

CALIFORNIA CODE OF REGULATIONS  
TITLE 14. NATURAL RESOURCES  
DIVISION 1. FISH AND GAME COMMISSION – DEPARTMENT OF FISH AND GAME  
SUBDIVISION 4. OFFICE OF OIL SPILL PREVENTION AND RESPONSE

**15-DAY COMMENT PERIOD  
ILLUSTRATION OF CHANGES**

Changes to section 817.02 of title 14 of the California Code of Regulations were approved by the Office of Administrative Law in a separate, concurrent rulemaking action (OAL Matter No. 2022-0525-04SR) on July 5, 2022, and will become effective on October 1, 2022. For this additional 15-day public comment period, text is illustrated as follows:

- **bold single underline** is used to denote text added in OAL Matter No. 2022-0525-04SR that is not being changed in this action; and
- ~~**bold single underline**~~ is used to denote deleted text in OAL Matter No. 2022-0525-04SR that has not been noticed to the public for repeal and is not being further changed in this action.

The changes to section 817.02 noticed in the non-floating oil rulemaking action for the original 45-day public comment period remain present as follows:

- double underline was used to denote added text; and
- ~~double strikethrough~~ was used to denote deleted text.

**CALIFORNIA CODE OF REGULATIONS**  
**TITLE 14. NATURAL RESOURCES**  
**DIVISION 1. FISH AND GAME COMMISSION – DEPARTMENT OF FISH AND GAME**  
**SUBDIVISION 4. OFFICE OF OIL SPILL PREVENTION AND RESPONSE**  
**CHAPTER 3. OIL SPILL PREVENTION AND RESPONSE PLANNING**  
**SUBCHAPTER 3. OIL SPILL CONTINGENCY PLANS**

**§ 817.02. Marine Facility Plan Content (Except for Those Small Marine Fueling Facilities Addressed in Section 817.03 of This Subchapter).**

To the degree the information required by Subsections 817.02(b) through (k) exists elsewhere, copies of the pre-existing information may be submitted. If the information provided is not sufficient to meet the requirements of this subchapter, additional information may be requested by the Administrator.

(a) Introductory Material

(1) Each plan shall provide the following information:

(A) name and address of the marine facility, and mailing address if different. The name and address of the facility shall be referenced in the plan title or on a title page at the front of the plan;

(B) name, address, phone number, fax number and e-mail address, if available, of the owner and/or operator of the marine facility;

(C) name, address and phone number, fax number and e-mail address, if available, of the person to whom correspondence should be sent;

(D) a certification statement signed under penalty of perjury by an executive within the plan holder's management who is authorized to fully implement the oil spill contingency plan, who shall review the plan for accuracy, feasibility, and executability. If this executive does not have training, knowledge and experience in the area of oil spill prevention and response, the certification statement must also be signed by another individual within the plan holder's management structure who has the requisite training, knowledge, and experience. The certification shall be submitted according to the following format;

"I certify, to the best of my knowledge and belief, under penalty of perjury under the laws of the State of California, that the information contained in this contingency plan is true and correct and that the plan is both feasible and executable."

\_\_\_\_\_ (signature), (title), (date);

(E) The California Certificate of Financial Responsibility (COFR) number for the marine facility shall be included in the front of the plan. If the COFR is not available when the plan is submitted because the marine facility is not yet operational, the COFR number must be provided as soon as it becomes available. The COFR number must be provided before the plan can be approved.

(2) Each plan shall identify a Qualified Individual, as defined in Chapter 1, Section 790 of this subdivision, and any alternates that may be necessary for the purpose of implementing the plan. If the plan holder contracts for this service, documentation that the Qualified Individual or company, and any identified alternates, acknowledge this capacity shall be included in the plan. If an alternate or alternates are identified in the plan, then the plan shall also describe the process by which responsibility will be transferred from the Qualified Individual to an alternate. During spill response activities, notification of such a transfer must be made to the State Incident Commander at the time it occurs.

(3) Each plan shall provide the name, address, telephone number and facsimile number of an agent for service of process designated to receive legal documents on behalf of the plan holder. If the plan holder contracts for this service, documentation that the agent for service of process acknowledges this capacity shall be included in the plan. Such agent shall be located in California.

(4) Each plan shall identify and ensure by contract or other approved means a certified Spill Management Team, as described in subchapter 5 of this chapter. The certified spill management team shall be the appropriate tier classification pursuant to section 830.3 of subchapter 5.

(A) The spill management team may have an interim certification for purposes of satisfying contingency plan requirements.

(B) A single spill management team may be listed if it is capable of responding in all geographic regions in which the plan holder operates.

(C) The spill management team may consist of personnel employed by the plan holder or persons affiliated with the plan holder, contracted personnel, or a combination thereof.

(D) If the plan holder contracts for these services, documentation that the certified Spill Management Team acknowledges this capacity shall be included in the plan.

(5) Each plan shall contain evidence of the contract or other approved means (as defined in Section 790 of this subdivision) verifying that any oil spill response organization(s) that are named in the plan will provide the requisite equipment and personnel in the event of an oil spill. This requirement can be met by a copy of the basic written agreement with an abstract of the recovery and/or cleanup capacities covered by the contract. Plan holders shall only contract with an OSRO(s) that has received a Rating by OSPR (as specified in Section 819 of this subchapter) for the booming, on-water recovery and storage, and shoreline protection services required.

(b) Marine Facility Description

(1) Each plan shall describe the marine facility's design and operations with specific attention to those areas from which an oil spill could occur. This description shall include, at a minimum, the following information:

(A) a piping and instrumentation diagram, and a tank diagram including the location of pumps, valves, vents and lines; the number, and oil storage capacity of each structure covered under the plan and its age, design, construction and general condition; the range of oil products normally stored in each structure; the presence or absence of containment structures and equipment; and the location of mooring areas, oil transfer locations, control stations, safety equipment, drip pans and the drainage for drip pans;

(B) a description of the types, physical properties, health and safety hazards, maximum storage or handling capacity and current normal daily throughput of oil handled. A material safety data sheet (MSDS) or equivalent will meet some of these requirements and can be maintained separately at the facility providing the plan identifies its location;

(C) a description of the normal procedures for transferring oil from or to a pipeline, tanker, barge or other vessel, or storage tank, and the amount, frequency and duration of oil transfers;

(D) the marine facility's normal hours of operation; and

(E) for an exploration or production facility, a complete description of those sections of the oil or gas lease field, gathering lines, storage tanks and processing facilities, under the control of the owner/operator, a spill from which could reasonably be expected to impact the marine waters of California.

