

**15-DAY EXPRESS TERMS
FOR PROPOSED BUILDING STANDARDS
OF THE CALIFORNIA STATE LANDS COMMISSION
REGARDING THE 2019 CALIFORNIA BUILDING CODE,
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 2**

**CHAPTER 31F – MARINE OIL TERMINALS
CHAPTER 35 – REFERENCED STANDARDS
(SLC-01-18)**

The State agency shall draft the regulations in plain, straightforward language, avoiding technical terms as much as possible and using a coherent and easily readable style. The agency shall draft the regulation in plain English. A notation shall follow the express terms of each regulation listing the specific statutes authorizing the adoption and listing specific statutes being implemented, interpreted, or made specific (Government Code Section 11346.2(a)(1)).

LEGEND FOR EXPRESS TERMS (Based on model codes - Parts 2, 2.5, 3, 4, 5, 9, 10)

1. Model Code language appears upright.
 2. Unmodified California 45-Day amendments appear in *underline and italics*.
 3. California 15-Day amendments appear in *double underline and italics* or ~~double strikethrough and italic~~.
 4. Rationale: The justification for the change is shown after each section or series of related changes.
 5. Notation: Authority and reference citations are provided at the end of each chapter.
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15-DAY EXPRESS TERMS

[Note: These Express Terms have been assigned item numbers where the first number represents the Division (e.g. “1.1.” for Division “1”, Item “1”).]

