

# **Digest of State Boiler, Pressure Vessel, Piping, and Aboveground Storage Tank Rules and Regulations**

API PUBLICATION 910  
EIGHTH EDITION, NOVEMBER 1997





## API ENVIRONMENTAL, HEALTH AND SAFETY MISSION AND GUIDING PRINCIPLES

The members of the American Petroleum Institute are dedicated to continuous efforts to improve the compatibility of our operations with the environment while economically developing energy resources and supplying high quality products and services to consumers. We recognize our responsibility to work with the public, the government, and others to develop and to use natural resources in an environmentally sound manner while protecting the health and safety of our employees and the public. To meet these responsibilities, API members pledge to manage our businesses according to the following principles using sound science to prioritize risks and to implement cost-effective management practices:

- To recognize and to respond to community concerns about our raw materials, products and operations.
- To operate our plants and facilities, and to handle our raw materials and products in a manner that protects the environment, and the safety and health of our employees and the public.
- To make safety, health and environmental considerations a priority in our planning, and our development of new products and processes.
- To advise promptly, appropriate officials, employees, customers and the public of information on significant industry-related safety, health and environmental hazards, and to recommend protective measures.
- To counsel customers, transporters and others in the safe use, transportation and disposal of our raw materials, products and waste materials.
- To economically develop and produce natural resources and to conserve those resources by using energy efficiently.
- To extend knowledge by conducting or supporting research on the safety, health and environmental effects of our raw materials, products, processes and waste materials.
- To commit to reduce overall emissions and waste generation.
- To work with others to resolve problems created by handling and disposal of hazardous substances from our operations.
- To participate with government and others in creating responsible laws, regulations and standards to safeguard the community, workplace and environment.
- To promote these principles and practices by sharing experiences and offering assistance to others who produce, handle, use, transport or dispose of similar raw materials, petroleum products and wastes.

# **Digest of State Boiler, Pressure Vessel, Piping, and Aboveground Storage Tank Rules and Regulations**

**Manufacturing Distribution and Marketing Department**

API PUBLICATION 910

EIGHTH EDITION, NOVEMBER 1997



## FOREWORD

This digest of State Boiler and Pressure Vessel Rules and Regulations is published to provide information to assist the refining and chemical process industries operating in the United States and Puerto Rico. The digest was compiled under the direction of the Ad Hoc Steering Committee for the Regulatory Action Program of the API Committee on Refinery Equipment.

THE SUMMARY OF BOILER AND PRESSURE VESSEL LAWS AND REGULATIONS IS PROVIDED FOR GENERAL INFORMATION AND NOT AS A BASIS FOR COMPLIANCE.

THIS DIGEST MAY BE USED BY ANYONE DESIRING TO DO SO. EVERY EFFORT HAS BEEN MADE BY THE AMERICAN PETROLEUM INSTITUTE TO ASSURE THE ACCURACY AND RELIABILITY OF THE DATA CONTAINED IN IT; HOWEVER, THE INSTITUTE MAKES NO REPRESENTATION, WARRANTY, OR GUARANTEE IN CONNECTION WITH THE PUBLICATION OF THIS DIGEST AND HEREBY EXPRESSLY DISCLAIMS ANY LIABILITY OR RESPONSIBILITY FOR LOSS OR DAMAGE RESULTING FROM ITS USE OR FOR THE VIOLATION OF ANY FEDERAL, STATE, OR MUNICIPAL REGULATION WITH WHICH THIS DIGEST MAY CONFLICT.

The information provided on state laws and regulations is in summary form only. Questions about the content of individual state laws or regulations should be directed to your legal office or the appropriate agency as listed in the state jurisdiction summary. Copies of the laws and regulations can be obtained from the state department or agency or as noted on the information page of the appropriate section.

Copies of the Digest are available from the API Publications and Distribution Section, 1220 L Street, N.W., Washington, DC 20005.

The API staff contact for information on the Digest can be reached at (202) 682-8000.

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API PRESSURE EQUIPMENT AND ABOVEGROUND STORAGE TANK REGULATORY ACTION  
PROGRAM

## POLICY

## Pressure Equipment

To preserve the ability of the petroleum and chemical process industries to perform construction, classification, maintenance inspection, repair, alteration and rerating procedures for boilers, pressure vessels, and piping used by these industries. The API objective in this program is to advance the adoption and the harmonious application of the ANSI/API 510 (and the National Board Inspection Code (NBIC) as companion standards) and ANSI/API 570 for use in any state, locality, or jurisdiction wherein the petroleum or chemical process industries would be affected by legislation or regulations or code adoption on the subject of boiler, pressure vessel or piping construction, classification, maintenance inspection, repair, alteration and rerating procedures.

ANSI/API 510 and ANSI/API 570 have application to owner-user maintenance inspection, repair, alteration, and rerating procedures for pressure vessels and piping in service by the petroleum and chemical process industries. The NBIC has application for pressure vessels used by other industries. API 510 and the NBIC recognize the application of the other. Both are American National Standards. Both organizations endorse the application of the other code within its proper sphere of application.

## Aboveground Storage Tanks

To preserve the ability of the petroleum and chemical process industries to perform maintenance inspection, repair, alteration, relocation, and reconstruction of aboveground storage tanks used by these industries. The API objective in this program is to advance the adoption and the harmonious application of API 653 and RP 12R1 when appropriate for use in any state, locality, or jurisdiction wherein the petroleum or chemical process industries would be affected by legislation or regulations or code adoption on the subject of aboveground storage tank maintenance inspection, repair, alteration, relocation, and reconstruction procedures.

API 653 has application to owner-user maintenance inspection, repair, alteration, relocation, and reconstruction procedures for welded or riveted, non-refrigerated, atmospheric pressure, carbon and low alloy steel tanks built to API Standard 650 and its predecessor 12C after they have been placed in service by the petroleum and chemical process industries.

API RP 12R1 has application to owner-user maintenance, inspection, repair, and alteration procedures for welded or bolted tanks built to API Specifications 12B, 12D, 12F, or 12P in production service.

Revised 11/12/97

LIST OF STATES THAT REFERENCE ANSI/API 510 PRESSURE VESSEL  
INSPECTION CODE<sup>1</sup>

1. California
2. Colorado
3. Georgia
4. Illinois
5. Indiana
6. Iowa
7. Missouri
8. Nebraska
9. New Jersey
10. New Mexico
11. North Dakota
12. Oklahoma
13. Utah
14. Washington
15. Wisconsin
16. Puerto Rico

LIST OF STATES THAT REFERENCE ANSI/API 570, PIPING INSPECTION CODE<sup>1</sup>

1. Colorado

LIST OF STATES THAT REFERENCE ANSI/API 653 TANK INSPECTION, REPAIR, ALTERATION, AND  
RECONSTRUCTION

1. Alaska
2. Arkansas
3. Florida
4. Nevada
5. Pennsylvania
6. Virginia
7. Washington

<sup>1</sup> See individual state section of Digest for nature of reference.



## GLOSSARY OF TERMS AND ABBREVIATIONS

ANSI	American National Standards Institute
ANSI/API 510	American Petroleum Institute; Pressure Vessel Inspection Code: Maintenance Inspection, Rating, Repair, and Alteration
ANSI/API 570	American Petroleum Institute; Piping Inspection Code: Inspection, Repair, Alteration, and Rerating of In-Service Piping Systems
ANSI/API 653	American Petroleum Institute; Tank Inspection, Repair, Alteration, and Reconstruction
ANSI/NB-23	National Board Inspection Code
API	American Petroleum Institute
API-ASME Code for Unfired Pressure Vessels	Discontinued in 1956
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
Btu/hr.	British Thermal Units per hour
cu. ft.	Cubic feet
DOT	United States Department of Transportation
ft.	Feet
gal.	Gallon
I.D.	Inside diameter
in.	Inches
Industry Association Staff Contact	The State Petroleum Council or Regional Petroleum Association Director or Executive Director. He is responsible for monitoring and reporting regulatory activities.
LNG	Liquefied Natural Gas
LPG	Liquefied Petroleum Gas
MAWP	Maximum Allowable Working Pressure

# GLOSSARY OF TERMS AND ABBREVIATIONS (continued)

MCOGA	Mid-Continent Oil and Gas Association
N/A	Not applicable
NB	National Board of Boiler and Pressure Vessel Inspectors
NBIC	National Board Inspection Code, ANSI NB-23
NFPA	National Fire Protection Association
O.D.	Outside Diameter
OSHA	Occupational Safety and Health Administration

## LIST OF PERTINENT ANSI, ASME, AND NFPA CODES

ANSI/ASME	American National Standards Institute and American Society of Mechanical Engineers Codes
B 31.1	Power Piping
B 31.2	Fuel Gas Piping
B 31.3	Chemical Plant and Petroleum Refinery Piping
B 31.5	Refrigeration Piping
B 31.8	Gas Transmission and Distribution Piping Systems
B 31.11	Slurry Transportation Piping Systems
CSD-1	Controls and Safety Devices for Automatically Fired Boilers
ANSI	
Z 21.10.3	Appliances and Gas Burning
Z 21.13	Gas Fired Low Pressure Steam and Hot Water Heating Boilers
Z 21.22	Relief Valves and Automatic Gas Shut-Off Devices for Hot Water Supply Systems
ASME	
Section I	Power Boilers
Section II	Materials Specifications
Section III - (1)	Nuclear Components
Section III - (2)	Concrete Reactor Vessels and Containments
Section IV	Heating Boilers
Section V	Non-Destructive Examination
Section VI	Recommend Rules for Care and Operation of Heating Boilers
Section VII	Recommend Rules for Care of Power Boilers
Section VIII - (1)	Pressure Vessels
Section VIII - (2)	Pressure Vessels - Alternate Rules
Section IX	Welding and Brazing Qualifications
Section X	Fiber Glass Reinforced Plastic Pressure Vessels
Section XI	Rules for In-Service Inspections of Nuclear Power Plant Components

LIST OF PERTINENT ANSI, ASME, AND NFPA CODES  
(continued)

NFPA	National Fire Protection Association
30	Flammable and Combustible Liquids Code
30A	Automotive and Marine Service Station Code
31	Installation of Oil Burning Equipment
51	Oxygen-Fuel Gas Systems for Welding, Cutting, and Allied Processes
54	National Fuel Gas Code
58	Storage and Handling of Liquefied Petroleum Gases
59	Storage and Handling of Liquefied Petroleum Gases at Utility Gas Plants
85A	Prevention of Furnace Explosions in Fuel-Oil and Natural Gas-Fired Single Burner Boiler-Furnaces
85B	Prevention of Furnace Explosions in Natural Gas-Fired Multiple Burner Boiler-Furnaces
85D	Prevention of Furnace Explosions in Fuel Oil-Fired Multiple Burner Boiler-Furnaces
85E	Prevention of Furnace Explosions in Pulverized Coal-Fired Multiple Burner Boiler-Furnaces
85F	Installation and Operation of Pulverized Fuel Systems
85G	Furnace Implosions in Multiple Burner Boiler-Furnaces
395	Storage of Flammable and Combustible Liquids on Farms and Isolated Construction Projects

ALABAMAREGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	Alabama
Laws Involved	None - ASME construction recommended.
Chief Inspector	None
State Department Responsible for Laws and Rules	None
Board of Boiler Rules Membership (* indicates chairman)	None
API Regulatory Action Team	Tim Noack, Field Superintendent UNOCAL Corporation 12303 Roberts Road Churchula, AL 36521-3447 (205) 675-6180
Industry Association Staff Contact	Robert A. Macrory, Executive Director Alabama Petroleum Council P.O. Box 4220 Montgomery, AL 36101 (205) 834-9707

ALABAMA

SUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* ASME construction is recommended. Presently there are no rules and regulations. Proposed Boiler and Pressure Vessel Safety Act presented during 1991 legislative session --no action subsequently taken to date.

Equipment Requiring Maintenance Inspection

Pertinent Exceptions to Maintenance Inspection

Maintenance Inspector Qualifications

Certificate of Inspection

Miscellaneous

N/A

ALABAMA

ANNUAL SUMMARY OF REGULATORY ACTION

Summary

A bill by Senator Ellis, S.589 -- The Boiler and Pressure Safety Act -- was presented during the 1991 legislative session but the session ended before it could be acted upon. No action has subsequently been taken.

No significant activity reported in 1996.

ALABAMA

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact	Robert A. Macrory Alabama Petroleum Council P.O. Box 4220 Montgomery, AL 36103-4220 (205) 834-9707
Action or Support Team	Al Freiberg UNOCAL Corporation 12303 Roberts Road Churchula, AL 36521-3447 (205) 679-3430
Additional Information	The Alabama Environmental Management Commission has authorized ADEM staff to initiate rule-making process on technical standards for ASTs.



ALASKA  
REGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	Alaska
Laws Involved	Statutes on Boilers and Pressure Vessels Article 3, AS 18.60.180 - 395 Administrative Rules for Boiler and Pressure Vessel Construction Title 8 (Labor), Part 4, Ch. 80 Articles 1 through 5.
Lead Boiler Inspector	Gerard F. (Jerry) Mankel
Title and Department	Lead Boiler Inspector, Mechanical Inspection  Alaska Department of Labor P.O. Box 107020 Anchorage, AK 99510-7020 (907) 269-4925 Fax: (907) 269-4932
State Department Responsible for Laws and Rules	Department of Labor
Board of Boiler Rules Membership (* indicates chairman)	Alaska has no Boiler Board. The following are officers of the Alaska B & PV Inspector Association:  Brad Frates, Chairman (UNOCAL)  Dave Sepzner, Vice Chairman (ARCO)  Kirk Carpenter, Treasurer (VECO)
API Regulatory Action Team	Brad Frates, Chairman UNOCAL Corporation P.O. Box 575 Kenai, AK 99611 (907) 776-3256

ALASKA

REGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS  
(continued)

Industry Association Staff Contact

Judith M. Brady, Executive Director  
Alaska Oil and Gas Association  
121 West Fireweed Lane  
Suite 207  
Anchorage, AK 99503  
(907) 272-1481

ALASKASUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* Items Covered
  - Boilers, and unfired pressure vessels.
  - Exceptions noted below.
- \*\* Codes
  - ASME Boiler & Pressure Vessel Code, 1992 Editions, Sections I-X and ANSI B 31.1.
  - Addenda as of December 31, 1991 are recognized.
  - National Board Inspection Code (NB-23) 1992 Edition for repairs and alterations. First adopted as law by 1990 legislature.
- \*\* Other
  - Boilers and vessels must have a state serial number and a certificate of inspection.
  - Special designs must be approved by state.
  - Department of Labor keeps a record of the type, dimensions, MAWP, age, condition, location, and date of inspection of boilers and vessels.
- \*\* Pertinent Exceptions
  - Boilers and vessels under federal control.
  - Vessels under 5 cu. ft. or having an inside diameter not exceeding 6 inches.
  - Vessels designed for a working pressure under 15 psi. not in a place of public assembly.

## Equipment Requiring Maintenance Inspection

- \*\* Items Covered
  - Boilers, and unfired pressure vessels.
  - Exceptions noted below.
- \*\* Frequency
  - Power boilers -- annual certificate inspection.
  - L.P. Boilers -- biennial with internal inspection every 4 years.
  - Vessels -- external and internal at intervals set by the state (internal inspection may be waived for non-corrosive service).
  - A report of each inspection must be made within 30 days.

## Pertinent Exceptions to Maintenance Inspection

- \*\* Boilers and vessels on farms/moving equipment.
- \*\* Vessels containing LPG.

## Maintenance Inspector Qualifications

- \*\* Owner-user inspectors permitted.

ALASKA

SUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS  
(continued)

- \*\* Inspectors must pass a written examination (National Board).

Certificate of Inspection

- \*\* Boilers and vessels may not be operated without a certificate.

Miscellaneous

- \*\* Welded alterations or repairs to boilers or vessels must be performed by a person or organization holding a valid ASME Code Stamp, a current National Board "R" certification, or a letter of authorization signed by the Director of the Division of Labor Standards and Safety.
- \*\* The 1992 Edition of the National Board Inspection Code Manual for Boiler and Pressure Vessel Inspectors constitutes the minimum boiler and pressure vessel standard of the state for boilers and pressure vessels after they have received their initial inspection certificates from the Department of Labor.

ALASKA

ANNUAL SUMMARY OF REGULATORY ACTION

Summary

No significant activity reported in 1996.

ALASKA

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact

Action or Support Team

Additional Information

ARIZONA  
REGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	Arizona														
Laws Involved	Arizona Boiler Act ARS Title 23, Chapter 2, Article 11 Arizona Boiler & Lined Hot Water Heater Regulations R4-13-401 through R4-13-406														
Chief Inspector	Thomas E. Rennie														
Title and Department	Chief Boiler Inspector Division of Occupational Safety & Health Industrial Commission of Arizona P.O. Box 19070 Phoenix, AZ 85005-19070 (602) 542-1771														
State Department Responsible for Laws and Rules	Division of Occupational Safety & Health The Industrial Commission of Arizona 800 W. Washington Phoenix, AZ 85007														
The Arizona Boiler Rules and Regulations	The Boiler Advisory Board:  <table border="0" style="width: 100%;"> <tr> <td>Gary Gillespie</td> <td>(Owner/Operator)</td> </tr> <tr> <td>William Langdon</td> <td>(Labor)</td> </tr> <tr> <td>Ron Lohrman</td> <td>(Public)</td> </tr> <tr> <td>T. Dean McCook</td> <td>(Industry)</td> </tr> <tr> <td>Roger E. Miller</td> <td>(Management)</td> </tr> <tr> <td>Harold Parish</td> <td>(Industry)</td> </tr> <tr> <td>Vacancy</td> <td>(Utilities)</td> </tr> </table>	Gary Gillespie	(Owner/Operator)	William Langdon	(Labor)	Ron Lohrman	(Public)	T. Dean McCook	(Industry)	Roger E. Miller	(Management)	Harold Parish	(Industry)	Vacancy	(Utilities)
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Ron Lohrman	(Public)														
T. Dean McCook	(Industry)														
Roger E. Miller	(Management)														
Harold Parish	(Industry)														
Vacancy	(Utilities)														
There are no oil or chemical members on the board.															
Board of Boiler Rules Secretary															
API Regulatory Action Team	Contact Industry Association representative listed below.														

ARIZONA

REGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS  
(continued)

Industry Association Staff Contact

Michael D. Wang, Manager  
Operations and Environment  
Western States Petroleum Association  
505 North Brand Boulevard  
Suite 1400  
Glendale, CA 91209  
(818) 545-4105



ARIZONASUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* Items Covered
  - All boilers and lined hot water heaters.
  - Exceptions noted below.
- \*\* Codes
  - ASME Boiler & Pressure Vessel Code, Sections I, II, IV, V, VI, VII, and IX, 1977.
  - ANSI Z 95.3 (1975) and Z 21.10.3 (1975) with addenda of June 30, 1978 for lined water heaters.
  - ASME Code addenda and interpretations are recognized.
- \*\* Other
  - Owner/operator must have a copy of the manufacturer's data report on file.
  - Boilers must have a state serial number applied on installation.
  - State approval must be obtained for non-code designs.
  - Owner/operator must notify the state in case of any accident involving an explosion or personal injury.
- \*\* Pertinent Exceptions
  - Boilers and water heaters under federal control.
  - Boilers and water heaters on Indian Reservations.
  - Pressure vessels.
  - Apartments of less than six units.

## Equipment Requiring Maintenance Inspection

- \*\* Items Covered
  - Power boilers, heating boilers and hot water supply boilers.
  - Exceptions noted below.
- \*\* Frequency
  - Power boilers - annual internal -- annual external under operating pressure.
  - Heating boilers (not over 15 psi.) -- biennial external and internal where possible.
  - Hot Water Supply boilers (under 160 psi., 250°F) - only an initial certificate inspection is required.
  - A report of each certificate inspection must be filed within 60 days.

## Pertinent Exceptions to Maintenance Inspection

- \*\* Boilers and water heaters under federal control.
- \*\* Boilers and water heaters on Indian Reservations.
- \*\* Apartments of less than six units.

ARIZONA

SUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

(continued)

Maintenance Inspector Qualifications

- \*\* There are provisions for owner/user inspectors in the law.
- \*\* Inspectors must pass a written examination.

Certificate of Inspection

- \*\* Certificates must be renewed periodically.

Miscellaneous

- \*\* Repairs to boilers must conform to applicable provisions of the National Board Inspection Code.
- \*\* Major repairs must be approved by a certified inspector.

ARIZONA

ANNUAL SUMMARY OF REGULATORY ACTION

Summary

Boiler rules were revised April 9, 1992, and now refer to 1989 editions of ASME Sections I, II, IV, and IX and NBIC 1989 edition.

No significant activity reported in 1996.

Arizona has no Section 8 requirements other than OSHA requirements 29 CFR 1910.

ARIZONA

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact

Action or Support Team

Additional Information

ARKANSASREGULATORY CONTACT INFORMATIONBOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	Arkansas	
Laws Involved	Arkansas Code Annotated Chapter 23, Boiler Inspections Sections 20-23-101 through 20-23-405 and regulations adopted pursuant thereto. General order regulating manufacture, sale, installation, repair, operation, and inspection of steam boilers, hot water heating boilers, hot water supply boilers, and unfired pressure vessels.	
Chief Inspector	None at this time	
Title and Department	Chief Boiler Inspector Boiler Inspection Division Department of Labor 10421 West Markham Little Rock, AK 72205 (501) 682-4513	
State Department Responsible for Laws and Rules	Department of Labor James L. Salkeld, Director	
Board of Boiler Rules Membership (* indicates chairman)	Tom McCollum Richard E. Mille' Bart Strand *None Rex Williams Douglas R. Sikes	(Ammonia Rep.) (Boiler Mfr. Rep.) (Insurance Rep.) (Chief Boiler Inspector) (Operating Engrs. Rep.) (User Rep.)
Board of Boiler Rules Secretary	Boiler Inspection Division Personnel keeps minutes.	
API Regulatory Action Team	M. J. Williams, Chairman Manager Lion Oil Company 1000 McHenry Avenue El Dorado, AR 71730 (501) 864-1320	

ARKANSAS

REGULATORY CONTACT INFORMATION

BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

(continued)

Industry Association Staff Contact

Tom Parker, Executive Director  
Arkansas Petroleum Council  
#1 Riverfront Place -#460  
North Little Rock, AR 72114  
(501) 375-9964

ARKANSASSUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* Applicable ASME Code Construction, inspection by State licensed National Board commissioned inspector, National Board stamp, State serial number, filing of "Notice of shipment" and manufacturer's data report and a certificate of inspection (installation and operating permits) are all required.
- \*\* All sellers and installers must be licensed by State. Manufacturer's cannot sell directly to users unless approved by licensed installer.
- \*\* Exemptions to inspection and installation permit requirements.
  - air tanks in garages and service stations.
  - air tanks less than 12 gals. or 150 psig.
  - boilers and pressure vessels under ICC Inspection Regulations.
  - boilers and pressure vessels in residences with 8 or less apartments.
  - pressure vessels less than 15 psig, 5 cu. ft. capacity, or 6 in. I.D.
  - liquefied petroleum gas vessels.
  - further, this act does not regulate boiler and pressure vessels used in the production, distribution, storage or transmission of oil, natural gas, or casinghead gas.

## Equipment Requiring Maintenance Inspection

- \*\* All boiler and pressure vessels not exempted from above construction inspection and permit requirements.
- \*\* Boilers require annual internal and external inspection.
- \*\* Unfired pressure vessels require biennial internal and external inspection.

## Pertinent Exceptions to Maintenance Inspection

- \*\* Same items exempted from construction inspection and installation permits.

## Maintenance Inspector Qualifications

- \*\* Must be State Inspector or an Insurance Inspector with a National Board and Arkansas Commission.

## Certificate of Inspection

- \*\* Required annually for boilers and biennially for unfired pressure vessels. After payment of fees an "operating permit" will be issued.

ARKANSASSUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

(continued)

## Miscellaneous

- \*\* There are special requirements for anhydrous ammonia equipment and facilities.
- \*\* Major and all welding repairs must have prior State approval and be done per ASME and National Board Inspection Code and must be accomplished by a licensed repair organization.
- \*\* Chief Inspector can modify or exempt rules if equivalent safety is provided.
- \*\* Plants with qualified maintenance personnel may repair their own boilers but must be licensed.
- \*\* Authorized Inspectors can shutdown equipment they consider unsafe.
- \*\* Explosions and accidents must be reported to State.
- \*\* Boilers over 50 HP and boilers in places of public assembly must be regularly attended by licensed operators.
- \*\* Manual boilers require constant attendance.
- \*\* Boiler Advisory Board assists in formation of Rules and Regulations and in the examinations as well as counseling the Chief Inspector.
- \*\* The Rules and Regulations become law upon approval by the Director of Labor.



ARKANSAS

ANNUAL SUMMARY OF REGULATORY ACTION

Summary

Effective January 1994, "pressure piping" as related to boilers and pressure vessels will become law.

Hot water heaters 200,000 Btu and below do not have to be ASME/NB constructed, but if located in schools, hospitals, nursing homes, and places of public assembly they must be inspected.

ARKANSASABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact	Tom V. Parker, Executive Director Arkansas Petroleum Council One Riverfront Place, #460 North Little Rock, AR 72114
Action or Support Team	None
Additional Information	There are no state regulations covering ASTs. Arkansas does, however, require registration of ASTs under Act 594 of 1991 which also requires UST registration. Ten dollars of the tank registration fee goes to the State Fire Marshall, Ray Carnahan, whose office issues AST permits based on Federal Fire Code and structural requirements. Farm tanks and mobile tanks are not required to be registered.

CALIFORNIAREGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State California

Laws Involved The following Title 8, California Administrative Code (CAC), Chapter 4, Subchapters apply:

Subchapter 1 -	Unfired Pressure Vessels (Includes special rules for air, LPG, LNG and ammonia)
Subchapter 2 -	Boilers and Fired Pressure Vessels
Subchapter 3 -	Compressed Air
Subchapter 14 -	Petroleum - Drilling and Production
Subchapter 15 -	Petroleum - Refining, Transportation, and Handling

Chief Inspector John A. Lemire<sup>1</sup>

<sup>1</sup>Contacts with state officials by those outside of California should be made through the Western States Petroleum Association in Glendale, California.

Title and Department Principal Safety Engineer  
Department of Industrial Relations  
Division of Occupational Safety and Health  
Pressure Vessel Section  
(415) 557-1878  
Fax: (415) 557-2523

State Department Responsible  
for Laws and Rules Department of Industrial Relations  
Occupational Safety & Health Standards Board  
John D. Mac Leod , Executive Officer  
1300 I Street, Suite 940  
Sacramento, CA 95814  
(916) 322-5080  
Fax: (916) 445-6331

CALIFORNIA  
REGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS  
 (continued)

Board of Boiler Rules Membership	California has no Boiler Board. The Department of Industrial Relations has the power to make, alter and amend the boiler and pressure vessel regulations.
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API Regulatory Action Team	<p>Ken Sposito, Chairman                  Tosco Refining Co.                  Avon Refinery                  Martinez, CA 94553                  (510) 228-1220 ext. 2212                  Fax: (510) 372-3029</p> <p>R. M. (Rick) Janciaes, Chief Inspector                  Mobil Oil Corporation                  3700 W. 190th Street                  Torrance, CA 90509                  (213) 212-4578</p> <p>John D. Howell                  ARCO Products Company                  P.O. Box 61004                  Anaheim, CA 92803-6104                  (714) 491-6883</p> <p>Philip E. Myers                  Chevron Research and Technology Co.                  P.O. Box 1627                  Richmond, CA 94802-0627                  (510) 242-2288</p> <p>R.M. Stellina, Supervisor                  Metallurgical Engineering &amp; Inspection                  UNOCAL - San Francisco Refinery                  1380 San Pablo Avenue                  Rodeo, CA 94572                  (510) 245-4451</p>
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CALIFORNIA

REGULATORY CONTACT INFORMATION

BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

(continued)

Industry Association Staff Contact

Michael D. Wang, Manager  
Western States Petroleum Association  
505 North Brand Boulevard  
Suite 1400  
Glendale, CA 91209  
(818) 545-4105

CALIFORNIASUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure Vessels

**\*\* Items Covered**

- Power boilers, low pressure boilers, and unfired pressure vessels.
- NOTE: California pressure vessel rules vary according to the service. Special rules apply to air tanks, LPG vessels, liquid and compressed natural gas and anhydrous ammonia vessels. Appropriate sections of the Safety Orders should be consulted.

**\*\* Codes**

- ASME Boiler and Pressure Code Sections I-XI (primarily 1977 Edition).
- Addenda are recognized except PG-39 and PW-35 (1974 Edition).

**\*\* Other**

- Basically all boilers and vessels must be designed and built to applicable ASME Codes.
- Boilers, LPG vessels, and air tanks must have a state serial number.
- Special (non-code) designs must be approved by state.
- Boilers and unfired pressure vessels shall be registered with the National Board. Manufacturers are required to file Manufacturers Data report with the Division of Occupational Safety and Health before vessel is installed.

**\*\* Pertinent Exceptions**

- Boilers and vessels under federal control.
- Air tanks under 150 psi. and 1.5 cu. ft. (must have relief valve).
- Vessels under 15 psi. (except LNG) and under 6 in. diameter.

## Equipment Requiring Maintenance Inspection

**\*\* Items Covered**

- Power boilers, low pressure boilers and some unfired pressure vessels. Exceptions noted below.

**\*\* Frequency**

- Power boilers - annual, internal and external inspections (with state approval, internal inspection intervals may be extended to 36 months).
- Power Boilers - with state approval, the internal inspection interval may be extended to 36 months.
- LPG Vessels - every 3 years. (Vessels 30 gals. or less, and LPG installations up to the point of delivery to a transportation tank in plants manufacturing LPG are excepted.)
- Air Tanks (portable) - every 3 years.
- Air Tanks (non-portable) - every 5 years.
- Air Tanks - special inspection procedures are stipulated (See Sub Ch. 1 Par. 462).
- Vessels covered by Petroleum Safety Orders at intervals sufficiently frequent to give due consideration to corrosion and other factors causing deterioration.

CALIFORNIASUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

(continued)

## Pertinent Exceptions to Maintenance Inspection

- \*\* Boilers and vessels under federal control.
- \*\* Air Tanks under 150 psi. and 25 cu. ft. unless moved or altered.
- \*\* LPG Vessels - certain small vessels under 575 gals. unless altered.
- \*\* Boilers - low pressure and miniature.
- \*\* Boilers - certain boilers under 400,000 Btu/hr. input (See Sub Ch. 2 Par. 771).
- \*\* Vessels under 15 psi.
- \*\* Vessels under 6 in. diameter.

## Inspector Qualifications

- \*\* Owner-user inspectors permitted.
- \*\* Inspectors must pass state exam (The National Board exam is used).

