

MINUTE ITEM

This Calendar Item No. C38
was approved as Minute Item
No. 38 by the State Lands
Commission by a vote of 3
to 0 at its 8/3/94
meeting.

CALENDAR ITEM

C38

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**ADOPT AMENDMENTS TO
REGULATIONS GOVERNING MARINE TERMINALS**

PROPOSAL:

Commission staff proposes that the State Lands Commission adopt amendments to Article 5, Sections 2305, 2325, 2330, 2340, 2345, 2380, 2385, 2390 and new Sections 2341, 2376, and 2396 to Title 2, Division 3, Chapter 1 of the California Code of Regulations. These sections pertain to marine terminals, defined in P.R.C. 8750, which are marine facilities used for transferring oil to or from tankers or barges. The regulations expressly exclude offshore drilling and production platforms and tank cleaning operations which begin after removal of cargo or fuel from any tank vessel or barge. The proposed amendments to the regulations would exclude transfers involving vessels other than tank vessels or barges with oil carrying capacities of less than 250 barrels, require report of damage, require that transfers be carried out so that no oil enters marine waters, provide for insulating flanges to prevent arcing, require authorization for handling packaged cargo, limit working hours for personnel involved in a transfer, require additional hose markings, require equipment tests and inspections, and require spill containment for ballasting or deballasting operations for tank vessels at marine terminals.

BACKGROUND:

On September 24, 1990, the State of California enacted the Lempert-Keene-Seastrand Oil Spill Prevention Act (Act). The Act added P.R.C. Sections 8750 through 8760 and established a comprehensive program for the prevention of and response to oil spills in California's marine waters. Under P.R.C. 8755, the Commission is required to adopt rules, regulations, guidelines and leasing policies for reviewing the location, type, character, performance standards, size and operation of all existing and proposed marine terminals within the state, whether or not on lands leased from the commission to minimize the possibilities of a discharge of oil. P.R.C. 8756 requires that the regulations be periodically reviewed and accordingly modified to ensure

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that all operators of marine terminals within the state always provide the best achievable protection of the public health and safety and the environment.

On January 14, 1994, Commission staff circulated the proposed regulations for public review and comment. Commission staff conducted public hearings on February 8, 1994 in Vallejo and on March 3, 1994, in Los Angeles to receive oral and written testimony. After considering all comments, the final version of the proposed regulations are herein proposed for adoption.

STATUTORY AND OTHER REGULATIONS:

A. P.R.C. Sections 8750 through 8760.

AB 884:

N/A

OTHER PERTINENT INFORMATION:

1. Pursuant to the Commission's delegation of authority and the State CEQA Guidelines (14 Cal. Code Regs. 10561), the Commission staff has determined that this activity is exempt from the requirements of the CEQA as a categorically exempt project. The project is exempt under classes 7 and 8, Action by a Regulatory Agency as Authorized by State Law to Assure the Maintenance, Restoration, Enhancement or Protection of a Natural Resource and of the environment where the regulatory process involves procedures for protection of the environment, 14 Cal. Code Regs. 15307 and 15308.

Authority: P.R.C. 21084 and Cal. Code Regs. 15300.

EXHIBIT:

A. Proposed Regulations

IT IS RECOMMENDED THAT THE COMMISSION:

1. FIND THAT THE ACTIVITY IS EXEMPT FROM THE REQUIREMENTS OF THE CEQA PURSUANT TO 14 CAL. CODE REGS. 15061 AS A CATEGORICALLY EXEMPT PROJECT, CLASSES 7 AND 8, AN ACTION BY A REGULATORY AGENCY AS AUTHORIZED BY STATE LAW TO ASSURE THE MAINTENANCE, RESTORATION, ENHANCEMENT, OR PROTECTION OF NATURAL RESOURCES AND OF THE ENVIRONMENT WHERE THE REGULATORY PROCESS INVOLVES PROCEDURES FOR THE PROTECTION OF THE ENVIRONMENT (14 CAL. CODE REGS. 15307 AND 15308).

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2. FIND THAT NO ALTERNATIVE WOULD BE MORE EFFECTIVE IN CARRYING OUT THE PURPOSE FOR WHICH THE REGULATION IS PROPOSED OR WOULD BE AS EFFECTIVE AND LESS BURDENSOME TO AFFECTED PRIVATE PERSONS THAN THE PROPOSED REGULATION.
3. ADOPT REGULATIONS SUBSTANTIALLY IN THE FORM OF THOSE SET FORTH IN EXHIBIT "A", TO BECOME EFFECTIVE IMMEDIATELY UPON FILING WITH THE SECRETARY OF STATE.
4. AUTHORIZE COMMISSION STAFF TO MAKE MODIFICATIONS IN THE REGULATIONS IN RESPONSE TO RECOMMENDATIONS BY THE OFFICE OF ADMINISTRATIVE LAW.
5. DIRECT COMMISSION STAFF TO TAKE WHATEVER ACTION IS NECESSARY AND APPROPRIATE TO COMPLY WITH PROVISIONS OF THE GOVERNMENT CODE REGARDING ADOPTION OF REGULATIONS AND TO ENSURE THAT THE REGULATIONS BECOME EFFECTIVE.
6. DIRECT COMMISSION STAFF TO TAKE WHATEVER ACTION IS NECESSARY AND APPROPRIATE TO IMPLEMENT THE PROVISIONS OF THE REGULATIONS AT SUCH TIME AS THEY BECOME EFFECTIVE.

ARTICLE 5. MARINE TERMINALS INSPECTION AND MANAGEMENT

[NOTE: ONLY THOSE SECTIONS OF ARTICLE 5 BEING AMENDED OR ADDED ARE HERE PRESENTED. UNDERLINED TEXT INDICATES ADDITIONS TO EXISTING REGULATIONS. ~~STRICKEN-OUT-TEXT~~ INDICATES DELETIONS FROM EXISTING REGULATIONS.]

. . .

§2305. Purpose, Applicability and Date of Implementation.

- (a) The purpose of the regulations in Title 2, Division 3, Chapter 1, Article 5 of the California Code of Regulations is to provide the best achievable protection of the public health and safety and of the environment by using the best achievable technology.
- (b) The provisions of this article shall not apply to:
 - (1) Oil transfer operations conducted at offshore drilling and production platforms.
 - (2) Tank cleaning operations which begin after the removal of cargo or fuel from any tank vessel or barge.
 - (3) Oil transfer operations to or from vessels other than tank vessels or barges if such vessels have oil carrying capacities of less than 250 barrels.
- (c) Unless otherwise specified in these regulations, all of the provisions of these regulations become effective 30 days after they have been filed with the Secretary of State, and any new sections or modifications to existing sections shall become effective 30 days after they have been filed with the Secretary of State.

Authority: Sections 8751, 8755, and 8756, Public Resources Code.

Reference: Sections 8750, 8751, 8755, 8756 and 8757, Public Resources Code.

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§2325. Notification.

- (a) Unless the Division and a terminal operator agree otherwise, at least four (4) hours, but not more than twenty four (24) hours, prior to the initiation of any transfer operation, the operator of the terminal where the transfer is to take place shall provide notice of the transfer to the Division. For barge operations, where the terminal operator has less than four (4) hours advance notice of the transfer, the terminal operator shall provide the Division with notice of

the transfer as soon as possible after receiving notice of the anticipated transfer, but in any case prior to the initiation of transfer operations.

- (b) Notifications shall be made in person, by telephone or by facsimile machine to the local area Division field office. For terminals located north of the boundary between Santa Barbara and San Luis Obispo counties, notifications are to be made to the Division field office in Hercules, (510) 741-4950; facsimile number (510) 741-4970. For terminals located south of the boundary between Santa Barbara and San Luis Obispo Counties, notifications are to be made to the Division field office in Long Beach, (310) 499-6348; facsimile number (310) 499-6355.
- (c) The notification shall include the following:
 - (1) The location of the transfer;
 - (2) The expected time of arrival of the vessel;
 - (3) Time anticipated for initiation of the transfer operations;
 - (4) The name of the tank vessel or barge involved; and
 - (5) The type or types of oil being transferred.
- (d) The terminal operator or TPIC shall promptly notify the local area Division field office of any report or notification received from the VPIC, that the tank vessel berthed at the terminal for the purpose of conducting a transfer operation does not have the ability to move away from the berth, under its own power, within 30 minutes, as described in §2340, subsection (a)(28)(A).
- (e) The terminal operator or TPIC shall promptly notify the local area Division field office of any significant damage to structure or equipment at the terminal caused by an incident such as impact from a vessel, heavy weather, fire, explosion, equipment failure or seismic activity. For the purpose of this subsection, "significant damage" shall mean damage that is likely to adversely impact public health and safety and the environment or is damage in excess of \$50,000.

