional wildlife biologists, who most likely will have previous oil spill and specific coastal field observation experience. At the discretion of the Reconnaissance Group Supervisor, survey teams also may include qualified OWCN staff and/or trained observers with knowledge and experience in oiled wildlife identification and handling. At a minimum, personnel conducting wildlife reconnaissance should be experienced at identifying species of pinnipeds and California coastal birds, including gulls, alcids, shorebirds and diving birds, and should be able to identify both breeding and alternate plumage in order to determine whether a live bird is oiled. Teams will likely conduct most surveys on foot, however, ATVs are often used which will require additional training.

Use of Reconnaissance Data for Near Real-Time Survey Mapping. Within minutes after receiving data from an aerial, boat or shoreline survey team, a GIS specialist, most likely from the Technical Specialist Unit in the Planning Section or the Wildlife Impact Documentation Unit, can create, and provide to the UC, a map depicting resources at risk on open water and shorelines, using pre-established grid block units. This map will assist the WBD in identifying and ranking wildlife response strategies. For example, site-specific booming or hazing actions may be recommended based on this information. Also, the presence of an especially sensitive wildlife resource in a spill trajectory might prompt or preclude the use of dispersants or other ARTs. The integration of pre-spill (baseline) data and reconnaissance information provide the WBD and the Planning Section Chief with the ability to develop a common understanding of, and strategy to protect wildlife resources at risk during response.

9710.4.3 Hazing Group

Once oiled, habitats that have been traditionally attractive to wildlife may be candidates for hazing actions (Figure 2). If oil-free and disturbance-free habitats are known to be available in the vicinity and continued exposure to oil in the contaminated traditional use areas is anticipated, hazing may protect wildlife from an oil spill by deterring them from entering oil-contaminated areas on water or land (Greer and O'Connor, 1994; Thomas, 1994; USDA 1997a, 1997b, 1997c).

The Hazing Group, which will undertake these activities, is directed by the Hazing Group Supervisor (for duties see Section 3252) who reports to the WBD. The Group Supervisor is responsible for minimizing wildlife impact and losses during spill responses. Other personnel in the Hazing Group may include state or federal trustee agency biologists and university or OWCN personnel with appropriate authorization and training.

If wildlife impacts are deemed to be unavoidable due to the predicted movement of oil in the hours and days following a discharge, then hazing can be initiated with little risk of exacerbating impacts. Hazing should always be considered in heavily-oiled habitats, particularly when clean sanctuaries can be designated in the area. Hazing is likely to be most effective when birds are concentrated in coastal lagoons, estuaries and bays. Hazing is likely to be ineffective or counterproductive, however, if the spill area is too large to focus deterrent actions or if animals are likely to be pushed into oiled habitat. Wildlife that has already been oiled should not be dispersed, since this can lead to the introduction of oiled animals into uncontaminated areas and populations. Rather, oiled animals should be captured as soon as practical.

Hazing activities must take place only under the authority and oversight of the trustee agencies, in coordination with the UC. The recommendation to haze will be guided by site-specific and species-specific factors operating at the time of the spill, and by proven hazing techniques. A variety of hazing devices are available and can be deployed to meet the situation, such as propane cannons, cracker shells, alarms and whistlers, flags, predator models, human effigies, and others. These techniques, specialized hazing equipment and special hazing considerations for wildlife are described in detail in the General Wildlife Hazing Plan included in Appendix IIIb.

9710.4.4. Wildlife Recovery and Transportation Group

Wildlife recovery and transportation involves the collection of dead and live oiled wildlife and their transport to processing centers (see Sections 9710.4.5 and 9710.4.6). These activities are performed by the Wildlife Recovery and Transportation Group, in close coordination with the UC and the State and federal trustee agencies. The appropriate trustee agency representative(s), such as someone from the CDFG, USFWS or NOAA/NMFS, must approve wildlife collection by any organization, including participating OWCN organizations (see 14 CCR 679(d); Section 9710.2, above).

At any time during the year, a California beach is likely to reveal various marine bird and mammal carcasses or stranded live animals that may or may not be spill related casualties (Stenzel, 1988). It is not feasible, reliable, or practical to attempt to discriminate between spill-related and non-spill-related casualties while conducting beach surveys during the response. For example, scavenged carcasses or dark plumage and wet carcasses that may be spill related are not always identifiable in the field as such. Additionally, seabirds are known to succumb to the effects of oil ingested during feeding or preening even when no oil is apparent on their plumage. Therefore, it is recommended that all animals, live and dead, be collected and processed for more definitive triage.

Oiled wildlife collection, treatment and rehabilitation are legislatively mandated and are important for spill documentation, humane and public relations reasons (Jessup and Mazet, 1999). In addition, the prompt removal of disabled and dead oiled animals from the environment can be critical to minimize the effects of secondary oiling such as poisoning of predators and scavengers. Appropriate measures must be undertaken by the PRP and the UC to insure that dead animals are collected appropriately, identified, documented and not disposed of until approved by the trustees.

During a spill, the public views any dead animal, regardless of the cause of death, as a problem requiring the attention of response personnel. The problem is best resolved by removing all dead animals. The systematic processing of the collected wildlife provides the UC with the necessary data to make informed statements about the status of affected wildlife and the environmental consequences of an oil spill (see Section 9710.4.5).

The Recovery and Transportation Group is directed by the Recovery and Transportation Group Supervisor (for duties see Section 3253) who reports to the WBD. The Group Supervisor is responsible for the recovery of dead and live, oiled and unoled wildlife that have been identified by the Reconnaissance Group or other individuals, and for the transportation of affected wildlife to processing/rehabilitation centers. The Group Supervisor should frequently update and coordinate with the Situation Unit of the Planning Section.

Once animals have become oiled, habitat-specific and species-specific strategies to recover and remove disabled and dead wildlife are required. Systematic shoreline surveys for affected wildlife ideally should be carried out several times per day. Preferred search times are before dawn, at dusk, and in the middle of the day. Surveys are often conducted on foot or by boat, however, the use of ATVs and four-wheel-drive trucks can expedite search times. Caution should be exercised with ATVs as they may scare wildlife back into the water or cause the animal(s) to flee the site. Successful captures not only depend on the condition of the animal, but also on the training and experience of the handler, and techniques and equipment used. For detailed and specific information on wildlife capture training, techniques and tools, see OWCN 1998a and 1998b.

Each team should work in pairs and be outfitted with the resources and equipment necessary to complete their assignment. Technological advancements and improvements have been incorporated into the information gathering phase of this overall task. For example, GPS receivers can now be used to mark locations of collections and survey transects. This GPS information can be downloaded to a GIS specialist who can graphically depict wildlife recovery sites and stranding locations. Additionally, field tag labels with preprinted barcodes can be affixed to live and/or dead animal bags or carriers. The use of barcodes will allow the Group Supervisor and WBD to track the individual animals through the capture/collection, processing, and for live animals the rehabilitation and release process via a computer database. Specialized equipment is identified in OWCN 1998a, 1998b. Other more basic equipment will include:

- X Proper and necessary PPE;
- X Dead bird body bags (collection containers);
- X Pillow cases and pet carriers;
- X Field tags to label to record collection information and Chain of Custody;
- X Regional and Segment maps;
- X Cellular phones or VHF radios;
- X GPS receivers; and
- X Basic capture equipment (e.g., nets).

Depending on the spill size, wildlife search, recovery and transportation can be accomplished with combinations of personnel from various WO groups or units. If response circumstances are favorable and properly trained personnel are available, wildlife recovery personnel may be integrated with Reconnaissance Unit teams who perform frequent (at least daily) systematic surveys of beaches/shoreline within the spill boundaries. For example, information on the location of captures and collections of dead and live animals throughout the survey area should be recorded to guide subsequent efforts and inform the UC of impacts to specific geographic areas (see Section 9710.4.5). When live animals are located, transfer arrangements must be made to promptly so transfer teams can take live birds and mammals to an OWCN rehabilitation facility. The timely deployment and coordination of recovery and transportation teams is best accomplished through open radio communications on dedicated frequencies or by cellular phone.

Recovery and Transportation personnel are from the OCWN, OSPR, other State and federal trustee agencies, and approved contractors. As with other WO activities, Recovery and Transportation personnel will include a high proportion of professional wildlife biologists as well as trained, qualified volunteers obtained through the OWCN and/or OSPR Volunteer Coordinators.

Capture and Transport of Oiled Birds. Teamwork is essential to minimize stress in oiled birds (OWCN 1998a). As they lose their waterproofing, many species of birds move to shore, first preening on open beaches and river banks and later hiding under cover.

Success at recovering wildlife (especially flightful or mobile individuals) depends on proper technique and timing. Methods used for search and collection will be dependent upon the location of the spill and the modes of transportation made available through the UC. Bird retrieval techniques are most effective if begun shortly before dawn. Birds should be retrieved by qualified teams on foot with handheld nets. Small projectile nets, linear sections of net placed on the ground and baited walk-in or swim-in traps may also be used. For more information on capture equipment and techniques, see OWCN 1998a.

Handling captured birds poses risks to both handler and birds. Because of the potential for birds to inflict injury on the handler, proper PPE is essential. Eye protection should always be worn. Use of appropriate gloves and outer clothing to prevent oiling of the handler are also important. To prevent further injury to wildlife, the use of proper handling techniques by trained personnel is essential. For details on proper handling techniques, see OWCN 1998a and “Wildlife Handling” in Appendix IIIa.

After capture, birds should be immediately placed in pillowcases or ventilated, solid-sided pet carriers, cardboard boxes, or plastic airline kennels for transport. Social, nonaggressive birds (such as common murre) can be placed with one or two conspecifics, but aggressive species, such as loons and cormorants, should be individually housed. Once captured, oiled live birds should be transported to the designated OWCN facility as soon as possible. If marine bird species must be transported for long distances or remain in pet carriers for longer than three hours, net-bottomed floors should be used. Since hypothermia is an important biomedical problem which affects oiled wildlife, it is advisable to bring oiled birds into a warm indoor environment as soon as possible, and to transport them in warm ventilated vehicles.

Capture and Transport of Marine Mammals. The need for marine mammal capture should be evaluated on a case-by-case basis by the WBD in consultation with those trustee agencies that have specific regulatory authority: the USFWS, the NMFS, and the CDFG. The protocols that guide decisions to capture and transport marine mammals are described in Appendix Ib and in OWCN 1998b. If oiled pinnipeds, sea otters, or cetaceans are determined to be ill and require retrieval, capture will be instituted by the WBD in conjunction with the CDFG, NMFS, the USFWS for sea otters, the California Marine Mammal Stranding Network (CMMSN) and the OWCN. Capture and transportation of oiled mammals should be performed only by qualified personnel who have received the appropriate safety training as well as marine mammal handling and restraint training. For more information regarding actual search and collection techniques of marine mammals, see OWCN 1998b.

Generally, the potential benefits of capture must outweigh the potential negative consequences. A decision to capture should consider the size of the individuals and their location with respect to other marine mammals. The method of capture may vary accordingly. While sea otters and fur seals can be immediately and acutely affected by oil, other pinnipeds may be able to withstand some short-term

external exposure to oil. Captures will generally be considered for isolated individuals on beaches, spits, tide flats or other relatively flat surfaces, using herding boards and nets (brail, breakaway, or steel frame pole). Less often, captures may be attempted from rock jetties, piers, docks or even in the water for severely debilitated animals. Long-handled dip nets, floating bag nets and a net gun have all been used with some success. Depending on the species involved, aquatic captures may use tangle nets, float nets or Wilson traps. Animals will be placed into kennel carriers or similar cages of an appropriate size, and immediately transported to designated marine mammal care facilities (see Table 1 and Figure 3). Shaved ice or water will sometimes be needed to avoid overheating.

Capture and Transport of Sea Otters. Sea otters are a special case because of their extreme susceptibility to oil and their status as a federally listed species. The capture and treatment of sea otters is addressed separately in Appendix IIIc, the Sea Otter Oil Spill Contingency Plan.

9710.4.5. Wildlife Processing Group

All dead and live wildlife encountered in the spill response area should be retrieved by the Recovery and Transportation Group (see Section 9710.4.4, above) and transported to the wildlife processing center(s), regardless of the condition (degree of decomposition, degree of oiling, etc.) of the carcass or live animal. The Processing Group then logs these animals into the center to receive treatment (live animals) or be placed in storage (dead animals). The Processing Group maintains an accurate record of all impacted wildlife. Each animal is brought to the center and the status and progress of each individual is tracked by the Processing Group through the WO system. This systematic documentation of adverse effects on wildlife will provide an understanding of the short- and long-term consequences of oil spills to wildlife populations and assist in the guidance of spill response actions.

The Processing Group is directed by the Processing Group Supervisor (for duties see Section 3254), who reports to the WBD (see Figure 2). The Group Supervisor, who may be the same as, and will in any event coordinate closely with, the Veterinary Services Group Supervisor, is responsible for establishing and maintaining centralized wildlife processing centers to receive all affected wildlife collected (dead or alive), and documenting and transporting dead wildlife to a secure storage facility (see Live and Dead Bird/Mammal Intake Logs, Appendix IIIa). The Supervisor establishes and directs the operations of both the Wildlife Intake Unit Leader (for duties see Section 3254.1) and the Wildlife Impact Documentation Unit Leader (for duties see Section 3254.2). The Group Supervisor will coordinate unit activities with the Veterinary Services Group and Recovery and Transportation Group Supervisors. Wildlife processing personnel may include trained agency and OWCN scientists and also may be conducted by trained staff under an OSPR contingency contract.

Intake Unit. Depending on the geographic range of the spill and the numbers of animals impacted, one or more wildlife processing centers may be established and directed by the Processing Intake Unit Leader. It is the responsibility of the Processing Group Supervisor to assess the need for multiple centers, and to set up, staff, establish record keeping procedures, and coordinate each center.

Staff in this Unit can include six basic positions at each center: the Unit leader, a Receiver, a Data Collector, a Data Processor, a Photographer, and an Animal Handler. More staff may be necessary if the number of animals entering the center is overwhelming; or less, under light impact situation where staff can perform multiple duties. For detailed information regarding specific tasks of each position, see the Wildlife Unit Protocols in Appendix IIIa. Since most of the wildlife likely to be oiled are birds, wildlife intake and processing in WO should be conducted by field biologists trained in the systematic collection of information from dead and live birds (Schuster et al., 1998).

With each processing center there will be two sections (live and dead animals), each containing two basic stations (Intake and Processing). As live and dead wildlife come to the processing center, they enter the Intake Station first. This is where all wildlife are logged in and information regarding the collector should be obtained and recorded on the Chain of Custody Intake Log (Attachment 2 and Appendix IIIa). The Processing Station is where all information necessary to complete either the Live or Dead Bird/Mammal Log is performed, as well as photographing the individual, prior to entering the rehabilitation process or dead animals going to storage. All information regarding wildlife processed through the system should be recorded on standard Live and Dead Bird/Mammal Log Forms (see Attachments 3 and 4, and Appendix IV). Barcodes from field tag labels can be scanned and an immediate identity given to that individual while in the system. Information documented on the forms include such items as: the collection location, species identification, plumage, presence and degree of oiling, injuries, band number if present, degree of decomposition, evidence of scavenging, etc should be noted (Ainley et al., 1994 and Appendix IV). All processing intake personnel should use the Live and Dead Bird/Mammal Log and the Chain of Custody Intake Log forms to ensure consistency of data. In addition, photographs should be taken and feather samples should be collected and preserved for future use if chemical fingerprinting of the oil becomes necessary. These data will help to determine whether or not the birds collected are spill-related casualties, and will provide the UC with sufficient documentation to make timely accurate statements concerning wildlife impacts. More detailed procedures are located in the Wildlife Processing Protocols in Appendix II.

Following intake and documentation, dead animals should be systematically packaged and transported to a secure freezer for storage. In recent years, this location has been the CDFG freezer at the Marine Wildlife Veterinary Care and Research Center (MVCRC) at Santa Cruz. This action will protect the interests of the trustees, the PRPs, and the USCG. If necessary, the carcasses can be re-examined to resolve problems with body counts, species identification or to secure additional samples for investigations. In some instances, necropsies may be performed concurrent with response activities to identify cause of death or disease outbreaks (see Section 9710.4.6). Disposal of the carcasses will occur when the federal and state trustee agencies give the authorization and will be disposed of in accordance with federal and state laws.

Wildlife Impact Documentation Unit. The Wildlife Impact Documentation Unit, directed by the Wildlife Impact Documentation Unit Leader, will maintain the database of information received from the Intake Unit in order to anticipate rates and locations of strandings and establish the status of impacted wildlife. Reports of locations, species and numbers of dead and live animals received are provided to the WBD and the Situation Unit in the Planning Section on at least a daily schedule.

Information from the Live & Dead Bird/Mammal Logs will be summarized for the WBD and UC. In the past, this has been done by hand in a tabular format. With increasing use of GPS, barcodes and databases, we now have the ability to integrate this information into a GIS, and graphically depict collection sites or any other information layer as needed. Currently, the CDFG is developing a spill response database that will allow for the direct input of the Live & Dead Bird/Mammal Logs, Chain of Custody Logs, and patient medical record information. This technology should expedite information summarization and record keeping.

Through this process, the UC can document adverse effects on wildlife resources, communicate this information through the Joint Information Center, anticipate work loads and estimate the duration of the response. This type of documentation is also important for public information. The public often gauges the significance of a spill by the numbers of affected animals. The legislature and the media also demand to know how wildlife has been impacted. The number of dead and live birds is one index. It is important to emphasize, however, that the animals recovered through WO can give only a rough indication of the

kinds of species and resources affected, and that a clear understanding of the magnitude and consequences of spill impacts will necessarily depend upon post-response follow-up studies, an analysis of the data collected during the spill and comparisons with baseline conditions.

9710.4.6 Veterinary Services Group

The Veterinary Services Group within WO ensures that wildlife exposed to petroleum products can receive the best achievable treatment, by providing access to trained personnel and permanent wildlife rehabilitation facilities statewide (see Figure 2 and Table 1). The Group is directed by the Veterinary Services Group Supervisor (for duties see Section 3255), who reports to the WBD (see Figure 2). The Group Supervisor is responsible for activating and maintaining wildlife rehabilitation centers during a response. The Supervisor is also responsible for receiving live oiled wildlife from the Intake Unit (see Section 9710.4.5, above) and processing into the veterinary services/rehabilitation system, which involves conducting triage, treatment, rehabilitation and release. The Veterinary Group Supervisor may be the same as, and will coordinate closely with, the Recovery and Transportation Group and Processing Group Supervisors. In the majority of past spill responses in California, this position has been filled by the OWCN Response Director.

Bird, Pinniped, and Sea Otter Units. The Group includes three units to handle specialized wildlife rehabilitation issues: the Bird Unit, the Pinniped Unit and the Sea Otter Unit. All of these groups operate under the direction of the Veterinary Services Group Supervisor. The group also coordinates the combined resources and capabilities of the OWCN and any other private wildlife care organizations to provide optimum treatment and rehabilitation services.

Each Unit Leader under the direction of the Veterinary Services Group Supervisor is responsible for receiving live oiled birds, pinnipeds, or sea otters requiring extended care and treatment at established treatment centers, recording essential medical information, conducting triage, stabilization, treatment and rehabilitation (see OWCN Oiled Bird Intake and Daily Progress Forms in Appendix IV). Specific protocols regarding these animals will not be addressed here as they are highly specialized, requiring special permits, expertise and veterinary care. Details can be found in one or more of the following references: OWCN, 1998a in, Oiled Wildlife Care Network: Protocols for the Care of Oil-affected Marine Birds; and OWCN, 1998b in, OWCN Protocols for the Care of Oil-Affected Marine Mammals; and the Sea Otter Oil Spill Contingency Plan (Appendix IIIc); and the interagency agreements (Appendix Ib). The most current information on rehabilitation can be found on the OWCN website at www.vetmed.ucdavis.edu/owcn.

If marine mammals are involved in a spill, the NMFS or the CMMSN can provide assistance with capture and treatment (Geraci and Lounsbury, 1993; Appendix Ib). If necessary, the CDFG-OSPR mobile veterinary laboratory and animal care trailer can be dispatched to the field so veterinarians and staff can perform preliminary examinations and stabilize wildlife prior to being transported to the veterinary facility. Birds can also be examined and stabilized at remote locations in the mobile veterinary lab.

Birds are the most abundant wildlife taken in at the processing centers and are often treated and released within three weeks. However, the time in care depends on the location of the spill, product involved, species, preexisting injuries, and other logistical concerns. When rehabilitated animals are scheduled for release, local wildlife managers are consulted to identify oil-free and disturbance-free release sites. As a part of the spill response actions, birds and mammals are banded or tagged and, in some cases, fitted with telemetry equipment for post-release monitoring. Released birds and mammals that behave abnormally or are noticed by the public may be recaptured if necessary.

Necropsies on selected dead animals may be conducted by wildlife pathologists concurrent with spill response, to inform the response and guide Veterinary Services Group in the treatment of remaining animals. There are several reasons for necropsies during a spill response (Appendix Ib). For example, captivity-related diseases may necessitate necropsies to identify pathogens so that corrective medical actions can be taken (Jessup and Leighton, 1996). Fatalities to apparently unoiled wildlife may necessitate necropsies to determine if ingestion of petroleum has occurred or if there are other naturally occurring reasons for death (*e.g.* starvation).

Veterinary facilities designed for oil spill response must meet minimal space requirements and incorporate all required aspects of wildlife treatment and rehabilitation activities. An ideal facility should include: an intake/physical exam/evidence processing area; a veterinary hospital with isolation capabilities, indoor wildlife housing/caging, food storage and preparation facilities, animals washing and rinsing areas, indoor drying pens, outdoor pool and pen areas, and pathology facilities; volunteer training/eating area with restrooms; administrative offices with multiple phone/fax lines and conference space; storage; and access to a large parking area.

9710.5 DEMOBILIZATION

Upon conclusion of WO, its activities are demobilized, following standard checkout procedures identified through the ICS and the UC. WO demobilization follows a conclusive determination by the WBD, in consultation with the Veterinary Services Group Supervisor and other WO Group Supervisors that all wildlife affected by the spill have been accounted for. Demobilization of WO groups and units will generally lag behind that of response equipment and personnel, due to variables such as animals remaining in rehabilitative care, the presence of residual oil, and the presence of visibly oiled pinnipeds and free-flying birds. This lag time may last several weeks.

The last resource of the UC to be demobilized will likely be personnel and equipment of the Veterinary Services Group and the OWCN facilities used during the spill. Due to the time involved in the cleaning, treatment and rehabilitation of oiled wildlife, animals that may come into the rehabilitation center late in the response will likely be in care for a few weeks, and so may require care after other response resources have demobilized. In general, the rehabilitation center will continue to operate for three weeks following admission of the last animal into rehabilitation. During that time, as more animals are released and fewer animals remain in care, personnel and equipment resources will be gradually demobilized. After the last animal leaves care, the center should be sanitized and prepared for the next response before closing down.

Attachments

Forms:

1. Wildlife Reconnaissance Survey Form
2. Chain of Custody Intake Log
3. Live Bird/Mammal Log
4. Dead Bird/Mammal Log
5. Codes for Live & Dead Bird/Mammal Logs

1. Incident Name: _____ **2. Observation Team:** _____
3. Date: _____ **4. Time Start:** _____ **5. Time End:** _____
6. Segment Name: _____ **7. Segment No.:** _____
8. Survey Length: _____ ft. **9. Survey Width:** _____ ft. **10. Latitude:** _____ N **11. Longitude:** _____ W
12. Survey Mode: Foot Vehicle Boat/Ship Airplane Helicopter **13. Tide Table Data at Start of Survey:** _____ ft.
14. Weather: _____ **15. Beaufort Scale:** _____ **16. Visibility:** < 0.1 mi. 0.5 mi. 1.0 mi. 1.0 mi.
(Describe Briefly) (See Chart) (< 160 m) (800 m) (1.6 km) (> 1.6 km)
17. Round Trip Mileage: _____(miles) **18. Round Trip Driving Time:** _____(hours) **19. Trip Prep Time:** _____(hours)

INSERT Attachment 3 - Live Bird/Mammal Log

Station:
Location/Spill Name:
Year of Processing:
Page of

LIVE BIRD/MAMMAL LOG

OWCN/OSWRT

Station Manager:
Data Collector:
Data Recorder:
Photographer:

Bar Code	Morgue Bag/Box	Disp. Date m/d	Disp. Status	Photo Taken ?	Feather/oil Sample	Oil not visible but	Extern. Oil Visible?	Band Number	Species	Time Proc'd 24 hr	Collection Location	Date Processed M/d	Date Arrived m/d	Date Collected m/d	Intake No.

*Oil not visible but animal is oiled based on one or more of the following: smell oil, plumage malaligned/parted or sticky, skin wet/not water-proof, skin burns

Station:
Location/Spill Name:
Year of Processing:
Page of

DEAD BIRD/MAMMAL LOG

OWCN/OSWRT

Station Manager:
Data Collector:
Data Recorder:
Photographer:

Bar Code	Morgue Bag/Box	Photo Taken?	Feather/Oil Sample Taken?	Where Oiled	Depth of Oil	%Bird Oiled or Sheened	Oil not visible but oiled ?*	Extern. Oil Visible?	Condition	Band Number	Species	Time Proc'd 24 hr	Collection Location	Date Processed M/d	Date Arrived m/d	Date Collected m/d	Intake No.

*Oil not visible but animal is oiled based on one or more of the following: smell oil, plumage malaligned/parted or sticky, skin wet/not water-proof, skin burns

Codes for OWCN/OSWRT Live & Dead Bird/Mammal LOG Forms

Record collection station number and location, year, and get printed names and initials of personnel present at the collection station while the animals listed on the page were processed.

Intake #: Using a different sequence for each station, record i.d. number which animal was given upon arrival.

Date Collected: Record the date on which the animal was collected.

Date Arrived: Record the date on which the animal was brought to the collection station. Include year only if different from year of processing.

Date Processed: Record month and day of processing.

Collection Location: Location from which the animal was retrieved.

Time 24hr: Record the time when processing for this animal began. Use 24hr military format.

Species: Use the standard four-letter abbreviations if the species name is known. If the species is unknown, indicate the lowest taxonomic category that can be determined (i.e. gull; alcid; bird).

Band #: For all recovered birds (live or dead) enter the color and number (i.e. B198 if Blue band #198) or simply the band number (if USFWS band) of the band placed on the metatarsus. If carcass is incomplete, the band can be placed elsewhere (i.e. sternum) or else should be secured to the carcass with string or wire. For turtles or phocids, plastic NMFS tags should be fitted on the hind flipper. For otariids, tags go on front flipper.

Condition: (for dead animals only) **1**=freshly dead; **2**=decomposing whole carcass; **3**=body parts only-fresh; **4**=body parts only-decomposing; **5**=desiccated, mummified carcass.

External Oil Visible: **1**=yes; **2**=no, may be jet fuel, diesel, gasoline, vegetable oil, fish oil or other.

Oil Not Visible But Oiled?: **0**=no; **1**=yes, smell oil; **2**=yes,plumage malaligned or parted; **3**=yes, plumage sticky; **4**=yes, skin wet/not waterproof; **5**=yes, skin burn.

% of Bird Oiled or Sheened: (for dead animals only) **1**=<2% of body; **2**=2-33% of body; **3**=34-66% of body; **4**=67-100% of body covered; **5**=oil detected but extent undeterminable due to state of carcass; **6**=no oil detected but this may be due to state of carcass; **7**=was not evaluated.

Depth of Oil: (for dead birds only) **0**=no apparent oil; **1**=superficial; **2**=moderate; **3**=deep; **4**=tar; **5**=not evaluated.

Where Oiled: (for dead animals only) **0**=no apparent oil; **1**=dorsal side only; **2**=ventral side only; **3**=entire body; **4**=bill/mouth area only; **5**=head only; **6**=wings only/fore flippers; **7**=feet only/hind flippers; **8**=more than one area but not entire body; **9**=was not evaluated.