## Certificate of Inspection

- \*\* An operating permit is required for air tanks and LPG vessels (See Sub Ch. 1 Paras. 461 and 470 for exceptions).
- \*\* Power Boilers (See Sub Ch. 2 Par. 771 for exceptions).

## Miscellaneous

- \*\* Owner-user internal inspections of boilers and air tanks must be reported to the state within 21 days (See Sub Ch. 2 Pars. 770 and 774).
- \*\* Boiler repairs involving welding (where boiler safety is concerned) must be reported to the state (See Sub Ch. 2 Art. 7 for permissible repair procedures).

CALIFORNIA  
ANNUAL SUMMARY OF REGULATORY ACTION

Summary

1. Review of LPG Unfired Pressure Vessel Safety Orders vs. NFPA 58.
2. Review of CNG/LNG Unfired Pressure Vessel Safety Orders.



CALIFORNIA

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact

Action or Support Team

John D. Howell  
ARCO Products Company  
P.O. Box 61004  
Anaheim, CA 92803-6104  
(714) 491-6883

Additional Information

COLORADO  
REGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	Colorado
Laws Involved	Boiler Inspection Law 1 CRS Title 9, Article 4 Rules have been extracted from the statute, as written.
Chief Inspector	Charles S. Withers
Title and Department	Chief Boiler Inspector Tower 2, Suite 750 1515 Arapahoe S. Denver, CO 80202-2117 (303) 572-2900
Also covers pressure vessels.	
State Department Responsible for Laws and Rules	Department of Labor & Employment Division of Labor Tower 2, Suite 750 1515 Arapahoe S. Denver, CO 80202-2117 (303) 620-4705
Board of Boiler Rules	There is no Board of Boiler Rules at the present time.
API Regulatory Action Team	Kelly J. Smith/James A. Slovacek Conoco, Inc. Denver Refinery 5801 Brighton Boulevard Commerce City, CO 80022 (303) 286-5714
Industry Association Staff Contact	William F. Owens, Executive Director Colorado Petroleum Association Lincoln Tower, Suite 404 1860 Lincoln Street Denver, CO 80295 (303) 860-0099

COLORADOSUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* Items Covered
  - Boilers and pressure vessels.
  - Exceptions noted below.
- \*\* Codes
  - ASME Boiler & Pressure Vessel Code, 1968 by reference in the law, extend by reference to the currently published Edition and mandatory addenda.
  - Addenda and interpretations are recognized.
- \*\* Other
  - Power boilers must be registered with the National Board.
  - Boilers must be inspected by a state employed inspector who shall assign a state serial number for registration purposes.
  - Special designs not covered by ASME codes must be reviewed for approval by the state boiler inspection branch.
- \*\* Pertinent Exception
  - Boilers and vessels under federal control.

## Equipment Requiring (Maintenance) Inspection

- \*\* Items Covered
  - Boilers and service water heaters rated over 200,000 Btu/hr. energy input.
  - Exceptions noted below.
- \*\* Frequency
  - Boilers and service water heaters rated over 200,000 Btu/hr. energy input - annually.

## Pertinent Exceptions to (Maintenance) Inspection

- \*\* Boilers and vessels under federal control.

## (Maintenance) Inspector Qualifications

- \*\* An inspector employed by an insurance company or holding a current National Board Commission and work card may be certified as a "Special Inspector" qualified to perform the annual recertification for boilers (and service water heaters greater than 200,000 Btu/hr.).
- \*\* Owner-user inspectors with National Board owner-user commissions, or employed by an approved owner-user inspection agency, may do inspections of their own pressure vessels.

COLORADOSUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

(continued)

## Certificate of Inspection

- \*\* Boilers and service water heaters greater than 200,000 Btu/hr. may not be operated without a posted inspection certificate (subject to annual renewal).

## Miscellaneous

- \*\* Pressure vessel can be maintained, inspected, rated, or altered in accordance with API 510 and API 570, current editions, when performed under an approved owner-user inspection program.
- \*\* Boiler repairs must conform to NBIC requirements (current edition).
- \*\* All repairs and alterations to boilers must be reported to the state.
- \*\* Organizations performing welded repairs on boilers must hold a current certificate of authorization for the National Board of Boiler and Pressure Vessel Inspectors "R" Program.
- \*\* Order dated August 1, 1975 adopted current editions of all sections and addenda of ASME Boiler and Pressure Vessel Codes and the National Board Inspection Code for Boiler and Pressure Vessel Inspectors.
- \*\* Effective November 1, 1996, the state adopted by rule (pursuant to Colorado revised statute 8-1-107 and 9-4-103) the following codes:
- ASME Sections I, III, IV, VIII divisions 1 & 2, X, XI
  - NBIC NB-23
  - API 510, 570
  - ASME CSD-1
  - Also allowed for waiver of rules for pressure vessels located on remote sites when requested thru variance.

COLORADO  
ANNUAL SUMMARY OF REGULATORY ACTION

Summary

The statute is currently under review to establish and verify the need for changes during the 1996-1997 fiscal year.

API 570 "Piping Inspection Code" was adopted.

COLORADO

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact

William F. Owens, Executive Director  
Colorado Petroleum Association  
1860 Lincoln Street, Suite 404  
Denver, CO 80295  
(303) 860-0099

Action or Support Team

Additional Information

The State Chief Inspector indicated that no activity (to his knowledge) was occurring with regards to ASTs at this time.

CONNECTICUT  
REGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	Connecticut
Laws Involved	Department of Public Safety Division of Fire, Emergency & Building Services Bureau of State Fire Marshall, Title 29, Chapter 540 Steam Boilers Sec. 29-231-244 (latest revision 1996). Administrative Regulations 29-232-1 through 116
Chief Inspector	James W. Corcoran
Title and Department	Supervisor Division of Fire, Emergency & Building Services Bureau of Boilers 1111 Country Club Road P.O. Box 2794 Middletown, CT 06457-9294 (860) 685-8320
State Department Responsible for Laws and Rules	Kenneth H. Kirschner, Commissioner Department of Public Safety Commissioner empowered to formulate Rules and Regulations and Amendments thereto.
Board of Boiler Rules Membership	None
Regulatory Action Team	Contact Industry Association representative listed below.
Industry Association Staff Contact	Thomas Fitzpatrick, Executive Director Connecticut Petroleum Council 55 Farmington Avenue, Suite 704 Hartford, CT 06105 (203) 246-8846

CONNECTICUTSUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* Boilers
  - ASME Code Sections I, II, III, IV, V, VI, VII, IX, and code cases. All boilers must be registered with the Department and stamped with a Connecticut serial number. Shop inspector must have a Connecticut commission or if outside Connecticut, a National Board commission.
- \*\* Pressure Vessels
  - Not regulated.

## Equipment Requiring Maintenance Inspection

- \*\* Power Boilers
  - One annual internal. One annual external inspection under operating conditions.
- \*\* Low Pressure, Hot Water Heating & Supply Boilers inspected externally biannually, and internally at discretion of the inspector.

## Pertinent Exceptions to Maintenance Inspection

- \*\* Public Service companies.
- \*\* Portable boilers used in pumping, heating, steaming, and drilling in open field.

## Maintenance Inspector Qualifications

- \*\* Various combinations of education and experience are stipulated. Reciprocal commissions issued to insurance inspectors holding approved State or National Board Commission.
- \*\* National Board Commission is required.
- \*\* There are no provisions for owner-user inspections.

## Certificate of Inspection

- \*\* Reports of internal and external inspections must be filed with Department within 30 days of inspection.
- \*\* Certificate of Operation is issued on payment of fee for 12 months for Power Boilers, 24 months for other boilers.

## Miscellaneous

- \*\* All boilers, unless exempted must be registered with the state.
- \*\* Boiler Operators are required to be licensed in cities of Bridgeport and New Haven.



CONNECTICUT

SUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

(continued)

- \*\* National Board rules for Repairs and Alterations to Boilers and Pressure Vessels by welding are acceptable to the Department.
- \*\* Connecticut adopts all OSHA regulations.

CONNECTICUT  
ANNUAL SUMMARY OF REGULATORY ACTION

Summary

The Connecticut Department of Public Safety revised and updated its boiler regulations in 1996.

CONNECTICUT

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact	Steven S. Guveyan, Associate Director Connecticut Petroleum Council 55 Farmington Avenue, Suite 704 Hartford, CT 06105 (203) 246-8846
Action or Support Team	Dan Horton Mobil Oil Corporation 3225 Gallows Road Room 7W-005 Fairfax, VA 22037 (703) 849-3331
Additional Information	DEP is reviewing its aboveground storage tank rules.

DELAWAREREGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	Delaware
Laws Involved	Boiler Law 1919 Original Rules and Regulations (Sept. 1992)
Chief Inspector	Frank L. Gardner
Title and Department	Director Division of Boiler Safety P.O. Box 674 Dover, DE 19903-0674 (302) 739-5889
State Department Responsible for Laws and Rules	Department of Public Safety Division of Boiler Safety
Board of Boiler Rules Membership (* indicates chairman)	<p>Delaware Boiler Safety Advisory Council serves in advisory capacity to Director of Division of Boiler Safety.</p> <p>5 Members:</p> <ul style="list-style-type: none"> <li>- A representative of a company licensed to insure boilers and pressure vessels in Delaware</li> <li>- Manufacturer of boilers</li> <li>- *User of boilers or pressure vessels</li> <li>- A mechanical engineer</li> <li>- A licensed stationary engineer</li> </ul> <p>*Present Chairman:</p> <p>Dennis Stordahl 727 Huston Street Seaford, DE 19973</p>
Board of Boiler Rules Secretary	Theobald Ombor 205 West Delaware Avenue Gwinhurst Wilmington, DE 19807

DELAWARE

REGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS  
(continued)

API Regulatory Action Team

Contact Industry Association below.

Industry Association Staff Contact

Gary B. Patterson, Executive Director  
Delaware Petroleum Council  
109 South State Street  
P.O. Box 1429  
Dover, DE 19903-1429  
(302) 734-7455

DELAWARESUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* ASME Code with National Board Stamping and Delaware serial number.
- \*\* Foreign manufacturers must register with Division of Boiler Safety to construct Boilers or Pressure Vessels for use in Delaware.
- \*\* Copy of Manufacturer's Data Report must be filed with the Division through the National Board.
- \*\* Exceptions
  - Pressure vessels not exceeding 15 psi.

## Equipment Requiring Maintenance Inspection

- \*\* Power Boilers, Miniature Boilers, High Temperature Water Boilers
  - Internal inspection annually. Certificate inspection biennially.
- \*\* Low Pressure Boilers
  - External inspection biennially, unless an internal inspection is required by the inspector.
- \*\* Pressure Vessels
  - Certified Inspection - 4 years unless additional inspection is required by the inspector.

## Pertinent Exceptions to Maintenance Inspection

- \*\* Heating Boilers in building for no more than 6 family units.
- \*\* Sterilizers
  - Under 2 cu. ft.

## Maintenance Inspector Qualifications

- \*\* Employment by an Insurance Company and Commissioned by the Division.
- \*\* Field and Shop inspectors must have a Delaware commission.

## Certificate of Inspection

- \*\* Reports of Certificate inspection must be filed with the Division on National Board forms within 30 days of inspection.

DELAWARE

SUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

(continued)

Miscellaneous

- \*\* National Board Rules for Repair by Fusion Welding have been adopted.
- \*\* Permission to make repairs by fusion welding must be obtained from a Delaware Commission Inspector.  
The company making welded repair must file a record with the Division.
- \*\* The organization making the repair or alteration shall possess a National Board repair authorization certificate.

DELAWARE  
ANNUAL SUMMARY OF REGULATORY ACTION

Summary

New regulations effective in 1990:

- \*\* Waste Heat Boilers
  - Extended inspection interval to 4 years.
- \*\* Water Heaters
  - The breakpoint for water heaters for code compliance with the regulations is 200,000 Btu/hr.
- \*\* H.P. boilers with continuous water treatment plus someone in charge of treatment--plus an annual inspection--must request to operate for 2 years by letter before having an internal.
- \*\* All piping to be installed to B 31 code.
- \*\* All boilers to utilize CSD-1 on installation.
- \*\* All safety valves to be tested within a 6-year period or replaced or repaired.
- \*\* "R" stamp required on all boiler and pressure vessel repairs.
- \*\* "VR" or "V" stamp required on all safety valve repairs.



DELAWARE

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact

Action or Support Team

Additional Information

FLORIDAREGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	Florida
Laws Involved	Boiler Safety Act. Adopted June 1987. Boiler safety rules Chapter 4A-41.005 to 4A-51.085. Adopted March 1989.
Chief Inspector	Greg A. Lundberg
Title and Department	Chief Inspector Bureau of Fire Prevention Boiler Safety Program 200 East Gaines Street Tallahassee, FL 32399-0300 (904) 413-3722
State Department Responsible for Laws and Rules	Department of Insurance Bill Nelson, Commissioner
Board of Boiler Rules Membership (* indicates chairman)	Florida has no Board.
API Regulatory Action Team	Allen R. Mikul Monsanto Company P.O. Box 97 Gonzalez, FL 32560 (904) 968-7231
Industry Association Staff Contact	C. Doug Shelby, Executive Director Florida Petroleum Council First Florida Bank Building Suite 800 215 South Monroe Street Tallahassee, FL 32301 (904) 561-6300

FLORIDASUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* ASME, National Board Manufacturer's Data Report.
- \*\* Boilers of Special Design can be authorized by Insurance Department.

## Equipment Requiring Certificate Inspection

- \*\* Only boilers in places of public assembly.
- \*\* Power boilers and high pressure, high temperature water boilers require annual external and internal inspection (if construction permits).
- \*\* Low pressure steam or vapor heating boilers require biennial external and internal inspection (if construction permits).
- \*\* Hot water heating and hot water supply boilers require biennial external inspections and an internal inspection every 4 years (if construction permits).

## Pertinent Exceptions to Maintenance Inspection

- \*\* All boilers except those in places of public assembly.

## Maintenance Inspector Qualifications

- \*\* A State or Insurance Inspector with Florida Certificate of Competency.

## Certificate of Inspection

- \*\* After approval of Inspection Report and payment of fees the state will issue a Certificate of Compliance (Operating Permit). This only applies to boilers in places of public assembly.

## Miscellaneous

- \*\* Owners must submit National Board Manufacturer's Data Report for Existing Boilers.
- \*\* Inspector can shut down boilers he believes to be unsafe.
- \*\* Repairs to safety & safety relief valves shall be conducted by the manufacturer or a holder of the National Board "VR" stamp.
- \*\* Automatic fired steam boilers shall have a low water fuel cut-off.  
ASME/ANSI - CSD-1 applies.
- \*\* Boiler repairs must have prior approval by a Florida commissioned inspector and performed by a National Board "R" Stamp Holder, ASME Certificate Holder, or authorization from the Boiler Safety Program.

FLORIDA

ANNUAL SUMMARY OF REGULATORY ACTION

Summary

No significant activity reported for 1996.

FLORIDA

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact	Robert W. McVety Florida Petroleum Council First Florida Tower, Suite 800 215 South Monroe Street Tallahassee, FL 32301 (904) 561-6300
Action or Support Team	David Killingsworth Amoco Oil Company 600 Corporate Drive, Suite 500 Ft. Lauderdale, FL 33334  Pat Sauer Mobil Oil Corporation 3225 Gallows Road Fairfax, VA 22037-0001  Gary Sweinhart Chevron USA, Inc. P.O. Box 1706 Atlanta, GA 30301  Texaco P.O. Box 4582 Atlanta, GA 30302  Bob Wilcox BP Oil 4850 E. 49th Street Cleveland, OH 44125
Additional Information	AST rule passed in 1991 is undergoing revision. Projected adoption 1995.

GEORGIAREGULATORY CONTACT INFORMATIONBOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	Georgia
Laws Involved	Boiler and Pressure Vessel Safety Act, Chapter 11, Title 34-11-1 to 34-11-22, Latest revision July 1, 1993. Boiler and Pressure Vessel Rules, Chapter 300-6-1-01 to 300-6-1-28, Latest revision January 1994.
Chief Inspector	Earl Everett
Title and Department	Chief Safety Engineer Safety Engineering Section Georgia Department of Labor 223 Courtland, NE, Suite 301 Atlanta, GA 30303 (404) 656-2966
State Department Responsible for Laws and Rules	Department of Labor Safety Engineering Section David Poythress, Commissioner
Advisory Board of Boiler Rules Membership (* indicates chairman)	Boiler Advisory Board  Windell Peters Atlanta Gas Light Company P.O. Box 4569 Atlanta, GA 30302 (404) 584-4468  Walter Cohen Walter Cohen and Associates 6680 Jones Mill Court, Suite G Norcross, GA 30092 (404) 416-1918  *Broward Gable Union Carbide Corporation P.O. Box 428 Woodbine, GA 31569 (912) 729-9278

GEORGIA

REGULATORY CONTACT INFORMATION

BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

(continued)

William Farmer, Plant Support Engineer  
Georgia Power Company  
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Atlanta, GA 30302  
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Larry Tucker  
Continental Insurance Company  
Technical Service  
3700 Crestwood Parkway, NW  
Duluth, GA 30136  
(404) 279-3200

Winfred May  
Industrial Boiler Company  
221 Law Street  
Thomasville, GA 31799  
(912) 226-3024

Johnny Wilson  
Wilson Welding Service  
2939 Snapfinger Road  
Decatur, GA 30034  
(404) 981-3535

The Honorable Nan Orrock  
State Representative, District 56  
1070 Delaware Avenue, SE  
Atlanta, GA 30316  
(404) 622-6687

The Honorable James Tysinger, State Senator  
District 41  
3781 Watkins Place, NE  
Atlanta, GA 30319  
(404) 457-2375

GEORGIA  
REGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS  
(continued)

Jackques Thad Morris, Power Plant Supervisor  
Lockheed - Georgia  
1610 Pinefield Court  
Department 49-25 Zone 336  
Marietta, GA 30066  
(404) 494-3114

Warren Hohl  
Proctor and Gamble  
Paper Product Company  
512 Liberty Expressway, South  
Albany, GA 31703-6701  
(912) 883-2000

Timothy McGee, Sr., Regional Manager  
Regional Manager  
Hartford Steam Boiler Inspection & Insurance Co.  
200 Ashford Center North, Suite 300  
Atlanta, GA 30338  
(404) 396-4820

Advisory Board of Boiler Rules  
Secretary

Earl Everett, Chief Inspector

API Regulatory Action Team

Jerry Hill, Chairman  
Amoco  
P.O. Box 5077  
Atlanta, GA 30302  
(404) 512-6852

Industry Association Staff Contact

Richard B. Cobb, Executive Director  
Petroleum Council of Georgia  
230 Peachtree Street, NW, Suite 1500  
Atlanta, GA 30303  
(404) 522-2574



GEORGIASUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* ASME and NB construction and stamping is required.
- \*\* Boilers and PVs require shop inspection by NB commissioned inspector.
- \*\* Boiler controls and safety devices must comply with ASME CSD-1 or applicable NFPA 85 series.
- \*\* Boilers must have at least one ASME/NB certified safety valve. Over 500 sq. ft. heating surface or 1100 kw., a boiler must have two or more safety valves.
- \*\* Department of Labor must approve "Special" designs before construction and fees must be paid.
- \*\* The installers of B&PV must receive an installation permit from Chief Inspector.
- \*\* Companies that are Authorized Owner-User Inspection Agencies and have an ASME "U" stamp may fabricate their own vessels.
- \*\* Exemptions
  - Boilers and PVs under federal control.
  - Most DOT PVs.
  - PV's on state and federal vehicles.
  - Air tanks on railroad right of ways and used for train operation.
  - PVs less than:
    1. 5 cu. ft. and 250 psig.
    2. 1 1/2 cu. ft. and 600 psig.
    3. 6" I.D.
    4. 15 psig. internal or external pressures.
    5. All pressure vessels containing water (including those with air cushion) 300 psi. or less or 210°F or less.
  - Hot water pressure vessels and supply boilers (with ASME/NB relief valves) not exceeding:
    1. 200,000 Btu/HR; or
    2. 210°F; or
    3. 120 gals.
  - Most research vessels.
  - PVs not within scope of ASME Section VIII.
  - B&PVs used in generation of electricity. [See 34-11- 7(a)(12).]
  - B&PVs used to generate steam for manufacturing processes with approved owner-user program [see 34-11-7 (a) (13)].
  - B&PVs used by public utilities.

## Equipment Exempted From Maintenance Inspection

- \*\* All B&PVs except those exempted from above construction requirements and the following:
  - Most farm B&PVs.

GEORGIASUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS  
(continued)

- Heating B&PVs in residences with less than 6 families.
- Containers for electric transformers and circuit breakers.
- PVs on most remote oil and gas production sites.
- Pressure vessels used for storage of liquid propane gas under the jurisdiction of the State Fire Marshal, except for pressure vessels used for the storage of liquid petroleum gas, 2,000 gals. or above which have been modified or altered.
- Air storage tanks not exceeding 16 cu. ft. (120 gals.) and under 250 psig. pressure.

## Equipment Requiring Maintenance Inspection

- \*\* Power boilers and high pressure/temperature water boilers require annual internal and external certificate inspection.
- \*\* Low pressure heating boilers require biennial external certificate inspection and internal inspection every 4 years where construction permits.
- \*\* Hot water heating and supply boilers require biennial external certificate inspection and internal inspection per inspector.
- \*\* PVs subject to corrosion require triennial external certificate inspection and internal inspections per inspector.
- \*\* PVs not subject to corrosion require an external certificate inspection triennial.
- \*\* A 2 month grace period is permitted between inspections.
- \*\* The Board may grant longer periods between certificate inspections and variations to inspection requirements.
- \*\* Insurance inspectors must file report with state within 30 days of inspection after which an Inspection Certificate will be issued.
- \*\* Owner-user Inspectors must maintain adequate files (subject to audit) and file inspection reports with the Chief Inspector. A Certificate (operating permit) will be issued.

## Pertinent Exceptions to Maintenance Inspection

- \*\* See above.

## Maintenance Inspector Qualifications

- \*\* Authorized Inspection Agencies include State, insurance, owner-user and API 510 inspection organizations. All inspectors must pass National Board written exam and be commissioned by the State.

GEORGIASUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

(continued)

## Certificate of Inspection

- \*\* Certificate of Inspection (Operating Permit) must be obtained for each boiler and PV in the state (except those exempted). The following fees are in effect:
- \$50.00 Certificate fee 1 year High Pressure Boiler
- \$50.00 Certificate fee 2 years Low Pressure Boiler
- \$15.00 Certificate fee 3 years Unfired Pressure Vessel

## Miscellaneous

- \*\* The ASME Boiler and Pressure Vessel codes, NBIC and API 510 have been adopted by resolution; this means these documents have been accepted in their entirety as applicable legal requirements by the State. Therefore, a jurisdiction approved program for petroleum or chemical process facilities can maintain, inspect, repair, alter or rerate their own pressure vessels with an approved program by the state.
- \*\* Authorized owner-user inspection agencies may inspect Pressure Vessels per NBIC or API 510 as applicable.
- \*\* Repairs to Boilers and Pressure Vessels must be done per NBIC or API 510 as applicable by an organization with: (1) an "R" stamp, or (2) jurisdictional approval.
- \*\* Contractors must pay a permit fee for each Boiler installed:
- |          |                             |
|----------|-----------------------------|
| \$100.00 | up to 30 boiler horse power |
| \$200.00 | 31 BHP to 50 BHP            |
| \$300.00 | 51 BHP to 100 BHP           |
| \$400.00 | 101 BHP to 200 BHP          |
| \$500.00 | all over 200 BHP            |
- \*\* Aggrieved parties may appeal to Board.
- \*\* Accidents to Boilers and Pressure Vessels must be reported to Chief Inspector. If personal injury or explosion occurs, it must be reported immediately.
- \*\* No safety appliance (e.g., relief valve) can be worked on or removed while subject to pressure.
- \*\* Relief valves must be repaired by "RV" stamp shops or state approved owner-user shops.
- \*\* Second hand equipment must have installation permit and state approval before installation.
- \*\* The Department of Labor:
- Formulates rules and regulations on advice of the Board.
  - Approves owner-user inspection organizations.
  - Approves variances to inspection cycles.
  - Interprets the rules and regulations.
  - Approves Inspection Reports.

GEORGIA

ANNUAL SUMMARY OF REGULATORY ACTION

Summary

Both the Act and Rules were revised in 1993.

GEORGIA

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact

Action or Support Team

Additional Information

HAWAIIREGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	Hawaii
Laws Involved	Occupational Safety & Health Standards, Parts 9 and 10 Hawaii Revised Statutes, Chapter 397, Boiler and Elevator Safety Law
Chief Inspector	Yash Nagpaul
Title and Department	Chief Boiler Inspector Boiler & Elevator Inspection Branch 830 Punchbowl St., Room 423 Honolulu, HI 96813 (808) 586-9141 Fax: (808) 586-9104
State Department Responsible for Laws and Rules	Department of Labor & Industrial Relations Division of Occupational Safety & Health Boiler & Elevator Inspection Branch
Board of Boiler Rules Membership (* indicates chairman)	Hawaii does have a Boiler Board.
API Regulatory Action Team	Dave Price Chevron USA Products Co. 91-480 Malakole St. Kapolei, HI 96707 (808) 682-2256  Phil E. Myers Chevron Corporation Engineering Department P.O. Box 1627 Richmond, CA 94804-1627 (510) 842-7222 Fax: (510) 842-2288

HAWAII

REGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS  
(continued)

Industry Association Staff Contact

Michael D. Wang, Manager  
Operations and Environment  
Western States Petroleum Association  
505 North Brand Boulevard, Suite 1400  
Glendale, CA 91209  
(818) 545-4105

HAWAIISUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* Items Covered
  - Boilers, pressure vessels, and pressure systems.
  - Exceptions are noted below.
- \*\* Codes
  - ASME Boiler & Pressure Vessel Code, 1995.
  - ANSI B 31.1 Code for Pressure Piping, 1995.
  - Addenda are recognized.
  - National Board Inspection Code, ANSI/NB-23, 1992.
- \*\* Other
  - Boilers and vessels must be constructed and stamped in accordance with ASME and National Board codes.
  - The manufacturer's data report must be filed with the state through the National Board.
  - Boilers and vessels must be stamped with a state serial number.
  - Non-code designs must be approved as a "state special."
  - Boilers, pressure vessels, and pressure systems must have an operating permit.
- \*\* Pertinent Exceptions
  - Boilers and vessels under federal control.
  - Vessels (unfired) for liquids under pressure with nominal water capacity of 120 gals. or less.
  - Vessels (unfired) under 15 psig.
  - Vessels under 5 cu. ft. and 250 psig.
  - Vessels under 1.5 cu. ft. and 600 psig.
  - Vessels having an inside diameter not exceeding 6 in.
  - Vessels for storage of liquefied compressed flammable gases under other jurisdictions.
  - Vessels for storage of cold water.
  - Hot water supply and heating boilers, directly fired if:
    1. Heat input is less than 200,000 Btu/hr.
    2. Water temperature is 200°F or less.
    3. Water capacity is 120 gals. or less.

## Equipment Requiring Maintenance Inspection

- \*\* Items Covered
  - Boilers and pressure vessels.
  - Exceptions are noted below.



HAWAIISUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

(continued)

**\*\* Frequency**

- Power boilers - annual, internal with external inspection under normal operating conditions 5 to 7 months later. Extension to 2 years between internal inspections may be granted upon application.
- Heating boilers - biennial inspection.
- Hot water boilers - biennial with internal at inspector's discretion.
- Vessels - biennial external with internal at inspector's discretion.
- Vessels under supervision of owner/user inspection agency shall be inspected at intervals determined in accordance with Chapter V of the NBIC.

**Pertinent Exceptions to Maintenance Inspection**

- \*\* Boilers and vessels under federal control.**
- \*\* Vessels (unfired) for liquids under pressure with nominal water capacity of 120 gals. or less.**
- \*\* Vessels (unfired) under 15 psig.**
- \*\* Vessels under 5 cu. ft. and 250 psig.**
- \*\* Vessels under 1.5 cu. ft. and 600 psig.**
- \*\* Vessels having an inside diameter not exceeding 6 in.**
- \*\* Vessels for storage of liquefied compressed flammable gases under other jurisdictions.**
- \*\* Vessels for storage of cold water.**
- \*\* Hot water supply and heating boilers, directly fired if:**
  - Heat input is less than 200,000 Btu/hr.
  - Water temperature is 200°F or less.
  - Water capacity is 120 gals. or less.

**Maintenance Inspector Qualifications**

- \*\* Provisions are made for owner-user inspectors for pressure vessels.**
- \*\* Special inspectors (including owner-user inspectors) must hold a National Board commission.**

**Certificate of Inspection**

- \*\* No boilers or pressure system shall be operated unless a permit to operate or certificate of inspection has been issued by the state.**

HAWAIISUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS  
(continued)

## Miscellaneous

- \*\* Accidents involving boilers or vessels must be reported to the state.
- \*\* Serious accidents involving personal injury or explosion must be immediately reported by telephone or messenger.
- \*\* Repairs must conform to the NBIC.
- \*\* All welding performed on boilers, pressure vessels, or piping, shall be performed in accordance with the requirements of the ASME Code, ANSI B 31.1 and the NBIC.
- \*\* Restamping of ASME Code symbol must be done by original manufacturer.
- \*\* Safety valve repair must be done by a holder of the "VR" stamp unless a variance is obtained from the state.

HAWAII

ANNUAL SUMMARY OF REGULATORY ACTION

Summary

No significant activity was reported in 1996.

HAWAII

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact

Action or Support Team

Additional Information

IDAHOREGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	Idaho
Laws Involved	Idaho Boiler Safety Rules IDAPA 17.06 (1996)
Chief Inspector	None -- Idaho has no boiler inspectors who are employed by the state.
State Boiler Program Manager	Division of Building Safety Bureau of Logging and Industrial Safety Industrial Safety Section 277 N. 6th P.O. Box 83720 Boise, ID 83720-0049 (208) 334-2129
State Department Responsible for Laws and Rules	Industrial Commission P.O. Box 83720 Boise, ID 83720-0041 (208) 334-6000
Board of Boiler Rules Membership (* indicates chairman)	Idaho does not have a Boiler Board.
API Regulatory Action Team	Contact Industry Association representative listed below.
Industry Association Staff Contact	Jess Cooper RMOGA 1775 Sherman Street Suite 2501 Denver, CO 80203 (303) 860-0099 Fax: (303) 860-0310

IDAHOSUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* Items Covered
  - Boilers and pressure vessels except as noted below.
- \*\* Codes
  - ASME Boiler & Pressure Vessel Code, 1983.
  - ASME Power Piping Code - ANSI B 31.1, 1983.
- \*\* Other
  - Boilers and vessels must bear the National Board stamp.
- \*\* Pertinent Exceptions
  - Boilers and vessels under federal control.
  - Approved boilers and hot water tanks under:
    - 120 gals. water capacity; and
    - 160 psi. and 200°F and
    - heat input of 200,000 Btu/hr.
  - Pressure vessels under:
    - 5 cu. ft. and 250 psig.
    - 1.5 cu. ft. and 600 psig.
    - 6 in. diameter
    - 15 psi.
  - Water containing vessels under 120 gallons capacity.

