

(a) Prior to the accumulation of 12,000 total landings, or within 1,000 landings after the effective date of this AD, whichever occurs later: Modify the elevator uncoupling mechanism in accordance with Aerospatiale Service Bulletin ATR72-27-1044, dated March 5, 1996.

(b) As of the effective date of this AD, no person shall install a pitch uncoupling mechanism of the elevator, having the following part numbers, on any airplane:
S2738194100800
S2738194102895
S2738194102200
S2738194102400
S2738194102800
S2738194103200

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Manager, Standardization Branch, ANM-113, FAA, Transport Airplane Directorate. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Standardization Branch, ANM-113.

Note 2: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Standardization Branch, ANM-113.

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

(e) The modification shall be done in accordance with Aerospatiale Service Bulletin ATR72-27-1044, dated March 5, 1996. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Aerospatiale, 316 Route de Bayonne, 31060 Toulouse, Cedex 03, France. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(f) This amendment becomes effective on December 31, 1996.

Issued in Renton, Washington, on November 18, 1996.

James V. Devany,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 96-29989 Filed 11-25-96; 8:45 am]

BILLING CODE 4910-13-U

DEPARTMENT OF THE INTERIOR

Minerals Management Service

30 CFR Part 250

RIN 1010-AC03

Oil and Gas and Sulphur Operations in the Outer Continental Shelf

AGENCY: Minerals Management Service, Interior.

ACTION: Final rule.

SUMMARY: The Minerals Management Service (MMS) amends the documents incorporated by reference in regulations governing oil, gas, and sulphur operations in the Outer Continental Shelf (OCS). The organizations that publish the incorporated documents have revised many of their recommended practices and standards and have published new editions. The new editions will continue to ensure that lessees use the best available and safest technologies while operating in the OCS.

DATES: *EFFECTIVE DATE:* December 26, 1996.

The incorporation by reference of certain publications listed in this regulation is approved by the Director of the Federal Register on December 26, 1996.

FOR FURTHER INFORMATION CONTACT: Bill Hauser, Engineering and Standards Branch, telephone (703) 787-1600.

SUPPLEMENTARY INFORMATION: MMS uses standards, specifications, and recommended practices developed by standard-setting organizations and the oil and gas industry as a means of establishing requirements for activities in the OCS. This practice, known as incorporation by reference, allows MMS to incorporate the requirements of technical documents into the regulations without increasing the volume of the Code of Federal Regulations (CFR). MMS currently incorporates by reference, 68 documents into the offshore operating regulations.

The regulations found at 1 CFR part 51 govern how MMS and other Federal agencies incorporate various documents by reference. Agencies can only incorporate by reference through publication in the Federal Register. This generally includes standard rulemaking procedures; i.e., the agencies provide notice and opportunity for comment.

Agencies must also gain approval from the Director of the Federal Register for each publication incorporated by reference. Incorporation by reference of a document or publication is limited to

the edition of the document or publication cited in the regulations. This means that newer editions, amendments, or revisions to documents already incorporated by reference in regulations are not part of MMS's regulations.

This rule updates more than 50 out-of-date documents incorporated by reference into MMS regulations. For most documents, the changes between the old and new editions are minor. However, MMS must update these documents because the older editions may not be readily available to the affected parties. For instance, some American Petroleum Institute (API) documents currently referenced by MMS are out of print and no longer available. Other documents have undergone major revisions, and after reviewing these documents, MMS has determined that we must incorporate these documents to ensure the use of the best and safest technologies.

In the future, MMS would like to keep the number of out-of-date documents incorporated by reference to a minimum. To accomplish this, this rule includes language that streamlines the rulemaking process. Under this rule, MMS will review new editions of documents we incorporate by reference as we do now. If MMS determines that the revisions are minor, result in safety improvements or represent new industry standard technology, and do not impose undue costs on the affected parties, MMS will update the documents incorporated by reference section of our regulations with a final rule published in the Federal Register. This means that the new edition of the document(s) becomes effective without the public having prior opportunity to comment. This option is provided to agencies under 5 U.S.C. 533(b) when agencies find that the notice and comment would be impracticable, unnecessary, or contrary to the public interest.

Narrative Response to Comments

MMS received comments on the notice of proposed rulemaking (60FR42819) from oil and natural gas producers and trade organizations representing oil and gas producers, pipeline companies, and drilling contractors. A summary of their comments and MMS's response to each comment follows below:

Comment: Three parties alerted MMS that some of the documents that we had proposed to incorporate by reference have been superseded by newer editions or documents with different titles.

MMS response: MMS reviewed the new documents, and if the changes were

minor, noncontroversial, and did not impose any substantial new costs to industry, we included the new documents in the final rule. Specific documents we chose not to update include the following:

1. API Spec Q1—MMS will update the regulations to incorporate the latest edition of this document in an upcoming rule.

2. API RP 2A—WSD—MMS, industry, and API are working on changes to the 20th edition. When the changes are final, MMS will update the regulations to incorporate the 20th edition of this document.

3. API RP 14C—MMS, industry, and API are working on changes to the fifth edition. When the changes are final, MMS will update the regulations to incorporate the fifth edition of this document.

Comment: Two parties asked MMS to consider including documents that had not previously been incorporated by reference.

MMS response: MMS cannot include these documents until we review them and then go through the notice and comment rulemaking procedure. MMS will consider these and other documents in a future rulemaking.

Comment: One party asked MMS to include the words “previously incorporated” in the introductory paragraph of § 250.1. This addition will make it clear that the streamlined process for updating documents incorporated by reference applies only to previously incorporated documents.

MMS response: MMS accepts this suggestion and has included the words “previously incorporated” in this final rule.

Comment: One party asked that MMS not attach any other changes to our regulations when we use the streamlined process to update documents incorporated by reference.

MMS response: MMS does not intend to attach other changes to the regulations when using the streamlined process to update documents incorporated by reference.

Comment: Two parties criticized our streamlined method of updating our documents incorporated by reference, and they suggested we use the U.S. Coast Guard’s (USCG) final rule of September 22, 1995 (60 FR 49222), as a model. Three parties supported our streamlining efforts.

