

Thorough examination and testing of equipment during the coronavirus outbreak: Your legal obligations

This guidance is for dutyholders and inspectors. It has information about how to meet your legal obligations to carry out thorough examination and testing of equipment during the coronavirus (COVID-19) outbreak.

Several health and safety regulations require statutory examination and testing:

- the Lifting Operations and Lifting Equipment Regulations (LOLER);
- the Pressure Systems Safety Regulations (PSSR);
- the Provision and Use of Work Equipment (PUWER) (including power presses);
- the Control of Substances Hazardous to Health (COSHH) (for local exhaust ventilation (LEV));
- the Electricity at Work Regulations (EWR).

For equipment covered by these regulations:

- the legal obligation to ensure that work plant and equipment is maintained and is safe to use **remains in place**;
- an effective maintenance regime is essential to ensure the safety of equipment;
- the use of thorough examination and testing continues to be a legal requirement and should be carried out wherever possible;
- HSE will adopt a pragmatic and proportionate approach towards enforcement action if the effects of the coronavirus outbreak prevent dutyholders meeting their thorough maintenance and testing duties for equipment in use, as long as they ensure the equipment remains safe.

Overview

Meeting the requirements to complete statutory thorough examination and testing of plant and equipment is potentially an ongoing challenge for industry during the coronavirus outbreak.

This guidance is intended to ensure that work plant and equipment remain safe to use and provides a framework for decision-making if thorough examination and testing requirements cannot be met. It is intended primarily to help dutyholders and inspection bodies maintain the overarching scheme of thorough examination and testing. It then sets out a risk-based approach to apply when all attempts to ensure thorough examination and testing have been exhausted.

Background

There may be difficulties completing thorough examination and testing within the required time because of a number of issues. These are likely to include:

- a backlog of outstanding thorough examination and testing inspections due to these not being carried out during the coronavirus outbreak lockdown;
- staff and contractor availability to adequately prepare complex pressure systems for the relevant statutory examination;
- engineers or dutyholders refusing to enter premises to carry out thorough examination and testing due to concerns about contact with vulnerable groups or adequate safe working arrangements and other protection methods.

Thorough examination and testing is a critical component of a management process. It helps with auditing the ongoing safe operation of equipment whose failure through deterioration can create dangerous situations, physical harm and business disruption. It is important that plant and machinery

continues to be properly maintained and subject to interim inspections to reduce the likelihood of defects being found during thorough examination and testing.

The statutory requirements apply across all industries that use equipment subject to periodic examination and testing, to ensure it remains safe to use. The risks posed if dutyholders deviate from the required thorough examination and testing regime, and the consequential reductions in the level of protection for the workforce and others, may have different consequences from one business to another.

Enforcement

HSE will adopt a pragmatic and proportionate approach towards enforcement action for non-compliance with statutory requirements directly attributable to the coronavirus outbreak. The enforcement response in these circumstances will normally be to take no action if the only failing is that thorough examination and testing is not carried out by the required date.

Equipment should only be used outside its test regime if dutyholders can demonstrate that it is critical for essential work and can still be operated safely. They must be able to demonstrate that they have made reasonable attempts to have thorough examination and testing carried out, obtained competent advice to produce a thorough assessment of the increased risk and taken appropriate action to manage it.

What dutyholders should do to undertake thorough examination and test

HSE expects dutyholders to make all reasonable efforts to arrange for thorough examination and testing to be carried out within the statutory time limits.

Dutyholders and inspection bodies should work together to agree appropriate safe working arrangements in the workplace, to satisfy both parties' needs, with suitable and sufficient on-site support to allow the inspection body to operate safely, for example suitable access and emergency procedures.

Make sure equipment is suitably cleaned, prepared, stripped down where necessary and made ready before the inspection.

Make sure inspection bodies have access to equipment in a timely manner. This includes plant at businesses that have furloughed staff and are not currently operating, so equipment is ready for when the business reopens. For LEV systems, the examination may have to take place before any work begins. In such situations the business is not reopening for its normal business activity, just for access.

For pressure systems and larger equipment, preparing for statutory inspection may involve multiple contractors travelling to site to undertake cleaning, scaffolding and stripping of insulation work. Employers should factor in that preparation work will take longer (with reduced levels of staffing) and that workers may be working shifts.

