

ATTACHMENT 27 – NONTANK VESSEL CONTINGENCY PLAN (NTVP), SECTION H

Document Title: CALIFORNIA VESSEL CONTINGENCY PLAN	Issue: 9/28/2006
Document Section: h - ON-WATER CONTAINMENT & RECOVERY	Rev: 52 Page: 1

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h **827.02(h)** **On-Water Containment and Recovery**

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h.1 CONTRACT(S)/AGREEMENTS - OIL SPILL RESPONSE ORGANIZATION(S)

Attached are contract certifications for the following:

1. Oil Spill Response Organizations (OSRO):

- MSRC
- NRC

2. Salvage / Fire Fighting Emergency Contractor

- Marine Response Alliance (MRA)
- DONJON-SMIT

These contracts are intended to demonstrate that the above OSRO(s) will provide the requisite equipment and personnel in the event of an oil spill for each of the geographic regions the non-tank vessel transits in the regulatory required times.

The attached letter from the OSRO(s) that documents its review of the plan trajectories and their respective RRAW's which response equipment and personnel to satisfy the planning requirements.

h.2 RESPONSE CAPABILITY STANDARDS

On-water Containment and recovery Response Capabilities requirements are defined in 827.02(h)(2)(A) & (B) and summarized in the following table:

Table H-2. Summary of 827.02(h)(2)(A)&(B)
 On-Water Containment and Recovery Services
 for a Reasonable Worst Case Spill

	Time	Initial Recovery Capability	Initial Recovery Response Time	Pre-Staging Requirement Non Bunkering
San Francisco Harbor	<6 Hours	2500 BBL/day	2 Hours	–
Los Angeles/Long Beach	<6 Hours	2500 BBL/day	2 Hours	–
Stockton & Sacramento	<6 Hours	2500 BBL/day	2 Hours	2500 BBL
Santa Barbara Channel	<12 Hours	2500 BBL/day	2 Hours	2500 BBL Humboldt Bay to Monterey Bay Only
Balance of the Coast	<18 Hours	2500 BBL/day	2 Hours	--

Based on a review of the RRAWs with MSRC and NRC, it has been concluded that all the response capability standards set forth in 827.02(h)(2)(A)d(B) can be met or exceeded.

h.3(A) ON-WATER RESPONSE EQUIPMENT AND SERVICES

See h.1

h.3(B) OSRO EQUIPMENT SPECIFICS

See the OSRO approval attached



State of California - The Resources Agency

GRAY DAVIS, Governor

DEPARTMENT OF FISH AND GAME

<http://www.dfg.ca.gov>
Office of Spill Prevention and Response
1700 K Street
P.O. Box 944209
Sacramento, CA 94244-2090
(916) 327-9946



August 23, 2001

Mr. Michael A. LaTorre
Marine Spill Response Corporation
1105 13th Street
Everett, Washington 98201-1653

Dear Mr. LaTorre:

The approval of Marine Spill Response Corporation as a California Oil Spill Response Organization (OSRO) is hereby renewed. Contingency plan preparers may continue to refer to your equipment, personnel and services to satisfy response planning requirements for all geographic areas of California. Requirements in the California Code of Regulations, Title 14, section 819.02 have been met. You are granted approval at Levels 2-72 for all vessel and facilities contracted within Area Contingency Plan Areas 1 through 6 inclusive. Your approval includes the addition of the Sacramento and Stockton areas.

This approval shall be for a period of five years or until amended through legislation and/or rule making. If you have any questions, please feel free to contact me at the above letterhead address, or Mr. Bill Weber, of my staff, at telephone number (916) 324-5659 or by e-mail at bweber@ospr.dfg.ca.gov.

Sincerely,

Harlan Henderson
Administrator
Office of Spill Prevention and Response

cc: Mr. Bill Weber
Marine Safety Branch

Conserving California's Wildlife Since 1870

DEPARTMENT OF FISH AND GAME

1616 NINTH STREET
BOX 941299
SACRAMENTO, CA 94244-2099
Phone (916) 327-0046



April 20, 1999

Mr. G. E. "Ike" Ikerd
Manager - Southwest Area
Marine Spill Response Corporation
Post Office Box 760
Port Hueneme, California 93044

Dear Mr. Ikerd:

The Office of Spill Prevention and Response (OSPR) has completed the review of Response Resource Availability Worksheets (RRAW) you submitted on behalf of your clients to meet the exercise schedule requirements contained in California Code of Regulations (CCR), Title 14, Division 1, Subdivision 4, Chapter 3, Subchapter 3, Section 820.01(f). You have met the requirements for Area Contingency Plan (ACP) areas 1, 2, 3, 4, 5, and 6, for which you are currently contractually responsible for providing service coverage.

You have also met the requirements of CCR 819.02(a)(6), for having prepared an adequate Plan of Operations for your largest Reasonable Worst Case Spill (RWCS) client in ACP areas 1, 2, 3, 4, 5, and 6. If you undertake service coverage for any clients operating in ACP areas other than that mentioned above, or for clients having a larger RWCS in areas for which you are currently considered approved, you must submit RRAWs (or a document containing substantially the same information) applicable to those areas or RWCSs. Any new or revised documents should be submitted as an amendment to your Oil Spill Response Organization application to maintain approval for those ACP areas.

The arduous effort you and your staff expended to meet these requirements has allowed the OSPR to have a better understanding of your response capability and is appreciated. Please contact me at the letterhead address and phone number, or Mr. Jim Porter at (916) 445-7913, or in his absence, Mr. Chris Klumpp at (916) 322-1195 with any questions you may have.

Sincerely,

A handwritten signature in black ink, appearing to read "R. W. Floerke".

Robert W. Floerke
Assistant Deputy Administrator
Office of Spill Prevention
and Response

cc: Mr. Jim Porter, OSPR
Mr. Chris Klumpp, OSPR



August 27, 2002

Dan Sobieski
The O'Brien's Group
376 South Valencia Avenue
Brea, CA 92823

NONTANK VESSEL CONTINGENCY PLAN REQUIREMENTS

Dear Dan:

We have reviewed the Environmental Consequence Analysis, including trajectories and resources at risk, as required by the California nontank vessel contingency plan regulations. Specifically, we have reviewed your trajectories as listed below.

OOPS Trajectory
Port of Oxford
San Francisco Entrance
Harding Rock
San Pablo Bay
Carquisez Bridge
Port of Stockton
Port of Sacramento
Port Hueneme
Port of Los Angeles
Port of Los Angeles Turning Basin
Angels Gate
Port of Long Beach
Port of Long Beach Southeast Basin
Queens Café
San Diego Inner Harbor
San Diego Bay Entrance
Humboldt Bay (north Coast ACP)

Based on our review and analysis, we are able to provide the on-water containment and recovery and shoreline protection required for the identified resources at risk in the times required, as presented in section (g) of your plan. For section (h) and (i) of your plan, you should site NRC's OSRO Application, Response Resource Availability Worksheets and our Regional Resource Manual.

Regards,

James C. Riedel

A handwritten signature in black ink that reads 'James C. Riedel'.

General Manager

4.0 RESPONSE RESOURCES

4.1 MOBILIZATION TIMES

NRC resources (both NRC owned and those of ICN) are concentrated in the following ACP areas:

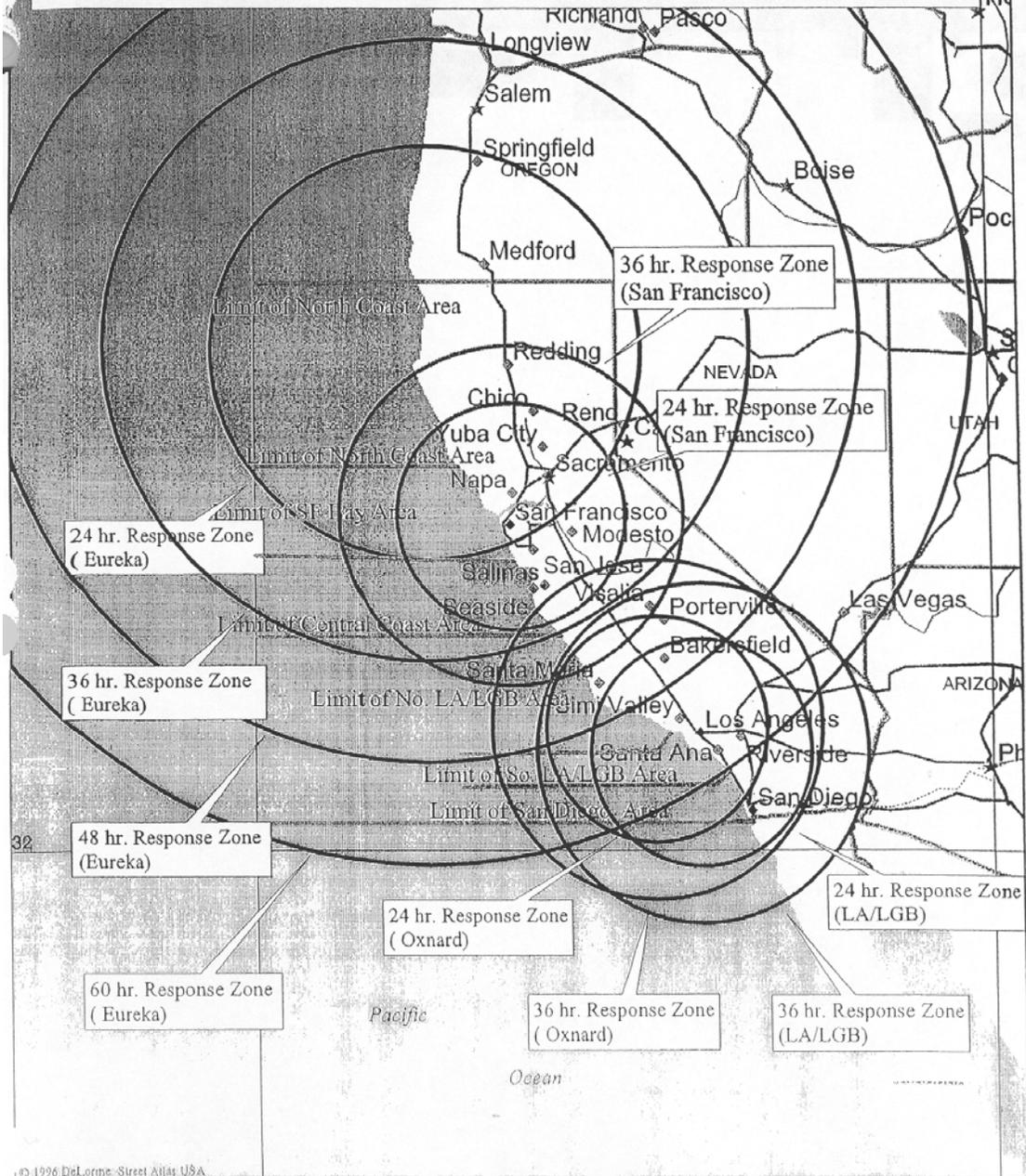
ACP AREA	EQUIPMENT LOCATION
ACP 1 - No. Coast	Eureka, CA
ACP 2 - San Francisco Bay and Delta (Including Stockton & Sacramento)	Richmond, CA Stockton, CA Sacramento, CA
ACP 4 - North LA/ Long Beach	Port Hueneme, CA
ACP 5 - South LA/ Long Beach	Long Beach, CA
ACP 6 - San Diego	San Diego, CA

Mobilization benchmarks for response resources are as follows:

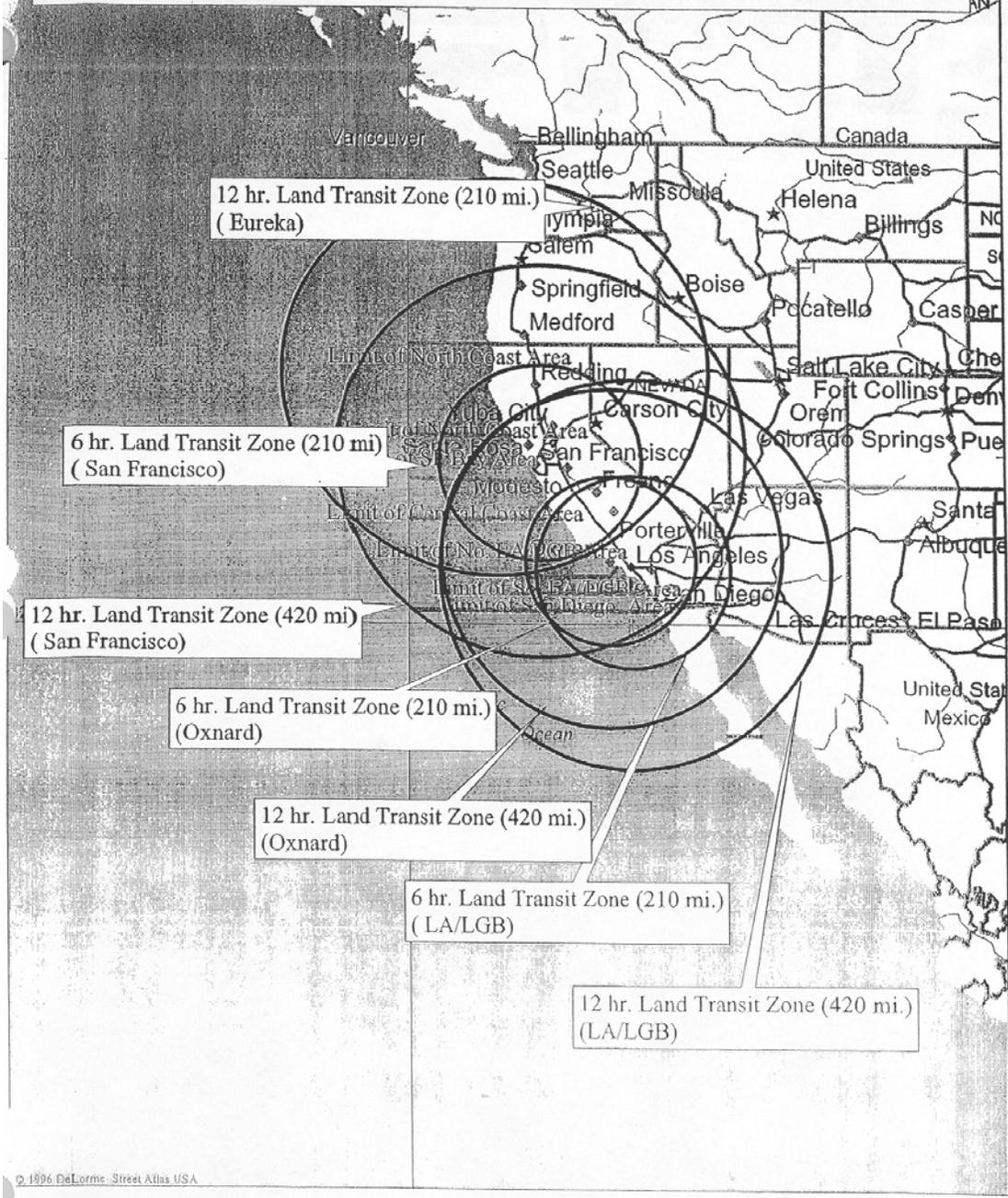
	<u>During Work</u>	<u>During Off-hours</u>
Response Vessels	1 hour	2 hour
Response Vehicles	1 hour	2 hour

The response time for resources has a mobilization allowance of 2 hours for vessels and 1 hour for vehicles, unless noted otherwise. Transit time allowances is based on 5 knots for water borne assets and 35 mph for land transit, unless noted otherwise.

NRC CA - Marine Resource Transit



NRC CA - Land Resource Transit



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4.2 NRC RESPONSE RESOURCES

4.2.1 NRC RESOURCES

The following Tables list the response equipment that NRC has located in the following Ports along the U.S. West Coast. More detail information is provided in the NRC Spill Response Contractor Application on file with the state of California.