(2) Each plan shall describe the marine facility site and surrounding area, including, where appropriate, the following information (note: where maps/diagrams are required they may be submitted on electronic media, in Portable Document Format (PDF)):

(A) a map and description of site topography, including the drainage and diversion plans for the marine facility, such as sewers, storm drains, catchment, containment or diversion systems or basins, oil/water separators, and all watercourses into which surface runoff from the facility drains;

(B) vicinity maps showing any vehicular or rail access to the marine facility, pipelines to and from the facility, nearby residential, commercial or other populous areas, and access to private land necessary to respond to a spill;

(C) seasonal hydrographic and climatic conditions including wind speed and direction, air and water temperature, local tides, prevailing currents, and any local visibility problems;

(D) physical geographic features, including ocean depths and local bathymetry; beach types and other geological conditions, including type of soil and terrain; operational conditions such as physical or navigation hazards, traffic patterns, permanent buoys, moorings and underwater structures or other site-specific factors; and any other physical feature or peculiarity of local waters that call for special precautionary measures that may affect spill response;

(E) logistical resources within the geographic region covered by the plan, including facilities for fire services, medical services, and accommodations for spill response personnel; and

(F) shoreline access area, including piers, docks, boat launches and equipment and personnel staging areas.

(c) Prevention Measures

Each plan shall address prevention measures in order to reduce the possibility of an oil spill occurring as a result of the operation of the marine facility. The prevention measures must eliminate or mitigate all the hazards identified in the Risk and Hazard Analysis.

(1) Risk and Hazard Analysis

(A) Each marine facility shall conduct a Risk and Hazard Analysis to identify the hazards associated with the operation of the facility, including: operator error, the use of the facility by various types of vessels, equipment failure, and external events likely to cause an oil spill.

The owner/operator may use one or more of the hazard evaluation methods identified by the American Institute of Chemical Engineers, or an equivalent method, including, but not limited to:

1. What-if analysis;
2. Checklist analysis;
3. Preliminary hazard analysis;
4. Hazard and operability study;
5. Failure mode and effect analysis; or
6. Fault tree analysis.

(B) The chosen hazard evaluation method must be conducted in accordance with the guidelines established by the American Institute of Chemical Engineers as published in the "Guidelines for Hazard Evaluation Procedures", second edition, copyright 1992, prepared for The Center For Chemical Process Safety.

1. The plan must include information regarding the expertise of the working group that develops the analysis.
2. The plan must include information that demonstrates to the Administrator that the analysis is appropriate to the marine facility and adequate according to the published procedures referenced in (B) above.
3. An owner/operator may be found in violation of this section if the Risk and Hazard Analysis does not adequately address the risks posed by the marine facility.

4. The Administrator may require that an analysis be updated if there are significant changes made to the marine facility. A significant change, as used in this paragraph, is one that would have an impact on the outcome of the Risk and Hazard Analysis.

5. Additional information regarding the analysis method used or the working group that conducted the analysis shall be made available to the Administrator upon request.

(C) Each plan shall include a summary of the results of the risk and hazard analysis. The summary shall include the following:

1. the hazard analysis method used, and a statement that the analysis is specific to the marine facility. If the analysis relies on a risk assessment at a similar facility, the summary shall specify how the two facilities are comparable;

2. an inventory of the hazards identified, including the hazards that resulted in the historical spills;

3. an analysis of the potential oil discharges, including the size, frequency, cause, duration and location of all significant spills from the marine facility as a result of each major type of hazard identified;

4. the control measures that will be used to mitigate or eliminate the hazards identified. The plan shall include timeframes for implementing any control measures that cannot be functional immediately; and

5. a prediction of the potential oil spills that might still be expected to occur after any mitigating controls have been implemented.

(D) All supporting documentation used to develop the Risk and Hazard Analysis summary shall be made available to the Administrator upon request.

## (2) Off-Site Consequence Analysis

For the significant hazards identified in the Risk and Hazard Analysis required under this section, the marine facility shall conduct a trajectory analysis to determine the Off-Site Consequences of an oil spill. This analysis shall assume pessimistic water and air dispersion and other adverse environmental conditions such that the worst possible dispersion of the oil into the air or onto the water will be considered. This analysis is intended to be used as the basis for determining the areas and shoreline types for which response strategies must be developed. Some of the information required in this subsection may be drawn from the appropriate Area Contingency Plans, completed by the U.S. Coast Guard, State Agencies, and Local Governments pursuant to the Oil Pollution Act of 1990. (Note: where maps/diagrams are required they may be submitted on electronic media, in Portable Document Format (PDF)). The analysis, which shall be summarized in the plan, shall include at least the following:

(A) a trajectory, or series of trajectories (for pipelines, etc.), to determine the potential direction, rate of flow and time of travel of the reasonable worst case oil spill from the facility to marine waters and to the shorelines, including shallow-water environments, that may be impacted. For purposes of this requirement, a trajectory or trajectories

(projected for a minimum of 72 hours) that determine the outer perimeter of a spill, based on regional extremes of climate, tides, currents and wind with consideration to seasonal differences, shall be sufficient;

(B) for each probable shoreline that may be impacted, a discussion of the general toxicity effects and persistence of the discharge based on type of product; the effect of seasonal conditions on sensitivity of these areas; and an identification of which areas will be given priority attention if a spill occurs.

### (3) Resources at Risk from Oil Spills

Based on the trajectory of the spilled oil as determined in the Off-Site Consequence Analysis, each plan shall identify the environmentally, economically and culturally sensitive sites that may be impacted. Each plan shall identify and provide a map of the locations of these areas. Some of the information required in this subsection may be drawn from the appropriate Area Contingency Plans, completed by the U.S. Coast Guard, State Agencies, and Local Governments pursuant to the Oil Pollution Act of 1990. (Note: where maps/diagrams are required they may be submitted on electronic media, in Portable Document Format (PDF)).

