



fact sheet

el segundo refinery marine terminal loading system

human energy®



A double-hulled tanker offloads crude at the El Segundo Marine Terminal.

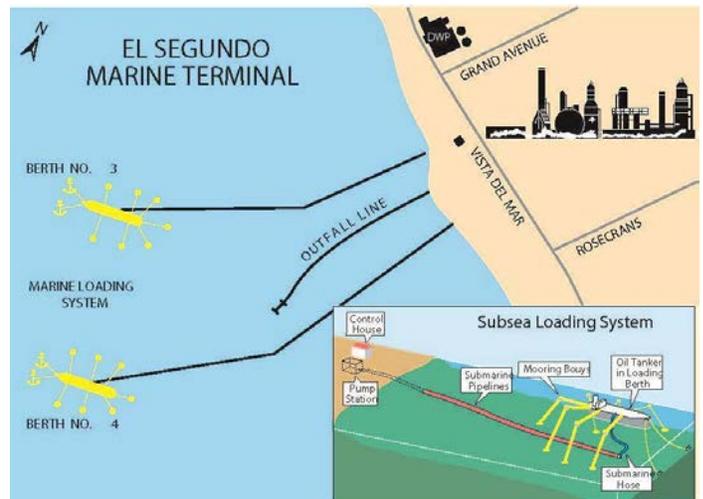
About 90% of the crude oil processed at the El Segundo Refinery makes its way to the facility from its home via tankers. It is off-loaded into underwater pipelines at our offshore Marine Terminal. This terminal is one of the safest, most efficient in operation, and with its two separate mooring berths can handle two tankers at a time.

The two separate berths are located approximately one and a half miles from shore, and are designed to allow for the safe maneuvering of vessels. When vessels call at El Segundo's Marine Terminal, a Chevron mooring master and an environmental cargo officer board the ship about two miles offshore then guide it to berth. Using a mooring launch vessel and a tug standing by for assistance, along with modern navigational systems such as GPS (Global Positioning System), the mooring master directs anchoring and securing of all mooring lines.

Before cargo offloading begins, the mooring master, the environmental cargo officer, the ship's master and chief engineer approve the El Segundo Marine Terminal pre-loading check list, which verifies that safety and environmental precautions have

been reviewed. Next, the line launch crew assists the ship's crew in raising and securing the submarine hose. When satisfied that the hose and the ship's manifold are properly connected, the mooring master notifies the loading operator at the Marine Terminal control house, and the transfer begins.

Throughout the transfer, the mooring master or environmental cargo officer aboard the ship, and the head operator onshore, maintain constant radio contact, while the wharf operator oversees the quantity and quality of product flowing from or to the tank at the Marine Terminal.



Marine Terminal berth map.

Preventing any environmental incident from occurring is Chevron's top priority when it comes to operating the El Segundo Marine Terminal. That is why so much time is dedicated to training, modern equipment and monitoring systems. Chevron performs routine self-audits and participates in government inspections; however, it is always prudent to plan for the unexpected, which is why Chevron also dedicates significant resources to spill response.



Chevron El Segundo's response equipment.

Every time a tanker is in berth, there is a support boat on scene. This support boat contains spill response equipment and trained personnel to act as a first line of defense. Chevron also maintains several vessels in the Redondo Beach Harbor that are specifically designed and outfitted for oil spill response. Full time, licensed employees and contractors staff these boats. A team of Chevron employees also receives regular training and conducts drills.

Chevron was a founding member of the oil spill co-op Clean Coastal Waters (CCW), which maintained a fleet of over a dozen vessels in Long Beach that were specifically designed for spill response. In 2004, CCW merged with the Marine Spill Response Corporation (MSRC), which Chevron also maintains a membership. MSRC is the largest nationwide oil spill response organization. MSRC has significant resources in Southern California, including the premier response vessel in Los Angeles, the *California Responder*, and it also maintains equipment inventoried on refinery property. MSRC is recognized by the State of California and the U.S. Coast Guard as their primary oil spill response organization.

Prevention will always be first when it comes to the operation of the El Segundo Marine Terminal, but Chevron always stands ready to respond.

For more information about the El Segundo Refinery Marine Terminal or other refinery processes, contact the refinery's Policy, Government and Public Affairs office at 310.615.5254. Off-hour needs can be addressed by calling the 24-Hour Community Response Hotline at 310.615.5342.