MMS response: MMS believes that the method we proposed to streamline the process of updating previously incorporated documents will work better than the USCG’s method suggested by the comments we received. The USCG’s method requires two

notices (one initial notice and one notice stating no comments disagreed with the proposal) in the Federal Register, whereas our proposal only requires one. MMS has found that most of the documents we propose for incorporation by reference come from organizations that have as members the parties affected by MMS regulations. By the time they release a new edition of a document, these parties have already commented on the new edition. It is redundant for MMS to issue the document for additional comments and unnecessarily delay the implementation of new ideas in the document. Anyone can send comments to MMS regarding our regulations at any time. If an affected party has concerns with a new edition of any of the documents incorporated by reference, that party should promptly voice those concerns to MMS.

This final rule updates more than 50 documents that were out of date, over two-thirds of our total documents. We should note that we received only one negative comment concerning documents we proposed to update. We did receive negative comments about other documents we have concerns with, and thus declined to update. This rulemaking effort indicates that our streamlined method of updating documents incorporated by reference is sufficient.

To clarify when MMS will and will not use the streamlined procedure, we have added language to the introductory paragraph of § 250.1, detailing the MMS will go through the traditional notice and comment procedure to change the documents incorporated by reference regulations whenever:

1. MMS proposes to include documents not previously incorporated by reference.

2. The new edition of a document already incorporated by reference introduces controversial issues, or imposes substantial new costs on industry.

3. MMS proposes that a document cover parties not previously affected by the document in question.

4. MMS believes it would be in the best interest of the public to receive comments on a new edition.

Comment: One party commented that MMS adopts new standards without regard to the feasibility or cost of implementing them on existing facilities and equipment.

MMS response: MMS makes the determination about enforcing requirements found in newer editions of documents incorporated by reference on a case-by-case basis. We do not intend for parties to make radical changes to

their existing facilities or equipment because of changes to the documents we incorporate. However, if the changes reflected by the updated documents can be easily made, and result in improvements in safety, then we would ask that parties conform to the requirements found in the newer edition.

Comment: One party commented that MMS presumes that the industry standards we cite are the relevant standards for all sectors of the industry.

MMS response: While the documents we incorporate by reference are intended for use by all parties operating in the OCS, parties have the right to petition the Regional Supervisor for waivers to certain requirements found in the documents. The Regional Supervisor makes a decision on a case-by-case basis. If a certain sector of the industry finds a document that is more suitable for their operations than the document MMS incorporates, then they should submit the document to MMS for consideration in future updates to our documents incorporated by reference regulations.

Comment: One party asked MMS to clarify its position on the status of documents referenced within the documents MMS incorporates by reference. MMS refers to these documents as second-tier documents.

MMS response: When MMS incorporates a document by reference, we intend for the users of that document to follow all parts of that document unless otherwise noted. If users ignore the second-tier document, then the document we incorporate loses its impact and its usefulness to MMS and industry. The MMS position on this issue is that second-tier documents apply unless otherwise noted, and parties should follow them when conducting operations in the OCS.

Summary of Final Rule Revisions

Based on our review and analysis of the comments, the final rule revises the regulations as follows:

1. The introductory paragraph in § 250.1 indicates that MMS will, in certain cases, update previously incorporated documents without the public having prior opportunity to comment.

2. The latest editions of the following documents were not included in the proposed rule but are included in the final rule. Organizations either updated these documents between the time MMS drafted and the Federal Register published the proposed rule or MMS was not aware that the documents had been updated. After reviewing the documents, MMS has determined that

the changes to these documents are minor, and we have included the latest edition of the document in the final rule. A list of the documents affected follows:

a. American Concrete Institute (ACI) Standard 318–89 was updated to ACI Standard 318–95.

b. American National Standards Institute/American Society of Mechanical Engineers (ANSI/ASME) B31.8–1989 was updated to ANSI/ASME B31.8–1992.

c. Following are the API documents affected:

—API Spec 6A—This document includes a new section with specifications for surface safety valves and underwater safety valves for offshore service. The specifications are the same as those found in API Spec 14D. So, MMS has included API Spec 6A as an acceptable alternative to API Spec 14D. MMS will continue to include API Spec 14D in the regulations until API withdraws the document.

—API Spec 6AV1—This document contains the same information found in various parts of API Spec 14D. MMS has included this document as an acceptable alternative to parts of API Spec 14D.

—API Standard 2545—This document has been superseded by the Manual of Petroleum Measurement Standards (MPMS), Chapter 3.1A and MPMS, Chapter 3.1B. Standard 2545 will remain in effect for pressurized vessels until new MPMS, Chapter 3 documents are drafted. MMS will incorporate MPMS, Chapter 3.1A and MPMS, Chapter 3.1B into the regulations since we have reviewed these documents and determined that the differences between them and Standard 2545 are minor. MMS will continue to incorporate Standard 2545 as well.

—API Standard 2550—This document has been superseded by MPMS, Chapter 2.2A and MPMS, Chapter 2.2B. MMS will incorporate MPMS, Chapter 2.2A and MPMS, Chapter 2.2B into the regulations since we have reviewed these documents and determined that the differences between them and Standard 2550 are minor. MMS will not continue to reference Standard 2550 since the API indicates that this document will be withdrawn soon.

—MPMS, Chapter 5.1 was updated to the Third Edition, September 1995.

—MPMS, Chapter 5.3 was updated to the Third Edition, September 1995.

—MPMS, Chapter 5.4 was updated to the Third Edition, September 1995.

—MPMS, Chapter 7.2 was updated to the Second Edition, March 1995.

—MPMS, Chapter 8.1 was updated to the Third Edition, November 1995.

—MPMS, Chapter 8.2 was updated to the Second Edition, November 1995.

—MPMS, Chapter 11.2.3 was updated to the Second Edition, November 1995.

In cases where API superseded other documents with new documents, MMS had to make minor adjustments to the language in the regulations to reflect the reference to a new document.

d. Following are the American Society for Testing and Materials (ASTM) documents affected:

—ASTM Standard C33–90 was updated to ASTM Standard C33–93.

—ASTM Standard C94–91a was updated to ASTM Standard C94–95.

—ASTM Standard C150–89 was updated to ASTM Standard C150–95.

—ASTM Standard C595–90 was updated to ASTM Standard C595–95.

e. American Welding Society D1.1–92 was updated to D1.1–96.

f. National Association of Corrosion Engineers (NACE) Standard RP–01–76 was updated to NACE Standard RP–0176–94.