(A) The map of environmentally sensitive sites shall include:

1. shoreline types and associated marine resources;
2. the presence of migratory and resident marine bird and mammal migration routes, and breeding, nursery, stopover, haul-out, and population concentration areas by season;
3. the presence of aquatic resources including marine fish, invertebrates, and plants including important spawning, migratory, nursery and foraging areas;
4. the presence of natural terrestrial animal and plant resources in marine-associated environments;
5. the presence of state or federally-listed rare, threatened or endangered species;
6. the presence of commercial and recreational fisheries including aquaculture sites, kelp leases and other harvest areas.

(B) The map of the locations of economically and culturally sensitive sites shall include:

1. public beaches, parks, marinas, boat ramps and diving areas;
2. industrial and drinking water intakes, power plants, salt pond intakes, and other similarly situated underwater structures;
3. off-shore oil and gas leases and associated drilling/production platforms;
4. known historical and archaeological sites. If a plan holder has access to any confidential archaeological information, it must be submitted as a separate item and will be handled as confidential information as **outlined-described** in **Subsection 816.01(d); section 790.3 of chapter 1.**

5. areas of cultural or economic significance to Native Americans; and
6. the major waterways and vessel traffic patterns that are likely to be impacted.

#### (4) Required Prevention Measures

Each marine facility shall take all prevention measures to reduce or mitigate the potential hazards identified in the Risk and Hazard Analysis, and the potential impact those hazards pose to the resources at risk. Each plan shall include the following:

(A) schedules, methods and procedures for testing, maintaining and inspecting pipelines and other structures within or appurtenant to the marine facility that contain or handle oil which may impact marine waters if a failure occurs. Any information developed in compliance with Title 30 CFR, Part 250.153; Title 33 CFR, Part 154; Title 49 CFR, Part 195; and/or Title 5, Division 1, Part 1, Chapter 5.5, Sections 51010 through 51019.1 of the Government Code may be substituted for all or part of any comparable prevention measures required by this subsection.

(B) methods to reduce spills during transfer and storage operations, including overfill prevention measures and immediate spill containment provisions. Any information developed in compliance with Title 2, CCR, Division 3, Chapter 1, Article 5, Sections 2300-2407; Title 30 CFR, Part 250.154; and/or Title 33 CFR, Parts 154 and 156 may be substituted for all or part of any comparable prevention measures required by this subsection.

(C) procedures to assure clear communication among all the parties involved during transfer operations. Any information developed in compliance with Title 2, CCR, Division 3, Chapter 1, Article 5; Title 14, CCR, Division 1, Subdivision 4, Chapter 3, Subchapter 6; and/or Title 33 CFR, Parts 154 and 156 may be substituted for all or part of any comparable prevention measures required by this subsection;

(D) protection measures for areas within the marine facility that are subject to flooding;

(E) the plan holder shall provide additional relevant information to the Administrator upon request.

#### (d) Containment Booming and On-water Recovery

Each plan holder must have a contract or other approved means for containment booming and on-water recovery response resources up to their Response Planning Volume for all potential oil spills from the marine facility. To determine the amount of response resources for containment booming and on-water recovery, each plan holder must calculate a Response Planning Volume as outlined below:

##### (1) Reasonable Worst Case Spill

To calculate the Response Planning Volume, it is first necessary to determine the reasonable worst case spill for each marine facility, as follows:

(A) For marine facilities (except on-shore pipelines (not subject to Chapter 6.67 (commencing with Section 25270) or Chapter 6.7 (commencing with Section 25280) of



Division 20, Health and Safety Code) which are addressed in Subsection (B), offshore platforms which are addressed in Subsections (C) and (D), and offshore pipelines which are addressed in Subsection (E):

1. the loss of the entire capacity of all in-line, break-out and portable storage tank(s), not subject to Chapter 6.67 (commencing with Section 25270) or Chapter 6.7 (commencing with Section 25280) of Division 20, Health and Safety Code, needed for the continuous operation of the pipelines used for the purposes of handling or transporting oil, taking into account the existence of volume limiting factors including, but not limited to, line pressure, gravity, and the availability and location of the emergency shut-off controls; plus
2. the amount of additional spillage that could reasonably be expected to enter California marine waters during emergency shut-off, transfer or pumping operations if a hose(s) or pipeline(s) ruptures or becomes disconnected, or if some other incident occurs which could cause or increase the size of an oil spill. The spillage shall be calculated as follows: the maximum time to discover the release from the pipe or hose in hours, plus the maximum time to shut down flow from the pipe or hose in hours (based on historic discharge data or the best estimate in absence of historic discharge data for the marine facility) multiplied by the maximum flow rate expressed in barrels per hour (based on the maximum relief valve setting or maximum system pressure when relief valves are not provided) plus the total linefill drainage volume expressed in barrels.
3. The Administrator has the discretion to accept that a marine facility can operate only a limited number of the total pipelines at a time. In those circumstances, the reasonable worst case spill volume shall include the drainage volume from the piping normally not in use, in addition to the volume determined in (1) and (2), above.

(B) For on-shore pipelines not subject to Chapter 6.67 (commencing with Section 25270) or Chapter 6.7 (commencing with Section 25280) of Division 20, Health and Safety Code, the largest volume in barrels, of the following:

1. The pipeline's maximum release time in hours (i.e., the time between pipeline rupture and discovery), plus the maximum shut-down response time in hours (based on historic discharge data or in the absence of such historic data, the operator's best estimate), multiplied by the maximum flow rate expressed in barrels per hour (based on the maximum daily capacity of the pipeline), plus the largest line drainage volume after shutdown of the line section(s) in the response zone expressed in barrels. (As used in this subsection: line section means a continuous run of pipe that is contained between adjacent pressure pump stations, between a pressure pump station and a terminal or break-out tank, between a pressures pump station and a block valve, or between adjacent block valves; response zone means a geographic region either along a length of pipeline or including multiple pipelines, containing one or more adjacent line sections, for which the operator must plan for the deployment of, and provide spill response capabilities. The size of the zone is determined by the operator after considering available capabilities, resources, and geographic characteristics); or

2. The largest foreseeable discharge for the line section(s) within a response zone, expressed in barrels, based on the maximum historic discharge, if one exists, adjusted for any subsequent corrective or preventive action taken; or

3. If the response zone contains one or more break-out tanks, the capacity of the single largest tank or battery of tanks within a single secondary containment system, adjusted for the capacity or size of the secondary containment system, expressed in barrels.