## Equipment Requiring Maintenance Inspection

- \*\* Items Covered
  - Power boilers, low pressure steam and hot water boilers and pressure vessels.
  - Exceptions noted below.
- \*\* Frequency
  - Power boilers - annual internal and external not under pressure also annual external under pressure.
  - Low pressure boilers:
    - steam - annual external and triennial internal.
    - hot water - annual external and internal at inspector's discretion.
  - Vessels - triennial external and internal at inspector's discretion.
  - A report of each certificate inspection must be filed with the state.

## Pertinent Exceptions to Maintenance Inspection

- \*\* Boilers and vessels under federal control.

IDAHO

SUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS  
(continued)

- \*\* Approved boilers and hot water tanks under
    - 120 gallon water capacity;
    - 160 psi. and 200°F; and
    - heat input of 200,000 Btu/hr.
  - \*\* Pressure vessels under:
    - 5 cu. ft. and 250 psig.
    - 1.5 cu. ft. and 600 psig.
    - 6 in. diameter.
    - 15 psi.
  - \*\* Water-containing vessels under 120 gallons capacity.
- Maintenance Inspector Qualifications

- \*\* There are no provisions for owner-user inspectors.

Certificate of Inspection

- \*\* Boilers and pressure vessels must have a certificate of inspection before being placed in operation.

Miscellaneous

- \*\* All welding on boilers and power piping must conform to the applicable ASME and ANSI codes.

IDAHO

ANNUAL SUMMARY OF REGULATORY ACTION

Summary

No change in boiler regulations since last revisions in 1985.



IDAHO

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact

Action or Support Team

Additional Information

ILLINOISREGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	Illinois
Laws Involved	Boiler and Pressure Vessel Safety Act III. 430 ILCS 75. Boiler and Pressure Vessel Safety 41 Ill. Adm.Code 120
Chief Inspector	David A. Douin
Title and Department	Superintendent of Boiler & Pressure Vessel Safety Division of Boiler and Pressure Vessel Safety - Office of the Illinois State Fire Marshal 1035 Stevenson Drive Springfield, IL 62703-4259 (217) 782-2696 Fax: (217) 782-1062
State Department Responsible for Laws and Rules	State Fire Marshal
Board of Boiler Rules Membership (* indicates chairman)	*A. L. Calcaterra - High pressure users W.H. Byerley - Low pressure users E. J. Hoveke - Boiler manufacturers W.C. Trimmer - Insurance L. C. Bird - Professional engineer J.J. Skermont - Boilermakers C. R. Hickman - Operating engineers
Present Chairman:	*A. L. (Tony) Calcaterra 5320 River Aire Drive Godfrey, IL 62035 (618) 466-1982
Board of Boiler Rules Secretary	Winston C. Trimmer Division of Boiler and Pressure Vessel Safety 3150 Executive Park Drive Springfield, IL 62703

ILLINOIS

REGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS  
(continued)

API Regulatory Action Team

T.P. (Tom) Wylie

Shell Oil Company  
P.O. Box 262  
Wood River, IL 62095  
(618) 255-3096

Industry Association Staff Contact

David A. Sykuta, Executive Director  
Ronald S. Cardoni, Associate Director  
Illinois Petroleum Council  
P.O. Box 12047  
Springfield, IL 62791  
(217) 544-7404

ILLINOISSUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* Items Covered
  - Boilers and pressure vessels.
  - Exceptions noted below.
- \*\* Codes
  - ASME Boiler and Pressure Vessel Code.
  - ANSI/ASME B. 31.1, Code for Power Piping.
  - Addenda are recognized.
- \*\* Other
  - Boilers and pressure vessels must be constructed, inspected and stamped per ASME Boiler and Pressure Vessel Code.
  - Boilers and Pressure Vessels must be registered with the state.
  - Boilers and pressure vessels must be registered with the National Board of Boiler and Pressure Vessel inspectors and they must bear a National Board registration number.
  - Special designs must be approved by the state.
  - Special rules apply for places of public assembly.
- \*\* Pertinent Exceptions
  - Boilers and vessels under federal control.
  - Boilers and vessels in cities of over 500,000 population.
  - Ammonia vessels covered by the Illinois Fertilizer Act.
  - DOT vessels used for transportation of liquids or gases.
  - Vessels under 15 cu. ft. and 250 psig (not in a place of public assembly).
  - Vessels under 5 cu. ft. and 250 psig (located in a place of public assembly).
  - Vessels under 1.5 cu. ft. or 6 in. diameter at any pressure.
  - Vessels designed/operated at 15 psig or less.
  - Vessels used for water conditioning.
  - Vessels installed on railroad R.O.W. used in operating trains.
  - Boilers and pressure vessels located on farms and used solely for agricultural purposes.

## Equipment Requiring Maintenance Inspection

- \*\* Items Covered
  - Boilers and pressure vessels.
  - Exceptions are noted below.
- \*\* Frequency
  - Power boilers - annual internal and external (provisions to extend internal interval to 2 years).
  - Low pressure boilers - biennial internal and external.
  - Vessels:

ILLINOISSUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS  
(continued)

- ANSI/API 510 or NBIC rules may be used by qualified owner-users.
- triennial internal, external where conditions permit.
- Self-insured owner-users must have a written quality control system approved by the state.
- Owner-user must maintain inspection records and file an annual statement with state.
- Unsafe boilers or vessels must be reported to the state.
- Accidents which render boiler or vessel inoperable must be reported to the Chief Inspector.

## Pertinent Exceptions to Maintenance Inspection

- \*\* See under Construction requirements, above.

## Maintenance Inspector Qualifications

- \*\* Inspectors must have a state commission.
- \*\* Inspectors must pass state examination or hold a National Board commission or a commission from a state with reciprocity.
- \*\* Special rules apply to owner-user inspectors (see Sec. 120.1360 of the Rules and Regulations).

## Certificate of Inspection

- \*\* Unless exempted or covered by an owner-user inspection service, all boilers and vessels must have a valid inspection certificate.
- \*\* Boiler certificates may be extended 1 year by the Chief Inspector.

## Miscellaneous

- \*\* Qualified owner-user may use ANSI/API 510 rules for inspection, repair, alteration, or rerating of vessels.
- \*\* Owner-user inspector may perform acceptance inspections of repairs to boilers and vessels when such repairs have been made by his employer if his organization and procedures have been approved by the state.
- \*\* Allows owner-user to repair relief and safety valves if their organization and procedures have been approved by the state.
- \*\* Effective July 1, 1997, companies performing welded repairs to boilers and pressure vessels will be required to obtain a license. Companies that work on their own equipment will not be required to have this license.

ILLINOIS  
ANNUAL SUMMARY OF REGULATORY ACTION

Summary

Significant changes effective July 1993.

Pressure vessels subject to corrosion must have both internal and external certificate inspections every three years where conditions permit. The previous requirement had allowed internal inspections to be at the discretion of the Inspector. Owner-user has the option of using API-510 or the NBIC for setting inspection intervals.

Pressure vessels not subject to internal corrosion will also require a triennial certificate inspection if conditions permit. Owner-users have the option to use API-510 or the NBIC for setting inspection intervals.

All Inspectors, not just Special Inspectors, must report unsafe conditions found on boilers and pressure vessels to the Chief Inspector.

The Chief Inspector must be notified within 24 hours or on the next business day of any incident involving boilers or pressure vessels which rendered them inoperative.

Graduate chemists or engineers in the employ of the user are no longer required to supervise water treatment. This can now be handled by a qualified person.

As of August 15, 1995, own-user inspectors may perform acceptance inspections of alterations in addition to repairs to boilers and pressure vessels when such repairs/alterations have been made by his employer if his organization and procedures have been approved by the state.

ILLINOIS

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact

David A. Sykuta, Executive Director  
Illinois Petroleum Council  
P.O. Box 12047  
Springfield, IL 62791  
(217) 544-7404

Action or Support Team

Additional Information

INDIANAREGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	Indiana
Laws Involved	Indiana Boiler and Pressure Vessel Law Chapter 66 of Acts of General Assembly of 1987 (IC 22-12) Boiler and Pressure Vessel Rules and Regulations 1972 Edition, amended 1995
Chief Inspector	Anthony W. Meiring
Title and Department	Director/Chief Inspector Boiler and Pressure Vessel Division Government Center South 402 W. Washington Street, Room W246 Indianapolis, IN 46204 (317) 232-1921
State Department Responsible for Laws and Rules	Boiler and Pressure Vessel Rules Board of Department of Fire and Building Services
Boiler and Pressure Vessel Rules Board Membership (* indicates chairman)	100 Members: <ul style="list-style-type: none"> <li>- Public Utility Owner-User of Power Boilers and Pressure Vessels</li> <li>- Faculty, Engineering College</li> <li>- Iron and Steel Manufacturer Owner/User</li> <li>- Boilermaker</li> <li>- Boiler and Pressure Vessel Manufacturer</li> <li>- *Petroleum Refinery Owner-User of Pressure Vessels</li> <li>- Practical Steam Operator</li> <li>- Chemical Processing Owner-User of Pressure Vessels</li> <li>- General Owner-User of Pressure Vessels</li> <li>- Insurance Company Inspector</li> </ul>



INDIANA  
REGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS  
 (continued)

*Present Chairman:	James M. Lowes, Manager Chem. Eng. Tech. Eli Lilly & Company Lilly Corporate Center DC 4921 Indianapolis, IN 46285 (317) 276-2000
Board of Boiler Rules Secretary	Anthony W. Meiring, Chief Inspector Indiana Department of Fire and Building Services - Boiler and Pressure Vessel Safety Division Government Center South 402 W. Washington Street, Room W246 Indianapolis, IN 46204 (317) 232-1921
API Regulatory Action Team	William L. Gibson, Refinery Maintenance Manager C. Akan, Manager, WE&C J. Hutchins John J. Ardner, Engineer (Industry representative on board) E. W. Cannon, Manager, Reliability  Amoco Oil Company P.O. Box 710 Whiting, IN 46394-0710 (219) 473-7700
Industry Association Staff Contact	Maureen Ferguson, Executive Director Indiana Petroleum Council 714 Harrison Office Building 143 West Market Street Indianapolis, IN 46204 (317) 639-2588

INDIANASUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* ASME Code for Boilers and Pressure Vessels.
- \*\* Owner-User must file Manufacturer's Data Report with the National Board before installation.
- \*\* Exemptions:
  - Pressure vessels, other than nuclear vessels, operated entirely full of water or other liquid that the Rules Board specifically found to be not materially more hazardous than water, if the temperature of the vessel's contents does not 180°F.
  - Boilers and pressure vessels under federal regulation.
  - Pressure vessels meeting the requirements of the Department of Transportation for shipment of liquids or gases under pressure.
  - Pressure vessels that were installed before July 1, 1971, and that have a volume of:
    - 15 cu. ft. or less if located in a place other than a place of public assembly; and
    - 5 cu. ft. or less if located in a place of public assembly.
  - Pressure vessels, other than nuclear vessels, that were installed after June 30, 1971, and have a volume of:
    - 15 cu. ft. or less, if adequately protected by pressure relieving devices set to function at 300 psi. or less and located in a place other than a place of public assembly;
    - 5 cu. ft. or less if adequately protected by pressure relieving devices set to function at 250 lbs. psi. or less and located in a place of public assembly; or
    - 1 1/2 cu. ft. or less regardless of pressure or location.
  - Pressure vessels, other than nuclear vessels, protected by adequate pressure relieving devices set to function at not over 15 psi. gauge.
  - Pressure vessels containing liquefied petroleum gases and regulated by the commission.
- \*\* Regulated Pressure Vessels shall be stamped with a state serial number. Stamped identification tag affixed to the vessel in lieu of stamping the vessel, depending upon vessel thickness.

## Equipment Requiring Maintenance Inspection

- \*\* Power Boilers
  - One annual internal and external certificate inspection, operating certificates extended to 2 years with Board approval.
- \*\* Pressure Vessels and Steam Generating Equipment which is an Integral Part of a Continuous Processing Unit.
  - Certificate inspections per API RP 510, 1992 Edition except frequency shall not exceed five years, or three years where systematic corrosion data are not available.

INDIANA

SUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS  
(continued)

Pertinent Exemptions to Maintenance Inspection

- \*\* See above.

Maintenance Inspector Qualifications

- \*\* Inspectors employed by an Owner-User Inspection Agency and commissioned by Division are accepted.
- \*\* Applicants shall have a high school certificate and three years experience, minimum.

Certificate of Inspection

- \*\* Reports of certificate inspection must be filed on forms patterned after National Board forms.
- \*\* Inspection certificates are not required for boilers and vessels inspected by owner-user agency; however, inspection reports must be kept on file. Owner-user must file annual report of inspections performed in lieu of individual reports.

Miscellaneous

- \*\* API 510, 1992 Edition may be used as a standard for repair of pressure vessels at the option of the owner-user inspection agency.

INDIANA  
ANNUAL SUMMARY OF REGULATORY ACTION

Summary

INDIANA

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact(s)

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Action or Support Team

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Amoco Oil Company  
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Amoco Oil Company  
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Whiting, IN 46394-0710  
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E. W. Cannon  
Amoco Oil Company  
P.O. Box 710  
Whiting, IN 46394-0710  
(219) 473-3010

Additional Information

IOWA

REGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	Iowa
Laws Involved	Iowa Division of Labor, Chapter 89, Iowa Boiler Code. Working with 1989 ASME with December 1989 Addenda and NBIC of 1989.
Chief Inspector	Robert B. West
Title and Department	Chief, Boiler and Pressure Vessel Rules & Regulations Iowa Division of Labor Services 1000 E. Grand Avenue Des Moines, IA 50319-0209 (515) 281-5548
State Department Responsible for Laws and Rules	Iowa Division of Labor Byron Orton, Commissioner  John Gusman State Fire Marshall Office Wallace State Office Building Des Moines, IA 50319
Board of Boiler Rules Membership (* indicates chairman)	There is no Advisory Board at the present time. The last meeting was 1983.
API Regulatory Action Team	John Moles, Chairman Monsanto Company 1910 48th Street Fort Madison, IA 52627 (319) 376-5029  James Schilling Monsanto Company P.O. Box 473 Muscatine, IA 52761 (319) 263-0093, ext. 259

IOWA

REGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS  
(continued)

Industry Association Staff Contact

David A. Smitherman, Executive Director  
Iowa Petroleum Council  
1012 Fleming Building  
Des Moines, IA 50309  
(515) 288-8569

IOWASUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* Power boilers and unfired steam pressure vessels require ASME construction, inspection and stamp and the National Board Stamp. Power boilers must also comply with ASME CSD-1 (Controls and Safety Devices).
- \*\* Commissioner must be notified 10 days before installing boiler or unfired steam pressure vessel.
- \*\* Exemptions
  - Most railroad boilers.
  - Boilers under federal government jurisdiction.
  - Boilers used for agricultural purposes.
  - Heating boilers in residences.
  - Low pressure heating boilers except those in places of public assembly.
  - Exhibition boilers.
  - Antique hobby boilers no longer inspected.

## Equipment Requiring Maintenance Inspection

- \*\* All boilers and unfired steam pressure vessels except those exempted from above construction requirements and those exempted below.
- \*\* All boilers and unfired steam pressure vessels over 15 psi. operation require annual internal and external inspection.
- \*\* All low pressure heating boilers and unfired steam pressure vessels in places of public assembly and other steam appurtances require annual internal and external inspection.
- \*\* Boilers over 100,000 lbs./hr. capacity with Commissioner approved water treating facilities, records and supervision require biennial internal and external inspections.
- \*\* Steel hot water boilers require internal inspections every 6 years and annual operating external inspections.
- \*\* Internal inspections are not required for unfired steam pressure vessels without inspection plates; however, the vessels must be reported and approved by Commissioner.
- \*\* Special waivers granting 30-day extensions in the inspection intervals can be obtained from the state for just cause.

## Pertinent Exceptions to Maintenance Inspection

- \*\* Unfired steam pressure vessels are exempt from inspection, reporting and fees if following are not exceeded:
  - 5 cu. ft. and less than 250 psi.
  - 1.5 cu. ft. with no pressure limit.



IOWASUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

(continued)

## Maintenance Inspector Qualifications

- \*\* Must be a State Inspector or an Insurance Company Inspector with a State Commission (A National Board Commission is usually required).

## Certificate of Inspection

- \*\* After Insurance Inspector files inspection report and owner pays fee, a Certificate of Inspection (Certificate to Operate) will be issued by the state.

## Miscellaneous

- \*\* ANSI/API 510 is referenced in the Rules under Definitions; however, owner-user inspection organizations are not recognized and repairs must be made to NBIC, so there is essentially no application for ANSI/API 510 at this time.
- \*\* The Commissioner prescribes rules, investigates boiler explosions and keeps records of all steam boilers.
- \*\* Repairs and alterations by welding must be approved by an Inspector, per National Board Inspection Code, and accomplished by an ASME stamp, National Board "R" stamp, or a state-approved organization. The National Board Repair or Alteration form must be filed with the Commissioner.
- \*\* There are special rules developed for:
  - Old power boiler installations (before July 1, 1959).
  - Miniature boilers.
  - Steam heating, hot water heating and hot water supply boilers.
  - Water heater supply boilers.
- \*\* Owner-user must notify Commissioner of any boiler explosions.
- \*\* Power Boilers must have an ASME safety valve. No block valves allowed upstream or downstream of safety valves.

IOWA

ANNUAL SUMMARY OF REGULATORY ACTION

Summary

State of Iowa Boiler Code now is referencing the 1992 NBIC and 1992 ASME Boiler Code. As such, now the only companies that may make repairs or alterations to boilers or pressure vessels is a company that holds a National Board "R" certificate. ASME code stamp holders cannot make repairs or alterations under their ASME certificate.

As of September 1995, Iowa is using the 1992 ASME Boiler and Pressure vessel code with 1994 addenda, and the 1992 NBIC with 1994 addenda.

IOWA

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact

David Smitherman  
Iowa Petroleum Council  
1012 Fleming Building  
Des Moines, IA 50309  
(515) 288-8569

Action or Support Team

Additional Information

KANSASREGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	Kansas
Laws Involved	Boiler Safety Act, Article 19, Boiler Inspection, 44-913 to 44-930 adopted 1953 -- last revision 1977. Rules & Regulations 49-45-1 to 49-49-1 -- latest revision 1988.
Chief Inspector	Donald Jenkins
Title and Department	Chief Inspector Boiler Inspection Section Kansas Department of Human Resources 512 West 6th Topeka, KS 66603-3178 (913) 296-4379 Fax: (913) 296-1775
State Department Responsible for Laws and Rules	Kansas Department of Human Resources Labor-Management Relations & Employment Standards
Boiler Advisory Board (Inactive)	
Boiler Advisory Board Secretary	Minutes developed by Boiler Inspection Station.
API Regulatory Action Team	Ed Burnett, Chairman Inspection and Testing Supervisor Texaco Refinery P.O. Box 1121 El Dorado, KS 67042 (316) 321-2200, ext. 237
Industry Association Staff Contact	Kenneth W. Peterson, Executive Director Kansas Petroleum Council 800 S.W. Jackson, Suite 1005 Topeka, KS 66612 (913) 234-0589 Fax: (913) 235-6179

KANSASSUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* There is no law covering pressure vessels.
- \*\* Act does not apply to Boilers and Pressure Vessels located on oil and gas production sites [see 44-915(a)(4)] and to the inspection, reports and fees portion of the act when located in petroleum refineries using a regular inspection service to rate, inspect, and repair equipment per nationally recognized practices [see 44-915(b)(5)].
- \*\* Applicable ASME code design and construction - secretary can approve "special" designs and construction.
- \*\* National Board or "authorized" inspector must inspect new boilers during construction.
- \*\* Exemptions
  - Boilers under federal control.
  - Exhibition boilers.
  - Fire engine boilers.
  - Boilers and pressure vessels on remote oil and gas production sites (see above).
  - Small hot water supply boilers with National Board and ASME relief valves.

## Equipment Requiring Maintenance Inspection

- \*\* All boilers except those exempted above and the following:
  - Boilers used for agriculture/horticultural purposes.
  - Heating boilers located in residences of less than 6 families.
  - Steam boilers inspected by State agencies.
  - Boilers operated and inspected by interstate railroads.
  - Boilers in most refineries and gas plants [(see above and 44-915(b)(5))].
- \*\* Power boilers and high pressure/high temperature boilers require annual internal and external certificate inspection. With satisfactory water treatment and records program, the Secretary may extend internal inspection interval to 24 months with Insurance Inspectors agreement.
- \*\* Steam and hot water heating boilers require annual certificate external inspection and an internal inspection every 3 years.
- \*\* Nuclear boilers require inspections as Secretary designates.
- \*\* Hot water supply boilers require inspection every 3 years.
- \*\* Secretary may allow longer periods between inspection. A 90-day extension to an existing operating permit can be obtained with Insurance Inspectors agreement.

## Pertinent Exceptions to Maintenance Inspection

- \*\* See above. Essentially all oil and gas production sites and processing facilities [see 44-915(a)(4) and (b)(5)].

KANSASSUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS  
(continued)

## Maintenance Inspector Qualifications

- \*\* Must be State Inspector or an Insurance Inspector with a State Certificate of Competency.

## Certificate of Inspection

- \*\* A certificate Inspection Report must be filed within 30 days of inspection and fees paid after which an Inspection Certificate (Operating Permit) will be issued.

## Miscellaneous

- \*\* NFPA 8501, 8502, 8503, 8504, 8505, and 8506 are adopted for prevention of furnace explosions and the installation or operation of boilers, as applicable.
- \*\* Chief Inspector must be notified immediately of any boiler explosions.
- \*\* Secretary of Human Resources Department has authority to adopt Rules and Regulations.
- \*\* Major repairs must be made per NBIC by qualified welders and organizations, and must be approved in advance.
- \*\* Steam Separators must be designed for twice the operating pressure.
- \*\* All power piping beyond Section 1 jurisdiction must be per B 31.1.
- \*\* Inspector can require additional non-destructive test (x-rays, etc.) beyond Code.
- \*\* Inspector can shut down boiler if external inspection indicates a problem.
- \*\* Authorized Inspection Agencies only include State and Insurance Inspectors.
- \*\* Definition of "alteration" includes pressure vessels (Kansas has Boiler Act only) and non-physical changes (rating changes). The word "pressure vessel" is added to other sections of the proposed Rules and Regulations.
- \*\* The National Board "VR" safety valve repair program is invoked.
- \*\* Safety and safety relief valves must be repaired by an "authorized" manufacturer or repair shop.
- \*\* Steam cleaners and hot water power washers are added to the regulations.
- \*\* Boilers require National Board and State serial numbers.
- \*\* Factors of safety range from 4.5 to 8 for nonstandard boilers.
- \*\* Each boiler must have at least one ASME/NB approved safety valve.
- \*\* No block valve allowed under relief valves.

KANSAS

ANNUAL SUMMARY OF REGULATORY ACTION

Summary

No significant changes reported in 1996.

KANSAS

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact

Action or Support Team

Additional Information



KENTUCKYREGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	Kentucky
Laws Involved	Boiler and Pressure Vessel Safety Act, Kentucky Revised Statutes, Chapter 236.005-236.990. Effective July 15, 1980. Boilers and Pressure Vessels Regulations, Title 815, Chapter 15, KAR 15:010-15:070. Effective 1980.
	NOTE: Boilers and Pressure Vessels in oil refineries are exempt from KRS 236.005 to 236.150.
Chief Inspector	Roger A. Coomes
Title and Department	Chief Boiler Inspector Department of Housing, Buildings, and Construction Boiler Inspection Section The 127 Building 1047 U.S. 127 South, Suite #1 Frankfort, KY 40601-4337 (502) 564-3626
State Department Responsible for Laws and Rules	Department of Housing, Buildings, and Construction. Commissioner of this Department, upon advisement of Board of Boiler and Pressure Vessel Rules is empowered to make, alter, or amend Rules and Regulations.
Board of Boiler and Pressure Vessel Rules Membership (* indicates chairman)	7 Members: - *Chief Boiler Inspector - Operating engineer or owner-user representative - Kentucky boiler and pressure vessel manufacturer representative - Boiler insurance representative: Donald E. McIntyre - Representative of pipe erecting concern: Robert L. Mueller - Boilermaker representative - Metallurgist, welder or representing welding industry
Board of Boiler Rules Secretary	Position deleted.

KENTUCKY

REGULATORY CONTACT INFORMATION

BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

(continued)

API Regulatory Action Team

Dick Adkins, Director of Engineering  
Ashland Petroleum Company  
P.O. Box 391  
Ashland, KY 41104  
(606) 327-6840

Industry Association Staff Contact

Steve Wilborn, Executive Director  
Kentucky Petroleum Council  
403 State National Bank Building  
305 Ann Street  
Frankfort, KY 40601  
(502) 875-3742

KENTUCKYSUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* ASME code. Updated about every 4 years.
- \*\* Boilers and pressure vessels located at oil refineries are exempt from Rules for Construction and Stamping.

## Equipment Requiring Maintenance Inspection

- \*\* Refinery boilers and pressure vessels are exempt.
- \*\* Power Boilers
  - Annual internal and external.
- \*\* Low Pressure Boilers.
  - Internal and external biennial.
- \*\* Pressure vessels
  - Not required for maintenance, only new installations.

## Pertinent Exceptions to Maintenance Inspection

- \*\* Statutes KRS 236.005 to 236.150 do not apply to boilers and pressure vessels in oil refineries.

## Maintenance Inspector Qualifications

- \*\* Refinery inspectors exempt.

## Certificate of Inspection

- \*\* Boilers and pressure vessels in oil refineries are exempt.
- \*\* Power boiler - annual (2-month grace period).
- \*\* Low pressure boilers - biennial (2-month grace period).

## Miscellaneous

- \*\* A license from the Commissioner or the Chief Boiler Inspector on recommendation of the Board, is required to install, erect, or repair boilers and piping. A permit to install or for major repairs to boilers and pressure vessels is also required from the Department.

KENTUCKY  
ANNUAL SUMMARY OF REGULATORY ACTION

Summary

No amendments to the Boiler Regulations have been enacted since the 1991 report. The Department of Housing, Buildings and Construction is preparing to submit new and amended regulations in the future which will reorganize and clarify Chapter 15 of Title 815 of the Kentucky Administrative Regulations. The Department will propose a statutory change to KRS 236.120 in the 1994 legislative session to permanently increase the fee for certificate inspections from \$5 to \$15.

KENTUCKY

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact	Office of the State Fire Marshal Hazardous Materials Section 1047 US Hwy 127 South, Suite 1 Frankfort, KY 40601-4337
Action or Support Team	Hazardous Materials Response Team (502) 564-3626
Additional Information	NFPAs 30 & 30A

LOUISIANAREGULATORY CONTACT INFORMATIONBOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	Louisiana
Laws Involved	Boiler Inspection Law and Rules and Regulations (under authority of Title 23, Chapter 5, Part III Louisiana revised statutes) of 1950. Latest publication April 1986.
Chief Inspector	Robert Cate
Title and Department	Chief Inspector, Boiler Inspection Section Office of State Fire Marshal 5150 Florida Boulevard Baton Rouge, LA 70806 (504) 925-4911
State Department Responsible for Laws and Rules	V.J. Bella, State Fire Marshal Department of Public Safety and Corrections Office of State Fire Marshal 5150 Florida Boulevard Baton Rouge, LA 70896
Board of Boiler Rules Membership	Abolished on March 20, 1996

LOUISIANASUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* There is no law covering pressure vessels, and boiler regulations only cover direct fired water/steam units.
- \*\* New boiler installations require ASME construction and stamping, Louisiana serial numbers and inspection by a commissioned inspector.
- \*\* Provisions are available for "Louisiana Special."
- \*\* Exemptions or modifications of rules can be granted by Fire Marshal.
- \*\* Potable water boilers exempted by ASME Section IV must be per Underwriters Laboratory recognized standard.
- \*\* Exemptions
  - Boilers under federal control.
  - Portable agricultural boilers.
  - Steam heating boilers 15 psi. or less.
  - Non-commercial hot water boiler in private homes.
  - Boilers in New Orleans.
  - Commercial portable water boilers of 50 gallons capacity or less.
- \*\* On August 15, 1995, Act 43 took effect which allows extension of boiler internal inspection intervals to 5 years for those power boilers "...the operation of which is an integral part or necessary adjunct to other continuous operations..."

## Equipment Requiring Maintenance Inspection

- \*\* All boilers except those exempted from above construction requirements.
- \*\* Filing of inspection reports with state are required after internal inspection.
- \*\* High pressure and power boilers require an annual internal inspection. This internal inspection can be extended to 2 years by Fire Marshal with acceptable continuous water treatment. External certificate inspections are required midway between internal inspections.
- \*\* Low pressure, hot water and portable water boilers require a biennial inspection.

## Pertinent Exceptions to Maintenance Inspection

- \*\* All boilers exempted from above construction requirements.

## Maintenance Inspector Qualifications

- \*\* Must be an Authorized Inspector commissioned by the state or the National Board.

LOUISIANA

SUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

(continued)

Certificate of Inspection

- \*\* Certificate of Inspection (Operating Permit) is issued, withheld or revoked after an external inspection which is required midway between internal inspections.

Miscellaneous

- \*\* Fire Marshal promulgates Rules and Regulations.
- \*\* Any proposed regulations must be published at least ten days before public hearing is held.
- \*\* Each boiler must have an ASME certified safety valve.
- \*\* Safety valves must be repaired, tested, set, and sealed by the manufacturer or an authorized repair shop (holder of a National Board "VR" stamp or State Certificate).
- \*\* Each automatically fired steam boiler must have an automatic low-water fuel cut-off.



LOUISIANA  
ANNUAL SUMMARY OF REGULATORY ACTION

Summary

No significant changes to report in 1996.

Legislation extending inspection period for certain boilers passed in 1995.