3. API changed its stock numbering system in 1996. MMS changed the stock numbers for API documents in the final rule.

Executive Order (E.O.) 12866

This rule was reviewed under E.O. 12866. The Department of the Interior (DOI) has determined that the rule is not a significant rule under the criteria of E.O. 12866 and, therefore, the rule was not reviewed by the Office of Management and Budget (OMB).

Regulatory Flexibility Act

The DOI has determined that this final rule will not have a significant economic effect on a substantial number of small entities. This rule will not have a significant economic effect on any entity, regardless of size. Any minor effects of this rulemaking will primarily affect lessees and operators—entities that are not, by definition, small due to the technical complexities and financial resources necessary to conduct OCS activities. The indirect effects of this rulemaking on small entities that provide support for offshore activities were also determined to be small.

Paperwork Reduction Act

This rule does not contain collections of information that require approval by OMB under 44 U.S.C. 3501 *et seq.*

Takings Implication Assessment

The DOI certifies that this final rule does not represent a governmental

action capable of interference with constitutionally protected property rights. Thus, a Takings Implication Assessment need not be prepared pursuant to E.O. 12630, Government Action and Interference with Constitutionally Protected Property Rights.

E.O. 12988

The DOI has certified to OMB that this rule meets the applicable civil justice reform standards provided in Sections 3(a) and 3(b)(2) of E.O. 12988.

National Environmental Policy Act

The DOI has determined that this action does not constitute a major Federal action significantly affecting the quality of the human environment. Therefore, preparation of an Environmental Impact Statement is not required.

Unfunded Mandate Reform Act of 1995

This rule does not contain any unfunded mandates to State, local, or tribal governments or the private sector.

List of Subjects in 30 CFR Part 250

Continental shelf, Environmental impact statements, Environmental protection, Government contracts, Incorporation by reference, Investigations, Mineral royalties, Oil and gas development and production, Oil and gas exploration, Oil and gas reserves, Penalties, Pipelines, Public lands—mineral resources, Public lands—rights-of-way, Reporting and recordkeeping requirements, Sulphur development and production, Sulphur exploration, Surety bonds.

Dated: September 30, 1996.

Sylvia V. Baca,

Deputy Assistant Secretary, Land and Minerals Management.

For the reasons stated in the preamble, MMS amends 30 CFR part 250 as follows:

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

1. The authority citation for part 250 continues to read as follows:

Authority: 43 U.S.C. 1334.

2. In § 250.1, revise the third sentence in the introductory paragraph, adds two new sentences following the third sentence and revise paragraphs (a)(1), (b), (c)(1) through (c)(4), (c)(6), (d), (e)(1) through (e)(5), (f)(1), and (g)(2) to read as follows:

§ 250.1 Documents incorporated by reference.

* * * MMS will publish a notice of any changes in these documents in the Federal Register. The rule change will become effective without notice and prior opportunity to comment if MMS determines that the revisions to a previously incorporated document are minor, result in safety improvements, or represent new industry standard technology and do not impose undue costs on the affected parties. MMS will go through the notice and comment procedure to change the documents incorporated by reference or into this section when MMS proposes to include documents not previously incorporated by reference; a new edition of a document already incorporated by reference introduces controversial issues, or imposes substantial new costs on industry; MMS proposes that a document cover parties not previously affected by the document in question; or MMS believes it would be in the best interest of the public to solicit comments on a new edition. * * *

(a) * * *

(1) American Concrete Institute (ACI) Standard 318-95, Building Code Requirements for Reinforced Concrete, plus Commentary on Building Code Requirements for Reinforced Concrete (ACI 318R-95), Incorporated by Reference at: § 250.138 (b)(4)(i), (b)(6)(i), (b)(7), (b)(8)(i), (b)(9), (b)(10), (c)(3), (d)(1)(v), (d)(5), (d)(6), (d)(7), (d)(8), (d)(9), (e)(1)(i), and (e)(2)(i).

(b) American Institute of Steel Construction (AISC) Document. The AISC document listed in this paragraph may be purchased from the American Institute of Steel Construction, Inc., P.O. Box 4588, Chicago, Illinois 60680.

(1) AISC Standard Specification for Structural Steel Buildings, Allowable Stress Design and Plastic Design, June 1, 1989, with Commentary, Incorporated by Reference at: § 250.137 (b)(1)(ii), (c)(4)(ii), and (c)(4)(vii).

(2) [Reserved]

(c) * * *

(1) The American National Standards Institute/American Society of Mechanical Engineers (ANSI/ASME) Boiler and Pressure Vessel Code, Section I, Power Boilers including Appendices, 1995 Edition, incorporated by Reference at: §§ 250.123 (b)(1) and (b)(1)(i) and 250.292 (b)(1) and (b)(1)(i).

(2) The ANSI/ASME Boiler and Pressure Vessel Code, Section IV, Heating Boilers, including Nonmandatory Appendices A, B, C, D, E, F, H, I, and J and the Guide to Manufacturers Data Report Forms, 1995

Edition, Incorporated by Reference at: §§ 250.123 (b)(1) and (b)(1)(i) and 250.292 (b)(1) and (b)(1)(i).

(3) ANSI/ASME Boiler and Pressure Vessel Code, Section VIII, Pressure Vessels, Divisions 1 and 2, including Nonmandatory Appendices, 1995 Edition, Incorporated by Reference at: §§ 250.123 (b)(1) and (b)(1)(i) and 250.292 (b)(1) and (b)(1)(i).

4. ANSI/ASME B 31.8-1995, Gas Transmission and Distribution Piping Systems, Incorporated by Reference at: § 250.152(a).

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(6) ANSI/ASME B 16.5-1988 (including Errata) and B 16.5a-1992 Addenda, Pipe Flanges and Flanged Fittings, Incorporated by Reference at: § 250.152(b)(2).

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(d) American Petroleum Institute (API) Documents. The API documents listed in this paragraph may be purchased from the American Petroleum Institute, 1220 L Street, NW., Washington, D.C. 20005. (Paragraphs (d)(21) through (d)(61) of this section refer to the API Manual of Petroleum Measurement Standards (MPMS)).

(1) API Spec Q1, Specification for Quality Programs, Third Edition, June 1990, API Stock No. 811-00001, Incorporated by Reference at: § 250.126(c)(3).