(C) For offshore platforms (except those drilling a new well which are addressed in Subsection (D)):

1. total tank storage and flow line capacity; plus

2. that portion of the total linefill capacity which could be lost during a spill, taking into account the availability and location of the emergency shut-off controls and the effect of hydrostatic pressure; plus

3. the amount of additional spillage that could reasonably be expected to enter marine waters during emergency shut-off, transfer or pumping operations if a hose or pipeline ruptures or becomes disconnected, or some other incident occurs which could cause or increase the size of an oil spill. The calculation may take into consideration other safety devices, emergency reaction times and maximum transfer rates; plus

4. the daily production volume for thirty (30) days from an uncontrolled blowout of the highest capacity well associated with the marine facility. In determining the daily discharge rate, the reservoir characteristics, casing/production tubing sizes, and historical production and reservoir pressure data shall be taken into consideration.

(D) For offshore platforms with active well drilling:

The owner/operator of a platform at which a new well is being drilled must submit a proposed reasonable worst case oil spill calculation for platform operations to the Administrator. The proposed worst case discharge is the daily volume possible for thirty (30) days from an uncontrolled blowout taking into consideration any known reservoir characteristics. The proposed calculation will be reviewed by the Administrator during the plan review and approval process to determine if it adequately addresses the oil spill potential of the new well system.

(E) For offshore pipelines, the largest volume in barrels of the following calculation:

1. The pipeline system leak detection time, plus the shutdown response time, multiplied by the highest measured oil flow rate over the preceding 12-month period. For new pipelines, use the predicted oil flow rate. Add to this calculation the total volume of oil that would leak from the pipeline after it is shut in. This volume should be calculated by taking into account the effects of hydrostatic pressure, gravity, frictional wall forces, length of pipeline segment, tie-ins with other pipelines, and other factors.

(F) The calculations, and such parameters as flow rates, linefill capacities and emergency shutoff times, that are used to determine a marine facility's reasonable worst case spill shall be submitted as part of the plan. The Administrator may review and test

these parameters as part of the drill conducted in accordance with Subsection 816.03(b).

(2) Persistence and Emulsification Factors

(A) The reasonable worst case spill volume is then multiplied by a persistence factor relative to the most persistent type of oil that may be spilled by the marine facility. The persistence factors relative to the type of oil spilled, are specified below:

Oil Group	Group 1	Group 2	Group 3	Group 4
Persistence Multiplier	.20	.50	.50	.50

(B) Emulsification Factors

The volume determined from the calculation in Subparagraph (A) is then multiplied by one of the following emulsification factors, again, based on the type of oil.

Oil Group	Group 1	Group 2	Group 3	Group 4
Emulsification Multiplier	1.0	1.8	2.0	1.4

(C) Response Planning Volume

The total determined by the above calculation is a Response Planning Volume.

1. The Response Planning Volume to be used to determine the amount of Response Equipment and Services that must be under contract or other approved means shall be the greater of the amount determined in Subsection 817.02(d)(1) and (2) , or the Planning Volume for On-water Recovery calculated for the nearshore/inland environment in the marine facility's federal response plan pursuant to 33 CFR Part 154, Appendix C, Section 7. The Planning Volume for On-Water Recovery is the adjusted volume from the federal calculation determined prior to establishing the response tiers utilizing the mobilization factors.

2. All calculations used to determine the Response Planning Volume shall be included in the plan.

(3) Response Capability Standards

The equipment and personnel necessary to address the Response Planning Volume is brought to the scene of the spill over a period of time. The timeframes are dependent upon the risk zone in which the marine facility is located and are specified in the tables in this section.

The standards set forth in this section are only planning standards and may not reflect the exigencies of actual spill response. However, these are the standards that must be used to determine the amount of equipment and personnel that must be under contract or other approved means. Response resources in addition to those under contract must be identified, and a call-out procedure in place to access this equipment, if the marine

facility has a spill that exceeds the Response Planning Volumes. The owner/operator is ultimately responsible for addressing the entire volume of an actual spill regardless of the planning volume.

(A) On-Water Daily Recovery Rates and Containment Boom Amounts

1. The total amount of on-water recovery equipment and services required shall be the lesser of the amount necessary to address the Response Planning Volume determined in Section 817.02(d)(2)(C) or the Daily Recovery Rate established by this Section at 817.02(d)(3)(B) below.

2. The amount of response resources and the timeframes for delivery are specified in Subsection 817.02(d)(3)(B) below. The barrels per day capability figure is the total amount of on-water recovery equipment that must be at the scene of the spill at the hour specified which is measured from the time of notification, as described in this subchapter. All on-water recovery response resources shall be capable of being deployed and operable within one hour of arrival at the scene of the spill or drill but no later than the designated timeframe for each risk zone.

3. The timeframes for equipment delivery and deployment as specified in this subsection do not take into account the time required to conduct a health and safety assessment of the site as set forth in Subsection 817.02(f)(8), and as required by the California Occupational and Safety Administration. In addition, these timeframes do not account for delays that may occur due to weather or seastate. The actual time necessary to deliver and deploy equipment will be assessed at the time of an incident or a drill and will take into account the prevailing conditions of weather and seastate, as well as the site assessment requirements.

(B) Daily Recovery Rate

1. Facilities located in High-Volume Ports

Delivery Time (Hrs)	6	24	36	60
Bbls/Day Capability	23,437	31,250	46,875	78,125

i. in addition, the facility/transfer points within the High Volume Ports must have 3,125 barrels/day, or 10% of the reasonable worst case spill volume, whichever is less, of on-water recovery capability that can be mobilized and on-scene within two hours of notification;

ii. if a facility/transfer point within a High Volume Port maintains and can immediately deploy containment equipment for a 3,125 barrel spill, or 10% of the reasonable worst case spill volume, whichever is less, the initial on-water recovery capability can be on-scene within three hours rather than two hours.