**DIVISION 2
SECTION 3102F
AUDIT AND INSPECTION**

2.8. Replace Figure 31F-2-1:

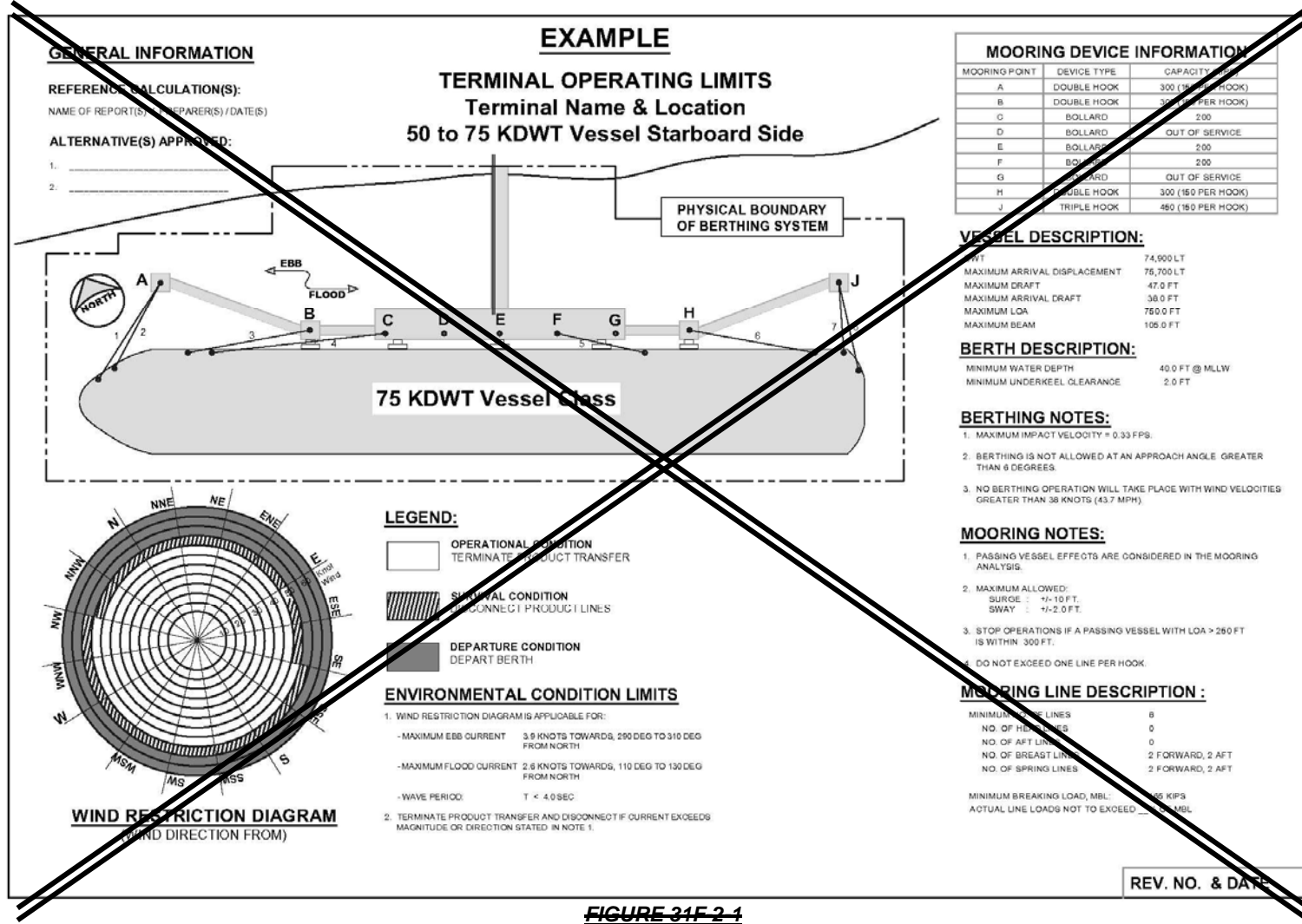


FIGURE 31F-2-1

EXAMPLE

TERMINAL OPERATING LIMITS

Terminal Name & Location
50 to 75 KDWT Vessel Starboard Side

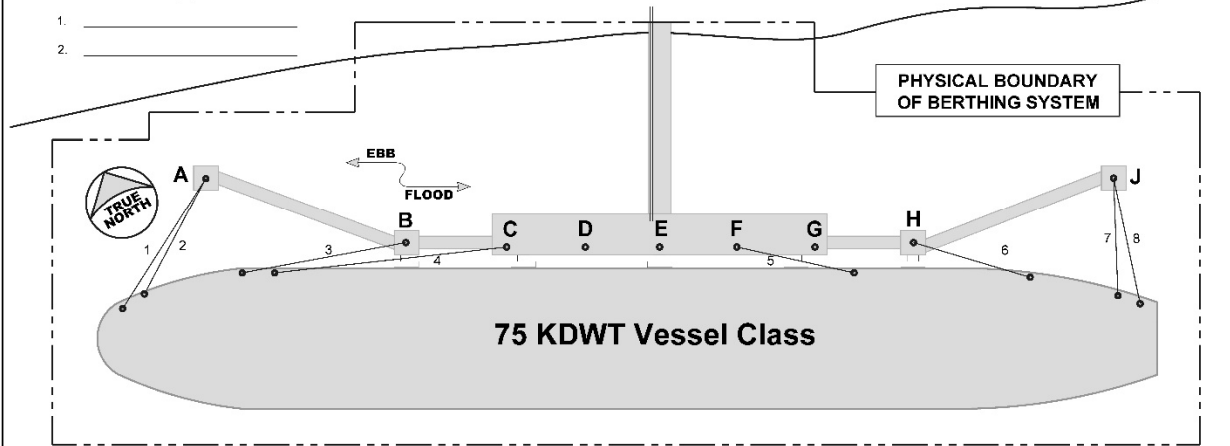
GENERAL INFORMATION

REFERENCE CALCULATION(S):

NAME OF REPORT(S) / PREPARER(S) / DATE(S)

ALTERNATIVE(S) APPROVED:

1. _____
2. _____



MOORING DEVICE INFORMATION		
MOORING POINT	DEVICE TYPE	CAPACITY (KIPS)
A	DOUBLE HOOK	300 (150 PER HOOK)
B	DOUBLE HOOK	300 (150 PER HOOK)
C	BOLLARD	200
D	BOLLARD	OUT OF SERVICE
E	BOLLARD	200
F	BOLLARD	200
G	BOLLARD	OUT OF SERVICE
H	DOUBLE HOOK	300 (150 PER HOOK)
J	TRIPLE HOOK	450 (150 PER HOOK)

VESSEL DESCRIPTION:

DWT CAPACITY	74,900 LT
MAXIMUM ARRIVAL DISPLACEMENT	75,700 LT
MAXIMUM DRAFT	47.0 FT
MAXIMUM ARRIVAL DRAFT	38.0 FT
MAXIMUM LOA	750.0 FT
MAXIMUM BEAM	105.0 FT

BERTH DESCRIPTION:

MINIMUM WATER DEPTH	40.0 FT @ MLLW
MINIMUM UNDERKEEL CLEARANCE	2.0 FT

BERTHING NOTES:

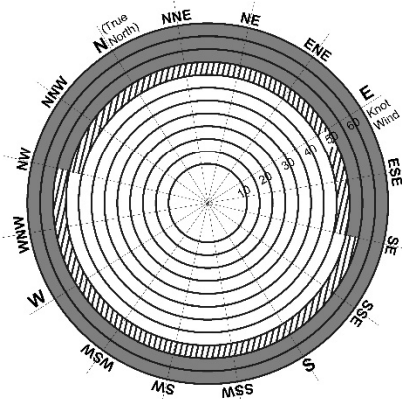
1. MAXIMUM IMPACT VELOCITY = 0.33 FPS.
2. BERTHING IS NOT ALLOWED AT AN APPROACH ANGLE GREATER THAN 6 DEGREES.
3. NO BERTHING OPERATION WILL TAKE PLACE WITH WIND VELOCITIES GREATER THAN 38 KNOTS (43.7 MPH).

MOORING NOTES:

1. PASSING VESSEL EFFECTS ARE CONSIDERED IN THE MOORING ANALYSIS.
2. MAXIMUM ALLOWED:
SURGE : +/- 10 FT.
SWAY : +/- 2.0 FT.
3. STOP OPERATIONS IF A PASSING VESSEL WITH LOA > 250 FT IS WITHIN 300 FT.
4. DO NOT EXCEED ONE LINE PER HOOK.

MOORING LINE DESCRIPTION :

MINIMUM NO. OF LINES	8
NO. OF HEAD LINES	0
NO. OF AFT LINES	0
NO. OF BREAST LINES	2 FORWARD, 2 AFT
NO. OF SPRING LINES	2 FORWARD, 2 AFT
MINIMUM BREAKING LOAD, MBL:	165 KIPS
ACTUAL LINE LOADS NOT TO EXCEED	___% OF MBL



WIND RESTRICTION DIAGRAM
(WIND DIRECTION FROM)

LEGEND:

- OPERATIONAL CONDITION
- SURVIVAL CONDITION:
TERMINATE PRODUCT TRANSFER &
DISCONNECT PRODUCT LINES
- DEPARTURE CONDITION:
DEPART BERTH

ENVIRONMENTAL CONDITION LIMITS

1. WIND RESTRICTION DIAGRAM IS APPLICABLE FOR:
 - MAXIMUM EBB CURRENT 3.9 KNOTS TOWARDS, 290 DEG TO 310 DEG FROM NORTH
 - MAXIMUM FLOOD CURRENT 2.6 KNOTS TOWARDS, 110 DEG TO 130 DEG FROM NORTH
 - WAVE PERIOD: T < 4.0 SEC
2. TERMINATE PRODUCT TRANSFER AND DISCONNECT IF CURRENT EXCEEDS MAGNITUDE OR DIRECTION STATED IN NOTE 1.

REV. NO. & DATE

FIGURE 31F-2-1

RATIONALE: The proposed “EXAMPLE” language in Figure 31F-2-1 is amended with the following sufficiently related and non-substantive amendments:

- (a) **VESSEL HULL SHAPE** – Based on public comment, the vessel hull shape is updated to be more representative of a tanker.
- (b) **TERMINATE PRODUCT TRANSFER** – Based on public comment, for clarity, the location of the terminology “*TERMINATE PRODUCT TRANSFER*” is adjusted with the relocation of this terminology to the “*SURVIVAL CONDITION*” zone in the wind restriction diagram legend, allowing for unrestricted transfer operations within the “*OPERATIONAL CONDITION*” wind envelope, and providing consistency with the proposed Sections 3103F.5.2.2.1 (Express Term #3.14) and 3103F5.2.2.2 (Express Term #3.15) language. In general, the range of the “*SURVIVAL CONDITION*” wind zone is defined by “*TERMINATE PRODUCT TRANSFER*” threshold as the lower bound and “*DEPARTURE CONDITION*” threshold as the upper bound, with “*DISCONNECT PRODUCT LINES*” occurring within the zone.
- (c) **UNITS OF MEASUREMENT & DIRECTIONALITY FOR WIND** – Based on public comment, the terminology “*True*” is added to the north direction arrow and the terminology “(*True North*)” to the “*WIND RESTRICTION DIAGRAM*” to clarify that units of measurement and directionality shall be specified in Terminal Operating Limits diagrams.
- (d) **VESSEL CLASS MARKING** – During the 45-day Comment Period, the Commission staff discovered a minor graphical error in this Express Term, where a white box was placed around the “*75 KDWT Vessel Class*” marking on the vessel image. Therefore, this white box is removed in the amended language.
- (e) **DWT Capacity** – Based on a public comment received regarding proposed amendments to Section 3105F.2 (ref. Express Term #5.4), Commission staff became aware of potential ambiguity in the use of the terminology “*DWT*” when defining vessel sizes. Therefore, the terminology “*Capacity*” is added after “*DWT*” in the “*Vessel Description*” section for clarity and consistency when expressing vessel size (e.g., see item 3 in existing Section 3101F.6). This change is without regulatory effect.