(2) API RP 2A, Recommended Practice for Planning, Designing and Constructing Fixed Offshore Platforms Working Stress Design, Nineteenth Edition, August 1, 1991, API Stock No. 811-00200, Incorporated by Reference at: §§ 250.130(g) and 250.142(a).

(3) API RP 2D, Recommended Practice for Operation and Maintenance of Offshore Cranes, Third Edition, June 1, 1995, API Stock No. G02D03, Incorporated by Reference at: §§ 250.20(c) and 250.260(g).

(4) API Spec 6A, Specification for Wellhead and Christmas Tree Equipment, Seventeenth Edition, February 1, 1996, API Stock No. G06A17, Incorporated by Reference at: §§ 250.126(c)(3), (e)(2), and (e)(3) and 250.152 (b)(1) and (b)(2).

(5) API Spec 6AV1, Specification for Verification Test of Wellhead Surface Safety Valves and Underwater Safety Valves for Offshore Service, First Edition, February 1, 1996, API Stock No. G06AV1, Incorporated by Reference at: § 250.126(c)(3).

(6) API Spec 6D, Specification for Pipeline Valves (Gate, Plug, Ball, and Check Valves), Twenty-first Edition, March 31, 1994, API Stock No. G03200, Incorporated by Reference at: § 250.152(b)(1).

(7) API Spec 14A, Specification for Subsurface Safety Valve Equipment, Ninth Edition, July 1, 1994, API Stock No. G14A09, Incorporated by Reference at: § 250.126 (c)(3), (e)(2), and (e)(3).

(8) API RP 14B, Design, Installation, Repair and Operation of Subsurface Safety Valve Systems, Fourth Edition, July 1, 1994, with Errata dated June, 1996, API Stock No. G14B04, Incorporated by Reference at: §§ 250.121(e)(4), 250.124(a)(1)(i), and 250.126(d).

(9) API RP 14C, Recommended Practice for Analysis, Design, Installation and Testing of Basic Surface Safety Systems for Offshore Production Platforms, Fourth Edition, September 1, 1986, API Stock No. 811-07180, Incorporated by References at §§ 250.122 (b) and (e)(2); 250.123 (a), (b)(2)(i), (b)(4), (b)(5)(i), (b)(7), (b)(9)(v), and (c)(2); 250.124 (a) and (a)(5); 250.152(d); 250.154(b)(9); 250.291 (c) and (d)(2); 250.292 (b)(2) and (b)(4)(v); and 250.293(a).

(10) API Spec 14D, Specification for Wellhead Surface Safety Valves and Underwater Safety Valves for Offshore Service, Ninth Edition, June 1, 1994, with errata dated August 1, 1994, API Stock No. G07183, Incorporated by Reference at: § 250.126 (c)(3), (e)(2), and (e)(3).

(11) API RP 14E, Recommended Practice for Design and Installation of Offshore Production Platform Piping Systems, Fifth Edition, October 1, 1991, API Stock No. G07185, Incorporated by Reference at: §§ 250.122(e)(3) and 250.291 (b)(2) and (d)(3).

(12) API RP 14F, Recommended Practice for Design and Installation of Electrical Systems for Offshore Production Platforms, Third Edition, September 1, 1991, API Stock No. G07190, Incorporated by Reference at: §§ 250.53(c), 250.123(b)(9)(v), and 250.292(b)(4)(v).

(13) API RP 14G, Recommended Practice for Fire Prevention and Control on Open Type Offshore Production Platforms, Third Edition, December 1, 1993, API Stock No. G07194, Incorporated by Reference at: §§ 250.123 (b)(8) and (b)(9)(v) and 250.292 (b)(3) and (b)(4)(v).

(14) API RP 14H, Recommended Practice for Installation, Maintenance and Repair of Surface Safety Valves and Underwater Safety Valves Offshore, Fourth Edition, July 1, 1994, API Stock No. G14H04, Incorporated by Reference at: §§ 250.122(d) and 250.126(d).

(15) API RP 500, Recommended Practice for Classification of Locations for Electrical Installations at Petroleum Facilities, First Edition, June 1, 1991, API Stock No. G06005, Incorporated by

Reference at: §§ 250.53(b), 250.122(e)(4)(i), 250.123(b)(9)(i), 250.291 (b)(3) and (d)(4)(i), and 250.292(b)(4)(i).

(16) API Standard 2545, Method of Gauging Petroleum and Petroleum Products, October 1965, reaffirmed October 1992, also available as ANSI/American Society of Testing Materials (ASTM) D 1085-65, API Stock No. H25450, Incorporated by Reference at: § 250.180(f)(2)(ii)(C).

(17) API Standard 2551, Standard Method for Measurement and Calibration of Horizontal Tanks, First Edition, 1965, reaffirmed October 1992, also available as ANSI/ASTM D 1410-65, reapproved 1984, API Stock No. H25510, Incorporated by Reference at: § 250.180(f)(2)(i)(C).

(18) API Standard 2552, Measurement and Calibration of Spheres and Spheroids, First Edition, 1966, reaffirmed October 1992, also available as ANSI/ASTM D 1408-65, reapproved 1984, API Stock No. H25520, Incorporated by Reference at: § 250.180(f)(2)(i)(C).

(19) API Standard 2555, Method for Liquid Calibration of Tanks, September 1966, reaffirmed October 1992, also available as ANSI/ASTM D 1406-65, reapproved 1984, API Stock No. H25550, Incorporated by Reference at: § 250.180(f)(2)(i)(C).

(20) API RP 2556, Correcting Gauge Tables for Incrustation, Second Edition, August 1993, API Stock No. H25560, Incorporated by Reference at: § 250.180(f)(2)(i)(C).

(21) Manual of Petroleum Management Standard (MPMS), Chapter 2, Tank Calibration, section 2A, Measurement and Calibration of Upright Cylindrical Tanks by the Manual Strapping Method, First Edition, February 1995, API Stock No. H022A1, Incorporated by Reference at: § 250.180(f)(2)(i)(A).

(22) MPMS, Chapter 2, section 2B, Calibration of Upright Cylindrical Tanks Using the Optical Reference Line Method, First Edition, March 1989, also available as ANSI/ASTM D4738-88, API Stock No. H30023, Incorporated by Reference at: § 250.180(f)(2)(i)(B).

(23) MPMS, Chapter 3, Tank Gauging, section 1A, Standard Practice for the Manual Gauging of Petroleum and Petroleum Products, First Edition, December 1994, API Stock No. H031A1, Incorporated by Reference at: § 250.180(f)(2)(ii)(A).