TABLE 4-1 – NRC BOOM RESOURCES

LOCATION	RESOURCES
<u>Neah Bay, WA</u>	43" Offshore boom with ancillary gear. Offshore Sweep Boom
<u>Astoria, OR</u>	43" Offshore Boom with ancillary gear located on an OSRV. Offshore Sweep Boom
<u>Eureka, CA</u>	43" Offshore Boom with ancillary gear located on an OSRB. Offshore Sweep Boom
<u>San Francisco Bay Area</u>	21" Harbor Boom with gear located in Trailer 43" Offshore Boom with ancillary gear located in Trailers 21" Harbor Boom with ancillary located in trailers
<u>Stockton, CA Area</u>	21" Harbor Boom with ancillary gear located in a van
<u>Sacramento, CA Area</u>	21" Harbor Boom with ancillary gear located in a van
<u>Port Hueneme, CA</u>	42" Offshore Boom with ancillary gear located in a van
<u>Long Beach, CA</u>	43" Offshore Boom with ancillary gear located in Trailers
<u>San Diego, CA</u>	21" Harbor Boom with ancillary gear
<u>CONTINGENCY PACKAGE (CAP)</u>	<u>AUGMENTATION</u> 22,500 ft. of 43-inch Offshore Boom with ancillary gear 600 ft. of 43-inch Offshore Sweep Boom

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TABLE 4-2 NRC On Water / Nearshore Recovery Services

LOCATION	RESOURCE	Nominated as Non-Cascadable
<u>Neah Bay, WA -</u>	(1) Vikoma Cascade Weir Skimmer, TEDRC 5,465 BPD	
<u>Astoria, OR</u>	OSRV (2) In-hull 5 brush LORI Skimming Systems, TEDRC 12,379 BPD	
<u>Eureka, CA</u>	OSRB with (1) Marco Class XIC Skimmer, TEDRC 24,000 BPD	
	(1) Action Petroleum Double Drum Skimmer, TEDRC 1,954 BPD	
<u>San Francisco Bay Area</u>	(1) Vikoma Cascade Weir Skimmer, TEDRC 5,465 BPD	ACP-2
	(1) Vikoma Fast Flow TEDRC 3,154 BPD	
	(2) Vacuum transfer units with Acme Weir Heads, TEDRC 6,857 BPD	
	(1) Action Petroleum Model 60 skimmer, TEDRC 4114 BPD	ACP-2
	(1) Action Petroleum Model 24 skimmer, TEDRC 1954 BPD	ACP 2
<u>Pt. Hueneme, CA</u>	(1) Vikoma Cascade Weir Skimmer, TEDRC 5465 BPD	ACP 4, 5
CONTINGENCY AUGMENTATION PACKAGE (CAP)	Three (3) Marco Class XI-Combi Skimmers TEDRC = 24,000 bpd each	
	Three (3) Vikoma Cascade Weir Skimmers TEDRC = 5465 bpd each	
	Three (3) Guzzler Vacuum Transfer Units with Acme Weir heads TEDRC = 6857 each	

As requested by the California OSPR regulations (§817.02(4) and 818.02(4)), NRC has nominated the recovery resources designated above as non-cascadable, without prior approval of the Administrator. Tank vessel and facility client transfers areas are in ACP Areas Nos. 2, 4, and 5. Nominated resources are limited to these areas.

As allowed by the regulations, resources must be mobilized within 2 hours and on scene within 12 hours for high volume ports. Resources may be moved as permitted by the Federal On-Scene Coordinator or California Administrator through the Unified Command decision process. The OSPR Administrator shall determine which among the nominated recovery equipment will be designated as "Non-Cascadable" for each of the areas. The final determination may not include all resources nominated in each of the plans.

Currently, NRC has not been notified that any of the nominated resources have been designated as "Non-Cascadable" in support of a client's plan.

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TABLE 4-3 NRC Storage Services

Neah Bay, WA	100 bbl. Canflex Bladders
Astoria, OR	OSRV with storage
Eureka, CA	NRC Barge with aboard storage capacity.
	100 bbl. Canflex Bladder
Richmond, CA -	100-barrel Canflex Bladders
	(2) Shallow Water Barge set.
Pt. Hueneme, CA	100 bbl. Canflex Bladder
CONTINGENCY PACKAGE (CAP)	AUGMENTATION (6) Sets of Shallow Water Barge with capacity of 238 bbls each Total = 1434 bbls.

The Crowley Marine barges through the NRC Independent Contractor Network are available for response and may be utilized as both storage and skimming platforms. These include the following barges which may be mobilized on as available basis.

CROWLEY PETROLEUM BARGES – West Coast			
BARGE	SIZE	TYPE	BARREL CAPACITY
450-2	400x99.5x25	Petroleum	149,000
450-6	400x99.5x25	Petroleum	149,000
450-7	400x99.5x25	Petroleum	149,000
450-9	400x99.5x25	Petroleum	149,000
450-10	400x99.5x25	Petroleum	149,000
450-11	400x99.5x25	Petroleum	149,000
	300x80x27	Petroleum	103,968
102	430x80x27	Petroleum	150,000
360	357.5x68x24.5	Petroleum	86,540
255	250x76x16.8	Petroleum	49,508
250-10	250x76x16.8	Petroleum	49,993
450-3**	400x99.5x25	Petroleum	149,000
450-8**	400x99.6x25	Petroleum	148,000

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TABLE 4-4 Communications

OSRV/OSRB	VHF-FM Motorola base station (programmable) & phone patch capable
	One Inmarsat M Portable Satellite system (voice and fax capable)
	UHF-FM Motorola base station (programmable) & phone patch capable
	One HF/SSB Radiotelephone set
	Two Motorola 3 watt Cellular phones w/RJ-11 interface
	Six Motorola GP300 8-channel Programmable UHF-FM handheld radios
	Six Motorola MT 2000 160-channel Programmable VHF-FM highband handheld radios
	One Motorola 6-bin Rack battery rapid chargers for handheld radios
	One HP OfficeJet facsimile machine
	One Compaq Prolinea computer
CONTINGENCY AUGMENTATION PACKAGE (CAP)	<p>One Mobile Communications Center, including the following equipment:</p> <ul style="list-style-type: none"> a.) Two UHF-FM Motorola base stations (programmable) & phone patch capable b.) Two VHF-FM Motorola base stations (programmable) & phone patch capable c.) One HF/SSB Raytheon 152 Radiotelephone set d.) One Scientific Atlanta Inmarsat M portable Satellite system (voice & fax) e.) One Panasonic PABX (24 line capable) w/9 telephones f.) Two Motorola 3-watt Cellular phones w/RJ-11 interface g.) Six Motorola GP300 8-channel Programmable UHF-FM handheld radios h.) Six Motorola MT2000 160-channel Programmable VHF-FM highband i.) Two Omnifax OX-3 facsimile machines j.) Two Dell NL25 Laptop Computers

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4.2.2 EQUIPMENT READINESS

NRC has instituted a preventive maintenance program to ensure its oil spill response resources are maintained in a constant state of readiness. Readiness is the cornerstone of NRC's operational mission and equipment preparedness is the basis of our existence.

In addition to our preventive maintenance program, NRC routinely conducts equipment-training sessions, which provide operational evaluation opportunities for each piece of equipment used.

4.2.3 EQUIPMENT OWNERSHIP

All equipment is owned or under contract to NRC. In addition to its own response resource base, NRC has access to a massive amount of contractor resources through pre-existing contractual means.

4.2.4 PREVENTIVE MAINTENANCE

The oil spill response equipment owned and operated by NRC is inspected, maintained, deployed and operated according to a preventive maintenance program. Each item of response equipment is inspected monthly, operated quarterly, and subjected to a detailed annual service and operation program in accordance with the manufacturer's recommended procedures. Ancillary gear is inspected and inventoried quarterly. Spill response equipment is deployed and operated under actual service conditions regional training exercises conducted eight to ten times annually. Equipment is further deployed and operated when opportunities arise from participation in government and industry sponsored drills.

Records of equipment inspection, operation, and maintenance are maintained at NRC's offices in Great River, NY and available upon request.

4.2.5 RESOURCE UNAVAILABILITY

NRC, has access to a vast amount of response equipment that can be airlifted to the West Coast. In addition, NRC has redundant agreements in place with almost all environmental contractors and Cooperatives on the West Coast. NRC will advise as required by regulations whenever the resources are out of service or in transit from their area of operation.

4.3 NRC INDEPENDENT CONTRACTOR NETWORK (ICN)

The Independent Contractor Network (ICN) represents a cornerstone of NRC's response resource base for such services as Shoreline Protection, Shallow Water Response and Shoreline Cleanup. Collectively, ICN Participants contribute to a networking structure, enabling NRC to cascade massive numbers of personnel and equipment into a response effort as dictated by its clients, their response plans, and the spill scenario being faced.

ICN Participants will also contribute a variety of support equipment such as pumps, generators, lighting systems, transportation assets and more. Materials such as sorbents, personal protective clothing, hand tools, spare parts, and other consumables are available in sufficient quantities within the ICN.

