

# Mandatory Date Approaches for Compliance with European Pressure Equipment Directive

**T**he European Pressure Equipment Directive (97/23/EC) becomes mandatory in Europe on May 29, 2002. What this means is that starting on that date, all pressure equipment that falls under the scope of the Directive will have to be in compliance, and bear CE marking signifying such compliance. EU countries will no longer have the option of accepting equipment built in compliance with their national regulations/standards. Over the past three years, ASME has been making preparations for this approaching changeover in several ways, and those preparations are beginning to bear fruit. The following is an update on the latest developments on several topics, some of which have been mentioned in previous editions of *The Mark*.

## Guidance Document for ASME Stamp Holders

This document was developed in cooperation with the Pressure Vessel Research Council and European notified bodies and was published in July, 2001. The Guidance Document is made up of three major portions. The first portion is chapters I through X, which gives an overview of the PED, provides important basic information on the entire Directive, and identifies specific issues of higher importance. The next major portion, Chapters XI and XII, provides a comparison of the PED and Section VIII, Division 1 requirements, including commentary on both, and an Annex Z for Section VIII, Division 1. This Annex Z provides the Section VIII Code users with instructions on how to augment what they are currently doing in order to meet all essential safety requirements (ESRs) of the PED. The third portion of this Guidance Document gives a listing of approved CLAP1 interpretation sheets, which provide useful information on applying some of the ESRs.

Most of the principles and positions contained in the document are as applicable to Section I of the ASME Boiler and Pressure Vessel Code as to Section VIII, Division 1, but ASME is planning to issue a supplement to the Guidance document with specific information on other Sections of the Code. To order a copy of the Guidance Document, visit the ASME Codes and Standards website at [www.asme.org/codes](http://www.asme.org/codes) and click on the shopping cart in the upper right corner of

the screen. Then, type "Stamp Holders" in the search box and Enter. The Codes and Standards website should also be monitored periodically for future announcements of supplements to the Guidance Document covering other Sections of the Code.

## European Approval of ASME Materials

In previous editions of *The Mark*, reports were made about the extensive effort being conducted by ASME in conjunction with industry to apply for European Approval of Materials (EAM) for ASME/ASTM material specifications. In early 2001, a request was sent to CETIM, a French notified body notified for approval of materials, that contained seven data sheets covering various types and grades of ASME/ASTM materials. On March 16, 2001, CETIM submitted those seven data sheets to the European Commission and the European Member States for information pursuant to their approval, and each was contested by at least one European Member State

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under the EAM approval process described in the PED.

Subsequently, the European Commission's Working Party Materials has ruled that Clause 5 of Article 11 of the PED prohibits the issuance of an EAM covering a type of material that is covered by a European harmonized standard. Therefore, not only have all seven ASME/ASTM material submissions been rejected, but also to date, no EAM's have been issued for any type of material, even though the vast majority of the submissions are for existing European national (not harmonized) material specifications.

For that reason, the only path open to using ASME materials under the PED is to obtain a Particular Material Appraisal (PMA). The PMAs are conducted by the manufacturer to confirm that the material is suitable for its application and meets the applicable Essential Safety Requirements for materials. In the case of pressure equipment in categories III and IV, these Particular Material Appraisals are subject to review/approval by the notified body responsible for the conformity assessment procedure.

There have been some strong indications that the burden of performing PMAs for every piece of equipment constructed could be reduced somewhat by the development of a standardized approach to PMAs. In fact, many notified bodies are accepting duplicate PMAs (previously approved for the manufacturer by the notified body) for the repetitive use of an ASME material by the same manufacturer under identical service conditions. A Guideline is being developed by the Commission's Working Group Pressure on the subject of PMAs and should be available from the official website for the PED, <http://ped.eurodyn.com/> in the near future.

## Open Lines of Communication

ASME continues to keep communication lines open with manufacturers of pressure equipment, notified bodies, the European Commission, and US Trade and Commerce representatives. These lines are multi-path in that ASME holds seminars to keep manufacturers informed of the latest developments in the PED. During these programs, ASME learns from the manufacturers what their difficulties and concerns are. These can then be related through meetings with the US Department of Commerce and US Trade Representative, as well as in direct meetings with the European Commission's Directorate General Enterprise, which is responsible for the PED.