Authority: Sections 8751, 8755, and 8757, Public Resources Code.
Reference: Sections 8750, 8751, 8755, and 8757, Public Resources Code.

\$2330. Exchange of Information.

(a) Exchange of Information Prior to a Vessel's Arrival at a Terminal.

(1) Prior to arrival of a tank vessel or barge at the terminal, the terminal operator shall acquire from the tank vessel or barge or its owners, operators or agents, and the vessel's owner, operator or agent shall provide, all of the following items of information which are applicable:

- (A) Draft on arrival;
- (B) Maximum draft and trim expected during transfer operation;
- (C) Whether tank cleaning or crude oil washing will be undertaken;
- (D) Any repairs that could delay commencement of cargo transfer;
- (E) Manifold details, including type and size;
- (F) Quantity and nature of slops, dirty ballast to be transferred at the terminal and any contamination thereof by chemical additives;
- (G) Any defect of hull, machinery, piping, valves or other equipment which may:
 - 1. Affect the safe maneuverability of the tank vessel or barge; or
 - 2. Constitute a hazard to public health and safety and the environment; and
- (H) Any other information pertinent to mooring, transfer of vessel's stores and cargo transfer operations.

(2) Prior to arrival at the terminal, the terminal operator shall provide, as applicable to the operator of the tank vessel or barge, information which shall include but not be limited to:

- (A) Least depth of water expected at the berth while the vessel will be at the berth;
- (B) The minimum number, length, size and material of mooring lines and emergency towing wires and

accessories which the vessel should have available for mooring operations;

- (C) Manifold/hose/mechanical loading arm details, including, but not limited to, type and size, used for oil transfer;
 - (D) Details and requirements concerning any vapor recovery system;
 - (E) Terminal requirements for crude oil washing and tank cleaning procedures;
 - (F) Any arrangements for the reception of slops or oil ballast residues;
 - (G) Any particular features of a dock or mooring or any significant damage which is considered essential to bring to the notice of the Master of the tank vessel, crew of the barge, Pilot or Mooring Master;
 - (H) At offshore terminals, the number of tugs required and the number of mooring support vessels that will be provided for mooring and unmooring operations;
 - (I) At offshore terminals information on wind, sea, swell, current, tide, visibility and load limitations and terminal restrictions including conditions under which mooring will not be permitted and conditions requiring cessation of transfer operations and departure from the moorings; and
 - (J) Any other information pertinent to available port services, mooring and cargo transfer operations.
- (b) Exchange of Information upon Arrival (Pre-transfer Conference).
- (1) Transfer operations shall not commence until both persons in charge are present and mutually agree to commence transfer operations after having conducted a pre-transfer conference and completed the declaration of inspection.
 - (2) The TPIC and the VPIC shall hold a pre-transfer conference, to ensure that each person in charge clearly understands all information and agrees to all procedures necessary for a safe and pollution-free transfer operation.

(3) Those matters to be addressed in the pre-transfer conference shall include, but not be limited to, detailed information concerning the following:

- (A) The quantities and temperatures of the products to be transferred;
- (B) The cargo information listed in §2385, subsection (d)(2)(E) for the products to be transferred;
- (C) The transferring and receiving systems, including, but not limited to, the following:
 - 1. The sequence of transfer operations;
 - 2. Maximum allowable working pressure;
 - 3. Maximum allowable product temperature;
 - 4. The control of line pressures;
 - 5. The location of pressure gauges;
 - 6. Settings of relief valves and the direction of their discharge;
 - 7. Communications between vessel and terminal to compare and confirm quantities transferred and received;
 - 8. Limitations on the movement of loading hoses and mechanical loading arms;
 - 9. The initial, maximum and topping off transfer rates;
 - 10. Tank changeover procedures;
 - 11. Topping off procedures;
 - 12. Transfer shutdown procedures; and
 - 13. Signals to be used for standby, slowdown transfer rate, stop transfer, and emergency shutdown in case of a breakdown of communications system;
 - 14. If any part of the transfer is to be by gravity, the maximum marine terminal transfer rate possible using gravity; and

15. If the transfer is expected to take less than an hour, the approximate anticipated length of time needed for the transfer.

- (D) Critical stages of the transfer operation;
 - (E) Federal, state, and local rules that apply to the transfer of oil;
 - (F) Emergency procedures;
 - (G) Discharge containment procedures;
 - (H) Discharge reporting procedures and requirements;
 - (I) Watch or shift arrangement; and
 - (J) Frequency and means of checking that communications systems are operating effectively.
- (34) In addition to the requirements of subsection (b)(23) of this section, the TPIC and VPIC shall verify the following during the pre-transfer conference:
- (A) The name or title and location of each person participating in the transfer operation;
 - (B) That vessel's cargo tanks which are required by the Coast Guard to be inerted have an oxygen content in the vapor space of cargo tanks of 8 percent by volume or less;
 - (C) That inerted tanks will remain inerted throughout the transfer operation or, if not, that Coast Guard approved alternate safety procedures will be employed;
 - (D) Whether tank cleaning or crude oil washing will be conducted during the transfer operation;
 - (E) The number and sizes of hose connections or loading arms to be used;
 - (F) Arrangements for the transfer of slops and/or oily ballast residues; and
 - (G) The maximum transfer rate of vapor recovery systems used during the transfer operation.

Authority:

Sections 8750, 8751, 8752, 8755, and 8757, Public Resources Code.

Reference: Sections 8750, 8751, 8752, 8755, and 8757, Public Resources Code.

§2335. Declaration of Inspection.

- (a) No person may transfer oil to or from a vessel unless both the TPIC and VPIC have filled out and signed a declaration of inspection described in subsection (c) of this section.
- (b) No person in charge may sign the declaration of inspection unless he or she has determined by visual inspection, unless visual inspection is precluded, and indicated by initialling in the appropriate space on the declaration of inspection form, that the terminal or vessel, as appropriate, meets the requirements of §2340.
- (c) The declaration of inspection may be in any form, but must contain at least the following:
 - (1) The name or other identification of the transferring vessel and the terminal;
 - (2) The address of the terminal;
 - (3) A list of the requirements in §2340, subsection (a), with each requirement set forth separately and with spaces on the form following each requirement for the person in charge of the vessel or terminal, whichever is appropriate, to indicate by initialling that the requirement is met for the transfer operation; and
 - (4) A space for the date, time of signing, signature, and title of each person in charge during transfer operations on the transferring vessel or terminal and space for the date, time of signing, signature, and title of each person in charge during transfer operations on the receiving terminal or vessel.
- (d) On completion of the transfer operation the TPIC and VPIC shall annotate the declaration of inspection with:
 - (1) The date and time of hookup for the transfer operation; and
 - (2) The date and time of disconnection upon completion of the cargo transfer.
- (e) The VPIC and TPIC shall each have a signed copy of the declaration of inspection available for inspection by any employee or agent of the Division during the transfer operation.

- (f) Each TPIC and VPIC who is different from the person who originally signed the declaration of inspection shall sign the declaration of inspection before assuming or re-assuming the duties of a person in charge. Prior to their signing or re-signing the declaration of inspection, each person in charge shall inspect the terminal or vessel, as appropriate, to ensure that the requirements of §2340, are being maintained.
- (g) The terminal operator shall retain a signed copy of the declaration of inspection for at least three (3) years from the date of signature.

Authority: Sections 8750, 8751, 8752, 8755 and 8757, Public Resources Code.