LOUISIANA

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact

Action or Support Team

Additional Information

MAINEREGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	Maine
Laws Involved	Boiler Rules, Revised Boiler Law Subchapter II 1983 Section 173, Title 26, as amended 1989.
Chief Inspector	Position Vacant - to be filled shortly
Title and Department	Chief Inspector and Director of Division of Boiler Inspection 62 State House Station Augusta, ME 04333-0062 (207) 624-8603
State Department Responsible for Laws and Rules	Alan Hinsey, Director Bureau of Labor Standards Division of Boiler Inspection State Office Building, Station 45 Augusta, ME 04333 (207) 624-6420
Board of Boiler Rules Membership (* indicates chairman)	7 Members: <ul style="list-style-type: none"> <li>- 1 representative of boiler owners-users</li> <li>- 1 representative of boiler manufacturers</li> <li>- 1 representative of operating, steam engineers</li> <li>- 1 representative of a boiler inspection and insurance company</li> <li>- 1 representative of boiler operators</li> <li>- 1 representative of boiler makers</li> <li>- 1 representative of the public</li> </ul>
*chair will be elected by membership	
Board of Boiler Rules Secretary	The Chief Inspector acts as Secretary of the Board
API Regulatory Action Team	Contact Industry Association representative below
Industry Association Staff Contact	Patricia W. Aho, Executive Director Maine Petroleum Association 45 Memorial Circle Augusta, ME 04330 (207) 622-5881

MAINESUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* Boilers
  - ASME Code Section I, III, IV ANSI B31.1.
- \*\* Pressure Vessels
  - ASME Code Section VIII(1) and (2), X, and XI. Boilers and pressure vessels must be stamped with state registration number.

## Equipment Requiring Maintenance Inspection

- \*\* High Pressure Boilers
  - Annual internal, and external 6 months later.
- \*\* Low Pressure, Steam, Hot Water Heating Boilers, Hot Water Supply Boilers.
  - Internal every third year, external under operation 6 months later. External or internal during intervening 2 years at discretion of inspector only in schools and for boilers owned by municipalities.

## Pertinent Exceptions to Maintenance Inspection

- \*\* Pressure vessels in general do not require inspection.

## Maintenance Inspector Qualifications

- \*\* Boiler inspections must be made by an inspector commissioned by the state.

## Certificate of Inspection

- \*\* For boilers only.
- \*\* Reports of internal inspections must be filed with the Department within 30 days after inspection. A certificate of inspection, valid for 14 months, is issued by the Department.

## Miscellaneous

- \*\* Rules provide for licensed engineers and operators for non-exempt power, process and heating installation.
- \*\* All Safety and Safety relief valve repairs shall be by an organization with an ASME "V" or "UV" Certificate of Authorization or National Board "VR" Certificate of Authorization.
- \*\* National Board Rules (Chapter III) for Repair and Alteration to Boilers and Pressure Vessels have been adopted.
- \*\* Welders must be certified or be welding to the procedures of a company holding a National Board "R" stamp.

MAINE

ANNUAL SUMMARY OF REGULATORY ACTION

Summary

1996 legislation moves the enforcement of boiler regulation from the Department of Labor, Bureau of Labor Standards to the Department of Professional and Financial Regulation as of October 1, 1996.

MAINE

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact

Action or Support Team

Additional Information

MARYLANDREGULATORY CONTACT INFORMATIONBOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	Maryland
Laws Involved	Boiler and Pressure Vessel Safety Act Article 48, Sections 167-180A Rules and Regulations of Board of Boiler Rules 09.12.01 (1975)
Chief Inspector	Myron H. Diehl, Jr.
Title and Department	Chief Boiler Inspector, Boiler Inspection Unit Labor and Industry Department of Licensing and Regulations 501 St. Paul Place Baltimore, MD 21202 (410) 333-4161 Fax: (410) 333-0663
State Department Responsible for Laws and Rules	Board of Boiler Rules, Division of Labor and Industry, Department of Licensing and Regulations
Board of Boiler Rules Membership (* indicates chairman)	<p>8 Members:</p> <ul style="list-style-type: none"> <li>- 1 representative, owners/users of power boilers</li> <li>- 1 representative, owners/users of heating boilers</li> <li>- 1 representative, owners/users of pressure vessels</li> <li>- 1 representative of manufacturers or assemblers of boilers or pressure vessels</li> <li>- 1 representative of an insurance company insuring boilers or pressure vessels</li> <li>- *a mechanical engineer on the faculty of a recognized engineering college within the State (Dr. Dirse Sallet)</li> <li>- a licensed professional engineer having boiler or pressure vessel experience (Louis Kohler)</li> <li>- 1 representative of public</li> <li>- Commissioner of Labor and Industry (ex-officio)</li> </ul>
Board of Boiler Rules Secretary	Carolyn West, Administrator Labor and Industry 501 St. Paul Place Baltimore, MD 21202-2272 (410) 333-4184 Fax: (410) 333-1771

MARYLAND

REGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS  
(continued)

API Regulatory Action Team

Contact Industry Association  
Representative below.

Industry Association Staff Contact

Drew P. Cobbs, Executive Director  
Maryland Petroleum Council  
60 West Street, Suite 403  
Annapolis, MD 21401  
(410) 269-1850  
Fax: (410) 269-8830



MARYLAND

SUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* ASME Code with National Board Stamping.
- \*\* Manufacturers must file Data Report with Department through National Board.
- \*\* Exception
  - Pressure vessels not exceeding 15 psi. working pressure.
- \*\* CSD-1 (Burner Controls) B 31.1 (Power Piping) B 31.3 (Chemical/Petroleum Piping)

Equipment Requiring Maintenance Inspection

- \*\* Power Boilers
  - Internal certificate inspection annually, external annually under pressure.
- \*\* Low Pressure Boilers (internal where possible)
  - Biennially.
- \*\* Inspection interval may be extended to 2 years for power boilers conforming to water treatment requirements, with Boiler Board approval.
- \*\* Pressure Vessels
  - Certificate inspection biennially.

Pertinent Exceptions to Maintenance Inspection

- \*\* Pressure vessels containing only water under pressure for domestic supply purposes when located in private residences or apartment house of less than 6 units.
- \*\* Pressure vessel less than 15 psi.
- \*\* A/C or refrigeration condensers or evaporators using Halocarbon refrigerants built to ANSI/ASHRAE #15; if less than 300 psig and less than 210°F.

Maintenance Inspector Qualifications

- \*\* Inspector employed by companies operating pressure vessels may be issued commissions as special inspectors upon passing an examination, as specified in Section 174 of the Maryland Boiler and Pressure Vessel Safety Act. (Currently National Board Exam)
- \*\* Reciprocal commissions recognized.
- \*\* National Board Commission required for reciprocal recognition.

Certificate of Inspection

- \*\* Reports of inspection must be filed within 30 days. The chief inspector shall issue to the owner or user an Inspection Certificate specifying the maximum pressure which the boiler or pressure vessel may be allowed to carry.

MARYLAND

SUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS  
(continued)

Miscellaneous

\*\* All repairs must be made by "R" symbol holder(s) or ASME certificate holder.

MARYLAND  
ANNUAL SUMMARY OF REGULATORY ACTION

Summary

Adopted CSD-1, B 3.1 and B 31.3 in 1992.

MARYLAND

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact	<p>Greg Sonberg, Division Chief          Permits &amp; Support Division          Maryland Department of the Environment          2500 Broening Highway          Baltimore, MD 21224-6612          (410) 631-3443          Fax: (410) 631-3092</p>
Action or Support Team	<p>Don Schroder          Maryland Petroleum Council          AST Subcommittee          60 West Street, #403          Annapolis, MD 21401          (410) 269-1850          Fax: (410) 269-8830</p>
Additional Information	<p>As of September 1996, AST Draft Regulations now in the process.</p>

MASSACHUSETTSREGULATORY CONTACT INFORMATIONBOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	Massachusetts
Laws Involved	Chapter 146, Public Safety & Good Order (1953) Amendments, latest June 1985 522 CMR 1.00-14.00 Board of Boiler Rules, Code of Massachusetts Regulations (1981)
Chief Inspector	John McCabe
Title and Department	Supervising District Engineering Inspector 1 Ashburton Place, Room 1301 Boston, Massachusetts 02108-1618
Phone	(617) 727-3200, ext. 619
State Department Responsible for Laws and Rules	Department of Public Safety Board of Boiler Rules Winthrop Farwell, Commissioner of Public Safety
Board of Boiler Rules Membership (* indicates chairman)	<ul style="list-style-type: none"> <li>- *Supervising District Engineering Inspector</li> <li>- Boiler User</li> <li>- Boiler Insurance Company</li> <li>- Boiler Manufacturer</li> <li>- Operating Engineer</li> </ul>
Board of Boiler Rules Secretary	Georg Bindit, Administrative Secretary
API Regulatory Action Team	Contact Industry Association representative below.
Industry Association Staff Contact	Frank M. Tivnan, Executive Director John Quinn, Associate Director *Steven S. Guveyan, Associate Director Massachusetts Petroleum Council 11 Beacon Street, Suite 415 Boston, MA 02108 (617) 227-4227
*Primary Contact	

MASSACHUSETTSSUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* Boilers
  - ASME Code, Section I, III, and IV.
- \*\* Air Tanks
  - ASME Section VIII.
- \*\* Fiberglass Reinforced Plastic Pressure Vessels
  - ASME Section X.
- \*\* Refrigerant-Containing Pressure Vessels
  - ASME Section VIII.
- \*\* Other Pressure Vessels not regulated.

## Equipment Requiring Maintenance Inspection

- \*\* Power, Process or Steam Heating Boilers
  - Annual, internal and external when operating 6 months later.
- \*\* Hot Water Heating Boilers
  - Internal every 3 years, annual external.
- \*\* Air Tanks
  - Internal every 2 years.
- \*\* Refrigeration and Air Conditioning Systems
  - One annual inspection.

## Pertinent Exceptions to Maintenance Inspection

- \*\* Boilers less than 3 hp, air tanks less than 50 psi., refrigeration and air conditioning systems less than 20 tons capacity.

## Maintenance Inspector Qualifications

- \*\* Certificate of competency based on examination as to construction, installation, maintenance, and repair of steam boilers.

## Certificate of Inspection

- \*\* A Certificate of Inspection, valid for 1 year for Boilers, Refrigeration and Air Conditioning Systems, and for 2 years for air tanks, is issued by the Inspector.

MASSACHUSETTSSUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

(continued)

## Miscellaneous

- \*\* Inspection of boilers shall be made by the Division or by Inspectors of Insurance companies. Shop inspections outside Massachusetts shall be by inspectors holding a National Board Commission.
- \*\* Stamping
  - All Boilers and Pressure Vessels covered by Chap. 146 used in Massachusetts must have either the "Massachusetts Standard" stamping or ASME and National Board stamping and registration.
- \*\* Licensing
  - A Massachusetts license is required for Engineers and Firemen who operate boilers and steam plants based on a practical examination and experience.
- \*\* Licenses are also required for Pipefitting, Sprinkler Fitters and Refrigeration Technicians, and Nuclear Power Plant Operators and Engineers.
- \*\* An Insurance Inspector holding a National Board Commission is required to take the examination for the Massachusetts Certificate of Competency.

MASSACHUSETTS  
ANNUAL SUMMARY OF REGULATORY ACTION

Summary

Rules reprinted in 1993; no significant changes.



MASSACHUSETTS

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact	Steven S. Guveyan, Associate Director Massachusetts Petroleum Council 11 Beacon St., Suite 415 Boston, MA 02108 (617) 227-4227
Action or Support Team	Dan Horton Mobil Oil Corp. 3225 Gallows Road, Rm. 7W005 Fairfax, VA 22037 (703) 849-3331
Additional Information	See 527 CMR 9.00 which combines the AST and UST codes. AST portion was amended in July 1993.

MICHIGANREGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	Michigan
Laws Involved	Boiler Act 290 of 1965, amended 1985 General Rules, 1995
Chief Inspector	Robert J. Aben, Jr.
Title and Department	Chief Inspector Boiler Division Department of Consumer and Industry Services Bureau of Construction Codes State Secondary Complex 7150 Harris Drive Lansing, MI 48909 (517) 322-1836 Fax: (517) 322-1267
State Department Responsible for Laws and Rules	Bureau of Construction Codes Department of Consumer and Industry Services
Board of Boiler Rules Membership (* indicates chairman)	11 Members: - *Frank Gregor - Joseph P. Day, Vice Chairman - 1 Representative of general public - 2 Owners-users of boilers - 2 From organized labor engaged in boiler work or operation - Water tube boiler manufacturer - Fire tube boiler manufacturer - Boiler insurance company - Boiler mechanical contractor - Boiler repair contractor - Consulting boiler engineer
Board of Boiler Rules Secretary	Joseph Casalia

MICHIGAN

REGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS  
(continued)

API Regulatory Action Team

Roger Campbell, Chief Engineer  
Marathon Petroleum Company  
1300 South Fort Street  
Detroit, MI 48217  
(313) 843-9100

Industry Association Staff Contact

John P. Kerekes, Executive Director  
Associated Petroleum Industries of Michigan  
P.O. Box 10070  
Lansing, MI 48901  
(517) 372-7455  
Fax: (517) 372-1268

MICHIGANSUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* Boilers and Piping
  - Shall be constructed per ASME code and registered with the National Board.
- \*\* Pressure Vessels
  - Not regulated.
- \*\* Boiler blowoff tanks and separators shall be constructed per ASME Section VIII and registered with the National Board.

## Equipment Requiring Maintenance Inspection

- \*\* Power boilers, process boilers, high pressure-high temperature water boilers shall have certificate inspection annually and shall be externally inspected annually under pressure within 6 months of internal inspection.

## Pertinent Exceptions to Maintenance Inspection

- \*\* See above.

## Maintenance Inspector Qualifications

- \*\* Deputy Inspectors
  - 5 years experience, passing examination.
- \*\* Special Inspectors
  - Insurance companies, cities, or owners-users of boilers by examination.

## Certificate of Inspection

- \*\* Inspection report to be filed within 30 days of inspection on Division forms. Report of external inspection not required unless dangerous condition disclosed. Certificate shall be posted in boiler room.

## Miscellaneous

- \*\* Detroit is exempt from State Boiler Code and have their own Rules.
- \*\* Cities of Detroit and Dearborn have regulations requiring pressure vessels to be constructed per ASME Section VIII. Internal Inspections are required annually in Dearborn, biennial in Detroit, but extensions are granted.
- \*\* Reciprocal commissions are available to inspectors with National Board or other State Commissions.

MICHIGAN

ANNUAL SUMMARY OF REGULATORY ACTION

Summary Rules approved by legislature in 1995 to adopt CSD I, ASME and to require all non boiler external pipes to be installed and repaired by licensees.

MICHIGAN  
ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact

John Kerekes, Executive Director  
Associated Petroleum Industries of Michigan  
P.O. Box 10070  
Lansing, MI 48901  
(517) 372-7455  
Fax: (517) 372-1268

Action or Support Team

Additional Information

Regulations administered by Michigan State Police,  
Hazardous Materials Division, (517) 322-1658.

5,472 Active ASTs  
1,066 registered facilities

Regulated under Flammable/Combustible Materials Code; adopted  
NFPA 30, 30A, 31, 395; plus miscellaneous API recommended  
practices.

MINNESOTAREGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL AND PIPING RULES AND REGULATIONS

Name of State	Minnesota
Laws Involved	Minnesota Statutes 183.375 to 183.62 Minnesota Boilers, Pressure Vessels and Boats Rules 5225.010 to 5225.9000
	Department of Labor and Industry <sup>1</sup> to supervise high pressure piping Section 326.46 to 326.521 - Steam Fitters Rules and Code for Power Piping Systems, 5230.0010 to 5230.1270

<sup>1</sup>Separate operating unit with separate Chief Inspector.

Chief Inspector (a)	James P. Larson
Title and Department	Chief Inspector, Boiler Division, Code Administration and Inspection Services Department of Labor and Industry 443 Lafayette Road St. Paul, MN 55155-4304 (612) 296-1098

(b)	Ruben Besonen
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Title and Department	Chief Inspector, High Pressure Piping Code Administration and Inspection Services Department of Labor and Industry 443 Lafayette Road St. Paul, MN 55155-4304 (612) 296-4529
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State Department Responsible for Laws and Rules	Department of Labor and Industry Gary Bastian, Commissioner (612) 296-2342
	Code Administration and Inspection Services Charles Curren, Director <sup>2</sup> (612)297-2540

MINNESOTA  
REGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS  
(continued)

Department of Labor and Industry  
443 Lafayette Road  
St. Paul, MN 55155-4304

<sup>2</sup>Includes High Pressure Piping and Boiler Divisions.

Board of Boiler Rules Membership  
(\* indicates co-chairman)

Code Enforcement Advisory Council

James Dowell - Contractor  
\*Charles Fritze - PF Crafts  
Donald C. Getschel - Contractor  
David Zitzmann - PF Contractor  
David H. Grong - Contractor  
Aaron Toltzman - Insurance Inspector  
Jeff Ricker - User Inspector  
James O'Gary - Operating Engineers  
David Green - PF Crafts  
\*Steve Pettersen - PF Crafts  
Greg Rosier - Contractor

Charles Lemke - PF Contractor  
Route #1, Box 3  
Glencoe, MN 55336  
(612) 864-3816

Board of Boiler Rules Secretary

Code Advisory Council Secretary

Code Administration and Inspection Services  
Department of Labor and Industry  
(612) 297-2540

API Regulatory Action Team

Mark W. Colchin, Chairman  
Mechanical Engineering Manager  
Koch Refining Company  
P.O. Box 64596  
St. Paul, MN 55164  
(612) 437-0700



MINNESOTA

REGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS  
(continued)

H. Anthony "Tony" Raiche, Director of Engineering  
Ashland Petroleum Company  
P.O. Box 391  
Ashland, KY 41104  
(606) 329-3333

Industry Association Staff Contact

Darrel D. Bunge, Executive Director  
Minnesota Petroleum Council  
350 Saint Peter Street, Suite 1025  
St. Paul, MN 55102  
(612) 227-8841

MINNESOTASUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* Applicable ASME Codes
- \*\* Manufacturer's data report must be filed with state.
- \*\* ASME, National Board or Minnesota special stamp required.
- \*\* Shop inspections by authorized inspector with National Board Commission required.
- \*\* Exemptions
  - Boilers in residences with less than 5 families.
  - Railroad locomotives and air tanks on railroad right-of-way.
  - Boilers and pressure vessels (B&PV) under federal control.
  - PVs not exceeding 15 psig. internal or external pressure.
  - Air PVs less than 5 cu. ft. volume with ASME relief valve set at 100 psig. maximum.
  - PVs less than 6" inside diameter.
  - Water PVs less than 120 gallons capacity.
  - B&PVs on farms.
  - Liquid petroleum gas cylinders and tanks.
  - Unfired PVs in petroleum refineries.
  - Air tanks on transport vehicles.
  - Hot water and other hot liquid heating boilers less than 750,000 Btu/hr.
  - Hot water supply boilers less than 500,000 Btu/hr., 210°F, 120 gallons, or 160 psig.
  - Dry cleaning and laundry pressers less than 5 cu. ft. of steam volume.
  - Pressure vessels operated full of water or other liquid not materially more hazardous than water if the contents do not exceed 140°F or 200 psi.

## Equipment Requiring Maintenance Inspection

- \*\* All B&PVs except those exempted from above construction requirements.
- \*\* Boilers require internal and external inspection before initial operation and annually thereafter; however,
- \*\* Boilers of 200,000 lb./hr. or more capacity, with an internal continuous water treatment must be inspected at least once every 24 months internally and externally while not under pressure, and at least once every 18 months externally while under pressure.
- \*\* If substantial deficiencies are found, inspections may be required every 12 months.
- \*\* Unfired PVs require biennial inspection.

## Pertinent Exceptions to Maintenance Inspection

- \*\* Unfired PVs in petroleum refineries and other equipment exempted from above construction requirements.

MINNESOTASUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

(continued)

## Maintenance Inspector Qualifications

- \*\* Must be a State Inspector with a Chief Engineer's license and a National Board Certificate of Competency or an insurance inspector with a National Board Commission and a State of Minnesota Certificate of Competency. Shop Inspectors must have a National Board Commission, with appropriate endorsement.

## Certificate of Inspection

- \*\* After a satisfactory inspection and payment of fees, a safety certificate (operating permit) or exemption certificate will be issued by the State.

## Miscellaneous

- \*\* Boiler, steam engine and turbine operators must pass written exam and obtain operator's license. Renewal fees must be paid annually.
- \*\* Operator licenses are not required for hot water supply boilers or steam generators that are under 100,000 Btu/hr., 25 KW., 2.5 H.P. or under 15 psig., as well as, for electric boilers under 50 psig., 30 KW., or 3 H.P., but these electric boilers must be inspected like PVs.
- \*\* The National Board Inspection Code contains the recommended rules for repair of Power B&PVs; it must be used for riveting and welding repairs. All welded repairs must be reported to Inspector.
- \*\* The Division of Boiler Inspection makes the rules for the inspection and operation of B&PVs. The Commissioner sets all fees.
- \*\* The Inspector can shut down any B or PV he thinks unsafe.
- \*\* High pressure boiler (over 15 psig.) operators of units over 200 H.P. cannot leave the plant for more than 30 minutes or be more than 500 ft. away without adequate replacement.
- \*\* Automatically fired boilers must have low-water fuel cut-off.
- \*\* Minnesota also has a Law and Rules for High Pressure Piping regulated by Statutes 326.46 through 326.521 and Steamfitter Rules and Code for Power Piping Systems covered by 5230.0010 through 5230.1270. High Pressure Piping is defined as steam heating boiler piping over 15 psig.; hot water heating boiler piping over 30 psig. and 250°F; and high pressure ammonia piping<sup>3</sup>.
- \*\* Pipefitters and contractors installing these systems must be licensed and the piping must meet Minnesota Code of Minimum Standards. ASME B 31.1, B16 series and Section I are reference documents as is National Board Inspection Code (ANSI NB-23).

<sup>3</sup>Interpreted to apply to refrigeration and process systems only.

MINNESOTA

ANNUAL SUMMARY OF REGULATORY ACTION

Summary

No significant activity to be reported for 1996.

MINNESOTA

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact

Action or Support Team

Additional Information

MISSISSIPPIREGULATORY CONTACT INFORMATIONBOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	Mississippi
Laws Involved	Boiler and Pressure Vessel Safety Act and Rules and Regulations
Chief Inspector	Henry T. McEwen
Title and Department	Director Boiler & Pressure Vessel Safety Branch Chief Inspector Mississippi State Department of Health P.O. Box 1700 2423 North State Street, Room 234 Jackson, MS 39215-1700 (601) 960-7917
State Department Responsible for Laws and Rules	Mississippi State Department of Health Bureau of Environmental Health Boiler and Pressure Vessel Safety Branch P.O. Box 1700 Jackson, MS 39125-1700
Board of Boiler Rules Membership (* indicates chairman)	Technical Advisory Committee  Vacant- a manufacturer of boilers and pressure vessels Dr. C. T. Carley, P.E. - a mechanical engineer on faculty of engineering school Jimmy Eldridge, P.E. - a representative of engineering firm designing boilers and pressure vessels *John Sneed - insurance representative  Three owners representing the following:  Power Boiler Representative Randall Richardson Mississippi Power & Light P.O. Box 4079 Gulfport, MS 39502 (601) 865-5901

MISSISSIPPI  
REGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS  
 (continued)

Boiler & Pressure Vessel Manufacturer  
 Earl L. Sanders  
 Mississippi Tank Co.  
 P.O. Box 1391  
 Hattiesburg, MS 39403-1391  
 (601) 264-1800

Chemical Industry Representative  
 Mr. Charles McMahan, P.E.  
 Hercules, Inc.  
 Route 1, Box 664  
 Hattiesburg, MS 39401  
 (601) 545-3450

Board of Boiler Rules Secretary

Henry T. McEwen

API Regulatory Action Team

G. L. "Gary" Sampson  
 Chairman  
 Manager Designs Engineer  
 Chevron Refinery  
 P.O. Box 1300  
 Pascagoula, MS 39567  
 (601) 938-4600

Industry Association Staff Contact

Joseph K. Sims, President  
 Mid-Continent Oil & Gas Association  
 Mississippi-Alabama Division  
 188 East Capitol Street  
 Suite 805  
 Jackson, MS 39201  
 (601) 948-8903

MISSISSIPPISUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* New boiler and pressure vessels require-ASME code design, construction, inspection, and stamping.
  - National Board, Mississippi stamping and Mississippi serial number may be used in addition to ASME stamping.
  - Inspection by authorized inspector.
  - Filing of manufacturing data report with state.
- \*\* Non-code design (Mississippi special) needs state approval.
- \*\* ASME data reports for boiler external pressure piping must be filed with Chief Inspector.
- \*\* Safety and pressure relief valves must comply with ASME codes Section I and VIII respectively.
- \*\* No block valves allowed under boiler safety valves except as provided by applicable sections of ASME codes.
- \*\* UL symbol required on electrically heated boilers, pressure vessels and water heaters.
- \*\* Unattended steam boilers and automatically fired hot water heating boilers greater than 400,000 Btu/hr. must have automatic low-water fuel cut-off.
- \*\* Exemptions or modifications of rules can be granted by State Department of Health.
- \*\* Exemptions
  - Boilers and pressure vessels under federal control.
  - Air tanks on vehicles.
  - Pressure vessels not exceeding:
    - 5 cu. ft. and 250 psig.
    - 1 1/2 cu. ft. and 600 psig.
    - 6 in. I.D. and no pressure limit
    - 15 psig.
    - 120 gals.
  - Heating boilers and domestic water vessels in houses with less than 6 family units are exempt from maintenance inspection requirements.
  - "Boilers and pressure vessels used in connection with the production, treating, processing, storage or transportation of oil or natural gas, when located in areas which are remote from places of human habitation or public congregation." The jurisdiction considers "remote" as being "well head" site only.

## Equipment Requiring Maintenance Inspected

- \*\* All boilers and pressure vessels except those exempted from above construction requirements.
- \*\* High pressure/high temperature and power boilers require annual internal and external inspection.



MISSISSIPPISUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS  
(continued)

- \*\* Heating boilers require biennial inspection.
- \*\* Pressure vessels subject to corrosion require biennial inspection.
- \*\* Pressure vessels not subject to corrosion also require biennial inspection, but it does not have to be internal, if noncorrosiveness is approved by state.
- \* Board can extend inspection cycles and modify inspection requirements.

## Pertinent Exceptions to Maintenance Inspection

- \*\* All boilers and pressure vessels that are exempted from above construction requirements.

## Maintenance Inspector Qualifications

- \*\* Must be licensed by the state as deputy inspectors, insurance inspectors or owner-user inspectors. Owner-user inspectors must pass written examination to obtain license.

## Certificate of Inspection

- \*\* Deputy and insurance inspectors must file report with Chief Inspector and pay fees, after which an inspection certificate (operating permit) will be issued.
- \*\* Qualified owner-user inspection organizations must file annually stating number of vessels inspected and paying filing fee. Inspection records must be kept and are subject to audit by state.

## Miscellaneous

- \*\* Rules and Regulations developed by Advisory Committee are subject to public review. After State Department of Health approval, it becomes law.
- \*\* Chief Inspector shall be notified of any accidents concerning boilers or pressure vessels and of any welding on this equipment.
- \*\* Vessels cannot be rerated for a maximum allowable working pressure greater than nameplate stamping without state approval.

MISSISSIPPI  
ANNUAL SUMMARY OF REGULATORY ACTION

Summary

There was no regulatory action in 1996.

MISSISSIPPI

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact

Action or Support Team

Additional Information

MISSOURI  
REGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	Missouri
Laws Involved	Boiler and Pressure Vessel Act Sections 650.200 to 650.295, Passed April 1984, amended May 1990 Boiler and Pressure Vessel Safety Rules 11CSR40-2.010 to 11CSR40-2.060 effective date November 12, 1986, September 14, 1991, April 1, 1996
Chief Inspector	Darryl K. Peetz
Title and Department	Chief Inspector Department of Public Safety Division of Fire Safety 1709 Industrial Drive Jefferson City, MO 65109 (573) 751-8708 or (800) 877-5688 Fax: (573) 751-1744
State Department Responsible for Laws and Rules	Department of Public Safety Gary Kempker, Director Division of Fire Safety Bill Farr, State Fire Marshal
Board of Boiler Rules Membership (* indicates chairman)	Vergil L. Belfi - Operating Engineers David J. Dieckman - Insurance Donald W. Link - Boilermakers Dr. Bassem Armaly - Academic and Professional Wayne Mueller - Large Boiler User *Jim G. Smith - Small Boiler User
Board of Boiler Rules Secretary	Wayne Mueller
API Regulatory Action Team	Dale E. Dressel, Chairman Mail Zone A2SA Monsanto Company 800 N. Lindbergh Boulevard St. Louis, MO 63167 (314) 694-6031 Fax: (314) 694-7300
Industry Association Staff Contact	Ric Telthorst, Executive Director Executive Director Missouri Oil Council 312 East Capitol Avenue, Suite B Jefferson City, MO 65101 (573) 636-2138 Fax: (573) 634-5359

MISSOURI  
REGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS  
(continued)

Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* Boilers and Pressure Vessels must be designed, constructed, stamped, and installed per ASME Code and National Board registered.
  - \*\* Missouri Specials must be approved by Board.
  - \*\* Exceptions
    - Maximum allowable working pressure must be determined per ASME Code, API-ASME Code, NBIC, ANSI/API 510 or approved by Board for Missouri Specials.
    - Boiler and pressure vessels under federal control.
    - Compressed gas and liquid petroleum gas pressure vessels per National Fire Protection Agency or Department of Transportation that are inspected routinely.
    - Pressure vessels on vehicles.
    - Pressure vessels used by railroads.
    - Pressure vessels that do not exceed:
      - 15 cu. ft. and 250 psig. when not in place of public assembly.
      - 5 cu. ft. and 250 psig. when in a place of public assembly.
      - 1.5 cu. ft. or 6" I.D. with no pressure limit.
    - Pressure vessels less than 15 psig. working pressure.
    - Pressure vessels containing not more than 120 gals. water.
    - Vessels containing water and operating as water softeners, water filters, dealkalizers, demineralizers and cold water storage tanks when:
      - (1) the temperature of the water in the vessel does not exceed 120°F; and
      - (2) heat is not applied to the water prior to entering the vessel or to the vessel itself; and
      - (3) the pressure of the water in the vessel does not exceed 150 psig; and
      - (4) the vessel does not contain any hazardous, toxic or explosive material.
    - Boilers and pressure vessels on farms used for agricultural purposes.
    - Most hobby boilers.
    - Residences with 5 family or less.
    - Water heaters and hot water storage tanks are exempt from ASME construction if none of the following are exceeded:
      - heat input 200,000 Btu/hr.
      - 210°F.
      - 120 gals. with approved relief valve.
    - Coil type steam vapor cleaners are exempt from ASME construction if none of the following are exceeded.
      - 3/4 in. diameter tubing with no headers attached.
      - 6 gallon capacity.
      - 350°F.
      - steam not generated in the coil.
- NOTE: While exempt from ASME Code Construction if the above four items are met, one or more safety valve meeting the requirements of 11 CSR 40-2.020 shall be provided.