(24) MPMS, Chapter 3, section 1B, Standard Practice for Level Measurement of Liquid Hydrocarbons in Stationary Tanks by Automatic Tank Gauging, First Edition, April 1992, API

Stock No. H30060, Incorporated by Reference at: § 250.180(f)(2)(ii)(B).

(25) MPMS, Chapter 4, Proving Systems, section 1, Introduction, First Edition, July 1988, reaffirmed October 1993, API Stock No. H30081, Incorporated by Reference at: § 250.180(c)(6)(i) and (d)(3)(iv).

(26) MPMS, Chapter 4, section 2, Conventional Pipe Provers, First Edition, October 1988, reaffirmed October 1993, API Stock No. H30082, Incorporated by Reference at: § 250.180(c)(6)(i) and (d)(3)(iv).

(27) MPMS, Chapter 4, section 3, Small Volume Provers, First Edition, July 1988, reaffirmed October 1993, API Stock No. H30083, Incorporated by Reference at: § 250.180(c)(6)(i) and (d)(3)(iv).

(28) MPMS, Chapter 4, section 4, Tank Provers, First Edition, October 1988, reaffirmed October 1993, API Stock No. H30084, Incorporated by Reference at: § 250.180(c)(6)(i) and (d)(3)(iv).

(29) MPMS, Chapter 4, section 5, Master-Meter Provers, First Edition, October 1988, reaffirmed October 1993, API Stock No. H30085, Incorporated by Reference at: § 250.180(c)(6)(i) and (d)(3)(iv).

(30) MPMS, Chapter 4, section 6, Pulse Interpolation, First Edition, July 1988, reaffirmed October 1993, API Stock No. H30086, Incorporated by Reference at: § 250.180(c)(6)(i) and (d)(3)(iv).

(31) MPMS, Chapter 4, section 7, Field-Standard Test Measures, First Edition, October 1988, API Stock No. H30087, Incorporated by Reference at: § 250.180(c)(6)(i) and (d)(3)(iv).

(32) MPMS, Chapter 5, Metering, section 1, General Considerations for Measurement by Meters, Third Edition, September 1995, API Stock No. H05013, Incorporated by Reference at: § 250.180(c)(6)(ii).

(33) MPMS, Chapter 5, section 2, Measurement of Liquid Hydrocarbons by Displacement Meters, Second Edition, November 1987, reaffirmed October 1992, API Stock No. H30102, Incorporated by Reference at: § 250.180(c)(6)(ii).

(34) MPMS, Chapter 5, section 3, Measurement of Liquid Hydrocarbons by Turbine Meters, Third Edition, September 1995, API Stock No. H05033, Incorporated by Reference at: § 250.180(c)(6)(ii).

(35) MPMS, Chapter 5, section 4, Accessory Equipment for Liquid Meters, Third Edition, September 1995, with Errata, March, 1996, API Stock No. H05043, Incorporated by Reference at: § 250.180(c)(6)(ii).

(36) MPMS, Chapter 5, section 5, Fidelity and Security of Flow Measurement Pulsed-Data Transmission Systems, First Edition, June 1982, reaffirmed October 1992, API Stock No. H30105, Incorporated by Reference at: § 250.180(c)(6)(ii).

(37) MPMS, Chapter 6, Metering Assemblies, section 1, Lease Automatic Custody Transfer (LACT) Systems, Second Edition, May 1991, API Stock No. H30121, Incorporated by Reference at: § 250.180(c)(6)(iii)(A).

(38) MPMS, Chapter 6, section 6, Pipeline Metering Systems, Second Edition, May 1991, API Stock No. H30126, Incorporated by Reference at: § 250.180(c)(6)(iii)(B).

(39) MPMS, Chapter 6, section 7, Metering Viscous Hydrocarbons, Second Edition, May 1991, API Stock No. H30127, Incorporated by Reference at: § 250.180(c)(6)(iii)(C).

(40) MPMS, Chapter 7, Temperature Determination, section 2, Dynamic Temperature Determination, Second Edition, March 1995, API Stock No. H07022, Incorporated by Reference at: § 250.180(c)(6)(iv)(A) and (f)(2)(iii)(A).

(41) MPMS, Chapter 7, section 3, Static Temperature Determination Using Portable Electronic Thermometers, First Edition, July 1985, reaffirmed March 1990, API Stock No. H30143, Incorporated by Reference at: § 250.180(c)(6)(iv)(B) and (f)(2)(iii)(B).

(42) MPMS, Chapter 8, Sampling, section 1, Standard Practice for Manual Sampling of Petroleum and Petroleum Products, Third Edition, October, 1995, also available as ANSI/ASTM D 4057-88, API Stock No. H30161, Incorporated by Reference at: § 250.180(c)(6)(v) and (f)(2)(iv).

(43) MPMS, Chapter 8, section 2, Standard Practice for Automatic Sampling of Liquid Petroleum and Petroleum Products, Second Edition, October 1995, also available as ANSI/ASTM D 4177, API Stock No. H30162, Incorporated by Reference at: § 250.180(c)(6)(v) and (f)(2)(iv).

(44) MPMS, Chapter 9, Density Determination, section 1, Hydrometer Test Method for Density, Relative Density (Specific Gravity), or API Gravity of Crude Petroleum and Liquid Petroleum Products, First Edition, June 1981, reaffirmed October 1992, also available as ANSI/ASTM D 1298, API Stock No. H30181, Incorporated by Reference at: § 250.180(c)(6)(vi)(A) and (f)(2)(v)(A).

(45) MPMS, Chapter 9, section 2, Pressure Hydrometer Test Method for Density or Relative Density, First Edition, April 1982, reaffirmed October 1992, API Stock No. H30182,

Incorporated by Reference at: § 250.180 (c)(6)(vi)(B) and (f)(2)(v)(B).

(46) MPMS, Chapter 10, Sediment and Water, section 1, Determination of Sediment in Crude Oils and Fuel Oils by the Extraction Method, First Edition, April 1981, reaffirmed December 1993, also available as ANSI/ASTM D 473, API Stock No. H30201, Incorporated by Reference at: § 250.180 (c)(6)(vii)(A) and (f)(2)(vi)(A).

