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### Title 30: Mineral Resources

#### PART 250—OIL AND GAS AND SULPHUR OPERATIONS IN THE OUTER CONTINENTAL SHELF

#### Subpart I—Platforms and Structures

**Source:** 70 FR 41575, July 19, 2005, unless otherwise noted.

#### General Requirements for Platforms

##### § 250.900 What general requirements apply to all platforms?

(a) You must design, fabricate, install, use, maintain, inspect, and assess all platforms and related structures on the Outer Continental Shelf (OCS) so as to ensure their structural integrity for the safe conduct of drilling, workover, and production operations. In doing this, you must consider the specific environmental conditions at the platform location.

(b) You must also submit an application under §250.905 of this subpart and obtain the approval of the Regional Supervisor before performing any of the activities described in the following table:

<b>Activity requiring application and approval</b>	<b>Conditions for conducting the activity</b>
(1) Install a platform. This includes placing a newly constructed platform at a location or moving an existing platform to a new site	(i) You must adhere to the requirements of this subpart, including the industry standards in §250.901. (ii) If you are installing a floating platform, you must also adhere to U.S. Coast Guard (USCG) regulations for the fabrication, installation, and inspection of floating OCS facilities.
(2) Major modification to any platform. This includes any structural changes that materially alter the approved plan or cause a major deviation from approved operations and any modification that increases loading on a platform by 10 percent or more	(i) You must adhere to the requirements of this subpart, including the industry standards in §250.901. (ii) Before you make a major modification to a floating platform, you must obtain approval from both the MMS and the USCG for the modification.
(3) Major repair of damage to any platform. This includes any corrective operations involving structural members affecting the structural integrity of a portion or all of the platform	(i) You must adhere to the requirements of this subpart, including the industry standards in §250.901. (ii) Before you make a major repair to a floating platform, you must obtain approval from both the MMS and the USCG for the repair.
(4) Convert an existing platform at the current location for a new purpose	(i) The Regional Supervisor will determine on a case-by-case basis the requirements for an application for conversion of an existing platform at the current location. (ii) At a minimum, your application must include: the converted platform's intended use; and a demonstration of the adequacy of the design and structural condition of the converted platform.

	(iii) If a floating platform, you must also adhere to USCG regulations for the fabrication, installation, and inspection of floating OCS facilities.
(5) Convert an existing mobile offshore drilling unit (MODU) for a new purpose	<p>(i) The Regional Supervisor will determine on a case-by-case basis the requirements for an application for conversion of an existing MODU.</p> <p>(ii) At a minimum, your application must include: the converted MODU's intended location and use; a demonstration of the adequacy of the design and structural condition of the converted MODU; and a demonstration that the level of safety for the converted MODU is at least equal to that of re-used platforms.</p> <p>(iii) You must also adhere to USCG regulations for the fabrication, installation, and inspection of floating OCS facilities.</p>

(c) Under emergency conditions, you may make repairs to primary structural elements to restore an existing permitted condition without submitting an application or receiving prior MMS approval for up to 120-calendar days following an event. You must notify the Regional Supervisor of the damage that occurred within 24 hours of its discovery, and you must provide a written completion report to the Regional Supervisor of the repairs that were made within 1 week after completing the repairs. If you make emergency repairs on a floating platform, you must also notify the USCG.

(d) You must determine if your new platform or major modification to an existing platform is subject to the Platform Verification Program (PVP). Section 250.910 of this subpart fully describes the facilities that are subject to the PVP. If you determine that your platform is subject to the PVP, you must follow the requirements of §§250.909–250.918 of this subpart.

(e) You must submit notification of the platform installation date and the final as-built location data to the Regional Supervisor within 45-calendar days of completion of platform installation.

(1) For platforms not subject to the Platform Verification Program (PVP), MMS will cancel the approved platform application 1 year after the approval has been granted if the platform has not been installed. If MMS cancels the approval, you must resubmit your platform application and receive MMS approval if you still plan to install the platform.

(2) For platforms subject to the PVP, cancellation of an approval will be on an individual platform basis. For these platforms, MMS will identify the date when the installation approval will be cancelled (if installation has not occurred) during the application and approval process. If MMS cancels your installation approval, you must resubmit your platform application and receive MMS approval if you still plan to install the platform.

[70 FR 41575, July 19, 2005; 71 FR 16859, Apr. 4, 2006, as amended at 73 FR 20171, Apr. 15, 2008; 73 FR 64546, Oct. 30, 2008]

### **§ 250.901 What industry standards must your platform meet?**

(a) In addition to the other requirements of this subpart, your plans for platform design, analysis, fabrication, installation, use, maintenance, inspection and assessment must, as appropriate, conform to:

(1) ACI Standard 318–95, Building Code Requirements for Reinforced Concrete (ACI 318–95) and Commentary (ACI 318R–95) (incorporated by reference at §250.198);

(2) ACI 357R–84, Guide for the Design and Construction of Fixed Offshore Concrete Structures, 1984; reapproved 1997 (incorporated by reference at §250.198);

(3) ANSI/AISC 360–05, Specification for Structural Steel Buildings, (incorporated by reference as specified in

§250.198);

(4) American Petroleum Institute (API) Bulletin 2INT–DG, Interim Guidance for Design of Offshore Structures for Hurricane Conditions, (incorporated by reference as specified in §250.198);