4.3.1 ICN ACTIVATION PROCEDURES

All participants in the Independent Contractor Network (ICN) will maintain 24-hour access telephone numbers with personnel assigned to respond to after hour emergencies. ICN participants will be activated by NRC upon request for oil spill response services. Upon proper Authorization to Proceed, the ICN and requested response resources will be fully activated and mobilized.

Contacting NRC's International Operations Centers (IOC) 24-hour number is the only authorized method of ICN activation.

ICN Activation:

- 1) Contact International Operation Center (IOC) to request response services.
- 2) IOC contacts NRC response personnel to initiate response.
- 3) NRC response personnel contact ICN to activate resources.
- 4) IOC Duty Officer will fax responding ICN an Authorization to Respond form detailing requested response resources.

4.3.3 NRC RESPONSE PERSONNEL

NRC oil spill response personnel are appropriately OSHA trained and available for oil spill containment and cleanup from NRC's personnel pools in Neah Bay, Seattle, Astoria, Eureka, San Francisco, Port Hueneme, Los Angeles/Long Beach.

NRC response personnel meet and perform within the regulations and requirements as outlined in 29 CFR 1910.120.

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h.3(C) PERSONNEL AVAILABLE TO RESPOND

- a. See OSRO approval and ERST's Primary Response Contractor Approval attachment
- b. ICS Job Descriptions - See Response Procedures j1.
- c. Equipment/Personnel Mobilization Plan - See OSRO approval.
- d. See OSRO approval.

h.3(D) PROCEDURES FOR TRANSPORT OF REQUIRED EQUIPMENT, PERSONNEL AND OTHER RESOURCES

See h.3(B) OSRO approval.

h.3(E) EQUIPMENT AND PERSONNEL AVAILABILITY

See OSRO approval.

h.4 ON-WATER RESPONSE AND RECOVERY STRATEGY

General Spill Response Considerations

The response techniques, or combination of techniques employed in a spill are dependent upon the product spilled, quantity, location, response time, weather conditions, responder capability, and availability of response equipment. Among the options available are:

- Mechanical cleanup methods.
- Dispersants
- In-Situ burning
- Natural removal

Offshore Procedures

Mechanical Cleanup Methods (Refer to FIGURE 1 for Response Strategies)

Mechanical oil spill response uses physical barriers (boom) and mechanical devices (skimmers) to redirect and remove oil from the surface of the water.

Oil Containment Boom: Spilled oil floating on the water's surface is affected by wind, currents, and gravity, all of which cause it to spread. Boom is used for concentrating oil so that it is thick enough to be skimmed, for keeping oil out of sensitive areas, or for diverting oil into collection areas.

DEPARTMENT OF FISH AND GAME

416 NINTH STREET
P.O. BOX 944209
SACRAMENTO, CA 94244-2090



(916) 327-9943

January 12, 1996

Mr. Tim Perkins
Emergency Response Strike Team
Incorporated (ERST)
376 South Valencia Avenue
Brea, California 92621

Dear Mr. Perkins:

PRIMARY RESPONSE CONTRACTOR APPROVAL

The purpose of this letter is to confirm your status as a Primary Response Contractor for oil spill response, within the State of California. This approval is based upon the review of both your application and the performance of the Emergency Response Strike Team (ERST), at the Los Angeles/Long Beach Area Drill, conducted during October 17-18, 1995.

Your file has been assigned the Control Number CO-00-0018. Please refer to this number for all future correspondence.

Your Primary Response Contractor Approval is granted for the following category:

Oil Spill Response Management Services

The approval issued by this office is based upon your company having and continuing to provide a complete service meeting the regulatory requirements for a Primary Response Contractor, as set forth in the California Code of Regulations, Title 14, Section 819.

Please contact Mr. Jack Geck, of my planning staff, at telephone number (916) 323-4664, to answer any questions you may have concerning this approval.

Sincerely,

A handwritten signature in cursive script that reads "Jack Sands".

Robert J. Sands
Chief, Planning Branch
Office of Oil Spill Prevention
and Response

DEPARTMENT OF FISH AND GAME

1416 NINTH STREET
P. O. BOX 944200
SACRAMENTO, CA 94244-2000
Telephone (916) 445-4338



September 2, 1997

Mr. William C. Park III
Vice President, Western Region
Marine Spill Response Corporation
1105 13th Street
Everett, Washington 98201

Dear Mr. *Park*

Effective the date of this correspondence, the Marine Spill Response Corporation's re-application as a Primary Spill Response Contractor (PRC) in the State of California, dated January 7, 1997, has been approved. All regulatory requirements in Sections 819.02 and 816.03 of the California Code of Regulations, Title 14, have been met.

In addition to the regulatory requirements, approval levels are granted based upon your application, actual services provided, equipment and resources available and area of response. State approved PRC levels assigned to your organization are enclosed.

If you wish to appeal any approval level(s) that have been set, you may submit a written request for reconsideration to the Administrator of the Office of Oil Spill Prevention and Response at the above letterhead address. The request must contain the basis for the reconsideration and any pertinent supporting evidence or documentation.

Response services must be available as approved. You are required to notify the Administrator of significant reductions in equipment or personnel levels in advance, if planned, or within 24 hours of becoming aware of such change. If unplanned, this notice may be verbal, followed by a written notice within a reasonable time. Movement of significant equipment or personnel will require the identification of backup resources if such movement will impact your ability to provide approved levels of service.¹

¹ Note: If you can provide services in excess of the levels required to meet State mandates for a specific area, reporting of significant reductions in response service capability need not be reported to the Administrator as long as remaining resources continue to meet minimum State planning standards.

Mr. William C. Park III
September 2, 1997
Page Two

An approval may be revised/renewed at the request of the PRC in the event of a significant increase or decrease in response resources. Failure to comply with the requirements of approval may result in revocation or suspension of an approval.

A PRC's approval shall be for a period of five years. An application for renewal must be filed sufficiently in advance of the expiration date to allow the OSPR to properly evaluate the renewal submission.

If you have any questions, you may contact me at the letterhead address, or you may call Mr. Carl Young, of my staff, at telephone number (915) 324-7628.

Sincerely,



Pete Bontadelli
Administrator
Office of Oil Spill Prevention
and Response

Enclosures (5)

cc: Mr. G. E. Ikerd
Marine Spill Response Corporation



State of California - The Resources Agency
DEPARTMENT OF FISH AND GAME
<http://www.dfg.ca.gov>

Office of Spill Prevention and Response
Post Office Box 944209
Sacramento, California 94244-2090
(916) 327-9946

GRAY DAVIS, Governor



March 14, 2001

Mr. Steve Candito
National Response Corporation (NRC)
3500 Sunrise Highway, Suite T103
Great River, New York 11739

Dear Mr. Candito:

This office has completed the review of your recent Oil Spill Response Organization (OSRO) application. Your application has been approved for Levels 2 through 72 in all Area Contingency Planning Areas and operating environments identified in the application. The Statement of Contractual Terms made jointly by NRC and Foss Environmental, and the integrations of NRC response resources into Foss' approved application on file with OSPR were essential elements in meeting the standards for approval.

Contingency Plan preparers may continue to refer to your equipment, personnel and services to satisfy response planning requirements. The requirements in California Code of Regulations, Title 14, section 819.02 have been met.

If you have any questions, you may contact me at the above letterhead address, or Mr. Jack Geck of my staff at (916) 323-4664 or email at jgeck@ospr.dfg.ca.gov.

Sincerely,

Scott D. Schaefer
Administrator (Acting)
Office of Spill Prevention and Response

cc: Mr. Jack Geck
Marine Safety Branch

DEPARTMENT OF FISH AND GAME

<http://www.dfg.ca.gov>
1700 K Street
Post Office Box 944208
Sacramento, CA 94244-2080
(916) 327-9948

July 20, 2001

Mr. Jim Riedel
National Response Corporation (NRC)
6307-B Seaview Avenue NW
Seattle, Washington 98107

Dear Mr. Riedel:

Thank you for your letter dated June 29, 2001. The Office of Spill Prevention and Response (OSPR) has reviewed your existing Oil Spill Response Organization (OSRO) application on file and has determined that you meet the oil recovery rates and initial on-water recovery volumes based on the new 25 percent increase effective July 01, 2001.

Feel free to use this letter to notify your clients under contract that they have contracted enough equipment to meet the new recovery rate and recovery volume values.

If you have any questions please contact Mr. Bill Weber, of my staff, at (916) 324-5659, or e-mail at bweber@ospr.dfg.ca.gov.