Sample Taken?: Take a sample from oiled locations. If no apparent oil, take samples from areas which are frequently oiled. **0**=no; **1**=feather/fur sample taken; **2**=tissue sample taken. Place a copy of Intake #, species code, band number, processing date, spill event name, and processing station on both the envelope AND foil in which sample is placed.

Photo Taken?: **0**=no; **1**=yes. If yes, attach barcode and write the time it was taken on photo (if polaroid). In photo itself backdrop should clearly show: date, intake #, species code, and band number, and processing station

Morgue Bag/Box Color/#: Indicate the Color/Number combination of the morgue bag in which the corpse is placed for storage, i.e. Y5 for yellow bag number 5. If morgue bags were placed in boxes for movement or storage, indicate box number here.

Bar Code: Attach bar code sticker.

Notes: Indicate whether any notes have been taken for this animal on the reverse side of the data sheet. On this reverse side write the Intake #; and notes may include any of the following: measurements taken; age, sex or breeding condition if determined; which parts were recovered if body not whole; any conspicuous cause of

death if not related to oil (e.g. gun shot wound); and a note if the specimen was known to have been contaminated by other petroleum products (e.g. if it was wrapped in plastic) or other carcasses. Other observations or details of collection can be recorded here.

9720 Volunteer Plan

9720.1 Volunteer Cell Placement Within The ICS Structure

(Please also refer to the Volunteer Guidance Manual)

The Volunteer cell is organized under Resources in the Planning Section. The Volunteer cell will be opened upon decision by the Unified Command and notification to the Volunteer Coordinator. The Planning Section, the Resources Unit or the State IC notifies the SVC that volunteers may be needed or that telephone coverage is needed to inform/update the public about the status of volunteer utilization. The cell can consist of one person and one phone line, multiple people and lines, or an entire Volunteer Operations Center (VOC). It can expand as the need expands. All volunteers (except OWCN program volunteers) will be requested through Planning and Resources Section.

9720.2 Health & Safety

- A. Human health and safety is the first priority in decisions regarding the use of volunteers at an oil spill incident.
- B. California Code of Regulations stipulates that all persons working with hazardous materials, including crude oil, must receive specific health and safety training. Training courses are described in Section _____.
- C. Volunteers will not be utilized to work directly in the recovery of oil. Volunteers will not be assigned to work in areas where there is known a potential health hazard due to chemical exposure such as oil recovery, etc.

9720.3 Responsibility For Volunteers

- A. The determination to use volunteers at an incident is the responsibility of the Unified Command.
- B. The Volunteer Coordinator oversees the volunteer cell activities at the incident.
- C. Volunteers may be utilized by RP's in accordance with their oil spill contingency plan procedures or volunteers may be employed as unpaid state workers for the purpose of workers' compensation by the Administrator of the Office of Oil Spill Prevention and Response (OSPR).
- D. A volunteer is covered for workers compensation under the State of California only if the OSPR Administrator (or delegate) has sanctioned the use of the volunteers and the volunteer has been officially sworn in. Individuals independently working at the incident site who do not have approval to do so are not entitled to receive benefits. If there is a responsible party (RP), the RP is ultimately responsible for costs.

9720.4 Volunteer Coordinators

A. STATE (SVC)

Office of Oil Spill Prevention and Response

Volunteer Coordinator

Box 944209

Sacramento, CA 94244-2090

Telephone: (916) 323-4731

Fax: (916) 324-8829

***B. AREA (AVC)**

(To be selected and listed in each ACP) (Optional)

***C. LOCAL (LVC) (Optional)**

(To be selected and listed in each ACP) Optional

Local governments can work together and appoint an area coordinator if local coordinators are not available).

Selection Criteria:

(Refer to the Volunteer Guidance Manual for responsibilities of Coordinators)

Coordinators should be chosen based on availability of staff that meet the criteria. Each area should determine how many coordinators are needed to ensure a program is in place and knowledgeable trained staff are available for volunteer-related incident response. Every city and county does not need to select a local coordinator. However, contact of organizations in the area, development of agreements, and maintenance of a database of trained volunteers when coordinated among several people is more manageable. Of course, staff who are already performing similar functions may be more ideal (OES, Volunteer Centers, Local Govt. Volunteer Coordinators). It is also desirable that the person be interested in the volunteer program and like to network in the community. Other criteria includes:

1. Be available to respond to an incident, if requested.
2. Be familiar with a database software or be willing to learn in order to set up a volunteer database if the area or local plans indicate a database of organized volunteers will be maintained.
3. Be able and willing to attend Volunteer Coordinator meetings.
4. Be able and willing to participate in drills that include volunteer issues.

Types Of Volunteers

A. Organized - Volunteers who have been registered and trained prior to a spill. OSPR has trained over 100 volunteers in Hazwoper Training. The volunteers names, addresses and telephone numbers are filed for reference. At the time of this writing, it has not been determined whether the database will be maintained centrally by OSPR for the entire state. An alternative is to have a Volunteer Coordinator at each of the area levels with databases for the areas. (Refer to the Section on Coordinator Planning Responsibilities in the Volunteer Guidance Manual).

B. Convergent - Volunteers who arrive at the scene of a spill and who are not previously registered. They may or may not be experienced and trained.

(Members of the public who are volunteering on their own are not recognized as sanctioned volunteers until brought into the Volunteer cell and registered to perform approved tasks).

9720.6 Volunteer Function Progression Through Stages During An Incident

The following is an overview of a four-stage process for volunteer activity during an incident:

STAGE I - The Incident occurs and the 800 volunteer number is activated. It is unknown whether volunteers will be needed. SVC does not respond to the incident. A press release is submitted for approval to the UC and Public Information Officer.

STAGE II- SVC reports to the incident and refers the 800 line to the incident.

STAGE III- A VOC is set up and coordinated with area centers if agreement is in effect.

STAGE IV- Volunteers are brought in and registered.

A. STAGE I

1. Incident Occurs
2. OSPR Operations Center is opened.
3. OSPR Operations Center begins taking calls from volunteers and volunteer organizations.
4. OSPR Operations Center notifies OSPR Volunteer Coordinator (SVC) that the 800 volunteer hotline needs to be set up to take volunteer calls.
5. SVC asks for an incident status report to put in the 800 message to report to volunteers
6. SVC calls OSPR Telecommunications Specialist and requests the 800 line be taken off of “message only” status and transferred to the Volunteer Coordinator desk with a new recorded message for “off hours.”
7. SVC begins taking calls from volunteers and logging the volunteer’s name, address, telephone number and brief background (no extensive screening is done at this time as it is not know whether volunteers will be needed at the incident).
8. SVC releases canned press release and prepares other canned flyers that may be revised for the spill. A sample press release is included at the end of this section.

B. STAGE II

1. Communication begins between UC and SVC
 - a. Incident Commander or other UC representative requests the SVC to report to the incident.
 - b. SVC asks UC rep for the telephone number of the telephone where the 800 number will ring, if known.
 - c. SVC asks UC representative if volunteers are needed. If yes, perform tasks in Stage II and Stage III. If no, Stage II only.
2. SVC may call either Local or Area Coordinator (if one exists) and ask them to report to the incident to represent the Volunteer Coordinator (the Local and Area Coordinators should be trained prior to being called to represent the SVC. Prior to being trained, they may be called to assist).

3. SVC calls the OSPR Telecommunications Specialist and a) asks to have the 800 number transferred to another line; b) gives the telephone number and approximate time it will be needed (time SVC will arrive at the incident); or c) tells the Specialist that he will be called when the number is known.
4. SVC either transfers calls (if frequent) to the Operations Center while enroute to the incident or lets messages go onto the voicemail (if infrequent) while enroute.
5. If Local or Area Coordinator(s) report to the incident, they coordinate with the SVC on the telephones. The SVC would continue to answer the calls while the Local or Area Coordinator is enroute and then fax the information to them.
6. SVC or representative reports to the incident, checks in through Liaison and Resources and sets up the Volunteer Cell.

C. STAGE III

UC requests OSPR Volunteer Coordinator to set up the VOC. The OSPR coordinator may call in a local or area coordinator to assist or to serve as the Volunteer Coordinator in the Volunteer Cell. (The Volunteer Guidance Manual gives detailed set up instructions).

D. STAGE IV

The Volunteer Coordinator in the Volunteer Cell will refer to the Volunteer Guidelines for procedures for organizing the VOC, working with area volunteer centers and operating the VOC.

**9720.7 Approved Volunteer Jobs and Training Required
(Listed By Category)**

The description of each job listed in this chart follows the chart and is titled, "Volunteer Job Descriptions."

<u>CATEGORY of VOLUNTEER JOB</u> and Noted with "C" if appropriate for Convergent Volunteers	<u>TASK</u>	<u>TRAINING</u>
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ICS/VOC

C	OFFICE WORKERS AT VOC and other ICS functions - Performs a variety of general office duties in the VOC or other ICS location or at an OWCN facility. needed. See Data Entry Specialist, File Clerk/ Office Asst., Interviewer, Accounts Specialist, Administrative Coordinator/Office Manager, Receptionist, Runner, Scheduler/Time Card Asst., Command Center Administrative Specialist; Training Asst., Housing Asst., Transportation Asst., Supply Asst.	2 Hr. Workplace H&S
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****REHAB. FACILITY***

C California Conservation Corps (CCC) will be called out first. Volunteers will be called if CCC needs backup.	REHABILITATION FACILITY MAINTENANCE SPECIALIST - May include carpentry, plumbing, welding, or electrical to support the OWCN rehabilitation facility as requested.	2 Hr. Workplace H&S
C OWCN Rehab Facility volunteers will be utilized first.	REHABILITATION FACILITY SUPPORT - See Driver, Equipment Cleaner and Rehabilitation Facilities Specialist; Transportation of wildlife and wildlife food; picks up food from suppliers; loads/unloads coolers; scrubs cages, moves equipment, washes vehicles, washes and folds towels used for drying animals. Cleans office areas at OWCN rehabilitation facility.	4 Hr. Hazcom
OWCN Rehab Facility volunteers will be utilized first.	WILDLIFE CARE WORKER - See Wildlife Care Worker, Wildlife Handler/Washer and Wildlife Monitor; May assist with capture and rehabilitation of wildlife; may cut up fish for wildlife.	24 Hr. HAZWOPER

BEACH

BEACH CLEANUP - Removes tarballs

2 Hr. Workplace H&S

OTHER

FIRST AID RESPONDER - Provides emergency first aid for volunteers and other response personnel

4 Hr.
Hazcom

VOLUNTEER SUPERVISOR - Monitors volunteers to ensure they are following health and safety practices.

4-Hr.
Hazcom

TRAFFIC MONITOR - Oversees beach (site) access points to ensure only authorized persons enter; ensures habitat protection.

DFG will be called first. If not available, volunteer will be given specifics on what to photograph.

PHOTOGRAPHER - Provides photographic coverage of oil spill events for data collection, damage assessment, historical and for future training.

2 Hr.
Workplace
H&S

*Refer to the Section "Oiled Wildlife Care Network"

9720.8 Volunteer Job Descriptions

The following are descriptions of the jobs listed above within various categories.

Accounts Specialist - Maintains files and accounts of expenses attributable to the volunteer effort; communicates with the Finance Section of the Incident Command Center to determine accounting needs and system to be used. SKILLS REQUIRED: Must be detail oriented; experienced with 10-key data entry and be familiar with common computer software accounting and spreadsheet systems (e.g., Quicken, Lotus 123) highly desirable. TRAINING REQUIRED: Workplace Health and Safety, Site Safety.

Administrative Coordinator/Office Manager - Oversees office administrative activities at a Volunteer Operations Center (VOC), in the Volunteer Management cell within an Incident Unified Command Center, or other location; supervises work of file and data specialists; oversees development, maintenance and accuracy of computer and paper files of volunteer records; procures and distributes reports and provides updates to the Volunteer Operations Center Coordinator and the State Volunteer Coordinator as required. SKILLS REQUIRED: Good working knowledge of computer word processing and spreadsheet software, as well as excellent organizational, supervisory and communication skills. TRAINING REQUIRED: Workplace Health and Safety, Site Safety.

Beach Cleanup - Cleanup of tarballs that may appear seasonally on the beaches and rocky shores. TRAINING REQUIRED: Workplace Health and Safety.

Command Center Administrative Specialist - Provides backup and supplemental skills for Incident Unified Command Center staff. TRAINING REQUIRED: Workplace Health and Safety, Site Safety.

Computer Operator - Enter personnel information into established computer database. SKILLS REQUIRED: Familiarity with computer use. Particular software may be taught on the job if necessary. TRAINING REQUIRED: Workplace Health and Safety, Site Safety.

Data Entry Specialist - Enters wildlife and/or personnel information into established computer database(s). SKILLS REQUIRED: Familiarity with computer use. Particular software may be taught on the job if necessary. TRAINING REQUIRED: Workplace Health and Safety, Site Safety.

Driver - Provides ground transportation services as needed; may transport people using a sedan or van; may transport wildlife and wildlife food to various facilities or sites by truck; loads and unloads coolers used to transport animal food; picks up food from the supplier and delivers to facilities; keeps vehicle bed clean. All driving responsibilities require current driver's license, clean driving record, proof of insurance (if personal vehicle is used). TRAINING REQUIRED: Workplace Health and Safety, Site Safety, 4-hour hazcom if transporting wildlife.

File Clerk/Office Assistant - Performs general office tasks; files documents in office (usually at a Volunteer Operations Center) as appropriate; prepares outgoing memos and mail; sends and receives faxes; makes photocopies. SKILLS REQUIRED: Telephone skills, word processing, development of graphics presentations. Computer spreadsheet/database experience are desirable but not required. TRAINING REQUIRED: Workplace Health and Safety, Site Safety.

First Aid Responder - Provides emergency first aid for volunteers and other response personnel. SKILLS REQUIRED: Current First Aid Certification. TRAINING REQUIRED: 4 Hr. Hazcom

Housing Assistant - Works with the Facilities Unit of the Logistics Section to identify housing for volunteers; receives housing requests; procures and distributes housing materials (sleeping bags, blankets, tents), if necessary; makes housing assignments and maintains expense records related to housing. TRAINING REQUIRED: Workplace Health and Safety, Site Safety.

Interviewer - Works in Volunteer Operations Center (VOC), processing volunteers who arrive in the area or persons referred to the VOC by a county volunteer center; establishes rapport with prospective volunteers to appropriate tasks or jobs based on their experience and current volunteer job needs in the oil spill response effort. TRAINING REQUIRED: Workplace Health and Safety, Site Safety.

Photographer - Provides photographic coverage of oil spill incident for data collection, historical documentation, and future training purposes. Experience with still photography and/or handheld video photography is required. Experience photographing wildlife, preferably in documentary and fast-action settings is desirable. Personal photographic equipment needed. (DFG photographer will be called first). TRAINING REQUIRED: 24 hour Hazwoper, site safety.

Receptionist - Greets volunteers arriving at the Volunteer Operations Center (VOC) and directs them through the processing stages. TRAINING REQUIRED: Workplace Health and Safety, Site Safety.

Rehabilitation Facility Maintenance Specialist - May include carpentry, plumbing, welding, and electrical support to the OWCN rehabilitation facility as requested. CCC would be called before a volunteer was called. TRAINING REQUIRED: Workplace Health and Safety.

Rehabilitation Facilities Support Specialist - Cleans animal pens and holding areas; moves equipment as needed; washes vehicles; washes and folds towels used for drying animals; cleans and disinfects carrying cages and other contaminated animal capture and transport equipment, following established protocols. TRAINING REQUIRED: 4-Hr. Hazcom

Runner - Shuttles messages and materials among incident locations, such as between the VOC and UC or to a Rehabilitation facility or other oil spill response sites. Valid driver's license required. TRAINING REQUIRED: Workplace Health and Safety, Site Safety.

Scheduler/Time Card Assistant - Assures maintenance of sign-in and sign-out records for volunteers; ensures that all volunteers on site are properly cleared and trained (and are not exceeding scheduled hours, in accordance with the Incident Commander's guidance); develops and monitors scheduling to ensure that sufficient volunteers are on hand at all times, according to the needs of the sites, facilities and staffs. TRAINING REQUIRED: Workplace Health and Safety, Site Safety.

Supply Assistant - Assists with identification of volunteers' logistical requirements and with issue and control of personal equipment and supplies to volunteers deployed to oil spill sites. Experience is desirable in ordering, issuing, stocking, accounting for maintenance and recovery of items of equipment and supplies from user personnel. TRAINING REQUIRED: Workplace Health and Safety, Site Safety.

Traffic Monitor - Oversees beach (site) access points to ensure only authorized persons enter; ensures habitat protection. TRAINING: 2-hour Workplace Health and Safety, Site Safety.

Training Assistant - Coordinates required training for volunteers; arranges for class presentations by trainers; oversees audiovisual equipment and programming, determines appropriate training and availability for each volunteer; schedules volunteer training sessions to meet multiple training requirements; presents training classes as appropriate. SKILLS REQUIRED: excellent organizational and communications skills. TRAINING REQUIRED: Workplace Health and Safety, Site Safety.

Transportation Assistant - Works with the Transportation Unit of the Logistics Section to determine volunteer transportation needs including frequency, routing and type of transportation (private car, state vehicle, van, truck, commercial shuttle, bus); determines volunteer drop-off and pick-up schedules for multiple sites; coordinates and verifies appropriate volunteer driver authorizations; monitors vehicle condition and maintenance among vehicles assigned to volunteer use (from government agencies or private industry pools) in accordance with guidance of the UC and maintains appropriate vehicle use records. TRAINING REQUIRED: Workplace Health and Safety, Site Safety.

Volunteer Supervisor - Monitors volunteers to ensure they are following health and safety practices. TRAINING REQUIRED: Workplace Health and Safety, Site Safety.

Wildlife Care Worker - Captures wildlife. OWCN facility handles. Volunteer is utilized only if OWCN exhausts resources. TRAINING REQUIRED: 24 Hr. Hazwoper, Site Safety.

Wildlife Handler/Washer - Helps move animals in and out of transport carriers; restrains wildlife for veterinary examination and at the wash table; performs repeated washing and rinsing of oiled wildlife. TRAINING REQUIRED: 24 Hr. Hazwoper, Site Safety.

Wildlife Monitor - Conducts behavioral observations on cleaned animals; responsible for monitoring health of one to four animals at a time; keeps detailed records of animal behavior, condition, and overall health; feeds animals; communicates observations and perceptions to animal husbandry supervisor or veterinarian; may also be involved in post-release wildlife tracking and monitoring. TRAINING REQUIRED: 24 Hr. Hazwoper, Site Safety.

9720.9 Training Course Descriptions

In the best interests of all concerned, volunteers will be given appropriate training before being assigned. This may cause delays in assignment if the volunteer has to be trained at the spill site, but will avoid

needless injuries. Volunteers must be trained to perform the tasks they are asked to do. An inexperienced and untrained volunteer will not be assigned to perform a task requiring training and/or experience.

1. 24-hour HAZWOPER Training - Is for volunteers identified prior to a spill who will back up the Oiled Wildlife Care Network (OWCN) capturing oiled birds and mammals. They would be in the hot or warm zone, within permissible exposure limits. OWCN has primary responsibility for capture and care of oiled wildlife; therefore, other volunteers will be called in only when the capacity of OWCN is exhausted.
2. 8-Hour annual HAZWOPER refresher training is required for volunteers who have had the 24-hour training. The State Department of Fish and Game, Office of Oil Spill Prevention and Response, will provide refresher training for a pre-determined number of volunteers who are identified as OWCN backup.
3. 4-Hour HAZWOPER - If the supply of 24-hour Hazwoper trained volunteers is exhausted and more are needed to backup OWCN at an incident, a 4-hour on-scene HAZWOPER training will be given for those volunteers. Individuals trained at the 4-hour level may use this training only once, at a single incident. If the individual finds that they may need to attend future spills, this person must secure training at the appropriate level.
4. 4-hour Hazard Communication (Hazcom) Training - For volunteers who would be a backup in the rehabilitation facility. There is no refresher. The volunteer cannot be in the warm or hot zone.

The 4-hour HazCom includes:

- Fundamentals of Toxicology
- Chemical/physical properties of Petroleum products
- Physical Hazards (noise, thermal, lifting safety, slips, trips and falls, electrical safety.
- Biological hazards (zoonotic diseases, soil/water borne diseases; snakes, spiders and insects of concern).
- Personal protective equipment (boots, gloves, worksuits, safety glasses, hearing protectors).
- Decontamination of personnel and equipment
- Reporting injuries, worker compensation forms, and deadlines

5. 2-hour Workplace Health and Safety Training will be conducted onsite for volunteers who will be working in the support zone (not be in the warm or hot zone). For example, tasks could include clerical, phone, pre-beach cleanup, transportation of animals, etc. The 2-hour training includes:
 - Physical hazards (safe lifting; slips, trips and falls; general office ergonomics; general electrical safety.
 - Chemical hazards (toner, disinfectants, rubber cement, etc.)
 - Safe driving
 - Rest breaks/replacement for exhausted workers
 - Reporting of injuries, worker compensation forms, and deadlines
6. Site Safety Training (approximately 5-20 minutes) to orient the volunteer of hazards at the site of the spill.

*HAZWOPER - Title 8, California Code of Regulations (CCR), Section 5192 (It is the same as 29 Code of Federal Regulations 1910.120.

9720.10 Oiled Wildlife Care Network (OWCN) Rehabilitation Facilities

OWCN Affiliation to the Volunteer Program -The State of California, Department of Fish and Game, Office of Oil Spill Prevention and Response, has a Memorandum of Understanding with various wildlife rehabilitation facilities statewide. The program is called the "Oiled Wildlife Care Network" (OWCN). The facilities capture, clean and rehabilitate oiled animals.

OWCN Facilities Utilization of Volunteers -OWCN facilities have both paid and unpaid workers and both may be called "volunteers." If they need more volunteers to respond to a spill, the Incident Volunteer Coordinator (Volunteer Cell) may refer volunteers to them to screen for wildlife capture or may screen and refer volunteers to them for backup tasks (building, electrical, wildlife washing, etc.).

How OWCN is Activated During a spill -The UC will call the rehabilitation facility directly (through the wildlife care unit).

Paid Vs. Unpaid and Workers Compensation Entitlement - For the purposes of the ACP and Local Contingency Planning, to be entitled for State benefits, the volunteer cannot be a paid worker. If the "volunteer" is paid, the rehabilitation facility is responsible for the volunteer's benefits. If the volunteer is unpaid, the State will cover the benefits. In both cases, as previously stated, the RP is ultimately responsible for costs.

Unpaid volunteers must be sworn in to be deemed a State employee and be entitled to workers compensation, using form Std. 689.

9720.11 VOC Location

Each ACP is to insert alternate locations here. The following criteria may help in the selection:

A facility designated should have adequate facilities for central registration, training, assignment, deployment and demobilization of volunteers. The location of the Volunteer Operations Center should be close enough to the focus of activity to be efficient without interfering with site operations. The following should be considered:

1. Estimated number of volunteers expected
2. Types of assignments necessary
3. Locations and times needed
4. Parking
5. Accessible
6. Adequate space for registration, training, etc.
7. Adequate sanitary facilities
8. Multiple phone lines available or can be put in
9. Outlets for fax, and xerox.

9720.12 Press Releases

The initial press release included with this section is revised to fit the incident and released (in Stage I described above) through the Public Information Officer. As the incident progresses and the status of volunteer utilization changes, the Volunteer Coordinator writes additional press releases and sends them to the Public Information Officer or the JIC manager for approval or editing and distribution to the media.

CONTACT: Cindy Murphy
PHONE: 916-324-6250

DATE:
TIME:

VOLUNTEER HOT-LINE ACTIVATED

(City Name) — In response to the approximate ____-gallon oil spill in/at _____, the California Department of Fish and Game's Office of Oil Spill Prevention and Response (OSPR) has activated the Volunteer Hotline: **800-228-4544**. Hotline staff will record the caller's name, telephone number and applicable skills or training, and let the caller know whether or when volunteers will be utilized for spill response, and other event-specific information as needed.

Federal, State, and local governments, in a cooperative effort, have determined what tasks are appropriate for volunteer effort, have identified and pre-trained an existing group of volunteers statewide, and have developed a system to activate those volunteers. The system will be activated if the Unified Command at the spill decides that volunteers are needed for the response effort. At that time, a volunteer operations center will be established, and if additional volunteers are needed, the hotline listing will be publicized through the news media.

Volunteers and other people are advised to stay away from the spill site, as their presence can hamper clean-up efforts and increase danger factors. Oil is a hazardous material, and to work in or near the oil, one is required to complete 24 to 40 hours of training in Hazardous Waste Operations and Emergency Response (HAZWOPER). Additionally, for the safety of both the public and animals, only trained wildlife specialists should attempt to handle oiled wildlife.

The public can help at this time by reporting any oiled animals to (name of Rehab Facility), at telephone ____, or (name of 2nd rehab facility) at telephone _____. These facilities belong to the statewide Oiled Wildlife Care Network (OWCN), organized and directed by the OSPR, to focus on individual oiled animals and their survival after an environmental disaster. Modern technology, properly-equipped facilities, and new care and rehabilitation protocols standardize care throughout the OWCN, increasing survival rates. The less contact any wild creatures have with humans, the better for the animals.

9730 Salvage

This section describes marine salvage.

Note: The Coast Guard Captain of the Port has jurisdiction over vessel salvage situations occurring within his/her zone; this does not preclude any other agencies' interests with respect to spill response.

A vessel casualty and oil spill or potential oil spill, may require the following responses:

- (1) Search and rescue
- (2) Oil spill containment/clean-up
- (3) Fire fighting
- (4) Vessel salvage

The first priority in a vessel casualty is the safety of the crew and any other personnel in the area. Secondary concerns are for environmental protection and vessel salvage. A casualty-scene information that will become essential to the early efforts at salvage should be completed by the responders aboard the vessel.

1. Search and Rescue Operations.

The SAR (Search and Rescue) Mission Coordinator (SARMC) will respond by deploying Coast Guard resources. This individual will be the local Coast Guard Group Commander or District Commander whose zone includes the vessel casualty. Upon notification, the Coast Guard will designate the SARMC and respond, as necessary, with on-scene resources.

2. Pollution Response Operations.

The Federal On-Scene Coordinator will ensure pollution response efforts are conducted in accordance with this plan. However, pollution response operations will be accomplished on a not-to-interfere basis with search and rescue operations. While pollution response clearly takes priority over salvage efforts, the two responses may necessarily be conducted concurrently. Salvage operations could be critical to preventing any further discharge of oil. The FOOSC will prioritize actions to avoid interference between salvage and pollution response efforts.

3. Fire Fighting.

Refer to section 8000 of this plan and the Local Marine Safety Office Burning Ship Contingency Plan for marine fire fighting activities.

The salvage issues regarding firefighting should be considered while fire fighting activities are being completed. The de-watering, ballasting, and counter-flooding aspects of fire fighting will be coordinated by the FOOSC. Follow on issues of hull integrity due to weakening from heat fatigue must be considered in the salvage effort.

4. Salvage Operations.

Salvage is a term used to describe all services rendered to save property from marine peril. This broad definition encompasses not only actions undertaken to save a vessel or cargo, but also includes wreck removal, harbor clearance, and deep water search and recovery.

Salvage includes:

- Providing firefighting assistance.
- Refloating a vessel from a stranding.
- Offloading cargo or water to prevent foundering, or removing sound cargo from impending peril.
- Shoring, patching and making temporary repairs to correct structural, stability, or mechanical problems.
- Rescue towing of an incapacitated vessel to a safe haven.
- Preventing pollution.

Salvage Tug

A Salvage tug is a tugboat equipped to attend to vessels in distress in coastal or ocean conditions, and to render assistance either by towing, provision of pumping equipment, or similar aid. Such tugs historically have been large, powerful, and stationed at high risk locations for ship traffic.

Rescue Tug

A rescue tug is generally a “tug boat of opportunity”, having adequate horsepower or bollard pull strength to assist in controlling a distressed vessel until salvage resources arrive. A rescue tug would generally be capable of providing emergency towing, and quite possibly render a degree of firefighting assistance, since many of the newer tugs are equipped with firefighting water monitors. Rescue towing involves taking an incapacitated vessel under tow at sea and towing it out of harm’s way, generally to a safe haven or port, but sometimes for beaching.