(5) API Bulletin 2INT–EX, Interim Guidance for Assessment of Existing Offshore Structures for Hurricane Conditions, (incorporated by reference as specified in §250.198);

(6) API Bulletin 2INT–MET, Interim Guidance on Hurricane Conditions in the Gulf of Mexico, (incorporated by reference as specified in §250.198);

(7) API Recommended Practice (RP) 2A–WSD, RP for Planning, Designing, and Constructing Fixed Offshore Platforms—Working Stress Design (incorporated by reference as specified in §250.198);

(8) API RP 2FPS, Recommended Practice for Planning, Designing, and Constructing Floating Production Systems, (incorporated by reference as specified in §250.198);

(9) API RP 2I, In-Service Inspection of Mooring Hardware for Floating Drilling Units (incorporated by reference as specified in §250.198);

(10) API RP 2RD, Design of Risers for Floating Production Systems (FPSs) and Tension-Leg Platforms (TLPs), (incorporated by reference as specified in §250.198);

(11) API RP 2SK, Recommended Practice for Design and Analysis of Station Keeping Systems for Floating Structures, (incorporated by reference as specified in §250.198);

(12) API RP 2SM, Recommended Practice for Design, Manufacture, Installation, and Maintenance of Synthetic Fiber Ropes for Offshore Mooring, (incorporated by reference as specified in §250.198);

(13) API RP 2T, Recommended Practice for Planning, Designing and Constructing Tension Leg Platforms, (incorporated by reference as specified in §250.198);

(14) API RP 14J, Recommended Practice for Design and Hazards Analysis for Offshore Production Facilities, (incorporated by reference as specified in §250.198);

(15) American Society for Testing and Materials (ASTM) Standard C 33–07, approved December 15, 2007, Standard Specification for Concrete Aggregates (incorporated by reference as specified in §250.198);

(16) ASTM Standard C 94/C 94M–07, approved January 1, 2007, Standard Specification for Ready-Mixed Concrete (incorporated by reference as specified in §250.198);

(17) ASTM Standard C 150–07, approved May 1, 2007, Standard Specification for Portland Cement (incorporated by reference as specified in §250.198);

(18) ASTM Standard C 330–05, approved December 15, 2005, Standard Specification for Lightweight Aggregates for Structural Concrete (incorporated by reference as specified in §250.198);

(19) ASTM Standard C 595–08, approved January 1, 2008, Standard Specification for Blended Hydraulic Cements (incorporated by reference as specified in §250.198);

(20) AWS D1.1, Structural Welding Code—Steel, including Commentary, (incorporated by reference as specified in §250.198);

(21) AWS D1.4, Structural Welding Code—Reinforcing Steel, (incorporated by reference as specified in §250.198);

(22) AWS D3.6M, Specification for Underwater Welding, (incorporated by reference as specified in §250.198);

(23) NACE Standard MR0175, Sulfide Stress Cracking Resistant Metallic Materials for Oilfield Equipment,

(incorporated by reference as specified in §250.198);

(24) NACE Standard RP0176–2003, Item No. 21018, Standard Recommended Practice, Corrosion Control of Steel Fixed Offshore Structures Associated with Petroleum Production.

(b) You must follow the requirements contained in the documents listed under paragraph (a) of this section insofar as they do not conflict with other provisions of 30 CFR part 250. You may use applicable provisions of these documents, as approved by the Regional Supervisor, for the design, fabrication, and installation of platforms such as spars, since standards specifically written for such structures do not exist. You may also use alternative codes, rules, or standards, as approved by the Regional Supervisor, under the conditions enumerated in §250.141.

(c) For information on the standards mentioned in this section, and where they may be obtained, see §250.198 of this part.

(d) The following chart summarizes the applicability of the industry standards listed in this section for fixed and floating platforms:

<b>Industry standard</b>	<b>Applicable to * * *</b>
(1) ACI Standard 318–95, Building Code Requirements for Reinforced Concrete (ACI 318–95) and Commentary (ACI 318R–95)	Fixed and floating platform, as appropriate.
(2) ANSI/AISC 360–05, Specification for Structural Steel Buildings;	
(3) API Bulletin 2INT–DG, Interim Guidance for Design of Offshore Structures for Hurricane Conditions;	
(4) API Bulletin 2INT–EX, Interim Guidance for Assessment of Existing Offshore Structures for Hurricane Conditions;	
(5) API Bulletin 2INT–MET, Interim Guidance on Hurricane Conditions in the Gulf of Mexico;	
(6) API RP 2A–WSD, RP for Planning, Designing, and Constructing Fixed Offshore Platforms—Working Stress Design;	
(7) ASTM Standard C 33–07, approved December 15, 2007, Standard Specification for Concrete Aggregates;	
(8) ASTM Standard C 94/C 94M–07, approved January 1, 2007, Standard Specification for Ready-Mixed Concrete;	
(9) ASTM Standard C 150–07, approved May 1, 2007, Standard Specification for Portland Cement;	
(10) ASTM Standard C 330–05, approved December 15, 2005, Standard Specification for Lightweight Aggregates for Structural Concrete;	
(11) ASTM Standard C 595–08, approved January 1, 2008, Standard Specification for Blended Hydraulic Cements;	
(12) AWS D1.1, Structural Welding Code—Steel;	
(13) AWS D1.4, Structural Welding Code—Reinforcing Steel;	
(14) AWS D3.6M, Specification for Underwater Welding;	