Notation

Authority: Sections 8750 through 8760, Public Resources Code.

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

DIVISION 3
SECTION 3103F
STRUCTURAL LOADING CRITERIA

3.10. 3103F.5.1 General. ...

The vessel's moorings shall be strong enough to hold during all expected environmental and passing vessel conditions (see Section 3105F), while of surge, current and weather and long enough to adequately accommodate accommodating allow adjustment for changes in draft, surge, sway, yaw drift and tide (2 CCR 2340) [3.4].

RATIONALE: Based on public comment, the proposed language is amended with the addition of the terminology "(see Section 3105F)" for clarity regarding further language on environmental and passing vessel conditions, and to eliminate potential misunderstandings by replacing "to adequately accommodate" with ", while adequately accommodating". These amendments are sufficiently related and non-substantive because they seek only to add clarity in reference and sentence structure.

3.15. 3103F.5.2.2~~4~~.2 Survival condition. *The survival condition is defined as the state wherein a vessel can remain safely moored at the berth during severe winds; however, loading arms and hoses shall be disconnected (see Sections 3110F.2 and 3110F.3 regarding movement limits of loading arms and hoses, respectfully). The survival condition is the wind zone between the operational condition and the departure condition (defined in Section 3103F.5.2.2~~4~~.3). In this wind zone, the vessel must prepare to depart the berth.*

RATIONALE: During the 45-day Comment Period, the Commission staff discovered an error in the Section number reference for departure condition. Therefore, this cross-reference is corrected in the amended language. This amendment is sufficiently related and non-substantive.

Notation

Authority: Sections 8750 through 8760, Public Resources Code.

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

DIVISION 4
SECTION 3104F
SEISMIC ANALYSIS AND STRUCTURAL PERFORMANCE

4.20. **3104F.5.1 General.** Nonstructural components are mechanical, electrical and architectural components (such as piping/pipelines, loading arms, lifting equipment (winches and cranes), spill prevention equipment, pumps, instrumentation and storage cabinets, and lighting fixtures) that may be required to resist the effects of earthquake, such as piping/pipelines, loading arms, lifting equipment (winches and cranes), spill prevention equipment, pumps, instrumentation and storage cabinets, and lighting fixtures.

Nonbuilding structures (such as gangways, hose towers and racks) are self-supporting structures that carry gravity loads and that may be required to resist the effects of earthquake (with the exception of, but are not building structures, (such as control rooms), including but not limited to, gangways, hose towers and racks. For building structures, see Section 3104F.5.6.

Critical systems are nonstructural components, nonbuilding structures or building structures that shall remain operational or those whose failure could impair emergency operations following an earthquake, to prevent major oil spills and to protect public health, safety and the environment. A seismic assessment of the survivability and continued operation (related to personnel safety, oil spill prevention or response) during a Level 2 earthquake (see Table 31F-4-1) shall be performed for critical systems, including but not limited to, fire protection, emergency shutdown and electrical power systems.

RATIONALE: The proposed language is amended with the following sufficiently related and non-substantive amendments:

- (a) **1st Paragraph** – Based on public comment, the proposed language and sentence structure are amended to more clearly articulate the definition for and examples of “*nonstructural components*”.
- (b) **2nd Paragraph** – Based on public comment, the proposed language and sentence structures are amended to provide clearer definitions for and examples of “*nonbuilding structures*”, and by default, “*building structures*”. A reference to proposed Section 3104F.5.6 (ref. Express Term #4.35) is also added regarding “*building structures*” to assist the reader.
- (c) **3rd Paragraph, 1st Sentence** – Based on public comment, the proposed language is amended to better articulate and clarify the definition of “*critical systems*”.