(47) MPMS, Chapter 10, section 2, Determination of Water in Crude Oil by Distillation Method, First Edition, April 1981, reaffirmed December 1993, also available as ANSI/ASTM D 4006, API Stock No. H30202, Incorporated by Reference at: § 250.180 (c)(6)(vii)(B) and (f)(2)(vi)(B).

(48) MPMS, Chapter 10, section 3, Determination of Water and Sediment in Crude Oil by the Centrifuge Method (Laboratory Procedure), First Edition, April 1981, reaffirmed December 1993, also available as ANSI/ASTM D 4007, API Stock No. H30203, Incorporated by Reference at: § 250.180 (c)(6)(vii)(C) and (f)(2)(vi)(C).

(49) MPMS, Chapter 10, section 4, Determination of Sediment and Water in Crude Oil by the Centrifuge Method (Field Procedure), Second Edition, May 1988, also available as ANSI/ASTM D 96, API Stock No. H30204, Incorporated by Reference at: § 250.180 (c)(6)(vii)(D) and (f)(2)(vi)(D).

(50) MPMS, Chapter 11.1, Volume Correction Factors, Volume 1, Table 5A—Generalized Crude Oils and JP-4 Correction of Observed API Gravity to API Gravity at 60 °F, and Table 6A—Generalized Crude Oils and JP-4 Correction of Observed API Gravity to API Gravity at 60 °F, First Edition, August 1980, reaffirmed October 1993, also available as ANSI/ASTM D 1250, API Stock No. H27000, Incorporated by Reference at: § 250.180 (c)(6)(viii)(A), (d)(3)(v)(B), and (f)(2)(vii).

(51) MPMS, Chapter 11.2.1, Compressibility Factors for Hydrocarbons: 0–90° API Gravity Range, First Edition, August 1984, reaffirmed May, 1996, API Stock No. H27300, Incorporated by Reference at: § 250.180(c)(6)(viii)(B).

(52) MPMS, Chapter 11.2.2, Compressibility Factors for Hydrocarbons: 0.350–0.637 Relative Density (60 °F/60 °F) and – 50 °F to 140 °F Metering Temperature, Second Edition, October 1986, reaffirmed October 1992, also available as Gas Processors Association (GPA) 8286–86, API Stock No. H27307, Incorporated by Reference at: § 250.180(c)(6)(viii)(C).

(53) MPMS, Chapter 11, Physical Properties Data, Addendum to section 2.2, Compressibility Factors for

Hydrocarbons, Correlation of Vapor Pressure for Commercial Natural Gas Liquids, First Edition, December 1994, also available as GPA TP–15, API Stock No. H27308, Incorporated by Reference at: § 250.180(c)(6)(viii)(D).

(54) MPMS, Chapter 11.2.3, Water Calibration of Volumetric Provers, First Edition, August 1984, reaffirmed, May 1996, API Stock No. H27310, Incorporated by Reference at: § 250.180(d)(3)(iv).

(55) MPMS, Chapter 12, Calculation of Petroleum Quantities, section 2, Calculation of Petroleum Quantities Using Dynamic Measurement Methods and Volumetric Correction Factors, Including Parts 1 and 2, Second Edition, May 1995, also available as ANSI/API MPMS 12.2–1981, API Stock No. H30302, Incorporated by Reference at: § 250.180 (c)(6)(ix), (d)(3)(v)(A), and (d)(3)(v)(C).

(56) MPMS, Chapter 14, Natural Gas Fluids Measurement, section 3, Centric Square-Edged Orifice Meters, part 1, General Equations and Uncertainty Guidelines, Third Edition, September 1990, also available as ANSI/API 2530, Part 1, 1991, API Stock No. H30350, Incorporated by Reference at: § 250.181(c)(1).

(57) MPMS, Chapter 14, section 3, part 2, Specification and Installation Requirements, Third Edition, February 1991, also available as ANSI/API 2530, Part 2, 1991, API Stock No. H30351, Incorporated by Reference at: § 250.181(c)(1).

(58) MPMS, Chapter 14, section 3, part 3, Natural Gas Applications, Third Edition, August 1992, also available as ANSI/API 2530, Part 3, API Stock No. H30353, Incorporated by Reference at: § 250.181(c)(1).

(59) MPMS, Chapter 14, section 5, Calculation of Gross Heating Value, Relative Density, and Compressibility Factor for Natural Gas Mixtures From Compositional Analysis, Revised, 1996, also available as ANSI/API MPMS 24.5–1981, order from Gas Processors Association, 6526 East 60th Street, Tulsa, Oklahoma 74145, Incorporated by Reference at: § 250.181(c)(1).

(60) MPMS, Chapter 14, section 6, Continuous Density Measurement, Second Edition, April 1991, API Stock No. H30346, Incorporated by Reference at: § 250.181(c)(1).

(61) MPMS, Chapter 14, section 9, Liquefield Petroleum Gas Measurement, First Edition, February 1983, reaffirmed May 1996, API Stock No. H30348, Incorporated by Reference at: § 250.181(c)(1).

(e) * * *

(1) ASTM Standard C33–93, Standard Specification for Concrete Aggregates

including Nonmandatory Appendix, Incorporated by Reference at § 250.138(b)(4)(i).

(2) ASTM Standard C94–96, Standard Specification for Ready-Mixed Concrete, Incorporated by Reference at § 250.138(e)(2)(i).

(3) ASTM Standard C150–95a, Standard Specification for Portland Cement, Incorporated by Reference at § 250.138(b)(2)(i).

(4) ASTM Standard C330–89, Standard Specification for Light weight Aggregates for Structural Concrete, Incorporated by Reference at § 250.138(b)(4)(i).

(5) ASTM Standard C595–94, Standard Specification for Blended Hydraulic Cements, Incorporated by Reference at § 250.138(b)(2)(i).

(f) * * *

(1) D1.1–96, Structural Welding Code—Steel, 1996, including Commentary, Incorporated by Reference at: § 250.137(b)(1)(i).

* * * * *

(g) * * *

(2) NACE Standard RP 0176–94, Standard Recommended Practice, Corrosion Control of Steel Fixed Offshore Platforms Associated with Petroleum Production, Incorporated by Reference at § 250.137(d).

3. In § 250.53, revise paragraph (b) to read as follows:

§ 250.53 Electrical equipment.

