Product information
Risk Assessment

Boiler-house technical risk assessment & risk management

The legal position

The Management of Health and Safety at Work Regulations 1999 (MHSWR) imposes a duty on employers to assess all the risks to employees and others (non-employees) who may be affected by their work or business.

Regulation 3 requires the employer to make a 'suitable and sufficient' assessment of the risks from the work activity in order to properly identify the risks and consider what additional measures can be put in place to control them. The control measures must have the primary aim of eliminating the risks. Where elimination is not possible, the control measures should aim to reduce the risks to a level as low as is reasonably practical (ALARP).

The Owner/User of a boiler system is ultimately responsible for ensuring the system complies with all relevant Health & Safety legislation. While third parties can be used to assist in achieving compliance with these legal obligations, the overall and legal responsibility remains on the Owner/User and cannot be passed down or contracted out.

Pressure Systems Safety Regulations 2000 (PSSR)
Definition of the legal duty holders:

Owner – This means an employer or self-employed person who owns a pressure system. Where the Employer/Owner does not have a place of business in Great Britain, then the User will be responsible.

User – This means the employer or self-employed person who has control of the operation of the pressure system.

Benefits at a glance

- Compliance with legislation
- Conformance with CEA guidance
- Comply with Owner/User responsibilities
- Ensure essential records are in place
- Identify hazards and introduce control measures
- Reduce risk to as low as reasonably practicable (ALARP)
- Enhanced safety for personnel and plant
- Collate and review essential records

Task

To carry out and maintain a Boiler-house Risk Assessment

Solution

Use SAACKE expertise to assist with your compliance

The SAACKE risk assessment

SAACKE is able to carry out a thorough risk assessment and will examine risks to the Health and Safety of Personnel, risks to Plant, Property, Process and Production, Community and Environment, with reference to all the current laws and industry best practice guidance including but not limited to:

- Who might be harmed and how?
- Location of the boiler-house and the potential risk to employees, contractors and the wider community, including access, security, adjacent buildings and fuel storage areas;
- Environmental influences from flooding, freezing or heavy snowfall;
- Inspection of piping systems for general condition, adequate lagging, pipe supports and labelling;
- Inspection of cable installations for general condition and adequate supports;
- Fuel systems, general condition of installation;
- Review of combustion efficiency and emissions data;
- Type and reliability of controls and integrity of safety-related systems;
- Record-keeping, routine testing and level of supervision;
- Additional controls for remote or unsupervised boiler operation;
- The presence of other machinery or dangerous materials;
- The adequacy of boiler-house ventilation to IGE UP 10 and flue integrity;
- Environmental effects, e.g. noise, pollution, spills;
- Operational risks that could be high hazard low frequency events such as water-side explosion due to catastrophic failure of the pressure envelope, explosion caused by unspent fuel or exhaust gases;
- Plant operating profile, load and manning levels;
- Review of current risk assessment and control measures.

Evidence of compliance

All tests and examinations should be recorded and retained on file for at least two years. Examples of records to be kept:

- Risk assessments
- Written Scheme of Examination (WSE)
- Examination reports
- Certificates of thorough examination
- Gas supply diagram
- Boiler operating instructions
- Record of periodic boiler tests (NDT, Hydraulic test)
- Boiler-house log book
- Records of servicing and modifications
- As-built drawings
- Training records – boiler operators and managers.

Included in the risk assessment

A plan view drawing of the layout of the boiler-house showing the arrangement of the main services including steam, blowdown, feedwater and fuel lines including a gas supply line diagram to comply with the Gas Safety (Installation and Use) Regulations 1994.

Reference documents:

Law: HASAWA 1974, MHSWR 1999, PUWER 1998, PSSR 2000, WAHR 2005, COSHH 2002, Control of Noise at Work 2005
Guidance: CEA BG01, BG03, BG04, BG06, HSE INDG436

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