Reference: Sections 8750, 8751, 8752, 8755, 8757 and 8758, Public Resources Code.

§2340. Requirements for all Transfer Operations.

- (a) No operator, crew member or personnel of a vessel or terminal shall carry out or perform any willful or negligent act or omission which causes the entry of any amount of oil into marine waters during any transfer operation.
- (b) (1) Unless, because of emergencies or unanticipated circumstances, doing so would harm public health or safety or the environment, all transfer operations shall be conducted in accordance with the terminal operations manual approved under §2385 of these regulations or vessel transfer procedures required by 33 CFR 155.720, as appropriate, and with the mutual agreements and understanding established during the pre-transfer conference.
- (2) Notwithstanding the provisions of subsection (b)(1) of this section, in circumstances where for operational or safety reasons the sequence of transfer operations or any other conditions or procedures agreed to in the pre-transfer conference are to be changed, the TPIC and VPIC shall, prior to continuation of the transfer operation, confer with each other to ensure that each person in charge clearly understands all information regarding the changes and agrees to all procedures necessary for continuation of a safe and pollution free transfer operation.
- (ac) The respective requirements with which the terminal and vessel must comply and which must be set forth on the declaration of inspection and initialled separately by both

the TPIC and VPIC or both, as appropriate, as required by §2335, shall include, but not be limited to, the following:

- (1) The vessel's moorings are strong enough to hold during all expected conditions of surge, current, and weather and are long enough to allow adjustment for changes in draft, drift, and tide during the transfer operation.
- (2) Transfer hoses and loading arms are long enough to allow movement of the vessel while secured at the berth without placing strain on the hose, loading arm, or transfer piping system.
- (3) To prevent kinking or other damage to the hose and strain on its coupling, each hose is supported in accordance with the operational recommendations of the "HOSE TECHNICAL INFORMATION BULLETIN: No. IP-11-4; Oil Suction and Discharge Hose; Manual for Maintenance, Testing and Inspection," 1987 edition, published by the Rubber Manufacturers Association (RMA), 1400 K Street, N.W., Washington, DC 20005.
- (4) Each part of the transfer system is aligned to allow the flow of oil.
- (5) Each part of the transfer system not necessary for the transfer operation is securely blanked off. Each test cock, sampling or bleeder valve is closed and securely capped.
- (6) The end of each hose, loading arm and manifold that is not connected for the transfer of oil is blanked off with a bolt in at least every other hole and in no case less than four (4) bolts.
- (7) The transfer system is attached to a fixed connection on the vessel and the terminal.
- (8) Except when used to receive ballast as agreed within the pre-transfer conference, each overboard discharge or sea suction valve that is connected to the vessel's transfer or cargo tank system is sealed or lashed in the closed position.
- (9) Each transfer hose has no unrepaired loose covers, kinks, bulges, soft spots, or other defect which would permit the discharge of oil through the hose material and no gouges, cuts, or slashes that penetrate any layer of hose reinforcement. "Reinforcement" means the strength members of the hose, consisting of fabric, cord and/or metal.

- (10) Each hose or loading arm in use meets the requirements of §2380, subsections (a) and (b), respectively.
- (11) Each connection meets the requirements of §2380, subsection (d).
- (12) Any monitoring devices used to detect or limit the size of a discharge of oil, if installed, are operating properly.
- (13) The small discharge containment equipment for the terminal, required by §2380, subsection (f), is readily accessible or deployed as applicable and will be periodically drained.
- (14) The discharge containment equipment for the vessel is in place and will be periodically drained to provide the required capacity.
- (15) Each drain and scupper is securely closed by mechanical means.
- (16) All connections in the transfer system are leak free, except that a component in the transfer system, such as the packing glands of a pump which cannot be made leak free, shall not leak at a rate that exceeds the capacity of the discharge containment provided during the transfer operation.
- (17) The communications required by §2370 are operable for the transfer operation.
- (18) The emergency means of shutdown for the terminal, required by §2380, subsection (h) and the emergency means of shutdown for the vessel required by 33 CFR 155.780 are in position and operable.
- (19) There is a TPIC and a VPIC, and each:
 - (A) Meets the appropriate requirements of §2375 for persons in charge;
 - (B) Is at the site of the transfer operation and immediately available to the transfer personnel;
 - (C) Has ~~in his or her possession~~ ready access to a copy of the terminal operations manual or vessel transfer procedures, as appropriate; and
 - (D) Conducts the transfer operation in accordance with the terminal operations manual or vessel transfer procedures, as appropriate.

- (20) The personnel required, under the terminal operations manual and the vessel transfer procedures, to conduct the transfer operation:
- (A) Are on duty; and
 - (B) Conduct the transfer operation in accordance with the terminal operations manual or vessel transfer procedures, as appropriate.
- (21) At least one person is at the site of the transfer operation who fluently speaks the language or languages spoken by both persons in charge.
- (22) The TPIC and VPIC of transfer operations have held a pre-transfer conference as required by §2330, subsection (b).
- (23) The TPIC and VPIC of transfer operations agree when the transfer operation is to begin.
- (24) If any part of the transfer operation may take place between sunset and sunrise or during periods of reduced visibility, the lighting required by §2365 will be provided.
- (25) A transfer operation which includes collection of vapor emitted from a vessel's cargo tanks through a vapor recovery system not located on the vessel must have the following verified by the TPIC:
- (A) Each manual valve in the vapor collection system is correctly positioned to allow the collection of cargo vapor.
 - (B) A vapor collection hose or arm is connected to the vessel's vapor connection.
 - (C) The electrical insulating device recommended in chapter 6 of ISGOTT is fitted between the terminal vapor connection and the vessel vapor connection.
 - (D) The initial loading rate and the maximum transfer rate are confirmed by the TPIC and VPIC.
 - (E) The maximum and minimum operating pressures at the terminal vapor connection are confirmed by the TPIC and VPIC.
 - (F) The barge overfill control system, if compatible with the connection to the terminal, is connected to the terminal, is tested, and is operational.

- (G) The following have been performed not more than 24 hours prior to the start of the transfer operation:
1. Each alarm and automatic shutdown system has been tested and found to be operating properly; and
 2. Hydrocarbon gas and oxygen analyzers have been checked for calibration by use of a span gas.
- (H) Each vapor recovery hose has no unrepaired loose covers, kinks, bulges, soft spots, or any other defect which would permit the discharge of vapor through the hose material, and no external gouges, cuts, or slashes that penetrate any layer of hose reinforcement.
- (I) The oxygen content of the tank vessel's cargo tanks, if inerted, is at or below 8 percent by volume.
- (26) Fire fighting equipment required in §2345 is in readiness.
- (27) Where required, the spill containment provisions ~~in §~~ of sections 2395 and 2396 are being complied with.
- (28) The tank vessel has either of the following capabilities:
- (A) The tank vessel's boilers, main engines, steering machinery and other equipment essential for maneuvering are maintained in a condition so that the tank vessel has the capability to move away from the berth within 30 minutes under its own power; or
 - (B) Where the tank vessel does not have the capability specified in §2340, subsection (a)(28)(A), appropriate tug assistance is available so that the tank vessel can be moved away from the berth within 30 minutes.
- (29) Operations and practices are carried out in compliance with the following recommendations in ISGOTT:
- (A) Emergency towing wires are rigged forward and aft and the ends maintained not greater than 5 feet above the water (chapter 3).

- (B) Precautions regarding openings in superstructures are being observed (chapter 6).
- (C) Precautions regarding flame screens are being observed (chapter 6).
- (D) Precautions regarding unauthorized craft alongside a tank vessel or barge are being observed (chapter 6).
- (E) Precautions regarding entry to pumprooms, pumproom ventilation and bilges, are being observed (chapter 2).

(30) The requirements of section 2341 to prevent electrical arcing at onshore terminals are being complied with.