Salvage Masters

In order to conduct a proper salvage you must have someone in charge who has the knowledge of how to respond to the specific situation. The person in charge of a salvage operation is known as the salvage master.

A Salvage Master should have direct experience in ship salvage, demonstrating experience in the use of salvage ships and craft, ground tackle, heavy lift craft, cranes and booms, oil pollution containment equipment, and all ancillary types of salvage equipment (e.g. pumps, compressors, welding equipment, etc.). The salvage master acts under the direction of the FOOSC, he generally assumes complete control of salvage, harbor clearance, and related engineering operations.

9731 Federal Salvage Resources

9731.1 Navy Supervisor of Salvage Assistance (SUPSALVAGE)

In the event that the Responsible Party does not respond to the casualty, the federal government may respond to the salvage requirement, utilizing the services of Navy Supervisor of Salvage. However, financial responsibility remains with the responsible party.

Navy Supervisor of Salvage services may be obtained by:

- a. Telephoning Supervisor of Salvage Operations **(703) 607-2758**
After hours and weekends (NAVSEA Duty Officer) **(703) 602-7527**
- b. Initiating a message to: CNO WASHINGTON DC//N312/N866//

Add the following if applicable:

//N45// for oil pollution
//N873// for diving support

Info copy to: COMNAVSEASYS COM WASHINGTON DC//OOC//

Message text should include: a brief description of services required; location; urgency; point of contact; and telephone number. If the task is urgent and requires immediate mobilization, the message should amplify this and include a statement that funding will be provided by separate correspondence.

SUPSALVAGE can provide the services of naval architects, may provide the services of naval salvage vessels, and has access to contracts which will provide the services of commercial salvors and equipment. SUPSALVAGE developed and has available software for rapid analysis of longitudinal strength and intact/damaged stability. The software is known as Program of Ship Salvage Engineering (POSSE).

9731.2 US Coast Guard Marine Safety Center Support

Technical support is also available from the Marine Safety Center (MSC) Salvage Team. This group can evaluate vessel stability, hull strength and salvage plans, and may also be available for on-scene assistance. The MSC may be able to provide vessel plans if the ship is U.S. flag. The Federal On-Scene Coordinator may obtain services of MSC by calling **(202) 366-6481** during business hours, or by calling FLAGPLOT at **(202) 267-2100**, after hours. The checklist should be completed and faxed to the MSC at the earliest opportunity. The Marine Safety Center fax number is **(202) 366-3877**.

9731.3 U.S. Coast Guard Pacific Strike Team

The Pacific Strike Team can be on the scene quickly to provide initial response assistance with pumps, personnel, pollution control equipment, and miscellaneous salvage hardware. The Strike Team can be contacted 24 hrs a day at **(415) 883-3311**. The National Strike Force Coordination Center in North Carolina can also be notified at **(919) 331-6000**.

9732 Potential threats

The threat is greatest from cargo vessels that carry hazardous materials in large quantities, such as break bulk; containerized cargoes; dangerous liquids; and pressurized or liquified gases. Vessels that are regulated, such as oil

tank ships and barges, pose a substantial threat to the marine environment, they have been the main target of federal and state oil spill prevention regulations. Yet, in some cases it is the unregulated cargo vessel that may pose a bigger potential pollution hazard. There are far more cargo vessels than tank vessels, cargo vessels may carry more bunker fuel than the cargo capacity of some oil barges, additionally, cargo or freight vessels may be carrying products far more hazardous in nature than oil.

9733 Salvage Response Considerations

This section describes salvage situations and the general guidelines to follow in responding to a salvage situation. In addition, this section also describes actions to be taken in response to vessel strandings, the relationship between the on-scene coordinator, the responsible party, the vessel's master, and the salvor. Information pertaining to salvage procedures was adapted from Chapter 8 of Volume I of the U.S. Navy Salvage Manual. All parties involved in a salvage response should refer to the manual for specific information relating to salvage techniques.

Salvage efforts may be divided into three phases: stabilization, refloating, and post-refloating. During the stabilization phase, salvors take steps to limit further damage to the vessel, and to keep the ship from being driven harder aground or broaching. Response leaders gather information and formulate a salvage plan; that plan specifies actions to be taken during the refloating and post-refloating phases of the salvage. The refloating phase commences when the salvage plan is executed and ends when the ship begins to move from her strand. During post-refloating, the vessel is secured and delivered to the designated port facility.

Parties involved in salvage response should refer to Chapter 8, Volume I of the U.S. Navy Salvage Manual for specific information relating to salvage techniques.

9733.1 Stabilization Phase:

This phase of operations must take into account the potential discharge of oil and hazardous substances into the environment. Upon stranding the Vessel's master SHOULD take the following steps:

1. Have ships personnel report to their emergency stations.
2. Take action to determine the vessel's condition and stabilize the vessel.
3. Secure watertight closures.
4. Notify Coast Guard and vessel's Operations center.
5. Request salvage assistance.
6. Note course and speed at time of stranding.
7. Obtain and provide if necessary, an accurate cargo stowage plan.
8. Evaluate the following:
 - Safety of personnel
 - Weather and sea conditions
 - Forecast for change in weather and sea conditions
 - Nature of the sea floor and shoreline.
 - Depth of water around ship
 - Ground reaction
 - Damage to hull
 - Damage to shafting, screws, and rudder
 - Risk of further damage
 - Prospect of maintaining communications
 - Ground reaction
 - Likely draft and trim after refloating
 - Potential for discharge of pollutants
 - Position of vital and cargo systems' valves
 - The liquid level of all tankage (e.g. fuel, ballast, cargo, etc.)

The Vessel's Master should not:

1. Jettison weight to lighten the vessel in an attempt to back the vessel off.
2. Attempt to back the vessel off when the bottom is torn open.
3. Fail to take action to stabilize the vessel and to determine its condition.

The Vessel's Master should request salvage assistance immediately, and not delay pending the results of an early attempt to refloat the vessel. If the damage assessment indicates the vessel is not in danger of broaching, sinking or capsizing, the master may attempt to back the vessel clear using full engine power on the next high tide.

The Responsible Party should take the following steps:

1. Contact the Coast Guard. Provide a current status of the situation.
2. Implement a Unified Command System response organization.
3. Identify salvage resources available and determine time required for those resources to arrive on scene:
 - Salvage Master
 - Salvage Vessel's
 - Tug Boats
 - Beach Gear
 - Barges with Ground Tackle
 - Lightering Resources
 - Lifting Vessels
 - Appropriate portable cargo transfer pumps and hoses
 - Hull patching equipment
4. Initiate salvage response. Over-estimate the quantity of resources needed.
5. Keep the vessel's master informed of all actions taken.
6. Obtain the services of a Naval Architect.
7. Conduct damage stability and longitudinal strength calculations.

Upon being assigned responsibility for the salvage action, the salvor should:

- Advise the vessel that he (his organization, vessel, etc.) is enroute to assist, and provide ETA (estimated time of arrival) on-scene.
- Ensure that the master is aware of the information covered in the preceding paragraphs that relates to early attempts to refloat the vessel.
- Obtain all information available regarding the vessel's particulars and details of the stranding. This should include:
 - An accurate position of the stranding (latitude/longitude)
 - Means used to fix position
 - Drafts at time of sailing
 - Estimated drafts at time of stranding
 - Applicable chart numbers
 - Drafts after stranding, with state of time and tide
 - Soundings along side from forward to aft, corrected to datum of the chart of the area
 - Soundings of all tanks and voids, noting changes in contents
 - Ships course and speed at time of stranding
 - Ships heading after stranding and details of changes
 - Liveliness of the vessel in response to swells and surf
 - Weather conditions
 - Sea and current conditions
 - Extent of vessel damage
 - Location of grounding points and estimated ground reaction
 - Seafloor type
 - Status of vessel's machinery and piping systems
 - Vessels loading plan or cargo manifest

- Amount and location of hazardous substances
- Locally available resources (tugs, cranes, bulldozers)

Upon arrival, the salvage ship or vessels, and personnel, should conduct damage control and position stabilization. Damage control actions may range from augmenting the ship's crew, to conducting firefighting and flooding control. Position stabilization consists of securing the ship at the first opportunity to prevent it from broaching or being driven further ashore.

Prior to developing a salvage plan, the salvor must conduct a thorough salvage survey of the vessel and its immediate surroundings. The survey is defined in the Navy Salvage Manual as being comprised of: the preliminary survey; the detailed hull survey; the topside survey; the interior survey; the diving survey; the hydrographic survey; and the safety survey. The salvor should refer to Section 8-2.6 of Volume I of the Navy Salvage Manual for details. The information should be recorded on the salvage survey form included in Appendix I, Chapter 8, Volume I of the Navy Salvage Manual, or an equivalent.

Based on information received from the vessel, the salvor should evaluate the following:

1. Vessel's original estimates of ground reaction and freeing force.
2. Stability afloat and residual strength.
3. Ship's machinery condition and retraction power available locally.
4. Ship's ability to proceed to a safe haven after refloating.

The salvor should then advise the master based on these evaluations, and take the following steps to mobilize the salvage force:

1. Determine personnel and material required
2. Collect information about the stranded ship. Sources include:
 - Owner
 - Vessel's classification society
 - Coast Guard
3. Ensure needed navigation material is on board.
4. Begin recording written record of information and actions taken.
5. Ensure that salvage vessels enroute will be prepared to respond upon arrival to the stranding site.

Upon arrival (in coordination with the response organization/OSC where applicable), the salvage master should conduct damage control and stabilization. Damage control actions may range from augmenting the vessel's crew for firefighting and flooding control. Position stabilization consists of securing the vessel to prevent broaching or being driven further ashore. The salvor must then, in preparation for the development of the salvage plan, conduct a thorough salvage survey. This survey is defined and described in the Navy Salvage Manual, Volume 1 Section 8-2.6, as being comprised of the preliminary survey, a detailed hull survey, a topside survey, an interior survey, a diving survey, a hydrographic survey and a safety survey. The information gathered during the surveys should be recorded on a survey form as found in Appendix of the aforementioned manual.

1. Basic information identifying the ship's characteristics and the condition of the stranding.
2. An analysis prepared by the salvor and naval architect, which provides estimates of:
 - The ground reaction
 - The freeing force
 - Location of the neutral loading point (point at which weight can be added w/out change in ground reaction)
 - Stability - grounded and afloat
 - Strength of hull girder, damaged areas, attachment points, and rigging
 - A summary of the engineering rationale employed for selection of retraction and refloating techniques
 - Hydrographic information
 - Potential pollution risks
3. List of specific safety hazards involved

4. Potential pollution risks
 - Lightering Considerations
 - Booming Considerations
 - Standby Equipment
5. Means for controlling interference between pollution response efforts and salvage efforts
6. Appendices which provide detailed information regarding techniques to be employed.
7. Location to which the vessel will proceed following refloating.
8. Means for controlling the vessel as it is freed.
9. Vessel escort, if any, to be employed.
10. Means for delivering vessel to destination (tow, own power).
11. Any preparation of vessel necessary to gain permission for entry into port of destination.
12. Means of disposal, if other than above.

9733.2 Refloating Phase:

The salvage plan is implemented during this phase. The plan should be considered a flexible working plan with appropriate changes made in response to changing conditions. During this phase, all parties must be in close communication, and the process should be brought to a halt if significant safety problems develop. The salvor, responsible party, and the Captain of the Port have the authority to stop salvage operations in this case.

Consideration to assuring that the problem will not be made worse must be addressed thoroughly. In the case of a heavily damaged vessel, the risk to the port and the environment may not warrant allowing the vessel to be brought into the harbor. In some cases, it may be desirable to allow the vessel to sink in deep water to mitigate environmental damage, or minimize risk to life. Obviously, these are decisions that will have all parties in the salvage effort fully involved, and the FOSC must take the lead to assure that the best management of the incident/threat is achieved.

Working with the Responsible Party and the naval architect, the salvor must develop a salvage plan. The plan must detail actions to be taken and resources to be used, and it must set organizational responsibilities and the anticipated schedule. **After the plan is prepared and prior to initiating salvage operations, the Responsible Party must submit the plan to the Federal On Scene Coordinator or his designated representative, for review.** The Federal On Scene Coordinator will review the plan, and approve or disapprove it based upon real or potential risks to port safety and the environment. Any plans for the intentional jettisoning of cargo will be reviewed as part of the salvage plan.

9733.3 Post Refloating Phase:

(1) This phase commences when the ship begins to move off the strand, and is completed when the ship has been delivered to a safe haven or repair facility. In addition, salvage resources and equipment should be removed from the salvage site. The options for disposal of the vessel include:

- Steaming into port, or to another location within the port
- Towing to safe haven
- Anchoring in preparation for tow or temporary repairs
- Beaching if the ship is in danger of sinking
- Scuttling or sinking

(2) The following salvage plan items are to be updated, as necessary, following refloating:

- Overall seaworthiness
- Vessel's bottom, for damage hidden by the strand
- Condition of piping systems and machinery
- Condition of all ship's systems necessary for the transit
- Ship's stability, list, and trim (may necessitate loading or shifting of weights)

- Patching and pumping arrangements for compartments in way of damage
- Towing bridle, day marks, and navigation lights (an insurance line should be rigged even when the ship proceeds under its own power)

(3) Following this phase, the Responsible Party shall submit a completed form CG2692 to the Officer in Charge of Marine Inspection and submit all requested information to the Senior Investigating Officer of the Marine Safety Office.

9734 Salvage Response for Other Than Strandings.

Salvage assistance may also be required for vessel sinking and rescues (towing). In these cases, the relationships between the various parties remain the same as for strandings. For sinking, the salvor must focus on methods for refloating the vessel, and vessel stability as it is refloated. For rescue situations, development of a comprehensive salvage plan may not be necessary. Use of good marine practice in establishing and maintaining the tow, and coordination with the vessel's master, tow vessel, Coast Guard SARMC, the Captain of the Port, and the vessel's owner/operator may suffice. In either of these cases, the user of this plan should follow the guidelines presented, adapting them to the specific salvage requirements at hand.

9740 NRDA PROCEDURES

9741 Introduction

The overall goals of the natural resource damage assessment (NRDA) process are to restore the injured natural resources to pre-spill conditions and to obtain compensation for all documented losses and is a separate process from response. In general, this process may require several phases to complete, including the individual phases of documenting injuries, assessing damages, settling claims, and undertaking restoration programs. This document addresses the NRDA process only during the initial stages while response efforts are underway. This document attempts to describe the NRDA process, identify the principle participants in NRDA activities, and clarify the relationship of NRDA within the framework of the Incident Command System (ICS). NRDA is separate from the response, therefore it fits in under liaison. This information provided here is to allow an RP to understand the NRDA process. Additional information is provided concerning funding for NRDA activities and the requirements for specific federal, state, and local permits necessary to collect information for assessments of natural resource damages.

It is highly desirable for natural resource trustees to coordinate their NRDA activities and to consult with local governments and interest groups from the affected area to produce a single NRDA for all injuries to public trust resources. The trustees are encouraged to coordinate these activities with the efforts of a cooperative responsible party (RP) to the extent that trustee responsibilities are not compromised.

9742 Background And Structure

Significant oil spill incidents initially lead to two primary actions: a response to contain and cleanup the spilled oil, and an assessment of the injuries to natural resources caused by the pollutant. In 1990, Congress enacted the Oil Pollution Act (OPA 90; 33 U.S.C. 2701 et. seq.). OPA 90 authorizes Federal resource trustees (Department of Agriculture, Department of Commerce, Department of Defense, Department of Energy, Department of the Interior), State resource trustees (designated by the governor of each state), federally-recognized Indian tribes, and foreign trustees to seek compensation for injuries to natural resources caused by the discharge of oil. For purposes of this document, these groups are referred to as either "trustees" or "trustee agencies". In California, the Governor has designated the Secretary of the Resources Agency and the Secretary of the California Environmental Protection Agency as the State Trustees for natural resources within their purview. The Lead State Trustee generally is selected based upon the types of natural resources affected by the spill.

Damage assessments for natural resources shall be coordinated by representatives from each of the trustee agencies with affected resources. These trustee agencies typically work as a team to develop a single approach to the assessment process. The “NRDA Team” consults with members of government and interest groups from the affected area to address local concerns. Cooperative RP(s) may be invited to participate with the NRDA Team activities to develop one unified NRDA plan for public trust resources. A cooperative damage assessment could reduce costs by eliminating parallel assessments by the trustees and the RP. However, due to the statutory responsibilities, the trustees must maintain management and oversight of any cooperative damage assessment.

9742.1 NOAA Regulations

The National Oceanic and Atmospheric Administration (NOAA) promulgated final regulations for NRDA of injuries resulting from a discharge of oil (15 C.F.R. Part 990). NOAA published the final rules on January 5, 1996 in the Federal Register (61 Fed. Reg. 440). These regulations supersede the Department of the Interior’s (DOI) NRDA regulations (43 C.F.R. Part 11) implementing portions of the Comprehensive Environmental Response, Compensation and Liability Act (42 U.S.C. 9601 et. seq.) (CERCLA) and the Clean Water Act (33 U.S.C. 1251 et. seq.) (CWA) for oil spills. Any assessment of damages prepared in accordance with the regulations promulgated by NOAA shall have the force and effect of a rebuttable presumption of correctness on behalf of the trustees.

In addition to the final NRDA rule, NOAA has developed guidance documents covering various aspects of the NRDA process. The NOAA rule has similar advantages to the DOI rules but is more specific to oil-related injuries and the dynamics following an oil spill incident.

9742.2 California’s Office of Spill Prevention and Response

The California Lempert-Keene-Seastrand Oil Spill Prevention and Response Act (OSPRA) was enacted shortly after OPA 90. Under OSPRA, spillers are held strictly liable for damages, including natural resource damages, resulting from a discharge of oil into marine waters of the State. Damages can be sought under federal or state law or both but may be claimed by trustees only once. Double recovery of damages is not permitted. Hence, it is imperative with spills of significance that Federal and State trustees consider the interests of affected local governments and coordinate claims for all public trust natural resource damages. The monetary damages based on NRDA activities are compensatory in nature to the public and, therefore, are separate from fines and penalties which are largely punitive to the responsible party.

9742.3 CERCLA and Clean Water Act

CERCLA, enacted in 1980, authorizes Federal and State governments and federally-recognized Indian tribes to act as public trustees of natural resources and pursue damages from the RP(s) for injuries to natural resources caused by release of a hazardous substance. Section 1321 of the Clean Water Act authorizes the trustees to assess damages to natural resources caused by a release of oil. Pursuant to CERCLA and CWA, the DOI promulgated the first NRDA regulations (“DOI Rules”) establishing procedures that trustees may follow. The procedures, as modified by *Ohio v. U.S. Dept. of the Interior*, 880 F.2d 432 (D.C. Cir. 1989) and *Colorado v. U.S. Dept. of the Interior*, 880 F.2d 481 (D.C. Cir. 1989), provide guidance for measuring injuries to natural resources and quantifying damages (dollars) for the injuries.

The DOI issued a revised final NRDA rule for Type B assessments on March 25, 1994 (59 Fed. Reg. 14262) and a proposed rule for economic valuation on May 4, 1994 (59 Fed. Reg. 23098), in response to the Ohio decision. The DOI also issued a revised Type A (simplified) assessment rule on May 7, 1996 (61 Fed. Reg. 20560). The overall framework set forth in the DOI rules is the basis for NOAA’s NRDA regulations. It is also important to understand the procedures and standards set forth in the DOI rules because CERCLA still applies to oil spills in which the oil is mixed with a hazardous substance as defined in 42 U.S.C. 9601(14).

9742.4 Assessment Procedures

The assessment procedures set forth in the DOI rules are not mandatory. However, they must be used by trustees to obtain a rebuttable presumption that a specific assessment of damages is correct. The DOI rules set out two types of assessment procedures. The “Type A” procedures uses a computer model to calculate damages and is a simplified assessment process. The “Type B” procedures involve more comprehensive assessment activities but, may be tailored for individual cases.

Five steps are described in the DOI rules for determining and quantifying injury to resources and assessing monetary damages. The steps include: (1) conducting an initial preassessment; (2) conducting a preassessment screen; (3) preparing an assessment plan; (4) conducting the assessment following either the “Type A” or “Type B” rule; and, (5) preparing a post-assessment report. Although the regulations provide the option for the trustees to use either “Type A” or “Type B” procedures in a given case, both may be employed in practice as long as there is no double recovery of damages. The speed and simplicity of the “Type A” procedures may prove useful for certain spills or types of injury, whereas the “Type B” procedures may be used if a full assessment is warranted.

NOAA has identified three phases to a damage assessment: (1) Preassessment; (2) Restoration Planning; and, (3) Restoration Implementation. If injuries to natural resources or the services provided by natural resources are expected to continue following response actions, and feasible restoration alternatives exist to address those injuries, then trustees may proceed beyond the Preassessment phase to Restoration Planning and Implementation.

9742.5 Injuries and Lost Services

Initial steps in the NRDA process require documentation of a pathway for the spilled oil, demonstration of oil exposure (direct and indirect) with specific resources along the pathway, and quantification of the injuries caused by the spilled oil. Natural resources and/or the services provided by such resources may be injured or disrupted through direct or indirect exposure to released substances.

The methods used to assess the injuries arise largely from scientific practices and best professional judgement. The DOI rules and NOAA rule provide guidance on specific types of biological injuries (e.g., death, physiological malfunctions such as decreased reproductive capacity) that may be used to claim damages. The scope of possible injuries extends beyond impacts to single organisms and may include effects on populations, habitats, and ecosystems.

“Services” include physical and biological functions provided by the natural resources to the ecosystem as well as other functions related to human use of the resources. Production of food, protection from predators, maintenance of community diversity, and provision of habitats are examples of some services provided to the ecosystem or its constituents. Examples of services provided to humans by natural resources include recreational opportunities such as fishing, wildlife viewing and beach activities. Other services provided by resources to humans are often less visible and can relate to the knowledge that a resource exists and is healthy or will continue to exist for the benefit of future generations.

9742.6 Preliminary Damage Estimates

Expected damages should be estimated as soon as possible to determine the potential scope of the case and the prudence of undertaking certain types of studies. Preliminary damage estimates should include: (1) the reasonable costs of injury assessment, (2) the cost of restoring, rehabilitating, replacing or acquiring the equivalent of the injured resources; and, (3) the value of interim losses including both direct use (e.g., recreational) and passive use (e.g., existence value) of resources pending restoration or natural recovery.

9742.7 NRDA Process

Successful pursuit of NRDA actions, either by the trustees alone or in cooperation with the RP(s), is a complex process comprising numerous tasks that generally involve the interaction of scientists, economists,

lawyers, and administrators. The DOI rules and NOAA rule reduce some of the complexity by establishing an assessment process and providing a mechanism for determining the merits of going forth with the assessment and claim. The process provides a record of the trustees' decisions.

Other advantages to following the federal regulatory assessment processes may warrant use of the procedures. Results obtained by following the DOI and NOAA rules are presumed correct. The rebuttable presumption shifts the burden of proof to the party challenging the correctness of those results. Additionally, these rules provide national standards on injury measurement, describe methods for quantifying natural resource injuries into monetary values, and assist trustees in planning restoration of impacted resources.

9743 NRDA and the ICS

The Incident Command System (ICS) is an organizational framework designed to efficiently and effectively manage personnel and resources during emergency incidents. The system is designed to be adaptable to any size event, and can be changed in structure to conform to the needs of the response. One objective of the ICS is to reduce or eliminate the duplication of efforts by the numerous response agencies while attempting to control or contain the spill and mitigate possible impacts of the spilled oil. A small group consisting of the On-Scene Coordinator (OSC), the State Incident Commander (State IC), and a representative of the RP from the Unified Command (UC), coordinates and directs the actions of the response.

Concerns of the affected local governments related to spill response or cleanup are generally presented to the UC through a Multi-Agency Coordination (MAC) group representative. The local government claims for spill damages associated with services provided by natural resources should be coordinated with the Trustee NRDA Team to avoid overlap within assessments. For additional details on the ICS see section 1000.

Assessment of injuries and damages resulting from spilled oil need to begin as soon as possible following the initial release of the pollutant. This necessitates that NRDA activities be conducted simultaneously with response efforts and coordinated through the UC. Portions of the NRDA process should be integrated into the ICS to improve communication, expedite both response and NRDA activities, and make efficient use of personnel and equipment. To avoid potential conflicts in duties, it is recommended that members of the NRDA Team not have responsibilities for the spill cleanup or general response activities.

The primary role of the NRDA Team is to document a pathway for the spilled oil, measure levels of injuries resulting from the spill, and determine damages. The UC, in contrast to the NRDA Team, focuses primarily on response, cleanup, and minimizing impacts of the oil spill. Although the UC and NRDA Team often have different responsibilities and needs, some of their activities overlap and require coordination. Examples of activities to be coordinated immediately following a spill include collecting samples (e.g., access to restricted sites, sampling prior to cleanup), gathering information pertinent to measuring actual or potential adverse changes to natural resources, using equipment (boats, helicopters, etc.), communications, surveying spill sites, identification of protective measures and potential need for emergency restoration.

Uninterrupted communication between the UC and the NRDA Team is essential to ensure that needs and efforts of the NRDA Team are not in conflict with response strategies and activities selected by the UC. Information concerning, for example, the spill trajectory forecasts, cleanup strategies, and beach and port closures should be made available to the NRDA Team to assist sample and data collection in a timely fashion. Conversely, information concerning potential injuries to natural resources caused by oiling or response techniques should be made available to the Planning Section before implementation of cleanup responses by the Operations Section.

It is important to note that the RP is part of the UC but may not necessarily be part of the trustee's coordinated NRDA activities. For this reason, the NRDA Team must remain separate from the ICS to ensure that statutory responsibilities of the trustees are not compromised. The trustees retain the option of inviting the RP to participate in all or part of the damage assessment process. Some NRDA activities, however, are best coordinated through the UC. **The NRDA Team will provide a Representative(s) to the Liaison Officer of the ICS to present the needs of the NRDA Team and other response information to the incident command.**

The NRDA Representative(s) will also act as historian or recorder of information critical for an accurate assessment of spill damages and will attend appropriate incident command meetings to secure knowledge of the up-to-date response activities.

9744 Notification Procedure for Initiating NRDA

In the event of a spill, each trustee is responsible for notifying its own members of the NRDA Team. Individual federal, state, and local agencies may be notified through various channels depending on the size and location of the spill. In all incidents that might require NRDA action, the Office of Spill Prevention and Response (OSPR) of the California Department of Fish and Game (CDF&G) will attempt to notify representatives from each of the trustee agencies expected to participate in the NRDA process.

9745 Identification of Lead Administrative Trustee

Executive Order 12777 (October 22, 1991) requires the federal natural resource trustees to select a representative as the federal lead administrative trustee (LAT). In general, the LAT serves as the federal contact for all aspects related to damage assessment, resource restoration, and federal funding for NRDA activities. Depending on the resources affected and other relevant factors, it might be appropriate for most administrative duties to be undertaken by a lead trustee from a non-federal agency. In such cases, a federal LAT would still be selected to work with the representatives of the Oil Spill Liability Trust Fund to secure federal funds to initiate the damage assessment. All other administrative duties regarding damage assessment activities would be coordinated by the non-federal lead trustee. This lead trustee or trustee agency shall be selected by consensus of all participating trustees. The trustees will notify the Coast Guard of the federal LAT selection and, when applicable, non-federal lead trustee as soon as possible after an oil spill.

The trustees intend to execute a general Memorandum of Agreement (MOA) to coordinate their damage assessment and restoration activities. Among other things, the MOA will identify trustees, establish criteria for selecting the LAT, and provide procedures for decision making between the trustees signing the agreement.

9746 Funding Issues

9746.1 Oil Spill Liability Trust Fund (OPA Fund)

The federal LAT will contact the OSC or his/her representative to secure money to initiate the assessment of natural resource damages following an oil spill. The LAT will provide an outline jointly agreed upon by the participating trustees describing funding needs and how such funds will be allocated among the trustees. Each participating trustee will provide documentation of all expenditures, costs, and activities. The LAT is responsible for coordinating the submission of all such documentation to the representatives of the OSTLF. Please see the NPFC users guide to see what can be funded from the OSTLF for NRDA.

