PRESSURE SYSTEMS SAFETY REGULATIONS 2000 – REGULATION 10
IMMINENT DANGER

INTRODUCTION

1. Over recent years, there has been much discussion and debate between HSE and the industry (notably the key trade associations the Engineering Equipment and materials Users Association (EEMUA) and the Safety Assessment Federation (SAFed)).

2. This note brings together published advice from the Health and Safety Executive (HSE) and an explanation of the issues raised during discussion at EEMUA technical meetings.

PREVIOUS HSE ADVICE

3. The published advice from HSE on the application of PSSR Regulation 10 is repeated verbatim below;

*Imminent Danger under the Pressure Systems Safety Regulations 2000*

Under PSSR the legal duties of a competent person under Regs 9 and 10 are distinct.

Under Reg 9 the competent person undertakes an examination in accordance with the written scheme of examination and writes a report for the owner/user detailing any work that must be done on the pressure system and a timescale under which such work must be done. Unless the competent person is of the opinion that the pressure system is unsafe, and presents an imminent danger, the pressure system can be put back into service immediately if desired.

Reg 10 engages when the competent person is of the opinion that the pressure system is unsafe to be put back into service without certain repairs, modifications or changes to the operating conditions. In this situation the system presents an imminent danger and a report under Reg 10 must be made. This obligation exists even if the fault was immediately rectified in the presence of the competent person. Although not a legal requirement under Reg 10, it would, where appropriate, be good practice to note the completion of the corrective action taken on the report since this would better reflect the actual condition of the pressure system.

The receipt of an imminent danger report would not automatically lead to a visit by an inspector, although some cases may lead to further enquiries. More generally, HSE is seeking to use such reports to indicate, along with other data, where there may be inadequacies in a dutyholder's safety management systems. Inspectors will normally only visit if there is particular cause for concern. When an inspector visits, HSE only recovers the cost under Fee for Intervention if a material breach of health and safety legislation is found. More information is available at: http://www.hse.gov.uk/fee-for-intervention/index.htm.

SPECIFIC ISSUES

A Need to Reduce the Examination Interval

4. For the avoidance of doubt, in a situation where the Competent Person finds it necessary to reduce the inspection interval, but is still prepared to endorse the system for further operation, for whatever period, this does not constitute Imminent Danger and does not need to be notified under Regulation 10. This is consistent with the advice above.
Examples

a. Vessel on a 10 year examination interval. Corrosion is found such that the CP believes the remnant thickness could fall below the minimum allowable ($t_{\text{min}}$) in less than 10 years. As a consequence the CP chooses to endorse the vessel for a further 5 years’ service.

Routine – PSSR Regulation 10 does not apply

b. Vessel on 5 year examination interval. Severe corrosion found but CP is satisfied that it can be safely returned to service for 6 months and endorses it to that effect.

Unusual – PSSR Regulation 10 does not apply. HSE ME inspectors may wish to discuss with the CP how they established the corrosion rate if they happen to become aware of the situation as a result of (say) a routine inspection.

Issues Found Between Scheduled Examinations

5. As noted in the previously published advice above, the primary purpose of Regulation 10 notifications, from HSE’s perspective, is to alert us to potential issues with safety management systems. Clearly, if pressure equipment actually fails in service, as opposed to being in a condition where failure could be imminent at the point it is examined, this is a more serious condition and one which HSE would wish to know about. However, the wording of PSSR specifically requires the fault to have been found during an examination under the Written Scheme of Examination (WSE) for Regulation 10 to apply. Since, by definition, these problems occur outside of WSE examinations there will be few, if any, situations where notification would be appropriate.

6. Notwithstanding the above, if the failure leads to an injury, or constitutes a Dangerous Occurrence, there may be a requirement to report to HSE under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR).

Timing of the Notification and Fitness for Service Assessment

7. A defect constitutes ‘Imminent Danger’ at the point the Competent Person judges that to be the case. If, however, the Operator believes that a Fitness for Service (FFS) Assessment may demonstrate that the defect concerned does not constitute a danger he may choose to commission such work. IN such cases two conditions should be applied;

a. The equipment should not be operated until the FFS Assessment is complete and the Competent Person has judged that it demonstrates the equipment is fit for service in its current condition.

b. The final decision on application of Regulation 10 should be made at the point the completed FFS Assessment is reviewed by the Competent Person and the notification, if required, should be made at that time.
8. Where the Operator chooses not to have FFS Assessment carried out the decision regarding application of Regulation 10 should be made at the time of the examination.

9. Where, exceptionally, an operator wishes to have a FFS Assessment carried out, yet needs to bring the equipment back into service before this is complete, the following conditions apply;
   a. The equipment must be repaired to the satisfaction of the Competent Person before being brought back into service
   b. At the discretion of the Competent Person, the decision on notification against Regulation 10 can be delayed until completion of the FFS Assessment or made on the basis of the original findings.

OTHER ISSUES

Does a CP Recommendation for Repair mean Regulation 10 must Apply?

10. No. Regulation 10 will only apply if that repair is required before the equipment is brought back into use. In the vast majority of cases the equipment will be safe for use in its current condition, but repairs are required simply to enable the CP to give a sufficiently long endorsement to meet operational requirements.

Danger

11. PSSR is concerned solely with danger as a result of stored energy or steam. Consequently, when a CP is making a decision with regard to the application of Regulation 10 they should consider whether the likely mode of failure is such that ‘PSSR’ danger is present. For example, where the failure mode is a pin hole, such as in an example above, the CP may conclude that the failure does not represent danger under PSSR in which case it would not need to be reported under Regulation 10. Conversely, if the degradation is widespread cracking the CP might be expected to conclude that the failure mode could be brittle fracture, which would present a stored energy hazard, so reporting under Regulation 10 would be appropriate.

Impact of Other Legislation

There will be situations, as outlined above, where what could be construed as a failure of the integrity management system does not lead to a legal obligation to notify HSE under PSSR. However, in any situation where equipment is found to be in a potentially dangerous condition when examined, or if equipment fails in service, other legislation, specifically the Control of Major Accident Hazards (COMAH) and the Provision and Use of Work Equipment Regulations (PUWER) require that dutyholders take appropriate action in response to the situation.