- (bd) No person shall conduct an oil transfer operation unless the TPIC and VPIC have:
 - (1) Conducted the pre-transfer conference required under §2330, subsection (b);
 - (2) Ensured that transfer connections have been made as specified in §2380, subsection (d);
 - (3) Ensured that discharge containment equipment on the terminal and on or around the tank vessel or barge required under §§2380 and 2395 are in position or on stand-by, as appropriate; and
 - (4) Filled out and signed the Declaration of Inspection as required by §2335, subsection (a).
- (ee) No TPIC shall conduct a transfer operation with a tank vessel unless the tank vessel has either one of the capabilities of moving away from the berth within 30 minutes, as specified in §2340, subsection (ec)(28).
- (df) During all transfer operations, the TPIC shall be in attendance at the terminal.
- (eg) Each TPIC shall ensure that the means of operating the emergency shutdown is continually manned so that it can be activated in 30 seconds or less, as required in §2380, subsection (h)(5), while oil is being transferred between the terminal and the vessel.
- ~~(f) All transfer operations shall be in accordance with operations manuals approved under §2385.~~

- (g~~h~~) Each person conducting an oil transfer shall stop the transfer operation whenever oil from any source is discharged into the water or upon the adjoining shoreline. The transfer operation shall not resume unless authorized by the U.S. Coast Guard and the operator has complied with, or is complying with, the contingency plan approved by the Administrator for the terminal where the transfer is taking place.
- (h~~i~~) (1) Each person conducting a transfer operation shall stop the transfer operation whenever oil from any source is leaked onto the transfer operation work area, but not in the water, and shall not resume the transfer operation until after both of the following are completed:
- (A) The oil leaked into the oil transfer work area has been cleaned up; and
 - (B) All necessary preventive measures have been taken to ensure that a similar leak of oil does not recur.
- (2) Transfer operations need not be stopped under subsection (h~~i~~) of this section if all of the following occur:
- (A) The leak is directly into the small discharge containment of the terminal or the discharge containment aboard the vessel;
 - (B) No oil is displaced outside of the small discharge containment of the terminal or the discharge containment of the vessel; and
 - (C) Immediate corrective action is taken to stop the leakage of oil.
- (i~~j~~) Notwithstanding the provisions of subsections (g~~h~~) and (h~~i~~) of this section, the transfer operation may resume or may continue without interruption if both of the following occur:
- (1) Continuation or resumption of the transfer operation is necessary to avoid further discharge of oil; and
 - (2) Both the TPIC and VPIC agree that continuation or resumption is necessary to avoid further discharge of oil.

(jk) The provisions of subsections (gh), (hi) and (ij) of this section are subject to any direction by the Administrator issued directly in response to the discharge into the water.

Authority: Sections 8750, 8751, 8752, 8755, and 8757, Public Resources Code.

Reference: Sections 8750, 8751, 8752, 8755, 8757, and 8758, Public Resources Code.

§2341. Requirements to Prevent Electrical Arcing at Onshore Terminals.

(a) The provisions of §2341, become effective 180 days after these regulations have been filed with the Secretary of State.

(b) Insulating Flange Joint.

For the purpose of this section, an "insulating flange joint" means a typical insulating flange joint as described in Appendix D of ISGOTT or any other insulating flange that meets the electrical resistance requirements of subsection (f) of this section.

(c) Insulating Flange Joints on Metallic Cargo or Vapor Recovery Arms.

Each metallic cargo or vapor recovery arm used during a transfer operation shall be fitted with an insulating flange joint to ensure electrical discontinuity between the terminal and vessel. All metal on the vessel's side of the insulating flange joint shall be electrically continuous to the vessel and that on the terminal's side shall be electrically continuous to the terminal's grounding system.

(d) Cargo and Vapor Recovery Hose Connections.

Each cargo hose string or vapor recovery hose used during a transfer operation shall have either an insulating flange joint or a single length of non-conducting hose to ensure electrical discontinuity between the terminal and vessel. All metal on the vessel's side of the non-conducting length of hose shall be electrically continuous to the vessel and that on the terminal's side shall be electrically continuous to the terminal's grounding system.

(e) Testing of Insulating Flange Joints.

(1) The terminal operator shall test or cause to be tested each insulating flange joint by measuring the

electrical resistance between the metal pipe on the terminal side of the flange joint and the end of the hose or metal arm when freely suspended. Such tests shall be conducted at intervals not exceeding three months.

(2) At terminals which conduct infrequent transfers of oil and the interval between transfers exceeds three months the test specified in subsection (e)(1) of this section need not be conducted at intervals not exceeding three months. However, such test shall be conducted no more than 7 days prior to the connection of any metallic loading or vapor recovery arm or hose string for the purpose of transferring oil.

(3) The terminal operator shall maintain records of test dates, measured electrical resistance and name and designation of person conducting the test at the terminal for a period of at least one year from the date of testing.

(f) Insulating Flange Joints: Minimum Resistance.

No insulating flange joint whose measured electrical resistance is less than 1000 ohms shall be used in any metallic cargo or vapor recovery arm or hose string connection between the terminal and a vessel.

(g) Vessel to Shore Electrical Bonding Cables.

No vessel to shore electrical bonding cables or wires shall be used for a transfer operation.

Authority: Sections 8750, 8751, 8752, 8755, and 8757, Public Resources Code.

Reference: Sections 8750, 8751, 8752, 8755, 8757, and 8758, Public Resources Code.

\$2345. Fire Prevention for Transfer Operations.

- (a) Immediately before or on arrival at a terminal at which it is intended to conduct an oil transfer operation, fire hoses shall be connected to the tank vessel's fire main, one forward and one aft of the tank vessel's manifold. Where monitors are provided, they shall be pointed towards the manifold and be ready for immediate use.
- (b) At least two type B-II portable fire extinguishers shall be placed near the manifold, one forward of and one aft of the manifold.

- (c) When oil is being transferred, pressure shall be maintained on the tank vessel's fire main from the tank vessel's fire pump. Where this is impracticable, the tank vessel's fire pump shall be in a standby condition and ready for immediate use. Fire mains shall be pressurized or be capable of being pressurized within 2 minutes.
- (d) The vessel's fire extinguishing equipment shall be operational and ready for immediate use.
- (e) No packaged cargo or vessel's stores may be transferred between the terminal and the vessel during a transfer operation unless authorized by both the TPIC and VPIC. When authorizing transfers under this subsection, the TPIC and VPIC shall consider any potential risk of fire or explosion.

Authority: Sections 8750, 8751, 8752, 8755, and 8757, Public Resources Code.

Reference: Sections 8750, 8751, 8752, 8755, and 8757, Public Resources Code.

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§2370. Communications.

- (a) Each terminal shall have a means that enables continuous two-way voice communication between the TPIC and the VPIC.
- (b) The means required by subsection (a) of this section shall be usable and effective in all phases of the transfer operation and all conditions of weather at the terminal.
- (c) A terminal may use the voice communications system for emergency shutdown specified in §2380, subsection (h)(6)(B), to meet the requirement of subsection (a) of this section.
- (d) An alternate continuous two-way voice communication system shall be available in the event that the primary communications system is disabled.
- (e) Portable radio devices used in compliance with this section shall be intrinsically safe, as defined in the Institute of Electrical and Electronics Engineers Standard Dictionary, 1984 edition; Published by the Institute of Electrical and Electronics Engineers, available from the American Society of Mechanical Engineers (ASME), 22 Law Drive, Box 2300, Fairfield, New Jersey 07007-2300 and meet Class I, Division I, Group D requirements as defined in the National Electric Code, Article 500, ~~1990~~ 1993 edition published by NFPA, 1 Batterymarch Park, P.O. Box 9101, Quincy, Massachusetts 02269-9101.

- (f) The means of communication shall be continuously manned during a transfer operation by a person or persons who can immediately contact the TPIC and VPIC.
- (g) If the means of communications has not been used within a period of 60 minutes during a transfer operation, the means of communications shall be checked to ensure that it is operative.

Authority: Sections 8750, 8751, and 8755, Public Resources Code.

Reference: Sections 8750, 8751, 8752, 8755, 8757, and 8758, Public Resources Code.

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§2376. Limitations on Hours of Work for Terminal Personnel.