The information ASME gathers from those organizations then forms the basis for another round of informative seminars for manufacturers and users of pressure equipment. For instance, one key area of concern is in-service inspection requirements that vary from country to country throughout Europe. Onerous requirements based on the design code for a piece of equipment with CE marking can have a detrimental effect on that product's entry in some areas of the European market. Private sector and government-to-government discussions have raised this issue with the European Commission, and they have exhibited an interest in ensuring that in-service inspection requirements do not undermine the goals of the Directive: free movement of pressure equipment goods within the European Market.

## Growing Success

At the last three ASME seminars on using the ASME Boiler and Pressure Vessel Code to meet the PED, presentations were made giving case histories of how companies used the ASME Code and shipped their equipment with CE marking. Projects ranged from relatively small chiller units to

large hydrotreating reactors built in Italy to Section VIII, Division 2 and shipped to Portugal with CE marking. In each case, the notified body was also present to describe their part of the process. It is becoming clearer that it is possible to use the ASME Code to meet the PED.

The manufacturer must merely realize that the ASME Codes provide rules only for the design and construction of safe pressure equipment, while the ESRs require the designer to take into account other factors, e.g. means of filling and discharge, transportation during delivery, and warning labels. The manufacturer must therefore make an assessment of the extent to which the ESRs are addressed by the selected ASME Code and record details of the variances and the solutions to be adopted to fully meet the requirements. For example, following a particular ASME Code may not meet all the specific quantitative requirements of Annex 1 § 7 of the Directive, and in such cases "an equivalent overall level of safety" to the applicable harmonized European product standard must be demonstrated. It is generally accepted that this will be achieved if the philosophy adopted by the applicable ASME Code for design, manufacture and testing is followed in its entirety.

## Conclusion

ASME will continue to provide the latest information regarding the PED to its Certificate holders through this newsletter and on the ASME website. Visit the website regularly for announcement of PED seminars in your area of the world. The next scheduled seminar will be held in Beijing, China on May 22 – 23. For information on this seminar, and to provide any experiences you have had attempting to comply with the PED, Contact, Mark Sheehan, Director, ASME Pressure Technology Codes and Standards at [sheehanm@asme.org](mailto:sheehanm@asme.org).

# Seventh NRC/ASME Symposium on Valve & Pump Testing

The U. S. Nuclear Regulatory Commission (NRC) and the American Society of Mechanical Engineers (ASME) will jointly sponsor the Seventh NRC/ASME Symposium on Valve and Pump Testing on July 15 to 18, 2002, in Washington, DC, at the Renaissance Washington DC Hotel. This Symposium is conducted every two years to provide for the exchange of information on technical, programmatic, and regulatory issues associated with the testing of valves and pumps used in nuclear power plants. The audience will have an opportunity to discuss ideas and ask questions during

the technical sessions.

The NRC and ASME have received abstracts of proposed papers for the Symposium on the following topics:

- In-service testing
- Status and future direction of ASME O&M Code Issue
- Regulatory issues
- Testing of air-operated and motor-operated valves
- Testing of safety-relief valves
- Testing of check valves
- Testing of pumps
- Innovations in designs or testing of valves and pumps

- Risk-informed in-service testing and applications
- Industry and NRC research
- Advances in test equipment and test methods

Registration information and the final symposium program will be available during the first quarter of 2002. To ensure receipt of this information you may make your request to:

G.M. Eisenberg, Director  
Nuclear Codes and Standards  
ASME  
Three Park Ave, M/S 20W1  
New York, NY 10016-5990  
Fax: (212) 591-8501  
E-Mail: [eisenbergg@asme.org](mailto:eisenbergg@asme.org)

Additionally, the NRC contact for the Symposium is:

Thomas G. Scarbrough  
Telephone 301-415-2794  
E-mail: [tgs@nrc.gov](mailto:tgs@nrc.gov)