HSE is talking with inspection companies and examiners, their respective representative organisations, dutyholders and operators, to help their decision-making on prioritising resources. Some plant subject to thorough examination is safety critical. It is important that this plant continues to operate safely and effectively. You should also remember that reliability issues may become safety issues, so competent evaluation of the consequences of equipment failure is essential.

Managing safe working arrangements for inspection activities

There is clear and comprehensive guidance published by The Department for Business, Energy and Industrial Strategy (BEIS), developed in conjunction with businesses, unions and industry leaders as well

as devolved administrations, to cover a range of workplaces. This guidance is to help dutyholders and inspection bodies manage safe working practices. It includes guidance on:

- doing a 'COVID-19 risk assessment' to take account of the risk from coronavirus in consultation with workers or trade unions;
- maintaining social distancing in the workplace;
- the principles of minimising contact between individuals;
- good management of hygiene while on the premises;
- entering and leaving the premises.

The BEIS guidance for companies on safe working arrangements is at www.gov.uk/guidance/working-safely-during-coronavirus-covid-19.

Prioritisation of inspection activity

While inspection bodies continue to manage resource, if necessary, to prioritise those areas essential to the national infrastructure and to protect vulnerable parts of society, they will also continue to undertake thorough examination and testing wherever possible.

Factors considered may range from the role an industry plays in a supply chain, provision of food supplies and energy networks to the need to maintain entry and exit at social housing or to avoid unnecessary risk caused by shut down/restart of plant.

For pressure systems, including boilers and combined heat and power systems, there is particular significance on the first in-service examination as this is the checkpoint where the competent person determines if the written scheme of examination is adequate. Without this inspection, the ongoing inspection and maintenance regime may not be adequate, leading to potential compromise of safety integrity. If there is any delay in carrying out this examination, there should be confirmation in writing between dutyholder and inspection body, outlining the timescale as to when the examination will take place.

If a thorough examination cannot be undertaken

Some dutyholders may find it difficult to comply with statutory requirements for thorough examination and testing. If a dutyholder decides that equipment will not be used, they should withdraw it from service safely and not reintroduce it into service until all maintenance and inspection activities have been brought up to date. Some equipment may require additional measures to make it safe for an extended idle period and before first reuse. Continued operation of the equipment beyond the period of examination should not be considered:

- where thorough examination and testing is required due to an exceptional circumstance, for example overloading;
- for equipment requiring thorough examination and testing before initial use;
- following installation, or any significant repairs, modifications or changes.

In making decisions about whether equipment should be taken out of service once the examination period has passed, the primary and overriding statutory obligation is to ensure that work plant and equipment remain safe to use.

Dutyholders should consider whether the plant or equipment should be removed from use, either stopping that particular operation or using an alternative system of work, processes or piece of equipment. If these options are not feasible, additional measures should be identified that are required to minimise any potential risks from continued use. Additional measures may include a robust inspection or extra maintenance by people with the necessary skills, experience and knowledge, and with management oversight.

If dutyholders, having worked with their inspection body and/or (in the case of hired powered access equipment, air compressors etc) owner of the equipment, are unable to arrange an inspection within the specified time period, they must take competent advice. This may be possible from within the organisation, or if not, externally (for example the powered access equipment owner) and apply a robust, risk-based approach to decision-making about the continued operation of plant and machinery.

In the case of LEV it is unlikely the LEV system itself will present a safety risk if used beyond the thorough examination and testing date. However, its control of airborne contaminant may be reduced. Dutyholders should consult their LEV maintenance/inspection company and consider the effect of withdrawing LEV equipment on other aspects of plant operation.

If dutyholders conclude that the equipment can be used outside its testing period, they must document:

- the efforts they have made to get the plant examined;
- their decision-making process;
- the factors considered to justify their decision to continue operating plant or equipment;

These arrangements will be temporary, therefore needing:

- regular review;
- reinstatement to statutory compliance at the earliest opportunity;
- possible medium/long-term adjustment of examination schemes to take into account cumulative and/or differing damage during the outbreak.