Sincerely,



W. B. Leland
Assistant Deputy Administrator
Office of Spill Prevention and Response

cc: Mr. Bill Weber
Marine Safety Branch

Conserving California's Wildlife Since 1870

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The success of booming as a strategy is dependent on currents, winds, and waves. Currents can draw the oil under the boom; waves may cause oil splash over; wind and currents may cause the boom to sink or plane; and currents or debris may damage the boom.

- *Skimmers*: Skimmers remove oil from the water's surface and are typically used with boom that concentrate the oil to make it thick enough to be skimmed efficiently. The effectiveness of the skimmer is determined by how quickly it can collect the oil, and how much water is mixed in with it. The oil collected by the skimmer is stored in a containment tank.

Advantages

- Physically removes oil from the environment
- Allows recycling or proper disposal of recovered oil.
- Minimizes direct environmental impacts in open water areas.

Disadvantages

- Limitations of mechanical recovery exist. Wind, waves and currents may allow only a fraction of the spilled oil to be contained and recovered.
- The limitations of mechanical protection and recovery methods must be fully considered. Booms may fail and skimmers may clog.

Dispersants

Dispersants are specially designed oil spill products that are composed of detergent-like surfactants in low toxicity solvents. Dispersants do not actually remove oil from the water. Instead, they break the oiled slick into small particles, which then disperse in to the water where they are further broken down by natural processes. Dispersion of oil into the water column occurs naturally in untreated spills; dispersants just speed up the process. Dispersants also prevent the oil droplets from coming together again and forming another surface slick. Dispersants also reduce the ability of the oil to attach to birds and other animals, shoreline rock, and vegetation. Fire and explosion hazards are lessened because dispersants reduce evaporation of volatile oil components. The effects of the rapidly diluted dispersed oil must be weighted against the effects of that oil if it were allowed to impact wildlife populations or the shoreline.

Dispersants may be applied to oil from airplanes helicopters, or vessels. Dispersant spray systems are designed to provide the correct droplet size and dosage, as both are important factors in effective oil dispersal. The volume of dispersant applied is a fraction of the volume of oil treated, with a typical dispersant to oil ration to 1:20.

When the oil is treated with dispersants, it initially disperses within approximately the upper 30 feet of the water column. The dispersed oil will be spread horizontally by tides and currents, rapidly decreasing the concentration of the oil. Many impacted water column populations will rapidly recover from the dispersed oil exposure because of their mobility. If these impacts are expected to be short term, these organisms are given a lower priority than bird and mammal populations and sensitive shoreline habitats, which when oiled recover quite slowly. Typically, dispersant use is reserved for deeper waters to ensure sufficient dilution of the oil and to prevent impacts on bottom-dwelling organisms. There may be cases where use in shallow environments can be justified to minimize impact to highly sensitive areas that are difficult to otherwise protect.

Advantages

- Reduces impact of surface oil on shorelines, sensitive habitats, birds, mammals, and other wildlife.
- Rapid treatment of large areas.
- Reduced oil storage and disposal problems.
- Accelerated natural degradation processes.
- Use in high seas and currents is feasible/

Disadvantages

- Increased oil impacts on organisms in the upper 30 feet of water column.
- Time frame for effective use may be short.
- Application equipment may be unavailable.

3. In-Situ Burning

In-situ burning means the controlled burning of oil "in place." On open water, burning requires specialized fire resistant boom because uncontained oil rapidly spreads too thin to sustain combustion. In-situ burning requires less labor than most other techniques and can be applied in areas where other methods cannot be used because of limited access to the spill location. Fire-resistant booms are subject to some of the same wind and sea limitations as mechanical removal, since a fire boom behaves much like a standard containment boom. However, burning rapidly removes large quantities of oil and minimizes the need for recovery and storage.

The decision to use in-situ burning must consider the tradeoffs involved, including:

- the impact on air quality
- the benefit of rapid oil removal
- the safety of the response workers, and
- the risk of secondary fires.

In-situ burns have typically removed over 90% of the contained oil during experiments and accidental burns of petroleum on water. The small percentage of the original oil volume left unburned is typically a viscous, taffy-like material that floats for a long enough period of time to be manually removed.

Advantages

- Reduces impact of surface oil on shorelines, sensitive habitats, birds, mammals and other wildlife.
- Rapidly consumes oil in the burn.
- Reduces oil storage and disposal problems.
- Eliminates the air quality impacts of the volatile hydrocarbons that would otherwise evaporate.
- The products of combustion are diluted in the air above and downwind of the burn, dispersing rapidly at ground level to normal concentrations.

Disadvantages

- Use limited to correct atmospheric and sea conditions or offshore areas to protect public health.
- Equipment required for burning may not be readily available.
- Time frame for effective use may be short due to difficulty of igniting weathered oil.

4. Natural Removal

- To do nothing may sometimes be appropriate. No action is taken except for monitoring the movement of the spilled oil (i.e. light hydrocarbons are volatile and highly flammable/recovery may not be attempted because of fire hazards).

B. Shallow Water/Shoreline Procedures

1. Mechanical Cleanup Methods (Refer to FIGURE 2 for Strategies)

- *Open Ocean Boom:* In areas of shallow water, it may be possible to collect or corral the oil with ocean boom and take it to deeper water or low-current areas that have better skimmer access and higher recovery rates.
- *Bottom-seal Boom:* This boom is designed for deployment in very shallow water where traditional boom may foul on the bottom during low water levels. This boom's special features allow it to conform to the substrate, so that it can continue to act as a barrier to oil during changing tides or lower water levels. Bottom seal boom uses ballast tubes that are filled with water and actually lay on the bottom to provide a seal against oil passage. Shallow water boom is effective in higher-current areas because the shallow skirt minimizes the drag in the current.
- *Sorbent boom:* Sorbent boom is designed primarily to absorb oil although it can act as a protective measure against thin oil sheens under very quiet water conditions. Snare boom (pom-poms tied onto a line) is effective as a sorbent of more viscous oils under higher wave and current conditions. In any current, sorbent boom can contain only the thinnest sheens. When used with conventional booms, sorbents can be placed outside of the boom to pick up small amounts of escaping oil, or inside the boom to absorb small amounts of contained oil.
- *Inland Boom:* Inland boom is the smallest conventional boom and is designed for deployment in very shallow water; as the draft is only 6-12 inches. It is normally deployed in more protected waters where there is little or no wave action.

Figure 1. Offshore Response Strategies

Equipment	Use For:
1) Fast Response Unit	<p>A) Skimming oil offshore with a readily available seaworthy workboat.</p> <p>B) Ideal skimming in 3 to 4 foot seas. Heavier seas permissible under suitable conditions.</p> <p>C) Chasing oil slicks to assist the OSRVs in recovery</p> <p>D) The most immediate mechanical skimming means to respond offshore other than ID Boat if one is in vicinity. Draft of workboat determines the water depth for use in bays, 6 to 8 feet of water the minimum.</p> <p>E) Combustible Grade D and Grade E petroleum hydrocarbon spills if vessel is certified likewise.</p>
2) Identified Boats	<p>A) Rapid response skimming offshore until other equipment arrives.</p> <p>B) Skimming offshore in seas up to 4 feet in an advancing or stationary mode.</p> <p>C) Combustible Grade D and Grade E petroleum hydrocarbon spills.</p>
3) Oil Spill Response Vessels - High Volume, Open Sea	<p>A) Skimming long-duration, more extensive spills in a stationary mode where chasing after oil slicks is not required; for instance, down-wind and down-current from a well that is blowing-out of control; towing to skim is limited to about a one knot advance.</p>
4) Open Sea Boom	<p>A) Containment of oil for recovery by skimmers.</p> <p>B) Preventing spilled oil from spreading.</p> <p>C) Preventing measure in case oil may be spilled. <ul style="list-style-type: none"> 1) Self-inflating. 2) Can be operated in up to 6 foot seas and 20 knot winds. 3) Stocked in 500 foot sections, but an be separated into 50 foot sections. 4) Can be deployed by 1 to 3 men, from a dock, boat, using a crane, or by helicopter. </p> <p>D) Herding oil slicks for pickup by HOSS barge.</p>
5) Boat Sprayer System for Dispersants	<p>A) Spraying "Low-mixing energy" dispersants from the bow of the workboats, onto oil slicks.</p> <p>B) Fresher, not very weathered, less viscous, crude oils (usually not mousse).</p>
6) Exxon Corexit 9527/9500 - Oil Dispersant Inventory and Logistics	<p>A) Air to break up oil spills on water. <ul style="list-style-type: none"> 1) Must have USCG approval. </p>