4.21. 3104F.5.2 Seismic assessment. *For existing (E) nonstructural components, nonbuilding structures and building structures and their supports and attachments, seismic assessment shall be performed in accordance with CalARP [4.8] or ASCE Guidelines [4.9], except for piping/pipelines which shall be evaluated per Section 3109F. If seismic evaluation and/or strengthening are required, ~~it seismic evaluation and strengthening shall be performed in accordance with Section 3104F.5.2.1 this section.~~*

For new (N) nonstructural components, nonbuilding structures and building structures and their supports and attachments, seismic evaluation and design shall be performed in accordance with ~~Section 3104F.5.2.1 this section,~~ except for piping/pipelines which shall be evaluated per Section 3109F.

~~*For evaluation, strengthening and design, seismic forces (demands) shall be obtained from Section 3104F.5. The seismic adequacy of nonstructural components shall be demonstrated through submission of design documentation reviewed and accepted by a registered design professional, or manufacturer's certification that the nonstructural component is seismically qualified by analysis or testing or experience data as specified in ASCE/SEI 7 [4.1]. Structures shall be analyzed in accordance with Section 3107F.5. Supports and attachments shall be assessed in accordance with Sections 3107F.7.*~~

RATIONALE: The proposed language is amended with the following sufficiently related and non-substantive amendments, without regulatory effect:

- (a) **Seismic Evaluation, Strengthening and Design Methods** – Based on public comment, the proposed 3rd paragraph is relocated with minor sentence restructuring to new proposed Section 3104F.5.2.1 “*Seismic evaluation, strengthening and design*” (ref. Express Term #4.21a), and the terminology “*this section*” in the 1st and 2nd paragraphs are amended to directly reference this new proposed Section 3104F.5.2.1. These amendments are intended to clarify the applicability of the seismic evaluation, strengthening and design methods for existing (E) and new (N) components and structures.
- (b) **1st Paragraph, 2nd Sentence** – Based on public comment, the proposed language and sentence structure are amended to better clarify the “*If required...*” statement for existing (E) components and structures, where the proposed sentence structure articulates “*If seismic evaluation and/or strengthening are required, ...*”.

4.21a. 3104F.5.2.1 Seismic evaluation, strengthening and design. *For evaluation, strengthening and design of nonstructural components, nonbuilding structures and building structures, seismic forces (demands) shall be obtained from Section 3104F.5. The seismic adequacy of nonstructural components shall be demonstrated as specified in ASCE/SEI 7 [4.1]. Structures shall be analyzed in accordance with Section 3107F.5. Supports and attachments shall be assessed in accordance with Sections 3107F.7.*

RATIONALE: Based on public comment, this new Section 3104F.5.2.1 “*Seismic evaluation, strengthening and design*” is proposed to clarify the applicability of the seismic evaluation, strengthening and design methods for existing (E) and new (N) components and structures. The 3rd paragraph of proposed Section 3104F.5.2 “*Seismic assessment*” (ref. Express Term #4.21) is relocated to this section with minor modifications to the language, including addition of the title and the terminology “*of nonstructural components, nonbuilding structures and building structures*” in the proposed 1st sentence, and simplification of the proposed 2nd sentence to reduce the potential for misinterpretation regarding the terminology “*seismically qualified*”. These changes are without regulatory effect. These amendments are sufficiently related and non-substantive.

4.28. 3104F.5.4.1.1 Simplified Procedure. The Simplified Procedure may be used to estimate seismic loads on nonstructural components and nonbuilding structures permanently attached to a MOT structure. The Simplified Procedure shall not be used if any of the following apply:

...

where:

S_{XS} = spectral acceleration in Section 3103F.4.2.4 or Section 3103F.4.2.5, ~~at 0.2 seconds~~

...

where:

S_A = spectral acceleration in Section 3103F.4.2.4 or Section 3103F.4.2.5, at the period equal to the elastic fundamental period of the MOT structure, T , in direction under consideration

...

RATIONALE: The proposed language is amended with the following sufficiently related and non-substantive amendments:

- (a) **S_{xs} Definition** – Based on public comment, the proposed language is amended with the removal of “*at 0.2 seconds*” for clarity and consistency with the use of “ S_{XS} ” in existing Sections 3103F.4.2.4 and 3103F.4.2.5.
- (b) **S_A Definition** – Based on public comment, the proposed language is amended with the addition of “*elastic*” to the definition of “ S_{XS} ”, to clarify that the fundamental period, “ T ”, is the elastic fundamental period and not the effective fundamental period.