(15) NACE Standard RP 0176–2003, Standard Recommended Practice (RP), Corrosion Control of Steel Fixed Offshore Platforms Associated with Petroleum Production;	
(16) ACI 357R–84, Guide for the Design and Construction of Fixed Offshore Concrete Structures, 1984; reapproved 1997	Fixed platforms
(17) API RP 14J, RP for Design and Hazards Analysis for Offshore Production Facilities;	Floating platforms.
(18) API RP 2FPS, RP for Planning, Designing, and Constructing, Floating Production Systems;	
(19) API RP 2RD, Design of Risers for Floating Production Systems (FPSs) and Tension-Leg Platforms (TLPs);	
(20) API RP 2SK, RP for Design and Analysis of Station Keeping Systems for Floating Structures;	
(21) API RP 2T, RP for Planning, Designing, and Constructing Tension Leg Platforms;	
(22) API RP 2SM, RP for Design, Manufacture, Installation, and Maintenance of Synthetic Fiber Ropes for Offshore Mooring;	
(23) API RP 2I, In-Service Inspection of Mooring Hardware for Floating Drilling Units.	

[70 FR 41575, July 19, 2005, as amended at 72 FR 12096, Mar. 15, 2007; 73 FR 20169, Apr. 15, 2008; 73 FR 64546, Oct. 30, 2008; 75 FR 22226, Apr. 28, 2010]

### **§ 250.902 What are the requirements for platform removal and location clearance?**

You must remove all structures according to §§250.1725 through 250.1730 of Subpart Q—Decommissioning Activities of this part.

### **§ 250.903 What records must I keep?**

(a) You must compile, retain, and make available to MMS representatives for the functional life of all platforms:

- (1) The as-built drawings;
- (2) The design assumptions and analyses;
- (3) A summary of the fabrication and installation nondestructive examination records;
- (4) The inspection results from the inspections required by §250.919 of this subpart; and
- (5) Records of repairs not covered in the inspection report submitted under §250.919(b).

(b) You must record and retain the original material test results of all primary structural materials during all stages of construction. Primary material is material that, should it fail, would lead to a significant reduction in platform safety, structural reliability, or operating capabilities. Items such as steel brackets, deck stiffeners and secondary braces or beams would not generally be considered primary structural members (or materials).

(c) You must provide MMS with the location of these records in the certification statement of your application for platform approval as required in §250.905(j).

## Platform Approval Program

### § 250.904 What is the Platform Approval Program?

(a) The Platform Approval Program is the MMS basic approval process for platforms on the OCS. The requirements of the Platform Approval Program are described in §§250.904 through 250.908 of this subpart. Completing these requirements will satisfy MMS criteria for approval of fixed platforms of a proven design that will be placed in the shallow water areas ( $\leq 400$  ft.) of the Gulf of Mexico OCS.

(b) The requirements of the Platform Approval Program must be met by all platforms on the OCS. Additionally, if you want approval for a floating platform; a platform of unique design; or a platform being installed in deepwater ( $> 400$  ft.) or a frontier area, you must also meet the requirements of the Platform Verification Program. The requirements of the Platform Verification Program are described in §§250.909 through 250.918 of this subpart.

### § 250.905 How do I get approval for the installation, modification, or repair of my platform?

The Platform Approval Program requires that you submit the information, documents, and fee listed in the following table for your proposed project. In lieu of submitting the paper copies specified in the table, you may submit your application electronically in accordance with 30 CFR 250.186(a)(3).

Required submittal	Required contents	Other requirements
(a) Application cover letter	Proposed structure designation, lease number, area, name, and block number, and the type of facility your facility (e.g., drilling, production, quarters). The structure designation must be unique for the field (some fields are made up of several blocks); <i>i.e.</i> once a platform “A” has been used in the field there should never be another platform “A” even if the old platform “A” has been removed. Single well free standing caissons should be given the same designation as the well. All other structures are to be designated by letter designations	You must submit three copies. If, your facility is subject to the Platform Verification Program (PVP), you must submit four copies.
(b) Location plat	Latitude and longitude coordinates, Universal Mercator grid-system coordinates, state plane coordinates in the Lambert or Transverse Mercator Projection System, and distances in feet from the nearest block lines. These coordinates must be based on the NAD (North American Datum) 27 datum plane coordinate system	Your plat must be drawn to a scale of 1 inch equals 2,000 feet and include the coordinates of the lease block boundary lines. You must submit three
(c) Front, Side, and Plan View drawings	Platform dimensions and orientation, elevations relative to M.L.L.W. (Mean Lower Low Water), and pile sizes and penetration	Your drawing sizes must not exceed 11&inch; × 17&inch;. You must submit three copies (four copies for PVP applications).