- (a) For the purpose of this section, the term "work" includes any operational or administrative duties associated with a marine terminal.
- (b) Except in an emergency or a drill, no TPIC or terminal personnel engaged in transfer operations shall be permitted to work more than 16 hours in any 24 hour period, or more than 40 hours in any 72 hour period, or more than 72 hours in any period of seven consecutive days.

Authority: Sections 8750, 8751, and 8755, Public Resources Code.

Reference: Sections 8750, 8751, 8752, and 8755, Public Resources Code.

§2380. Equipment Requirements.

(a) Hose Assemblies.

- (1) Each hose assembly used for transferring oil shall meet the following requirements:
 - (A) The minimum design burst pressure for each hose assembly shall be:
 - 1. At least 600 pounds per square inch; and
 - 2. At least four times the sum of the pressure of the relief valve setting (or four times the maximum pump pressure when no relief valve is installed) plus the static head

pressure of the transfer system at the point where the hose is installed.

- (B) The maximum allowable working pressure (MAWP) for each hose assembly shall be:
1. At least 150 pounds per square inch; and
 2. More than the sum of the pressure of the relief valve setting (or the maximum pump pressure when no valve is installed) plus the static head pressure of the transfer system at the point where the hose is installed.
- (C) Each nonmetallic hose shall be usable for oil service.
- (D) Each hose assembly shall have one of the following:
1. Full threaded connections;
 2. Flanges that meet standard B16.5, Steel Pipe Flanges and Flange Fittings, 1988, or standard B16.24, Brass or Bronze Pipe Flanges, 1979, of the American National Standards Institute (ANSI), available from the American Society of Mechanical Engineers (ASME), 22 Law Drive, Box 2300, Fairfield, New Jersey 07007-2300; or
 3. Quick-connect couplings that either meet ASTM F-1122, published in 1987 by the American Society for Testing and Materials, 1916 Race Street, Philadelphia, Pennsylvania 19103-1187 or have been accepted by the U.S. Coast Guard.
- (E) Except as provided in subsection (F) of this section, each hose shall be marked near the two ends in the vicinity of the flanges, where it can best be seen, with the following:
1. Any of the following:
 - a. The products name of each product for which the hose may be used; ~~or the words "oil service";~~
 - b. For oil products, the words "OIL SERVICE"; or

C. For hazardous materials, the words "HAZMAT SERVICE - SEE LIST" followed immediately by a letter, number or other symbol that corresponds to a list or chart contained in the terminal's operations manual or the vessel's transfer procedure documents which identifies the products that may be transferred through a hose bearing that symbol;

2. Maximum allowable working pressure;
3. Date of manufacture; and
4. Date of the latest annual test required by 33 CFR 156.170 with dates of previous tests obliterated.

(F) The information required by subsections (E)3. and 4. of this section need not be marked on the hose if it is recorded elsewhere ~~at the~~ in the hose records of the terminal or vessel and the hose is marked to identify it with that information.

(G) The hose burst pressure and the pressure used for the test required by 33 CFR 156.170 shall not be marked on the hose and shall be recorded elsewhere at the terminal.

(H) Each non-conducting length of hose used for transferring oil or for vapor recovery shall be clearly marked "NON-CONDUCTING" where it can best be seen.

(2) Each hose used for transferring oil shall be inspected, maintained, handled and stored in accordance with the recommended practices in "HOSE TECHNICAL INFORMATION BULLETIN: No. IP-11-4; Oil Suction and Discharge Hose; Manual for Maintenance, Testing and Inspection," 1987 edition, published by the Rubber Manufacturers Association (RMA), 1400 K Street, N.W., Washington, D.C. 20005.

(b) Loading Arms.

(1) Each mechanical loading arm used for transferring oil and placed into service after June 30, 1973, shall meet the design, fabrication, material, inspection, and testing requirements in American National Standards Institute (ANSI) B31.3. published in 1990 and available from the American Society of Mechanical Engineers

(ASME), 22 Law Drive, Box 2300, Fairfield, New Jersey
07007-2300.

- (2) The manufacturer's certification that the standard American National Standards Institute (ANSI) B31.3 has been met shall be permanently marked on the loading arm or recorded elsewhere at the terminal with the loading arm marked to identify it with that information.
 - (3) Each mechanical loading arm used for transferring oil shall have a means of being drained or closed before being disconnected.
 - (4) Each mechanical loading arm shall be marked where it can best be seen, with the following:
 - (A) Maximum allowable working pressure; and
 - (B) Date of the latest annual test required by 33 CFR 156.170; dates of previous tests shall be obliterated.
 - (5) Each mechanical loading arm shall have its maximum allowable lateral movement envelope limits conspicuously marked on the terminal at the position of the loading arm. The maximum allowable extension limits of the loading arm shall also be indicated visibly.
- (c) Closure Devices.
- The terminal shall have sufficient blank flanges or other means acceptable to the Division to blank off the ends of each hose or loading arm that is not connected for the transfer of oil. New, unused hose is exempt from this requirement.
- (d) Connection.
- (1) Each person who makes a bolted connection for transfer operations shall:
 - (A) Use suitable material in joints and couplings to ensure a leak-free seal;
 - (B) Use a bolt in every hole;
 - (C) Use bolts of the correct size in each bolted connection; and

- (D) Tighten each bolt and nut uniformly to distribute the load and sufficiently and to ensure a leak free seal.
- (2) A person who makes a connection for transfer operations shall not use any bolt that shows signs of strain or is elongated or deteriorated.
- (3) Except as provided in subsection (4) of this section, no person may use a connection for transfer operations unless it is:
- (A) A bolted or full threaded connection; or
- (B) A quick-connect coupling that either meets American Society for Testing and Materials (ASTM) F-1122, Standard Specifications for Quick Disconnect Couplings published in 1987 by the American Society for Testing and Materials, 1916 Race Street, Philadelphia, Pennsylvania 19103-1187 or has been accepted by the U.S. Coast Guard.
- (4) No person may transfer oil to a vessel that has a fill pipe for which containment cannot practically be provided unless an automatic back pressure shutoff nozzle is used.

(e) Monitoring Devices.

Monitoring devices shall be installed and maintained at the terminal if required by the U.S. Coast Guard Captain of the Port.

(f) Small Discharge Containment.

- (1) Except as provided in subsections (3) and (4) of this section, an onshore terminal shall have fixed catchments, curbing, or other fixed means to contain oil discharged at the following locations:
- (A) Each hose handling and loading arm area (that area on the terminal that is within the area traversed by the free end of the hose or loading arm when moved from its normal stowed or idle position into a position for connection); and
- (B) Each hose connection manifold area.
- (2) The discharge containment means required by subsection (f)(1) of this section shall have a capacity of at least:

- (A) Two barrels if it serves one or more hoses of 6-inch inside diameter or smaller or one or more loading arms of 6-inch nominal pipe size diameter or smaller;
 - (B) Three barrels if it serves one or more hoses with an inside diameter of more than 6-inches, but less than 12 inches, or one or more loading arms with a nominal pipe size diameter of more than 6 inches, but less than 12 inches; or
 - (C) Four barrels if it serves one or more hoses of 12-inch inside diameter or larger or one or more loading arms of 12-inch nominal pipe size diameter or larger.
- (3) The terminal may use portable means of not less than $\frac{1}{2}$ barrel capacity each to meet the requirements of subsection (f)(1) of this section for part or all of the terminal if the Division finds that fixed means to contain oil discharges are not feasible.
 - (4) A mobile terminal, such as a tank truck, may have portable means of not less than five gallons capacity to meet the requirements of subsection (f)(1) of this section, when conducting transfer operations to or from tank vessels or barges.

(g) Discharge Removal.

Each onshore terminal shall have a means to remove discharged oil from the containment system required by subsection (f)(1) of this section safely and quickly without discharging the oil into the water.

(h) Emergency Shutdown.