4.31. Add new Table 31F-4-4:

TABLE 31F-4-4
IMPORTANCE FACTORS FOR
NONSTRUCTURAL COMPONENTS AND NONBUILDING STRUCTURES

<u>COMPONENT OR STRUCTURE</u>	<u>I_p</u>
<u>Critical^{1,2}</u>	<u>1.5</u>
<u>Other</u>	<u>1.0</u>

- 1. See Section 3104F.5.1 for definition of critical system.
- 2. A lower value may be utilized, subject to Division approval.

RATIONALE: Based on public comment, the proposed language is amended with the addition of the footnote “2. A lower value may be utilized, subject to Division approval.”, to allow user discretion to modify the Importance Factor for critical systems on a case-by-case basis, if justified and subject to Division approval. This amendment is performance-based and sufficiently related.

4.32. Add new Table 31F-4-5:

**TABLE 31F-4-5
RESPONSE MODIFICATION FACTORS FOR
NONSTRUCTURAL COMPONENTS AND NONBUILDING STRUCTURES**

<u>COMPONENT OR STRUCTURE</u>	<u>R_p¹</u>
Critical[#]	1.0
<u>Loading arms</u>	<u>3.0</u>
<u>Piping/pipelines (welded)</u>	<u>12.0</u>
<u>Piping/pipelines (threaded or flanged)</u>	<u>6.0</u>
<u>Pumps</u>	<u>2.5</u>
<u>Skids</u>	<u>2.5</u>
<u>Tanks and totes</u>	<u>2.5</u>
<u>Light fixtures (or luminaires)</u>	<u>1.5</u>
<u>Electrical conduits and cable trays</u>	<u>6.0</u>
<u>Mooring hardware</u>	<u>2.5</u>
<u>Velocity monitoring equipment</u>	<u>2.5</u>
<u>Instrumentation or storage cabinets</u>	<u>6.0</u>
<u>Cranes</u>	<u>2.5</u>
<u>Gangway (column systems)</u>	<u>3.0</u>
<u>Gangways (truss systems)</u>	<u>Use R_p from frame systems</u>
<u>Hose towers and racks</u>	<u>Use R_p from frame systems</u>
<u>Frame systems:</u>	
<u>Steel special concentrically braced frames</u>	<u>6.0</u>
<u>Steel ordinary concentrically braced frames</u>	<u>3.5</u>
<u>Steel special moment frames</u>	<u>8.0</u>
<u>Steel intermediate moment frames</u>	<u>4.5</u>
<u>Steel ordinary moment frames</u>	<u>3.5</u>
<u>Lightframe wood sheathed with wood structural panels</u>	<u>6.5</u>
<u>Lightframe cold-formed steel sheathed with wood structural panels</u>	<u>6.5</u>
<u>Lightframe walls with shear panels of other materials</u>	<u>2.0</u>
<u>Other</u>	<u>Subject to Division approval</u>

1. A higher value may be utilized, subject to Division approval.

1. See Section 3104F.5.1 for definition of critical system.

RATIONALE: The proposed language is amended with the following sufficiently related and non-substantive amendments:

- (a) **Critical Systems** – Based on public comment, the proposed language regarding critical systems is amended by withdrawal of $R_p=1.0$ and footnote 1.
- (b) **New Footnote 1** – Based on public comment, the proposed language is amended with the addition of a new footnote “1. A higher value may be utilized, subject to Division approval.”, to allow user discretion to modify Response Modification Factors on a case-by-case basis, if justified and subject to Division approval. This is a performance-based approach.

4.36. 3104F.67 Symbols.

...
 T = Fundamental period of the elastic structure
...

RATIONALE: Based on public comment, the proposed language is amended with the addition of “*the elastic*” to the definition of “*T*”, to clarify that the fundamental period is the elastic fundamental period and not the effective fundamental period, “*T_e*”.

Notation

Authority: Sections 8750 through 8760, Public Resources Code.

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

**DIVISION 5
SECTION 3105F
MOORING AND BERTHING ANALYSIS AND DESIGN**

5.4. 3105F.2 Mooring analyses. *A mooring analysis shall be performed for each berthing system, to justify the safe mooring-berthing of the various deadweight capacities of vessels expected at the MOT. Review of vessels calling at the MOT shall be performed to identify representative vessel size ranges and mooring configurations. Vessels analyzed shall be representative of the upper bound of each vessel size range defined by DWT capacity (see Section 3101F.6). The Terminal Operating Limits (TOLs) shall be generated based on the mooring analyses (see Section 3102F.3.6.1 and Figure 31F-2-1).*

...