Issues to address in your risk assessment

The exact scope of a suitable risk assessment will be dependent on the particular circumstances of the equipment that requires thorough examination, but dutyholders should at least consider the following:

- Is alternative equipment, or some sort of alternative process, available?
- What is the immediate potential degree of harm if the equipment fails – collapse onto people, damage to buildings, major explosion, electrical dangers, exposure to hazardous materials?
- If relevant, could failure of this equipment cause wider harm – is there a risk of some form of ‘cascade’ or ‘domino’ effect, resulting in a much greater degree of harm?
- A review of the written scheme and the history of past thorough examination and maintenance reports – in particular, have any specific points on past issues been identified as requiring additional observation/test/repair or revisions to the scheme?
- Have any comments or advice been received from the competent person or maintenance staff about common potential causes for concern or additional checks or routine maintenance that should be undertaken?
- The working environment and use being made of the equipment – for example is it in an environment that promotes corrosion, is minor ongoing damage a common occurrence?
- What additional measures are you putting in place to help manage the risk – extra checks, additional maintenance, process or operational changes, additional staff training or restrictions, limits to maximum loads/pressures, etc?
- What is the competency of the people able to undertake routine checks and maintenance, or any additional checks and maintenance you have identified as being needed? Do you have access to competent maintenance engineers or only the operators doing visual checks?
- When do you intend to review this risk assessment to determine if operation can continue? This should include considering how long it will be before thorough examination and testing is likely to restart and when you will review if further additional measures may be needed, for example temporary reduction of maximum operating loads/pressure.

For power presses there remains within PUWER the requirement for examination and test to include essential strip-down and examination of flywheel, clutch and brake mechanisms by a suitably qualified

engineer. The clutch should be dismantled if there is excessive noise, debris, oil, undue wear, sluggishness of movement, dragging or other cause for concern. Examination should include the brake, since this has important duties both for operation and safety. The condition of the brake lining, interlinking between the clutch and brake (including springs) should be checked, together with overrun protection devices. From time to time, removal or partial removal of a flywheel will be essential, to verify that potentially dangerous defects such as hairline cracks and undue wear in keys and keyways are not present. A qualified Non-Destructive Testing (NDT) inspector should be engaged to confirm the ongoing structural integrity of these mechanical components. Further information can be found at www.hse.gov.uk/pubns/books/hsg236.htm.

For pressure systems there remains within PSSR the option for the competent person to agree a postponement. This will require evaluation of the current written scheme and the history of past thorough examination and maintenance reports to identify past issues requiring additional observation/test or incomplete/outstanding repairs.

Start-up of all pressure systems following outage should be regarded as a functional pressure test to check for leaks. This should be done remotely wherever possible, anticipating that part of the system could fail. Refer to the safety precautions for 'checking for leaks' in the HSE guidance note GS4 (www.hse.gov.uk/pubns/gs4.pdf). Where larger and more complex pressure systems require intrusive inspection as part of leak testing, by a competent person, refer to SAFed guidance PSG21 (www.safed.co.uk/wp-content/uploads/2020/04/PSG-21-Issue-01-May-2020.pdf).

Offshore/onshore major hazard industries and pipelines

This guidance does not remove the duty to ensure so far as is reasonably practicable that all necessary measures have been taken, to prevent incidents/injuries and their consequences to people and, where relevant, the environment.

Offshore dutyholders should also consult with their Independent Verifying Body (IVB) and specialist vendors about any plant or equipment for which they are unable or anticipate being unable to arrange periodic inspection and manage this through their safety management system. All life-saving equipment and appliances should be maintained appropriately.

For dutyholders and operators of pipelines, onshore and offshore major hazard industries and installations, your lead HSE inspector may seek information about any plant or equipment for which you are unable or anticipate being unable to arrange periodic inspections or thorough examinations within the specified time period, and the steps being taken to ensure that the delay will not give rise to danger.

Where surveyors, engineers and inspectors are able to undertake thorough examinations, it is essential that they are able to carry out their work with the usual health and safety protections, social distancing and infection control measures. It is also essential that dutyholders co-operate with competent persons to facilitate safety during statutory inspections.

Further information

For information about health and safety, or to report inconsistencies or inaccuracies in this guidance, visit www.hse.gov.uk/. You can view HSE guidance online and order priced publications from the website. HSE priced publications are also available from bookshops.

This document is available at: www.hse.gov.uk/news/assets/docs/loler-pssr-during-outbreak.pdf

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