MISSOURI  
REGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS  
(continued)

Equipment Requiring Certificate Inspection

- \*\* Boilers and Pressure Vessels exempt from above construction requirements do not require Certificate Inspection.
- \*\* Owner-User Inspection Agencies can obtain Board approval for different Pressure Vessel inspection intervals (e.g., following ANSI/API 510 procedures).
- \*\* Following are exempted from Certificate Inspection, Reports and Fees of Act:
  - Cannery boilers and pressure vessels.
  - Boilers and heaters in less than 6 family residences.
  - Hobby boilers less than 12 in. diameter and 1 1/2 ft. grate area with safety valve, water level indicator and pressure gauge.
  - Water heaters no greater than 200,000 Btu/hr.
  - Power and high temperature water boilers require annual internal and external inspection. (Boilers greater than 15 psi. steam, greater than 160 psi., water or greater than 2,500.)
  - Low Pressure Steam (15 psi. or less), hot water heating and hot water supply boilers (160 psi. water or less and 250° temp or less) require biennial certificate inspection (may be internal or external or both - depending on service).
  - Pressure Vessels require biennial inspection.
- \*\* A 2-month grace period is allowed to above inspection intervals.
- \*\* The Board can also permit longer intervals between all certificate inspections.

Inspector Qualifications

- \*\* Qualified Inspectors are State Inspectors, Insurance Inspectors with a Missouri Certificate of Competency or State approved Owner-User Inspectors. The Owner-User Inspector must hold a valid National Board Owner-User Commission or pass a written exam by the Board to obtain a Certificate of Competency and be employed by an approved Owner-User Inspection Agency.

MISSOURI  
REGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS  
 (continued)

Certificate of Inspection

- \*\* State and Insurance Inspectors must submit inspection report, owner must pay fees to have a valid Certificate of Inspection.
- \*\* A qualified Owner-User Inspection Agency must maintain inspection files that are subject to audit, file annually or more frequently on number of vessels inspected and pay filing fees. A Certificate of Inspection is issued for each vessel.

Miscellaneous

- \* Before a petroleum or chemical process facility can use ANSI/API 510 for maintenance inspection, rating, repair, and alteration of their own pressure vessels, the owner or user's inspection organization must be approved by the Board and the responsible owner or user Inspector must be commissioned by the State as a Special Inspector.
- \*\* A seven member representative Board formulates the Rules that must be approved by the Joint Committee on Administrative Rules. The rules for inspection, maintenance and repair of boilers and pressure vessels must be based on National Board Inspection Code or ANSI/API 510 as a minimum.
- \*\* An inspector must approve all welded repairs and alterations which must be accomplished per National Board Inspection Code and ANSI/API 510.
- \*\* Chief Inspector must be notified of Boiler and Pressure Vessel accidents.
- \*\* Board can grant variations to Rules.
- \*\* Each boiler must have an ASME/NB Certified Safety Valve.
- \*\* No block valves are allowed upstream or downstream of safety valves.
- \*\* Automatically fired steam and vapor boilers must be equipped with automatic low-water fuel cut-off.

Note: The Board has adopted the 1995 National Board Inspection Code (NBIC) with the 1995 addendum except:  
 (1) Testing after repairs are to the 1992 NBIC with the 1994 addendum; and  
 (2) Repairs of a routine nature are defined in the 1992 NBIC with the 1994 addendum.

MISSOURI

ANNUAL SUMMARY OF REGULATORY ACTION

Summary

Additions and corrections were made to the Rules in 1996 to be more consistent with ASME Code requirements.



MISSOURI

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact

Ric Telthorst  
Missouri Oil Council  
312 E. Capitol Avenue, Suite B  
Jefferson City, MO 65101  
(573) 636-2138

Action or Support Team

Additional Information

MONTANAREGULATORY CONTACT INFORMATIONBOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	Montana
Laws Involved	Montana Safety Laws, Title 50, Chapter 74, Boilers and Steam Engines Administrative Rules of Montana, Building codes Bureau, Chapter 70, Subchapter 9, Boiler Safety
Bureau Chief	James F. Brown, P.E.
Title and Department	Bureau Chief Building Codes Bureau Department of Commerce 1218 E. 6th Avenue Helena, MT 59620 (406) 444-3933
Section Supervisor	William H. Jellison
Title and Department	Supervisor Building Codes Bureau Department of Commerce P.O. Box 200517 Helena, MT 59620-0517 (406) 444-3933
State Department Responsible for Laws and Rules	Department of Commerce Building Codes Bureau
Board of Boiler Rules Membership (* indicates chairman)	None
API Regulatory Action Team	Ralph Blee, Senior Staff Engineer Exxon Company USA P.O. Box 1163 Billings, MT 59103 (406) 657-5276

MONTANA

REGULATORY CONTACT INFORMATION

BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

(continued)

Industry Association Staff Contact

Gail Abercrombie, Executive Director  
Montana Petroleum Association  
P.O. Box 1186  
Helena, MT 59624  
(406) 442-7582

MONTANASUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure, vessels

- \*\* Items covered
  - Power boilers and heating boilers.
- \*\* Codes
  - ASME Boiler & Pressure Vessel Code, Sections I, II, IV, V, VI, VII and IX, 1995 and ASME CSD-1.
  - Addenda are recognized.
- \*\* Other
  - Manufacturers data report must be filed with state.
  - Boilers must have a state serial number.
  - Special designs must be approved by state.
- \*\* Pertinent Exceptions
  - Boilers and vessels under federal control.
  - Unfired pressure vessels.

## Equipment Requiring Maintenance Inspection

- \*\* Items covered
  - Power boilers and heating boilers.
  - Exceptions noted below.
- \*\* Frequency
  - Power boilers - annual internal with external approximately 6 months later.
  - Heating boilers (all) - annual external.
  - Low pressure boilers (under 15 psi.) - biennial internal.
  - Hot water boilers (under 160 psi., 250°F) - internal every 3 years when construction permits.
  - A report of each certificate inspection must be made to the state within 30 days.

## Pertinent Exceptions to Maintenance Inspection

- \*\* Boilers under federal control.
- \*\* Hot water boilers under 400,000 Btu/hr. input, 210°F, 120 gals.

## Maintenance Inspector Qualifications

- \*\* There are no provisions for owner-user inspectors.

## Certificate of Inspection

- \*\* Boilers may not be operated without a certificate.

MONTANA

SUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS  
(continued)

Miscellaneous

- \*\* Repairs to boilers must conform to the appropriate section of the ASME Boiler and Pressure Vessel Codes, Sections I, IV, and IX, 1977.

MONTANA

ANNUAL SUMMARY OF REGULATORY ACTION

Summary	With the transfer of boiler regulation to the Department of Commerce, new administrative rules were adopted.
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MONTANA

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact	Gail Abercrombie, Executive Director Montana Petroleum Association P.O. Box 1186 Helena, MT 59624 (406) 442-7582
Action or Support Team	<p>Jan Sensibaugh Department of Environmental Quality Permitting &amp; Compliance Division P.O. Box 200901 Helena, MT 59620-0901 (406) 444-2544</p> <p>John Geach Department of Environmental Quality Underground Storage Tanks Section P.O. Box 200901 Helena, MT 59620-0901 (406) 444-5975</p> <p>Jean Riley Montana Petroleum Tank Release Comp Board 2209 Phoenix Avenue P.O. Box 20902 Helena, MT 59620-0902 (406) 444-0925</p> <p>Bruce Suenram, State Fire Marshal Fire Prevention &amp; Investigation Bureau P.O. Box 201417 Helena, MT 59620-1417 (406) 444-2050</p>
Additional Information	The state of Montana has no regulatory action program for aboveground storage tanks.

NEBRASKAREGULATORY CONTACT INFORMATIONBOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	Nebraska
Laws Involved	Boiler Inspection Act - Statutes 48-719 through 48-743 Boiler Inspection Act Rules and Regulations, Title 229 - Chapter 1 through 25
Chief Inspector	Ed Sedor
Title and Department	Boiler Inspections Manager 301 Centennial Mall South Lincoln, NE 68509-5024 (402) 471-4721 Fax: (402) 471-5039
State Department Responsible for Laws and Rules	Department of Labor Dan Dolan, Commissioner (402) 471-9000 Fax: (402) 471-2318
Boiler Advisory Board (* indicates chairman)	Ray Otter - Sellers Cindy Krom - Public John "Jack" Campbell - Insurance Industry Thomas Jeffrey Hix - Owner-User Jerome Thompson - Public Safety John P. Hillebrandt - Licensed Professional Engineers Glenn E. Tubbs - Construction and Repair and Repair of Boilers Edwin A. Sedor - Ex-Officio Member
API Regulatory Action Team	John M. Witte, Chairman ICI Americas, Inc. 4111 Gibson Road Omaha, NE 68107 (402) 733-3200



NEBRASKA

REGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS  
(continued)

Industry Association Staff Contact

Vincent D. Brown, Executive Director  
Nebraska Petroleum Council  
301 South 13th Street, #703  
Lincoln, NE 68508-2532  
(402) 477-4449  
Fax: (402) 477-3535

NEBRASKASUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* Nebraska has no Pressure Vessel Law.
- \*\* ASME Code Construction, Nebraska Serial Number, Certificate of Inspection (Operating Permit), installation approved by authorized inspector and filing of Manufacturer's Data Report are all required.
- \*\* Exemptions
  - Most railway locomotives, fire engines, and boilers of a miniature model (boats, airplanes).
  - Boilers under federal control.
  - Agricultural boilers.
  - Steam heating boilers less than 15 psig. in residences and apartments with 4 or less units.
  - Hot water heating boilers less than 30 psig. in residences and apartments with 4 or less units.
  - Hot water supply boilers less than: (1) 150,000 Btu, (2) 120 gals., or (3) 210°F.
  - Federal accessed and federal inspected.

## Equipment Requiring Maintenance Inspection

- \*\* Same equipment that must meet above construction requirements.
- \*\* All jurisdictional boilers shall receive an annual certificate inspection.
- \*\* With inspector approval, power boilers with a capacity of 100,000 lbs./hr. or more, which has internal continuous water treatment under the direct supervision of a graduate chemical engineer or one having equivalent experience in the treatment of boiler water, shall receive an external inspection annually while in operation and an internal inspection every 2 years. Accurate records of boiler water chemistry shall be kept and made available for review by the inspector.
- \*\* Low pressure boilers shall be inspected as follows:
  - Steam or vapor boilers shall receive an external inspection annually and an internal inspection every 2 years where construction permits.
  - Hot water heating and hot water supply boilers shall receive an external inspection annually and where construction permits, an internal inspection every 5 years from the date of manufacturer's completion.
- \*\* Annual internal inspections may be required if the inspector deems it necessary.

## Pertinent Exceptions to Maintenance Inspection

- \*\* Low pressure heating boilers if located in residences or apartments with 4 or less units.

NEBRASKA

SUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS  
(continued)

Maintenance Inspector Qualifications

- \*\* Must be state or commissioned insurance inspector.
- \*\* Owner-user inspector is not recognized.

Certificate of Inspection

- \*\* Issued annually after inspection and payment of certificate fee.

Miscellaneous

- \*\* The Commissioner may adopt any portion of ANSI/API 510 in Rules and Regulations. To date this has not been done.
- \*\* Commissioner of Labor prescribes rules.
- \*\* Boiler explosions and accidents must be reported to Commissioner. The Chief Inspector investigates the incident.
- \*\* Repairs must be approved by commissioned inspector and must follow the principles of the National Board Inspection Code (NBIC).
- \*\* Welding repairs must be approved beforehand by commissioned inspector and done per NBIC.
- \*\* Automatically fired boilers require automatic low-water fuel cut-off. Must comply with CSD-1.

NEBRASKA

ANNUAL SUMMARY OF REGULATORY ACTION

Summary

New rules and regulations went into effect on January 19, 1996. New rules and regulations will be updated and readopted each year.

Department of Labor adopted "R" Stamp Requirement for repairs to boilers effective 1989.

NEBRASKA

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact

Action or Support Team

Additional Information

NEVADAREGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	Nevada
Laws Involved	Regulations for the Nevada Occupational Safety and Health Enforcement Program, NAC 618.010 through 618.340, December 23, 1992, NRS 618
Chief Inspector	Ken White
Title and Department	Mechanical Unit Supervisor 401 West King St., 2nd Floor Carson City, NV 89710 (702) 687-5249
State Department Responsible for Laws and Rules	Department of Business and Industry 1665 Hot Springs Road Carson City, NV 89710
Board of Boiler Rules Membership (* indicates chairman)	Nevada does not have a Boiler Board.
API Regulatory Action Team	Contact Industry Association representative listed below.
Industry Association Staff Contact	Michael D. Wang, Manager Operations and Environment Western State Petroleum Association 505 North Brand Boulevard, Suite 1400 Glendale, CA 91209 (818) 545-4105

NEVADASUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* Items covered
  - Boilers and pressure vessels.
  - Exceptions are noted below.
- \*\* Codes CSD-1 (1992)
  - ASME Boiler & Pressure Vessel Code, Sections I, II, IV, V, VI, VII, VIII, IX, X, and XI. Z 233.1 (1989) Natural Fuel Gas Code (1989).
  - Addenda are recognized and ANSI B 31.1.
- \*\* Other
  - Boilers and vessels must be constructed and stamped in accordance with ASME and National Board codes.
  - The manufacturer's data report must be filed with the state.
  - Boilers and vessels must be stamped with a state serial number.
  - Non-code designs must be approved by the state.
  - Boilers and vessels must have an operating permit
- \*\* Pertinent Exceptions
  - Boilers and vessels under federal control.
  - Vessels operating under 15 psi.
  - Vessels having an inside diameter not exceeding 6 in.
  - Vessels regulated by the Nevada Liquefied Petroleum Gas Board.
  - HWH vessels with nominal water capacity of 120 gals. or less.
  - Vessels under 5 cu. ft. and 250 psig. or 1.5 cu. ft. and 600 psig.
  - Hot water boilers, portable water heaters and indirectly heated vessels if:
    - heat input is less than 200,000 Btu/hr.
    - water temperature is 210°F or less.
    - water capacity is 120 gals. or less.

## Equipment Requiring Maintenance Inspection

- \*\* Items covered
  - Boilers and pressure vessels.
  - Exceptions are noted below.
- \*\* Frequency
  - Power boilers - annual, internal. An external inspection must be made approximately six months after the internal inspection. An extension to 2 years between internal inspections may be granted upon application to the state.
  - Heating boilers - annual external, biennial internal.
  - Hot water boilers - biennial external.
  - Pressure vessels must be inspected internally if possible, at least every 3 years.

NEVADASUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

(continued)

## Pertinent Exceptions to Maintenance Inspection

- \*\* Boilers and vessels under federal control.
- \*\* Vessels operating under 15 psi.
- \*\* Vessels having an inside diameter not exceeding 6 in.
- \*\* Pressure vessels meeting the requirements of the U.S. DOT for the shipment of liquids or gas under pressure.
- \*\* Vessels under 5 cu. ft. and 250 psig. or 1.5 cu. ft. and 600 psig.
- \*\* Hot water boilers, potable water heaters and indirectly heated vessels if:
  - Heat input is less than 200,000 Btu/hr.
  - Water temperature is 210°F or less.
  - Water capacity is 120 gals. or less.

## Maintenance Inspector Qualifications

- \*\* Provisions are made for owner-user inspectors for pressure vessels.
- \*\* Special inspectors (including owner-user inspectors) must a National Board commission and take a state examination.
- \*\* After an investigation, the Administrator may suspend an inspector certified for competency under certain specified conditions.

## Certificate of Inspection

- \*\* Boilers and vessels must have a valid operating permit. Permits are renewed at the time of the required periodic inspection.

## Miscellaneous

- \*\* Accidents which render a boiler or vessel unsafe must be reported to the state.
- \*\* Serious accidents (i.e., an explosion) must be reported immediately by telephone or telegram.
- \*\* Repairs must conform to the NBIC.
- \*\* Welding repairs require "R" Stamp.
- \*\* An organization which makes repairs by fusion welding to the pressure parts of a boiler or pressure vessel must hold a stamp bearing an "R" issued by the National Board.
- \*\* A person who is in the business of repairing safety valves must have a stamp designated as "VR" from the National Board.



NEVADAANNUAL SUMMARY OF REGULATORY ACTION

## Summary

Regulations were revised in 1992.

Pressure vessels must be inspected internally at least once every 3 years. As an alternative, the inspection may be external and the thickness may be determined by ultrasonic testing. Inspections may be by owner-user, per requirements of the National Board. The authorized inspector must have a valid commission issued by the National Board.

NEVADA

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact

Action or Support Team

Additional Information

NEW HAMPSHIRE  
REGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	New Hampshire
Laws Involved	Boilers and Unfired Pressure Vessels Law Chapter 157-A Amended 1973, 1975, 1983, 1988, 1989 and 1993 Rules and Regulations (October 23, 1983 and March 21, 1986) NBIC 1992 Edition
State Boiler Inspector	Franklin F. Ellis
Title and Department	Boiler Inspector New Hampshire Labor Department 95 Pleasant Street Concord, NH 03301 (603) 271-2584
State Department Responsible for Laws and Rules	Department of Labor
Board of Boiler Rules Membership (* indicates chairman)	*F. Ellis, Chairman  Harry Smith, Plant Operator Bio-Energy RR 2, Box 208 Contoocook, NH 03229 (603) 627-0416 or (603) 746-5833 Fax: (603) 627-1634  Timothy Edwards, Insurance Co. Inspector P.O. Box 488 Rochester, NH 03867 (617) 380-7100 Fax: (617) 742-0513  Antonio J. Maggio Energy Resources Group 35 Industrial Park Drive Dover, NH 03820 (603) 742-0124

NEW HAMPSHIRE  
REGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS  
 (continued)

Donald M. Jansen, Jr.  
 Public Services of NH  
 P.O. Box 330  
 Manchester, NH 03105  
 (603) 634-3039  
 Fax: (603) 634-2105

Jon Warrall  
 Hartford Steam Boiler  
 Suite 820  
 40 Brood Street  
 Boston, MA 02109  
 (617) 482-5666  
 Fax: (617) 642-3428

Al LePierre  
 Hansen Fox Co.  
 P.O. Box 1048  
 Concord, NH 03302  
 (603) 224-9951  
 Fax: (603) 228-1677

API Regulatory Action Team

Contact Industry Association representative below

Industry Association Staff Contact

Norman C. VanderNoot, Executive Director  
 Executive Director  
 New Hampshire Petroleum Council  
 11 Depot Street  
 Concord, NH 03301  
 (603) 224-4097

NEW HAMPSHIRESUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure Vessels

## \*\* Items covered

- Boilers and pressure vessels
- Electric water heaters (over 58.5 KW) and fired storage water heaters used for hot water supply service shall be considered subject to the law as hot water supply boilers if over 120 gallon capacity or a heat input of over 200,000 Btu/hr. Must be ASME code stamped.
- Exceptions noted below

## \*\* Codes

- ASME Boiler and Pressure Vessel Code, Sections I through XI.
- Code addenda and case interpretations are accepted.

## \*\* Other

- Manufacturer's data report must be filed with the state before boiler or vessel is installed.
- Boilers and pressure vessels must be tagged with New Hampshire serial number.
- Special designs must be approved by the state.

## \*\* Pertinent Exceptions

- Boilers and vessels under federal control.
- Vessels used for transportation and storage of compressed gasses under ICC jurisdiction.
- Vessels under 5 cu. ft. or 250 psig.
- Vessels under 1.5 cu. ft. or 6 in. diameter under 3,000 psig.
- Vessels operating at 15 psig. or less.
- Vessels containing water under 125 psig W.P.
- Vessels containing water for domestic supply purposes.
- Operating certificates not required for low pressure steam or hot water heating boilers located in private residences or apartment houses of less than 3 apartments.

## Equipment Requiring Maintenance Inspection

## \*\* Items covered

- Power boilers (steam above 15 psig).
- High pressure-high temperature water boilers (above 160 psig and 250°F).
- Low pressure boilers (under 15 psig or water heaters under 160 psig, 250°F).
- Unfired pressure vessels.
- Exceptions are noted below.

## \*\* Frequency

- Power boilers - annual certificate inspection and external inspection under pressure if possible.
- High pressure-high temperature water boilers - same as power boilers.

NEW HAMPSHIRE

SUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

(continued)

- Low pressure boilers - biennial certificate inspection.
- Unfired pressure vessels subject to internal corrosion - biennial certificate inspection.
- Unfired pressure vessels not subject to internal corrosion - interval set by Commissioner.

**\*\* Other**

- Certificate inspections shall be internal inspections when construction permits.

**Pertinent Exceptions to Maintenance Inspection**

- \*\* See under Construction requirements, above.**

**Maintenance Inspector Qualifications**

- \*\* Inspectors must hold a National Board commission and be qualified by the Commissioner.**

**Certificate of Inspection**

- \*\* It is unlawful to operate a boiler or pressure vessel in the state (except as exempted) without a valid inspection certificate.**
- \*\* When an object passes inspection, the Commissioner shall furnish an inspection certificate.**
- \*\* Certificates shall be displayed in the vicinity of the boiler or vessel.**

**Miscellaneous**

- \*\* 1992 Edition of National Board Inspection Code (NBIC) adopted to provide guidelines for inspection after installation, repair, alteration, and rerating of boilers and pressure vessels.**

NEW HAMPSHIRE  
ANNUAL SUMMARY OF REGULATORY ACTION

Summary

House Bill No. 954 was enacted in March of 1988. This bill changed the wording to make the terminology consistent with the National Board. The bill designates NBIC as a guide for repairs and alterations to existing boilers and vessels. Guidelines for inspection were established.

The position of Chief Boiler Inspector in the Department of Labor was abolished effective August 6, 1989.

NEW HAMPSHIRE

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact

Norman C. VanderNoot  
New Hampshire Petroleum Council  
11 Depot Street  
Concord, NH 03301  
(603) 224-4097

Action or Support Team

Additional Information

New law, RSA 146-E, covers aboveground tanks up to 1.1 million gals. of motor fuels.

For costs incurred AFTER JULY 1, 1988 Deductibles:

1 facility	\$5,000
2-19 facilities	20,000
over 20 facilities	30,000

Also fuel oil tanks (aboveground) covered after October 1, 1992.



NEW JERSEYREGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	New Jersey
Laws Involved	N.J.A.C. 12:90 Boilers, Pressure Vessels and Refrigeration (December 5, 1994) N.J.S.A. 34:1 - 38.1 et seq. Act Establishing the Mechanical Inspection Bureau (1967) N.J.S.A. 34:7-14 et seq. Act on Inspection of Boiler, Pressure Vessels and Refrigeration Systems (July 12, 1991)
Chief Inspector	Raymond Snyder
Title and Department	Acting Assistant Director Office of Boiler and Pressure Vessel Compliance CN392 East State Street and South Clinton Avenue Station Plaza #4 Trenton, NJ 08625-0392 (609) 984-3000
State Department Responsible for Laws and Rules	Board of Boiler, Pressure Vessel and Refrigeration Rules
Board of Boiler Rules Membership (* indicates chairman)	<ul style="list-style-type: none"> <li>- Six citizens of State, 2 of whom shall be professional engineers licensed by state, including: <ul style="list-style-type: none"> <li>- One manufacturer of boilers, pressure vessels or refrigeration equipment</li> <li>- One authorized insurer of boilers, etc.</li> <li>- One operator of boilers, etc.</li> <li>- Two users of boilers, pressure vessels, or refrigeration systems</li> <li>- One representative of general public</li> <li>- *Commissioner of Labor is Chairman of the Board</li> <li>- Examining Board.</li> </ul> </li> </ul>
Board of Boiler Rules Secretary	Ad hoc, appointed by Chief Inspector
API Regulatory Action Team	Steven C. Cyr DuPont Engineering P.O. Box 80840 Wilmington, DE 19880-0840 (302) 695-0487 Fax: (302) 695-0734

NEW JERSEY

REGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS  
(continued)

Industry Association Staff Contact

James E. Benton, Executive Director  
John Maxwell, Associate Director  
John Holtz, Associate Director

New Jersey Petroleum Council  
150 West State Street  
Trenton, NJ 08608  
(609) 392-0800  
Fax: (609) 392-0775

## NEW JERSEY

### SUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES AND REGULATIONS

#### Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* ASME Code and Code Cases or New Jersey Standard, Special or Approved.
- \*\* Four classes of Pressure Vessels established.
- \*\* Class IV Pressure vessels may be constructed per user-inspection provision of ASME Code.
- \*\* National Board Stamp is required for Class I Pressure Vessels, except those with UM stamp.

#### Equipment Requiring Maintenance Inspection

- \*\* Boilers
  - Annual internal and external, with provisions to extend internal to maximum of 5 years.
- \*\* Pressure vessels
  - For owner-user inspection organizations, API 510 and at intervals established by the NBIC, as applicable.
- \*\* Refrigeration Systems
  - Annual inspection.
- \*\* Additional external as required.

#### Pertinent Exceptions to Maintenance Inspection

- \*\* Pressure vessels having an internal or external operating pressure not exceeding 15 psi. with no limitation on size.

#### Maintenance Inspector Qualifications

- \*\* Commissioned inspectors employed by licensed insurance companies or,
- \*\* Certified User.
  - Inspectors of a state registered owner-user inspection organization or,
- \*\* Department Inspectors.
- \*\* All inspectors must possess N.B. Commission or API Certification, as applicable, and New Jersey Certificate of Competency.

#### Certificate of Inspection

- \*\* Reports of external inspections or reinspections are not required unless there are dangerous conditions or Code violations.

NEW JERSEY

SUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS  
(continued)

Miscellaneous

- \*\* API 510 and NBIC rules for repair, alteration, rerating, and inservice inspection are accepted.
- \*\* Welded repairs must be performed by holder of NB "R" stamp or New Jersey "R" Stamp.
- \*\* A report of alterations must be filed with the National Board on N.B. vessels, others with the state.
- \*\* Alterations must be made by holder of NB "R" stamp or New Jersey "R" stamp. (Use of New Jersey "R" stamp for alterations is permitted only when the organization performing the work is an owner-user with a registered API 510 owner-user inspection organization.)
- \*\* Registered owners-user inspection organizations maintain inservice inspection records at site. Records are subject to audit by the State at the State's discretion. No fees or submission of reports are required.

NEW JERSEY

ANNUAL SUMMARY OF REGULATORY ACTION

Summary

Significant activity in 1996 included recognition of API 510 for repair, alteration, rerating, and inservice inspection of pressure vessels. Recognition of API 510 became effective November 11, 1996.

NEW JERSEY

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact

Action or Support Team

Additional Information

NEW MEXICO

REGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	New Mexico
Laws Involved	60-12 NMSA 1978 Construction Industries Licensing Act
Chief Inspector	Steve Crespín, Manager Mechanical Bureau Construction Industries Division P.O. Box 25101 Santa Fe, NM 87504
State Department Responsible for Laws and Rules	Regulation and Licensing Department
Board of Boiler Rules Membership (* indicates chairman)	Steve Crespín
API Regulatory Action Team	Irvin Smith - Chief Mechanical Engineer Ron Loyd - Compliance Navajo Refining Company P.O. Box 159 Artesia, NM 88211-0159 (505) 748-3311  Greg Kardos Meridian Oil Co. Farmington, NM 87401 (505) 326-9700 Fax: (505) 326-9512
Industry Association Staff Contact	Darwin Van De Graaf, President New Mexico Oil & Gas Association P.O. Box 1864 Santa Fe, NM 87504-1864 (505) 982-2568

NEW MEXICO

SUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* Subject to State Uniform Mechanical Code and ASME Code, Code Sections I, IV, and IX and the National Board Inspection Code.



NEW MEXICO

ANNUAL SUMMARY OF REGULATORY ACTION

Summary

New Mexico has adopted the new boiler rules and regulations. Unfired pressure vessels are exempted. Enforcement to begin in October 1993.

NEW MEXICO

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact

Action or Support Team

Additional Information

NEW YORKREGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	New York
Laws Involved	Chap. 204 N.Y. Labor Law, 1968 Rules and Regulations Revised April 1, 1992 (high pressure) Revised April 1, 1992 (low pressure)
Chief Inspector	Ronald K. White
Title and Department	Chief Inspector New York State Department of Labor Boiler Safety Bureau Building 12 State Office Building Campus Albany, NY 12240-0102 (518) 457-2722 Fax: (518) 485-1150 (Room 134)
State Department Responsible for Laws and Rules	Department of Labor, Division of OSHA
Board of Boiler Rules Membership (* indicates chairman)	New York does not have a Boiler Board.
Board of Boiler Rules Secretary	N/A
API Regulatory Action Team	Contact Industry Association Representative below.
Industry Association Staff Contact	Michael R. Doyle, Executive Director Duncan R. MacKenzie, Associate Director  New York State Petroleum Council 150 State Street Albany, NY 12207 (518) 465-3563 Fax: (518) 465-4022

NEW YORKSUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* Registration with National Board of Boiler & Pressure Vessel Inspectors required for Boilers and Pressure Vessels.
- \*\* Power Boilers and Heating Boilers.
  - ASME Sections I, III, and IV.
- \*\* Pressure Vessels.
  - ASME Section VIII.

## Equipment Requiring Maintenance Inspection

- \*\* High Pressure Boilers.
  - Annual internal, and annual external 6 months later.
- \*\* Low Pressure Boilers.
  - Steam.
    - internal every 3 years.
  - Hot Water.
    - internal every 5 years.
- \*\* Low pressure boilers will be inspected every two years rather than the current annual cycle.
- \*\* No inspection will be conducted on any low pressure boiler with a capacity of 100,000 Btus or less.
- \*\* No inspection will be conducted on high pressure miniature electrical boilers.

## Pertinent Exceptions to Maintenance Inspection

- \*\* See above

## Maintenance Inspector Qualifications

- \*\* Insurance inspectors must have a New York commission based on examination. Inspectors holding a National Board commission can receive a New York reciprocal commission by oral examination.

NEW YORK

SUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS  
(continued)

Certificate of Inspection

- \*\* A Certificate of Inspection, valid for 12 or 24 months, is issued by the Insurance Company for insured boilers and by the Department for Uninsured Boilers, except in cities where they perform their own inspections.

Miscellaneous

- \*\* Repairs and Alterations.
  - May be made by owner-user organization whose QC program is approved by their insurance carrier and the state or National Board
- \*\* Cities of New York, Buffalo and White Plains have their own regulations. All three require boiler operators to be licensed.

NEW YORK

ANNUAL SUMMARY OF REGULATORY ACTION

Summary

No significant activity reported in 1996.