(d) Complete set of structural drawings	The approved for construction fabrication drawings should be submitted including; e.g., cathodic protection systems; jacket design; pile foundations; drilling, production, and pipeline risers and riser tensioning systems; turrets and turret-and-hull interfaces; mooring and tethering systems; foundations and anchoring systems	Your drawing sizes must not exceed 11&inch; × 17&inch;. You must submit one copy.
(e) Summary of environmental data	A summary of the environmental data described in the applicable standards referenced under §250.901(a) of this subpart and in §250.198 of Subpart A, where the data is used in the design or analysis of the platform. Examples of relevant data include information on waves, wind, current, tides, temperature, snow and ice effects, marine growth, and water depth	You must submit one copy.
(f) Summary of the engineering design data	Loading information (e.g., live, dead, environmental), structural information (e.g., design-life; material types; cathodic protection systems; design criteria; fatigue life; jacket design; deck design; production component design; pile foundations; drilling, production, and pipeline risers and riser tensioning systems; turrets and turret-and-hull interfaces; foundations, foundation pilings and templates, and anchoring systems; mooring or tethering systems; fabrication and installation guidelines), and foundation information (e.g., soil stability, design criteria)	You must submit one copy.
(g) Project-specific studies used in the platform design or installation	All studies pertinent to platform design or installation, e.g., oceanographic and/or soil reports including the overall site investigative report required in section 250.906	You must submit one copy of each study.
(h) Description of the loads imposed on the facility	Loads imposed by jacket; decks; production components; drilling, production, and pipeline risers, and riser tensioning systems; turrets and turret-and-hull interfaces; foundations, foundation pilings and templates, and anchoring systems; and mooring or tethering systems	You must submit one copy.
(i) Summary of safety factors utilized	A summary of pertinent derived factors of safety against failure for major structural members, e.g., unity check ratios exceeding 0.85 for steel-jacket platform members, indicated on “line” sketches of jacket sections	You must submit one copy.

(j) A copy of the in-service inspection plan	This plan is described in §250.919.	You must submit one copy.
(k) Certification statement	The following statement: “The design of this structure has been certified by a recognized classification society, or a registered civil or structural engineer or equivalent, or a naval architect or marine engineer or equivalent, specializing in the design of offshore structures. The certified design and as-built plans and specifications will be on file at (give location)”	An authorized company representative must sign the statement. You must submit one copy.
(l) Payment of the service fee listed in §250.125		

[70 FR 41575, July 19, 2005, as amended at 71 FR 40912, July 19, 2006; 73 FR 64546, Oct. 30, 2008]

**§ 250.906 What must I do to obtain approval for the proposed site of my platform?**

(a) *Shallow hazards surveys.* You must perform a high-resolution or acoustic-profiling survey to obtain information on the conditions existing at and near the surface of the seafloor. You must collect information through this survey sufficient to determine the presence of the following features and their likely effects on your proposed platform:

- (1) Shallow faults;
- (2) Gas seeps or shallow gas;
- (3) Slump blocks or slump sediments;
- (4) Shallow water flows;
- (5) Hydrates; or
- (6) Ice scour of seafloor sediments.

(b) *Geologic surveys.* You must perform a geological survey relevant to the design and siting of your platform. Your geological survey must assess:

- (1) Seismic activity at your proposed site;
- (2) Fault zones, the extent and geometry of faulting, and attenuation effects of geologic conditions near your site; and
- (3) For platforms located in producing areas, the possibility and effects of seafloor subsidence.

(c) *Subsurface surveys.* Depending upon the design and location of your proposed platform and the results of the shallow hazard and geologic surveys, the Regional Supervisor may require you to perform a subsurface survey. This survey will include a testing program for investigating the stratigraphic and engineering properties of the soil that may affect the foundations or anchoring systems for your facility. The testing program must include adequate in situ testing, boring, and sampling to examine all important soil and rock strata to determine its strength classification, deformation properties, and dynamic characteristics. If required to perform a subsurface survey, you must prepare and submit to the Regional Supervisor a summary report to briefly describe the results of your soil testing program, the various field and laboratory test methods employed, and the applicability of these methods as they pertain to the quality of the samples, the type of soil, and the anticipated design application. You must explain how the engineering properties of each soil stratum affect the design of your platform. In your explanation you must describe the



uncertainties inherent in your overall testing program, and the reliability and applicability of each test method.

(d) *Overall site investigation report.* You must prepare and submit to the Regional Supervisor an overall site investigation report for your platform that integrates the findings of your shallow hazards surveys and geologic surveys, and, if required, your subsurface surveys. Your overall site investigation report must include analyses of the potential for:

- (1) Scouring of the seafloor;
- (2) Hydraulic instability;
- (3) The occurrence of sand waves;
- (4) Instability of slopes at the platform location;
- (5) Liquifaction, or possible reduction of soil strength due to increased pore pressures;
- (6) Degradation of subsea permafrost layers;
- (7) Cyclic loading;
- (8) Lateral loading;
- (9) Dynamic loading;
- (10) Settlements and displacements;
- (11) Plastic deformation and formation collapse mechanisms; and
- (12) Soil reactions on the platform foundations or anchoring systems.

**§ 250.907 Where must I locate foundation boreholes?**

(a) For fixed or bottom-founded platforms and tension leg platforms, your maximum distance from any foundation pile to a soil boring must not exceed 500 feet.

(b) For deepwater floating platforms which utilize catenary or taut-leg moorings, you must take borings at the most heavily loaded anchor location, at the anchor points approximately 120 and 240 degrees around the anchor pattern from that boring, and, as necessary, other points throughout the anchor pattern to establish the soil profile suitable for foundation design purposes.