## 2. Facility/Transfer Areas and the Santa Barbara Channel Area

Delivery Time (Hrs)	12	36	60
Bbls/Day Capability	19,531	35,156	66,406

i. in addition, facility/transfer points within a Facility/Transfer Area and the Santa Barbara Channel Area must have 3,125 barrels/day, or 10% of the reasonable worst case spill volume, whichever is less, of on-water recovery capability that can be mobilized and on-scene within 2 hours of notification;

ii. if a facility/transfer point within a Facility/Transfer Area or the Santa Barbara Channel Area maintains and can immediately deploy containment equipment for a 3,125 barrel spill, or 10% of the reasonable worst case spill volume, whichever is less, the initial on-water recovery capability can be on-scene within three hours rather than two hours;

iii. for those points where transfers occur infrequently, and where there is not permanent equipment present, the 3,125 barrel/day, or 10% of the reasonable worst case spill volume, whichever is less, on-water recovery capability shall be brought to the site at the time of transfer;

iv. for infrequent transfers of non-persistent oil, the initial response requirement may be waived by application to the Administrator. The application for waiver must include a justification based on such factors as the location of the marine facility, proximity to response equipment, additional equipment in the immediate area, and the relative environmental sensitivity of the potential spill sites.

(C) Sufficient containment equipment shall be brought to the scene of the spill to address the daily recovery rates as designated in Section 817.02(d)(3)(B).

(D) The standards set forth in Subsection 817.02(d)(3)(B) were increased by a factor of 25% on July 1, 1997, and again on July 1, 2001. It was determined that this increase was feasible and necessary to meet the best achievable protection of the coast.

(E) The standards set forth in Subsection 817.02(d)(3)(B) will be reviewed by the Administrator to determine if increases to these amounts are feasible and necessary in order to meet the best achievable protection of the coast. The Administrator shall conduct a review and hold a public hearing prior to confirming the new standards to solicit input regarding the necessity of the proposed increase and any credits that may be allowed.

### (4) Movement of Response Resources

There may be times when it is necessary to move response equipment from one risk zone to another in order to respond to a catastrophic oil spill. However, the Administrator needs to ensure that sufficient response resources are available to address a reasonable risk within each zone. Therefore, when equipment is needed from

one risk zone which may impact the plan holder's on-water containment and recovery at the 6 hour level, the plan holder or OSRO shall make a request to the Administrator to temporarily reduce the Response Capability Standards set forth in (d)(3) above, before the equipment can be moved. The Administrator shall only grant such a request after determining that sufficient response resources are available to address a reasonable risk within the zone from where the response equipment is being considered for removal.

#### (5) On-Water Response Equipment and Services

(A) Each plan shall demonstrate that the marine facility owner/operator has under contract or other approved means (as defined in Section 790 of this subdivision), access to all the necessary response resources to comply with the Response Capability Standards established in Subsection 817.02(d)(3). The amount of response equipment required shall take into account the effective daily recovery capacity (EDRC, as defined in Chapter 1, Section 790 of this subdivision) of the equipment.

(B) The equipment identified for a specific area must be appropriate for use in that area given the limitations of the geography, bathymetry, water depths, tides, currents and other local environmental conditions. For those areas that require shallow-water response capability (refer to the relevant Area Contingency Plan), the plan shall provide for an adequate number of shallow-draft vessels (as defined in Section 815.05 of this subchapter) and for adequate booming and other shoreline protective resources to be owned or under contract or other approved means and available to provide shoreline protection of all sensitive sites identified in the trajectory analysis conducted as part of the Off-site Consequence Analysis. Additionally, the equipment identified shall also be appropriate for use on the type of oil identified. To the extent that the following information is provided by a Rated OSRO, evidence of a contract or other approved means with a Rated OSRO will suffice:

1. the location, inventory and ownership of the equipment to be used to fulfill the response requirements of this subchapter;
2. a complete inventory of any nonmechanical response equipment and supplies, including the type and toxicity of each chemical agent, with procedures for storage and maintenance;
3. the type and capacity of storage and transfer equipment matched to the skimming capacity of the recovery systems;
4. the manufacturer's rated capacities and the operational characteristics for each major item of oil recovery equipment;
5. the effective daily recovery capacity (as defined in Chapter 1, Section 790 of this subdivision) for each major piece of on-water recovery equipment listed, as well as the effective daily recovery capacity for the skimming systems as a whole.

i. A request may be submitted to the Administrator to review the effective daily recovery capacity for a piece of equipment if it can be shown that the equipment has a different capacity than the derating factor allows.

ii. The Administrator's decision regarding a change in the effective daily recovery capacity for a piece of equipment will be issued as soon as administratively feasible.

6. vessels designated for oil recovery operations, including skimmer vessels and vessels designed to tow and deploy boom, and availability of shallow-draft vessels;

7. vessels of opportunity reasonably available for oil spill recovery operations, including availability of shallow-draft vessels, procedures to equip the vessels, inventory all equipment, and train personnel;

8. procedures for storage, maintenance, inspection and testing of spill response equipment under the immediate control of the operator;

9. sufficient equipment to track the movement of discharged oil, including aerial surveillance sufficient to direct skimming operations.

10. Each plan shall describe the personnel available to respond to an oil spill, including:

i. a list by job category including a job description for each type of spill response position needed as indicated in the spill response organization scheme;

ii. a match between personnel by job category, and the equipment proposed for use (including equipment appropriate for shallow-water environments), including the plan for mobilization of such personnel;

iii. sufficient personnel to maintain a response effort of at least 14 days.

11. Each plan shall describe procedures for the transport of required equipment, personnel and other resources to the spill site. The description shall include plans for alternative procedures during adverse environmental conditions. Adverse environmental conditions to be considered shall include:

i. adverse weather;

ii. sea states, tides, winds and currents;

iii. presence of debris or other obstacles; and

iv. any other known environmental conditions that could restrict response efforts.

(C) The name(s) of the marine facility's certified spill management personnel team as described in subchapter 5 of this chapter.

(D) Any equipment and personnel identified in the plan must be available for response. Any necessary maintenance for the equipment, vacation periods for response personnel, or other eventuality must be taken into account in relying upon these resources.

1. The equipment owner must notify the Administrator when major equipment is removed from service for a period of 24 hours or more for maintenance or repair. Major equipment is that which, if removed, would affect timely implementation of the plan. Notification must be made prior to removing equipment for regularly scheduled maintenance, and within 24 hours of removing equipment for unscheduled repairs.
2. The equipment owner must demonstrate that backup equipment is available during the time that the primary response equipment is out of service. Backup equipment may be provided from the owner's own inventory, or may be made available from another responder.
3. A plan shall remain valid during the time that equipment has been removed from service for maintenance or repair.