- (1) The terminal shall have an emergency means to shutdown and stop the flow of oil from the terminal to the tank vessel or barge.
- (2) A point in the transfer system at which the emergency means stops the flow of oil on the terminal shall be located near the dock manifold connection to minimize the loss of oil in the event of the rupture or failure of the hose, loading arm, or manifold valve.
- (3) For oil transfers, the means used to stop the flow under subsection (h)(1) of this section shall stop that flow within:

(A) 60 seconds on any terminal or portion of a terminal that first transferred oil on or before November 1, 1980; and

(B) 30 seconds on any terminal that first transfers oil after November 1, 1980.

(4) The VPIC and TPIC shall each be capable of ordering or activating the emergency shutdown.

(5) If the VPIC or TPIC orders an emergency shutdown, the shutdown shall be capable of being activated and shall be activated within 30 seconds of the order.

(6) To meet the requirements of subsections (h)(4) and (5) of this section, the means to stop the flow of oil shall be either of the following:

(A) An electrical, pneumatic or mechanical linkage to the terminal; or

(B) A voice communications system continuously operated by a person on the terminal who at all times during the transfer can hear the communications and can, at any time, activate the emergency shutdown.

(i) Vapor Control Systems.

Any Vapor Control System at any marine terminal shall meet the requirements of 33 CFR 154, Subpart E, or any other such federal regulations governing Vapor Control Systems.

(j) Equipment Tests and Inspections.

No person may use any equipment for conducting an oil transfer unless it has been tested, inspected, and is in the condition specified in 33 CFR 156.170.

Authority: Sections 8750, 8751, 8752, 8755, and 8757, Public Resources Code.

Reference: Sections 8750, 8751, 8752, 8755, 8757, and 8758, Public Resources Code.

\$2385. Operations Manuals.

(a) Operations Manual Requirements.

(1) No terminal may conduct transfer operations except in accordance with an operations manual approved by the Division.

- (2) Operators of terminals who hold a letter of adequacy issued by the U.S. Coast Guard for their operations manual, at the time the provisions of this article become effective, may continue to carry out transfer operations in accordance with that manual without Division approval until the earlier of the following:
 - (A) One year from the date this article becomes effective; or
 - (B) The letter of adequacy is invalidated by the U.S. Coast Guard.
 - (3) Notwithstanding the provisions of subsection (b) of this section, each terminal operator shall submit to the Division, the following:
 - (A) Within 30 days of this article becoming effective, two copies of their current operations manual together with its letter of adequacy, for information purposes; and
 - (B) Within one (1) year of this article becoming effective, a new operations manual which meets the requirements of this section, for Division approval under subsection (c) of this section.
 - (4) Operators of terminals shall maintain their operations manual so that it is:
 - (A) Current; and
 - (B) Readily available for examination by the Division.
 - (5) Operators of terminals shall ensure that a sufficient number of copies of their operations manual are readily available for each TPIC and VPIC while conducting a transfer operation.
- (b) Letter of Intent.
- (1) Any person who proposes to install a new marine terminal or proposes to assume control over the operation of an existing marine terminal shall, not less than 60 days prior to the intended assumption of operations, submit a letter of intent to operate the terminal to the Division.
 - (2) The letter of intent required by subsection (b)(1) of this section may be in any form, but shall at least include the following:

- (A) The name, address, telephone number and facsimile number of the terminal operator;
 - (B) The name, address, berth number, telephone number and facsimile number (if any) of the terminal; and
 - (C) The proposed operations manual for the terminal.
- (3) The operator of any terminal for which a letter of intent has been submitted shall, within five (5) days of any change in operations or information or a termination of use of the terminal, advise the Division in writing of the changes and shall cancel, in writing, the letter for any terminal at which transfer operations can no longer be conducted.
- (c) Operations Manual: Approval.
- (1) The Division shall review and, within 30 days of submission, approve any operations manual which meets the requirements of this section. If the Division finds that the manual does not meet the requirements of this section, then it shall notify the submitting party within 30 days of the manual's submission.
 - (2) The approval by the Division is voided if the terminal operator:
 - (A) Amends the operations manual without following the procedures in subsection (f) of this section; or
 - (B) Fails to amend the operations manual when required by Division.
 - (3) Any terminal operator whose operations manual has been disapproved by the Division may appeal the disapproval to the Commission, provided that the appeal is submitted in writing to the Commission Executive Officer within 30 days after the operator receives notice of the disapproval.
- (d) Operations Manuals: Contents.
- (1) Each operations manual required by this section shall:
 - (A) Describe how the applicant meets the operating rules and equipment requirements specified in this article and in 33 CFR Parts 154 and 156, Subpart A; and

- (B) Describe the responsibilities of personnel under this section and under 33 CFR Parts 154 and 156, Subpart A, in conducting oil transfer operations.
- (2) Each operations manual required by this section shall contain all of the following:
- (A) Maps and diagrams showing the location and configuration of the terminal, including, at minimum, the following:
1. Scale and direction;
 2. A point on the map with its latitude and longitude taken with a geographic positioning system, with differential correction;
 3. A site plan of the major structural components of the current facility, including, but not limited to piers, mooring structures, buoys, manifolds, mechanical loading arms, pipelines, and pipeline end manifold (PLEM);
 4. The location of the general and emergency shutdown system controls;
 5. Locations of any environmental and discharge monitoring devices;
 6. Storage locations for pollution containment equipment including those deployed during transfer operations;
 7. Configuration of boom containment and arrangements for boom stand-off for each type of transfer operation that takes place at the terminal;
 8. Location and type of fire extinguishing, first aid and other safety equipment;
 9. Location of facilities used for personnel shelter, if any;
 10. Locations of environmentally sensitive areas in the immediate vicinity of the terminal, if any;
 11. Where applicable the locations of special shut-off valves and other safety equipment to be used in case of earthquakes;

12. Locations of sump wells, if any, at or in the vicinity of the terminal;
 13. Emergency exit routes for personnel; and
 14. Bathymetry and sea floor characteristics;
- (B) A physical description of the terminal including a plan of the terminal showing mooring areas, transfer locations, control stations, and locations of safety equipment;
- (C) The hours of operation of the terminal;
- (D) The sizes, types, and number of tank vessels and barges to and from which the terminal can transfer oil at any time;
- (E) For each product transferred at the terminal:
1. Generic or chemical name; and
 2. The following cargo information:
 - a. The name of the cargo, as listed under Appendix II of Annex II of MARPOL 73/78, Table 30.25-1 of 46 CFR 30.25-1, Table 151.05 of 46 CFR 151.05-1, or Table 1 of 46 CFR 153.
 - b. A description of the appearance of the cargo;
 - c. A description of the odor of the cargo;
 - d. The hazards involved in handling the cargo;
 - e. Instructions for safe handling of the cargo;
 - f. The procedures to be followed if the cargo spills or leaks or if a person is exposed to the cargo; and
 - g. A list of fire fighting procedures and extinguishing agents effective with fires involving the cargo.
- (F) The minimum number of persons on duty during transfer operations and their duties;

- (G) The names and telephone numbers of the terminal operator or operators, U.S. Coast Guard, California State Office of Emergency Services, and other personnel who may be called by the employees of the terminal in an emergency;
- (H) A description of each communication system required by §2370 of these regulations;
- (I) A description of the facilities and the location of each personnel shelter, if any;
- (J) A description and instructions for the use of drip and discharge collection, and vessel slop reception facilities, if any;
- (K) A description of and instructions for seep monitoring from sump wells, if any;
- (L) A description of the operation of and the component location of each emergency shutdown system;
- (M) Quantity, types, locations, and instructions for use of oil discharge monitoring devices, if any;
- (N) Quantity, type, location, instructions for use, and time required for gaining access to and deployment of initial response containment equipment;
- (O) A description of the spill containment for transfer operations required under §2395 and, if applicable, the basis used for determining that the onshore marine terminal is subject to high velocity currents as defined in §2395, subsection (b)(3);
- (P) Quantity, type, location, and instructions for use of fire extinguishing equipment required by federal, state and local fire prevention regulations;
- (Q) The maximum relief valve setting or, where relief valves are not provided, maximum system pressure for each transfer system and the method used to determine that pressure;

(R) Procedures for:

1. Operating each mechanical loading arm including the limitations of each loading arm;
2. Transferring oil;
3. Completion of pumping; and
4. Emergencies;

(S) Procedures for reporting and initially containing oil discharges;

(T) A brief summary of applicable federal, state, and local oil pollution laws and regulations;

(U) Procedures for shielding portable lighting authorized by the Division under §2365;

(V) A description of the training and qualification program for TPIC's; and

(W) A list of all designated TPIC's for the terminal;

(X) Statements explaining that each oil or hazardous materials transfer hose is marked either with the name of each product which may be transferred through the hose; with the words, "OIL SERVICE"; or with letters, numbers or other symbols representing all such products and the location in the operations manual where a chart or list of the symbols used and a list of the compatible products which may be transferred through the hose can be found for consultation before each transfer; and

(Y) A list and brief description of all operating restrictions placed upon the terminal by federal state or local authorities with proper jurisdiction.

