

**LOS ANGELES REFINERY
MARINE TERMINAL
BERTH 149 CRITERIA**

Criteria	LA-149		Comments
Berth Draft	34.1 feet	10.39 meters	35' Restriction (MOTEMS)
Under Keel Clearance	1 foot	0.3048 meters	
Maximum Vessel Draft	33.1 feet	10.09 meters	
Mean Tide Level	2.89 feet	.88 meters	
Upper Bound Tide	9.40 feet	2.87 meters	
Lower Bound Tide	-3.62 feet	-1.1 meters	
Maximum Displacement	67,400 LT		
Maximum Length Overall	750 feet	228.6 meters	
Minimum Length Overall	175 feet	53.34 meters	
Bow to Center Manifold	365 feet	111.25 meters	
Height of the Dock Above MLLW	16 feet	4.88 meters	
Distance from manifold to Edge of Dock	12 – 20 feet	1.22 – 2.44 meters	Bumpers not permitted
Height of Manifold Above Dock	4 feet	1.22 meters	
Length of Hose(s)	60 – 70 feet	18.29 – 19.81 meters	
Min Parallel Body Length	175 feet	53.34 meters	
Maximum Beam	105.8 feet	32.25 meters	
Max Manifold Height Above MLLW	50 feet	15.4 meters	
Min Manifold Height Above Water	N/A		
Maximum Air Draft	185 feet	54.4 meters	Vincent Thomas Bridge
Mooring Lines (Ships)	2 bow head, 2 fwd breast 2 fwd spring, 2 aft spring 2 aft breast, 2 aft stern		over 50,000 DWT must have winch mounted springs
Inert Capabilities	Must be used if equipped		
Manifold Connection Size	6" or 8"		
Number of Hoses	1-3		
Vapor Recovery	Shore Based Thermal Oxidizer		8" vapor hose; must be used when loading gasoline blend stocks
Receive Slops Oil & Garbage	Yes		Vessel to coordinate with terminal and/or contractor
Potable Water	Yes		Must supply own hose
Tank Cleaning	No		Not permitted
Bunkering	No		Not permitted
H2s Limits for open system (PPM in Liquid Cargo)	<100 ppm		ASTM D-5705 Test Method
H2s Limits for open system (sample of Cargo Tank Atmosphere)	<10 ppm		Draeger tube (or similar) method taken from within the cargo hold
Receiving Stores	No		Small shore side deliveries with permission