**§ 250.908 What are the minimum structural fatigue design requirements?**

(a) API RP 2A-WSD, Recommended Practice for Planning, Designing and Constructing Fixed Offshore Platforms (incorporated by reference as specified in 30 CFR 250.198), requires that the design fatigue life of each joint and member be twice the intended service life of the structure. When designing your platform, the following table provides minimum fatigue life safety factors for critical structural members and joints.

<b>If . . .</b>	<b>Then . . .</b>
(1) There is sufficient structural redundancy to prevent catastrophic failure of the platform or structure under consideration	The results of the analysis must indicate a maximum calculated life of twice the design life of the platform.
(2) There is not sufficient structural redundancy	The results of a fatigue analysis must

to prevent catastrophic failure of the platform or structure	indicate a minimum calculated life or three times the design life of the platform.
(3) The desirable degree of redundancy is significantly reduced as a result of fatigue damage	The results of a fatigue analysis must indicate a minimum calculated life of three times the design life of the platform.

(b) The documents incorporated by reference in §250.901 may require larger safety factors than indicated in paragraph (a) of this section for some key components. When the documents incorporated by reference require a larger safety factor than the chart in paragraph (a) of this section, the requirements of the incorporated document will prevail.

## Platform Verification Program

### § 250.909 What is the Platform Verification Program?

The Platform Verification Program is the MMS approval process for ensuring that floating platforms; platforms of a new or unique design; platforms in seismic areas; or platforms located in deepwater or frontier areas meet stringent requirements for design and construction. The program is applied during construction of new platforms and major modifications of, or repairs to, existing platforms. These requirements are in addition to the requirements of the Platform Approval Program described in §§250.904 through 250.908 of this subpart.

### § 250.910 Which of my facilities are subject to the Platform Verification Program?

(a) All new fixed or bottom-founded platforms that meet any of the following five conditions are subject to the Platform Verification Program:

- (1) Platforms installed in water depths exceeding 400 feet (122 meters);
- (2) Platforms having natural periods in excess of 3 seconds;
- (3) Platforms installed in areas of unstable bottom conditions;
- (4) Platforms having configurations and designs which have not previously been used or proven for use in the area; or
- (5) Platforms installed in seismically active areas.

(b) All new floating platforms are subject to the Platform Verification Program to the extent indicated in the following table:

If . . .	Then . . .
(1) Your new floating platform is a buoyant offshore facility that does not have a ship-shaped hull	The entire platform is subject to the Platform Verification Program including the following associated structures:
	<ul style="list-style-type: none"> <li>(i) Drilling, production, and pipeline risers, and riser tensioning systems (each platform must be designed to accommodate all the loads imposed by all risers and riser does not have tensioning systems);</li> <li>(ii) Turrets and turret-and-hull interfaces;</li> <li>(iii) Foundations, foundation pilings and templates, and anchoring systems; and</li> <li>(iv) Mooring or tethering systems.</li> </ul>

(2) Your new floating platform is a buoyant offshore facility with a ship-shaped hull	Only the following structures that may be associated with a floating platform are subject to the Platform Verification Program:
	<ul style="list-style-type: none"> <li>(i) Drilling, production, and pipeline risers, and riser tensioning systems (each platform must be designed to accommodate all the loads imposed by all risers and riser tensioning systems);</li> <li>(ii) Turrets and turret-and-hull interfaces;</li> <li>(iii) Foundations, foundation pilings and templates, and anchoring systems; and</li> <li>(iv) Mooring or tethering systems.</li> </ul>

(c) If a platform is originally subject to the Platform Verification Program, then the conversion of that platform at that same site for a new purpose, or making a major modification of, or major repair to, that platform, is also subject to the Platform Verification Program. A major modification includes any modification that increases loading on a platform by 10 percent or more. A major repair is a corrective operation involving structural members affecting the structural integrity of a portion or all of the platform. Before you make a major modification or repair to a floating platform, you must obtain approval from both the MMS and the USCG.

(d) The applicability of Platform Verification Program requirements to other types of facilities will be determined by MMS on a case-by-case basis.

[70 FR 41575, July 19, 2005; 71 FR 28080, May 15, 2006]

**§ 250.911 If my platform is subject to the Platform Verification Program, what must I do?**

If your platform, conversion, or major modification or repair meets the criteria in §250.910, you must:

(a) Design, fabricate, install, use, maintain and inspect your platform, conversion, or major modification or repair to your platform according to the requirements of this subpart, and the applicable documents listed in §250.901(a) of this subpart;

(b) Comply with all the requirements of the Platform Approval Program found in §§250.904 through 250.908 of this subpart.

(c) Submit for the Regional Supervisor's approval three copies each of the design verification, fabrication verification, and installation verification plans required by §250.912;

(d) Submit a complete schedule of all phases of design, fabrication, and installation for the Regional Supervisor's approval. You must include a project management timeline, Gantt Chart, that depicts when interim and final reports required by §§250.916, 250.917, and 250.918 will be submitted to the Regional Supervisor for each phase. On the timeline, you must break-out the specific scopes of work that inherently stand alone (e.g., deck, mooring systems, tendon systems, riser systems, turret systems).