(E) ~~Group 5~~ Non-floating Oils

Marine facilities that handle ~~Group 5~~ non-floating oils must contract with one or more Rated OSRO(s) to address the marine facility's Response Planning Volume. Such equipment shall include, but is not limited to the following:

1. sonar, sampling equipment, or other methods for locating the oil on the bottom or suspended in the water column;
2. containment boom, sorbent boom, silt curtains, or other methods to reduce spreading on the bottom;
3. dredges, pumps, or other equipment necessary to recover oil from the bottom;
4. equipment necessary to assess the impact of such discharges; and
5. any other appropriate equipment necessary to respond to a discharge involving a ~~Group 5~~ non-floating oil.

(F) The plan holder may propose the use of non-mechanical methods for response operations which may include dispersants, in-situ burning, coagulants, bioremediants, or other chemical agents. The use of any non-mechanical method for response must be done in accordance with provisions of the California Oil Spill Contingency Plan, the National Contingency Plan, the applicable federal Area Contingency Plan and all applicable State laws and regulations. If a non-mechanical method of response is proposed, the plan shall include:

1. methods of deployment or application;
2. for use of a chemical agent, a description of the specific mechanisms in place to assess the environmental consequences of the chemical agent. This shall include the mechanism for continuous monitoring of environmental effects for the first three days after initial application, and periodic monitoring thereafter until the agent is inert or no longer operative;
3. identification of all permits, approvals or authorizations needed to allow the use of chemical agents or non-mechanical methods, and the timeline for obtaining them;



4. a plan for protecting resources at risk, areas of public concern and the public from any adverse effects of the non-mechanical method used;

5. the projected efficacy of each type of non-mechanical method proposed for use taking into account the type of spilled material and the projected environmental conditions of the potential spill site; and

6. upon request, the plan holder shall provide any test results known to the plan holder which assess the environmental impacts of applying these methods in the marine environment.

(G) The plan shall describe methods for tracking the movement of the discharged oil; and

(H) The plan shall list the location of the weather stations to be used for observations of winds, currents and other data at the time of a spill that may assist in making real-time projections of spill movement.

(e) Shoreline Protection

Each plan must provide for shoreline protection of all potential spills from the marine facility.

(1) Shoreline Response Planning Volume

Each plan shall demonstrate that the marine facility has access to all necessary equipment and services to address the response strategies appropriate to each shoreline that could potentially be impacted by a spill from the facility.

To determine the amount of equipment and services necessary a Response Planning Volume must be calculated as outlined below:

(A) Multiply the reasonable worst case spill for the marine facility, as calculated in Subsection 817.02(d)(1), by the appropriate persistence factor from the chart below for the most persistent type of oil that may be spilled:

Oil Group	Group 1	Group 2	Group 3	Group 4
Persistence Multiplier	.20	.50	.50	.50

(B) Emulsification Factors

The volume determined from the calculation above is then multiplied by one of the following emulsification factors, again, based on the type of oil:

Oil Group	Group 1	Group 2	Group 3	Group 4
Emulsification Multiplier	1.0	1.8	2.0	1.4

(C) Total Shoreline Equipment Required

The total determined by this calculation is a Response Planning Volume.

1. The Response Planning Volume to be used to determine the amount of Response Equipment and Services that must be under contract shall be the greater of the amount determined in Subsection 817.02(e)(1), or the adjusted Planning Volume for onshore recovery calculated for the nearshore/inland environment in the facility's federal response plan pursuant to 33 CFR Part 154., Appendix C, Section 7.

2. All calculations used to determine the Response Planning Volume shall be included in the plan.

(2) Shoreline Protection Equipment and Services

Each plan must identify, and ensure availability through a contract or other approved means (as defined in Section 790 of this subdivision), the capability of effecting shoreline protection strategies. Such protection strategies must be commensurate with the Response Planning Volume calculated for potential shoreline impact, and must be capable of addressing all appropriate protection, and response strategies. The specific areas where equipment and services must be available for use shall be identified in the Off-Site Consequence Analysis.

(A) The equipment identified for a specific area must be appropriate for use in that area given the limitations of the bathymetry, geomorphology, shoreline types and other local environmental conditions. Additionally, the equipment identified shall be appropriate for use on the type of oil identified. Facilities that provide their own shoreline protection of sensitive sites shall participate in the OSPR Sensitive Site Strategy Evaluation Program, as described in Section 819.01 of this Subchapter. The following information shall be provided,; to the extent that the following information is provided by a Rated OSRO, evidence of a contract or other approved means with a Rated OSRO will suffice:

1. the amounts of all protective booming, shallow-draft vessels, and shoreline protection equipment necessary to address the specific types of shorelines that may be impacted;
2. the location, inventory and ownership of the equipment to be used to fulfill the response requirements;
3. the procedures for storage, maintenance, inspection and testing of spill response equipment under the immediate control of the operator.

(B) Each plan shall have under contract or other approved means sufficient trained personnel to respond to all oil spills up to the calculated Response Planning Volume, which are to remain on scene until demobilized by the State Incident Command or the Unified Command. For planning purposes, this shall include procedures to obtain sufficient personnel to maintain a response effort of at least 14 days.

(C) Any equipment and personnel identified to meet the planning standard requirements must be available for response. Any necessary maintenance for the equipment, vacation periods for response personnel, or other eventuality must be taken into account in relying upon these resources.

1. The equipment owner must notify the Administrator when major equipment is removed from service for a period of 24 hours or more for maintenance or repair. Major

equipment is that which, if moved, would affect timely implementation of the plan. Notification must be made prior to removing equipment for regularly scheduled maintenance, and within 24 hours of removing equipment for unscheduled repairs.

2. The equipment owner must demonstrate that backup equipment is available during the time that the primary response equipment is out of service. Backup equipment may be provided from the owner's own inventory or may be made available from another responder.

3. A plan shall remain valid during the time that equipment has been removed from service for maintenance or repair if the Administrator has not disapproved such removal within 24 hours of notification.