NEW YORK

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact	Michael R. Doyle New York State Petroleum Council 150 State Street Albany, NY 12207 (518) 465-3563
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Action or Support Team	Contact Industry Association
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Additional Information

NORTH CAROLINAREGULATORY CONTACT INFORMATIONBOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	North Carolina
Laws Involved	Uniform Boiler and Pressure Vessel Act, Chapter 95, Article 7A, latest revision July 1993. Boiler and Pressure Vessel Rules, Chapter 13, Title 13, latest amendment January 1, 1995.
Chief Inspector	H. Dieter Hanrath, P.E.
Title and Department	Director North Carolina Department of Labor Boiler and Pressure Vessel Division 4 West Edenton Street Raleigh, NC 27601 (919) 662-4690  Assistant Director Jack M. Given, Jr.
State Department Responsible for Laws and Rules	North Carolina Department of Labor Harry E. Payne, Jr., Commissioner
Board of Boiler Rules Membership (* indicates chairman)	Joseph L. Moore, Jr. - Boiler Manufacturers Robert E. Hennecy - Insurance Companies C. Theron Miller, Jr. - Licensed Heating Contractors Gary G. Sims - Operating Engineers T. A. Duncan - Pressure Vessel Manufacturers Byron A. Hamrick, Jr. - Professional Engineers  *Harry E. Payne, Jr. - Commissioner Robert S. Shackelford - Boilermakers J. X. Kwoikoski - Owner and Users of Steam Boilers Laddie B. Griffin - Pressure Vessel Users
Board of Boiler Rules Secretary	N/A
API Regulatory Action Team	K. D. Bedbord - Chairman E. I. DuPont Company P.O. Box 800 Kinston, NC 28501 (919) 522-6199
Industry Association Staff Contact	Wm. H. Weatherspoon, Executive Director North Carolina Petroleum Council 150 Fayetteville St. Mall, Suite 2850 Raleigh, NC 27601-2919 (919) 828-5438



NORTH CAROLINASUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* The design, construction, installation, inspection, stamping, and operation of all boilers and pressure vessels except nonstandard boilers and pressure vessels and North Carolina "Specials" shall conform to the Rules in this Chapter and the SAME Code, 1992 Edition, including subsequent amendments and editions, which is hereby incorporated by reference. Repairs and alterations to boilers and pressure vessels, shall conform to the requirements of the following sections of the National Board Inspection Code, 1992 edition, including subsequent amendments and editions, which are hereby incorporated by reference:

- (1) Chapter III, Repairs and Alterations to Boilers and Pressure Vessels by Welding; and
- (2) Appendices C-R and C-VR.

The rules of this Chapter shall control when any conflict is found to exist between the Rules and the ASME code or the National Board Inspection Code.

Welded repairs and alterations may only be made by an individual or organization in possession of a valid certificate of authorization for use of the National Board "R" symbol stamp or an ASME code symbol stamp.

Repairs of safety valves or safety relief valves shall be made by an individual or organization in possession of a valid certificate of authorization for use of the National Board "VR" symbol stamp.

- \*\* Boilers and pressure vessels shall be registered with the National Board and shall bear the National Board stamping as follows:

- (1) Power boilers installed after November 2, 1946;
- (2) heating boilers (except cast iron boilers) installed after January 1, 1976; and
- (3) pressure vessels installed after January 1, 1979.

Boilers and pressure vessels shall be exempted from the requirement for National Board registration provided the owner or user submits a letter of request to the Director enclosing with the letter a copy of the original manufacturer's data report and all R-1 reports of Welded Repair or Alteration for all repairs and alterations which have been made to the boiler or pressure vessel and all of this information is suitable to the Director. The documentation shall be reviewed by the Director to determine if the information is complete and traceable to the boiler or pressure vessel. The Director shall require an inspection of the boiler or pressure vessel if necessary to make the determination.

- The Director or his designee determines that the design and construction requirements of the National Board of Boiler and Pressure Vessel Inspectors in effect at the time of construction were adhered to and that based upon such criteria and information that is available, the boiler or pressure vessel complies with all other provisions of the Uniform Boiler and Pressure Vessel Act of North Carolina and these rules.

- \*\* North Carolina Specials are permitted but must be approved by the Director before the start of construction, except that the Director may consider granting state special authorization for vessels which previously operated in other states as state specials.

- \*\* Exemptions

- Federal government owned boilers and/or pressure vessels.
- Department of Transportation regulated pressure vessels.
- Portable boilers and pressure vessels used in an open field for pumping or drilling for gas or other products, or used for agriculture purposes only.
- Boilers and pressure vessels in private residences with less than 6 families.
- Liquid petroleum gas pressure vessels used for transportation.
- Air tanks on vehicles.

NORTH CAROLINA

**SUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS**

(continued)

- Railroad air tanks installed on railroad right-of-ways and used in train operations.
- Pressure vessels that do not exceed 5 cu. ft. and 250 psig.
- Pressure vessels that do not exceed 6" internal diameter with no pressure limits.
- Pressure vessels not exceeding 15 psig.
- Pressure vessels less than 120 gals. of water at ambient temperature.
- Boiler and pressure vessels on steam railroad locomotives that are federally regulated.
- Steam jennies (coil-type hot water supply boilers with certain size and operating limits.)
- Pressure vessels containing water at a temperature not exceeding 110°F (does not apply to hydropneumatic storage vessels)
- \*\* Construction and inspection requirements do not apply to most hot water supply boilers or hot water supply tanks which do not exceed 200,000 Btu/hr., 200°F or 120 gals., provided they have an ASME/NB approved safety relief valve.
- \*\* Construction requirements do not apply to certain pressure vessels installed before December 31, 1981 [see GS95-69.10 (d)] and before December 31, 1984 [see GS95-69.10 (e)].

**Equipment Requiring Maintenance Inspection**

- \*\* All boilers and pressure vessels, except those exempted from the construction requirements listed above.
- \*\* Power boilers require annual internal inspection and an external inspection 6 months later.
- \*\* Heating boilers and pressure vessels must have as complete an examination as reasonably can be made biennially of the external surfaces and if deemed necessary by the inspector, internally.
- \*\* Miniature boilers, coil-type watertube boilers, and boilers heating a fluid other than water which do not produce steam or vapor operating as power boilers shall undergo an external inspection annually. Miniature boilers, coil-type watertube boilers and boilers heating a fluid other than water operating as heating boilers shall undergo an external inspection biennially.
- \*\* Heating boilers and pressure vessels, except hydropneumatic storage tanks, shall undergo an external inspection biennially.
- \*\* Owner-user inspectors shall conduct inspections for boilers and pressure vessels as prescribed in this Rule.
- \*\* Hydropneumatic storage tanks shall undergo an external inspection every 5 years.

**Pertinent Exceptions to Maintenance Inspection**

- \*\* Only those exempt from Construction Requirements listed above.

**Maintenance Inspector Qualifications**

- \*\* Must be a Deputy Inspector (state employee), Special Inspector (Insurance) or Owner-User Inspector with a North Carolina Commission. Applicants must pass National Board written exam to obtain a National Board Commission and the employer must request North Carolina Commission and Certificate of Competency for the applicant. Those inspectors holding commissions as special inspectors shall be limited to making inspections on Boilers and Pressure Vessels insured by their employer. Owner-User inspectors shall be limited to conducting inspections on Boiler and Pressure Vessels owned or operated by their respective employers.

NORTH CAROLINASUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

(continued)

## Certificate of Inspection

- \*\* After Director approves Inspection Report and fee is paid, an Inspection Certificate (Operating Permit) is issued. Inspection Certificates are not issued for qualified Owner-User Inspection Agencies. These agencies must file an annual statement showing the number of boilers and pressure vessels and certifying that each inspection was performed pursuant to the rules and accompanied with the appropriate fee.

## Miscellaneous

- \*\* A nine member representative Board of Boiler and Pressure Vessel Rules appointed by the Commissioner proposes Rules, and conducts inspector examinations. The Commissioner adopts Rules, issues Inspector Certificates, keeps records and investigates accidents. The Director assists the Commissioner, inspects boilers and pressure vessels, issues Inspector Certificates and collects fees.
- \*\* Accidents causing boilers or pressure vessels to be inoperative must be reported immediately by telephone to the Director.
- \*\* If the Director refuses to issue an Inspection Certificate after a hearing, the owner can appeal by judicial review; however, the equipment must be kept out of service.
- \*\* All safety and safety relief valves must be per ASME Code, stamped and certified by National Board, and must be repaired by an organization holding a National Board "VR" stamp.
- \*\* No block valves allowed upstream or downstream of boiler safety valves.
- \*\* North Carolina Rules shall control when any conflict exists between these rules and the ASME or NBIC Code.
- \*\* Each automatically fired steam or vapor system boiler, and each hot water heating boiler or hot water supply boiler having a minimum safety valve relieving capacity greater than 400,000 Btu/hr., shall be equipped with an automatic low-water fuel cutoff so located as to automatically cut off the fuel supply and stop the operation of the burner before the surface of the water falls to the lowest safe water line. For electric boilers, the low-water fuel cut-off shall cut off the electrical supply to the electric elements or electrodes. The lowest safe water line shall be that level identified by the manufacturer which indicates the lowest safe water level for safe operation of the boiler. Low-water fuel cut-off devices embodying a float and float bowl shall be installed so that the boiler feedwater or makeup water can not be introduced through the float chamber.
- \*\* Steam and vapor boilers fired by the combustion of fuels and installed after January 1, 1995, and all steam and vapor boilers fired by the combustion of fuels after January 1, 2000, shall be protected by two low-water fuel cutoffs, one of which may also be used to regulate the normal water level.
- \*\* For boilers installed after January 1, 1995, and for all boilers after January 1, 2000, for which a low-water fuel cut-off is required by this Chapter, at least one of these devices shall be equipped with a manual reset which shall prevent the boiler from being fired after a low-water condition until the operator resets the switch manually.
- \*\* Automatically fired boilers installed after January 1, 1995, and all automatically fired boilers after January 1, 2000, shall be provided with a system to automatically maintain a constant water level so that the water level can not fall below the lowest safe water line.

NORTH CAROLINA  
ANNUAL SUMMARY OF REGULATORY ACTION

Summary

Companies performing repairs to code boilers and/or pressure vessels in North Carolina must comply with one of the following:

- Holder of an "R" stamp.
- A valid ASME Code stamp.
- Jurisdictional authorization by the Director, Boiler and Pressure Vessel Division

A report of all welded repairs is to be submitted to the Boiler and Pressure Vessel Division of the State of North Carolina at the completion of each repair.

NORTH CAROLINA

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact

Action or Support Team

Additional Information

NORTH DAKOTAREGULATORY CONTACT INFORMATIONBOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	North Dakota
Laws Involved	Boiler Law - Rules & Regulations, Chapters 45-12-01-01 to 45-12-10-03 inc., North Dakota Administrative Code Boiler Inspection Law, Chapter 26.1-22.1 of the North Dakota Century Code
Chief Inspector	Robert D. Reetz
Title and Department	Chief Boiler Inspector State Insurance Department 925 Basin Avenue Bismarck, ND 58504-6647 (701) 328-9607
State Department Responsible for Laws and Rules	State Insurance Department Boiler Inspection Program  Glenn Pomeroy, Commissioner
Board of Boiler Rules Membership (* indicates chairman)	North Dakota has no Board of Boiler Rules.
API Regulatory Action Team	L.D. (Les) Helm, Chairman Amoco Oil Company P.O. Box 5000 Mandan, ND 58554 (701) 667-2407  Joe T. Fell Amerada Hess Corporation P.O. Box 459 Tioga, ND 58852 (701) 664-3361
Industry Association Staff Contact	Lowell J. Ridgeway, Executive Director North Dakota Petroleum Council P.O. Box 1395 Bismarck, ND 58502 (701) 223-6380

NORTH DAKOTASUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

## Summary of Construction Requirements for Boilers

- \*\* Items covered
  - Power boilers and low pressure boilers.
  - Exceptions noted below.
- \*\* Codes
  - ASME Boiler & Pressure Vessel Code, Sections I, IV, and VIII.
  - Addenda are recognized.
- \*\* Other
  - The manufacturer's data sheets must be filed with the state and boilers must be registered with the National Board.
  - Boilers must have a state serial number and a certificate of inspection issued by the state.
  - Special designs must be approved by the chief inspector.
  - Appurtenances and pressure piping up to the second valve from the boiler must be inspected before initial service.
- \*\* Pertinent Exceptions
  - Boilers under federal control.
  - Hot water supply boilers of not more than 200,000 Btu/hr. input, pressure not over 160 psi. and not over 250°F.
  - Portable steam cleaners.
- \*\* Frequency
  - Power boiler - annual, internal not under pressure and annually while under pressure.
  - L.P. Boilers - biennial, internal and external inspections with internal and external inspections alternated (one each year).
  - Inspections for the renewal of certificates must be reported to the chief inspector.

## Boiler Maintenance Inspection

- \*\* Items covered.
  - All boilers unless exempt.
- \*\* North Dakota Administrative Code, 45-12-03-08, requires that:
  - "Repairs or adjustments made to safety or safety relief valves must be done by the manufacturer of the valve or an approved testing facility equipped to do the same. The resetting of safety valves or safety relief valves shall not exceed the accepted working pressure for the unit."
  - "Approved", as noted in the above section means "Approved by the Commissioner." Other than the manufacturer, the only firms "approved by the Commissioner" to adjust, reset, or repair or otherwise alter safety valves shall be those firms which maintain a valid "VR" program as administered by the National Board of Boiler and Pressure Vessel Inspectors.

## Pertinent Exceptions to Maintenance Inspection

- \*\* Boilers under federal control.
- \*\* Hot water supply boilers of not more than 200,000 Btu/hr. input, pressure not over 160 psi. and not over 250°F.
- \*\* Portable steam cleaners.

NORTH DAKOTASUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

(continued)

## Maintenance Inspector Qualifications

- \*\* Owner-user inspectors permitted.
- \*\* Inspectors must pass National Board written examination.

## Certificate of Inspection

- \*\* Boilers may not be operated without a certificate of inspection.

## Miscellaneous

- \*\* ANSI/NB-23 and ANSI/API 510 shall cover repair and alteration procedures. ANSI/API 510 may be used to cover the maintenance inspection, repair, alteration and rerating procedure for the petroleum and chemical industry. ANSI/NB-23 is intended to cover all other installation.
- \*\* Alterations or repairs to boilers or vessels must be authorized by the state or the owner-user inspector.
- \*\* All major repairs to boilers must be reported to the state.

## Summary of Construction Requirements for Unfired Pressure Vessels

- \*\* Regulated by Chapter 45-12-10 of the Boiler Rules, as amended June 1, 1994.

## Unfired Pressure Vessel Construction and Installation Standards

- \*\* Unfired pressure vessels must be constructed per ASME, Section VIII, Division 1 or 2, and bear the "U" stamp.
- \*\* Unfired pressure vessels must be registered with the National Board and bear the appropriate stamp.
- \*\* Vessels must be protected with ASME stamped pressure relief devices as defined in ASME Code, Section VIII. Existing, installed pressure relief devices are considered acceptable if in correct usage, set at correct pressure and in satisfactory working condition.
- \*\* State specials allowed if approval obtained before construction is started.
- \*\* Exceptions
  - Vessels under federal control.
  - Vessels under 4 cu. ft. and 250 psig.
  - Vessels under 1 1/2 cu. ft. and 600 psig.
  - Vessels installed or ordered prior to effective date of rules are exempt, but still must conform to North Dakota Boiler Rules, Section 45-12-10-01, part 4.

## Unfired Pressure Vessels -- Maintenance and Inspections

- \*\* Reinstalled pressure vessels must meet the rules for new construction except that National Board registration is required only for vessels ordered and constructed after November 1, 1987.
- \*\* Recommended that safety and pressure relief valves be repaired by a "VR" stamp holder.
- \*\* Recommended that pressure vessels be repaired by an "R" stamp holder.



NORTH DAKOTA  
ANNUAL SUMMARY OF REGULATORY ACTION

Summary

Obligation for Unfired Pressure Vessels transferred to State Insurance Department, effective July 1, 1993.

Hearings were held on various topics. The minor changes were adopted effective July 1, 1995. (Adopt 1995 ASME Codes, 1995 NBIC, and latest API 510.)

NORTH DAKOTA

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact

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(701) 223-6380

Action or Support Team

Additional Information

OHIOREGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	Ohio
Laws Involved	Ohio Revised Code Chapter 119 (1969), Administrative Code Chapter 4104 (1983) Boiler Code, Section 4101:4 (1986) Pressure Piping Systems Code, Section 4101:8 (1986)
Bureau Chief	Willie Beaver
Chief Inspector	Dean T. Jagger
Title and Department	Chief Inspector Division of Industrial Compliance P.O. Box 825 2323 West Fifth Avenue Columbus, OH 43216 (614) 644-2236
Title and Department	Larry R. Mace, Chief Inspector Division of Industrial Compliance P.O. Box 825 2323 West Fifth Avenue Columbus, OH 43216 (614) 644-2250
State Department Responsible for Laws and Rules	Department of Commerce  Board of Building Standards is empowered to make, alter, and amend rules and regulations Department of Commerce Donna Owens, Director 77 South High Street, 23rd Floor Columbus, OH 43215  Department of Commerce Andrew E. Lyles, Assistant Director 77 South High Street, 23rd Floor Columbus, OH 43215

OHIO

REGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS  
 (continued)

Bureau Chief

Debbie Smith

Division of Industrial Compliance  
 Marvin Thompson, Chief Inspector  
 P.O. Box 825  
 2323 West Fifth Avenue  
 Columbus, OH 43216  
 (614) 644-2248

Board of Boiler Rules Membership  
 (\* indicates chairman)

Board of Building Standards:

10 Member Board:

- \*Gerald Holland of Fire Service Assn. (614) 644-2613
- Richard G. Johnson
- Michael J. Morgan
- David A. Smith
- Donn Ellerbrock
- Mark E. Tanner
- Douglas C. Scholz
- Kurt N. Schmitt
- David L. Ledvinka
- Ballard H. T. Kirk

Board of Boiler Rules Secretary

Board of Building Standards Secretary:

John Brant, Executive Secretary  
 Board of Building Standards  
 Department of Industrial Compliance  
 2323 West Fifth Avenue  
 P.O. Box 825  
 Columbus, OH 43216  
 (614) 644-2613

API Regulatory Action Team

N.C. Horowitz, Manager  
 Engineering Services  
 BP Oil Company  
 200 Public Square (15-2556-C)  
 Cleveland, OH 44114  
 (216) 586-8202

OHIO

REGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS  
(continued)

Industry Association Staff Contact

Terry P. Fleming, Executive Director  
Myrl H. Shoemaker, Associate Director  
Elizabeth B. Moore, Associate Director  
Ohio Petroleum Council  
88 East Broad Street  
Columbus, OH 43215  
(614) 221-5439

OHIOANNUAL SUMMARY OF REGULATORY ACTION

## Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* Boilers and Pressure Vessels must be stamped ASME and registered with National Board.
- \*\* Shop inspection of boilers and unfired pressure vessels is mandatory and must be made by inspectors holding Ohio commissions.
- \*\* Power piping beyond ASME Code requirements must be installed in accordance with Ohio Pressure Piping Systems Code as applicable.
- \*\* Such piping erected within the property limits of facilities engaged in the processing, or handling of chemical, petroleum related products may be governed by ANSI B 31.3.
- \*\* Liquefied petroleum gas piping systems shall be in accordance with the Ohio Pressure Piping Systems Code as applicable, (Refers to NFPA 51, 54, 58, and 59 and B 31.4)

## Equipment Requiring Maintenance Inspection

- \*\* No provision is made for field inspection of pressure vessels.
- \*\* Boilers
  - One annual internal inspection and one annual external inspection under operating conditions. Internal inspection may be extended to 2 years if water treatment is satisfactory.
- \*\* Low Pressure Boilers
  - Must be inspected externally under operating conditions no less than once per year, and internally every 3 years.

## Pertinent Exceptions to Maintenance Inspection

- \*\* Repairs or changes to unfired pressure vessels shall comply with the NBIC Chapter III. Repair or change shall be approved by a commissioned inspector.

## Maintenance Inspector Qualifications

- \*\* An owner-user of unfired pressure vessels may designate employees to approve repairs or changes. Such employee shall be either a registered professional engineer who passes a Board examination, or an employee who holds a Certificate of Competency.

## Certificate of Inspection

- \*\* A Certificate of operation is issued; when approved by the Department of Industrial Relations, Division of Boiler Inspection.

OHIO

ANNUAL SUMMARY OF REGULATORY ACTION

(continued)

Miscellaneous

- \*\* National Board Rules for Repairs and Alterations to Boilers and Pressure Vessels by welding are acceptable to the Department.
- \*\* Operators of Steam Boilers over 30 horsepower are required to be licensed.

OHIO

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact	Ohio Petroleum Council 88 E. Broad St., Suite 1960 Columbus, OH 43215 (614) 221-5439
Action or Support Team	E. W. Cunningham BP Oil Company 200 Public Square, 7-4056-M Cleveland, OH 44114 (216) 586-8129  M.C. Horowitz BP Oil Company 200 Public Square, 15-2556-C Cleveland, OH 44114 (216) 586-8202
Additional Information	There is no existing or proposed AST legislation in Ohio. There is interest, especially by independent marketers, in legislation mandating regulation of ASTs under authority of the Ohio State Fire Marshall Bureau of UST Regulation and for cleanup of orphan and abandoned ASTs with payment by the Ohio Petroleum UST Release Compensation Fund. Additional funding mechanisms, such as a transfer fee, are being discussed to fund this potential additional activity.



OKLAHOMA  
REGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	Oklahoma
Laws Involved	Oklahoma Boiler & Pressure Vessel Safety Act, Title 40, Sections 141.1 through 141.18, adopted October 11, 1982, amended May 17, 1991. Boiler & Pressure Vessel Rules adopted December 14, 1982, amended April 5, 1991.
Chief Inspector	Tom Monroe
Title and Department	Chief Safety Standards Division Department of Labor 4001 N. Lincoln Boulevard Oklahoma City, OK 73105-5212 (405) 528-1500
State Department Responsible for Laws and Rules	Department of Labor Brenda Reneau, Commissioner
Board of Boiler Rules Membership (* indicates chairman)	Oklahoma has no such board.
API Regulatory Action Team	C.R. (Richard) Shank - Chairman Phillips Petroleum Company 210 Park Avenue, Suite 2425 Oklahoma City, OK 73102 (405) 270-8320  Doug Dewitz Conoco, Inc. P.O. Box 1267 Ponca City, OK 74602-1267 (405) 767-4271  Bill Taylor Exxon Company, USA Box 4358 Houston, TX 77210-4358 (713) 775-6303

OKLAHOMA

REGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS  
(continued)

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Sun Company  
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E.R. Findley  
Total Petroleum  
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Ardmore, OK 73402  
(405) 223-0535

John Davidson  
Sinclair Oil Corporation  
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(918) 588-1140

Note: RAT members also serve on the Committee on Industrial Regulations and Standards

Industry Association Staff Contact

Michael Bernard, President  
Oklahoma-Kansas, Mid-Continent Oil & Gas Association  
320 Triad Center  
501 West Interstate 44 Service Road  
Oklahoma City, OK 73118  
(405) 843-5741

OKLAHOMASUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* ASME design, construction, inspection, stamp, and installation.
- \*\* ASME Code Sections I, II, IV, V, VI, VII, Division 1 and 2, and IX, National Board Inspection Code, and API 510 Pressure Vessel Inspection Code adopted.
- \*\* Manufacturer's Data Report signed by National Board Inspector must be filed with State.
- \*\* State Serial Number and operating permit must be obtained.
- \*\* Provisions available for "Oklahoma Specials."
- \*\* Downstream welded steam lines in excess of 15 psig. shall be fabricated by Welders in possession of a valid State I.D. card and inspected during construction by State Inspectors or authorized owner-user Inspection Agency Inspectors.
- \*\* Exemptions
  - DOT cylinders used in transportation.
  - Vessels less than 15 psig., 6 in. I.D. or 120 gals. (for water only).
  - Hot water vessels and supply boilers when less than 200,000 Btu, heat input, 210°F or 120 gallon capacity.
  - Vessels integral to mechanical equipment.
  - Boilers and pressure vessels under federal control.
  - Railroad locomotive boilers.
  - Pressure vessels in remote oil and gas production sites [see Section 141.2(10)].
  - Research vessels [see Section 141.2(11)].
  - Hot water supply heaters (except state-owned).

## Equipment Requiring Maintenance Inspection

- \*\* All pressure vessels (except those covered by ANSI/API 510 - see below) subject to corrosion and waste heat steam generators require triennial internal and external inspections.
- \*\* All boilers and pressure vessels required to meet above construction requirements.
- \*\* Power and high pressure/temperature boilers require annual internal and external inspection.
- \*\* Low pressure steam and vapor boilers require biennial internal inspection and annual external inspection.
- \*\* Low pressure hot water heating and supply boilers require annual external inspection and an internal inspection at Inspector's discretion.
- \*\* Pressure vessels not subject to corrosion shall have an internal inspection each 10 years and an external inspection each 3 years.
- \*\* Hot water supply heaters require annual external inspections.
- \*\* With proper justification, the Commissioner may permit variations to inspection frequencies. A 2-month grace period for the inspection frequencies above is permissible but inspection due date shall not be affected.

OKLAHOMASUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS  
(continued)

## Pertinent Exceptions to Maintenance Inspection

- \*\* The frequency and criteria for pressure vessel inspections by authorized Owner-User Inspection Agencies (per ANSI/API 510) are excluded from above requirements.
- \*\* Pressure vessels not exceeding 15 cu. ft. volume and 250 psig.
- \*\* Most boilers, heaters, and pressure vessels in residences with less than 6 families.
- \*\* Pressure vessels filled with water (or like fluid) less than 150°F or 200 psig.

## Maintenance Inspector Qualifications

- \*\* Must be a State Inspector, Special Inspector (Insurance Inspector) or Owner-User Inspector. All Insurance and Owner-User Inspectors must obtain certificate of competency annually.
- \*\* All Authorized Inspectors must pass a written examination. The National API written examination and procedure may be used for Oklahoma API Owner-User Inspector examination.

## Certificate of Inspection

- \*\* Owner-User Inspection Agencies (per ANSI/API 510) must maintain adequate files which are subject to state audit and submit annual report on number of vessels inspected that year, pay fees and obtain a Certificate of Operation.
- \*\* Insurance Inspectors must submit inspection reports and owner pay fees within 30 days of inspection, after which a Certificate of operation (Operating Permit) will be issued.
- \*\* Owner-User organizations that are approved by the Commissioner may inspect, repair, rate, and alter their own pressure vessels per ANSI/API 510. Owner-User Inspectors must have a State Certificate of Competency.
- \*\* ANSI/API 510 is recognized.
- \*\* Welders, welding inspectors and weld test facilities involved with construction and repair of downstream steam piping in excess of 15 psi. must be licensed by the state. Qualified Owner-User (API 510) organizations may repair, alter, and install their own pressure vessels and/or boilers provided they have a state approved Quality Control System.
- \*\* Repair firms or owners making welded repairs must be licensed by the Labor Department and meet the requirements outlined in the NBIC for qualification for the "R" Stamp.
- \*\* For authorized ANSI/API 510 Owner-User inspection organizations, the repair firm must comply with Section IX. Firms and organizations qualifying under this paragraph will have their "Quality Control System" reviewed triennially by the state.
- \*\* ASME/NB certified relief valves are required.
- \*\* No block valves are allowed under or in discharge line of relief valves installed on boilers.
- \*\* Relief valves must be repaired by organizations holding National Board "VR" stamp or by a manufacturer or user approved by the state.

OKLAHOMASUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

(continued)

- \*\* Boiler and pressure vessel service, repair, alteration and installation organizations must be licensed by the state. Authorized Owner-User organizations may accomplish their own work but it must be designed, witnessed, approved, and documented by the Owner-User Inspector. Other organization making repairs or alterations must have prior approval by an authorized inspector and notification to the state and have an "R" stamp or applicable ASME stamp.
- \*\* Authorized Owner-User Inspection Agencies can inspect their boilers.
- \*\* Inspector can shut down equipment he believes to be unsafe.
- \*\* The Commissioner may grant variations to the R&Rs if equivalent safety is provided.
- \*\* The Labor Commissioner promulgates and adopts the R&Rs per the Oklahoma Procedures Act. There is no official advisory board.
- \*\* Except for State of Oklahoma authorized Owner-User Inspection Agencies, the installer of used or second-hand boilers or pressure vessels and the reinstaller of a moved boiler or pressure vessel shall notify the Bureau of Boiler Inspection prior to installation.
- \*\* Accidents and incidents as a result of sudden or accidental breakdown of a boiler or pressure vessel must be reported to the Department of Labor which has total jurisdiction over investigations.
- \*\* The Welding Act (Title 59) applies to new and repair welded steam piping in excess of 15 psi. and requires the qualified welder to have an Oklahoma Identification Certificate. Approved Owner-User Inspection Agencies may inspect their own lines per their inspection procedures manual.
- \*\* Approved piping codes in Oklahoma are B31.1, B31.2, B31.3, B31.4, and B31.8. The provisions of Title 59 only apply to weldments required by these codes.
- \*\* Except for State of Oklahoma authorized Owner-User Inspection Agencies, the installer of new boilers or pressure vessels must notify the Bureau of Boiler Inspection prior to installation.
- \*\* Repairs and/or alterations shall be done in accordance with the National Board Inspection Code or the American Petroleum Institute Pressure Vessel Code as applicable.

OKLAHOMA  
ANNUAL SUMMARY OF REGULATORY ACTION

Summary

Rules were adopted on December 14, 1982, referencing ANSI/API 510 and the National Board Inspection Code. Rules have been amended in 1987, 1990, and 1991. Codified in 1992 along with some corrections in "clerical" errors.

LPG Administrative Rules have not been updated since 1977. These cover mainly administrative parts of storing, transporting, and selling. NFRs NFPA 54 and NFPA 58 apply. Applies to terminals. Need to look at licensing.

Oklahoma Mechanical Licensing Act, amended 1992, expanded coverage. Covered HVAC only but "Process Piping" was added. Employees of petroleum processing companies are exempted, and contract pipefitters and fitter welders working on process piping now have to pass State test and be licensed.

HB1118: Asbestos and Lead Paint Bill was killed in Committee. It duplicated/layered on top of Federal rules.

All owners-users met with State Department of Labor for one day on October 6, 1993.

ASME CSD-1 1992 with addenda adopted effective July 1, 1995.

OKLAHOMA

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact

Action or Support Team

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OKLAHOMA

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

(continued)

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Additional Information

Aboveground Storage Tanks: Senate Bill 206 was introduced in 1993 Session by Senator Easky. The Bill died in Committee.

No regulations for ASTs at this time.



OREGONREGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	Oregon
Laws Involved	Boiler and Pressure Vessel Law ORS 480.510 to 480.665 Administrative Rules for Boilers and Pressure Vessels, Rules 918 Chapter 225 (1994)
Chief Inspector	William C. Lundine <sup>1</sup>
Title and Department	Chief Boiler Inspector Building Codes Division 1535 Edgewater NW Salem, OR 97310 (503) 373-1216

<sup>1</sup>Contacts with state officials by those outside of Oregon should be made through the Western States Petroleum Association in Seattle.