(e) Include your nomination of a Certified Verification Agent (CVA) as a part of each verification plan required by §250.912;

(f) Follow the additional requirements in §§250.913 through 250.918;

(g) Obtain approval for modifications to approved plans and for major deviations from approved installation procedures from the Regional Supervisor; and

(h) Comply with applicable USCG regulations for floating OCS facilities.

[70 FR 41575, July 19, 2005, as amended at 73 FR 64547, Oct. 30, 2008]

## § 250.912 What plans must I submit under the Platform Verification Program?

If your platform, associated structure, or major modification meets the criteria in §250.910, you must submit the following plans to the Regional Supervisor for approval:

(a) *Design verification plan.* You may submit your design verification plan with or subsequent to the submittal of your Development and Production Plan (DPP) or Development Operations Coordination Document (DOCD). Your design verification must be conducted by, or be under the direct supervision of, a registered professional civil or structural engineer or equivalent, or a naval architect or marine engineer or equivalent, with previous experience in directing the design of similar facilities, systems, structures, or equipment. For floating platforms, you must ensure that the requirements of the USCG for structural integrity and stability, e.g., verification of center of gravity, etc., have been met. Your design verification plan must include the following:

- (1) All design documentation specified in §250.905 of this subpart;
- (2) Abstracts of the computer programs used in the design process; and
- (3) A summary of the major design considerations and the approach to be used to verify the validity of these design considerations.

(b) *Fabrication verification plan.* The Regional Supervisor must approve your fabrication verification plan before you may initiate any related operations. Your fabrication verification plan must include the following:

(1) Fabrication drawings and material specifications for artificial island structures and major members of concrete-gravity and steel-gravity structures;

(2) For jacket and floating structures, all the primary load-bearing members included in the space-frame analysis; and

(3) A summary description of the following:

(i) Structural tolerances;

(ii) Welding procedures;

(iii) Material (concrete, gravel, or silt) placement methods;

(iv) Fabrication standards;

(v) Material quality-control procedures;

(vi) Methods and extent of nondestructive examinations for welds and materials; and

(vii) Quality assurance procedures.

(c) *Installation verification plan.* The Regional Supervisor must approve your installation verification plan before you may initiate any related operations. Your installation verification plan must include:

(1) A summary description of the planned marine operations;

(2) Contingencies considered;

(3) Alternative courses of action; and

(4) An identification of the areas to be inspected. You must specify the acceptance and rejection criteria to be used for any inspections conducted during installation, and for the post-installation verification inspection.

(d) You must combine fabrication verification and installation verification plans for manmade islands or platforms fabricated and installed in place.

### **§ 250.913 When must I resubmit Platform Verification Program plans?**

(a) You must resubmit any design verification, fabrication verification, or installation verification plan to the Regional Supervisor for approval if:

- (1) The CVA changes;
- (2) The CVA's or assigned personnel's qualifications change; or
- (3) The level of work to be performed changes.

(b) If only part of a verification plan is affected by one of the changes described in paragraph (a) of this section, you can resubmit only the affected part. You do not have to resubmit the summary of technical details unless you make changes in the technical details.

### **§ 250.914 How do I nominate a CVA?**

(a) As part of your design verification, fabrication verification, or installation verification plan, you must nominate a CVA for the Regional Supervisor's approval. You must specify whether the nomination is for the design, fabrication, or installation phase of verification, or for any combination of these phases.

(b) For each CVA, you must submit a list of documents to be forwarded to the CVA, and a qualification statement that includes the following:

- (1) Previous experience in third-party verification or experience in the design, fabrication, installation, or major modification of offshore oil and gas platforms. This should include fixed platforms, floating platforms, manmade islands, other similar marine structures, and related systems and equipment;
- (2) Technical capabilities of the individual or the primary staff for the specific project;
- (3) Size and type of organization or corporation;
- (4) In-house availability of, or access to, appropriate technology. This should include computer programs, hardware, and testing materials and equipment;
- (5) Ability to perform the CVA functions for the specific project considering current commitments;
- (6) Previous experience with MMS requirements and procedures;
- (7) The level of work to be performed by the CVA.

### **§ 250.915 What are the CVA's primary responsibilities?**

(a) The CVA must conduct specified reviews according to §§250.916, 250.917, and 250.918 of this subpart.

(b) Individuals or organizations acting as CVAs must not function in any capacity that would create a conflict of interest, or the appearance of a conflict of interest.

(c) The CVA must consider the applicable provisions of the documents listed in §250.901(a); the alternative codes, rules, and standards approved under 250.901(b); and the requirements of this subpart.

(d) The CVA is the primary contact with the Regional Supervisor and is directly responsible for providing immediate reports of all incidents that affect the design, fabrication and installation of the platform.

### **§ 250.916 What are the CVA's primary duties during the design phase?**

(a) The CVA must use good engineering judgement and practices in conducting an independent assessment of the design of the platform, major modification, or repair. The CVA must ensure that the platform, major modification, or

repair is designed to withstand the environmental and functional load conditions appropriate for the intended service life at the proposed location.

