



PROJECT DESCRIPTION DETAILED ELEMENTS

1	E.1	Codes, Standar	rds, and Specifications Governing Design and Construction			
2			roposed Project and Reduced Project Alternative would be designed,			
3		constructed, and operated in accordance with the following codes, standards, and				
4		•	cations applicable to industrial structures and marine terminals in southern			
5		Califor	nia generally, and marine oil terminals, tank farms, and pipelines in particular.			
6 7		•	Maritime Transportation Security Act of 2002 (46 Code of Federal Regulations [CFR] 701 and 33 CFR 101-106)			
8		•	Comprehensive Environmental Response, Compensation, and Liability Act			
9			of 1980 (40 CFR 300): National Oil and Hazardous Substances Pollution			
10			Contingency Plan)			
11		•	U.S. Department of Transportation (DOT): Title 49 CFR, Chapter I, DOT,			
12			Part 195 (Design, construction, maintenance, and operation of pipelines)			
13		•	California State Lands Commission: "Marine Oil Terminal Engineering and			
14			Maintenance Standards," (MOTEMS) Chapter 31F, Title 24, Part 2			
15			California Code of Regulations (2004)			
16		•	State of California: Senate Bill (SB) 2040 (Hazardous materials			
17			security)			
18		•	California Department of Transportation: Standard Provisions; Seismic			
19			Design Criteria, Version 1.3 (February 2004)			
20		•	South Coast Air Quality Management District (SCAQMD): Rule 1302 (h)			
21			Best Available Control Technology (BACT), Petroleum Storage Tanks			
22		•	City of Los Angeles: Building Code, 2002 Ed. (on-shore buildings only)			
23		•	Los Angeles City Division 95: Marine Oil Terminals, Tank Vessels, and			
24			Barges Fire Code			
25		•	Port of Los Angeles: Code for Seismic Design, Upgrade and Repair of			
26			Container Wharves (5/18/2004)			
27		•	National Fire Protection Association: Standards 20 (Standard for the			
28			Installation of Stationary Pumps for Fire Protection), 24 (Installation of			
29			Private Fire Service Mains and Their Appurtenances), 30 (Flammable and			
30			Combustible Liquids), 70 (National Electrical Code, applicable sections), and			
31			307 (Construction and Fire Protection of Marine Terminals, Piers and			
32			Wharfs)			

1	• National Flood Insurance Program (NFIP) floodplain building requirements
2	(40 CFR Sections 59 through 65).
3	 International Code Council: Uniform Building Code 1997
4 5	 American Petroleum Institute (API) Recommended Practices (RP) and Standards
6 7	 2A-WSD for Planning, designing and constructing fixed offshore platforms (Dec 2000)
8	 RP 500C Classification of areas for electrical installation of petroleum and gas pipeline transportation systems
10 11	 RP 2003, Protection against ignitions arising out of static, lightning and stray currents
12	o Standard 650, Welded Steel Tanks for Oil Storage
13	o Standard 653, Tank inspection, repair, alteration, and reconstruction
14	 Standard 1104, Welding Pipe Lines and Related Facilities
15 16 17 18	 American Society of Mechanical Engineers (ASME)/American National Standards Institute (ANSI): B31.4, "Liquid Transportation Systems for Hydrocarbons, Liquid Petroleum Gas, Anhydrous Ammonia, and Alcohols," (use latest edition at time of design)
19 20 21 22	 Oil Companies International Marine Forum (OCIMF), International Chamber of Shipping (ICS) and International Association of Ports and Harbors (IAPH): International Safety Guide for Oil Tankers and Terminals (ISGOTT), 5th edition, 2006 (relevant sections)
23 24	 OCIMF: Mooring Equipment Guidelines; Fire Protection and Emergency Evacuation Guide
25	Military Handbook (MIL-HDBK) Structural Engineering Sections
26	o 1002/1, General Requirements (30 Nov. 87);
27	o 1002/2A, Loads (15 Oct. 96)
28	o 1002/3, Steel Structures (30 Sep. 86)
29 30	 1002/4, Concrete Structures (Sep.86); 1002/5, Timber Structures (30 Mar. 87)
31	o 1025/1, Piers and Wharves (30 Oct. 87)
32 33	 Port International Navigation Association (PIANC): Guidelines for the Design of Fender Systems
34 35	 International Maritime Organization: International Ship and Port Facility Code
36 37	 American Concrete Institute: Building Code Requirements for Structural Concrete ACI 318
38 39 40	 American Institute of Steel Construction (AISC): Manual of Steel Construction (Load and Resistance Factor Design, and Allowable Stress Design), 13th Edition, 2006

American Welding Society: Structural Welding Code - Steel, AWS D1.1; 1 Structural Welding Code for Bridge Structures ANSI/AWS D1.5 2 Steel Structures Painting Council (SSPC): Good Painting Practice (Vol. 3 4 **Marine Terminal Design and Operation E.2** 5 **Tank Farm Design and Operation E.3** 6 **E.4 Pipeline Design and Operation** 7 **Security E.5** 8 **E.6 General Marine Oil Terminal Lease Conditions** 9 **E.7** References 10