## Boiler & Pressure Vessel Top 10

Top 10 Boiler and Pressure Vessel Certificate Holders by State as of January 2002				Top 10 Boiler and Pressure Vessel Certificates by Certificate (US/Canada) as of January 2002			
1	Texas	515		1	U	2628	
2	Pennsylvania	212		2	S	1076	
3	California	179		3	PP	660	
4	Oklahoma	139		4	UM	273	
5	Louisiana	132		5	H	210	
6	New York	127		6	A	195	
7	Ohio	113		7	UV	154	
8	Illinois	103		8	U2	118	
9	Wisconsin	81		9	V	100	
10	New Jersey	76		10	HLW	24	
<b>Total Above</b>		<b>1677</b>	<b>(57%)</b>	<b>Total Above</b>		<b>5438</b>	<b>(99%)</b>
<b>Total All</b>		<b>2935</b>	<b>(100%)</b>	<b>Total All</b>		<b>5502</b>	<b>(100%)</b>
Top 10 Boiler and Pressure Vessel Certificate Holders by Country as of January 2002				Top 10 Boiler and Pressure Vessel Certificates by Certificate (International) as of January 2002			
1	USA	2935		1	U	1206	
2	Canada	269		2	S	500	
3	Italy	152		3	U2	355	
4	Germany	132		4	PP	194	
5	S. Korea	107		5	A	61	
6	China	95		6	UM	56	
7	Mexico	76		7	H	36	
8	France	72		8	UV	25	
9	England	70		9	V	7	
10	Japan	61		10	UD	6	
<b>Total Above</b>		<b>3969</b>	<b>(88%)</b>	<b>Total Above</b>		<b>2446</b>	<b>(99%)</b>
<b>Total All</b>		<b>4505</b>	<b>(100%)</b>	<b>Total All</b>		<b>2460</b>	<b>(100%)</b>

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## ASME CONFORMITY ASSESSMENT PROGRAMS

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*Director, Accreditation and Certification – Alan Bagner, 1-212-591-8580, bagnera@asme.org*

### ACCREDITATION PROGRAMS

- AIA** Qualification of Authorized Inspection Agencies, nuclear and non-nuclear, based on the ASME QAI-1 Standard (formerly N626.1)  
Bibi Rahim, 1-212-591-8585, rahimb@asme.org & Ken Baron, 1-212-591-7019, baronk@asme.org
- BPV** Boiler and Pressure Vessels  
Joseph Pang, 1-212-591-8525, pangj@asme.org; Sandra Bridgers, 1-212-591-8583, bridgers@asme.org; Ken Baron, 1-212-591-7019, baronk@asme.org
- N-type** Nuclear component manufacturers and assemblers (vessels, tanks, pressure piping, and pressure relief devices)  
Bibi Rahim, 1-212-591-8585, rahimb@asme.org & Maria Tromba, 1-212-591-8586, trombam@asme.org
- PRD** Pressure relief device testing laboratories and authorized observers  
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- QEI** Elevator Inspector certifying organizations  
Bibi Rahim, 1-212-591-8585, rahimb@asme.org & Joseph Pang, 1-212-591-8525, pangj@asme.org
- QSC** Nuclear material organization (material manufacturers and suppliers)  
Bibi Rahim, 1-212-591-8585, rahimb@asme.org & Maria Tromba, 1-212-591-8586, trombam@asme.org
- RTP** Manufacturers of reinforced thermoset plastic corrosion resistant vessels  
Bibi Rahim, 1-212-591-8585, rahimb@asme.org & Maria Tromba, 1-212-591-8586, trombam@asme.org

### REGISTRATION PROGRAM

- ISO** Registration of suppliers of mechanical equipment and related materials, items, and services in the industries and sectors associated with the art, science, and practice of mechanical engineering  
Christine Bujal, 1-212-591-8592, bujalc@asme.org & Ken Baron, 1-212-591-7019, baronk@asme.org

### CERTIFICATION OF PERSONNEL

- QHO** Operators of hazardous waste incinerators  
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Sandra Bridgers, 1-212-591-8583, bridgerss@asme.org & John Millman, 1-212-591-8584, millmanj@asme.org
- QFO** Operators of high capacity fossil fuel fired plants  
Sandra Bridgers, 1-212-591-8583, bridgerss@asme.org & John Millman, 1-212-591-8584, millmanj@asme.org
- Y14** Geometric dimensioning and tolerancing professionals (GDTP)  
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