State Department Responsible for Laws and Rules	Building Codes Division
--	-------------------------

Board of Boiler Rules Membership  
(\* indicates chairman)

\*George C. Connally, Owner-User  
Term exp. June 30, 1996  
35463 Firway Lane  
St. Helens, OR 97051  
(503) 397-5635

Fred G. Armstrong, Jr., Insurance Inspector  
14895 SW Carlsbad Drive  
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Steve Nelson, Boilermaker  
5109 A S.E. Stark  
Portland, OR 97215

John F. Copenhagen, Mechanical Engineer  
17757 Kelok Road  
Lake Oswego, OR 97034

OREGON  
REGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS  
 (continued)

Roger Vignery, Jr., Manufacturer  
 NIP Inc.  
 36900 Highway 26  
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Thomas R. Lindberg, Owner-User  
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Loren Lorenzen, Practical Steam Operating Engineer  
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Michael H. Gibson, Owner/Operator  
 Lochmead Farm  
 668 Greenwood Street  
 Junction City, OR 97448

Casey Scott, Public Member  
 8120 SW Ernst Road  
 Portland, OR 97225

Matt J. Walters, Steamfitter  
 16262 SE Keller Road  
 Clackamas, OR 97015

Joe L. Wood, Manufacturer/Owner-User  
 Nuclear Vessels  
 13950 SW Singletree Drive  
 Beaverton, OR 97005

Note: There are no oil or chemical industry members on the board.

Board of Boiler Rules Secretary

The Chief Inspector acts as secretary to the board.

API Regulatory Action Team

Roger Allcroft, Chairman  
 Oregon Operations Subcommittee  
 Western States Petroleum Association  
 Chevron USA, Inc.

OREGON

REGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS  
(continued)

P.O. Box 4424  
Portland, OR 97208  
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Thomas C. Donaca  
General Counsel  
Associated Oregon Industries  
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Salem, OR 97309-0519  
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Industry Association Staff  
Contacts<sup>2</sup>

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(206) 441-9642

<sup>2</sup>Contacts with state officials by those outside of Oregon should be made through the Western States Petroleum Association in Seattle.

OREGONSUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* Items covered
  - Power boilers, low pressure boilers, and unfired pressure vessels and certain piping. Exceptions noted below.
- \*\* Codes
  - ASME Boiler and Pressure Vessel Codes, dated July 1, 1995.
  - Addenda are not recognized until adopted by the Board.
  - The 1995 Edition of ANSI/ASME B 31.1, Power Piping.
  - The 1988 Edition of ANSI/ASME B 31.9, Building Service Piping.
  - The 1995 Edition of the National Board Inspection Code ANSI/NB 23.
- \*\* Other
  - Manufacturer's data report must be filed and registered with the National Board (OAR 918-225-450).
  - Boilers and vessels must have a state serial number and an operating permit.
  - Boiler and vessel dwgs. and calculations must be approved by a professional engineer, if not ASME constructed.
  - Special designs must be approved by state.
  - Special rules apply to boilers and vessels in places of public assembly.
  - Non boiler external piping beyond second valve from boiler is defined as a boiler and must have inspections during construction. Building service piping containing steam must be inspected during fabrication and installation.
- \*\* Pertinent Exceptions
  - Boilers and vessels under federal control.
  - LPG vessels under state fire marshal except for repairs or altering.
  - Unfired pressure vessels under 150 psi. and 5 cu. ft. (must have relief valve)(ORS).
  - Vessels 120 gals. or less operating at ambient temperature used for water storage, filtering or softening (must have relief valve) (OAR 918-225-095(1)).
  - Vessels operating under 15 psi. (OAR 918-225-975).

## Equipment Requiring Maintenance Inspection

- \*\* Items covered
  - Power boilers, low pressure boilers and unfired pressure vessels. Exceptions noted below.
- \*\* Frequency
  - Power boilers - annual, internal, and external.
  - L.P. Boilers - biennial, external, and internal.
  - Vessels - biennial, external and internal if in corrosive service.
  - Vessels - biennial, external only if non-corrosive service OAR 918-225-175(10).
  - Air vessels under 20 cu. ft., 200 psi. - every 5 years (OAR 918-225-175(7)).

OREGONSUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS  
(continued)

- Special rules apply to boilers and vessels in places of public assembly.
- A report of each inspection must be made within 30 days.
- Special and deputy boiler/pressure vessel inspectors may make required inspections up to 180 days prior to inspection due date.

## Pertinent Exceptions to Maintenance Inspection

- \*\* See under construction above.
- \*\* Vessels operating under 15 psi (OAR 918-225-075(1)).
- \*\* Vessels under 6 in. diameter (OAR 918-225-085(2)).
- \*\* Cold water containing vessels with relief valves set at 150 psig. and 210°F are exempted from the requirements of the boiler safety law (OAR 918-225-095(1)).

## Maintenance Inspector Qualifications.

- \*\* Owner-user inspectors permitted (ORS 480.570).
- \*\* Inspectors must pass state written examination. Reciprocity accepted.

## Certificate of Inspection

- \*\* Boilers and vessels may not be operated without a permit.

## Miscellaneous

- \*\* Installations, alterations or repairs to boilers or vessels require a permit from the state.
- \*\* Repairs must conform to NBIC.
- \*\* Installations, alterations and repairs must be made by holders of a state license unless done by owner-user.
- \*\* Employees of business organizations must be certified in one of six classes of certification (effective 1991).
- \*\* Welded joints in high stress areas must be non-destructively tested, if required by NBIC or ASME Code.
- \*\* Written log of repairs on steam piping must be kept.
- \*\* Effective January 1, 1991, a "R" Stamp and R-1 Form (to be submitted to Chief Boiler Inspector) by all businesses who install, alter, or repair boiler pressure vessels and pressure piping by welding.
- \*\* Owner-User must comply with OAR 918-225-720.
- \*\* Effective July 1, 1991, an Oregon "O" stamp or NB "R" stamp is required for all businesses installing, altering or repairing non boiler external piping.

OREGON

ANNUAL SUMMARY OF REGULATORY ACTION

Summary

New rules will be adopted after public hearings March 3, 1997. Does not recognize API 510 certification. Owner-user inspectors in Oregon must have National Board commission.

OREGON

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact

Action or Support Team

Additional Information

PENNSYLVANIAREGULATORY CONTACT INFORMATIONBOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	Pennsylvania
Laws Involved	Boiler Law Act No. 451 (1981) as amended by Act No. 5 (1993) Regulations Governing Boilers and Unfired Pressure Vessels (1985) LPG Act No. 475, 1951, as amended
Chief Inspector	John D. Payton
Title and Department	Chief of Boiler Section Department of Labor and Industry Labor and Industry Building, Room 1543 Harrisburg, PA 17120 (717) 787-2923 Fax: (717) 787-8363
State Department Responsible for Laws and Rules	Department of Labor and Industry Industrial Board empowered to make, alter or amend Rules and Regulations
Board of Boiler Rules Membership	Industrial Board  1. Industrial Board  The Secretary of Labor and Industry (Chairman)  - 1 Licensed architect - 1 Licensed engineer - 1 Building industry representative - 1 Employee organization rep. - 2 General public representatives  2. Boiler Advisory Board (7 members)
Board of Boiler Rules Secretary	None
API Regulatory Action Team	None



PENNSYLVANIA  
REGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS  
(continued)

Industry Association Staff Contact

George H. Seidel, Jr., Executive Director  
Wayne S. Ewing, Associate Director

Associated Petroleum Industries of Pennsylvania  
P.O. Box 925  
Harrisburg, PA 17108  
(717) 234-7983

PENNSYLVANIASUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* ASME Code. Code rules updated every 6 months.
- \*\* Special designs or construction requires approval.
- \*\* Boilers and pressure vessels must be stamped ASME and National Board or Pennsylvania Standard.
- \*\* Shop inspection by inspector having National Board Commission with appropriate endorsements.
- \*\* Manufacturer's Data Reports filed before installation.

## Equipment Requiring Maintenance Inspection

- \*\* Power Boilers - Field inspections every 12 months with internal inspections extended to 24 if certain requirements are met.
- \*\* Process Boilers - Field inspections every 12 months with internal inspections extended to 60 months if certain conditions are met.
- \*\* Unfired pressure vessels - Field inspections every 3 years.
- \*\* Low Pressure Boilers - Biannual internal and external inspections.

## Pertinent Exceptions to Maintenance Inspection

- \*\* Pressure vessels having an internal or external operating pressure not exceeding 15 psi. with no limitation on size when equipped with approved safety devices. ESTABLISHES A ONE-TIME INSTALLATION INSPECTION UNDER CURRENT LAW FOR ESTABLISHMENTS WITH LOW PRESSURE BOILERS.

## Maintenance Inspector Qualifications

- \*\* Owner-User
  - Inspector of companies operating boilers and pressure vessels in Pennsylvania who have been commissioned by the Department are accepted in lieu of a Department inspector. National Board Commission for shop and Pennsylvania Commission for field inspections. Insurance inspectors requires Pennsylvania commission test administered in Harrisburg office.

## Certificate of Inspection

- \*\* A certificate of operation is issued by the Department for boilers and pressure vessels.

PENNSYLVANIA

SUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS  
(continued)

Miscellaneous

- \*\* Operator of boilers and pressure vessels are required to be licensed by local option.
- \*\* National Board Rules for Repair by Fusion Welding apply and must be approved by a commissioned inspector.
- \*\* Safety valve requirements are listed.

PENNSYLVANIA  
ANNUAL SUMMARY OF REGULATORY ACTION

Summary

Legislation passed and signed by Governor amending the Boiler Regulations Law - Act No. 5 (1993). Further changes anticipated by legislature to be introduced in 1997.

PENNSYLVANIA

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact	Eugene M. Barr Associated Petroleum Industries of Pennsylvania P.O. Box 925 Harrisburg, PA 17108 (717) 234-7984
Action or Support Team	Anthony Ippolito Sun Company, Inc. 1801 Market Street Philadelphia, PA 19103 (215) 977-3175
Additional Information	Corrective action regulations for underground and aboveground tanks promulgated. Interim permitting developed for ASTs, but not yet proposed for AST installation. DER is well aware of API 653 and has referenced this standard in a number of conversations.

PUERTO RICOREGULATORY CONTACT INFORMATIONBOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of Commonwealth	Puerto Rico
Laws Involved	Registration and Inspection of Boiler and/or Pressure Vessels - Special Rule #1 - Effective November 28, 1996
Chief Inspector	Antonio Cardenas
Title and Department	Boilers and Elevators Office Director Department of Labor and Human Relations Occupational Safety and Health Office Prudencio Rivera-Martinez Building 505 Munoz Avenue Hato Rey, PR 00918 (787) 754-2172 or 1-800-981-5720
Commonwealth Department Responsible for Laws and Rules	Department of Labor and Human Resources
Board of Boiler Rules Membership (* indicates chairman)	Boiler and Pressure Vessel Advisory Board  *Simon Carlo Arroyo, P.E. (787) 782-2304 Ulpiano Castillo, P.E. (787) 843-5398 Juan A. Figueroa, P.E. (787) 797-8905
Board of Boiler Rules Secretary	
API Regulatory Action Team	Rafael Amador, Chairman Chief Design Engineer Phillip's Puerto Rico CORE Inc. Call Box 10603 Guayama, PR 00785 (787) 864-1515, ext. 2220  John Light Chief Inspector Puerto Rico Sun Oil Company P.O. Box 186 Yabucoa, Puerto Rico 00767 (787) 893-2424
Industry Association Staff Contact	None

PUERTO RICO

SUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* ASME Stamp, inspection by a Licensed Inspector, and Commonwealth registration are required.
- \*\* Pressure vessel exceptions.
  - Vessels with less than 15 psig. internal or external pressure.
  - Vessels with less than 6 in. internal diameter.
  - Hot water tanks with less than 200,000 Btu/hr. heat input, 200°F and 120 gallons capacity.

Equipment Requiring Maintenance Inspection

- \*\* Same equipment covered by above construction requirements. Each boiler and Pressure Vessel must be inspected internally and externally each year. The OSHA office can shorten these inspection intervals if it deems it necessary. These intervals for Pressure Vessels could also be lengthened by the Secretary if the owner-user follows the principles of ANSI/API 510.

Pertinent Exceptions to Maintenance Inspection

- \*\* Same exceptions included in above construction requirements.

Maintenance Inspector Qualifications

- \*\* Must pass Advisory Boards examination and obtain license from Secretary of Labor.
- \*\* License must be renewed yearly.

Certificate of Inspection

- \*\* Inspectors must submit inspection reports within 15 days after each inspection.
- \*\* Special reporting procedures may be approved by the Assistant Secretary for multiple Pressure Vessel installations.

Miscellaneous

- \*\* With approval of the Secretary of Labor, an inspection program using ANSI/API 510 as a guide may be used to establish inspection cycles for pressure vessels.
- \*\* The ASME Code; NFPA 85, 85B, 85D, and 85E of Volume 1; and the NBIC are adopted as guides while the UL seal (or equal) is required for electric or electronic elements. The Secretary can grant exceptions to these documents, but these exceptions do not include equipment covered by applicable OSHA Title 29 CFR documents.

PUERTO RICO

SUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

(continued)

- \*\* Boiler and Pressure Vessel accidents requiring equipment shutdown for repairs or personnel injury must be reported immediately to Assistant Secretary. Phone (787) 754-2171.
- \*\* In addition to counseling the Department of Labor, the Advisory Board examines prospective candidates and recommends issuance of Inspector's licenses.



PUERTO RICO

ANNUAL SUMMARY OF REGULATORY ACTION

Summary

No significant changes to report since 1994.

PUERTO RICO

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact

Action or Support Team

Additional Information

RHODE ISLANDREGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	Rhode Island
Laws Involved	Section I, Chapter 28-25 of Rhode Island General Laws "Boiler Inspection" (1985). Act was amended to include pressure vessels. Rules and Regulations effective February 1, 1989, and adopted by Code Commission for Occupational Safety.
Chief Inspector	Thomas Wickham
Title and Department	Chief Boiler and Pressure Vessel Inspector Department of Labor, Division of Occupational Safety 610 Manton Avenue Providence, RI 02909 (401) 457-1838
State Department Responsible for Laws and Rules	Department of Labor Division of Occupational Safety
Board of Boiler Rules Membership (* indicates chairman)	Rhode Island has a 10-member Boiler and Pressure Vessel Advisory Board which reports to the Chief Inspector and the Administrator of the Division of Occupational Safety.
Board of Boiler Rules Secretary	N/A
API Regulatory Action Team	Contact Industry Association representative below.
Industry Association Staff Contact	Paul T. Hicks, Executive Director Rhode Island Petroleum Association 365 Smith Street, Suite 2 Providence, RI 02908 (401) 272-3400 Fax: (401) 272-3691

RHODE ISLANDSUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* Boilers
  - ASME Code and Code Cases Controls, Safety devices:  
ASME CSD-1 or NFPA 85. National Board Registration Mandatory for boilers manufactured in state.
- \*\* Pressure Vessels
  - ASME Code Section VIII. Registered with National Board. Except pressure vessels on remote oil or gas producing lease locations. National Board Registration Mandatory for vessels manufactured in state.
- \*\* Installation Permits required.

## Equipment Requiring Maintenance Inspection

- \*\* Power Boilers
  - One annual internal inspection, one annual external inspection 6 months later.
- \*\* Heating Boilers
  - External biennially. Low pressure steam -- external and an internal where construction permits.
- \*\* Hot Water Boilers
  - Biennially -- external and an internal where construction permits.
- \*\* Pressure vessels shall be inspected by State or authorized inspector triennially and shall be internal where construction permits.

## Pertinent Exceptions to Maintenance Inspection

- \*\* Power Boilers
  - Reports required for all mandated inspections.
  - No reports required for external inspection unless there are code violations or dangerous conditions.
- \*\* Pressure vessels on remote oil or gas producing lease locations.

## Maintenance Inspector Qualifications

- \*\* Companies operating pressure vessels may have owner-user inspectors commissioned by National Board upon passing a written examination.

## Certificate of Inspection

- \*\* Power Boilers
  - Certificates valid for 12 months issued to owner or user of all boilers inspected by State and Insurance Company Inspectors.
- \*\* Pressure Vessels
  - Certificates valid for one year. Renewed annually. Inspection criteria remains the same.
- \*\* Low pressure boilers and hot water heater certificates valid for 1 year.

## Miscellaneous

- \*\* National Board Inspection Code has been adopted for repairs and alterations to boilers and pressure vessels.

RHODE ISLAND  
ANNUAL SUMMARY OF REGULATORY ACTION

Summary

Annual renewal of pressure vessel and low pressure boilers certificate instituted in April 1992. Fee is still based on 3 years, but, change provides revenue flow during period of validity.

No significant changes reported in 1996.

RHODE ISLAND

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact

Paul T. Hicks  
Rhode Island Petroleum Association  
395 Smith Street, Suite 2  
Providence, RI 02908  
(401) 272-3400

Action or Support Team

Additional Information

SOUTH CAROLINAREGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	South Carolina
Laws Involved	None
Chief Inspector	N/A
Title and Department	
State Department Responsible for Laws and Rules	N/A
Board of Boiler Rules Membership (* indicates chairman)	N/A
API Regulatory Action Team	Jerry Hill Amoco P.O. Box 5077 Atlanta, GA 30302 (404) 512-6852
Industry Association Staff Contact	William F. Ross, Executive Director South Carolina Petroleum Council The Textile Building, Suite 250 1340 Bull Street Columbia, SC 29201 (803) 799-9588

SOUTH CAROLINA

SUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

Summary of Construction Requirements for Boilers and Pressure Vessels

N/A

Equipment Requiring Maintenance Inspection

N/A

Pertinent Exceptions to Maintenance Inspection

N/A

Maintenance Inspector Qualifications

N/A

Certificate of Inspection

N/A

Miscellaneous

N/A



SOUTH CAROLINA  
ANNUAL SUMMARY OF REGULATORY ACTION

Summary

Bills covering the regulations of boilers and pressure vessels were proposed the past few years but remained in committee. In 1996, H. 4562 was filed. The bill did not get out of committee; however, the House LCI Subcommittee held a hearing.

SOUTH CAROLINA

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact

William F. Ross, Executive Director  
South Carolina Petroleum Council  
The Textile Building, Suite 250  
1340 Bull Street  
Columbia, SC 29201  
(803) 799-9588

Action or Support Team

Additional Information

No legislation or regulations have been adopted affecting  
aboveground storage tanks at this time.

SOUTH DAKOTAREGULATORY CONTACT INFORMATIONBOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	South Dakota
Laws Involved	South Dakota Codified Laws, Chapter 34-29A, Boiler Safety. There are no laws or rules for vessels.
Chief Inspector	Jerome D. Anderson
Title and Department	Chief Boiler Inspector Department of Commerce and Regulation 118 West Capitol Pierre, SD 57501-2080 (605) 773-4311
State Department Responsible for Laws and Rules	Department of Commerce & Regulation 118 West Capitol Pierre, SD 57501-2080 (605) 773-4311
Board of Boiler Rules Membership (* indicates chairman)	South Dakota does not have a Boiler Board.
API Regulatory Action Team	Contact Industry Association representative listed below.
Industry Association Staff Contact	Bob Sutton, Executive Director South Dakota Petroleum Council 222 East Capitol Pierre, SD 57501 (605) 224-5979

SOUTH DAKOTASUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* Items covered
  - All boilers except as noted below.
- \*\* Codes
  - ASME Boiler & Pressure Vessel Code.
  - National Board Inspection Code.
- \*\* Other
  - State approval must be obtained for non-code designs.
  - The state keeps a record of the size, operating pressure, age, location and dates of inspection on each non-exempt boiler.
- \*\* Exceptions
  - Boilers and water heaters under federal control.
  - Hot water boilers (directly heated) equipped with ASME-National Board approved safety relief valves if operating not over:
    - 200,000 Btu/hr. heat input.
    - 210°F water temperature.
    - 120 gallon water capacity.
  - Pressure vessels.
  - Boilers located in a refinery.
  - Boilers used as part of an electrical generating plant.
  - Historic power boilers.

## Equipment Requiring Maintenance Inspection

- \*\* Items covered
  - All boilers except as noted below.
- \*\* Frequency
  - Power boilers - annual internal - annual external under operating pressure.
  - Heating boilers (not over 15 psi.) - biennial external and internal every 4 years.
  - Hot water supply boilers (under 160 psi., 250°F) external biennial; internal at inspector's discretion.
  - A report of each certificate inspection must be filed within 30 days.

## Pertinent Exceptions to Maintenance Inspection

- \*\* Boilers and water heaters under federal control.
- \*\* Hot water boilers (directly heated or solar) equipped with ASME-National Board approved safety relief valves and not over:
  - 200,000 Btu/hr. heat input.
  - 210°F water temperature.

SOUTH DAKOTA

SUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

(continued)

- 120 gallon water capacity.

Maintenance Inspector Qualifications

- \*\* There are no provisions for owner-user inspectors.

Certificate of Inspection

- \*\* Boilers must not be operated without an operation certificate unless exempt.
- \*\* Certificates must be renewed periodically depending on type of boiler.

Miscellaneous

- \*\* Repairs to boilers must conform to applicable provisions of the National Board Inspection Code.
- \*\* Major repairs must be approved by a certified inspector.

SOUTH DAKOTA  
ANNUAL SUMMARY OF REGULATORY ACTION

Summary

In 1996 changes occurred only in cost of certificate fee.

SOUTH DAKOTA

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact

Bob Sutton, Executive Director  
South Dakota Petroleum Council  
222 East Capitol  
Pierre, SD 57501  
(605) 224-5979

Action or Support Team

Additional Information

TENNESSEEREGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	Tennessee
Laws Involved	Boiler Inspection, Erection and Repair, 68-20-101 to 68-20-209, Passage 1949, Latest amendment 1989 Board of Boiler Rules, Chapter 0780-2-11, Latest amendment 1991
Chief Inspector	Donald E. Tanner
Title and Department	Chief Inspector Boiler and Elevator Inspection Section Department of Labor 710 James Robertson Parkway Gateway Plaza Nashville, TN 37243 (615) 741-2123
State Department Responsible for Laws and Rules	Department of Labor Alphonso Bodie, Commissioner
Board of Boiler Rules Membership (* indicates chairman)	Dr. Decatur Roberts - Faculty. Rep. Stephen V. Hadley, Jr. - Insurance Rep. R. Pat Sullivan - Boiler Mfg. Rep. Clyde R. Caldwell, Jr. - Boilermakers  Eddie Lunn, Jr., Boiler Owner Rep. Boiler Supply Co. 2950 Foster Creighton Drive Nashville, TN 37204-0225 (615) 244-3504 or (615) 248-3794  *Robert M. Elliott, Owner Representative Pressure Vessel Tennessee Eastman Kingsport, TN 37660 (423) 229-3482
Board of Boiler Rules Secretary	Donald E. Tanner
API Regulatory Action Team	Robert Elliott, Chairman Tennessee Eastman Kingsport, TN 37662 (615) 229-3482
Industry Association Staff Contact	Linda Bauch, Associate Director Tennessee Petroleum Council 4th Floor 211 Seventh Avenue, North Nashville, TN 37219 (615) 244-6290



TENNESSEESUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* ASME Construction and Stamp; National Board registration, inspection and stamp; and State Serial Number and Inspection Certificate (Operating Permit) are all required.
- \*\* "Tennessee Specials" must be approved by Board before start of construction.
- \*\* Boiler and "pressure tank" erectors and repairs must be licensed by state; this does not include shop fabricated equipment. Firms with own maintenance personnel can erect and repair their own boiler equipment and do not require a state license.
- \*\* Exemptions
  - Boilers under federal control.
  - Pressure vessels meeting ICC requirements.
  - Most air tanks located on vehicles or used by railroads.
  - Pressure vessels under 5 cu. ft.
  - Pressure vessels under 15 psig.
  - Pressure vessels used for liquid petroleum gas.
  - Portable hot water heaters that do not exceed 199,999 Btu/hr. and 210°F (these heaters are subject to Maintenance Inspection Requirements).
  - The following standards are referenced as minimum standards:
    - ASME Boiler and Pressure Vessel Code.
    - National Board Inspection Code.
    - API-ASME Pressure Vessel Code.
    - ASME-CSD-1 Controls and Safety Devices.
    - National Fire Protection Assn. 85 A, B, D, E, F, and G.

## Equipment Requiring Maintenance Inspection

- \*\* All boilers and pressure vessels except those exempted from the construction requirements and the following:
  - Most boilers used for agricultural purposes.
  - Steam heating boilers under 15 psig. in less than 6 family residences.
  - Hot water heating boilers under 30 psig. in less than 6 family residences.
  - Domestic hot water vessels under 200°F.
  - Water heaters with ASME/NB safety relief valves.
- \*\* Power boilers require annual internal inspection and an external inspection 6 months later.
- \*\* Low pressure heating boilers require biennial internal and external inspection.
- \*\* Unfired pressure vessels subject to corrosion require biennial internal and external inspection.
- \*\* Unfired pressure vessels not subject to corrosion require external inspection as set by Board, but do not require internal inspection.
- \*\* A 2-month grace period is allowed to above intervals.

## Pertinent Exceptions to Maintenance Inspection

- \*\* See above.

TENNESSEESUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

(continued)

## Maintenance Inspector Qualifications

- \*\* A State Inspector, an Insurance Inspector or an Owner-User Inspector are qualified. Insurance and Owner-User Inspectors must pass written exam and obtain Certificate of Competency from the State. Owner-User Inspectors may not inspect their boilers.

## Certificate of Inspection

- \*\* Inspector must submit report of each inspection within 30 days and owner must pay fees after which an Inspection Certificate (Operating Permit) is issued by Chief Inspector.

## Miscellaneous

- \*\* Board formulates rules that must follow generally accepted nationwide standards. It conducts written tests for all inspectors and issues Certificate of Competence.
- \*\* Boiler and pressure vessel accidents must be reported immediately to Chief Inspector.
- \*\* Safety and safety relief valves must be repaired by shop with National Board "VR" stamp or an Owner-User maintenance organization approved by the Chief Inspector.
- \*\* Each boiler must have an ASME/NB stamped safety valve.
- \*\* Block valves are not allowed upstream or downstream of safety valve.
- \*\* Most automatically fired boilers must have automatic low-water level fuel cut-off per ASME CSD-1.
- \*\* Boiler repairs must be made by licensed repairman with National Board "R" stamp or ASME "U" stamp unless accomplished by the owners own maintenance personnel.

TENNESSEE

ANNUAL SUMMARY OF REGULATORY ACTION

Summary

In 1988, TCA 68-20-101(a) was amended by adding one sentence calling for appointments to the Board of Boiler rules to include at least one person 60 years of age or older and at least one person to be a member of a racial minority.

The Boiler Law was changed in 1989 so that the Boiler and Elevator Inspection Section was transferred to the Department of Labor from the Department of Commerce and Insurance.

No significant activity was reported in 1996.

TENNESSEE

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact

Action or Support Team

Additional Information

No action in Tennessee on ASTs at this time. No action is anticipated.

TEXASREGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	Texas
Laws Involved	Texas Boiler Law (Chapter 755, Health and Safety Code) and associated rules
Chief Inspector	George Bynog
Title and Department	Chief Inspector Texas Department of Licensing and Regulation - Boiler Section P.O. Box 12157 Austin, TX 78711 (512) 463-2904 Fax: (512) 463-1376
State Department Responsible for Laws and Rules	Texas Department of Licensing and Regulation Tommy V. Smith, Executive Director P.O. Box 12157 Austin, TX 78711 (512) 463-2904
Board of Boiler Rules Membership (* indicates chairman)	Board is appointed by, and acts as an advisor to, the Commissioner of Licensing and Regulation  *George Bynog - Chief Inspector R. E. Berry - Kemper National Insurance Companies Eddie Davis - William & Davis Boilers, Inc. Jerry Outlaw - Chubb & Son Inc. Jack L. Mitchell - Dow Chemical U.S.A. Edward A. Doe - Shell Oil Products Co. Homer Schmidt - Consultant, TU Electric Beuford Herford - Boilermakers Local #587 Charles E. Vickers - CNA Insurance Co. Vacant - University Faculty Member
Industry Representatives	Jack Mitchell Dow Chemical USA Texas Operations Building B-2401 Freeport, TX 77541 (409) 238-1966  Larry J. Tekker Exxon Company USA P.O. Box 3950 Baytown, TX 77522-3950 (713) 425-3976

TEXAS

REGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS  
(continued)

Edward A. Doe  
Shell Oil Products Company  
P.O. Box 100  
Deer Park, TX 77536  
(713) 246-7362

Homer C. Schmidt, Consultant  
6905 Kolfax Drive  
Dallas, TX 75231-5709  
(214) 348-9561

Board of Boiler Rules Secretary

Barbara Stoll  
Texas Department of Licensing and Regulation  
Boiler Section  
P.O. Box 12157  
Capitol Station  
Austin, TX 78711  
(512) 463-2904

API Regulatory Action Team

Bennie High  
Huntsman Corporation  
P.O. Box 968  
Port Arthur, TX 77641-0968  
(409) 989-6571  
Fax: (409) 989-6899

Edward A. Doe  
Shell Oil Company  
P.O. Box 100  
Deer Park, TX 77536  
(713) 246-7362

Larry Duke  
Quantum Chemical Corporation  
P.O. Drawer D  
Deer Park, TX 77536  
(713) 209-7000

Bryan P. Gourlay  
Amoco Production Company  
P.O. Box 3092  
Houston, TX 77253  
(713) 584-7533

Mike Rogers  
Chevron, USA  
P.O. Box 701  
Port Arthur, TX 77641  
(409) 985-1440

TEXAS

REGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS  
(continued)

Donald A. Thain  
Mobil Oil  
P.O. Box 3311  
Beaumont, TX 77704  
(409) 757-3652  
Fax: (409) 757-1029

Industry Association Staff Contact

Rob Looney  
Texas Division Mid-Continent  
Oil & Gas Association  
1115 San Jacinto Boulevard, Suite 275  
Austin, TX 78701  
(512) 478-6631

TEXASSUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* There is no pressure vessel legislation or regulation. The following applies to boilers only.
- \*\* ASME construction and stamping, state registration and stamping, National Board Registration plus inspection by a Texas Commissioned Inspector are required.
- \*\* An inspection report must be filed with the State to obtain a Certificate of Operation.
- \*\* Provisions are available for "Texas Special" and variance to rules.
- \*\* Exemptions
  - Boilers under federal control.
  - Pressure vessels and unfired steam boilers, except steam drums of unfired steam boilers.
  - Manually fired miniature boilers that:
    - are constructed or maintained for locomotive boats, tractors, or stationary engines only as a hobby for exhibition, recreation, education, or historical purposes and not for commercial use;
    - have an inside diameter of 12 in. or less or a grate area of 2 sq. ft. or less; and
    - are equipped with a safety valve of adequate size, a water level indicator, and a pressure gauge.
  - Heating boilers in residences with less than four families are exempt from inspection, reports and fee requirements.
  - Drums of unfired steam boilers shall be constructed to ASME Section VIII, Division I.