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Equipment	Use For:
7) Chemical Dispersants Aircraft Spraying	<p>A) Rapid application of dispersant and/or coverage of large areas.</p> <p>B) Sea conditions that are unacceptable for other equipment and methods.</p> <p>C) Very distant or remote job sites.</p> <p>D) More beneficial spray patterns.</p> <p>E) Spill treatment in non-navigable waters.</p> <p>F) Spills of a size sufficient to keep equipment in use.</p>

Figure 2 Shallow Water/Inland Response Strategies

Equipment	Use For:
1) Self-Propelled Shallow Water Skimmer	<p>A) Skimming oil slicks while steering the vessel forward.</p> <p>B) Recovering old slicks herder or advancing to the skimmer.</p> <p>C) Inland or nearshore skimming in a stationary or advancing mode.</p>
2) Barge or Vessel Mounted Mop Skimmer	<p>A) Calmer waters.</p> <p>B) Removes oil contained in boom or in pockets.</p> <p>1) Excellent oil to water pick-up ratio</p> <p>2) Portable</p>
3) Floating Suction Oil Skimmer - (Swiss) Oela III	<p>A) Calm water conditions, such as:</p> <p>1) Removing confined oil from within booms.</p> <p>2) Cleaning oil from pits, tanks, ponds, slips, docks, rivers, canals, and ditches.</p> <p>3) Used in conjunction with hand skimmers</p>
4) Nearshore Boom (36 inches)	<p>A) Calmer waters.</p> <p>B) Containing spilled oil so that it can be recovered by skimmers.</p> <p>C) Preventing spread of spilled oil.</p> <p>D) Precautionary measures should oil be spilled.</p> <p>E) Diverting spilled oil and/or trash to another area.</p> <p>F) Concentrating spilled oil for more efficient collection.</p> <p>G) Barricading traffic or trash.</p>
5) Shoreline Boom	<p>A) Protection of shorelines from offshore spills.</p> <p>B) Containment of shallow shoreline spills.</p> <p>C) Containment of marsh spills from entering coastal waters.</p> <p>D) Preventing oil from entering or escaping tidal areas.</p>

<p>6) Oil Sorbents</p>	<p>A) Absorption of thin oil slicks or rainbows of oil.</p> <p>B) Wiping oil off structures, rock shorelines, vegetation, vessels, other oil spill equipment, etc. 1) Can be wrung out and reused 2) Can be recycled thus reducing disposal cost and volume.</p> <p>C) Can be used in lieu of straw and other particulates difficult to retrieve and dispose.</p> <p>D) A floating barrier to aid other containment and recovery devices.</p> <p>E) Can be used in congested or restricted areas.</p>
<p>7) Viscous Type Absorbents</p>	<p>A) Absorption of heavier oils.</p> <p>B) Wiping off rocks or structures, etc.</p> <p>C) Floating barrier.</p>
<p>8) 50 Barrel Oil Storage Barge</p>	<p>A) Offloading Shallow Water Skimmers (temporary storage).</p> <p>B) Additional storage for shallow water skimmers.</p> <p>C) Transport recovered oil.</p> <p>D) Combustible Grade D and Grade E hydrocarbon spills.</p> <p>E) Lakes, Bays, Rivers and other calm waters.</p>

Quick Approval Process For Dispersant Use In Waters Off California

Introduction

The following process has been developed by the California Department of Fish and Game, Office of Oil Spill Prevention and Response (OSPR) and the National Oceanic and Atmospheric Administration's Hazardous Materials Response and Assessment Division to provide for the timely and effective use of dispersants for oil spills in marine waters off California.

There are presently two commonly recognized approaches to remove significant quantities of spilled petroleum from marine surface waters. The most common technique involves mechanical skimming devices which typically remove less than 20% of the spilled petroleum (National Research Council, 1989). The second and more controversial method is the use of chemical agents (e.g. dispersants) to disperse oil into the water column. The effectiveness of chemical dispersants has been reported to range from zero to 100 percent depending on the type of petroleum spilled, the dispersant used, and the approach employed to estimate effectiveness (National Research Council, 1989). A third approach, in-situ burning, is still in the developmental stage.

Dispersants offer advantages over skimming technology when addressing dispersible oils. These include: dispersants can be applied in offshore or remote areas where the use of skimming vessels may be limited or response times protracted; dispersants can be used more effectively in sea states where skimmer vessels may not be able to operate; and aerial application of dispersants can more quickly address larger areas of spilled petroleum than skimmer technology. In addition, dispersants can be used in concert with mechanical skimming devices to increase the rate of surface oil removal.

Dispersion of petroleum into the water column does not alleviate the risk of petroleum-related impacts on the environment. Dispersant application does however, have the potential to accelerate cleanup of spilled petroleum on the surface of the water and at the same time reduce the risk of petroleum-related impacts on environmentally sensitive areas. In the case of California, environmentally sensitive areas include the productive intertidal regions, tidal inlets, tidal marshes and other wetland areas of the coastal islands and mainland and the surface waters where endangered marine mammals and large concentrations of sea birds might exist.

The controversial aspects of dispersants relate primarily to their effectiveness and toxicity. The effectiveness of dispersant

application depends on many factors including: type and weathered state of spilled petroleum; the dispersant used; sea state; and application efficiency. It is thus difficult to predict in advance the precise effectiveness of dispersant application at any one spill due to the many controlling variables (NRC, 1989).

A recent review of dispersant toxicity studies (NRC, 1989) suggests that the present generation of dispersants themselves do not present a significant threat to marine life. The primary dispersant related threat to the environment comes from the dispersion of spilled oil constituents into the water column. However, studies show that the acute toxicity associated with dispersed oil is likely to be short term as the dispersed oil is typically diluted within hours to below levels expected to produce impacts on the water column community. These findings coupled with the potentially severe consequences to natural living resources when oil is on the water's surface or deposited within the productive intertidal regions suggest that when possible the dispersion of oil may be the best response choice after an oil spill has occurred.

The California marine oil spill response community relies almost exclusively on skimmer technology to recover spilled petroleum in the open ocean. Though dispersants have been used in the past, consideration of and consent for their use has been slowed by the lack of an effective, well reasoned decision-making/approval process. Owing to the logistical constraints and relatively small window of opportunity in which dispersants may be effectively applied, the decision to use dispersants must be made in a timely fashion.

The purpose of this document is to combine an existing Quick Approval Zone policy for use of dispersant in the waters 15 miles or more off the coast of California with California's draft policy for use of dispersants in state waters. The resulting dispersant use decision making policy is designed to address the use of dispersants in all waters off the coast of California.