* * * * *

(b) All areas shall be classified in accordance with API RP 500, Recommended Practice for Classification of Locations for Electrical Installations at Petroleum Facilities.

* * * * *

4. In § 250.122, revise paragraph (e)(4)(i) introductory text to read as follows:

§ 250.122 Design, installation, and operation of surface production-safety systems.

* * * * *

(e) * * *

(4) * * *

(i) A plan for each platform deck outlining all hazardous areas classified in accordance with API RP 500, Recommended Practice for Classification of Locations for Electrical Installations at Petroleum Facilities, and outlining areas in which potential ignition sources, other than electrical, are to be installed. The area outlined shall include the following information:

* * * * *

5. In § 250.123 revise paragraphs (b)(9)(i) to read as follows:

§ 250.123 Additional production system requirements.

* * * * *
 (b) * * *
 (9) * * *

(i) Fire (flame, heat, or smoke) sensors shall be installed in all enclosed classified areas. Gas sensors shall be installed in all inadequately ventilated, enclosed classified areas. Adequate ventilation is defined as ventilation which is sufficient to prevent accumulation of significant quantities of vapor-air mixture in concentrations over 25 percent of the lower explosive limit (LEL). One approved method of providing adequate ventilation is a change of air volume each 5 minutes or 1 cubic foot of air-volume flow per minute per square foot of solid floor area, whichever is greater. Enclosed areas (e.g., buildings, living quarters, or doghouses) are defined as those areas confined on more than four of their six possible sides by walls, floors, or ceilings more restrictive to air flow than grating or fixed open louvers and of sufficient size to all entry of personnel. A classified area is any area classified Class I, Group D, Division 1 or 2, following the guidelines of API RP 500.

6. In § 250.126, revise paragraphs (c)(3), (e)(2), and (e)(3) to read as follows:

§ 250.126 Quality assurance and performance of safety and pollution prevention equipment.

* * * * *
 (c) * * *

(3) Be certified by the manufacturer as having been produced under a quality assurance program that meets the requirements of API Spec Q1 and the technical specification API Spec 14A for SSSV's. For SSV's and USV's the manufacturer must meet API Spec 6A and API Spec 6AVI, or API Spec 14D.

(e) * * *

(2) Equipment certified under paragraph (c)(3) of this section, must be reported in accordance with Appendix C of API Spec 14A or Appendix L of API Spec 6A or Appendix C of API Spec 14D, as appropriate.

(3) Equipment certified under both paragraphs (c)(2) and (c)(3) of this section must be reported in accordance with both section OE-2670 of ASME/ANSI SPPE-1-1988 and Appendix C of API Spec 14A or Appendix L of API Spec 6A or Appendix C of API Spec 14D, as appropriate.

7. In § 250.137, revise paragraphs (b)(1)(ii), (c)(4)(ii), and (c)(4)(vii) to read as follows:

§ 250.137 Steel platforms.

* * * * *
 (b) * * *
 (1) * * *

(ii) Fabrication other than welding shall be performed in accordance with American Institute of Steel Construction (AISC) publication, Specification for Structural Steel Buildings, Allowable Stress Design and Plastic Design, or other appropriate codes. The code to be followed during fabrication and construction shall be specified on design documents

* * * * *
 (c) * * *
 (4) * * *

(ii) For structural members and loadings covered by AISC publication, Specification for Structural Steel Buildings, Allowable Stress Design and Plastic Design, with the exception of earthquake loadings (see paragraph (c)(4)(v) of this section) and tubular structural members under the combined loading of axial compression and bending, the basic allowable stresses of the members shall be obtained using the AISC specification. For tubular members subjected to the aforementioned interaction, stress limits shall be set in accordance with a defensible formulation.

(vii) Whenever the ultimate strength of the platform is used as the basis for the design of its members, the safety factors or the factored loads shall be formulated in accordance with the requirements of AISC publication, Specification for Structural Steel Buildings, Allowable Stress Design and Plastic Design, or an equivalent code. The capability of the primary structural members to develop their predicted ultimate load capacity shall be demonstrated.

8. In § 250.138, revise paragraphs (b)(4)(i), (b)(6)(i), (b)(7), (b)(8)(i), (b)(9), (b)(10), (c)(3), (d)(1)(v), (d)(5), (d)(6), (d)(7), (d)(8), (d)(9), (e)(1)(i), and (e)(2)(i) to read as follows:

§ 250.138 Concrete-gravity platforms.

* * * * *
 (b) * * *

(4) *Aggregates.* (i) Aggregates shall conform to the requirements of ASTM C33, Specifications for Concrete Aggregates. Lightweight aggregates conforming to ASTM C330, Specifications for Lightweight Aggregates for Structural Concretes, shall only be permitted if they do not pose durability problems and where they are used in accordance with the applicable provisions of the ACI

publication, ACI 318, Building Code Requirements for Reinforced Concrete, plus Commentary.

* * * * *

(6) Reinforcing and prestressing systems. (i) Reinforcing and prestressing systems shall conform to the requirements of ACI 318; and

* * * * *

(7) Concrete. The concrete shall be designed to ensure sufficient strength and durability. The quality control of concrete shall conform to ACI 318. The mixing, placing, and curing of concrete shall conform to the requirements of paragraph (e) of this section. The water-cement ratio shall be strictly controlled and in no case shall it exceed 0.45.

(8) Grout for bonded tendons. (i) Grout for bonded tendons shall conform to ACI 318; and

* * * * *

(9) Post-tensioning ducts. Post-tensioning ducts shall conform to the requirements of ACI 318. Ducts and duct splices shall be watertight and grout-tight and shall be of suitable thickness to prevent crushing, deformation, and blockage.

(10) Post-tensioning anchorages and couplers. Post-tensioning anchorages and couplers shall conform to the requirements of ACI 318.

(c) * * *

(3) Design strength. The design strength shall conform to requirements of ACI 318 and ACI 357R.

* * * * *

(d) * * *

(1) * * *

(v) The material properties used in the analysis shall be based on actual laboratory tests or shall follow the appropriate sections of ACI 318.

* * * * *

(5) Analysis and design for bending and axial loads. The provisions of ACI 318 shall apply to the analysis and design of members subject to flexure or axial loads or to combined flexure and axial loads.

(6) Analysis and design for shear and torsion. The provisions of ACI 318 shall apply to the analysis and design of members subject to shear or torsion or to combined shear and torsion.