(3) If a terminal collects vapors emitted from vessel cargo tanks for recovery, destruction, or dispersion, the operations manual shall contain a description of the vapor collection system at the terminal which includes the following:

(A) A line diagram or simplified piping and instrumentation diagram (P&ID) of the terminal's vapor control system piping, including the location of each valve, control device, pressure-

vacuum relief valve, pressure indicator, flame arrester and detonation arrester; and

(B) A description of the vapor control system's design and operation, including the:

1. Vapor line connection;
2. Startup and shutdown procedures;
3. Steady state operating procedures;
4. Provisions for dealing with pyrophoric sulfide (for facilities which handle inerted vapors of cargoes containing sulfur);
5. Alarms, shutdown devices and Safety Analysis Function Evaluation (SAFE) chart as prescribed in Recommended Practice 14C, Fourth Edition, published on September 1, 1986, by the American Petroleum Institute (API), Publications and Distribution Section, 1220 L Street NW, Washington, DC 20005; and
6. Pre-transfer equipment inspection requirements.

(4) Each operations manual shall also contain an electrical hazardous (classified) area diagram of the current terminal, as described in National Fire Protection Association (NFPA) No. 70, National Electrical Code, Articles 500 and 515, 1993 edition, published by NFPA, 1 Batterymarch Park, P.O. Box 9101, Quincy, Massachusetts 02269-9101. This diagram need not be bound with the operations manual, but must be located at the terminal. Copies of the operations manual submitted to the Division under subsection (a)(3)(B) of section 2385 need not contain the diagram.

(45) For ease of amendment, the terminal's operations manual shall be contained in a binder which allows easy replacement of pages. The terminal operator shall incorporate a dated copy of each amendment to the operations manual under subsection (f) of this section in each copy of the manual with the related existing requirement or add the amendment at the end of each manual if not related to an existing requirement. Language in the manual which no longer applies shall be removed from the manual.

(56) The operations manual shall be written in the order specified in subsections (d)(2) and (d)(3) of this

section or contain a cross-referenced index page in that order.

(e) Operations Manual: Offshore Terminals.

(1) Each operations manual for an offshore marine terminal shall contain all applicable provisions of subsection (d) of this section and shall also include at least the following:

- (A) Calculations with supporting data and other documentation to show that the charted water depth at each berth of the terminal is sufficient to provide at least a 6-foot net underkeel clearance at all times and under all conditions for each tank vessel or barge that the terminal expects to be moored at the terminal.
- (B) A description of prevailing currents, tides, winds and other weather conditions most commonly experienced at the terminal and a description of the monitoring equipment, if any, employed at the terminal which relays information about wind, wave and current conditions at the terminal.
- (C) A description of specific limiting wind, wave, current and meteorological conditions under which each of the following will occur:
 - 1. Oil transfer operations will be shut down;
 - 2. Departure of the tank vessel or barge from the mooring will be required; and
 - 3. Mooring operations will be prohibited.
- (D) A description of the navigational aids, if any, provided for approach to the berth and times of operation;
- (E) A description of mooring support vessels duties and services;
- (F) A detailed description of mooring and unmooring maneuvers with supporting graphical illustrations for each berth of the terminal;
- (G) A description of the duties and responsibilities of mooring masters and assistant mooring masters, including the numbers of such personnel that will be in attendance at mooring/unmooring/cargo transfer operations; and

- (E) A description of each of the tugs available in compliance with §2390, subsection (b), including, at least, the following:
1. Bollard pull; and
 2. Towing and pushing arrangements.
- (2) The additional provisions required by subsection (e)(1) of this section may be incorporated under appropriate existing headings of the operations manual or may be added to the end of the manual.
- (f) Operations Manual: Amendment.
- (1) Using the following procedures, the Division may require the terminal operator to amend the operations manual if the Division finds that the operations manual does not meet the requirements of this section:
- (A) The Division shall notify the terminal operator in writing of any inadequacies in the operations manual within 30 days of receipt of the manual.
 - (B) The terminal operator may submit written information, views, and arguments on and proposals for amending the manual within 30 days from the date of the Division notice.
 - (C) After considering all relevant material presented, the Division shall, within 30 days of receipt of the material submitted under subsection (f)(1)(B) of this section, notify the terminal operator of any amendment required or adopted, or rescind the notice.
- (2) The amendment becomes effective 30 days after the terminal operator receives the Division's notice, unless the terminal operator petitions the Division Chief to review the Division's notice, in which case its effective date is delayed pending a decision by the Division Chief. Petitions to the Division shall be submitted in writing.
- (3) If the Division finds that there is a condition requiring immediate action to prevent the discharge or risk of discharge of oil that makes the procedure in subsection (f)(1) of this section impractical or contrary to the public interest, the Division may issue an amendment effective on the date the terminal operator receives notice of it. In such a case, the Division shall include a brief statement of the reasons

for the findings in the notice. The owner or operator may petition the Division Chief to review the amendment, but the petition shall not delay the amendment.

- (4) The terminal operator may propose amendments to the operations manual by submitting any proposed amendments in writing to the Division.
- (5) The proposed amendment shall take effect upon approval by the Division or, if the Division takes no action within 30 days of its receipt, then at the end of that period. If the operator requests that immediate action be taken, the Division may provide immediate approval if it determines that circumstances warrant it, provided that such approval is conditioned upon subsequent review within 30 days of receipt of the proposed amendment.
- (6) The Division shall respond to proposed amendments submitted under subsection (f)(4) of this section by:
 - (A) Approving or disapproving the proposed amendments;
 - (B) Advising the terminal operator whether the request is approved, in writing;
 - (C) Including any reasons in the written response if the request is disapproved; and
 - (D) If the request is made under subsection (f)(5) of this section, immediately approving or rejecting the request.
- (7) Amendments which do not affect compliance with the requirements of this article, such as amendments to personnel and telephone number lists required by subsection (d)(2)(G) of this section do not require prior Division approval, but the Division shall be advised of such amendments as they occur.

Authority: Sections 8750, 8751, 8755, and 8758, Public Resources Code.

Reference: Sections 8750, 8751, 8755, 8757, and 8758, Public Resources Code.

§2390. Additional Requirements at Offshore Terminals.

(a) Applicability.

The provisions of §2390, shall apply only at offshore terminals.

(b) Tug Requirements.

- (1) During every mooring and unmooring operation, a tug or tugs shall be available and standing by in readiness to assist the tank vessel. The tug or tugs shall have bollard pull sufficient to assist the tank vessel.
- (2) At all times during a transfer operation a tug or tugs shall be available to the barge. The tug or tugs shall have bollard pull sufficient to assist the barge.

(c) Mooring Masters.

- (1) For the purpose of this section, a "mooring master" means a person who holds a valid U.S. Coast Guard issued license as Master or Mate and an endorsement as First Class Pilot for the area at which the terminal is located.
- (2) A mooring master shall be aboard every tank vessel or barge for every mooring and unmooring operation at that terminal.

(d) Assistant Mooring Master.

- (1) For the purpose of this section, an "assistant mooring master" means a person who holds a valid U.S. Coast Guard issued license as Master or Mate and has experience in mooring and unmooring operations at that terminal. This person shall not be a member of the vessel's crew.
- (2) In addition to the requirement in subsection (c)(2) of this section, an assistant mooring master shall be aboard the tank vessel for every mooring and unmooring operation at that terminal.