(b) Primary duties of the CVA during the design phase include the following:

Type of facility . . .	The CVA must . . .
(1) For fixed platforms and non-ship-shaped floating facilities	Conduct an independent assessment of all proposed:
	(i) Planning criteria;
	(ii) Operational requirements;
	(iii) Environmental loading data;
	(iv) Load determinations;
	(v) Stress analyses;
	(vi) Material designations;
	(vii) Soil and foundation conditions;
	(viii) Safety factors; and
	(ix) Other pertinent parameters of the proposed design.
(2) For all floating facilities	Ensure that the requirements of the U.S. Coast Guard for structural integrity and stability, e.g., verification of center of gravity, etc., have been met. The CVA must also consider:
	(i) Drilling, production, and pipeline risers, and riser tensioning systems;
	(ii) Turrets and turret-and-hull interfaces;
	(iii) Foundations, foundation pilings and templates, and anchoring systems; and
	(iv) Mooring or tethering systems.

(c) The CVA must submit interim reports and a final report to the Regional Supervisor, and to you, during the design phase in accordance with the approved schedule required by §250.911(d). In each interim and final report the CVA must:

- (1) Provide a summary of the material reviewed and the CVA's findings;
- (2) In the final CVA report, make a recommendation that the Regional Supervisor either accept, request modifications, or reject the proposed design unless such a recommendation has been previously made in an interim report;
- (3) Describe the particulars of how, by whom, and when the independent review was conducted; and
- (4) Provide any additional comments the CVA deems necessary.

**§ 250.917 What are the CVA's primary duties during the fabrication phase?**

(a) The CVA must use good engineering judgement and practices in conducting an independent assessment of the fabrication activities. The CVA must monitor the fabrication of the platform or major modification to ensure that it has been built according to the approved design and the fabrication plan. If the CVA finds that fabrication procedures are changed or design specifications are modified, the CVA must inform you. If you accept the modifications, then the CVA must so inform the Regional Supervisor.

(b) Primary duties of the CVA during the fabrication phase include the following:

Type of facility . . .	The CVA must . . .
(1) For all fixed platforms and non-ship-shaped floating facilities	Make periodic onsite inspections while fabrication is in progress and must verify the following fabrication items, as appropriate:
	(i) Quality control by lessee and builder;
	(ii) Fabrication site facilities;
	(iii) Material quality and identification methods;
	(iv) Fabrication procedures specified in the approved plan, and adherence to such procedures;
	(v) Welder and welding procedure qualification and identification;
	(vi) Structural tolerances specified and adherence to those tolerances;
	(vii) The nondestructive examination requirements, and evaluation results of the specified examinations;
	(viii) Destructive testing requirements and results;
	(ix) Repair procedures;
	(x) Installation of corrosion-protection systems and splash-zone protection;
	(xi) Erection procedures to ensure that overstressing of structural members does not occur;
	(xii) Alignment procedures;
	(xiii) Dimensional check of the overall structure, including any turrets, turret-and-hull interfaces, any mooring line and chain and riser tensioning line segments; and
	(xiv) Status of quality-control records at various stages of fabrication.
(2) For all floating facilities	Ensure that the requirements of the U.S. Coast Guard floating for structural integrity and stability, e.g., verification of center of gravity, etc., have been met. The CVA must also consider:
	(i) Drilling, production, and pipeline risers, and riser tensioning systems (at least for the initial fabrication of these elements);

	(ii) Turrets and turret-and-hull interfaces;
	(iii) Foundation pilings and templates, and anchoring systems; and
	(iv) Mooring or tethering systems.

(c) The CVA must submit interim reports and a final report to the Regional Supervisor, and to you, during the fabrication phase in accordance with the approved schedule required by §250.911(d). In each interim and final report the CVA must:

- (1) Give details of how, by whom, and when the independent monitoring activities were conducted;
- (2) Describe the CVA's activities during the verification process;
- (3) Summarize the CVA's findings;
- (4) Confirm or deny compliance with the design specifications and the approved fabrication plan;
- (5) In the final CVA report, make a recommendation to accept or reject the fabrication unless such a recommendation has been previously made in an interim report; and
- (6) Provide any additional comments that the CVA deems necessary.

[70 FR 41575, July 19, 2005, as amended at 73 FR 64547, Oct. 30, 2008]

**§ 250.918 What are the CVA's primary duties during the installation phase?**

(a) The CVA must use good engineering judgment and practice in conducting an independent assessment of the installation activities.

(b) Primary duties of the CVA during the installation phase include the following:

<b>The CVA must . . .</b>	<b>Operation or equipment to be inspected . . .</b>
(1) Verify, as appropriate	(i) Loadout and initial flotation operations;
	(ii) Towing operations to the specified location, and review the towing records;
	(iii) Launching and uprighting operations;
	(iv) Submergence operations;
	(v) Pile or anchor installations;
	(vi) Installation of mooring and tethering systems;
	(vii) Final deck and component installations; and
	(viii) Installation at the approved location according to the approved



	design and the installation plan.
(2) Witness (for a fixed or floating platform)	(i) The loadout of the jacket, decks, piles, or structures from each fabrication site;
	(ii) The actual installation of the platform or major modification and the related installation activities.
(3) Witness (for a floating platform)	(i) The loadout of the platform;
	(ii) The installation of drilling, production, and pipeline risers, and riser tensioning systems (at least for the initial installation of these elements);
	(iii) The installation of turrets and turret-and-hull interfaces;
	(iv) The installation of foundation pilings and templates, and anchoring systems; and
	(v) The installation of the mooring and tethering systems.
(4) Conduct an onsite survey	Survey the platform after transportation to the approved location.
(5) Spot-check as necessary to determine compliance with the applicable documents listed in §250.901(a); the alternative codes, rules and standards approved under 250.901(b); the requirements listed in §250.903 and §250.906 through 250.908 of this subpart and the approved plans	(i) Equipment; (ii) Procedures; and (iii) Recordkeeping.