RATIONALE: The proposed language is amended with the following sufficiently related and non-substantive amendments:

- (a) **Mooring vs. Berthing** – Based on public comment, the proposed language is amended with the replacement of the terminology “berthing” with “mooring” in the 1st sentence of the section, to more accurately articulate the purpose of mooring analyses.
- (b) **Defining Vessel Size** – Based on public comment, the proposed language is amended with the addition of “...by DWT capacity (see Section 3101F.6)” to better define “...the upper bound of each vessel size range...”, consistently with existing Section 3101F.6.

5.11. 3105F.7 Safety factors for mooring lines. *Safety factors for different material types of mooring lines are given in Table 31F-5-3. The safety factors should be applied to the minimum number of lines specified by the mooring analysis, using the highest loads calculated for the environmental conditions. The minimum breaking load (MBL) of new ropes is obtained from the certificate issued by the manufacturer. If polyamide-nylon tails are used in combination with steel wire ropes mooring lines, the safety factor shall be based on the weaker of the two ropes.*

RATIONALE: Based on public comment, the proposed language is amended with the update of the terminology “nylon” to “polyamide”, as well as “steel wire ropes” to “wire mooring lines” for consistently with proposed Table 31F-5-3 “SAFETY FACTORS FOR ROPES [5.4]” (ref. Express Term #5.12). This amendment is sufficiently related and non-substantive.

5.18. 3105F.97 Symbols.

...

DWT ≡ Dead Weight Tonnage

...

RATIONALE: Based on public comment, the proposed language is amended by adding the definition of the terminology “DWT” for clarity. This amendment is sufficiently related and non-substantive.

Notation

Authority: Sections 8750 through 8760, Public Resources Code.

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

DIVISION 6
SECTION 3106F
GEOTECHNICAL HAZARDS AND FOUNDATIONS

6.1. 3106F.10.2 Kinematic loading from lateral spreading. *Kinematic pile loading from permanent lateral spread ground deformation in deep seated levels of slope/embankment/dike foundation soils shall be evaluated. The lateral deformations shall be restricted such that the structural performance of foundation piles is not compromised.*

The lateral deformation of the embankment or dike and associated piles and foundation soils shall be determined using analytical methods as follows:

1. ...
2. *For the pushover analysis, the estimated displacements may be uniformly distributed within the thickness of the weak soil layer (i.e., zero at and below the bottom of the layer to the maximum value at and above the top of the weak layer), ~~or as appropriate.~~ The thickness of the weak soil layer used in the analysis (failure zone) shall not be more than five times the pile diameter or 10 feet, whichever is smaller.*
3. ...

RATIONALE: Based on public comment, the proposed language is amended with the addition of the terminology “*used in the analysis (failure zone)*” for clarity. This amendment is sufficiently related and non-substantive.

Notation

Authority: Sections 8750 through 8760, Public Resources Code.

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

DIVISION 8
SECTION 3108F
FIRE PREVENTION, DETECTION AND SUPPRESSION

8.2.

TABLE 31F-8-3
MINIMUM FIRE SUPPRESSION PROVISIONS ~~PER BERTH~~ (N/E)

...

RATIONALE: During the 45-day Comment Period, the Commission staff decided to withdraw the proposed changes to the table title, with the removal of the “*PER BERTH*” language. This change is without regulatory effect. Therefore, the table title reverts to existing Chapter 31F language, and this amendment is sufficiently related and non-substantive.

Notation

Authority: Sections 8750 through 8760, Public Resources Code.

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

**DIVISION 9
SECTION 3109F
PIPING AND PIPELINES**

9.2. 3109F.3 Pipeline stress analysis (N/E). Pipeline stress analysis shall be performed for:

...

For pipelines spanning between seismically isolated structures—sections (Section 3104F.1.3) and/or varying geotechnical conditions, evaluation of the relative movement of pipelines and supports and varying seismic accelerations shall be considered, including phase differences.

...

RATIONALE: Based on public comment, the terminology “sections” is updated to “structures” in the 3rd paragraph for clarity and consistency. This amendment is sufficiently related and non-substantive.

9.4. 3109F.5.1 Valves and fittings. ...

1. Conform to ASME B31.3 [9.2], ASME B31.4 [9.3], API Standard 609 ~~[9.8][9.9]~~ and ASME B16.34 ~~[9.9][9.10]~~, as appropriate, based on their service (N).
2. Conform to Section ~~108~~ of API Standard 2610 [9.1] (N/E).
3. ...