4. The equipment owner shall notify the Administrator when the major equipment is back in service.

(3) (Reserved)

(4) Shoreline Clean-Up

(A) Utilizing the equipment that must be under contract, each plan shall describe the methods that will be used to contain spilled oil and remove it from the environment. The equipment identified for a specific area must be appropriate for use in that area given the limitations of the bathymetry, geomorphology, shoreline types and other local environmental conditions. Additionally, the equipment identified shall be appropriate for use on the type of oil identified. The description shall include:

1. all shoreline clean-up procedures and oil diversion and pooling procedures for the close-to-shore environment. These procedures shall include, where appropriate, methods for carrying out response operations and clean-up strategies in shallow-water environments, as identified in the trajectory analysis conducted as part of the Off-site Consequence Analysis;

2. methods for shoreside cleanup, including containment and removal of surface oil, subsurface oil and oiled debris and vegetation from all applicable shorelines, adjacent land and beach types.

3. measures to be taken to minimize damage to the environment from land operations during a spill response, such as impacts to sensitive shoreline habitat caused by heavy machinery or foot traffic.

(B) Protection, response and clean-up strategies will be specific to the type of oil spilled, the expected spill sites as identified in the Off-Site Consequence Analysis, and the resources at risk at those spill sites.

(C) Each plan must utilize all the strategies appropriate to the potential impact sites.

(D) Each plan shall have under contract or other approved means sufficient trained personnel to respond to all oil spills up to the Response Planning Volume, which are to

remain on scene until demobilized by the State Incident Command or the Unified Command

(f) Response Procedures

(1) Each plan shall describe the organization of the marine facility's spill response system and certified spill management team. An organizational diagram depicting the chain of command shall also be included. Additionally, the plan shall describe the method to be used to integrate the plan holder's organization into the State Incident Command System and/or the Unified Command Structure as required by subsection 5192(q)(3)(A), Title 8, California Code of Regulations.

(A) The plan holder may utilize the procedures as outlined in the appropriate Area Contingency Plan when describing how the marine facility's chain of command will interface with the State Incident Command System which utilizes the Unified Command.

(B) Each plan shall describe the organization of the plan holder's public information office, as it relates to an oil spill incident, and the method by which the Information Officer will be integrated into the State Incident Command System.

(C) Each plan shall describe the plan holder's safety program as it relates to an oil spill incident and the method by which their Safety Office will be integrated into the State Incident Command System.

(2) Each plan shall identify potential sites needed for spill response operations including location(s) for:

(A) a central command post sufficient to accommodate the State Incident Command or Unified Command as well as the plan holder's response organization;

(B) a central communications post if located away from the command post;

(C) equipment and personnel staging areas.

(3) Each plan shall include a checklist, flowchart or decision tree depicting the procession of each major stage of spill response operations from spill discovery to completion of cleanup. The checklist, flowchart or decision tree shall describe the general order and priority in which key spill response activities are performed.

(4) Each plan shall describe how the plan holder will provide emergency services before the arrival of local, state or federal authorities on the scene, including:

(A) procedures to control fires and explosions, and to rescue people or property threatened by fire or explosion;

(B) procedures for emergency medical treatment and first aid;

(C) procedures to control ground, marine and air traffic which may interfere with spill response operations;

(D) procedures to manage access to the spill response site and the designation of exclusion, decontamination and safe zones; and

(E) procedures to provide the required personnel protective gear for responders.

(5) Each plan shall describe equipment and procedures to be used by marine facility personnel to minimize the magnitude of a spill and minimize structural damage which may increase the quantity of oil spilled.

(A) Spill mitigation procedures shall include immediate containment strategies, methods to stop the spill at the source, methods to slow or stop leaks, and methods to achieve immediate emergency shutdown.

(B) For spill mitigation procedures the plan shall include prioritized procedures for marine facility personnel including specific procedures to shut down affected operations. Responsibilities of facility personnel should be identified by job title. A copy of these procedures should be maintained at the facility operations center. These procedures should address the following equipment and scenarios:

1. failure of manifold and mechanical loading arm, other transfer equipment, or hoses, as appropriate;
2. tank overfill;
3. tank failure;
4. pipe rupture;
5. pipe leak, both under pressure and not under pressure, if applicable;
6. explosion and/or fire; and
7. other equipment failure (e.g. pumping system failure, relief valve failure, etc.).

(6) Each plan shall detail the lines of communications between the responsible party, the Qualified Individual and the on-scene coordinators, response teams, and local, state, and federal emergency and disaster responders, including:

(A) communication procedures;

(B) the communication function (e.g., ground-to-air) assigned to each channel or frequency used;

(C) the maximum broadcast range for each channel or frequency used; and

(D) redundant and back-up systems.

(7) Each plan shall describe the procedures to manage access to the spill response site, the designation of exclusion, decontamination and safe zones, and the decontamination of equipment and personnel during and after oil spill response operations, as required by the California Occupational Safety and Health Administration.

(8) Prior to beginning spill response operations and/or clean up activities, a Site Safety Plan must be completed. Each site safety plan shall include information as required pursuant to Title 8, Section 5192(b)(4)(B) of the California Code of Regulations including, but not limited to, a written respiratory protection program, written personal protective equipment program, written health and safety training program, written confined space program and permit forms, direct reading instrument calibration logs, and written exposure monitoring program.

(g) Notification Procedures

(1) Each plan shall include a list of contacts to call in the event of a spill, threatened discharge of oil, or discharge of oil. The plan shall:

(A) detail the procedures for reporting oil spills to all appropriate local, state, and federal agencies;

(B) identify a central reporting office or individual who is responsible for initiating the notification process and is available on a 24-hour basis. The individual making this notification must be fluent in English. The following information must be provided:

1. the individual or office to be contacted;
2. telephone number or other means of contact for any time of the day; and
3. an alternate contact in the event the individual is unavailable.

(C) establish a clear order of priority for notification.

(2) Immediate Notification

Nothing in this section shall be construed as requiring notification before response.

(A) Each plan shall include a procedure for contacting the OSRO, or other initial response resources if an OSRO is not being used, immediately, but no longer than 30 minutes, after discovery of a discharge of oil or threatened discharge of oil.

(B) Each plan shall include a procedure that ensures that the owner/operator or his/her designee will initiate contact with the Qualified Individual, the California Office of Emergency Services and the National Response Center immediately, but no longer than 30 minutes, after discovery of a discharge of oil or threatened discharge of oil.