9746.2 California Oil Spill Response Trust Fund

If the federal funds are not available, or will not be available in an adequate period of time, and an RP does not exist or is unable or unwilling to provide adequate and timely payment for cleanup and damage assessment activities, the State Administrator of OSPR may access the California Oil Spill Response Trust Fund (COSRTF). Money from the COSRTF may be used to cover State damage assessment costs.

9746.3 Contacts With Responsible Party(ies)

The trustees will need early access to representatives of the RP(s) to determine the availability of funding, personnel, and equipment for damage assessment activities. The federal LAT or non-federal lead trustee will first notify the appropriate representative of the USCG or UC and request a meeting between the trustees and the RP's representative. Should the USCG or UC fail to arrange a timely meeting, the trustees will establish contact directly with the RP's representative.

9747 Supporting References

CASES

- 1) *Ohio v. United States Department of the Interior*, 880 F.2d 432 (D.C. Cir. 1989).
- 2) *Colorado v. United States Department of the Interior*, 880 F.2d 481 (D.C. Cir. 1989).
- 3) *Kennecott v. United States Department of the Interior*, 88 F.3d 1191 (D.C. Cir. 1996).

GUIDANCE DOCUMENTS

- 1) NOAA. 1996. Natural Resource Damage Assessment Guidance Document: Pre-assessment Phase (Oil Pollution Act of 1990). National Oceanic and Atmospheric Administration, Damage Assessment and Restoration Program, Silver Spring, MD.
- 2) NOAA. 1996. Natural Resource Damage Assessment Guidance Document: Specifications for Use of the NRDA/CME Version 2.4 to Generate Compensation Formulas. National Oceanic and Atmospheric Administration, Damage Assessment and Restoration Program, Silver Spring, MD.
- 3) NOAA. 1996. Natural Resource Damage Assessment Guidance Document: Injury Assessment (Oil Pollution Act of 1990). National Oceanic and Atmospheric Administration, Damage Assessment and Restoration Program, Silver Spring, MD.
- 4) NOAA. 1996. Natural Resource Damage Assessment Guidance Document: Primary Restoration (Oil Pollution Act of 1990). National Oceanic and Atmospheric Administration, Damage Assessment and Restoration Program, Silver Spring, MD.
- 5) NOAA. 1996. Natural Resource Damage Assessment Guidance Document: Restoration Planning (Oil Pollution Act of 1990). National Oceanic and Atmospheric Administration, Damage Assessment and Restoration Program, Silver Spring, MD.
- 6) NOAA. 1997. Natural Resource Damage Assessment Guidance Document: Scaling Compensatory Restoration Actions (Oil Pollution Act of 1990). Public Review Draft. National Oceanic and Atmospheric Administration, Damage Assessment and Restoration Program, Silver Spring, MD.
- 7) NPFC. Users guide.

REGULATIONS

- 3) 40 C.F.R. 300.600 (Identification of Federal Trustees; CERCLA)
- 4) 40 C.F.R. 300.605 (Identification of State Trustees; CERCLA)
- 5) 15 C.F.R. Part 990 (NOAA NRDA rule - see 61 Fed. Reg. p. 440 et.seq.)
- 6) 43 C.F.R. Part 11 (DOI rules - see 59 Fed. Reg. p. 14262 et. seq.)

STATUTES

- 7) Government Code section 8670.1 et. seq. (OSPRA)
- 8) Title 14, California Code of Regulations, section 679(d)
- 9) 33 United States Code 1251 et. seq. (Clean Water Act)
- 10) 33 United States Code 2701 et. seq. (Oil Pollution Act of 1990)
- 42 United States Code 9601 et. seq. (CERCLA)

9750 Public Affairs Procedures

9751 Check-list for Public Affairs Response to Pollution Incidents

1. Where a potential risk to the health & safety of local communities exists, consider coordinating an **EDIS** broadcast through the local Office of Emergency Services (OES).
2. The Federal On-Scene Commander (FOSC) designates an incident **Lead Information Officer (IO)** — generally a Public Affairs Officer (PAO) from either the Coast Guard or DFG-OSPR, experienced in California spill response. Ensure that all PAOs know who the IO is, and understand that they report to him or her. The IO reports directly to the three Unified Commanders.
3. Complete a basic fact sheet and prepare a 30-second **media statement** (about 150 words, maximum).
4. Establish **Joint Information Center (JIC)** if the size or impact of the incident generates enough media or public interest in the spill and response. (Also see Section **2221.1** for additional JIC information.)
5. Contact district (Pcp) and DFG-OSPR at outset of any medium-to-large spill to arrange for **PA back-up**. (See Section **2221.2** for contacts and phone numbers).
6. Establish **phone bank** for answering media calls (on large spills, consider staffing on 24-hour basis during initial crisis), and deploy adequate PA staff to answer all incoming phones.
7. Have a minimum of four **phone lines** available for public affairs use: Two each, incoming (published) and outgoing (unpublished) phone and FAX.
8. Schedule a **media availability with the FOSC** at least daily when media interest is great. Preference is immediately following UCS operations meeting. This allows the three key parties (FOSC, SOSC & RP) to attend and field questions.
9. Contact the Coast Guard's National Strike Force Coordination Center (**NSFCC**), Public Information Assistance Team (**PIAT**) to alert for back-up, in case of any potential major incident. Note: FOSC may request PIAT at any time, regardless of spill size. (See Section **5612.3** for information and phone contact for PIAT)
10. In major spills, designate a **Protocol Officer** to handle VIP visitors. Do not, under any circumstances, assign this function to the Information Officer or JIC staff as a collateral responsibility.

9752 Suggested Equipment Needs for JIC/Public Affairs:

1. Minivans (six passenger or greater) and a fuel-purchase card.

2. FAX machines (two or more)
3. At least four modem-quality telephone lines (incoming & outgoing phone & FAX, + modem)
4. Complete computer system (including printers, modems, & software)
5. Office supplies (paper, pens, file folders, tape, paper clips, push-pins, easels, felt pens, etc.)
6. Desks, chairs, file boxes, erasable white boards, pens, & erasers
7. Cellular phones, batteries, & charging units
8. VHF-FM radios (at least one)
9. Scanners for VHF-FM (to monitor response activities)
10. Voice Pagers
11. Photocopiers and paper
12. Televisions/VCRs
13. Podium w/PA system (for news conferences)
14. Charts, maps, and a way to display them (easels, tape to walls, magnets, etc.)
15. Bulletin boards / Erasable boards and supplies
16. Answering machine (for nights when JIC is not staffed)
17. AM-FM Radio
18. Pain relievers (aspirin, acetaminophen, and ibuprophen)
19. Bottled water, coffee, juices, soft drinks (caffeine)
20. VCR and monitor on tall, movable stand, for use in Press Room (or news conferences)
21. Security (for JIC when unstaffed, and for news conferences)
22. Paper towels, facial tissues (Kleenex)

9753 Public Affairs Section Staffing

In accordance with the Oil Spill Field Operations Guide (FOG) ICS-OS-420-1, there will be one **Lead Information Officer (IO)**, assigned from either the USCG or OSPR. The IO heads the entire public affairs effort, and is responsible for developing and releasing information about the incident to the news media, to incident personnel, and to other appropriate agencies and organizations. S/he has direct contact with the Unified Command (UC), attends UC meetings, and informs the UC of the news media's focus and areas of particular interest. S/he answers directly to the State and Federal On-Scene Commanders, and ensures that information flows in both directions between the UC, PA staff, and media/public. S/he supervises the Deputy Information Officer, Joint Information Center (JIC) Chief, and Community Relations Officer.

Only one Information Officer will be assigned for each incident, including incidents operating under Unified Command (UC) and multi-jurisdictional incidents. The IO may have as many assistants, responsible for specific public affairs tasks, as necessary. The assistants may also represent assisting agencies or jurisdictions. The assistants will fill the following positions within a JIC, under the direction of the lead IO. The IO should make these assignments in consultation with ICS, based on the expertise of each assistant. All assistant positions may be filled by qualified PA personnel from the USCG, OSPR, RP, or other responding organizations, and no single agency should dominate the lead positions.

1. **Deputy Information Officer** — Assists the IO directly, and serves as facilitator between the IO and the JIC Chief, Media Relations Supervisor, and others as needed. Is responsible for internal information flow from JIC to the response community (ICS responders & “home office” staff).
2. **JIC Chief** — This should be an experienced, well-organized PA specialist with working knowledge of oil spill response issues, ICS, basic supervision, and, if possible, the local media. The JIC Chief is responsible for managing the JIC, under the direct guidance of the lead IO. The JIC Chief will:
 - a. Determine staffing needs for the JIC. Assess the experience, skills, capabilities, and interests of available PA staff, and match staff with appropriate positions within the JIC (telephones, information coordinators, media relations, writing/production, support, etc.);
 - b. Review information supplied by information coordinators and determine appropriate method for dissemination (to writers/production for news releases, fact sheets & updates, copying and writing on status board for JIC staff, etc.);
 - c. Elevate sensitive or unresolved issues to the Lead IO;
 - d. Ensure news releases, fact sheets, and media advisories are distributed to JIC staff, Command staff, on- and off-site news media, and other interested parties;
 - e. Provide orientation for newly-arriving or assigned staff (this task may be delegated to the JIC Deputy Chief or other staff as appropriate).
3. **JIC Deputy Chief** — Reports to JIC Chief and carries out assignments as given. Should be from a different organization than Chief. Supervises media relations, production and support groups, and must be able to carry out all the responsibilities of the JIC Chief when necessary. May be called on to be JIC Chief during night shifts.
4. **Information Coordinators** — Report to the JIC Chief and gather information about the spill response effort directly from Operations, Planning, Logistics, and Finance sections. Information coordinators will work closely with the appropriate section supervisor and/or designated public information contact. Information gathered is provided to the JIC Chief immediately, for dissemination to the media, public, and entire response community. Information coordinators are assigned to Operations (on- and off-shore, as needed), Planning/Environmental (wildlife, habitat, NRDA), Planning/Situation, Logistics, and Finance, and will use status sheets to help determine what information and activities should be recorded. Specific information to be collected by Information Coordinators includes the following:
 - a. **Off-Shore Operations** —
 - Information on the vessel(s) involved in the incident (ie: name, ownership, registry, destination)
 - Size and type (single hull, double hull, freighter, tanker, barge, yacht...)
 - Cargo and fuel type
 - Extent of damage to vessel(s), and (if known) cause of damage
 - Information on crew status (injuries, missing) and search & rescue operations
 - Size (area covered) and volume of spill
 - Information on the spilled material
 - Safety restrictions or advisories (Notice to Mariners, closed air space, etc.)

Number & activities of oil skimmers and other on-water response operations (amount of boom deployed & location, types of equipment, names of contractors, etc.).
Amount of spilled material recovered
Stabilization, salvage, and other activities directed at the vessel(s) involved in the incident.

b. **On-Shore Operations** —

Locations of equipment and staging areas
Number and activities of shoreline clean-up crews
Amount of oil and oiled debris recovered
Waste storage and disposal activities
Any special provisions for local residents (medical monitoring, decontamination stations, etc.)

c. **Environmental** —

Number, status and description of oiled wildlife (species, # captured, collected dead, estimated oiled)
Status and description of oil slick (trajectories, from NOAA)
Environmentally sensitive areas impacted or threatened by spill
Protective actions that will be taken in sensitive areas
Activities taking place at wildlife care centers and OSPR vet van
Volunteer activities (if any) and desirability of convergent volunteers (give 800 phone #)

d. **Planning-Logistics-Finance** —

Weather and tides
Incident Action Plan (overall response objectives)
Noteworthy logistical activities (equipment from out-of-state, etc.)
Claims processing information (telephone number for 3rd party claims against spiller)
Total number of people involved in response effort (and organizational breakdowns)

5. **Media Relations** — Positions in this group are filled by experienced PA staff that have media experience and local knowledge (particularly geographical features), if possible. The media relations group, headed by a **Media Relations Supervisor (MRS)**, answers news media questions, sets up facilities for news conferences, and reports to the JIC Deputy Chief. The MRS ensures that all media relations staff have the most current information available on the spill response effort.

Media Phone Staff must include at least one representative each from the USCG, OSPR, and RP. Other affected, local governments and organizations may also provide staff. Typically this might include PAs from the National Park Service or State Dept. Of Parks and Recreation (closed beaches or parks), impacted city or county, NOAA, etc. Phone staff will answer inquiries from the news media, direct calls to appropriate staff when an “agency” or “RP” response is warranted, and provide the MRS with questions and “rumors” that need to be checked-out. There must be enough phone staff on duty to answer all phone lines in the JIC.

On-Site Media Staff will monitor news coverage and:

- a. Assist reporters at command post or spill site;
- b. Work with MRS to locate appropriate staff for interviews;
- c. Escort reporters and photographers through command post and/or spill site;
- d. Set-up facility for news conferences and facilitate pool coverage when necessary;
- e. Provide directions to field locations as appropriate;
- f. In absence of clerical support staff, do clerical support tasks, as needed.

6. **JIC Production Staff** consists of writers and a graphic designer/artist, and reports to the JIC Deputy Chief. The Production staff prepares news releases, updates, fact sheets, media advisories, maps, and other graphics materials for the news media and public. The **Production Supervisor** ensures written and graphics materials are produced as needed for public dissemination, news conferences, and public meetings. **Writers** must have solid journalistic abilities, know AP Style, and be proficient with computers

and word processing programs (ie: WordPerfect and/or MS Word). Writers prepare materials as directed by the Production Group Supervisor or JIC Chief. The **Graphic Designer** prepares maps, status boards, and other graphic materials for use in news conferences, public meetings, and for dissemination through the media.

7. **JIC Support Staff** are PAs or knowledgeable clerical support personnel with above-average communication skills, and report to the JIC Deputy Chief. The Jic Support staff will:
 - a. Make copies of news releases, fact sheets, maps, advisories, etc.;
 - b. Disseminate materials as directed to internal OSCs, Operations, Planning, Logistics, Finance sections, Liaison & Safety Officers) and external recipients (media and off-site agency/company representatives);
 - c. Maintain status boards (update hourly) and map of spill response actions (update hourly);
 - d. Answer phones & take messages, ensure the JIC has necessary office supplies, perform other support duties as required by the JIC Deputy Chief.

Note: Two staff groups that are sometimes associated with Public Affairs — Community Relations and Government Relations — are handled in California by the **Liaison Officers (LO)**, who are part of the Unified Command Staff. The lead IO and LO communicate frequently, sharing information regarding media and VIP tours of the spill site, most frequently-asked questions, and information updates from areas within the response organization. Efforts should be made to keep VIP and media tours separate, so officials aren't tempted to use the occasion to "grandstand," and reporters aren't tempted to use the occasion to interrogate officials, or interview them regarding unrelated issues. We want to keep everyone on-track. Under no circumstances should VIP/protocol or community relations be a collateral duty of the media relations staff, during a major incident.

9754 Logistical Concerns For News Conferences

Pollution incidents that generate significant media interest require news conferences, at least in the first few days of emergency response. These media gatherings provide an opportunity for the three Incident Commanders (FOSC, SOSOC, & RP) to tell the media what has happened and what they're doing about it. It also gives reporters a chance to photograph and ask questions of senior response officials.

If the incident is large enough for the JIC to have a Media Relations Supervisor (MRS), s/he is responsible for scheduling news conferences, managing the "press room" or conference site, advising the media in advance of upcoming news conferences, and ensuring that news releases, updated fact sheets, or press packets, podium & PA system (if needed), and visual aids (large charts, maps, diagrams) are in place before news conferences begin. In absence of a MRS, the lead Information Officer or a PAO s/he designates will be responsible for media relations activities.

News conferences should, ideally, be held in a dedicated "press room," preferably in the same building as the command post, but completely separated from the Unified Command's room or area where operations and planning staff are working. (The JIC should be between the press room and UC's meeting room.) Ideally, it would be near the entrance to the building and have entries from both sides of the room. Such a dedicated room allows the MRS to leave charts, maps, and diagrams posted for reporters and photographers to see, throughout the response phase. These must be updated, as often as new information becomes available, and would typically include enlarged aerial photos, spill trajectories, NOAA-generated displays, wildlife injury/mortality counts, and maps indicating the locations of oil, boom, skimming operations, closed beaches, and environmentally-sensitive areas (Threatened & Endangered Species' habitats).

If a room at the command post is not available, news conferences could also be conducted next to a mobile command post, such as the Pacific Strike Force trailer. The outer walls of the trailer can be posted with the maps,

charts, etc. A major drawback to outdoor news conferences is a lack of acoustics. It is more difficult to hear a speaker outside, especially if there is much wind or any ambient sound (such as traffic, surf, clean-up equipment, etc.). Even a slight breeze will cause papers to blow away, and wind can make a distracting noise when it blows across a microphone. News conferences held at a spill site must be carefully controlled, to mitigate safety hazards and prevent any interference with clean-up operations.

Both print and TV photographers will want access to the spill site. California Penal Code Title 11, Section 409.5(d) exempts “duly authorized representatives of any news service, newspaper, or radio or television station or network from entering the areas closed” to the public by law enforcement, because of any calamity or disaster. Reporters may not interfere, but they may observe and photograph an incident site. The UC may require media to check-in and -out, and provide proof that they represent legitimate media outlets. A business card that matches some photo I.D., or letter of introduction on company letterhead will suffice, for those who lack official CHP press credentials. They are responsible for their own safety. (Exceptions to the media exemption from PC 409.5 are crime scenes and air crashes, where an investigation is necessary.)

Direct access to private property such as facilities, vessels, or barges will remain under the control of the owner. If possible, a Coast Guard vessel should be made available for media tours of the affected area from the water-side. When media interest exceeds the capacity of the vessel, it will be necessary to form a press pool. The selection of participants is best left to members of the media, but generally includes equal representation from print, TV, Radio, and “wire” service (AP, UPI, et al.). News organizations may also obtain their own vessel, plane, or helicopter for surveillance. Unless granted specific access by appropriate authority (FOOSC), they will continue to be governed by any security or safety zones around the site.

The lead Information Officer is responsible for briefing the three Incident Commanders (ICS) in advance, advising them of the subjects in which media seem most interested that day, and facilitating the news conference. (S/he may delegate the latter task.) One successful format has been this:

1. Lead IO welcomes media, introduces self and ICs (who should be seated at a front table, if possible), then describes the format.
2. S/he explains that each IC will make a statement regarding his/her organization’s area of responsibility, then answer questions from reporters.
3. After all three ICs have made their statements, the IO will request that reporters who have questions raise their hands, and when s/he recognizes them, identify themselves and their organization, before asking their questions. S/he will have assigned a member of the Media staff to record the names and organizations of each reporter, for the record.
4. If a time limit has been established prior to the news conference, the IO should say so, while describing the format. When the allotted time has nearly passed, the IO should tell the reporters (ie: “We only have a few minutes before the Incident Commanders need to get back to the spill response...”). At the end of the available time, the IO wraps it up, thanks the reporters for coming, and points out Media Staff who can answer additional questions. A uniformed USCG or OSPR law enforcement officer will escort the ICs from the press room or site.

The lead IO or his/her designee should request security at news conferences, escalating the degree if there is any indication of possible demonstrations or “gate-crashing” by people outside the legitimate media.

9755 Internal Information

Purpose

Informing the members of the response community of the status of the response is vital, if consistent and accurate information is to be conveyed to all interested parties. Likewise, the UCs need to know what subjects are of

greatest interest to the media and community. Internal information is the process of informing our own people of the status of our activities, and of public interest in the incident.

Discussion

At a minimum, all personnel assigned to response duties should be provided with access to the daily fact sheet(s) prepared by the media relations supervisor. Conversely, all PAs need frequent updates on the response activities, wildlife casualty counts, etc. This will help ensure a consistent and accurate flow of information. The Deputy Information Officer shall be responsible for internal information dissemination.

Action

1. Distributing copies of the fact sheets and news releases to the cooperating agencies and their employees is a function of the internal information staff. During clean-up operations of a lengthy duration, consideration may be given to a computer-generated or hard copy publication, published at regular intervals.
2. To facilitate the flow of information and ensure that the information given to the media by JIC staff is the most current available, the Support unit of the Logistics section will provide the JIC with at least one "runner." The runner(s) will gather updated information from other units (Situation, Wildlife, Ops, Planning) for use by the JIC writers, and take updated fact sheets and news releases to each section or branch in and near the Command Post.

9756 Photo Documentation

Purpose

Photo documentation, both still and video, has a three-fold purpose: (1) Additional resource material for news media outlets, (2) briefing materials for town meetings and protocol-sanctioned visits, and (3) historical documentation. It is not the intention of establishing this unit to provide documentation for a legal action against the responsible party or spiller. Separate arrangements must be made by legal entities to provide this function for litigation.

Discussion

As a unit reporting directly to the Deputy Information Officer, the needs of the Unified Command are prioritized and assigned by this individual. When the news media cannot visit locations due to safety concerns, it is the responsibility of the photo documentation unit to provide this information.

Action

Resources available to fill this requirement begin with the three lead agencies of USCG, OSPR, and the RP. Access and assistance from the DOD's Combat Camera should be solicited by the FOSC by message traffic, early in the clean-up effort.

1. One person should be designated Chief Photographer for each incident. Depending on the size and complexity of the incident, s/he may request assistance. If additional photographers (still and/or video) are employed, consideration should be given to balancing the organizations represented (ie: USCG, OSPR, and RP). The resulting photographic record should represent as many areas of response as possible, and all response organizations (not just the photographer's own organization).

9757 Administration

Purpose

Provide administrative support to the various branches of the public affairs effort. This includes the JIC, Community Relations, and Photo Documentation units. Record-keeping, purchasing, and logistical support is provided by the Support branch of the Logistics section.

Action

Support staff report directly to the Deputy IO and are assigned tasking, according to the needs of the Public Affairs branches.

Staffing

Immediate staffing (first 48 hours) should consist of at least one (1) Yeoman and one (1) Storekeeper with District, Reserve, and Auxiliary (See Section **5612** for CG Personnel Resources) augmentation following for the longer duration. Support staff may also be provided by the DFG/OSPR, the RP, and volunteers.

9758 Community Relations

Background

Providing information directly to members of the impacted community, free of the filtering and potentially distorting effect of the media, is critical to public understanding of the incident response. Community relations may include scheduling of public meetings, preparing speeches and coordinating public activities with the Liaison Officer and local government MAC representative. If a spill's impact justifies a Community Relations branch, it should be within the Public Affairs section.

Discussion

In order to ensure that important constituencies are not overlooked or slighted during a major response, it is important that a **Community Relations Officer (CRO)** and necessary support staff be assigned within the public affairs branch. Under no circumstances should community relations be a collateral duty of the media relations staff, during a major incident. A local government official should be considered for the position. Additional community relations officers should be sought from the RRT and regional EPA office, to provide expertise to this important aspect of the public affairs program.

Action

Important considerations for establishing a separate Community Relations branch include public health & safety, damage claims, and transportation disruptions. The media may not provide detailed information to their audiences on issues that affect smaller groups of individuals. It is incumbent on community relations staff to provide answers to the impacted communities.

A well-run community relations program is a two-way street in a successful public affairs program. Authoritative answers to important individual questions are given and the UC gains a "grass-roots" feel for the concerns of the individuals directly impacted by the spill. Those concerns can then be addressed by the Command Staff to mitigate problems before the problems begin to drive the clean-up effort.

1. Public Health and Safety

The primary, initial concern of the community relations staff should be addressing the public health & safety issues. When warranted, an EDIS alert should be issued, outlining the specific health & safety concerns.

2. Phone Banks

Consideration should be given to establishing an “800” telephone bank for general public inquiries, which should be answered by community relations staff (**not** the media relations staff). Information about public health & safety, transportation disruptions, third-party claims, etc., would be disseminated by a team of operators separate from media phone staff. Ideal staffing would include representatives from Federal, State, and local governments, and community affairs personnel from the responsible party. This conduit would serve as rumor control and provide the UCs with the current concerns of local citizens. Spokespersons should use the “Rumor Inquiry” form to track these.

The OSPR has two existing “800” numbers for use during spills. One is a pre-recorded outgoing message containing spill information (**800-999-1043**), controlled by the OSPR Public Affairs Officer. It is updated (as needed) by the OSPR PAO; it does not record incoming messages. The other is answered by the OSPR Volunteer Coordinator (VC), in the Planning Section’s Resources unit (**800-228-4544**). It has voice mail, for times the VC is not available to answer it.

3. Town Meetings

Local community meetings should be considered by the UC when communities suffer severe environmental, recreational, economic, or cultural impact. In extremely large communities, arrangements should be made for teleconference sites in addition to the “live” site. The CRO should arrange town meetings with the Liaison Officers, in consultation with the UC.

4. Claims

Questions about damage to private property, loss of income, and disruption of transportation become real concerns in a major oil spill. Information directing individual recourse must be addressed early in the clean-up process. The Responsible Party will take the lead on addressing these issues and provide the Community Relations branch with information that alleviates and mitigates these real concerns. It is imperative that the JIC staff (all PAs) know the “claims phone” number, to give media and other callers who request information.

9800 - RESERVED

9900 - APPENDIX

9910 - Glossary (Refer to Section 1200)

9920 - Conversion Table To Be Developed

9930 - Sample Documents

9931 - Incident Command System Forms Index

ICS Form #	Form Title	Prepared By
201 ¹	Incident Briefing	Initial Response IC
202 ¹	Response Objectives*	Planning Section Chief
203 ¹	Organization Assignment List*	Resources Unit Leader
204 ¹	Division Assignment List*	Ops. Chief & Resources Unit
205	Incident Radio Comms Plan*	Comms Unit Leader
206	Medical Plan*	Medical Unit Leader
207	Organization Chart	Resources Unit Leader
208	Site Safety Plan	Safety Officer
209(oil) ²	Incident Status Summary	Situation Unit Leader
210	Status Change Card	Communications Center
211	Check-in List	Resources Unit at multiple locations
212(oil) ³	Resources at Risk Source*	Situation Unit Leader
213	General Message Form	Any message originator
214	Unit/Activity Log	All Positions
215	Operational Planning Worksheet	Operations Section Chief & Planning Section Chief
216	Radio Requirements Worksheet	Comms Unit Leader
217	Radio Frequency Assignment	Comms Unit Leader
218	Support Vehicle Inventory	Ground Support Unit Leader
219	Resource Status Card	Resources Unit Leader
220 ¹	Air Operations Summary	Logistics Section Chief
221	Demobilization Checkout	Demobilization Unit Leader
OS-230	Daily Meeting Schedule	Situation Unit Leader
OS-230a	Meeting Description	Situation Unit Leader
__ ³	Initial Notification Sheet	Person receiving initial report of incident
__ ³	Executive Summary	Planning Section Chief
__ ³	General Plan	Planning Section Chief
__ ³	ICS IAP Cover*	Situation Unit Leader

¹ Form is significantly changed from the original ICS version.

² ICS form has been slightly modified for oil spills, either version can be used.

³ No ICS form equivalent.

* Commonly used in written Incident Action Plans (IAP)

These ICS Forms can be obtained via the internet at:

<http://www.uscg.mil/pacarea/pm/ICSforms/ICS.htm>

or

<http://www.uscg.mil/hq/g-m/nmc/response/forms/Default.htm>

9932 - Plans

9932.1 Health & Safety

Applicable Regulations.

The regulations regarding Hazardous Waste Operations and Emergency Response (HAZWOPER), references (a) and (b), apply to: a) cleanup operations, required by a governmental body, involving hazardous substances, that are conducted at uncontrolled hazardous waste sites, and b) emergency response operations for releases of, or substantial threats of release of, hazardous substances without regard to the location of the hazard; unless the employer can demonstrate that the operation does not involve employee exposure or the reasonable possibility for employee exposure to safety or health hazards. These regulations also define crude oil, fuel oils no. 1,2,4,5,6, aviation fuel, and gasoline as hazardous substances. An uncontrolled hazardous waste site is defined as, "an area identified as an uncontrolled hazardous waste site by a governmental body, whether Federal, state, local, or other, where an accumulation of hazardous substances creates a threat to the health and safety of the individuals or the environment or both." OSHA considers an area impacted by an oil spill as an uncontrolled hazardous waste site.

