

Recommended Practice for Occupational Safety for Oil and Gas Well Drilling and Servicing Operations

API RECOMMENDED PRACTICE 54
THIRD EDITION, AUGUST 1999

REAFFIRMED, JANUARY 2013



AMERICAN PETROLEUM INSTITUTE

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Upstream Segment

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FOREWORD

This recommended practice was prepared by the API Subcommittee on Occupational Safety for Oil and Gas Well Drilling and Servicing Operations. It represents the combined contributions of industry representatives from the oil and gas well drilling, production, and well servicing segments who served on this subcommittee. This Third Edition supersedes and replaces the Second Edition, May 1992. This publication is under the jurisdiction of the American Petroleum Institute Upstream Department's Executive Committee on Drilling and Production Operations.

The goal of this recommended practice is to assist the oil and gas industry in promoting personnel and public safety. This publication has intentionally stressed recommended safe operating practices concentrating on personnel and public safety as differentiated from equipment safety and operations efficiency. **THE PUBLICATION DOES NOT, HOWEVER, PURPORT TO BE SO COMPREHENSIVE AS TO PRESENT ALL OF THE RECOMMENDED SAFE OPERATING PRACTICES THAT CAN AFFECT SAFETY IN OIL AND GAS WELL DRILLING AND SERVICING OPERATIONS.**

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The publication is available for review by federal and state agencies or authorities and possible use as a model safe practice to assist in preparation or revision of occupational safety codes or regulations. Recommendations set forth in this publication are viewed as one satisfactory method for accomplishing a desired result. They should not be considered as the only method for achieving the desired results. This publication includes usage of the verbs "shall" and "should," whichever is deemed most applicable for the specific situation. For the purposes of this publication, the following definitions are applicable:

Shall: Denotes that the recommended practice has universal application to that specific activity.

Should: Denotes a recommended practice: (1) where a safe comparable alternative practice is available; (2) that may be impractical under certain circumstances; or (3) that may be unnecessary for personnel safety under certain circumstances.

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Suggested revisions are invited and should be submitted to the general manager of the Upstream Segment, American Petroleum Institute, 1220 L Street, N.W., Washington, D.C. 20005.

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Recommended Practice for Occupational Safety for Oil and Gas Well Drilling and Servicing Operations

1 General

1.1 PURPOSE

The purpose of this document is to recommend practices and procedures for promotion and maintenance of safe working conditions for personnel engaged in drilling operations and well servicing operations, including special services.

1.2 SCOPE

These recommendations apply to rotary drilling rigs, well servicing rigs, and special services as they relate to operations on location. The recommendations are not intended to cover seismic drilling or water well drilling operations. These recommendations do not apply to site preparation and site abandonment operations.

1.3 RESPONSIBILITY

These recommendations are made recognizing that owners, operators, contractors, and their personnel have separate responsibilities that may be contractual in nature. In the safe performance of work covered by these recommendations, each employer should provide training and instruction for its personnel. It is not the intent of these recommendations to alter the contractual relationship(s) between the parties. The well owner or operator should provide and the contractor should seek pertinent information that is known or assumed and that the contractor may need to assure a safe operation. At all times, the specific work activity being performed should be under the immediate supervision of an authorized person who has the authority to commence, modify, or cease the work methods or operations, as necessary, to ensure the safety of affected personnel. The authorized person should observe changing conditions and improve, whenever required, the work methods to promote increased protection for the personnel.

2 References

The most recent editions of the following documents are referenced in this publication.

API

- RP 2D *Operation and Maintenance of Offshore Cranes*
- RP 4A *Steel Derricks (Including Standard Rigs)* [out of print]*
- RP 4D *Guyed Portable Masts* [out of print]*
- RP 4E *Drilling and Well Servicing Structures* [out of print]*
- Spec 4F *Drilling and Well Servicing Structures*
- RP 4G *Maintenance and Use of Drilling and Well Servicing Structures*
- Spec 6A *Wellhead and Christmas Tree Equipment*

- Spec 8A *Drilling and Production Hoisting Equipment*
- RP 8B *Inspection, Maintenance, Repair, and Remanufacture of Hoisting Equipment*
- Spec 8C *Drilling and Production Hoisting Equipment (PSL 1 and PSL 2)*
- RP 9B *Application, Care, and Use of Wire Rope for Oilfield Service*
- RP 14F *Design and Installation of Electrical Systems for Fixed and Floating Offshore Petroleum Facilities for Unclassified and Class 1, Division 1 and Division 2 Locations*
- Spec 16A *Drill Through Equipment*
- RP 49 *Safe Drilling of Wells Containing Hydrogen Sulfide* [out of print]*
- RP 53 *Blowout Prevention Equipment Systems for Drilling Operations*
- RP 55 *Conducting Oil and Gas Producing and Gas Processing Plant Operations Involving Hydrogen Sulfide*
- RP 67 *Oilfield Explosives Safety*
- RP 68 *Well Servicing and Workover Operations Involving Hydrogen Sulfide*
- RP 500 *Recommended Practice for Classification of Locations for Electrical Installations at Petroleum Facilities Classified as Class 1, Division 1 and Division 2*
- RP 505 *Recommended Practice for Classification of Locations for Electrical Installations at Petroleum Facilities Classified as Class 1, Zone 0, Zone 1 and Zone 2*
- API 510 *Pressure Vessel Inspection Code: Maintenance Inspection, Rating, Repair and Alteration*
- RP 2003 *Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents*
- Std 2015 *Safe Entry and Cleaning of Petroleum Storage Tanks*
- Publ 2201 *Procedures for Welding or Hot Tapping on Equipment in Service*
- ACGIH¹ *Threshold Limit Values and Biological Indices for 1997–1998*
Industrial Ventilation, A Manual of Recommended Practice, 22nd Edition
- ANSI²
B15.1 *Safety Standard for Mechanical Power Transmission Apparatus*

¹American Conference of Governmental Industrial Hygienists, 1330 Kemper Meadow Drive, Suite 600, Cincinnati, Ohio 45240-1634.

²American National Standards Institute, 11 West 42nd Street, New York, New York 10036.