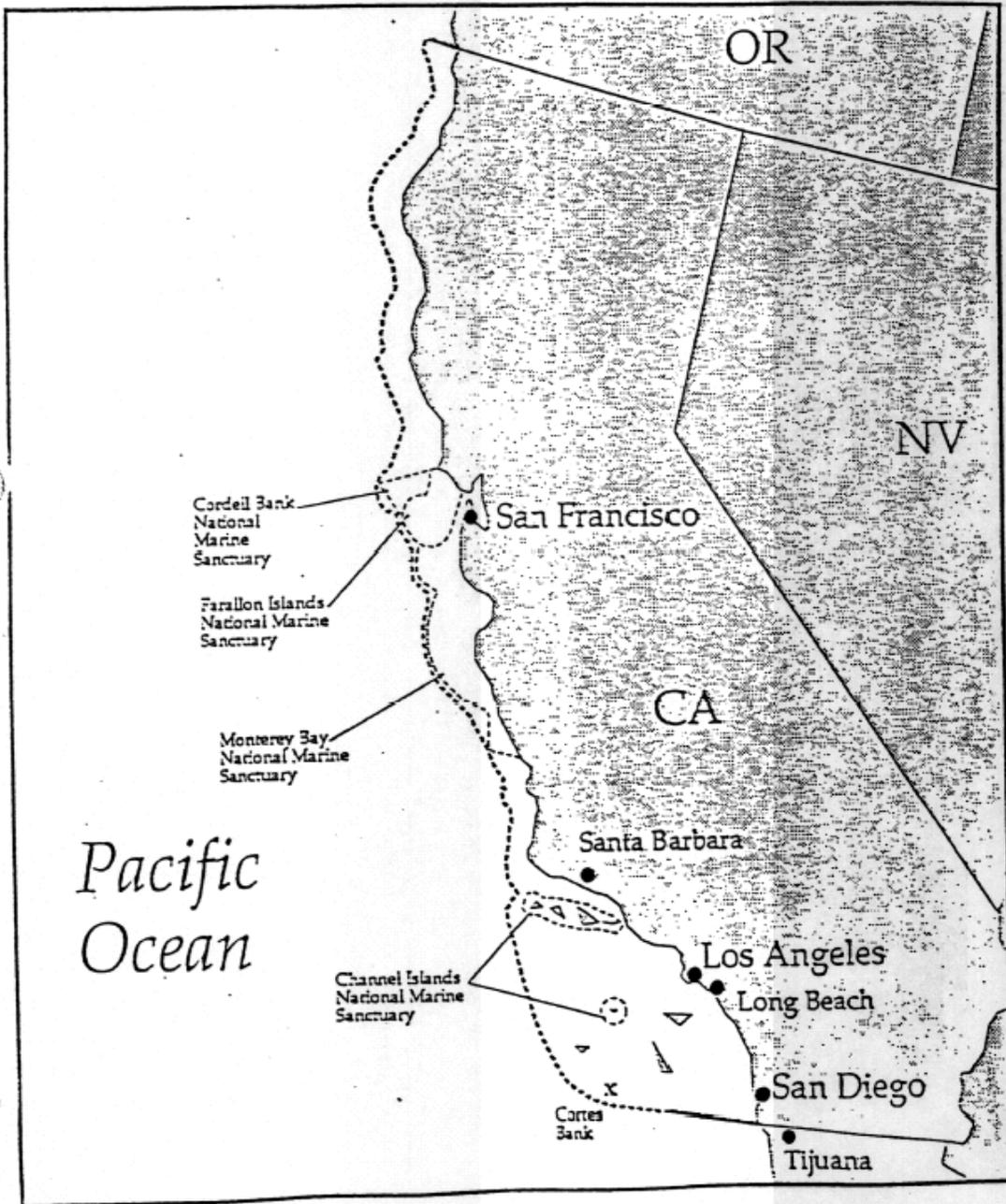
Background

In 1994, the 11th U.S. Coast Guard District and Region IX of the U.S. Environmental Protection Agency (EPA) along with the State of California and other members of the Regional Response Team (RRT), developed a Quick Approval Zone Plan to expedite dispersant use in the offshore water of California at a "safe" distance from environmentally sensitive areas (Region 9 RRT, 1994). The actual area of the Quick Approval Zone (QAZ) is those waters from the Oregon border to a point 15 nautical miles from the Mexican border (to provide the Mexican government with input into dispersant use decisions that may effect their waters) and west from a line 15

Proposed Boundary of "Quick Approval Zone"

State of California

USE ONLY AS A GENERAL REFERENCE



nautical miles from the nearest point of land and extending out to the western most limits of the national Exclusive Economic Zone (Figure 1). Special cases were made for offshore islands which also had a 15 nautical mile dispersant use buffer zone. The separation of the QAZ from California waters was undertaken to accommodate the State until it could develop a dispersant decision process for California waters including the environmentally sensitive nearshore areas as required by State statute.

The QAZ Plan was a streamlined dispersant use checklist process to provide the Federal On Scene Coordinator (FOSC), the federal representative in the Unified Command (UC), with a mechanism to secure RRT permission or denial for dispersant use within one to two hours.

Until the present, the State had no uniform published approach or guide lines for dispersant use. In early 1995, the OSPR, finalized a "draft" Dispersant Use Decision Process (DUDP), pursuant to State statutory requirements, which addressed the use of dispersants in State waters (OSPR, 1995). The purposes of the 1995 document were to provide: a written position and guidelines for dispersant use in state waters; a process for incorporating dispersant efficacy and biological resources data into the decision making process; and a speedy DUDP for examining dispersant.

While the QAZ process was designed to provide a quick dispersant response in waters away from environmentally sensitive areas, the State's DUDP was designed to protect the most environmentally sensitive areas, when possible, through selected dispersant use. In general, the State has identified environmentally sensitive areas as the near shore surface waters, including those surrounding the offshore islands of the state, where endangered marine mammals and thousands to hundreds of thousands of sea birds may exist at any one time and the highly productive tidal inlets and intertidal regions of the mainland and offshore islands.

The State's premise on dispersant use is that in general, petroleum on the surface of the ocean poses more of an immediate and long term risk to living marine resources and habitats than petroleum dispersed into the water column. There are exceptions to this approach and they are identified in the QAP boundary definition and discussed in the Quick Approval Process Checklist backup material provided in Appendix 1.

Quick Approval Process (QAP) for Dispersant Use in Waters off California

If a dispersant response is to be successful it must typically be undertaken within a small window of opportunity following the

release of oil, which often can be measured in hours . In order to accomplish such a task, the UC must have a mechanism at their disposal to expedite the dispersant use decision. The QAP, a combination of the existing federal QAZ and the State's draft DUDP, is such a mechanism. This accelerated review process, conducted by the Planning Section of the UC, is designed to provide the UC with sufficient information to determine if a dispersant use request should be made and to provide members of the RRT with sufficient information to approve or disapprove within the first two hours of its receipt. This information is provided through the use of an Incident Command (IC) decision making process and support documents. If the results of the decision making process supports dispersant use, the FOSC, representing the UC, will contact the RRT, provide information as required, and obtain a dispersant use decision.

QAP Boundary Definition

The geographic boundaries of the QAP are those marine waters off the coast of California which occur between lines drawn perpendicular to the Oregon/California and California/Mexican borders. A five mile exclusion zone is provide from each boundary to insure the sovereignty of the waters of Oregon and Mexico (the government of Mexico has authority over the use of chemical countermeasures in their waters. Dispersant use in these waters will require coordination with the Joint Response Team). Offshore, the QAP extends seaward to the western most limits of the Exclusive Economic Zone. Inshore, the QAP is limited to those waters beyond a depth of 60ft, and a distance of .5 miles from the mainland and island shorelines or kelpbeds. In addition, dispersant use is excluded from a one mile radius around the mouths of rivers having significant salmon and steelhead trout runs during peak periods of adult and smolt migration.

Marine Sanctuaries

Marine Sanctuaries comprise a significant fraction of the coastal waters off California. The use of dispersants in the Sanctuaries will require considerable coordination with the Sanctuary Managers and their staff. Though Sanctuaries are represented by the Department of Commerce delegate on the RRT, the Sanctuary Manager and/or staff members will be requested to take part in the QAP process through their participation in the UC Planning Unit's Alternative Response Technology (ART) section. The Sanctuaries can provide resource data and insight necessary to the QAP process that may otherwise not be available to the UC in a timely manner, thus their participation can be crucial.

Incident Command Dispersant Quick Approval Process

To ensure a streamlined operation, the IC Quick Approval Dispersant Decision Process (Appendix 1) and support documents addressing on-water cleanup equipment availability, spill information, and biological resources at risk (Appendix 2) shall be completed by the Alternative Response Technology (ART) Unit of the UC Planning Section with assistance from the OSPR operations center in Sacramento. Information on biological resources at risk and dispersant effectiveness will be obtained from the OSPR data base. Results of the QAP review, supporting information, and dispersant use recommendation will be summarized on the FOSC Check List (Appendix I) and forwarded to the IC.

Procedures

- 1) The FOSC contacts the proper agency representatives on the RRT (Appendix 3) and informs them that a request to utilize dispersants maybe forthcoming.
- 2) ART Unit of Planning Section completes the Quick Approval Dispersant Decision Process (Appendix 1) and submits summary of findings and information to UC on FOSC Checklist form (Appendix I).
- 3) If check list indicates that dispersant use is appropriate (all checklist questions answered yes), FOSC schedules conference call with RRT representatives or alternates at first reasonable opportunity (eg. one to two hours prior to first dispersant flight).
- 4) Conference call is conducted and Yes/No decision made based on information provided on FOSC Checklist.
- 5) If a "YES" decision is made then overflights will be conducted prior to the dispersant application to confirm that natural resources are not being threatened by the planned operation. Dispersant application will be canceled if it is determined that an unacceptable threat to resources exist. If possible, observation vessels, with UC representatives, will be positioned to observe dispersant application. Information gathered from these platforms will be relayed to the UC for further consideration.
- 6) If practical, a protocol will be developed, by the UC at the time of a spill, for overflight observations to gather general information on the success of the dispersant application. Based on the overflight information, the UC will make a "Continue or Do Not-Continue determination.