Most oil spill emergency response and cleanup operations will fall within the scope of the HAZWOPER regulations. Any governmental agency or private employer involved in such operations, must comply with HAZWOPER regulations as a matter of pre-planning, in order that a response to an actual situation may be safe, timely, and effective. Therefore, it is prudent for each employer to take action to meet as many of the requirements of the HAZWOPER regulations before an incident occurs. Some of the specific items that can be done, partially or completely, prior to an incident are, written standard operating procedures and workplans, written emergency response plan, written site safety plan, general site worker safety and health training, respiratory protection training, emergency responder training, medical surveillance program, written personal protective equipment program, site monitoring strategies, decontamination procedures.

Operations falling within the scope of the HAZWOPER regulations are not excluded from the requirements of other safety regulations, such as hazard communications, respiratory protection, occupational noise exposure, benzene, injury illness prevention, and others. In addition, health and safety hazards that have no mandatory standard such as heat stress, manual lifting, ergonomics, slips/trips & falls, biological hazards, and extremely low frequency vibrations, must also be addressed in training and the site safety plan.

9932.1.1 Site Safety

Any scenario for a large oil spill will usually begin as an emergency response. Section (q) of references (a)&(b) covering employers whose employees are engaged in emergency response, requires that an emergency response plan be developed and implemented to handle anticipated emergencies prior to the commencement of emergency response operations. The first emergency response organization on scene must therefore develop and implement this plan. When other employers become involved in the emergency response the emergency response plans should be modified to cover their employees. Each employer must provide written draft of those sections which contain information specific to their employees and their duties.

The vast majority of large oil spills in the marine environment will generate cleanup operations separate from the emergency operation and ultimately the associated emergency response will be downgraded to a post-emergency response. These cleanup operations and post-emergency response operations will be subject to sections (b) through (o) of references (a)&(b) and require site safety plans. Therefore both an emergency response plan and a site safety

plan is usually required. Since the two plans have many common elements and an emergency response plan is required as part of the site safety plan, it would be prudent to develop a combined plan.

The Office of Oil Spill Prevention and Response has generated a generic site safety/emergency response plan to assist local government, public entities, and professional volunteer groups in writing their own required plan. This plan meets the requirements of CAL OSHA and is recommended as a model for developing generic site safety plans. A generic site safety/emergency response plan should be prepared as a pre-planning document. The site specific safety and health/emergency response plan can be generated quickly if the generic plan already exists. Those workers operating under the plan must be familiar with the plan prior to the start of work and agree to obey and follow all elements of the plan while performing certain work in designated control zones on-site. The Safety Staff of the Unified Command will review and approve all site safety plans for all agencies responding to a pollution incident, prior to site entry. An example of OSPR's site safety plan can be found in OSPR's guidance document for the preparation of a marine facility and vessel oil spill contingency plan that covers "Workforce Safety Training Requirements" and the State of California "Marine Oil Spill Contingency Plan."

OSPR's grant process requires certain response agencies, including municipal and county governments and volunteer groups to submit generic site safety planning documents in advance of an incident. All site safety plans submitted to OSPR for review must be formatted as closely as possible to the generic site safety plan for the purpose of consistency and ease in finding essential elements of site safety plan by the reviewer. Copies of the generic site safety/emergency response plan are available for all parties identified in the Oil Spill Prevention and Response Act who anticipate submitting their completed plans to OSPR for review and approval.

A large spill in the marine environment may impact several physically separated sites. Therefore, it may be more convenient to treat these sites independently when writing and maintaining site safety and emergency response plans.

The following is a list of specific requirements, from references (a)&(b), that must be met prior to initial site entry or before an individual employee is allowed on site.

- 1) Employees who are expected to become involved in cleanup operations must be trained in accordance with section (e) before being permitted to participate in such operations.
- 2) Employees who are expected to wear a respirator must be covered under a respiratory protection program.
- 3) Employees must be enrolled in a medical surveillance program if;
 - i) they are or may be exposed to hazardous substances or health hazards at or above the permissible exposure limits for 30 days or more a year,
 - ii) they wear a respirator for 30 days or more a year,
 - iii) they are injured, become ill, or develop signs or symptoms due to possible overexposure involving hazardous substances,
 - iv) they are a member of a HAZMAT team.
- 4) Required medical examinations and consultations must be made available by the employer to the employee prior to assignment.
- 5) The emergency response plan and/or site safety plan must be written prior to initial site entry.
- 6) Employees who are required to wear a respirator while working at a hazardous waste site must have received 40 hours off-site instruction before they are permitted to engage in hazardous waste operations. In addition they must receive three days' actual field experience under the direct supervision of a trained, experienced supervisor.
- 7) Employees who are not required to wear a respirator and are unlikely to be exposed above

permissible exposure limits while working at a hazardous waste site must have received 24 hours off-site instruction before they are permitted to engage in hazardous waste operations. In addition they must receive one day actual field experience under the direct supervision of a trained, experienced supervisor.

8) The SSHP shall provide for pre-entry briefings to be held prior to initiating any site activity and at such times as necessary to ensure that employees are appraised of the SSHP.

9) A preliminary evaluation of a site's characteristics shall be performed prior to site entry.

10) Required Information. The following information to the extent available shall be obtained by the employer prior to allowing employees to enter a site:

- i) Location and approximate size of the site.
- ii) Description of the response activity and/or the job task to be performed.
- iii) Duration of the planned employee activity.
- iv) Site topography and accessibility by air and roads.
- v) Safety and health hazards expected at the site.
- vi) Pathways for hazardous substance dispersion.
- vii) Present status and capabilities of emergency response teams that would provide assistance to hazardous waste cleanup site employees at the time of an emergency.
- viii) Hazardous substances and health hazards involved or expected at the site, and their chemical and physical properties.

11) Appropriate site control procedures shall be implemented to control employee exposure to hazardous substances before cleanup work begins. The site control program shall include as a minimum: a site map; site work zones; the use of a buddy system; site communications including alerting means for emergencies; the standard operating procedures or safe work practices; and identification of the nearest medical assistance.

12) A decontamination procedure shall be developed, communicated to employees and implemented before any employees or equipment may enter areas on-site where potential for exposure to hazardous substances exists.

13) An emergency response plan shall be developed and implemented by all employers ... prior to the commencement of hazardous waste operations.

The following requirements pertain to initial entry.

1. PPE for initial site entry must be appropriate for the hazards identified during the preliminary evaluation.
2. During initial site entry, if positive-pressure self-contained breathing apparatus is not used, and if respiratory protection is warranted by the potential hazards identified during the preliminary site evaluation, an escape self-contained breathing apparatus of at least 5 minutes duration shall be carried by employees during initial site entry.
3. If the preliminary site evaluation does not produce sufficient information to identify the hazards or suspected hazards of the site, an ensemble providing protection equivalent to level B PPE shall be provided as minimum protection, and direct reading instruments shall be used as appropriate for identifying IDLH conditions.
4. During initial site entry when the preliminary site evaluation produces information that shows the potential for IDLH conditions, or when the site information is not sufficient to reasonably eliminate these possible conditions, monitoring the air with appropriate direct reading test equipment for IDLH and other conditions that may cause death or serious harm shall be conducted.

9932.1.2 Respiratory Protection

All workers that are required or allowed to wear a respirator during an emergency response or cleanup operation must be covered under an employer's respiratory protection program that meets the requirements of reference (c) and have received appropriate training as required in references (a), (b), and (c). Under the HAZWOPER regulations, the worker would require 40 hours of hazardous waste operations site safety and health training.

9932.1.3 Training Requirements

All individuals responsible for responding to an oil spill must meet the health and safety requirements mandated in regulations by both State and Federal Occupational Safety and Health Administrations (OSHA). The amount of health and safety training required for each individual to respond to an oil spill will depend upon: the kind of tasks performed, the degree of exposure encountered, and the type of operation (emergency response vs post-emergency cleanup). Training shall be conducted by a qualified instructor and certified in writing upon completion. Proof of proper health and safety training will be required for each individual requesting entrance to the spill site. Proof of training should include: name of training class, hours of training received, dates of class, signature of the administrator of the employer's health and safety program, and description of course material covered in the class.

The initial training requirements for workers involved in the cleanup of uncontrolled hazardous waste sites and post-emergency response operations is summarized below.

a. General/Occasional Site Workers exposed above the PELs and/or required to wear respirators - 40 hours off-site and three days (24 hrs) actual field experience under the supervision of a trained supervisor.

b. General/Occasional Site Workers exposed below PELs and not required to wear respirators - 24 hours off-site and one day (8 hrs) actual field experience under the supervision of a trained supervisor.

c. Management and Supervisors of workers exposed below PELs and not required to wear respirators - 24 hours off-site plus 8 hours specialized training and one day actual field experience under supervision of a trained supervisor.

d. Management and Supervisors of workers exposed above PELs and/or required to wear respirators - 40 hours off-site plus 8 hours specialized training and three days actual field experience under supervision of a trained supervisor.

e. Although there is no provision in references (a) or (b), Federal OSHA and CAL OSHA have both stated in references (c) and (d) respectively, that during the post-emergency response cleanup of an oil spill, for job duties and responsibilities with a low magnitude of risk, a minimum of 4 hours site safety and health training may be appropriate. Neither agency has granted a blanket exclusion but has allowed the FED OSHA representative to the RRT to make the determination based on an assessment of the cleanup operation. Some of the criteria considered in this decision are:

i. This is the worker's first involvement in post-emergency response or cleanup operations and it is unlikely the worker will be involved in response activities in future incidents.

ii. Cleanup is performed in an area that has been monitored and fully characterized by a qualified person indicating that exposures are presently and can be expected to, remain under permissible exposure limits and other published exposure limits.

iii. Health risks from skin absorption are minimal.

f. Employers who can show by documentation or certification that an employee's work experience and/or training has resulted in training equivalent to that required in references (a) and (b) shall not be required to provide

the initial training to such employees and shall provide a copy of the certification or documentation to the employee upon request.

The training curriculum for the four-hour training course provided to the one-time workers described in section 9932.1.3.e., must include:

- emergency response plan/site safety plan
- hazard communications
- decontamination procedures
- water safety
- hypothermia
- heat stress
- safety hazard controls
- personal protective equipment
- other safety training as needed.

At a large oil spill, special groups of workers such as the California Conservation Corp, environmental groups, and vessels of opportunity may participate in the response and/or cleanup. These groups are identified in advance for emergency planning purposes and are likely to become involved as often as needed. Therefore, they must receive 24 or 40 hours of off-site training and appropriate supervised field experience depending on the potential level of exposure to hazardous substances. The Office of Oil Spill Prevention and Response (OSPR) intends to provide 24 hours of training to members of these groups. OSPR has developed a curriculum, for this 24-hour training. This curriculum, shown at the end of this annex, is recommended as a guide for developing other training programs. These workers may not enter an environment where they may be exposed above permissible exposure limits nor may they be required or allowed to wear respirators during response or cleanup operations unless 16 additional hour of off-site training and 16 additional hours of supervised field experience is provided.

Eight hours of refresher training is required annually for all site workers, managers, and supervisors. CAL OSHA has further interpreted this to mean that if a worker does not receive refresher training by each anniversary date of the completion of initial training, the initial training must be repeated.

Occasional/Regular Site Worker OSPR Oil Spill Health and Safety Course Curriculum.

Regulations: Employee and Employer Roles and Responsibilities:

- T8, CCR, Section 5192 HAZWOPER
- Fed/OSHA Directive CPL 2-2.51 Post-Emergency Response Operations
- T8, CCR, Section 3203 Injury Illness Prevention Program
- T8, CCR, Section 3204 Access to Employee Exposure and Medical Reports
- T8, CCR, Section 3220 Emergency Action Plan
- T8, CCR, Section 3383 Body Protection
- T8, CCR, Section 3384 Hand Protection
- T8, CCR, Section 3385 Foot Protection
- T8, CCR, Section 3389 Life Rings and Personal Flotation Devices
- T8, CCR, Section 3400 Medical Services and First Aid
- T8, CCR, Section 5095-5100 Hearing Conservation Program
- T8, CCR, Section 5155 Airborne Contaminants
- T8, CCR, Section 5162 Emergency Eyewash and Shower Equipment
- T8, CCR, Section 5194 Hazard Communication
- Labor Code: Section 142.7 Hazardous Substance Removal
- Labor Code: Section 6100 Workers' Compensation

- Labor Code: Section 6300 Jurisdiction and Duties of the Occupational Safety and Health Act
- Labor Code: Section 6400 Health and Safety Responsibilities of Employees and Employers
- T8, CCR, Section 5157 Confined Spaces (Recognition of Confined Space Hazards)
- T8, CCR, Section 341 (Recognition of Shoring and Excavation Hazards)
- T8, CCR, Section 3661 and 3664 Industrial Trucks, Tractors, Haulage Vehicle and Earthmoving Equipment (Recognition of Heavy Equipment Operation Hazards During Oil Spill Cleanup Operations)

Operational Activities: Under The Unified Incident Command System

- Communication and coordination with any and all agencies having authorized activities dealing with oil spills (roles and responsibilities).
- Local contingency plans jurisdiction when dealing with oil spills. Discussion of purpose, components, value and limitations of pre-event and event specific planning.
- Incident Command System and unified version, describe the basic implementation and how it manages an oil spill and demonstrate proper information flow from ICS stall to the incident commander.

Site Health and Safety Plan for Oil Spills

- Site Description
- Hazard Identification and Recognition
- Personal Protective Equipment
- Hazard Evaluation/Risk Identification
- Exposure Monitoring Program (General area and breathing zone)
- Onsite Control
- Decontamination
- Safe Distances and Places of Refuge
- Evacuation Routes and Procedures
- Emergency Medical Treatment/First Aid
- Emergency Alert and Response Procedures

Hazard Communication

- Health Effects and Chemistry of Oil (Benzene, Toluene, Xylene, Hydrogen Sulfide, Diesel Fuel, Gasoline, Crude Oil, Bunker C, MTBE, etc.)
- Thermal Stress
- Water Safety (Personal Flotation Devices)
- Physical Hazards (including electrical, heavy equipment, confined spaces, trenches, shoring, excavation, etc.)
- Biological Hazards
- Slips, Trips, and Falls
- Ergonomics
- Hearing Conservation
- Workers' Compensation
- Accident Prevention and Reporting

Animal Handling Techniques

- Occupational health and safety hazards associated with the capture, transport, cleaning, rehabilitation, and release of oiled marine wildlife:
 - a. Required personal protective equipment
 - b. Decontamination of personal protective equipment
 - c. Slips, trips, and falls (e.g. mob cart)
 - d. Safe lifting and handling techniques of large mammals
 - e. Water safety during capture and release of animals
 - f. Bites, pecks, and scratches
 - g. Zoonosis

Oil Spill Cleanup Techniques

- Health and safety hazards associated with manual oil cleanup activities
- Safe work practices with oil cleanup tools and equipment

Reference and Resource Documents:

29 CFR 1910.120 - OSHA Regulations for Hazardous Waste Operations and Emergency Responses. (HAZWOPR).

8 CCR 5192 HAZWOPER

40 CFR 300 - National Oil and Hazardous Substances Pollution Contingency Plan.

OSHA Compliance Guidelines CPL 2-2.51 (11/5/90) "Inspection Guidelines for Post Emergency Response Operations Under 29 CFR 1910.120.

49 CFR Subchapter B Part 130 - Oil Spill Prevention and Response Plans.

NIOSH/OSHA/USCG/EPA Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities (NIOSH 85-115)(Phone 800-356-4674).

"Oil Spill Contingency Planning," October 1990, DOT and EPA Status Report to the President.

NIOSH Health Evaluation Report "Exxon Valdez Alaska Oil Spill" (HETA 89-200 and 89-273-2111, May 1991).

Standard for Professional Competence of Responders to Hazardous Materials Incidents - NFPA 472.

Control of Gas Hazards Aboard Vessels - NFPA 306.

"Rehabilitating Oiled Sea Birds - A Field Manual." International Bird Rescue Research Center; 699 Potter St, Berkeley, CA (510-841-9086).

"Oiled Bird Rehabilitation - A Guide for Establishing and Operating a Treatment Facility for Oiled Birds." 1989 Tri-State Bird Rescue and Research, Inc. Newark, DE 19711 (Phone: 302-737-7241/9543, pgr 800-710-0695)

"Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices." American Conference of Governmental Industrial Hygienists, Cincinnati, OH (Phone: 513-742-2020).

9932.2 - Waste Management Plan

One of the major issues associated with an oil spill response is the proper management of the recovered petroleum product, as well as the contaminated cleanup materials, soil, and debris. How these are managed is dependent on how they are characterized - as either a solid waste, hazardous waste or a hazardous material (used or reused). This subsection presents a general approach to the management of the various types of wastes collected during an oil spill.

Waste Management Options

Under California law, a hazardous substance released or discharged to marine waters of the state is defined as a waste and must be characterized as either hazardous or nonhazardous and managed accordingly. Once the waste is characterized and its final disposition is determined, the waste may be redefined and managed as a material, rather than a waste.

In accordance with **CHSC 25143.2**, recovered hazardous wastes may be managed as a hazardous **material** rather than a hazardous **waste** by utilizing any one of the following methods:

The material is used or reused as an ingredient in an industrial process to make a product, and is **NOT** reclaimed; The material is used or reused as a substitute for commercial products, and is **NOT** reclaimed; Without first being reclaimed, the material is returned to the original process from which it was generated as a substitute for raw material feedstock, as long as the material is returned as a substitute for raw material feedstock, and the process uses raw materials as principal feedstocks;

The material is shipped to the site from where it was generated or managed, or to another site owned by the same generator, and is either burned as a fuel or is recombined with normal process streams to produce a fuel.

However, it should be noted that the DTSC has agreed with DFG/OSPR that recovered oil originally headed for a refinery will **NOT** be considered a hazardous waste and may still be sent to the refinery.

Remember, hazardous “material” management activities need to comply with a different set of regulations, which include, in part, the local fire code for storage and handling requirements, and 49 CFR for shipping requirements. Do **NOT** use a hazardous waste manifest when shipping hazardous materials - use a **Bill of Lading**.

In managing hazardous wastes, one must also be responsible for adhering to the waste minimization philosophy behind good waste management practices. Waste generation and disposal can be minimized through proper waste characterization, handling, segregation, treatment, and recycling; while only solid, non-recyclable wastes are actually “disposed” of. The following waste management hierarchy should always be used in the management of both hazardous and nonhazardous wastes:

1. **Eliminate or minimize the amount of waste generated**
2. **Source reduction**
3. **Use and reuse as a material**
4. **Reclaim or recycle**
5. **Treatment**
6. **Disposal** *Dispose of waste **only** if the above priorities are not feasible !!*

The need to minimize the volume and toxicity of all hazardous wastes has been made clear and explicit in state and federal regulations; however, other reasons to minimize waste would include protection of public health and the environment, as well as economic incentives, liability incentives, and public relations incentives.

Crude oil and Refined Petroleum Product. Crude oil spilled into marine waters that is recovered and transported to the refinery of original destination or a refinery that can accept the crude oil for use or reuse may be considered a “material” rather than a “waste” and, therefore, not subject to the more stringent hazardous waste management laws and regulations [California Health and Safety Code (CHSC), Section 25143.2]. Refined petroleum products that are recovered from marine waters may also be handled as a product if they can be used for their originally intended purpose (i.e. fuel, fuel oil, etc.), per CHSC 25250.3.

There are other avenues by which recovered petroleum may be managed as a material (CHSC 251143.2). These approaches include recycling the petroleum through incineration, as a fuel, a substitute for raw material feedstock, or as an ingredient used in the production of a product (i.e. asphalt). The California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) should be consulted for more information on these and other management options. The latest published list of companies that recycle oil and the latest published list of licensed used oil haulers can be obtained from DTSC.

Recovered petroleum “products” or “materials” that are not accepted by a refinery as a material, should then be recycled. Since state law requires the generator of a waste to consider recycling before other waste management methods, recycling should be the next waste management priority. To ensure that the appropriate waste management method is utilized for the recovered petroleum, the waste must be characterized by the generator either through knowledge of the waste or through analysis by a State certified laboratory to determine if the waste is hazardous or non-hazardous. It is the responsibility of the Responsible Party (RP) to have the waste accurately characterized for proper disposition [Title 22, Section 66260.200(c) of the California Code of Regulations (22 CCR)].

Discharge to Sea of Water Separated From Recovered Oil. Oil recovered at sea typically contains significant amounts of sea water. In order to maintain the efficiency of the skimming process this water must be separated/decanted from the oil and discharged back to the ocean during recovery operations. Separated sea water typically contains elevated levels of hydrocarbons and thus the discharge of this material may constitute a discharge of a pollutant; therefore, in 1995, a Memorandum of Understanding (MOU) had been entered by the SWRCB and OSPR which addresses all permits and requirements pertaining to the incidental discharge of wastewater during oil spill response activities. The MOU finds that these discharges are exempt from the regulation under a National Pollution Discharge Elimination System (NPDES) permit. Additionally, the MOU also provides that the SWRCB will recommend that the coastal RWQCB waive the issuance of waste discharge requirements for these types of discharges.

The “discharge” of separated/decanted water is recognized by the Federal On-Scene Commander (FOSC) as an integral part of off-shore skimming operations and as an excellent waste minimization tool. The FOSC or designee, therefore, may authorize the discharge of separated/decanted water back into the sea within the catenary area of a boom/skimming system outside of State waters (3 miles), in accordance with the MOU between SWRCB and OSPR. The exception to this will be in NOAA Marine Sanctuary waters. With the addition of the Monterey Bay National Marine Sanctuary a significant portion of the coastline is now part of the National Marine Sanctuary program. Other sanctuaries include Point Reyes/Farallon Island, Channel Islands San Miguel, Santa Cruz, Santa Rosa, Anacapa, Santa Barbara Island, Richardson and Castle Rock), and Cordell Banks. Federal law prohibits the discharge of material, such as separated water, to marine sanctuaries unless permitted by the Administrator of the sanctuary program. negotiations are presently under way seeking pre-approval to discharge separated waters during an emergency response to oil spills within the sanctuaries. Until pre-approval is obtained, permit for the discharge of separated water must be obtained from the Sanctuary Program, via the appropriate field office, before any discharge can take place. The phone numbers for the Sanctuary field offices are as follows: Monterey Bay @ (831) 647-4258; Channel Islands @ (805) 966-7107; and Farallones and Cordell Book @ (415) 561-6622.

Contaminated Debris. Contaminated debris including organic material, contaminated cleanup equipment (i.e., PPE, sorbents, booms, etc.) and other contaminated materials that cannot be recycled must be managed as a waste. The materials must also be characterized before the appropriate waste management option is determined. If the debris is contaminated only with petroleum or any of its fractions, then it is exempt from regulation under Section 25143.12 of the Health and Safety Code if ALL of the following conditions are met:

The debris consists exclusively of wood, paper, textile materials, concrete rubble, metallic objects, or other solid manufactured objects; The debris is not subject to regulation as a hazardous waste under the federal act; The debris does not contain any free liquids, as determined by the paint filter test specified in the regulations adopted by the department; The debris is disposed of in a composite lined portion of a waste management unit which is classified as either a Class I or Class II landfill in accordance with 23 CCR 2530, *et seq.*, the disposal is made in accordance with the applicable requirements of the California Regional Water

Quality Control Board and the California Integrated Waste Management Board, and, if the waste management unit is a Class II landfill, it is sited, designed, constructed and operated in accordance with the minimum standards applicable on or after 10/9/93 to new or expanded municipal solid waste landfills, which are contained in 40 CFR 258.1, *et seq.*

Oiled Animal Carcasses. Oiled animals and carcasses should be collected and turned over to the California Department of Fish and Game, Office of Oil Spill Prevention and Response (OSPR) representatives who are responsible for wildlife rehabilitation and collection of carcasses for natural resource damage assessment (NRDA) . The identification and location of OSPR representatives can be provided by the Unified Command Center. OSPR will be responsible for the disposal of the oil-contaminated carcasses.

Waste Minimization and Recycling Opportunities

Debris Avoidance. It is generally not possible to avoid the generation of oily debris resulting from the contact of floating oil with waterborne solids, however, it is possible to minimize the generation of oily debris in the coastal intertidal zone if the anticipated area of oil impact can be cleaned prior to stranding of the spilled oil. This has been successfully accomplished in a small number of past spills.

Personnel can be deployed to remove debris from beach intertidal areas to above the high tide line in order to minimize oiling of stranded debris/trash. It is important to note that such crews are not likely to be certified as required under OSHA 1910.120 and can only perform this task prior to the stranding of spilled oil. An Industrial Hygienist and/or Health & Safety specialist should be consulted regarding the limitations of these crews and the effective establishment of exclusion zones in the area of beach impact.

Selection of Personal Protective Equipment. Depending upon climatic conditions and material compatibilities of personal protective equipment (PPE), waste can be minimized through the selection of reusable equipment, when possible. For instance, the use of reusable PPE (such as gloves and boots) instead of disposable PPE can minimize the generation of the oil-contaminated disposable PPE, as long as such equipment use is approved by the site safety officer. Such decisions should be made early in the response process in order to minimize the generation of contaminated PPE which is generally considered a hazardous waste and managed at a Class I hazardous waste management facility.

Recovered Oil and Oilv-water. In order to maximize skimmer efficiency and effectiveness, water should be decanted to the spill impact area with the approval of the FOSC and relevant state agency representatives. Operational standards (e.g., decanting only in the impact area where water depth is sufficient; no free oil) should be established as soon as skimming is initiated. In federal waters, decanting can be approved through a request to the FOSC. As discussed earlier, in state waters approval must be secured from the Regional Water Quality Control Board (see the MOU between the SWRCB and OSPR).

Both oil and oily-water recovered from skimming operations should be off-loaded to facilities (ie; terminals, refineries) where it can be effectively managed as a material, or recycled as a wastestream at an off-site recycling facility (ie; commercial refiners, reclaimers, recyclers). These facilities may be able to provide temporary waste storage in their tank or container storage areas. Prior to commencing any storage activities, however, the facility may have to obtain an emergency permit from the DTSC (approval is usually over the phone, followed by the appropriate paperwork in the mail). Additionally, any oiled debris that is recovered along with the skimmed oil must also be maintained in a secure, temporary waste storage area until it is sufficiently characterized for final disposition.

Sorbent Use/Reuse: Synthetic sorbents (i.e., pads, sweeps, booms) have become standard response materials in the “mechanical recovery” of spilled oil. Their oleophilic, hydrophobic character makes them efficient at separating oil and water and they are routinely used to recover oil from solid surfaces as well (e.g., rubble, cobble and boulder shorelines; equipment/gear; vessels; etc.). Since oiled sorbent material often constitutes a substantial percentage of the oily solid waste generated during spill response and cleanup, opportunities for minimizing this waste volume should be considered.

Some sorbents are designed to be reusable (i.e., mechanized rope-mop skimmers) or can be recycled on-site with inexpensive gear (e.g., appropriate barrel-mounted wringers). Sorbent manufacturers instructions should be followed regarding the limits of effective reuse for their individual products. It is also possible to replace sorbent sweeps and booms with recyclable boom and other appropriate gear in circumstances where floating oil can be efficiently recovered without generating oiled sorbents. For example, in good-access, low energy shoreline areas (harbors, bays, inlets), it may be possible to use containment-boom and recover the trapped oil with vacuum trucks instead of contaminating large volumes of sorbent.

