

**A. EL SEGUNDO MARINE TERMINAL**

1. Terminal Location and Description: The Chevron U.S.A. Products Company's El Segundo Marine Terminal facility is located in an open, unsheltered roadstead in the Santa Monica Bay on the West Coast of the United States at El Segundo, California. The Terminal maintains a Sea Buoy, "2ES," a lighted bell buoy exhibiting a red flashing light every 4 seconds. The Terminal has two, 7-point conventional buoy moorings systems (CBMs). Berth No. 3 is approximately 7,200ft offshore and Berth No. 4 is approximately 8,100ft offshore.

Berth No. 3 has two separate piping systems and associated submarine hoses; 3C (clean) for light oils (primarily gasoline, diesel and jet fuels) and 3B (black) for crude oil and black fuel oils. In Berth 3C, a 16in submarine pipeline and a 12in submarine circulation pipeline are attached to 245ft of submarine hose, the last link of which is a 12in over-the-rail hose. Berth 3B has a 26in pipeline, and a 12in circulation pipeline also attached to 240ft of submarine hose with a 12in over-the-rail hose.

In Berth 4, a 36in submarine pipeline and a 14in submarine circulation pipeline attach to 310ft of submarine hose, the last link of which is a 16in over-the-rail hose.

The Onshore Facility consists of a transfer station for each submarine system, with booster pumps, lines and instrumentation. The systems operate remotely from a manned control room with control indicators, recording equipment, and remote actuators for facility controls. The El Segundo Marine Terminal is maintained and operated 24 hours a day, 7 days a week.

2. Mooring and Unmooring: Only vessels that have been successfully vetted by Chevron Shipping Company are cleared to call at this Terminal. A mooring launch with a Chevron Mooring Master and a Mooring Master Assistant (MMA) meets vessels scheduled to proceed directly into berth on arrival at the pilot station, which is located three miles SW of Buoy "2ES." The Mooring Master pilots the vessel and advises the vessel's Master on approaching and departing the berth. The Mooring Master acts as Terminal Person-in-Charge while onboard the vessel. The MMA assists the Mooring Master and acts as the pollution prevention officer on the vessel during the vessel's stay at El Segundo. The Mooring Master, MMA and marine support vessel remain with the ship throughout the entire stay at the Marine Terminal.

The following is a typical procedure for berthing vessels in Berth Nos. 3 or 4. The vessel's Master and Mooring Master discuss and agree the detailed passage plan and procedures to take into account existing conditions of the particular berth, including, but not limited to the state of the wind, current, sea, vessel size limitations before commencing the operation. Escorted by an assist tug, a vessel typically approaches the mooring heading due north, passing approximately 200 yards west of No. 7 mooring buoy. The MMA and mooring launch assist the Mooring Master in dropping and positioning the vessel's anchors. Both the port and starboard anchors are dropped and

positioned in approximately 80ft of water in Berth No. 4, and 73ft of water in Berth No. 3. The mooring launch is employed to tie up the vessel to 7 large mooring buoys, the order of which is determined by metocean conditions.

Reverse the general procedure to depart the berth. The vessel's crew slacks the lines and the mooring launch crew releases them at the buoy. The anchors are heaved based on metocean conditions at the time. An assist tug attends the unmooring operation at all times.

3. Tug Assist Requirements: All vessels will have a minimum of one tug standing by in readiness to assist the tank vessel during every mooring and unmooring.
4. Under-keel Clearance Guidelines: The maximum operating draft for vessels is 51ft in Berth No. 3 and 56ft in Berth No. 4. As measured at the pipeline end manifold (PLEM), vessels at the maximum allowable draft in each berth would have an under-keel clearance of at least 12ft.
5. Spill Prevention and Response: Chevron is aware of the consequences of oil spills, and works diligently to prevent them at the Marine Terminal. The process begins with the vetting of all tank vessels before entering into any commercial contract. The vessel owner must make the vessel available to a Chevron marine representative and the vessel must satisfy specific assurance criteria. Suitable vessels appear on Chevron Shipping Company's Conventional Buoy Mooring (CBM) Certified List. Only CBM-certified vessels trade at this terminal.

Chevron maintains the practice of placing a Mooring Master and MMA aboard all vessels calling at the Terminal. These individuals have a very high level of training and professional competency. The combination of skilled professionals monitoring the vessel's evolution from vessel mooring, throughout cargo transfer, which is concluded after the vessel is unmoored, ensures not only full compliance with regulations but also prompt corrective action to avoid dangerous developments. Chevron mooring masters rely on well-developed Contingency Plans for a wide variety of possible emergency situations and the Terminal personnel are trained in the event of an oil spill. Periodic drills involve the Terminal's own workforce and equipment, as well as a contract with MSRC (Marine Oil Spill Response Organization). All Mooring Masters complete the Chevron Mooring Master Training program and possess a USCG License and a Federal First Class Pilotage Endorsement for El Segundo Offshore Moorings.

**B. ADDITIONAL EL SEGUNDO MARINE TERMINAL PREVENTION MEASURES**

1. A contracted industrial diver conducts monthly surface and sub-sea inspections of all mooring equipment, the submarine PLEM and submarine hoses in each berth. Additionally, dive inspections are made in the event a submarine hose has not been lifted within fifteen days of the previous cargo transfer and after a storm or seismic event affects the area.
2. Continuous vacuum is placed on the submarine pipeline and hose during all mooring and unmooring operations and when a vessel is operating in the vicinity of the berths.
3. Bathymetric Surveys are conducted every three years. Quarterly soundings are taken at each Berth PLEM, if the quarterly sounding exceeds the Bathymetric Survey by five percent, a new Bathymetric Survey must be conducted.
4. The Terminal takes pride in a low incident rate and has a goal of zero oil spills. To contain oil spills on the water, the refinery maintains the following spill response equipment:
  - a. Initial Response: Mooring launches are equipped with 1000ft of Expandi pollution boom, and upon verification of a spill, personnel can begin deploying this boom within 15 minutes.
  - b. The refinery will dispatch the following Chevron equipment from King Harbor which can be in place in less than two hours:
    - i. Walt K: 38ft Fast response boat with– Lamor Mini max skimmer (approximately 150 bbls per hour) 3X - Kepner Oil Storage bladders (Total 100 bbls capacity)
    - ii. Utility One: 32ft Fast response vessel.
    - iii. Boomer: 52ft with 1,000ft of 43in Kepner Sea Curtain ReelPak
    - iv. Duke J: 48ft with 1,000' of 43in Kepner Sea Curtain ReelPak

Supplementary response will commence from MSRC within 2 - 2.5 hours.

NOTE - See the “Oil Spill Contingency Response Plan” for additional inventory of the refinery’s spill containment equipment, as well as information concerning Spill Notification Procedures, Logistical Support, Offshore Containment and Recovery Procedures and Shoreline Protection and Cleanup.