RATIONALE: Based on public comment, an editorial error in the API Standard 2610 [9.1] section reference in Item No. 2 is corrected. This amendment is sufficiently related and non-substantive.

9.6. 3109F.7 Fire piping and pipeline systems. Firewater and foam piping and fittings shall meet the following requirements:

...

76. External visual inspection shall be performed for per Section 3102F.3.5.35 (N/E).

RATIONALE: Based on public comment, an editorial error in the Section cross-reference in proposed Item No. 7 is corrected. This amendment is sufficiently related and non-substantive.

Notation

Authority: Sections 8750 through 8760, Public Resources Code.

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

DIVISION 11
SECTION 3111F
ELECTRICAL SYSTEMS

11.5. 3111F.8.1 Illumination Locations. At a minimum, MOTs shall provide ~~have~~ fixed lighting (or luminaires) that illuminates the following areas:

1. Transfer connection points on the MOT
2. Transfer connection points ~~on for~~ any barge moored at the MOT that may transfer oil ~~at the MOT~~
3. Transfer operations work areas on the MOT
4. Transfer operations work areas ~~on for~~ any barge moored at the MOT that may transfer oil ~~at the MOT~~
5. Areas defined in Sections 17.4 and 24.6.4 of ISGOTT [11.7], as ~~appropriate~~ applicable

Lighting shall be located or shielded so as not to mislead or otherwise interfere with off-site areas as governed by federal, state and local agency requirements.

RATIONALE: The proposed language is amended with the following sufficiently related and non-substantive amendments:

- (a) **Provide vs. Have** – Based on public comment, the proposed language is amended with the replacement of the terminology “*have*” with “*provide*” in the 1st sentence of the section, to more clearly articulate that the MOT is required to provide the fixed lighting, not the barge.
- (b) **Item Nos. 2 and 4** – Based on public comment, the proposed language in Item Nos. 2 and 4 is amended with minor modifications such as use of the terminology “...*on any barge moored at the MOT...*”, to better articulate the relationship between the MOT and barge, when the barge is moored at the MOT.
- (c) **Item No. 5** – Based on public comment, the proposed language in Item No. 5 is amended with the replacement of the terminology “*applicable*” with “*appropriate*”, to better articulate the user’s discretion in this performance-based objective.

11.6. ~~3111F.8.2 Illumination Levels. After subtraction of the ambient lighting level, the minimum illumination levels at the locations defined in Section 3111F.8.1 shall be as follows:~~

1. 5.0 footcandles (54 lux) at transfer connection points
2. 1.0 footcandle (11 lux) in transfer operations work and other areas

Where the illumination appears to the Division to be inadequate, the Division may require verification by instrument of the levels of illumination. The illumination levels shall be verified by measurement at the locations defined in Section 3111F.8.1, if required. All measurements shall be taken on a horizontal plane, 3 feet above the MOT and barge deck or walking surface (33 CFR 154.570 (b) [11.8]). ~~Background measurement of ambient lighting (e.g., moonlight, sky glow) shall be recorded in an area shielded from site lighting.~~

RATIONALE: The proposed language is amended with the following sufficiently related amendments:

- (a) **Ambient Lighting Level** – Based on public comment, the proposed language regarding ambient lighting levels is withdrawn, including the following language: “*After subtraction of the ambient lighting level*” and “*Background measurement of ambient lighting (e.g., moonlight, sky glow) shall be recorded in an area shielded from site lighting.*”.
- (b) **Duplicative Reference to Locations in Section 3111F.8.1** – During the 45-day Comment Period, the Commission staff discovered duplicative use of the terminology “*at the locations defined in Section 3111F.8.1*” in the proposed language. Therefore, the terminology “*at the locations defined in Section 3111F.8.1*” is removed in the 1st sentence of the amended language.
- (c) **Illumination Survey Requirements** – Based on public comment, the sentence “*Where the illumination appears to the Division to be inadequate, the Division may require verification by instrument of the levels of illumination.*” is added to the 2nd paragraph, to provide clarity and improve consistency with the Commission’s existing Article 5 (2 CCR 2365(b)) operations requirements. Note that this proposed language already occurs in the Commission’s existing MOT regulations (ref. 2 CCR 2365(b)), making this amendment sufficiently related. And to further emphasize this point, the terminology “*if required*” is also added to the end of the proposed 2nd sentence in the 2nd paragraph.

Notation

Authority: Sections 8750 through 8760, Public Resources Code.

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