## Equipment Requiring Maintenance Inspection

- \*\* All boilers except those exempted.
- \*\* Power boilers require annual internal and external inspections.
- \*\* Steam and hot water heating boilers require biennial Certificate inspections.
- \*\* Hot water supply and portable water heaters require triennial Certificate inspections.
- \*\* Portable power boilers require annual internal inspections and external inspections after each move.
- \*\* Nuclear boilers are inspected as required by the Commissioner.
- \*\* The Commissioner can extend the internal inspections for power boilers to 24 months and unfired steam boilers to 60 months when satisfactory records and water treatment are maintained. Requests for extension are made every 12 months and are supported by an external inspection. Above inspection intervals can be extended 120 days in emergencies with Commissioner and authorized inspector approval.

## Pertinent Exceptions to Maintenance Inspection

- \*\* See above.



TEXAS

SUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

(continued)

Maintenance Inspector Qualifications

- \*\* Deputy inspectors or authorized (insurance) inspectors with Texas Commission.

Certificate of Inspection

- \*\* After a satisfactory Certificate inspection report is filed, and the appropriate fee paid, a Certificate of Operation (operating permit) will be issued by the Commissioner.

Miscellaneous

- \*\* The Commissioner of Licensing and Regulations promulgates, enforces and grants variations to Rules.
- \*\* Repairs and alterations must conform to the 1989 Edition of the National Board Inspection Code (NBIC).
- \*\* Safety and safety relief valves must be repaired by an "authorized" manufacturer, user, or repair shop.
- \*\* Automatically-fired boilers (except those with constant attendant) require low-water fuel cut-offs.
- \*\* Block valves are allowed under safety or safety relief valves on steam drums of unfired boilers built to ASME Section VIII, Division I as shown in the Exhibits of the Texas Boiler Rules.
- \*\* Rule changes must be published for public comment in Texas Register 30 days prior to adoption.

TEXAS

ANNUAL SUMMARY OF REGULATORY ACTION

Summary

During the 1991 legislative session, the provisions of HB 2136 and HB 863 were combined into Senate Bill (SB) 404. SB 404 provisions will be published during 1991 in Chapter 755 of Health and Safety regulations. The new regulations allow the steam drums of waste heat (unfired) boilers to be classified as unfired pressure vessels.

No significant activity reported in 1996.

TEXAS

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact

Action or Support Team

Additional Information

Provision for degassing prior to cleaning ASTs in TCB Regulation V, Subchapter F is expected to be finalized in November 1993. Discussion continues on materials for which emissions must be controlled. State proposing 0.5 psia vapor pressure; industry suggesting 1.5 psia vapor pressure. Law will take effect between mid-1995 and the end of 1996.

UTAHREGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	Utah
Laws Involved	Boiler and Pressure Vessel Boiler Law 35-7-1-9 Boiler and Pressure Vessel Rules & Regulations of 1988
Chief Inspector	James C. Parsell
Title and Department	Safety Director Industrial Commission of Utah 160 East 300 South, 3rd Floor P.O. Box 146620 Salt Lake City, UT 84114-6620 (801) 530-6872
State Department Responsible for Laws and Rules	The Industrial Commission of Utah, Safety Division Lee R. Ellertson, Chairman
Board of Boiler Rules Membership (* indicates Chairman)	The Boiler Review Board  Paul Clayton (Rocky Mountain Fabrication Co.) Kenneth R. Reid (Amoco Oil Company) Dr. Larry de Vries (University of Utah) Paul M. Howe (Factory Mutual Systems) Lorenze Liang (Church of Jesus Christ of Latter-Day Saints) John Jackman (Chevron) *James C. Parsell (Safety Director)  Review Board members may be contacted at the address of the Safety Director
Board of Boiler Rules Secretary	None
API Regulatory Action Team	John D. Jackman, Member Boiler Board Chevron USA

UTAH

REGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS  
(continued)

Larry Shanks, Refinery Manager  
Chevron USA  
P.O. Box 25117  
Salt Lake City, UT 84125  
(801) 539-7200

Sydney G. Horsfield, Refinery Manager  
Amoco Oil Company  
474 West 900 N  
Salt Lake City, UT 84103  
(801) 521-4810

Mark Haney, Refinery Manager  
Phillips Petroleum Company  
393 South 800 W  
Woods Cross, UT 84087  
(801) 299-6600

Jeff Utley, Refinery Manager  
Flying "J"  
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North Salt Lake, UT 84054  
(801) 298-7733

Industry Association Staff Contact

Jim Peacock, Executive Director  
Utah Petroleum Association  
311 South State Street, Suite 320  
Salt Lake City, UT 84111  
(801) 363-5757

UTAHSUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* Items covered
  - Boilers and pressure vessels.
  - Exceptions are noted below.
- \*\* Codes
  - ANSI/API 510 Pressure Vessel Inspection Code recognized for petrochemical plants and refineries, see below.
  - ASME Boiler & Pressure Vessel Code, latest edition.
  - ANSI B 31.1 Code for Power Piping.
  - National Board Inspection Code (NBIC).
  - Addenda are recognized.
- \*\* Other
  - Boilers installed after May 1, 1978, must be registered with the National Board and bear the National Board number.
  - The manufacturer's data report must be filed with the National Board.
  - Boilers must have a valid inspection certificate before operating. Pressure vessels must be ASME.
  - Special designs must be approved by the state.
- \*\* Pertinent Exceptions
  - Boilers and vessels under federal control.
  - Vessels operating under 15 psi.
  - Vessels having an inside diameter not exceeding 6 in.
  - Portable water heater vessels if:
    - heat input is less than 201,000 Btu/hr.
    - water temperature is 210°F or less.
    - water capacity is 120 gals. or less.
    - combination HWH and HWS boiler under 200,000 Btu.

## Equipment Requiring Maintenance Inspection

- \*\* Items covered
  - Boilers and pressure vessels.
  - Exceptions are noted below.
- \*\* Frequency
  - Power boilers - annual, external, and internal.
  - Heating boilers - biennial, internal for steam at the inspector's discretion, external for water.
  - Vessels - every 60 months, external and internal at inspector's discretion for vessels not covered by API 510. ANSI/API requirements apply for vessels within the jurisdiction of an ANSI/API 510 owner-user inspection agency.

UTAHSUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

(continued)

- Owner-user inspectors must maintain inspection records and file an annual statement with the Chief Inspector on all vessels inspected during the year.
- Owner-user inspectors must notify the Chief Inspector if any vessel is found unsafe to operate.

## Pertinent Exceptions to Maintenance Inspection

- \*\* Boilers and vessels under federal control.
- \*\* Vessels operating under 15 psi.
- \*\* Vessels having an inside diameter not exceeding 6 in.
- \*\* Potable water heater vessels if:
  - Heat input is less than 201,000 Btu/hr.
  - Water temperature is 210°F or less.
  - Water capacity is 120 gals. or less.

## Owner-User Inspector Qualifications

- \*\* As of January 31, 1991, API 510 owner-user inspectors must be certified by API. A National Board owner-user commission will be accepted in lieu of API certification.

## Certificate of Inspection

- \*\* Boilers must have a valid inspection certificate before operating.

## Miscellaneous

- \*\* Boiler and vessel repairs must conform to Utah State special or the NBIC except for vessels under ANSI/API 510.
- \*\* A qualified owner-user can maintain a Safety Relief Valve Repair organization by meeting specified conditions.
- \*\* Boiler safety and safety relief valves may be adjusted or reset only by holders of VR stamp.

UTAH

ANNUAL SUMMARY OF REGULATORY ACTION

Summary

No significant changes reported in 1996.



UTAH

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact

Action or Support Team

Additional Information

VERMONTREGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	Vermont
Laws Involved	January 4, 1952, Latest amendment, 1990 Latest Rules and Regulations, 1990
Chief Inspector	Malcom J. Wheel
Title and Department	Chief Boiler Inspector Fire Prevention Division 19 Commerce Street Williston, Vermont 05495 (802) 658-2199
State Department Responsible for Laws and Rules	Department of Labor and Industry Mary Hooper, Commissioner (802) 828-2286  Governor and Commissioner empowered to make, alter, or amend Rules and Regulations.
Board of Boiler Rules membership (* indicates chairman)	None
API Regulatory Action Team	Contact Industry Association representative listed below.
Industry Association Staff Contact	Joseph L. Choquette III, Executive Director Vermont Petroleum Association P.O. Box 566 Montpelier, VT 05601-0566 (802) 223-3496

VERMONTSUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* Boilers
  - ASME Code Sections I, II, IV, V, 1989 ASME Code.
- \*\* NBIC, 1989 Edition
- \*\* Pressure Vessels
  - ASME Code Section VIII, Div. I and Div. II, IX, and X, 1989 Code.
- \*\* All Boilers and Pressure Vessels shall be stamped with a Vermont serial number.
- \*\* Manufacturer's Data Report must be filed with state before installation.
- \*\* B31.1 Power Piping, ANSI 1989 Edition.

## Equipment Requiring Maintenance Inspection

- \*\* Power Boilers
  - One annual internal and external inspection.
- \*\* Low Pressure Heating and Hot Water Supply Boilers in Public Buildings, Hospitals, Schools
  - One annual internal (where construction permits) and external inspection.
- \*\* Unfired Pressure Vessels Subject to Internal Corrosion.
  - Internal and external inspection once every 2 years.

## Pertinent Exceptions to Maintenance Inspection

- \*\* Boiler or pressure vessel under federal control.
- \*\* Pressure vessel used as container for liquefied petroleum gas.
- \*\* Obviously portable boiler used in the construction of public roads, railroad or bridges.
- \*\* Low pressure boiler located in a private residence, or in an apartment house of less than 2 family units.
- \*\* Certain other exceptions: call (802) 828-2106.

## Maintenance Inspector Qualifications

- \*\* For Companies Operating Unfired Pressure Vessels.
  - Inspections by employee inspectors are accepted in lieu of Department Inspector. Such inspectors must obtain a certificate.

## Certificate of Inspection

- \*\* A certificate is issued for 12 months for Power Boilers and 12 months for Low Pressure Boilers and 24 months for Unfired Pressure Vessels.

## Miscellaneous

- \*\* Certificates of Competency (commission) are issued to insurance inspectors holding an approved National Board commission.

VERMONT  
ANNUAL SUMMARY OF REGULATORY ACTION

Summary

Significant revisions made to Boiler and Pressure Vessel Law in 1990.

Adopted B 31.1 Power Piping and NBIC in 1996.

VERMONT

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact	Joseph L. Choquette, III Vermont Petroleum Association P.O. Box 566 Montpelier, VT 05601-0566 (802) 223-3496
Action or Support Team	
Additional Information	No current activity.

VIRGINIAREGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	Virginia
Laws Involved	Boiler and Pressure Vessel Safety Act Chapter 3.1 Section 40.1-51.5 to 51.19 Boiler and Pressure Vessel Rules and Regulations Section I-IV VR 425-01-75(amended August 1, 1995) Standard for Boiler and Pressure Vessel Operator Certification (effective January 17, 1990). VR 425-01-64.
Chief Inspector	Fred P. Barton
Title and Department	Director/Chief Inspector Department of Labor and Industry Powers-Taylor Building 13 South 13th Street Richmond, VA 23219 (804) 786-3262 Fax: (804) 371-2324
State Department Responsible for Laws and Rules	Safety and Health Codes Board empowered to make, alter or amend Rules and Regulations
Safety & Health Codes Board Membership (* indicates chairman)	Charles B. Ashby - Agricultural Employers West Franklin Chappell - Agricultural Employees Roger L. Burkhardt - Boiler and PV Industry Employers Thomas A. Bryant - Construction Industry Employers James H. Underwood - Labor in the Construction Industry Bobby J. Sasser - Industrial Employers Suzanne K. Lowman - Labor Representative Knowledgeable in Chemical and Toxic Substances Luke O'Toole - Insurance Company *Louis Cernak, Jr. - Labor in the Boiler and PV Industry Samuel B. Thomas - General Public Representative Franklin D. Owens - Industrial Representative Knowledgeable in Chemical and Toxic Substances Linwood Saunders - Labor in the Manufacturing Industry Robert B. Stroube, M.D. - Ex Officio William Woodfin - Ex Officio

VIRGINIA  
REGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS  
(continued)

Safety & Health Codes Board  
Secretary

Linwood Saunders  
437 Barrett Street  
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API Regulatory Action Team

Christopher J. Payton, Superintendent  
Engineering and Inspection  
Amoco Oil Company  
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Industry Association Staff Contact

Michael D. Ward, Executive Director  
Virginia Petroleum Council  
701 East Franklin Street, Suite 105  
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VIRGINIASUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* ASME Code for Boilers and Pressure Vessels.
- \*\* Boilers and Pressure Vessels must be stamped ASME Code and National Board.
- \*\* Manufacturer's data report must be filed with Chief Inspector prior to operation.
- \*\* Exception.
  - Unfired pressure vessels not exceeding 15 psig. with no limitation in size.

## Equipment Requiring Maintenance Inspection

- \*\* Power Boilers and High Temperature Water Boilers.
  - Certificate inspection annually and external inspection annually while operating.
- \*\* Pressure Vessels subject to internal corrosion.
  - Certificate inspection biennially with an internal inspection at discretion of inspector where construction permits.
- \*\* Pressure Vessels not subject to corrosion.
  - Certificate inspection biennially (external) with internal at discretion of inspector where construction permits.

## Pertinent Exceptions to Maintenance Inspection

- \*\* Pressure vessels under supervision of an owner-user inspection agency shall be inspected at such intervals as agreed upon with the Board.

## Maintenance Inspector Qualifications

- \*\* Applications for owner-user organizations shall be sent to the Chief Inspector.
- \*\* Examinations for Certificate of Competency given 4 times each year.
- \*\* Qualifications.
  - Mechanical engineering degree plus one year experience in design, construction, operation, or inspection of high pressure boilers and pressure vessels, or
  - Engineering degree plus 2 years experience.
  - High school education plus 3 years experience.
- \*\* Contract fee inspectors must show evidence of financial responsibility. (1996 amendment Chapter 294, Acts of Assembly.)

## Certificate of Inspection

- \*\* A certificate of inspection valid for not more than 14 months for power boilers, and for not more than 26 months for low pressure boilers and pressure vessels is issued by the Commissioner upon payment of a fee of \$20 by the owner or user direct to the



VIRGINIA

SUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS  
(continued)

Commissioner. Owner-user may apply for an extension of up to 3 months beyond this period.

Miscellaneous

- \*\* National Board Rules for Repairs and Alterations to Boilers and Pressure Vessels are acceptable to the Department.
- \*\* Owner-user inspection agencies must maintain inspection records for unfired pressure vessels and file an annual statement for vessels inspected during the year.
- \*\* Fairfax County and Arlington County, Virginia, also have boiler and pressure vessel regulations.

VIRGINIA

ANNUAL SUMMARY OF REGULATORY ACTION

Summary

July 1, 1990 - The 120-gallon criteria for exemption was removed on water tanks under 300 psi. and 210°F. The 120-gallon hydroneumatic tank was not exempted.

Standard for Boiler and Pressure Vessel Operator Certification, revised July 1991.  
VR 425-01-64.

Boiler and Pressure Vessel Safety Act, Chapter 3.1, Section 40.1-- 51.3 to 51.19, amended 1996.

Boiler and Pressure Vessel Regulations, 1974 amended 1978, July 1, 1991, September 1, 1993, and August 1, 1995,  
VR 425-01-75.

VIRGINIA

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact

Action or Support Team

Additional Information

Extensive regulatory action: Proposed Regulation VR  
680-14-13 -- based on Statutory Authority 62.1-44.34:15.1 and  
62.1-44.15(10) of the Code of Virginia.

WASHINGTONREGULATORY CONTACT INFORMATION  
BOILER AND PRESSURE VESSEL RULES AND REGULATIONS

Name of State	Washington
Laws Involved	Boilers and Unfired Pressure Vessels Laws, Chapter 70.79, Chapter 296-104 WAC
Chief Inspector	Dick Barkdoll <sup>1</sup>
Title and Department	Chief Inspector Department of Labor & Industries B&CSIS Boiler/Pressure Vessel Section P.O. Box 44410 Olympia, WA 98504-4410 (206) 956-5270

<sup>1</sup>Contacts with state officials by those outside of Washington should be made through the Western States Petroleum Association in Seattle. (See page 4 for contact information).

State Department Responsible for Laws and Rules	Department of Labor & Industries Boiler & Pressure Vessel Section
--	--

Board of Boiler Rules Membership  
(\* indicates Chairman)

Jerry Takeuchi  
15805 N.E. 32nd Street  
Vancouver, WA 98662  
(360) 896-0851

Daryl A. Hoffman (Insurance)  
Factory Mutual Engineering  
10900 NE 4th, Suite 700  
Bellevue, WA 98009  
(206) 454-3931  
Term expires: August 22, 1994

\*Charles Butros (Engineer)  
1412 Sunnyvale Court  
Olympia, WA 98502  
(206) 482-4428, ext. 5010  
Term expires: August 22, 1995

WASHINGTON  
REGULATORY CONTACT INFORMATION  
BOILER AND PRESSURE VESSEL RULES AND REGULATIONS  
(continued)

Thomas Tait (Labor)  
Rayonier Inc.  
700 N. Ennis St.  
Port Angeles, WA 98362-4504  
Term expires: August 22, 2000

Frank Sanchez, Owner-User  
P.O. Box 8  
Ferndale, WA 98248  
Term expires: August 22, 1999

Board of Boiler Rules Secretary

The Chief Inspector acts as secretary to the board.

Regulatory Action Team

The Northwest Pressure Equipment Resource Group of the  
Western States Petroleum Association is the Regulatory Action Team

Chuck Bowers (Chairman)  
Shell Oil  
Anacortes Refinery  
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Texaco Refining & Marketing Inc.  
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Del J. Fogelquist, Northwest Regional Manager  
Western States Petroleum Association  
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WASHINGTON

REGULATORY CONTACT INFORMATION  
BOILER AND PRESSURE VESSEL RULES AND REGULATIONS  
(continued)

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Paul Noges  
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Robert (Bob) G. Terry  
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John T. Reynolds  
Shell Oil  
Westhollow Technical Center  
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Fax: (713) 544-7705

J. J. (Jeff) Waytashek  
UNOCAL  
P.O. Box 5797  
Kennewick, WA 99336-0618  
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Fax: (509) 586-5440

Industry Association Staff Contact

Del J. Fogelquist, Northwest Regional Manager  
Western States Petroleum Association  
2201 6th Avenue, Suite 1105  
Seattle, WA 98121-1832  
(206) 441-9642

WASHINGTONSUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* Items covered
  - Power boilers, low pressure boilers, and unfired pressure vessels. Exceptions noted below.
- \*\* Codes
  - ASME Boiler & Pressure Vessel Code - Sections I, II, V, VIII, and IX.
  - Addenda are recognized.
- \*\* Other
  - Manufacturer's data report must be filed with state or registered with the National Board of Boiler and Pressure Vessel Inspectors, Columbus, Ohio.
  - Boilers and vessels must have a state serial number.
  - Special designs must be approved by state.
  - Special rules apply to boilers and vessels in places of public assembly.
- \*\* Pertinent Exceptions
  - Boilers and vessels under federal control or federal rules.
  - Vessels under 5 cu. ft., vessels under 15 psi. and LPG service, no certificate to operate required.

## Equipment Requiring Maintenance Inspection

- \*\* Items covered
  - Power boilers, low pressure boilers and unfired pressure vessels. Exceptions noted below.
- \*\* Frequency
  - Power boilers - annual, internal, and external. (Variances for longer inspection intervals can be obtained from the Boiler Board.)
  - L.P. boilers - biennial, external (internal if possible).
  - Vessels - biennial, external (biennial, internal, or at intervals established in accordance with the NBIC or API-510, if subject to corrosion).
  - Internal inspections must be reported to the state.

## Pertinent Exceptions to Maintenance Inspection

- \*\* See under Construction above.

## Maintenance Inspector Qualifications

- \*\* Owner-user inspectors must be commissioned by the state.
- \*\* Inspectors must pass state examination and National Board examination or API 510 examination.

WASHINGTONSUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

(continued)

## Certificate of Inspection

- \*\* Biennial inspection certificates are required for vessels and annual inspection certificates are required for boilers.

## Miscellaneous

- \*\* Repairs must conform to NBIC, or API 510 if applicable.
- \*\* Repairs and alterations must be made by holders of ASME Certificate of Authorization or National Board "R" stamp.
- \*\* Defective boilers and vessels must be reported to the state.
- \*\* Alterations and repairs must be reported to the state.
- \*\* Pressure relief valves must conform to ASME codes and be stamped by ASME stamp holder, or obtain variance.
- \*\* Resetting, repairing and restamping of safety valves on state vessels/boilers requires a "V", "UV", or "VR" stamp.
- \*\* External adjustments on safety valves to set pressure must be witnessed and approved by a National Board commissioned inspector.
- \*\* Special rules apply to safety valves on heating boilers.



WASHINGTON  
ANNUAL SUMMARY OF REGULATORY ACTION

Summary

WAC changes in 1994 resulted in the following:

- Recognition of API 510 certified pressure vessel inspectors.
- Acceptance of alterations by R-Stamp holders.
- Authority of owners-users to set pressure vessel internal inspection intervals per NBIC or API 510 requirements.
- Recognition of NBIC and API 510 for pressure vessel inspection.

WASHINGTON

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact

Action or Support Team

Additional Information

Washington State Oil Spill Prevention Regulations (WAC 173-180D) requires the use of API 653 for aboveground storage tanks.

WEST VIRGINIAREGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	West Virginia
Laws Involved	West Virginia Code 21-3-7, Effective date July 1, 1945, Title: Steam Boiler Inspection
Chief Inspector	Murray Shuff
Title and Department	Chief Boiler Inspector & Safety Engineer Division of Labor Capitol Complex, Building 3, Room 319 Charleston, WV 25305 (304) 558-7890
State Department Responsible for Laws and Rules	Commissioner of Labor is empowered to propose alterations or amendments to the Rules and Regulations. These are reviewed by a legislative committee and voted on by the full legislature.
Board of Boiler Rules Membership (* indicates chairman)	None
API Regulatory Action Team	Clyde C. Neely Union Carbide Corporation Building 2000 P.O. Box 8361 South Charleston, WV 25303 (304) 747-5224
Industry Association Staff Contact	Jack E. Harrison, Executive Director West Virginia Petroleum Council 1250 One Valley Square Charleston, WV 25301 (304) 344-3609

WEST VIRGINIASUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* West Virginia does not regulate Pressure Vessels.
- \*\* Steam boilers must be constructed and stamped per ASME Section I and National Board stamping.
- \*\* Small portable boilers used in oil and gas industry about their wells and tool houses are exempt (small portable boiler is one weighing less than 200 lbs.).

## Equipment Requiring Maintenance Inspection

- \*\* Steam Boilers
  - One annual internal inspection, and after repairs.

## Pertinent Exceptions to Maintenance Inspection

- \*\* See above.

## Maintenance Inspector Qualifications

- \*\* Special inspectors must hold a West Virginia Boiler Inspector's Commission in order to make field inspections or stamp new boilers. He may hold an approved National Board Commission to make other Shop Inspections.
- \*\* Examinations for Special Inspectors or Department of Labor Inspectors are held on request. Reciprocal commissions are issued to Inspectors holding a National Board Commission.

## Certificate of Inspection

- \*\* A certificate of inspection, valid for 12 months is issued by the Department. The Commissioner of Labor may charge such fee as he determines reasonable.

## Miscellaneous

- \*\* National Board "Repairs and Alterations to Boilers and Pressure Vessels by Welding" are acceptable by the Department.

WEST VIRGINIA  
ANNUAL SUMMARY OF REGULATORY ACTION

Summary

No significant activity reported in 1996.

WEST VIRGINIA

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact

Jack E. Harrison, Executive Director  
West Virginia Petroleum Council  
1250 One Valley Square  
Charleston, WV 25301  
(304) 344-3609

Action or Support Team

Additional Information

WISCONSINREGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	Wisconsin
Laws Involved	Boiler Pressure Vessel Code 1996 Chapter ILHR41:Administration, Inspection and General Installation Requirements Chapter ILHR 42:Repairs, Alterations and Miscellaneous Requirements
Chief Inspector	Michael Verhagen
Title and Department	Acting Chief Boiler Inspector Division of Safety and Buildings Department of Commerce 401 Pilot Court, Suite C Waukesha, WI 53188 (414) 548-8617 Fax: (414)-548-8614
State Department Responsible for Laws and Rules	Department of Commerce
Board of Boiler Rules	Boiler and Pressure Vessel Code Advisory Committee  State governmental agencies are being reorganized. In conjunction with this reorganization, advisory committees are also being reviewed. Some of these committees will be discontinued as a result of this review, which is scheduled to be completed late this year or early in 1997. The Boiler and Pressure Vessel Code Advisory Committee, assuming it is continued, will probably be reconstituted sometime in the future.
Board of Boiler Rules Secretary	Ronald H. Acker  Division of Safety and Buildings 201 East Washington Avenue P.O. Box 7969 Madison, WI 53707 (608) 267-7907

WISCONSIN

REGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS  
(continued)

API Regulatory Action Team

Industry Association Staff Contact

Charles W. Elliott, Executive Director

Wisconsin Petroleum Council  
25 West Main Street, Suite 703  
Madison, WI 53703  
(608) 256-3312



WISCONSINSUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

## Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* ASME Code for both Boilers and Pressure Vessels ANSI B 31.1 for steam and hot water piping.
- \*\* Boilers and Pressure Vessels shall be registered with the National Board.

## Equipment Requiring Maintenance Inspection

- \*\* Power Boilers
  - One annual internal or external inspection.
- \*\* Pressure Vessels
  - One external or internal inspection every 36 months.
- \*\* Low pressure steam and hot water heating boilers -- one external or internal inspection every 36 months.

## Pertinent Exceptions to Maintenance Inspection

One and 2 family dwellings exempt - ILHR 41.18 (1) (b).

## Maintenance Inspector Qualifications

- \*\* In-service field inspectors shall have one of the following education and experience qualifications:
  - (a) A bachelor's degree in engineering from an accredited college or university, which is deemed to be the equivalent of 2 years experience in design, construction, operation, or inspection of high pressure boilers and pressure vessels; or
  - (b) An associate degree in mechanical technology plus 1 year of actual experience in design, construction, operation, or inspection of high pressure boilers and pressure vessels; or
  - (c) Two years of practical experience in the construction, installation, repair, maintenance, operation, or inspection of high pressure boilers and pressure vessels.
- \*\* After 1 year, in-service field inspectors may apply for a certificate as a boiler-pressure vessel inspector.
- \*\* In-service field inspectors may perform field inspection work only and must work under the general supervision of a certified boiler-pressure vessel inspector.

## Certificate of Inspection

- \*\* Certificate of Operation required for boilers and pressure vessels.
- \*\* New certificate issued by State after each periodic inspection.

WISCONSIN

SUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES  
AND REGULATIONS

(continued)

Miscellaneous

- \*\* ANSI/API 510 has been adopted by reference.
- \*\* Code boiler and vessel repairs must be made by a holder of an ASME Certificate, a National Board "R" stamp or a boiler repairer registration from the state.
- \*\* For noncode pressure vessels, repairs and alterations must be made in accordance with the vessel manufacturer's recommendations and Section IX of the ASME Code.
- \*\* Repairs to safety valves and safety relief valves shall be performed by an organization in possession of:
  - ASME V, HV, or UV code stamp.
  - National Board VR stamp.

WISCONSIN  
ANNUAL SUMMARY OF REGULATORY ACTION

Summary

Minor revisions were made to Chapters ILHR 41 and 42. The latest versions were published in the Wisconsin Administrative Register in June 1996, No. 486, effective July 1, 1996.

WISCONSIN

ABOVEGROUND STORAGE TANK CONTACT INFORMATION

Industry Contact

Charles W. Elliott, Executive Director  
Wisconsin Petroleum Council  
25 West Main Street, Suite 703  
Madison, WI 53703  
(608) 256-3312

Action or Support Team

Additional Information

WYOMINGREGULATORY CONTACT INFORMATION  
BOILER, PRESSURE VESSEL, AND PIPING RULES AND REGULATIONS

Name of State	Wyoming
Laws Involved	Occupational Health and Safety General Rules and Regulations. Subparts A-2 cover various hazards and exposures including special sections for several industries. Subpart G includes sections on Flammable and Combustible Liquids and LPG
Chief Inspector	There is no office of "Chief Inspector." For information contact:
Title and Department	Steve Foster, Assistant Administrator for Safety Department of Employment Division of Workers' Safety & Compensation Herschler Building 2nd Floor East Cheyenne, WY 82002 (307) 777-7786
State Department Responsible for Laws and Rules	Occupational Health and Safety
Board of Boiler Rules Membership (* indicates chairman)	Wyoming has no Board of Boiler Rules
API Regulatory Action Team	None
Industry Association Staff Contact	Richard T. Robitaille, Executive Director Petroleum Association of Wyoming 951 Werner Court, Suite 100 Casper, Wyoming 82601 (307) 234-5333

WYOMING

SUMMARY OF BOILER, PRESSURE VESSEL, PIPING, AND ABOVEGROUND STORAGE TANK RULES AND REGULATIONS

Summary of Construction Requirements for Boilers and Pressure Vessels

- \*\* Items covered
  - Boiler and pressure vessels and certain piping.
- \*\* Codes
  - Boilers: ASME Boiler and Pressure Vessel Code, Section I, 1968 including applicable addenda.
  - Unfired vessels: ASME Boiler and Pressure Vessel Code, Section VIII, 1968.
  - Air receivers: ASME Boiler and Pressure Vessel Code, Sections VIII, 1968 including applicable addenda.
  - Piping: ANSI and API standards as applicable.
- \*\* Other
  - Rules vary according to product and industry. Rules quoted here apply to refineries, and chemical plants (Wyoming OHS General Rules & Regulations, Subpart 1910.10, Section 6, Subsection i and Subpart M, Section 1910.169, Air Receivers and Steam Boilers).
  - For other applications, including bulk plants and service stations, see the OHS Rules and Regulations.
- \*\* Pertinent Exceptions
  - Certain exemptions apply to each section of these rules and regulations. Refer to the regulations for specific applications.

Equipment Requiring Maintenance Inspection

- \*\* No rules for maintenance inspections or repairs have been written.

Maintenance Inspector Qualifications

- \*\* No rules for maintenance inspections or repairs have been written.

Certificate of Inspection

No rules for maintenance inspections or repairs have been written.

Miscellaneous

- \*\* Wyoming rules covering boilers, vessels and piping follow those of the Federal OSHA for safety in the workplace.

WYOMING

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No significant legislative activity in 1996.

WYOMING

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