(e) Diver Inspection of Submarine Hose.

Each terminal operator shall ensure that a diver inspection of any submerged hose string to be used has been conducted prior to every hookup if:

- (1) The submarine hose has not been lifted within 15 days of the last previous transfer; or

- (2) There has been a passage of a storm or seismic event affecting the area which may have damaged or covered the submarine hose.

(f) Pipeline Requirements.

- (1) At all times, offshore terminals shall have the capability of drawing and maintaining a vacuum on all submarine pipelines containing oil.
- (2) At all times during mooring and unmooring operations at offshore terminals, a vacuum shall be maintained on all submarine pipelines containing oil which do not lead to a berth where another vessel is already moored and which:
 - (A) Serve the berth where the vessel is being moored or unmoored; or
 - (B) Are in or near the approach path of the vessel being moored or unmoored.

(g) Underkeel Clearance.

Each tank vessel or barge that conducts or is intending to conduct a transfer operation at an offshore terminal shall at all times during the transfer operation and under all conditions have a net underkeel clearance of at least six (6) feet from the sea-floor and any known obstructions.

(h) Bathymetric Surveys.

Offshore terminals shall conduct annual bathymetric surveys of the berth and maneuvering areas adjacent to the berth.

Authority: Sections 8750, 8751, and 8755, Public Resources Code.

Reference: Section 8670.17, Government Code; Sections 8750, 8751, and 8755, Public Resources Code.

\$2395. Spill Containment for Transfer Operations.

(a) Applicability and Date of Implementation.

- (1) The provisions of \$2395 apply only to oil transfer operations between vessels and terminals where the oil transferred is a persistent oil as defined in subsection (b)(1) of this section.

- (2) The provisions of §2395, become effective 180 days after these regulations have been filed with the Secretary of State.

(b) General.

- (1) For the purpose of this section and section 2396, "persistent oil" means a petroleum-based oil that does not meet the distillation criteria for a non-persistent oil. "Non-persistent oil" means a petroleum-based oil, such as gasoline, diesel or jet fuel, which evaporates relatively quickly. Specifically, it is an oil with hydrocarbon fractions, at least 50 percent of which, by volume, distills at a temperature of 645 degrees Fahrenheit and at least 95 percent of which, by volume, distills at a temperature of 700 degrees Fahrenheit.
- (2) For the purpose of this section and section 2396, the term "boom" means flotation boom or other effective barrier containment material suitable for containment of oil that is discharged on to the surface of the water.
- (3) For the purpose of this section and section 2396, an "onshore marine terminal subject to high velocity currents" means an onshore terminal at which the maximum current velocities are 1.5 knots or greater for the majority of the days in the calendar year.

(c) Vessel Loading Operations at Onshore Terminals.

- (1) Prior to commencement of each transfer operation from the terminal to the vessel at an onshore terminal, the terminal operator shall deploy boom to enclose the water surface surrounding the vessel so as to provide common containment area for:
- (A) The entire vessel at the waterline; and
- (B) Either of the following:
1. The entire dock; or
 2. Portions of the dock where oil may spill into the water.
- (2) To meet the requirements of subsection (c)(1)(B) of this section, where the face of the dock is capable of acting as an effective barrier on the inboard side of the vessel, the boom on that side may be deployed so that it provides containment between the vessel and the dock.

- (3) The boom shall be deployed so that it provides a stand-off of not less than 4 feet from the outboard side of the vessel.
- (4) For onshore marine terminals subject to high velocity currents, the terminal operator may provide sufficient boom appropriate to the conditions at the terminal, trained personnel and equipment, maintained in a standby condition at the berth for the duration of the entire transfer operation, so that a length of at least 600 feet of boom will be deployed for effective containment within 30 minutes of a spill as an alternative to the requirements set forth in subsections (c)(1) and (c)(2) of this section.
- (d) Vessel Offloading Operations at Onshore Terminals.
- (1) Prior to commencement of each transfer operation from the vessel to the terminal at an onshore terminal, the terminal operator shall deploy boom to enclose the water surface on the inboard side of the vessel, so as to provide common containment area for:
- (A) The vessel's entire inboard length, at the waterline; and
- (B) Either of the following:
1. The entire dock; or
 2. Portions of the dock where oil may spill into the water.
- (2) Where the face of the dock is capable of acting as an effective barrier, the boom shall be deployed so that it provides containment between the vessel and the dock.
- (3) For onshore marine terminals subject to high velocity currents, the terminal operator may provide sufficient boom appropriate to the conditions at the terminal, trained personnel and equipment, maintained in a standby condition at the berth for the duration of the entire transfer operation, so that a length of at least 600 feet of boom will be deployed for effective containment within 30 minutes of a spill as an alternative to the requirements set forth in subsections (d)(1) and (d)(2) of this section.

(e) Transfer Operations at Offshore Terminals.

Prior to commencement of each transfer operation at offshore terminals, the terminal operator shall provide either one of the following for the duration of the entire transfer operation:

- (1) Boom deployed to enclose the water surface on the transfer side of the vessels manifold, so as to provide effective containment for an area of the water surface that extends from at least 75 feet forward, to at least 75 feet astern of the manifold and outward to a distance of at least 50 feet beyond the position of the pipeline end manifold (PLEM); or
- (2) Sufficient boom appropriate to the conditions at the terminal, trained personnel and equipment, maintained in a stand-by condition at the berth, so that a length of at least 600 feet of boom will be deployed for effective containment within 30 minutes of a spill.

Authority: Sections 8750, 8751, 8752, 8755, 8757, and 8758, Public Resources Code.

Reference: Section 8670.28, Government Code; Sections 8750, 8751, 8752, 8755, 8757, and 8758, Public Resources Code.

§2396 Spill Containment for Ballasting or Deballasting Operations for Tank Vessels at Marine Terminals.

(a) Applicability.

The provisions of §2396 apply to tank vessels conducting ballasting or deballasting operations at terminals where any part of the cargo on board or any part of the cargo last carried is a persistent oil. These provisions do not apply to ballasting operations to a tank vessel's segregated ballast tanks.

(b) Tank Vessel Ballasting or Deballasting Alongside Onshore Terminals.

- (1) Prior to commencement of any ballasting or deballasting operation at an onshore terminal, the terminal operator shall ensure that boom is deployed or maintained in a standby condition, as appropriate, as specified in subsections (c) or (d) of section 2395.
- (2) At onshore terminals not subject to high velocity currents, where the tank vessel uses the sea valves on the outboard side of the vessel, the booming shall

conform to the requirements of subsections (c)(1), (c)(2) and (c)(3) of section 2395. Where the sea valves on the terminal side of the vessel are used, the booming shall conform to the requirements of subsections (d)(1) and (d)(2) of section 2395.

(c) Tank Vessel Ballasting or Deballasting at Offshore Terminals.

Prior to commencement of any ballasting or deballasting operation at an offshore terminal, the terminal operator shall ensure that the provisions of subsection (e)(2) of section 2395, have been complied with.

Authority: Sections 8750, 8751, 8752, 8755, 8757, and 8758, Public Resources Code.

Reference: Section 8670.28, Government Code; Sections 8750, 8751, 8752, 8755, 8757, and 8758, Public Resources Code.

\$2400. Mitigation Monitoring Requirements.

If an environmental review is or has been conducted for all or any part of a terminal or for terminal operations pursuant to §§21002 through 21082.2 of the Public Resources Code and Title 14, California Code of Regulations, §§15000 et seq., and a lead or responsible agency requires compliance with mitigation measures as a condition for installation or operation of that terminal, then:

- (1a) The terminal operator shall comply with the required mitigation measures; and
- (2b) If the mitigation measures relate to operation of the terminal, both the mitigation measures and monitoring program required shall be incorporated into the terminal operations manual.

Authority: Sections 8750, 8751, 8755 and 8758, Public Resources Code.

Reference: Sections 21002, 21004, 21067, 21069, 21081 and 21082.2, Public Resources Code; Sections 15051, 15052, and 15386, Title 14, California Code of Regulations.

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