Petroleum-contaminated Soil Recycling and Reuse: While the volume of petroleum-contaminated soil associated with coastal spills is generally lower than such volumes resulting from large inland spills, opportunities for

recycling/reuse should be considered. For soils satisfying the waste profiling requirements of the state and commercial facilities, beneficial reuse as daily landfill cover after appropriate treatment is an available option in California (see Response Resources list). Recycling of oil-contaminated soil as aggregate in cold-mix and hot batch asphalt is available at four facilities in the State of Washington. Furthermore, a recently completed study of the incorporation of oily/solid residuals into construction materials concluded that a large market exists in California and that these recycling/reuse opportunities should be pursued and encouraged. It is important to note that both the costs and benefits of such recycling (less than \$100/ton and low future liability) versus disposal in a California Class I or II disposal facility (greater than \$100/ton and moderate to high future liability) are substantial. Removal of contaminated soil from temporary storage will require the authorization Unified Command, FOSC, or SIC.

Temporary Storage

To expedite removal of spilled oil, refined products, and contaminated materials from marine waters during an emergency-response, containment activities (to include temporary waste storage) may be conducted at appropriate on-shore locations [22 CCR 66270.1(c)3]. The transportation of oil and contaminated material to temporary waste storage sites during an emergency response is exempt from transportation and manifesting requirements, per the draft MOU between OSPR and DTSC (these requirements are also exempted per 22 CCR 66263.30 and/or 66263.43 for transportation-related emergency responses.

During an immediate response, all oil and/or oily materials may be recovered, transported, or transferred to temporary waste storage sites and are exempt from any hazardous waste generator and facility permit requirements for a period of 30 days, per the draft MOU between OSPR and DTSC. Additional 30 day extensions may be granted by DTSC, under appropriate circumstances.

Temporary storage sites can be an area or facility approved by the IC or Unified Command for characterizing and/or temporarily storing recovered oil and/or oily materials used, collected, or recovered during an oil spill response. Such an area may include, but is not limited to, permitted or interim status hazardous waste storage facilities, other non-permitted facilities, vessels, barges, tanks, vacuum trucks, barrels, containers, storage piles, or other appropriate containment methods and locations that may be used to hold recovered oil and/or oily materials. Temporary storage sites need not be owned, operated, or leased by the RP. Temporary storage sites that are on-shore should be established at locations that are convenient to the recovery operations for the temporary storage of recovered petroleum products, and contaminated materials and debris. Siting of the temporary storage site, however, must be done with the concurrence of the following:

- FOSC/SIC
- DTSC [The DTSC duty officer can be contacted at one of the following phone numbers: Region 1 (Sacramento) @ 916-255-3564; Region 2 (Oakland) @ 510-540-3739; Region 3 (Glendale) @ 818-551-2830; and Region 4 (Long Beach) @ 562-590-4968.]
- California Coastal Commission/Bay Area Conservation and Development Commission Joint Oil Spill Program (BCDC/CCC) [for further information on obtaining temporary and/or emergency permits within the coastal zone, contact the CCC/BCDC at (415) 904-5200]
- Regional Water Quality Control Board (RWQCB), and
- Local health, fire and emergency services departments.

If a Unified Command is established, OSPR will facilitate the contact of the state and local government agencies through the Liaison Officer.

Initial Treatment

Petroleum and petroleum contaminated cleanup materials can potentially be treated at the temporary storage site. One of the treatment process that may be used is Transportable Treatment Units (TTU). The most likely treatment

process undertaken with a TTU will be separation of water from collected petroleum. Another treatment method employed for separating water on-site is decanting water from temporary storage tanks.

Any water generated through the separation of petroleum and sea water may be potentially discharged to a sanitary sewer system or back to marine waters. A discharge to the sanitary sewer will require a permit from the local sanitation district which will establish effluent requirements for the discharged water. Should a sanitation district not allow the discharge of water to its system, the recovered sea water would either be discharged back to the adjacent marine waters or transported off-site for disposal. The discharge of recovered sea water to state waters will require a NPDES permit from the local RWQCB, if it isn't under the scope of the OSPR/SWRCB MOU. A portable incinerator may be another type of TTU available during a spill response for use with contaminated material. The use of an incinerator will require a permit from DTSC and the local air pollution control district or air quality management district. The potential use of any TTU and regulatory standards must be discussed with DTSC.

Characterization of Recovered Material

Recovered petroleum and contaminated debris not recycled must be characterized to determine their waste classification before the waste can be shipped to a proper waste management facility for final disposition. The actual testing may be conducted on representative samples of each type of waste by a State of California certified hazardous waste laboratory.

It is the responsibility of the generator, or the responsible party (RP), to have the recovered petroleum and other contaminated materials accurately characterized as either hazardous or nonhazardous for proper disposition [22 CCR 66260.200(c)]. A generator who incorrectly determines and manages a hazardous waste as non-hazardous is in violation of the hazardous waste requirements and may be subject to DTSC enforcement action.

According to 22 CCR 66264.13 and 66265.13, before an owner or operator of a treatment, storage, or disposal facility transfers, treats or disposes of any hazardous waste, the owner or operator shall obtain a detailed chemical and physical analysis of a representative sample of the waste. An analysis of the waste, therefore, must be provided to the hazardous waste management facility (HWMF) via a profile sheet which can be obtained from the HWMF. The HWMF then determines whether or not the waste can be accepted prior to its shipment. State criteria for characterizing a waste hazardous or nonhazardous is found in 22 CCR 66261.10 and 66261.20-66261.24 while federal criteria is presented in 40 CFR 261.30-261.33 (see Figure E.VI.2). These criteria can apply to any oily-water, sorbents, booms, and debris generated as a result of an oil spill clean up. Based on waste characterization, the wastes can be further defined as either a Federal Resource Conservation and Recovery Act (RCRA) waste (hazardous waste regulated under federal regulations), a non-RCRA waste (hazardous waste regulated under California regulations only), or a non-hazardous waste. Be aware, however, that some non-hazardous wastes may be defined as a "designated waste" per 23 CCR 25522, and should be managed accordingly. Once the waste is characterized, disposition options can then be selected. Removal of recovered material from temporary storage will require authorization by the Unified Command, FOSC, or SIC.

Transportation

Recovered petroleum product not accepted at a refinery for reuse must be transported to an approved waste management facility. The type of waste management facility will be based on the results of the waste analysis performed.

Hazardous Waste: Waste classified as hazardous under either federal or State regulations must be transported to a permitted or interim status hazardous waste management facility. Any shipments of hazardous waste must be done by a transporter who is registered with DTSC as a hazardous waste hauler (a list is available from the DTSC) and has a valid EPA Identification Number. Prior to removal of the hazardous material from temporary storage, a California Uniform Hazardous Waste Manifest (EPA Form # 8700-22A) must be prepared by the generator (RP or designee) for recovered petroleum and other contaminated materials (22 CCR 66263.20-66263.23). While

preparing the manifest, the RP may request assistance from the on-scene DTSC representative or the DTSC regional duty officer.

All hazardous materials and wastes shipped off-site must be transported in compliance with applicable regulations. These include the RCRA regulations in 40 CFR 262-263, DOT Hazardous Materials Regulations (49 CFR 171-178), and any applicable state regulations (22 CCR 6626.20-6626.23).

Nonhazardous Waste: Waste that is determined to be nonhazardous but is a “designated waste” (per 23 CCR 2522) will be transported to a Class II waste management facility. Manifesting of the waste is not required but a Bill of Lading is required for transportation. The appropriate Regional Water Quality Control Board (RWQCB, list in Table E.VI.3) and local health department should be contacted to determine what waste management facility will accept the waste and any additional test requirements the facility might require (see tables E.VI.4). Removal of nonhazardous waste from temporary storage will require authorization by the Unified Command, FOSC, or SIC.

Off-Site Waste Management Facilities

Depending on the type of waste and how it is to be managed, you need to identify an appropriate off-site waste management facility, as follows:

Non-hazardous waste/designated waste (per 23 CCR 2522): Transport to a Class II waste management facility*.

Non-hazardous waste/non-designated waste (per 23 CCR 2522): Transport to a Class III waste management facility*.

Hazardous waste: Transport to a facility as a “material” for use/reuse; or to an authorized Class I hazardous waste management facility for recycling, treatment, storage, or disposal.

* *The Regional Water Quality Control Boards should be consulted for information on the location and disposal requirements of facilities in their region.*

To avoid confusion and panic at the time of a spill incident, it usually helps to plan ahead and identify the waste management facilities (primary and alternates) to use for the different types of waste streams that are expected to be generated during a spill response and clean-up. There are three approved hazardous waste management facilities in California, as follows:

1. **Chemical Waste Management Co. (Kettleman Hills Facility)**
35251 Old Skyline Blvd.
Kettleman City, CA 93239
(559) 386-9711

This is the only class I facility that accepts liquid waste in any sizable quantity. Liquid petroleum accepted at Kettleman Hills will be transported to their subsidiary in Azusa, California and further transported out-of-state for incineration.

2. **Safety Kleen Inc (Imperial County)**
5295 South Garvey Road
Westmoreland, CA 92281
(760) 344-9400

This facility will accept only solid waste.

3. **Safety Kleen Inc (Kern County)**
2500 Lokern Road

Buttonwillow, CA 93206
(805) 762-7372

This facility accepts only solid waste, although it is developing the ability to process small volumes of liquid waste.

For a list of Recyclers within California, as well as in other states, call DTSC/Resource Recovery Unit at (916) 323-6042 for a copy of the *California Waste Exchange Directory of Industrial Recyclers and Listing of Hazardous Wastes Available for Recycling*.

9932.2a Example Waste Management Plan (next page)

Example
WASTE MANAGEMENT PLAN
for the Careless Corporation Oil Spill
September 10 - 28, 2000

OBJECTIVES

To handle recovered oil, oily debris, and contaminated sand/dirt resulting from the subject oil spill so that the wastes do not cross-contaminate other areas that are clean. To ensure that all recovered oil and oiled debris are managed in accordance with state and federal regulations, while keeping operating costs down.

GENERATOR:

Name: Careless Corporation
Generator's EPA ID: 000 000 000

COLLECTION SITES

Collection Site Locations:

1. Yahoo Bay Yacht Club
1212 Wave Ave., Long Beach
2. Dolphin Beach Naval Storage Station
9875 Riptide Blvd., Long Beach

Approximately 8 **Vacuum trucks** (with attached skimmers) will recover oil directly from collection points and off-load at the Careless Corp. Terminal (CCT), Tank #11-XTC (130,000 bbl capacity).

The Coastal On-Water (COW) **recovery barge** (45,000 bbl capacity) will be emptied tomorrow morning at the CCT. Four additional tanks are also available with a capacity of 175,000 bbl on an as needed basis. Currently, Tank #12-XTC (130,000 bbl capacity) is available to accept oil from the barge. The recovered oil off-loaded by both the barge and vacuum trucks will later be processed into gasoline at the Careless Corp. Refinery.

WASTE TYPE & MANAGEMENT METHOD

Decanted Water: Water that is decanted from off-shore skimming operations will be released back to the ocean within the operational area, per the MOU between the State Oil Response Agency and the State Water Board.

Recovered Oil: Managed as a recovered product, and not a waste, as it will be used/reused as raw material as part of the process at the Careless Corp. Refinery.

Solid Oily Debris:

If non-hazardous (oiled dirt/sand, PPE, trash, wood, seaweed, etc.) = No-Waste, Inc. and Action Clean Up Company will transport waste to the Union Pacific Railroad loading facility (245 Pacific Rim Drive, Wilmington) and shipped to WasteCo (class II landfill) located in-state.

If hazardous = transport to the Union Pacific Railroad loading facility in Wilmington and on to Burn-It Industries (class I Waste Management Facility) in Utah.

No-Waste is currently doing beach pre-cleanup, while Action Clean-Up and Wacco Waste Co. are available to be contracted out by Careless Corp. to do waste sampling, transport to lab, clean-up, and HW transportation, as needed. All three contractors are available for oily debris beach clean-up in the event oil does impact the shoreline.

Oily Sand/Dirt: Sand and/or dirt that is oiled will be placed in bins stored at the temporary waste storage area (if no bins area available, the sand/dirt can be stockpiled at the staging areas - lined and covered with visqueen), until results of the samples reveal whether or not the oiled sand/dirt is hazardous or non-hazardous. If hazardous, will transport to Burn-It Industries; if non-hazardous, it will be transported to Ace Asphalt for use in their asphalt processes.

Waste from Decon Operations: Liquid Waste: Two Baker Tanks (each with a capacity of 500 bbls) will be located at each field staging areas/command posts. Oily water waste will be held in the Baker Tanks and off-loaded by vacuum trucks and transported to Cryer & Underwood in Wilmington for recycling. Solid Waste: Solid wastes resulting from decontamination operations will be placed in the bins labeled “Contaminated Waste “(which are already located at the temporary storage sites, next to the field staging areas/command posts) and will be managed the same way as the solid oily debris.

Waste from Wildlife Rehab Operations: Liquid Waste - All oily water recovered from rehab operations will be stored in a portable tank for further analysis/waste characterization. If the oily water is acceptable for re-use, it will be brought back to the Careless Corp. Refinery and used as a “material” in the refinery process. If not acceptable for re-use, the oily water waste will be discharged to the sewer with an approved NPDES permit (local sanitation district has already given approval). Solid Waste - All solid oily wastes from rehab operations will be placed in visqueen-lined roll-on/roll-off bins and will be managed the same as solid oily debris.

Oiled Animal Carcasses: Any oiled animal carcasses will be handled and managed by state Oil Response Agency wildlife personnel.

WASTE MINIMIZATION:

Careless Corp. will brief field responders and contractors on waste minimization practices (e.g.: minimize use of sorbents and waste segregation), types of waste, labeling, packaging, etc.

Pre-beach cleanup: Pre-beach cleanup of wood, seaweed and other debris prior to oil impacting the shoreline is being conducted by No-Waste, with Action Clean-Up and Wacco Waste are on stand-by.

Segregation of contaminated and non-contaminated wastes: Roll-off bins will be labeled as either “Contaminated Debris” or “Non-Contaminated Debris”, so as to avoid any cross-contamination.

TEMPORARY STORAGE SITES

Temporary Storage Site Locations: Yahoo Surf State Beach, Parking lot #8; and Dolphin Beach State Park, parking lot # 19. Both temporary storage sites are adjacent to the staging areas, and near the field command posts.

Ten roll-off bins lined with visqueen will be located at each temporary storage site. Each bin will be labeled “Contaminated Debris” and “Non-Contaminated Debris”, so as to avoid any cross-contamination. Each bin will be numbered in a chronological manner as they are received on-site (i.e.: #1 - 10), and letters to identify the site (i.e.: “YS” for Yahoo Surf, “DB” for Dolphin Beach). The identification numbers should, therefore, look as follows: *YS-1, YS-2; DB-1, etc.*

Each bin will be further identified by origin of waste (e.g.: “Yahoo Yacht Club”, etc.). Use duct tape and marker pen w/ indelible ink. Contents of bins will be assessed by Oil Response Agency and Careless Corp. representatives before transporting to an off-site facility. Bins will be marked as “hold” or “OK to transport” by the Oil Response Agency and Careless Corp. representatives. Assessment of bins may take up to 2 weeks, therefore, bins marked hold will be temporarily stored at the Careless Terminal, until the bins are assessed.

A State Oil Response Agency representative will also witness gauges of Baker Tanks containing liquid wastes.

Siting & Construction : Appropriate state agencies (Oil Response, Water Board, Coastal Commission, Toxic Substances) have approved the siting and construction of temporary storage sites prior to storage. All agencies have approved siting of temporary storage areas.

Temporary Storage Site Permits Required: State Toxic Substances Department and the Coastal Commission have granted emergency permits to operate the temporary storage sites as described above.

DECONTAMINATION SITES

Decontamination of response equipment (boat, boom, etc.) and personnel, as well as recreation and fishing boats, will be conducted at the following designated locations:

Yahoo Yacht Club
Ito Industries Dock
Mira Marina

GAUGING OF RECOVERED OIL

Skimmed oil from marine waters:

1. From COW vessels to Barge #119. A state Oil Response Agency representative will be on-scene to witness gauging. Barge #119 to Careless Terminal to off-load into Tank #12-XTC. A state Oil Response Agency representative will witness gauges, watercut, and will sample oil prior to any transfers. Additionally, Marine Terminal Safety Inspectors from the State Lands Commission-Marine Facilities Inspection Division will assist the state Oil Response Agency with gauging and oil transfer operations issues, as needed.
2. During Lightering of the damaged Barge, oil will be skimmed from damaged tanks. This oil will be handled SEPARATE from the recovered skimmed oil, as this is oil that has not been spilled.
3. Oil skimmed from the water at collection points will be transported to Careless Terminal Tank #11-XTC by vacuum truck. A Careless Corp. representative (or designee) will record each load amount and the collection point from which the vacuum truck came from. A state Oil Response Agency Representative will conduct daily spot checks.
4. State Oil Response Agency will witness all final closing gauges when transfers are finished.

Recovered oil from the beaches: . State Oil Response Agency will be assessing the amount of oil accumulated in the bins at the temporary storage sites along with the Careless representative (or designee). Bins will not leave the temporary storage sites until this has been completed.

SAMPLING PROTOCOL

Protocol: Sampling of the recovered oil and oily debris will be followed in accordance with the attached Sampling Protocol. Sampling will be conducted by the state Oil Response Agency and/or the Careless representative (or designee). All analytical results will be shared amongst Careless Corp., state Oil Response Agency, U.S. Coast Guard, and NOAA (NRDA Team).

State Certified Hazardous Waste Laboratory: Careless Corp. already has a contract in place with **Del Lago Analytical**. Representative waste samples will be analyzed for flashpoint, state metals, and TCLP EPA Method 8240 to determine whether or not the waste is hazardous.

TRANSPORTATION

Highway: Action Clean-Up and/or No-waste. Both are registered hazardous waste haulers and are certified by the state Toxic Substances Department.

Rail: Union Pacific

Recovered oil that is considered a hazardous waste does not need a manifest to transport from the spill site to the Careless Refinery or Terminal, as it is a transportation-related spill incident and is exempt from that requirement (per regulation section xxxxx). Recovered oil that is not considered a waste, but a material to be used/reused at the terminal, does not require manifests for transportation from the spill site to the Careless Terminal. Manifests will be used when transporting hazardous wastes (and a Bill of Lading for non-hazardous wastes) from the spill site and/or the Careless Terminal to the Wilmington Railroad transfer facility and then by rail to Burn-It Industries.

OFF-SITE WASTE MANAGEMENT FACILITY

Burn-It Industries, located in Utah.

Ace Asphalt, located in Azusa, California

REQUIRED PERMITS/GOVERNMENT AGENCY CONTACTS

State Toxic Substances Department @ (800) 555-4998. To obtain emergency permits for the temporary storage sites. The Toxic Substances Dept. has granted an emergency permit over the phone for the temporary storage sites.

State Coastal Commission @ (800) 555-3886. For work at the temporary storage sites which occurs within the coastal zone. The Coastal Commission has granted an emergency permit for the temporary storage sites and will hand-deliver it by 5:00 p.m. today.

9933 - Letters (Refer to Section 3400)

9934 - Notices

Notice to Mariners

For development of a Notice to Mariners in the event of a spill situation, refer to the Coast Guard Aids to Navigation Manual-Administration, COMDTINST 16500.7, Ch. 13.D.3.

Safety and Security Zones

Detailed information describing Safety & Security Zones can be found in 33 CFR 165.1 thru 165.33. Information on delegation of authority to COTPs to establish and enforce Safety & Security Zones, and Regulated Navigation Areas can be found in 33 CFR 1.01-30 and 33 CFR 160.5.

COTP & Administrative Orders

Information on Captain of the Port Orders and other special orders applying to vessel operation can be found in COMDTINST 16000.6, Marine Safety Manual, Volume 1, Administration and Management, Ch 12, Sect I; COMDTINST 16000.11, Marine Safety Manual, Volume VI, Ports and Waterways Activities, Ch. 1, Sect I.E; 33 CFR 160, Subpart B.

Press Releases

Guidance on preparing a press release can be found in the Coast Guard Public Affairs Manual, COMDTINST M-5728.2A, Ch. 2, Sec. E (pgs 2-10 thru 2-14).

State of California Proposition 65

The Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) was passed by the voters of California in November 1986, and became effective January 1, 1987. The Act required the Governor to publish a list of chemicals known to the State to cause cancer or reproductive toxicity no later than March 1, 1987. Updates and revisions to the list are required no less than annually. For chemicals so listed, warnings are required 12 months after listing for knowing and intentional exposure, and knowing and intentional discharges to the State's drinking water sources are prohibited 20 months after listing. The lead agency for implementation of this Act is the California Environmental Protection Agency's Office of Environmental Health Hazard Assessment.

The Act provides three mechanisms by which a chemical is listed: (1) if in the opinion of the State's qualified experts it has been clearly shown through scientifically valid testing according to generally accepted principles to cause cancer or reproductive toxicity; (2) if a body thought to be authoritative by such experts has formally identified it as causing cancer or reproductive toxicity; or (3) if an agency of the State or federal government has caused it to be labeled or identified as causing cancer or reproductive toxicity. The list currently includes 379 carcinogens and 128 reproductive toxicants.

Regulations which are intended to provide guidance and reduce the uncertainties associated with the Act and the list of chemicals are published in Division 2 of Title 22 of the California Code of Regulations, Sections 12000 *et seq.* They are also printed in Title 26, Division 21.5 beginning with Section 22-12000. The list of chemicals is updated in the California Regulatory Notice Register, which is published by the California Office of Administrative Law **(916) 323-6225**.

9940 - Reference Documents

This document can be found on the World Wide Web (after January 1, 2000) at:

<http://www.uscg.mil/pacarea/pm/ACMIN/A-Cminutes.htm> (for the North Coast, SF Bay & Delta, Central Coast, LA/LB North & South Sectors, and San Diego Area Committees)

or

<http://www.uscg.mil/d11/msosf> (for North Coast, S.F. Bay & Delta Area, and Central Coast)

only)

Field Operation Guide (FOG) Incident Command System (ICS); U.S. Coast Guard.

COMDTINST 16000.6, Coast Guard Marine Safety Manual, Vol. 1
COMDTINST 16000.8, Coast Guard Marine Safety Manual, Vol. 3
COMDTINST 16000.9, Coast Guard Marine Safety Manual, Vol. 4
COMDTINST 16000.10, Coast Guard Marine Safety Manual, Vol. 5
COMDTINST 16000.11, Coast Guard Marine Safety Manual, Vol. 6
COMDTINST 16000.15, Coast Guard Marine Safety Manual, Vol. 10

COMDTINST 16465.1, Spills Of National Significance Response Management System, 15 July 1997

National Contingency Plan (40 CFR Part 300)

COMDTINST 16471.1 Adoption of NIIMS ICS, 9 Feb 1996

COMDTINST 16471.2, Incident Command System Implementation Plan, 23 May 1997

9950 - ART Check-Off Lists (Refer to section 4553)

9960 - MOU's

List of Applicable Memorandums of Agreement/Understanding

Several other Interagency agreements can be found in COMDTINST M16000.15, Marine Safety Manual, Volume 10.

(* Copy of MOU/MOA text is included in this ACP)

*MOA on Oil Pollution and Response Between Commander, Eleventh Coast Guard District and the State of California—Signed 1997

*MOA Between Department of Fish and Game's Office of Oil Spill Prevention and Response and the State Water Resources Control Board Relating to Discharges Associated with Response Activities Conducted Pursuant to CH. 7.4, Division 1 of the Government Code.

*Memorandum Of Understanding Relating To The Handling And Transport Of Materials Used Or Recovered During An Oil Spill Between The Department Of Fish And Game's Office Of Oil Spill Prevention And Response And The Department Of Toxic Substances Control. 1997

LOA Among U.S. Coast Guard (USCG), Environmental Protection Agency (USEPA), National Oceanic and Atmospheric Administration (NOAA), and Department of Interior (USDOJ) Concerning the Use of In-Situ Burning as a Response Method to Oil Pollution for the Area 35-200 Nautical Miles Off the Coast of California.—Signed 10 April 1997. (See section 4550 for copy of LOA)

MOU Between U.S. Coast Guard and the Environmental Protection Agency — Signed 4 January 1982

MOU Between the Departments of Interior and Transportation Concerning Respective Responsibilities Under the National Oil and Hazardous Substances Pollution Contingency Plan — Signed 16 August 1971

Interagency Agreement Between the U.S. Fish and Wildlife Service and the U.S. Coast Guard for Participation in Pollution Incidents — Signed 24 July 1979

Instrument of Redlegation of Sections 2(d), 2(f), 2(g), 3(a), and 4(b) of Executive Order 12316 of October 2, 1981 from the U.S. Coast Guard to the Environmental Protection Agency on Response Actions.

Interagency Agreement (IAA) between the United States Navy and the United States Coast Guard for Cooperation in Oil Spill Clean-up Operations and Salvage Operations — Signed 15 September 1980

MOU Among the National Institute for Occupational Safety and Health, the Occupational Safety and Health Administration, the United States Coast Guard and the United States Environmental Protection Agency – Signed 18 December 1980

MOU Between the Minerals Management Service of the Department of the Interior and the United States Coast Guard of the Department of Transportation Concerning Regulation Activities and Facilities on the Outer Continental Shelf of the United States — Signed 29 August 1989

MOU Between the Environmental Protection Agency and the United States Coast Guard Concerning the Mitigating of Damage to the Public Health or Welfare Caused by a Discharge of a Hazardous Substance under Section 311 of the Clean Water Act (33 USC 1321) — Signed 3 October 1979

MOU Between the Environmental Protection Agency and the United States Coast Guard on Assessment of Civil Penalties for Discharges of Oil and Designated Hazardous Substances — Signed 17 August 1979

MOU Between the Department of Transportation and the Department of the Interior Regarding Offshore Pipelines — Signed 6 May 1976

MOU Between the Department of Transportation, Department of Interior and the Environmental Protection Agency Regarding Jurisdictional Responsibilities for Offshore Facilities — Signed 14 December 1993

MOU Between the [CA] Department of Fish and Game's Office of Oil Spill Prevention and Response and the [CA] State Lands Commission.

MOU Between the California Department of Fish and Game and California Department of Forestry and Fire Protection.

MOA on Oil Spill Prevention and Response Between Wildlife Protection Division and Office of Oil Spill Prevention and Response.

**MEMORANDUM OF AGREEMENT
ON
OIL POLLUTION PREVENTION AND RESPONSE
BETWEEN
THE COMMANDER, ELEVENTH COAST GUARD DISTRICT
AND
THE-STATE-OF CALIFORNIA**

WHEREAS, Congress enacted the Oil Pollution Act of 1990 (OPA 90) to protect the waters of the United States from oil pollution and to plan for the effective and immediate response in the event of an oil spill, and the President subsequently designated the Coast Guard as the Federal On Scene Coordinator ZOSC) within the California coastal zone; and

WHEREAS, Congress has decided in a number of enactments, including OPA 90, not to preempt the various States from regulating certain matters associated with the protection of waters within their jurisdiction from oil pollution, which matters are also subject to regulation by the Coast Guard under OPA 90 and other statutes; and

WHEREAS, Congress explicitly provided that the provisions of OPA 90 do not: (1) preempt or affect the authority of any state to impose additional liability or requirements respecting oil discharges or other oil pollution within such a state or removal activities in connection with such a discharge; (2) affect the authority of any state to establish or continue to fund, any purpose of which, is to pay for oil pollution or the substantial threat of oil pollution costs or damages, or to require any person to contribute to such a fund; or (3) affect the authority of any state to impose any fine or penalty for violation of law relating to a discharge; and

WHEREAS, the State of California has enacted the LempertKeene-Seastrand Oil Spill Prevention and Response Act of 1990, hereinafter referred to as the California Act, to protect the waters of the State from oil pollution and to plan for the effective and immediate response, removal, abatement, and cleanup in the event of an oil spill and to augment State authority for the prevention and response to spills in waters under the jurisdiction of the State; and

WHEREAS, the California Act provides that the Administrator of the Office of Oil Spill Prevention and Response (OSPR) is appointed by and acts at the direction of the Governor. The Administrator acts as chairperson of the State Interagency Oil Spill Committee (SIOSC) and coordinates actions through the State committee and review subcommittee; and

WHEREAS, the Administrator, subject to the Governor, and through the Department of Fish and Game, has the primary State authority to direct prevention, removal, abatement, response containment and cleanup efforts, with regard to all aspects of any oil spill in the State waters, in accordance with any applicable marine facility or vessel contingency plan, and the State Oil Spill Contingency Plan; and

WHEREAS, the State Lands Commission has the primary State authority to adopt rules, regulation, guidelines and commission leasing policies for reviewing the location, type, character, performance standards, size, and operation of all marine facilities on lands leased from the Commission and all existing and proposed marine terminals within the State; and

WHEREAS, the Commander, Eleventh Coast Guard District is the senior Coast Guard officer within the State of California, exercising Federal authority under the Oil Pollution Act of 1990 and other Federal laws with respect to oil pollution planning and response in waters subject to the jurisdiction of the United States in and outside the State of California and matters dealing with areas of vessel manning and safety equipage; and

WHEREAS, marine oil spills require a rapid, efficient, and coordinated response and cleanup by Federal, State, and local agencies as well as from private entities to minimize the deleterious effects on human, wildlife, and other natural resources; and

WHEREAS, both the Coast Guard and the State recognize the critical roles each has within their respective areas of authority in preventing oil-spills and in planning for and responding to oil spills; and

WHEREAS, the Parties recognize the cooperation between them in the implementation and exercise of their respective statutory and regulatory authority is essential to avoid conflict and unnecessary duplication; and

WHEREAS, the Parties believe and intend that by acting in a cooperative and coordinated manner, the effect will be a synergistically enhanced oil spill prevention and response effort in the State of California;

NOW THEREFORE, the Parties agree, to the extent permitted by law, and as consistent with their respective policies and available resources, to cooperate and to coordinate their efforts in implementing and exercising their respective statutory and regulatory duties related to oil spill prevention and response.