(C) All phone numbers necessary to complete the immediate notification procedures must be included in the response manual.

(3) Each plan shall identify a call-out procedure to acquire the resources necessary to address spills that cannot be addressed by the equipment that the owner/operator is required to have under contract. Procedures must allow for initiation of the call-out within 24 hours of the incident and must begin as soon as a determination has been made that additional resources are necessary.

(4) Each plan shall provide a checklist of the information to be reported in the notification procedures, including but not limited to:

- (A) marine facility name and location;
- (B) date and time of the incident;
- (C) the cause and location of the spill;
- (D) an estimate of the volume of oil spilled and the volume at immediate risk of spillage;
- (E) the type of oil spilled, and any inhalation hazards or explosive vapor hazards, if known;
- (F) the size and appearance of the slick;
- (G) prevailing weather and sea conditions;
- (H) actions taken or planned by personnel on scene;
- (I) current condition of the marine facility;
- (J) injuries and fatalities; and
- (K) any other information as appropriate.

(5) Reporting of a spill as required by Subsection 817.02(g)(2) shall not be delayed solely to gather all the information required by Subsection 817.02(g)(4).

(6) An updated estimate of the volume of oil spilled and the volume at immediate risk of spillage shall be reported to the California Office of Emergency Services whenever a significant change in the amount reported occurs, but not less than every 12 hours within the first 48 hours of response. The State Incident Commander and/or the Federal On-Scene Coordinator through the Unified Command shall have the option of increasing or decreasing this timeframe, as needed. Updated spill volume information included in the Incident Action Plan developed through the Unified Command will meet the requirements of this subsection.

#### (h) Temporary Storage and Waste Management

(1) Each plan shall identify sufficient temporary storage for all recovered oil or all oily waste, and identify facilities that would be able to accept the recovered oil or oily waste for recycling or other means of waste management. Sufficient storage shall be no less than two times the calculated Response Planning Volume up to the Daily Recovery Rate as determined in Section 817.02(d)(3)(B).

(A) To meet the temporary storage requirement described in Subsection (1) above, the following amounts of storage shall be dedicated response resources (as defined in Section 815.05(c) of this subchapter) or OSRO-owned and controlled response resources (as defined in Section 815.05(k) of this subchapter), as applicable to the appropriate risk zone:

Sufficient storage to support the skimming systems shall be brought to the scene of the spill during the first four hours of response:

520 barrels of storage, or 20% of the response planning volume, whichever is less, shall be brought to the scene of the spill within four hours of notification of a spill;

12,000 barrels, or two times the response planning volume, whichever is less, shall be available at the scene of the spill within 6 hours of notification of a spill.

The balance of the temporary storage requirement described in Subsection (1) above may be provided by non-dedicated storage resources. All skimming systems operating at the scene of a spill shall have adequate storage.

(2) Each plan shall identify the party that shall maintain responsibility for recovered oil and oily waste for the purposes of temporary storage.

(3) Each plan shall describe site criteria and methods used for temporary storage of recovered oil and oily wastes generated during response and cleanup operations, including sites available within the marine facility, or near the spill area.

(4) Each plan shall identify all applicable permits, and all federal, state and local agencies responsible for issuing those permits for transit, temporary storage and ultimate waste management of all wastes likely to result from an oil spill.

(5) Each plan shall include information which could expedite the state approval process for the use of temporary waste storage sites, including a list of appropriate contacts and a description of procedures to be followed for each approval process.

(i) Oiled Wildlife Care Requirements

Each plan shall describe how oiled wildlife care will be provided by one of the following approved means:

(1) Utilize the California Oiled Wildlife Care Network (OWCN) to meet oiled wildlife care requirements; or

(2) describe procedures that clearly outline how oiled wildlife care will be provided. The equipment, facilities, and personnel necessary to implement these procedures must be identified and assured by contract for each geographic region covered by the plan. Standards and written protocols for wildlife care must comply with all applicable State and federal laws.

(j) Training

(1) Each plan shall provide that all appropriate personnel employed by the marine facility shall receive training in the use and operation of oil spill response and clean-up equipment. The plan shall describe:

(A) the type and frequency of training that each individual in a spill response position receives to achieve the level of qualification demanded by their job description;

(B) the procedures, if any, to train and use volunteers or other additional personnel in spill response operations as necessary for the size of the spill.



(2) Each plan shall describe the type and frequency of personnel training on methods to reduce operational risks. The description of the training shall include, if applicable, the following:

(A) any established training objectives that address potential spill sources and causes that were identified in the Risk and Hazard Analysis.

(B) the means of achieving any established training objectives, such as:

1. training programs for the positions involved with the various aspects of the marine facility's operation that could result in a spill (e.g., position responsible for facility inspections or transfers);

2. a training schedule, including adequate frequency, (e.g., initial training upon hire and annual refresher training) and type of training (workshops, classroom, videotape, on-the-job training, etc.) for each position trained, by job classification;

(C) any licenses, certifications or other prerequisites required to hold particular jobs.

(D) A plan holder whose facility is subject to and in compliance with State Lands Commission training regulations; Title 2, Division 3, Chapter 1, Article 5.3, CCR Sections 2540 through 2548, shall be considered in compliance with the training provisions of this subsection.

(3) Each plan shall provide for safety training as required by state and federal health and safety laws for all personnel likely to be engaged in oil spill response, including a program for training non-permanent responders such as volunteers or temporary help.

(4) The marine facility owner/operator shall ensure that training records are maintained for 3 years. All such documentation must be made available to the Administrator upon request.

(k) Drills and Exercises

(1) Each plan shall describe the small marine facility's drill and exercise program that meets the requirements of Section 820.01(a), to ensure that the elements of the plan will function in an emergency.

(2) Training sessions may constitute creditable drills and exercises if all requirements in Subsection 820.01(a) are met.

(3) A marine facility owner/operator shall ensure that all of the response resources identified in the plan participate in equipment deployment exercises at least once every three years.

Note: Authority cited: Sections 8670.7, 8670.10, 8670.28, 8670.29, 8670.30 and 8670.32, Government Code. Reference: Sections 8670.7, 8670.10, 8670.25.5, 8670.28, 8670.29, 8670.30, 8670.31, 8670.32 and 8670.37.51, Government Code.