Observation and Monitoring

There has been considerable discussion as to the desirability of a monitoring program to determine the effectiveness of a dispersant application at sea. This discussion has been driven primarily by the regulatory community's desire to understand how well a dispersant application is working. To conduct such a monitoring program will require sophisticated sampling equipment capable of providing real time water column hydrocarbon data and the continuous 24hr stand-by availability of a ship and trained crew.

Though data gained from such a monitoring program may be desirable, predicating the use of dispersants on such a program could limit the UC's ability to conduct the spill response. The inability to conduct such a monitoring program due to weather conditions, a breakdown in shipboard or sampling equipment, or the necessity to wait for a monitoring ship to reach station could significantly reduce or eliminate dispersant use as a response option. The use of a required monitoring program, to quantify dispersant effectiveness, is thus not recommended for the QAP program.

The purpose of the QAP approach is to take advantage of the time restricted dispersant use window of opportunity. If the UC requests the use of dispersants, based on the QAP process, to address an oil spill and the RRT provides approval for dispersant use, there must be an understanding by both parties that: (1) the use of dispersants represents an acceptable risk to the environment; (2) the selected dispersant will have an acceptable effectiveness on the spilled oil; (3) dispersant application will not disperse all of the spilled oil; and (4) mechanical or other methods will be required to address the remaining oil.

This is not to say that dispersant use should not be overseen for product and application effectiveness. General visual observations by experienced observers, from low flying aerial platforms, can provide sufficient information to determine if the dispersant is working as dispersed oil and dispersants alone in surface waters exhibit a different color signature. These observations, though unsophisticated, presents a quick qualitative approach to determine the success of a dispersant application. In addition to observations, remote sensing equipment, if available at the time of the spill, can be used to monitor the relative effectiveness of dispersant applications. Should the observations or remote sensing data indicate that the dispersant application is not effective, the dispersant application program can be terminated.

A detailed monitoring program should be developed as part of the natural resource damage assessment. The general design of the program should be established before an incident and specifics added to meet the unique needs of an individual spill. This approach provides an avenue for quick monitoring response without tying the use of dispersants to the presence of a monitoring program.

Annual Review

It will be the charge of the RRT Alternative Response Technologies (ART) Working Group to annually review the QAP Plan and report its findings to the RRT at a scheduled meeting. The group will be responsible for the administrative upkeep of the contact list as well as insuring that the plan is updated to reflect any changes in regional policies (including those of Region X, the state of Oregon and Mexico), and technological advances.

References

National Research Council. 1989. Using Oil Spill Dispersants on the Sea. Committee on Effectiveness of Oil Spill Dispersants,

Marine Board, Commission on Engineering and Technical Services. National Academy of Science, Washington DC. 335pp.

OSPR. 1995. Draft Decision Use Document for Dispersant Use In California Waters. 4pp

Region 9 RRT. 1994. Quick Approval Zone Plan. 4 pp. plus Appendices

Appendix 1

Quick Approval Process

on the affects of petroleum on the populations at large and not the individual animal.

7. The application of dispersants is extremely difficult in foggy conditions. In addition, on days with little or no winds and clam sea conditions, there may not be sufficient mixing energy to mix oil and dispersant.

8. Results of dispersant field studies suggest that dispersed oil concentrations below a depth of about 30 ft are typically far below levels found to cause mortality in laboratory tests. Based on these observations, it has been suggested that dispersant operations can be carried out in water depths greater than 30 ft without fear of significantly impacting benthic communities. To increase the margin of protection for benthic communities, a safety factor of 2x is imposed, therefore the minimum water depth for dispersant use should be ≥ 60 ft.

There are areas along the coast where kelp beds extend into waters of a depth of 60ft or greater. The existence of the kelp beds can significantly affect local oceanographic conditions through the depression of water column mixing and wave action. The presence of kelp beds could significantly effect the dispersion of the chemically dispersed oil and or trap the dispersed oil along or within it's boundaries. Further, the use of dispersants in or near a kelp bed would pose a significant threat to the highly productive community inhabiting both the floor and water column regions of the bed.

There are also areas along the coast where waters in excess of 60ft exist adjacent to the shore line (e.g. the Channel Islands and areas of the coast with submarine canyons). The use of the 60ft depth criteria for dispersant application in these areas would not provide the mixing area or protection for the inshore habitat as intended. To ensure appropriate mixing depth and protection to the inshore habitat, the folowing are required: 1. water depth of ≥ 60 ft.; minimum of 0.5 miles from a kelp bed; and, a minimum of 0.5 miles from the shore line.

Along the coast of northern California exists several rivers and streams that support significant populations of salmon and steelhead trout. To protect the migration of adults and smolts to and from these rivers, a one mile radius dispersant use exclusion zone, measured from the mouth of the river/stream, shall exist during peak migration periods.

9. There may be times when dispersant application should be considered in water depths less than 60ft or areas closer than .5 miles from shore to protect a particularly sensitive habitat or species. The use of dispersants in these regions will be reviewed on a case-by-case basis.

10. If dispersant application is considered for waters within or adjacent to federal sanctuaries, seashores, parks, etc., the manager of the area must be notified and so apprised. Actual permission for use of the dispersant in these areas and the limitations for dispersant use must be developed prior to including the sanctuaries and etc. in the Quick Approval Process.

11. Once the Check list is completed and a decision for dispersant use generated, the IC will forward their request, along with any requested data, to the RRT via a phone conference. Based on the information provided, the RRT will provide an approval/disapproval decision for dispersant use.

FOSC CHECKLIST

The FOSC Checklist is used by the Incident Command to determine whether a request should be forwarded to the Regional Response Team for Dispersant Use. All of the criteria below must be met before a request is made.

CheckList:

1. Is the spilled petroleum dispersable? Y/N
2. Is the appropriate equipment available for dispersant application? Y/N
3. Is a sufficient quantity of dispersant available to respond to the spill? Y/N
4. Are weather and oceanographic conditions favorable for dispersant application? Y/N
5. Does the dispersion of spilled petroleum to the water column pose less of an environmental risk than leaving the petroleum on the sea surface? Y/N
6. Does the region of dispersant application fall within the established water depth and boundaries identified in the approval process? Y/N
7. If required, have state and international boundary considerations be addressed? Y/N
8. Has the ATR Unit recommended the use of Dispersants? Y/N

Basic information regarding the spill (weather, location of slick, type of oil, trajectory analysis, resources at risk, etc.) - see attached forms

Phone Call List (refer to the contact list in Appendix III)

<u>EPA</u>	<u>Y/N</u>
<u>USCG</u>	<u>Y/N</u>
<u>DOC</u>	<u>Y/N</u>
<u>DOI</u>	<u>Y/N</u>
<u>CALIFORNIA</u>	<u>Y/N</u>

Appendix 2

Support Information For
Quick Approval Process Checklist

1. On-Water Mechanical Cleanup Equipment Availability

<u>Equipment Type</u>	<u>Skimming Capacity</u>	<u>Estimated Time of Arrival</u>
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____
5. _____	_____	_____
6. _____	_____	_____

2. Spill Information

A. Incident Information:

Cause of Spill _____

Date and Time of Spill _____

Location _____

Volume and Type of Release (Continuing. vs Instantaneous)

Potential Volume to be Released _____

B. Characteristics of Spilled Oil:

Oil Type/Name _____
II-1

Specific/API Gravity _____ Flash Point _____

Pour Point _____ Viscosity _____
II-1

C. Dispersant Information

Available Dispersants and Amounts _____

Laboratory Data on Dispersability of Oil _____

D Weather and Water Conditions/Forecast

Water Temp. _____ Air Temp. _____

Current Information _____

Wind Speed/Direction (present and 48hr projection) _____

Salinity _____ Water Depth _____

Sea State and 48Hr Projection _____

Tide Information and 48hr Projection _____

Comments _____

E. Oil Trajectory Information

Surface Area of Slick _____

24hr Slick Trajectory _____

48hr Slick Trajectory _____

Expected Land Fall (Location/Time) _____

Comments _____

3. Biological Resources at Risk
(Provided by OSPR)

A. On-Water Resources _____

B. Shallow Subtidal Resources _____

C. Intertidal Resources _____

D. Anadromous Resources _____

E. Significant Water Column Resources _____