(c) The CVA must submit interim reports and a final report to the Regional Supervisor, and to you, during the installation phase in accordance with the approved schedule required by §250.911(d). In each interim and final report the CVA must:

- (1) Give details of how, by whom, and when the independent monitoring activities were conducted;
- (2) Describe the CVA's activities during the verification process;
- (3) Summarize the CVA's findings;
- (4) Confirm or deny compliance with the approved installation plan;
- (5) In the final report, make a recommendation to accept or reject the installation unless such a recommendation has been previously made in an interim report; and
- (6) Provide any additional comments that the CVA deems necessary.

[70 FR 41575, July 19, 2005, as amended at 73 FR 64547, Oct. 30, 2008]

## **Inspection, Maintenance, and Assessment of Platforms**

### **§ 250.919 What in-service inspection requirements must I meet?**

(a) You must submit a comprehensive in-service inspection report annually by November 1 to the Regional Supervisor that must include:

- (1) A list of fixed and floating platforms you inspected in the preceding 12 months;
- (2) The extent and area of inspection for both the above-water and underwater portions of the platform and the pertinent components of the mooring system for floating platforms;
- (3) The type of inspection employed (e.g., visual, magnetic particle, ultrasonic testing);
- (4) The overall structural condition of each platform, including a corrosion protection evaluation; and
- (5) A summary of the inspection results indicating what repairs, if any, were needed.

(b) If any of your structures have been exposed to a natural occurrence (e.g., hurricane, earthquake, or tropical storm), the Regional Supervisor may require you to submit an initial report of all structural damage, followed by subsequent updates, which include the following:

- (1) A list of affected structures;
- (2) A timetable for conducting the inspections described in section 14.4.3 of API RP 2A–WSD (incorporated by reference as specified in §250.198); and
- (3) An inspection plan for each structure that describes the work you will perform to determine the condition of the structure.

(c) The Regional Supervisor may also require you to submit the results of the inspections referred to in paragraph (b)(2) of this section, including a description of any detected damage that may adversely affect structural integrity, an assessment of the structure's ability to withstand any anticipated environmental conditions, and any remediation plans. Under §§250.900(b)(3) and 250.905, you must obtain approval from MMS before you make major repairs of any damage unless you meet the requirements of §250.900(c).

[73 FR 64547, Oct. 30, 2008]

### **§ 250.920 What are the MMS requirements for assessment of fixed platforms?**

(a) You must document all wells, equipment, and pipelines supported by the platform if you intend to use either the A–2 or A–3 assessment category. Assessment categories are defined in API RP 2A–WSD, Section 17.3. If MMS objects to the assessment category you used for your assessment, you may need to redesign and/or modify the platform to adequately demonstrate that the platform is able to withstand the environmental loadings for the appropriate assessment category.

(b) You must perform an analysis check when your platform will have additional personnel, additional topside facilities, increased environmental or operational loading, or inadequate deck height your platform suffered significant damage (e.g., experienced damage to primary structural members or conductor guide trays or global structural integrity is adversely affected); or the exposure category changes to a more restrictive level (see Sections 17.2.1 through 17.2.5 of API RP 2A–WSD for a description of assessment initiators).

(c) You must initiate mitigation actions for platforms that do not pass the assessment process of API RP 2A–WSD. You must submit applications for your mitigation actions (e.g., repair, modification, decommissioning) to the Regional Supervisor for approval before you conduct the work.

(d) The MMS may require you to conduct a platform design basis check when the reduced environmental loading

criteria contained in API RP 2A–WSD Section 17.6 are not applicable.

(e) By November 1, 2009, you must submit a complete list of all the platforms you operate, together with all the appropriate data to support the assessment category you assign to each platform and the platform assessment initiators (as defined in API RP 2A–WSD) to the Regional Supervisor. You must submit subsequent complete lists and the appropriate data to support the consequence-of-failure category every 5 years thereafter, or as directed by the Regional Supervisor.

(f) The use of Section 17, Assessment of Existing Platforms, of API RP 2A–WSD is limited to existing fixed structures that are serving their original approved purpose. You must obtain approval from the Regional Supervisor for any change in purpose of the platform, following the provisions of API RP 2A–WSD, Section 15, Re-use.

[73 FR 64548, Oct. 30, 2008]

#### **§ 250.921 How do I analyze my platform for cumulative fatigue?**

(a) If you are required to analyze cumulative fatigue on your platform because of the results of an inspection or platform assessment, you must ensure that the safety factors for critical elements listed in §250.908 are met or exceeded.

(b) If the calculated life of a joint or member does not meet the criteria of §250.908, you must either mitigate the load, strengthen the joint or member, or develop an increased inspection process.