I PARTIES

The Parties to this Memorandum of Agreement are the Eleventh Coast Guard District (“Coast Guard”) and the State of California (“State”).

II PURPOSE OF THE AGREEMENT

The purpose of this Memorandum of Agreement (MOA) is to ensure the Parties exercise their respective authorities regarding oil spill prevention, planning, and response in a manner so as to avoid unnecessary duplication and conflict and to ensure best achievable protection from the impact of pollution incidents for the navigable waters of the United States which are within or may impact the State waters of California; subject to each Party’s statutory, regulatory, and policy requirements.

III DEFINITIONS

Except where otherwise specifically defined in the context of its use herein, or where specifically set forth below, terms used in this Memorandum of Agreement (MOA) shall have the meaning as set forth in Federal law and applicable State law.

A. Specific definitions:

1. State Waters: Federal regulations designate the Coast Guard as the Federal On Scene Coordinator (OSC) within the California coastal zone. The Environmental Protection Agency (EPA) is the OSC for oil spills within the inland zone. The jurisdictional boundary between these zones is specified in the Federal Region IX Regional Response Team Contingency Plan. The term "State waters" shall mean those navigable waters of the United States which lie within the jurisdiction of the State of California and over which the Coast Guard has concurrent Federal authority for oil spill response.

2. Marine Oil Spill Contingency Plan: The Marine Oil Spill Contingency Plan is an addendum to the State Oil Spill Contingency Plan, which in turn is a part of the State Hazardous Materials Incident Contingency Plan. Under this scheme the Department of Fish and Game Director is the State Incident Commander for inland oil spills and the Administrator of OSPR is the State Incident Commander for marine oil spills.

IV INFORMATION SHARING

The exchange of information between the Federal government and the State relative to historic pollution events and current risks is necessary to develop appropriate prevention and response systems. Both Parties maintain information systems that are relevant to both historical and real-time incidents. The Parties require the fullest degree of information sharing from available and pertinent data bases in order to make accurate and timely decisions to prevent and or respond to oil pollution. Transmissions of information shall be in accordance with procedures adopted by the Parties for that purpose.

A. Action:

1. The Parties agree to share information on Prevention Through People (PTP) programs sponsored by Coast Guard, or other human factor initiatives that either party may undertake.

2. The Eleventh Coast Guard District will advise the State of information it receives of the following events occurring in the navigable waters, or that may impact the State, involving vessel disablings, collisions, groundings, explosions, rammings, allisions, distress and other events when oil pollution or substantial threat of oil pollution results. The State will ensure that its emergency notification systems report these incidents to the Coast Guard.

3. The Parties agree to identify and share existing data bases, including the Marine Safety Information System (MSIS), and work toward developing risk management programs that provide risk data sharing for vessels and access by both parties to all data, subject to the requirements of applicable law, regulation, and policy, in a manner to conserve and leverage agency resources.

4. Initiatives taken to limit the introduction on nonindigenous aquatic nuisance species into State waters will be sought through appropriate State or federal regulation. Information concerning aquatic nuisance species programs shall be shared by the Parties as appropriate.

5. The Parties agree, subject to limitations imposed by applicable law or regulations, to share information from relevant studies.

V
OIL SPILL RESPONSE PREPAREDNESS

The National Contingency Plan (NCP) establishes the response organization within the United States and requires tiered contingency planning efforts. The State, consistent with the NCP, defines its response organization through the State Hazardous Material Plan and addenda to the Oil Spill Contingency Plan.

A. Planning Documents

1. National Oil and Hazardous Substances Pollution Contingency Plan (“National Contingency Plan - NCP”):

The Environmental Protection Agency (EPA) is the lead agency in drafting, and the Coast Guard and EPA are jointly responsible for implementing, the NCP which governs actions concerning spill response and cleanup for Federal, State, local agencies, responsible parties, clean-up contractors and others participating in such actions in United States waters.

a. Action: The State will work with the Coast Guard to ensure State plans and policies for marine environmental protection are consistent with the NCP.

2. State Hazardous Material Incident Contingency Plan and the State Oil Spill Contingency Plan:

The State Office of Emergency Services (OES) is responsible for developing and maintaining the Statewide Contingency Plan that details State responsibilities, policies, and actions governing response to spills in waters of the State. The OSPR has specific statutory authority and responsibility concerning oil spills.

a. Action: The Coast Guard will consult with the State to ensure State plans and policies for marine environmental protection are consistent with the NCP.

3. Area Contingency Plan:

The Area Committees, established by the President under the authority of the Oil Pollution Act of 1990, are responsible for the development of Area Contingency Plans for those Areas under the direction of the Federal On Scene Coordinator (OSC). The Area Contingency Plans describe the responsibilities of owners, operators and Federal, State and local agencies in responding to oil spills or threats of spills, list equipment and personnel available to respond, describe procedures for the use of dispersants and describe how the Area Contingency Plan integrates with other plans. Area Contingency Plans are adopted by amendments to the State Contingency Plan to facilitate and coordinate on-going work with local municipalities and coastal counties. Through the OSPR Local Grant Program, municipal and county governments are also included in State and Federal planning documents. The objective is to create consistency between the local, State, and national contingency plans.

a. Action: The Parties agree to consult with each other to enhance contingency planning and to ensure that the Area Contingency Plans and Statewide Master Plan are consonant and uniform, subject to the requirements of existing law.

4. Facility Oil Spill Response Plans:

Facility Oil Spill Response Plans are required by both Federal and State law. These plans describe facility capabilities to prevent and respond to pollution emergencies. The State and the Coast Guard will coordinate with the Department of Transportation (DOT), Mineral Management Service (MMS), and the Environmental Protection Agency (EPA) in assessing facility contingency plans.

a. Action:

(i) Subject to the requirements of applicable law, regulations and policy, the Parties will develop a system to coordinate, to the extent practicable, the Parties' cooperative review and approval of facility contingency plans. The Parties agree to conduct reviews of facility contingency plans in as much of a coordinated and non-duplicative manner as is permitted by applicable laws, regulations and procedures.

(ii) The Coast Guard and the State will cooperate to ensure that requirements for facility response plans are compatible and do not conflict. The Parties will work together to determine the feasibility of the Coast Guard accepting State review of facility contingency plans, subject to Coast Guard oversight.

5. Vessel Oil Spill Response Plans:

Vessel oil spill response plans are required by both Federal and State law. These plans describe vessel capabilities to prevent and respond to pollution emergencies.

a. Action:

(i) Although the Parties recognize the need to independently review vessel plans for compliance with their respective laws and regulations, the Parties agree to conduct reviews of vessel contingency plans in as much of a coordinated and non-duplicative manner as permitted by applicable laws, regulations and procedures.

(ii) The State shall accept to the maximum extent practicable the Federal vessel contingency plan requirements and shall prepare supplementary forms for parties to comply with State requirements in areas such as preventive measures which are in addition to Federal requirements.

(iii) The Parties will cooperate to ensure that requirements for vessel contingency plans are compatible and do not conflict. The Parties will work together to determine the feasibility of the Coast Guard accepting State review of vessel contingency plans, subject to Coast Guard oversight.

B. Government Committees

The National Contingency Plan (NCP) directs the organization of government committees to prevent and respond to pollution emergencies.

1. Regional Response Team:

The Region IX - Regional Response Team (RRT) is established as a coordinating committee by the NCP and includes the State along with the Federal agencies with pollution prevention and pollution response responsibilities.

a. Action: The Parties agree to jointly participate as members of the Regional Response Team (RRT). RRT participation includes both attending regularly scheduled meetings and responding during incident specific RRT mobilization.

2. Area Committees:

Area Committees were established by OPA 90 to maximize State and local participation in contingency planning.

a. Action: The Parties agree to coordinate local response planning by jointly participating in the Area Committee planning process. Both Parties are strongly committed to participating in Area Committee Plan

development and the use of the Area Committees in conducting exercises and drills, consistent with the provisions of the NCP and applicable State contingency plan.

3. Mexico/United States Pact (MEXUSPAC) Joint Regional Response Team:

The MEXUSPAC Joint Regional Response Team (JRRT) is established in accordance with the NCP to prepare for and respond to pollution emergencies that may impact the international border area between the United States and Mexico on the Pacific coast.

a. Action: The Coast Guard will advise the State of all agreements, plans, and standard operating procedures (SOP) developed to coordinate pollution response with Mexico. During an incident specific mobilization of the MEXUSPAC JRRT, the State will be represented through the State RRT representative who will be from the Department of Fish and Game.

4. State Interagency Oil Spill Committee (SIOSC): SIOSC is responsible for coordinating oil spill prevention, response, planning and policy at the State level.

a. Action: The Coast Guard is invited to provide input and recommendations to the SIOSC.

5. State Harbor Safety Committees: State Harbor Safety Committees are responsible to evaluate and recommend ways to improve the safety of navigation in harbors and harbor approaches.

a. Action: The Coast Guard is invited to provide input and recommendations to the Harbor Safety Committees.

C. Drills and Exercises:

Drills and exercises are required by both Parties to ensure the readiness and interoperability of pollution response organizations. It is the intention of the Parties to encourage coordination, participation, and cross-training in periodic drills and exercises to facilitate a better understanding of each Party's duties and responsibilities as well as to ensure a combined, effective, familiar working relationship at oil spill incidents.

a. Action:

(i) The Parties agree to interact in the planning, scheduling, design, conduct and evaluation of exercises as time and resources permit. In this context, the Parties recognize the role of the National Strike Force Coordination Center, as the focal point for exercise strategy for all elements of the National Response System, in scheduling, designing, executing, evaluating and providing feedback on all National Response System PREP exercises in conjunction with the appropriate RRT and Area Committees.

(ii) The Parties agree to make available, as time and resources permit, any published annual reports as required by OPA 90 and State statutes concerning evaluations of drills and recommended changes to the National and Area Contingency Plans.

D. Certification of Oil Spill Response Organizations:

Both Parties evaluate, categorize, and certify oil spill response organizations.

1. Action:

a. The Coast Guard and the State will cooperate to the maximum extent practicable to evaluate, categorize, and certify oil spill response organizations. The Parties will develop joint certification guidelines and conduct independent or joint reviews as necessary or desirable.

b. The State shall accept to the maximum extent practicable the Federal compliance documents for Federal certification and shall prepare supplementary forms for compliance with State regulations.

VI PREVENTION OF OIL SPILLS

A. Cooperative Implementation:

The Parties are coordinating their efforts to prevent oil spills in the marine environment.

1. Action: To the extent permitted under applicable laws, the Parties agree to cooperate in the execution of their respective regulatory responsibilities, to minimize duplication of effort, and to identify opportunities for innovative implementation of casualty prevention plans. Both Parties recognize the importance to encouraging cross-training in each other's regulations and rules including the areas of inspection and response. Each Party must exercise its own rulemaking implementation responsibilities independently and in accordance with applicable rulemaking procedures. Federal inspection requirements associated with vessel safety are not subject to supplemental State regulation.

B. Vessel Inspections:

Each Party recognizes that the other must independently exercise its respective examination responsibilities in accordance with applicable law, regulations and policies. The Coast Guard conducts inspection programs for the purpose of enforcing both international agreements and domestic law aboard United States and foreign flagged vessels. The State, under the California Act, is required to evaluate that inspection process and make recommendations for improvement.

1. Action:

a. The Parties agree to work together to avoid inconsistent requirements and to find ways to conduct vessel inspections in such a way that disruption to the industry is minimized and efficiency and safety maximized.

b. In implementing any State examination programs, the State agrees to avoid conflicts and unnecessary duplication in reviewing Federal inspection programs by on-going consultation with the Coast Guard.

c. Review of inspection records: The Parties agree to make inspection records available to the other and to cooperatively review inspection results, subject to applicable laws, regulations, and procedures.

d. The State shall report to the responsible officer in charge, marine inspection (OCMI), recognized discrepancies in meeting the requirements of international agreements believed to exist aboard United States and foreign flagged vessels.

e. Requirements in State Waters: The Parties will cooperate to establish consistent pollution prevention requirements, and to cooperatively monitor, examine and exchange information relative to those requirements, for vessels to operate in State waters.

f. The State will promptly inform the cognizant OCMI, and the Coast Guard will promptly inform the Administrator or his designee, of any situation or circumstance relative to a vessel whose condition or equipment may significantly increase the potential for an unauthorized discharge or create an unusual or an unacceptable risk to public health and safety or the safety of navigation within State waters.

g. The Parties agree to share all applicable information obtained from their respective vessel inspections and examinations.

C. Vessel Screening:

The Coast Guard, under Federal law, through the District Commander and the Captain of the Port (COTP), has the authority to regulate the entry of vessels, including those determined to be a threat to the environment. The State may establish the means by which it can determine whether tank vessels entering the State waters pose a substantial risk of harm to public health and safety and the environment.

1. Action: When the State determines that a particular vessel or vessels pose a substantial risk, that determination will be forwarded to the cognizant Captain of the Port (COTP). The COTP shall consider that information in making a determination under Federal law as to appropriate action to be taken, if any, including the possibility of denial of entry.

D. Tank Vessel Equipment:

The Coast Guard conducts inspections and examinations to ensure compliance with requirements for equipment to ensure safety of life at sea aboard vessels. The California Act authorizes the Administrator to conduct vessel inspections. Both Parties conduct examinations to ensure compliance with requirements for pollution prevention and pollution response equipment.

1. Action: The Parties will cooperatively examine pollution prevention and pollution response equipment aboard vessels and report noncompliance to the other Party.

E. Tank Vessel Manning:

The Coast Guard establishes and enforces requirements for manning, competence, and documentation of personnel aboard tank vessels.

1. Action:

a. The State will assist the Coast Guard to evaluate and coordinate additional requirements for manning, training, and qualification requirements through the manning standards process.

b. The Parties agree to actively promote and coordinate research projects, such as PTP, to identify human factors which need to be regulated to prevent pollution incidents.

F. Tank Vessel Transfer Operations:

Monitoring tank vessel transfer operations has been identified as an effective pollution prevention action.

1. Action:

a. The Parties will cooperate to monitor transfer operations aboard tank vessels, including, but not limited to, dockside transfers at facilities and lightering and bunkering operations. The Coast Guard acting through the Marine Safety Offices (MSO's) and the State agree to cooperate in the scheduling of monitoring vessel transfer operations to make best use of limited resources and avoid redundant oversight and disruptions to industry. Each Party will advise the other of violations observed.

b. The Parties will cooperatively monitor and examine pollution prevention and pollution response equipment during transfer operations. Each Party will advise the other of violations observed.

c. The Parties agree to make transfer monitor records available to each other and to cooperatively review monitoring results, subject to applicable laws, regulations and procedures.

G. MARPOL 73/78

MARPOL 73/78 is the International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto:

MARPOL 73/78 is an international agreement implemented to reduce pollution from vessels.

1. Action: The Parties will cooperate in the enforcement of existing MARPOL requirements. The Coast Guard will keep the State informed concerning MARPOL regulations, and both Parties will work together to develop disposal services adequate to support port operations.

H. Facility Inspections:

Facility, inspections are conducted by both Parties to ensure compliance with pollution prevention and pollution response regulations. The State has statutory responsibility for oil transfer facilities and their operation within the State. Included in this responsibility is the requirement to establish regulation and inspection programs governing oil transfer facilities. This includes regulation and inspection of oil transfer operations between marine facilities and tank vessels.

1. Action:

a. Facility Inspection: The Parties will coordinate their respective inspection and monitoring activities to the extent practicable to utilize the resources of both Parties efficiently and effectively. Cognizant inspectors from both Parties may carry out inspections and other activities jointly where appropriate.

Equipment: The Parties will cooperatively enforce requirements for pollution prevention and pollution response equipment at marine facilities.

Manning: The Parties will cooperatively enforce requirements for trained and qualified personnel to be responsible for transfer operations at marine facilities.

d. MARPOL Reception Facilities: The Parties will work together to ensure adequate facilities are present to receive garbage, sewage, and oily wastes from vessels.

e. The State will promptly inform the COTP, and the USCG will promptly inform the State, of any situation or circumstance relative to facilities whose operation or equipment may significantly increase the potential for an unauthorized discharge or create an unusual or an unacceptable risk to public health and safety, or the safety of navigation within State waters.

I. Waterways Management:

1. Port and Waterways Safety

The Captain of the Port (COTP) is the predesignated Federal official with primary responsibility to exercise control of vessels to ensure the safety and security of ports and waterways. Under the California Act, Harbor Safety Committees are created and are responsible for the planning of safe navigation and operation of tankers, barges, and other vessels in harbors and harbor approaches.

a. Action

(i) The State will promptly inform the COTP, and the Coast Guard will promptly inform the appropriate State authority, of any situation or circumstance relative to vessels whose operation or equipment may significantly increase the potential for an unauthorized discharge or create an unusual or an unacceptable risk to public health and safety, or the safety of navigation within State waters.

(ii) The State is guided by recommendations from the Harbor Safety Committee for the planning of safe navigation and operation of tankers, barges and other vessels within each harbor. The State, in adopting regulations to implement the Harbor Safety Plan will coordinate with the COTP.

2. Vessel Traffic Services (VTS)

The Ports and Waterways Safety Act authorizes the Coast Guard to construct, operate and maintain vessel traffic services in the areas subject to the jurisdiction of the United States. The Federal system of VTS is designed and empowered to inform, advise, and direct marine traffic in designated areas. Federal VTSs require the participation of certain classes of vessels and may direct the movement of those vessels to reduce navigational risks.

In 1991, the Coast Guard completed a VTS Ports Needs Study to determine which United States ports would gain the most benefit from the presence of a Federal VTS. The California ports and waterways included in the Port Needs Study were Los Angeles/Long Beach, Santa Barbara Channel and the ports in and around San Francisco Bay.

a. Action:

(i) The Coast Guard maintains a Federal VTS in San Francisco Bay. The State will cooperate with the Coast Guard to ensure expansion of the existing VTS system within San Francisco, San Pablo, Suisun Bays as well as the Gulf of the Farallones.

(ii) A Vessel Traffic Information System (VTIS) for Los Angeles/Long Beach is maintained under a joint partnership between the Marine Exchange, the State and the Coast Guard.

3. Pilots

Federal law requires pilots aboard vessels sailing within the coastwise trade. Foreign vessels or United States vessels engaged in foreign trade may be controlled by State pilotage requirements. In the absence of State pilotage regulations, the Federal government may impose pilotage requirements on those vessels.

a. Action: The Coast Guard and the State intend to enter into a memorandum of agreement with California's port and harbor authorities for the purpose of creating a state pilotage system ; except for the port and harbor authorities falling under pilotage jurisdiction of the Board of Pilot Commissioners for San Francisco, San Pablo and Suisun Bays, where the Coast Guard recognizes the State regulation of pilotage.

4. Tug Escorts

Federal and State law authorize the regulation of the use of tug escorts and may require either equipment or standards of performance deemed necessary for the function.

a. Action:

(i) The State and the Coast Guard agree to consult with each other in issuing any regulations requiring tug escorts to ensure that they are consistent to the extent permitted by law.

(ii) Towing Equipment: The Parties agree to review requirements for tow equipment for barges and tank vessels carrying oil in bulk, with the purpose of determining whether additional standards for equipment, maintenance, operation, and inspection should be adopted.

5. Aids to Navigation (ATON)

The Coast Guard establishes, regulates, and maintains a uniform system of aids to

navigation within the United States.

Action: The State will assist the Coast Guard by recommending changes, improvements, or repairs that may improve aids to navigation, in cooperation with the Harbor Safety Committees.

J. Public Information/Education

The Parties agree that public education in areas of pollution prevention, which includes oil, hazardous substances and garbage, is a high priority and that each agency shall seek opportunities to coordinate pollution prevention public awareness and education programs.

1. Action:

a. Marinas: Public information and education will be cooperatively developed and implemented targeting marina operations to reduce pollution from oil, toxic substances, garbage, and sewage.

b. Small Oil Transfer Facilities: Public information and education will be cooperatively developed and implemented targeting small oil transfer facilities to reduce pollution from oil, toxic substances, garbage, and sewage.

c. Recreational Vessels: Public information and education will be cooperatively developed and implemented targeting the recreational boating community to reduce pollution from oil, toxic substances, garbage, and sewage.

VII RESPONSE

Federal law established the Coast Guard as the primary Federal agency tasked with responding to oil spills on the navigable waters of the United States. In such cases, the Federal On Scene Coordinator (OSC) is the predesignated official responsible for directing response actions. The OSC may direct or monitor all Federal, State, and private actions in response to an oil spill or a potential oil spill in State waters. The Parties will respond to marine oil spills as required by and in accordance with the National Contingency Plan (NCP). The OSC will consult, as required by OPA 90 and other applicable Federal law, with the OSPR Administrator or designee concerning oil spill response activities. State law provides that OSPR is responsible for coordinating State oil spill cleanup efforts.

A. Notification: The Parties agree to provide the earliest possible notification of discharges of oil and hazardous substances and imminent threats of such discharges to each other in accordance with applicable law, regulations and policies consistent with the National Oil and Hazardous Substances Pollution Contingency Plan and applicable area contingency plans. In order to provide a single point of contact for the OSC in the event of a marine oil spill, the OSPR Administrator or designee will represent all State agencies and will be the primary point of contact.

B. Incident Command System (ICS)/Unified Command Structures (UCS):

The Incident Command System (ICS)/Unified Command Structure (UCS) establishes functional responsibilities, lines of communication, information sharing and control for the conduct of an oil spill response operation.

1. Action:

a. The Parties agree to work together within the framework of their respective authorities to ensure a coordinated effort with a minimum of duplication in response to oil spills.

b. The Parties agree to implement an ICS/UCS to ensure coordination of emergency response decision-making during a pollution incident. In those circumstances where governmental action is required to develop and direct action to clean up or abate the effects of an oil spill, the Parties agree to consider best utilization of existing resources, avoiding duplication, while taking advantage of resource availability. The OSC may request the State to undertake response actions on a case-by-case basis. If the State assumes responsibility for response activity, the State will conduct those activities, as directed by the OSC, in accordance with the National Contingency and Area Contingency Plans.

c. Response Decisions: The OSC will coordinate with the State in decision-making relating to the conduct of oil spill response operations including, but not limited to: salvage, lightering, safe haven and other matters affecting the discharge of spilled oil, its containment or its cleanup.

d. The Parties agree to establish a joint public information center to provide for the coordinated dissemination of information during a response operation. This provision does not preclude the Parties from making independent responses to the media and the public.

C. Natural Resource Protection

Both Parties recognize the importance of protecting and preserving natural resources in responding to an oil spill. Both Parties agree that response strategies and procedures will be established through the Unified Command Structure (UCS), in accordance with applicable laws, regulations, and policies, and procedures. The Area Contingency Plan (ACP) will be used as the primary guidance document regarding resource protection.

D. Response Monitoring and Technology

Both Parties agree that the methods used to clean up oil and oily debris shall be established through the Incident Command System (ICS)/UCS which will determine the level of action which is required.

1. Action:

a. Both Parties agree, through the Incident Command System, to provide timely input and recommendations to the Unified Command, to the extent practicable, on dispersant usage, in situ burning, bioremediation, and other non-mechanical cleanup technologies.

b. Both Parties agree that decisions to discontinue clean up operations and demobilize response activities shall be made through the Unified Command Structure. The State retains the right to undertake response, remedial or mitigating actions beyond the response actions completed by the OSC.

E. Incident Command System (ICS) Training

Both Parties acknowledge the necessity for increased and ongoing training in ICS procedures to maintain a qualified pool of response personnel.

1. Action:

a. Both Parties agree to establish training criteria appropriate to their agencies.

b. Both Parties agree to pursue joint training opportunities and instruction.

c. To better prepare for an oil spill where a responsible party is not present or not identified, the State and each COTP shall prepare an action plan for, and exercise the Incident Command System. Such action plans shall be reviewed, updated, and exercised as needed.

VIII NATIONAL POLLUTION FUNDS CENTER INFORMATION

A. The Oil Spill Liability Trust Fund (The Fund).

The Fund provides funding under certain conditions for oil discharge removal actions. The Fund is available in certain circumstances to compensate the State for incurred costs and damages associated with oil discharges. To the extent allowed, a State may access the Fund under current regulations and National Pollution Fund Center (NPFC) procedures.

1. Action: Upon the publication of regulations implementing Section 1012(d)(2) of OPA 90, the State may negotiate directly with the NPFC to establish a cooperative agreement to provide access to the Fund under Section 1012(d)(2). Any agreement between the State of California and the National Pollution Fund Center shall be attached as an annex to this MOA.

B. The National Pollution Fund Center (NPFC)

1. The NPFC administers the Oil Spill Liability Trust Fund (The Fund) in order to: provide funding for oil removal activities, provide State access to the Fund, conduct cost recovery, accept and process claims, and evaluate requests by Federal trustees to fund initiation of natural resource damage assessments. The NPFC also administers Certificates of Financial Responsibility and provides CERCLA/Superfund funding to Coast Guard On Scene Coordinators (OSC) responding to hazardous material incidents.

2. The State may receive payment from the Fund in the State's role as a response organization engaged in removal activities consistent with the National Contingency Plan, as an appropriate claimant for damages, and in the State's role as a natural resource trustee. In addition to the text herewith concerning Section 1012(d)(2) of the Oil Pollution Act of 1990 (OPA 90), the State recognizes the following provisions outline alternative funding methods for State removal activity:

a. Section 1012(d)(1). Regulations under Section 1012(d)(1) of OPA 90 allow the NPFC, upon request of the Governor of a State and as authorized by the Federal On Scene Coordinator (OSC), to obligate The Fund for payment in an amount not to exceed \$250,000 for removal costs, consistent with the National Contingency Plan (NCP), required for the immediate removal of a discharge, or the mitigation or prevention of a substantial threat of a discharge, of oil. The NPFC's Technical Operating Procedures (TOPS) for State access under Section 1012(d)(1) of OPA 90, and the TOPS for resource documentation under OPA 90 are approved guidelines for State use to access the Fund under this section.

b. Claims. Regulations under Section 1012(a)(4) of OPA 90 authorize use of The Fund for the "payment of claims in accordance with Section 1013 of OPA 90 for uncompensated removal costs determined by the President [Coast Guard] to be consistent with the NCP or [for] uncompensated damages." Procedures for claims are found in 33 CFR Part 136. States have a special status under Section 1013 of OPA 90 regarding claims for uncompensated costs which allows States to make such claims directly to The Fund rather than first to the responsible party.

c. The State agrees to eliminate excessive overhead expenses associated with the cost recovery program so that only those individual claims in excess of a dollar amount to be determined through consultation with the Coast Guard and eligible for compensation shall be submitted to the Fund.

d. Working Directly for the OSC. State agencies may work directly for the On Scene Coordinator (OSC) in performing removal actions. In these situations, the OSC issues a Pollution Removal Funding Authorization (PRFA) to the State to establish a contractual relationship and to obligate The Fund. The OSC actively directs and is responsible for the response actions. The OSC may request State assistance and participation in emergency removal actions under CERCLA in response to a hazardous materials incident or threatened incident and where funding for these actions is established in a PRFA.