(7) Analysis and design of prestressed concrete. The analysis and design of prestressed concrete members and structures shall comply with ACI 318. In addition, the safety requirements of paragraph (c) of this section shall be satisfied.

(8) Details of reinforcement and prestressing systems. Details of reinforcement and prestressing systems shall conform to the requirements of ACI 318 with special attention given to

the fatigue resistance and ultimate behavior of offshore structures.
(9) Minimum reinforcement. The minimum amount of reinforcement shall conform to the requirements of ACI 318. Additionally, sufficient reinforcement shall be provided to control crack growth, especially at surfaces exposed to severe hydraulic pressures.

* * * * *

(e) * * *

(1) * * *

(i) Construction methods and workmanship shall conform to the provisions of ACI 318 and to the following requirements.

* * * * *

(2) * * *

(i) Mixing of concrete shall conform to the requirements of ACI 318 and ASTM C94, Specification for Ready Mixed Concrete;

* * * * *

§ 250.180 Measurement of liquid hydrocarbons.

* * * * *

(c) * * *

(6) * * *

(i) Chapters 4.1 through 4.7, Proving Systems;

(ii) Chapters 5.1 through 5.5, Metering;

* * * * *

(v) Chapters 8.1 and 8.2, Sampling;

(vi)(A) Chapter 9.1, Hydrometer Test Method for Density, Relative Density (Specific Gravity), or API Gravity of Crude Petroleum and Liquid Petroleum Products;

(B) Chapter 9.2, Pressure Hydrometer Test Method for Density or Relative Density;

* * * * *

(viii) (A) Chapter 11.1, Volume 1, Table 5A—Generalized Crude Oils and JP-4, Correction of Observed API Gravity to API Gravity at 60°F and Table 6A—Generalized Crude Oils and JP-4, Correction of Volume to 60°F Against API Gravity at 60°F;

* * * * *

9. In § 250.180, revise paragraphs (c)(6)(i), (ii), (v), and (vi); (c)(6)(viii) (A) and (C); (d)(3)(iv) and (d)(3)(v)(B); and (f)(2)(i), (ii), (iv), (v), and (vii), to read as follows:
(C) Chapter 11.2.2, Compressibility Factors for Hydrocarbons: 0.350–0.637 Relative Density Range (60°F/60°F) and –50°F to 140°F Meeting Temperature;

* * * * *

(d) * * *

(3) * * *

(iv) Mechanical-displacement provers and prover tanks shall be calibrated at

least every 5 years in accordance with the API MPMS, Chapters 4.1 through 4.7 and 11.2.3. A copy of each calibration report shall be submitted to the Regional Supervisor within 15 days following calibration.

* * * * *

(v) * * *

(B) The change in volume of the test liquid with the change in temperature (Ctl) using APIMPMS, Chapter 11.1, Volume I, Table 6A, Generalized Crude Oils and JP-4, Correction of Volume to 60°F Against API Gravity at 60°F;

* * * * *

(f) * * *

(2) * * *

(i)(A) Chapter 2.2A, Measurement and Calibration of Upright Cylindrical Tanks by the Manual Strapping Method;

(B) Chapter 2.2B, Measurement and Calibration of Upright Cylindrical Tanks Using the Optical Reference Line Method;

(C) Standards 2551, 2552, 2555, and 2556;

(ii)(A) Chapter 3.1A, Standard Practice for the Manual Gauging of Petroleum and Petroleum Products;

(B) Chapter 3.1B, Standard Practice for Level Measurement of Liquid Hydrocarbons in Stationary Tanks by Automatic Tank Gauging;

(C) Standard 2545, Method of Gauging Petroleum Products;

* * * * *

(iv) Chapter 8.1 and 8.2, Sampling;

(v)(A) Chapter 9.1, Hydrometer Test Method for Density, Relative Density (Specific Gravity), or API Gravity of Crude Petroleum and Liquid Petroleum Products;

(B) Chapter 9.2, Pressure Hydrometer Test Method for Density or Relative Density;

* * * * *

(vii) Chapter 11.1, Volume 1, Table 5A, Generalized Crude Oils and JP-4, Correction of Observed API Gravity to API Gravity at 60°F, and Table 6A, Generalized Crude Oils and JP-4, Correction of Volume to 60°F, Against API Gravity at 60°F.

* * * * *

10. In § 250.181, revise paragraph (c)(1) to read as follows:

§ 250.181 Measurement of gas.

* * * * *

(c) * * *

(1) The measuring equipment shall be installed and operated in accordance with the recommendations contained in the API MPMS, Chapters 14.3, Parts 1,2, and 3; 14.5; 14.6; and 14.8, Natural Gas Fluids Measurement.

* * * * *

11. In § 250.291, revise paragraphs (b)(3) and (d)(4)(i) to read as follows:

§ 250.291 Design, installation, and operation of production systems.

* * * * *

(b) * * *

(3) Electrical system information including a plan of each platform deck, outlining all hazardous areas classified in accordance with API RP 500, Recommended Practice for Classification of Locations for Electrical Installations at Petroleum Facilities, and outlining areas in which potential ignition sources are to be installed;

* * * * *

(d) * * *

(4) * * *

(i) A plan of each platform deck, outlining all hazardous areas classified in accordance with API RP 500 and outlining areas in which potential ignition sources are to be installed;

* * * * *

12. In § 250.292, revise paragraph (b)(4)(i) to read as follows:

§ 250.292 Additional production and fuel gas system requirements.

* * * * *

(b) * * *

(4) * * *

(i) Fire (flame, heat, or smoke) sensors shall be installed in all enclosed classified areas. Gas sensors shall be installed in all inadequately ventilated, enclosed classified areas. Adequate ventilation is defined as ventilation that is sufficient to prevent accumulation of significant quantities of vapor-air mixture in concentrations over 25 percent of the lower explosive limit. One approved method of providing adequate ventilation is a change of air volume each 5 minutes or 1 cubic foot of air-volume flow per minute per square foot of solid floor area, whichever is greater. Enclosed areas (e.g., buildings, living quarters, or doghouses) are defined as those areas confined on more than four of their six possible sides by walls, floors, or ceilings more restrictive to air flow than grating or fixed open louvers and of sufficient size to allow entry of personnel. A classified area is any area classified Class I, Group D, Division 1 or 2, following the guidelines of API RP 500.

* * * * *