3. Natural Resource Damage Assessments. A State natural resource Trustee may request access to the Fund for the initiation of an assessment of natural resource damages resulting from a discharge of oil, through a Federal Lead Administrative Trustee (one of the Federal Trustees designated in the NCP), in accordance with the procedures established by the NPFC (Section 6002(b) of OPA 90).

IX ENFORCEMENT

Enforcement action by either Party may include civil and criminal penalties. The Coast Guard may also take action against Coast Guard merchant marine licenses and seamen's documents.

A. Action:

1. Subject to the requirements and limitations of applicable State and Federal law, the Parties agree to cooperate to the fullest extent possible in marine casualty investigations and pollution investigations including, but not limited to: the sharing of information regarding witnesses, reports, analyses, and other available information, or evidence that may assist in determining the cause of the casualty or pollution incident.

2. Enforcement action undertaken by each of the Parties must occur independently in accordance with applicable laws and regulations. The Parties agree that to the extent they can, they will consult with each other as to intended enforcement action.

3. The Parties agree to investigate the feasibility of the Coast Guard utilizing the Department of Fish and Game Petroleum Chemistry Laboratory for the analysis of Coast Guard oil samples.

X RULEMAKING

A. Issuance of Regulations

The Oil Pollution Act of 1990 and other-Federal law provides for the issuance of regulations pertaining to the prevention of oil spills from vessels. The Commandant of the Coast Guard has the authority to promulgate such regulations. The Commander, Eleventh Coast Guard District, and the respective Captains of the Port have limited authority to promulgate local regulations. Acting under its inherent regulatory authority and under authority not preempted by Federal law, the State has the authority to promulgate regulations concerning oil spill prevention which do not conflict with, and which are not otherwise preempted, by Federal law. It is the intention of the parties to maintain close communications to reduce conflict between each Party's permits, directives, and instructions.

1. Action:

a. The intent of this section is to avoid conflict and inconsistent regulation in rulemaking wherever possible, subject to applicable procedural rules, and to endeavor to provide a coordinated, synergistic response to oil pollution planning and response. It is the intent of the Parties to endeavor under their respective authorities to assure the best achievable protection for the waters of the State.

b. In addition, the respective Federal and State procedures for noticing the opportunity to comment on proposed rules, the Parties anticipate that through their participation on committees and day-to-day working communications, the concerns of each will be discussed and given due consideration.

B. Containment and cleanup for refueling, bunkering or lightering operations

OPA 90 and other Federal laws regulate refueling, bunkering and lightering operations. Federal regulations enforced by the Coast Guard govern these operations. Subject to the requirement that they be consistent with Federal regulations, the State may issue its own regulations relating to these same operations.

C. Tank Vessel Response Equipment Rules

Federal law governs the standards for response equipment. State law authorizes the adoption of State standards for spill response equipment to be maintained on tank vessels operating in waters of the State. State rules must be consistent with Federal spill response equipment standards.

XI AGREEMENT

A. This agreement represents a voluntary understanding between the Eleventh Coast Guard District and the State of California.

B. The terms of this agreement may be changed at any time by the Parties by a written, signed amendment hereto with or without notice to any other person.

C. The agreement may be terminated by either party at any time without notice to any person other than the other party.

D. No rights, duties, obligations, or liabilities enforceable at law are created by this agreement.

E. No action based upon this agreement may be brought against the United States or the State of California by any person.

F. This agreement does not alter, modify, abridge, or in any way affect any rights, duties, obligations, or liabilities of any person under the laws of the United States or the State of California.

G. In the event that individual and severable portions of this agreement are found to be in conflict with either State or Federal law, regulations or policies, and therefore of no effect, the agreement will remain in effect without those provisions, unless either Party notifies the other in writing that the entire agreement is terminated.

H. Any action to modify, amend or terminate this agreement may only be taken by the Governor of the State of California or the Commander, Eleventh Coast Guard District or person to who this authority is specifically delegated by them.

I. This MOA supercedes and replaces the MOA signed on June 2, 1993.

FOR THE STATE OF CALIFORNIA:

FOR THE UNITED STATES COAST GUARD:

//S//

PETE WILSON
Governor
State of California

//S//

R. T. RUFÉ
Vice Admiral, USCG
Commander,
Eleventh Coast Guard District

Date:

Date:

**MEMORANDUM OF UNDERSTANDING
BETWEEN THE
DEPARTMENT OF FISH AND GAME'S
OFFICE OF OIL SPILL PREVENTION AND RESPONSE
AND THE
STATE WATER RESOURCES CONTROL BOARD
RELATING TO
DISCHARGES ASSOCIATED WITH RESPONSE ACTIVITIES
CONDUCTED PURSUANT TO CH. 7.4, DIVISION 1
OF THE GOVERNMENT CODE**

WHEREAS, The Administrator, of the Office of Oil Spill Prevention and Response (hereinafter referred to as OSPR) and the Executive Director of the State Water Resources Control Board (hereinafter referred to as SWRCB), acting for the SWRCB and the Regional Water Quality Control Boards (RWQCBs), are directed by Government Code section 8670.7, as amended by Stats. 1993, ch. 736, to enter into a memorandum of understanding (MOU) to address discharges, other than dispersants, that are incidental to, or directly associated with, the response, containment, and clean up of an existing or threatened oil spill in marine waters, conducted pursuant to Chapter 7.4, Division 1 of the Government Code; and WHEREAS, It is the intent of this MOU that all incidental discharges as defined herein shall occur within the response area in or proximate to the area in which the oil recovery activities are taking place for the purpose of returning any oily water back into the response area; and

WHEREAS, Both the Administrator of OSPR and the SWRCB share the same goal of minimizing any unnecessary deleterious impacts to the environment, or to the public health and safety; and

WHEREAS, The Administrator of OSPR has the primary authority to direct prevention, removal, abatement, response, containment, and cleanup efforts with regard to all aspects of any oil spill in or threatening the marine waters of the State; and

WHEREAS, The SWRCB and the RWQCBs have the primary authority for regulating and ensuring the quality of the waters of the State; and

WHEREAS, This MOU is not effective until approved by the SWRCB and the Administrator of OSPR; and

NOW, THEREFORE, the Administrator of OSPR and the Executive Director of SWRCB (the Parties) have reached the following agreement and clarification of existing law concerning discharges, other than dispersants, that are incidental to, or directly associated with, the response, containment, and clean of an oil spill in marine waters, pursuant to Chapter 7.4, Division 1 of the Government Code.

Definitions

The Parties agree that for the purposes of this MOU the following definitions shall apply:

a. Incident Command System or Unified Command Structure:

For the purpose of this section the terms "Incident Command System or Unified Command Structure" mean the procedures established for directing personnel, facilities, equipment, and communications during the response, containment, and cleanup of an oil spill incident in marine waters.

b. Incidental Discharge

"Incidental discharge" means the release of oil and/or oily water within the response area in or proximate to the area in which the oil recovery activities are taking place during and attendant to oil spill response

activities. Incidental discharges include, but are not limited to, the decanting of oily water; in order to conserve oil storage capacity, and the wash down of vessels, facilities, and equipment used in the response

c. Marine Waters:

“Marine waters” include all waters defined as marine waters in California Government Code Section 8670.3(h) and all water otherwise within the jurisdiction of the Administrator of OSPR. under Chapter 7.4, Division 1 of the Government Code.

d. National Pollution Discharge Elimination System Permit (NPDES Permit):

An NPDES Permit is any permit issued by the SWRCB or the RWQCBs pursuant to California Water Code section 13370 et seq., as required or authorized by the Federal Clean water Act, Title 33 U.S.C. 1251 et seq.

e. Oily water:

Oily Water means any substance, matter, or medium containing or permeated with any kind of petroleum, liquid hydrocarbons, or petroleum products or any fraction or residues therefrom, including, but not limited to, crude oil, bunker fuel, gasoline, diesel fuel, aviation fuel, oil sludge, oil refuse, oil mixed with waste, and liquid distillates from unprocessed natural gas. Waste includes, but is not limited to, seaweed, driftwood, debris, and other similar types of materials.

f. Response:

Response means the time period when response personnel, acting under the authority of the Administrator, the Federal On-Scene Coordinator, the State On-Scene Coordinator, through the Incident Command System or Unified Command Structure, are performing Response Activities that are reasonably necessary to prevent, reduce, or mitigate damages to persons, property, and/or natural resources of this State due to an oil spill incident in marine waters.

g. Response Activities:

Response Activities means those activities, consistent with the National Contingency Plan, the State Oil Spill Contingency Plan, or taken at the direction of the Administrator or Federal On-Scene Coordinator through the Incident Command System or Unified Command Structure, in response to a spill, that entail the removal of oil from marine waters of the State. This includes all activities conducted on-water or onshore relating to the separation, recovery, containment, transfer, or treatment of marine waters of the State contaminated by oil and/or oily materials.

h. Response Area:

Response Area means the area of marine waters where response activities are occurring as defined by the daily work plan approved under the Incident Command System or Unified Command Structure by the Administrator, Federal On-Scene Coordinator, or State On-Scene Coordinator.

i. Waste Discharge Requirements

“Waste Discharge Requirements” are a set of requirements issued by the RWQCBs, pursuant to California water Code section 13260 et seq., regulating the discharge of waste which could affect state waters. Waste Discharge Requirements may be issued by the SWRCB upon the review of an action or failure to act by a RWQCB, pursuant to Water Code section 13320.

II. NPDES Permits

The Parties agree that:

The incidental discharges covered by this MOU are consistent with the State Contingency Plan and the National Contingency Plan. Incidental discharges as described in this MOU which are in compliance with the instructions of the On-Scene Coordinator, pursuant to the National Contingency Plan or the applicable Coast Guard regulations, are excluded from regulation under an NPDES permit, as provided by the Federal Environmental Protection Agency regulation 40 C.F.R. 122.3(d), are consistent with Federal laws and regulations, and do not constitute a prohibited discharge.

III. Waste Discharge Requirements

The Parties agree that:

a. It is in the public interest for the RWQCBs for the North Coast, San Francisco Bay, Central Coast, Los Angeles, Santa Ana and San Diego Regions to waive the issuance of waste discharge requirements for incidental discharges, within the response area during a spill response as provided in Water Code section 13269. The SWRCB will recommend such action to the RWQCBs.

b. Such discharges do not create a vested right to discharge, but rather such discharges are privileges, as provided by California Water Code section 13263(g).

IV. Miscellaneous

a. The terms of this agreement may be changed at any time by the Parties by a written, signed amendment hereto with or without notice to any other person.

b. The agreement may be terminated by either party at any time without notice to any person other than the other party.

c. No rights, duties, obligations, or liabilities enforceable at law are created by this agreement.

d. This agreement does not alter, modify, abridge, or in any way affect any rights, duties, obligations, or liabilities of any person under the laws of the State of California.

e. In the event that individual and severable portions of this agreement are found to be in conflict with either state or federal law, regulations or policies, and, therefore, of no effect, the agreement will remain in effect without those provisions unless either party notifies the other in writing that the entire agreement is terminated.

f. Any action to modify, amend, or terminate this agreement may only be taken by the Administrator of OSPR and the Executive Director of SWRCB, or persons to whom this authority is specifically delegated by them. Any such modification is not effective until approved by the SWRCB.

FOR THE OFFICE OF OIL SPILL
PREVENTION AND RESPONSE:

//s//

Pete Bontadelli
Administrator

Date:

FOR THE STATE WATER RESOURCES
CONTROL BOARD:

//s//

Walt Pettit
Executive Director

Date:

State of California

M e m o r a n d u m

To : Ben D. Kor, NCRWQCB
Steven R. Ritchie, SFBRWQCB
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Date: APR 28 1995

From : STATE WATER RESOURCES CONTROL BOARD
901 P Street, Sacramento. CA 95814 Mail Code G-8

Subject: WAIVER OF WASTE DISCHARGE REQUIREMENTS FOR INCIDENTAL
DISCHARGES ASSOCIATED WITH OIL SPILL RESPONSE ACTIVITIES

In 1993 the Lempert-Keene-Seastrand Oil Spill Prevention and Response Act was amended to require that the Administrator of the Office of Oil Spill Prevention and Response (OSPR) and the Executive Director of the State Water Resources Control Board (SWRCB) enter into a memorandum of understanding (MOU), which addresses all permits and other requirements pertaining to the incidental discharge of wastewater during oil spill response activities. An MOU was subsequently signed in 1995. A copy is attached for your reference as Attachment 1.

The MOU addresses discharges of oily water which occur during oil spill response activities within or proximate to oil spill response areas. The MOU finds that these discharges are exempt from regulation under a National Pollutant Discharge Elimination System (NPDES) permit. The MOU also provides that the SWRCB will recommend that the coastal Regional Water Quality Control Boards (RWQCBs) waive the issuance of waste discharge requirements for these types of discharges.

The purpose of this memorandum is to request that you take appropriate action to amend the waiver resolution or water quality control plan, as appropriate, for your region to include incidental discharges on the list of discharges for which waste discharge requirements are waived. Waiver of this type of discharge would be in the public interest, as provided in Water Code section 13269, because the issuance of waste discharge requirements under the circumstances could significantly impede oil spill cleanup. Also, the addition of incidental discharges to an RWQCB's waiver list could be considered categorically exempt from the California Executive Officers.

Environmental Quality Act, Public Resources Code section 21000, et seq. under the emergency project exemption. See 14 C.C.R. § 15269. The addition of incidental discharges to an RWQCB's waiver list would also be exempt from review by the Office of Administrative Law under the Administrative Procedure Act, Government Code section 11340, et seq. See Gov. Code § 11352(b).

Sample language for inclusion in the RWQCB's waiver resolution is contained in Attachment 2. Please contact Sheila Vassey, Senior Staff Counsel, in the Office of the Chief Counsel at (916) 657-2408 or Calnet 8-437-2408 if you would like further information regarding this matter.

Attachments (2)

cc: Pete Bontadelli Administrator Office of Oil Spill Prevention and Response Department of Fish and Game
1700 K Street, Suite 250 Sacramento, CA 95814

Barry R. Ogilby Carlsmith, Ball, Wichman, Murray, Case & Ichiki
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**MEMORANDUM OF UNDERSTANDING
RELATING TO
THE HANDLING AND TRANSPORT OF MATERIALS
USED OR RECOVERED DURING AN OIL SPILL
BETWEEN THE
DEPARTMENT OF FISH AND GAME'S
OFFICE OF OIL SPILL PREVENTION AND RESPONSE
AND
THE DEPARTMENT OF TOXIC SUBSTANCES CONTROL**

WHEREAS, The Administrator of the Office of Oil Spill Prevention and Response within the Department of Fish and Game (hereinafter referred to as OSPR) and the Director of the Department of Toxic Substances Control (hereinafter referred to as DTSC) are interested in developing a pre-approved process for the handling and transport of materials used or recovered during an oil spill response, including materials that may be classified as hazardous waste; and

WHEREAS, Both the Administrator of OSPR and the Director of DTSC share the same goal of minimizing any unnecessary deleterious impacts to the environment, or to the public health and safety; and

WHEREAS, The Administrator of OSPR has the primary authority to direct prevention, removal, abatement, response, containment, and cleanup efforts with regard to all aspects of any oil spill in the marine waters of the State; and

WHEREAS, The Director of DTSC has the primary authority for regulating the handling, transport, recycling, treatment, and disposal of all hazardous waste within the State; and

WHEREAS, Both the Administrator of OSPR and the Director of DTSC are required under State law to establish a process for the handling and transport of materials used or recovered during an oil spill response.

NOW, THEREFORE, the Administrator of OSPR and the Director of DTSC (the Parties) have reached the following Memorandum of Understanding (MOU) and clarification of existing law concerning the handling and transport of materials used, collected, or recovered during an oil spill response.

I. Definitions

The Parties agree that for the purposes of this MOU the following definitions will apply:

a. Emergency Permit

“Emergency permit” means a permit issued by the DTSC in accordance with Title 22, California Code of Regulations, Section 66270.61.

b. Federal On Scene Coordinator

“Federal On Scene Coordinator” means the federal designated representative from the U.S. Coast Guard or the U.S. Environmental Protection Agency who represents the federal government within the Unified Command.

c. Immediate Response

“Immediate response” means the time period when response activities are undertaken that are reasonably necessary to prevent, reduce, or mitigate damages to persons, property, or natural resources of this State due to a threatened or actual spill of oil and/or oily materials.

d. Incident action plan

“Incident action plan” means the document(s) that describe those response activities approved by the Incident Commander or Unified Command.

e. Incident Commander

“Incident Commander” means the state designated representative for coordinating response to oil spills. The Administrator of OSPR or his or her designee is the Incident Commander during a spill and represents the state within the Unified Command.

f. Oil and/or oily materials

“Oil and/or oily materials” means any substance, matter, or medium containing or permeated with any kind of petroleum, liquid hydrocarbons, or petroleum products or any fraction or residues therefrom, including, but not limited to, crude oil, bunker fuel, gasoline, diesel fuel, aviation fuel, oil sludge, oil refuse, oily water, oil mixed with waste, and liquid distillates from unprocessed natural gas.

g. Orphan spill

“Orphan spill” means a situation where a Responsible Party does not exist, is unknown, or the Responsible Party is unable or unwilling to provide adequate and timely cleanup and/or to pay for the damages resulting from the spill.

h. Response Activities

“Response activities” means those activities that render care, assistance, or advice in accordance with the National Contingency Plan (40 CFR 300 et seq.), the State Oil Spill Contingency Plan, or at the direction of the Incident Commander or Unified Command during an immediate response to a spill or threatened spill of oil and/or oily materials. Response activities are approved in the incident action plan and include for the purposes of this MOU, but are not limited to, separation, recovery, containment, transfer, or transport of oil and/or oily materials to temporary storage sites.

i. Response Area

“Response area” means the area where response activities are occurring or will be occurring as designated and approved by the Incident Commander or Unified Command within the incident action plan. Response area may include, but is not limited to, the location(s) of temporary storage sites and areas associated with a response vessels or other vehicle routes to such sites.

j. Response personnel

“Response personnel” are those individuals or entities performing response activities. Response personnel includes, but is not limited to, all employees, agents, designees, or subcontractors of the Responsible Party, including oil spill cleanup organizations as well as local, state or federal agency employees, volunteer workers, or individuals or entities acting under the direction of the Incident Commander or the Unified Command.

k. Responsible Party

For the purposes of this MOU, “Responsible Party” means any of the following:

- (1) The owner or transporter of oil and/or oily materials or a person or entity accepting responsibility for the oil and/or oily materials; or
- (2) The owner, operator, or lessee of, or person who charters by demise, any vessel or marine facility; or
- (3) A person or entity who, as a shore-based representative of a vessel or facility owner or operator, has full written authority to implement an oil spill contingency plan or otherwise accepts responsibility for the vessel or marine facility.

To the extent permitted by law, oil spill response organizations are not considered a Responsible Party solely due to their performance of response activities authorized in this MOU.

l. Spill or discharge

“Spill” or “discharge” means any release of oil and/or oily materials into or that impacts state waters that is not authorized by any federal, state, or local government entity.

m. Temporary Storage Site

“Temporary storage site” means an area or facility approved by the Incident Commander or Unified Command for characterizing and temporarily storing recovered oil and/or oily materials used, collected, or recovered during an oil spill response. Such an area may include, but is not limited to, permitted or interim status hazardous waste storage facilities, other non-permitted facilities, vessels, barges, tanks, barrels, containers, storage piles, or other appropriate containment methods and locations that may be used to hold recovered oil and/or oily materials. Temporary storage sites need not be owned, operated, or leased by a Responsible Party.

n. Unified Command

“Unified Command” consists of the state Incident Commander, the Federal On Scene Coordinator and the Responsible Party. The Unified Command determines the procedures for directing personnel, facilities, equipment, and communications during the response, containment, and cleanup of an oil spill.

II. Implementation

The Parties agree that:

- a. The Director of DTSC will designate individual(s) (hereinafter DTSC representative(s)) in advance or when notified by OSPR, the Office of Emergency Services, or the U.S. Coast Guard that a threatened or actual spill or discharge of oil and/or oily materials has occurred who are authorized to implement and ensure compliance with all terms and conditions of this MOU.
- b. The DTSC representative(s) will immediately report to the Incident Commander or Unified Command for assignment where needed and represent the DTSC throughout the response, containment, and cleanup of the spill.
- c. The DTSC representative(s) will ensure that all appropriate federal, state, and local agencies are kept informed of potential or actual hazardous waste issues throughout the response and related disposal activities.

- d. The Administrator of OSPR agrees to take appropriate efforts to ensure that a Responsible Party reimburses DTSC for all reasonable and necessary response costs incurred and to fund the positions of all reasonably necessary DTSC personnel throughout the duration of an orphan spill.

III. Immediate Response Exemption

The Parties agree that:

- a. During an immediate response, all response activities conducted on water within the response area will be exempt from obtaining a hazardous waste facility permit pursuant to section 66270.1(c)(3)(A), Title 22, California Code of Regulations, Division 4.5, and 66263 (hazardous waste manifesting) for treatment or containment activities.
- b. Response personnel will use the generator identification number issued for emergency response actions. However, other than the Responsible Party, owners and operators of response equipment, including but not limited to, tanker vessels, barges, or other waterborne craft, vacuum trucks, or other vehicles performing response activities shall not be deemed hazardous waste generators for the purposes of this MOU and shall not require generator identification numbers.
- c. During an immediate response all oil and/or oily materials used, collected, or recovered within the response area will be allowed to be expeditiously removed, transferred, or transported to temporary storage sites without uniform hazardous waste manifests.
- d. The immediate response exemption created in Article III shall be in effect at all times, for a period of up to thirty (30) days, while oil and/or oily materials are being recovered, transported, or transferred to temporary storage sites for material characterization. Additional thirty (30) day extensions may be granted under appropriate circumstances.

IV. Temporary Storage Sites

The Parties agree that:

- a. As soon as practicable once an immediate response has commenced, the Incident Commander or Unified Command will designate or approve temporary storage sites for storing all oil and/or oily materials used, collected, or recovered during a spill response.
- b. The Incident Commander will notify DTSC of all designated or approved temporary storage sites, and, to the extent practicable and feasible, will work in conjunction with the DTSC representative(s) and other state and local agencies to avoid any unnecessary deleterious impacts to the environment or threats to the public health and safety when designating or approving temporary storage sites.
- c. The Incident Commander will ensure that DTSC representatives have full access to all temporary storage sites to perform all appropriate regulatory activities.
- d. Permitted or interim status hazardous waste facilities, or other authorized facilities will obtain an emergency permit from DTSC to modify or necessitate modifying any existing permits issued by DTSC for acting as a temporary storage site. The Responsible Party will be liable for all costs associated with the emergency permit.
- e. Oil and/or oily materials stored or otherwise contained at temporary storage sites may not be transferred, transported, treated, disposed, processed, used or re-used, or otherwise utilized until the Incident Commander or Unified Command authorizes such activities. Authorization will not be given until such materials have been characterized (as described in Article V.), and a

volumetric determination of the amount of such materials recovered has been made or approved by the Incident Commander.

V. Material Characterization

The Parties agree that:

- a. Once the oil and/or oily materials have been contained at the temporary storage site, the Responsible Party, or, in the event of an orphan spill, the Incident Commander in conjunction with DTSC, must expeditiously determine:
 - (1) Those materials that are capable of being processed, used or re-used, or otherwise utilized as an ingredient in the manufacture of petroleum products or other products and therefore not a waste or hazardous waste; or
 - (2) Those materials that are waste but are nonhazardous waste; or
 - (3) Those materials that are hazardous waste.
- b. Materials capable of being processed, used or re-used, or otherwise utilized as an ingredient in the manufacture of petroleum products or other products will be expeditiously transported to any facility that is otherwise authorized during non-spills to perform such activities. Facilities performing such activities will obtain emergency permits from DTSC before processing, using or re-using, or utilizing such materials. The Responsible Party will be liable for all costs associated with the emergency permit.
- c. Recovered oil and/or oily materials deemed a waste by the Responsible Party, or by DTSC, must undergo chemical waste characterization as provided in Title 22, California Code of Regulations, sections 66264.13 and 66265.13, to determine whether the materials recovered are hazardous waste.
- d. Materials characterized as hazardous waste after undergoing characterization will be managed in accordance with all applicable statutes, regulations, or permits prior to and during transfer, or transport to a hazardous waste management facility.
- e. Notwithstanding V.(a)-(d) or any other provision of law, debris that is contaminated only with petroleum or any of its fractions is exempt from regulation under Chapter 6.5, of Division 20 of the Health and Safety Code if all of the following conditions are met:
 - (1) The debris consists exclusively of wood, paper, textile materials, concrete rubble, metallic objects, or other solid manufactured objects.
 - (2) The debris is not subject to regulation as a hazardous waste under the federal act.
 - (3) The debris does not contain any free liquids, as determined by the paint filter test specified in the regulations adopted by the department.
 - (4) The debris is disposed of in a composite lined portion of a waste management unit which is classified as either a Class I or Class II landfill in accordance with Article 3 (commencing with Section 2530) of Chapter 15 of Division 3 of Title 23 of the California Code of Regulations, the disposal is made in accordance with the applicable requirements of the California regional water quality control board and the California Integrated Waste Management Board, and, if the waste management unit is a Class II landfill, it is sited, designed, constructed, and operated in accordance with the minimum standards applicable on or after October 9, 1993, to new or expanded municipal solid waste landfills, which are

contained in Part 258 (commencing with Section 258.1) of Subchapter I of Chapter 1 of Title 40 of the Code of Federal Regulations, as those regulations read on January 1, 1996.

VI. Emergency Permit

The Parties agree that:

- a. Once oil and/or oily materials have been deemed hazardous waste at the temporary storage site(s), the DTSC representative will expeditiously determine if the storage of such materials creates an imminent and substantial endangerment to human health or the environment.
- b. If such determination is made, the DTSC representative will immediately issue an emergency permit to the Responsible Party, or to the Incident Commander in the event of an orphan spill, for the temporary storage site(s).
- c. The emergency permit will thereafter be valid throughout the duration of the response activities but in no case in excess of ninety (90) days unless extended in writing by DTSC pursuant to Title 22, California Code of Regulations, Section 66270.61.
- d. The emergency permit shall allow all response personnel to expeditiously perform all other response activities (within the scope of DTSC's authority) that are reasonably necessary to prevent, reduce, or mitigate damages to persons, property, or natural resources of this State including transfer, treatment, storage, resource recovery, or disposal of materials used, collected, or recovered during the oil spill response.

VII. Miscellaneous

The Parties agree that:

- a. The terms of this MOU may be changed at any time by the mutual consent of both Parties by a written, signed amendment hereto.
- b. In the event that individual and severable portions of this MOU are found to be in conflict with either State or Federal law, regulations or policies, and, therefore, of no effect, the MOU will remain in effect without those provisions unless either party notifies the other in writing that the entire MOU is terminated.
- c. Any action to modify, amend, or terminate this MOU may only be taken by the Administrator of OSPR and the Director of DTSC, or persons to whom this authority is specifically delegated by them.

FOR THE OFFICE OF OIL SPILL
PREVENTION AND RESPONSE:

Pete Bontadelli
Administrator

FOR THE DEPARTMENT OF FISH
AND GAME:

Jacqueline E. Schafer
Director

FOR THE DEPARTMENT OF
TOXIC SUBSTANCES CONTROL:

Jesse Huff
Director

9970 - GRPs/Site Strategies

Due to the great length of the Site Strategies for this planning area, 9970 is bound in a separate cover as Volume II of this Area contingency Plan.

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