Post-coronavirus start-up guidance: Utilities, machinery & equipment

As you prepare to return to your premises following the enforced Covid-19 partial or full shutdown, it is important to carefully plan and manage the reinstatement of building services (elevators, escalators, heating, air conditioning, water supplies, power and gas supplies etc) plus plant and machinery.

In many cases the building will have been idle for several weeks, so the task should be undertaken by trained and competent personnel familiar with the facility and the relevant OEM guidelines – this may include the services of a Facilities Management company.

The objective is to return to the building and resume operations in a controlled and safe manner whilst minimising the risk of further disruption to the business at this sensitive time.

These guidelines provide general advice and considerations that should be taken into account, and are not intende d to be a comprehensive list of tasks or checks that should be performed. Each building and business will need to be individually risk assessed to establish specific needs to develop your own reinstatement plan.

To assist, reference can also be made to our related documents on restarting operations, including specific guidance on ensuring sprinkler installations are operating as intended.

Due to the diversity of premises and business occupiers, each will need to be individually risk assessed to establish specific needs and the guidance given below covers some of the main areas to consider.

These guidelines do not override any existing policy conditions.

The fact that a business is deemed essential, or is permitted to operate, does not mean its legal obligations are in any way relaxed or reduced. Indeed, in the present climate the duties owed to employees and others are enhanced. All activities must only be undertaken in line with the current guidance issued by HM Government.

All applicable health & safety legislation and regulations remain fully in force, including but not limited to:

- **Health & Safety at Work Act 1974.**
- **Management of Health & Safety at Work Regulations 1999.**
- **Workplace (Health, Safety & Welfare) Regulations 1992.**
- **Provision & Use of Work Equipment Regulations 1998.**
- **Fire Safety Regulatory Reform Order 2005.**

- **Lifting Operations and Lifting Equipment Regulations 1998 (LOLER).**
- **Pressure Equipment (Testing) Regulations 2016.**
- **Pressure Systems Safety Regulations 2000.**
- **Electricity at Work Regulations 1989.**
- **Electrical Equipment (Safety) Regulations 2016.**
- **Dangerous Substances and Explosive Atmosphere Regulations 2002.**

First and foremost, customer, maintenance and service engineers, and employee safety are paramount.

Risk management measures

Activities: It is important that a review of your working activities is undertaken before restarting any work, as this will form part of your Covid-19 Compliance risk assessment. You must carry out a suitable and sufficient risk assessment; this means looking at working areas and activities to enable your employees to successfully distance themselves from customers and colleagues and work safely. It may not be appropriate to carry out certain activities as you normally would, and / or you may need to consider supplying PPE equipment to certain employees. Please see the latest Government and HSE advice for updates on appropriate precautions.

Please remember that if some activities cannot be carried out safely, they should not be undertaken at all.

You must reinduct your employees to ensure that they understand new restrictions, new rules and altered arrangements for using welfare facilities and you may need to operate out of hours and/or, introduce shift patterns in order to manage safely the social distancing elements of the Covid-19 guidelines.

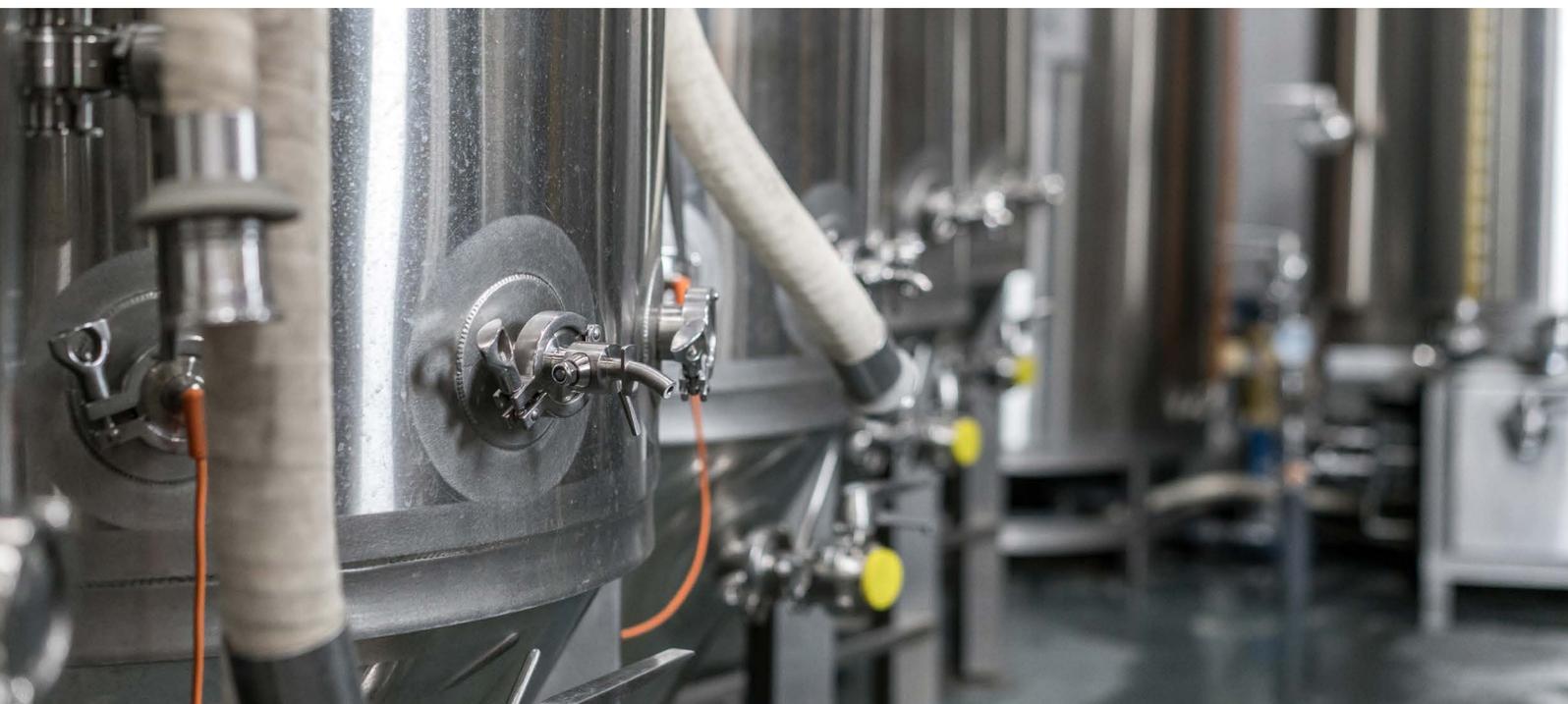Please click on the headings below for links to further information:

Guidance for employers and businesses on coronavirus (COVID-19)

HSE Coronavirus information

HSE Social Distancing Guidelines

Working safely during Coronavirus

HSE Working safely during Coronavirus

Consultation

Employers should consult with employees and trade unions about the return to the workplace. In the meantime staff should continue to work from home if they can.

Employers should keep up to date with the latest government guidance to help them plan ahead.

When planning to return to the workplace, employers must:

- Consult with staff and employee representatives, including any trade union representatives and health and safety officials.
- Consider the risks of anyone being harmed in the workplace and carry out a suitable and sufficient risk assessment.
- Make the workplace as safe as possible for staff, customers and other visitors.

Some employees may be anxious about their safety when returning to the workplace. Employers and employees should talk about any concerns and try to resolve them together. It can also help to signpost staff to any health and wellbeing support that is available, for example occupational health or mental health services.

PPE

You must ensure that you have adequate supplies of PPE. Some items of PPE are in very short supply, particularly FFP masks and certain types of gloves - employees must not be put at risk because there is no PPE to wear for hazards in the workplace. Activities must not be undertaken if there is no PPE available.

Risk management

You must consider and manage the following:

- Update risk assessments and working procedures in respect of the Covid-19 amendment.
- Confirm that your employees have had training refreshed in respect of Covid-19 for risk assessments and working procedures.
- Confirm that you have, and can supply & provide, the correct PPE where this is required for work-related activities.
- Ensure that all your employees and have not been in contact within the last 14 days with someone who has had, or is suspected to have had, Covid-19, or someone who has been required to self-isolate with suspected Covid-19.
- In addition, anyone who is classed as a vulnerable person, through age, ill health condition, pregnancy, or who is a carer for someone who is vulnerable, should remain away from work.
- Inform your insurer that you are operational, and following specific guidance issued by HM Government and the HSE in respect of Covid-19.
- Confirm that all relevant insurance policies areas still in force and the limits of indemnity remain as before the crisis.

Car parks

- Ensure that social distancing in car parks can be achieved by introducing a one-way traffic flow system, if not already in place.

- Ensure there are adequate directions and prominent signage.

- Use alternating parking bays.

- Reduce speed in car parks to 5 mph to protect pedestrians.

- Employees involved in directing car parking operations must wear high visibility clothing.

- Make sure that access and egress to car parks is managed in such a way as to maintain social distancing requirements.

- In line with the Government advice, be aware that increased cycle use is likely for both employees and members of the public. You must ensure that traffic management arrangements take account of this.

- You must train all your employees in the new procedures and share information with them regarding the risk assessment before the premises reopen.

- Make sure that they understand fully how to manage the social distancing guidelines.

Document the following:

- **Assess:** review all areas of work activity, look for contact points between employees and others, possibly any members of the public or delivery drivers and consider / re-assess if these can be managed within the current social distancing guidelines. Update your risk assessments to reflect any changes.

- **Train and inform:** communicate with your employees and tenants about what the new changes may mean, ensuring that they fully understand and above all document and record all training and information going forward.

- **Clean:** review welfare arrangements and facilities provided - can social distancing be achieved in washrooms and canteen facilities? You may need to stagger the use of these facilities and supervise or control access and egress.

- All actions, systems and procedures must be documented – you may be required to produce evidence of compliance to a regulator.

Cleaning – general guidance applicable to all locations

- Think about your business/site/building and the layout of your premises, prior to opening for business. If your risk assessment identifies cleaning before opening, you should only consider cleaning surfaces yourself if you have the correct protective equipment and materials to hand, or these are readily available.

- We also understand that you may wish to use a service delivery option to do this work ahead of opening.

Prepare a schedule of cleaning steps covering the following:

- Access and egress routes – what could anyone have touched?

- Always work from clean to dirty areas, to avoid spreading any contamination.

- Door handles, letterboxes, finger plates, keypads, glass surfaces and floors – these are just a few areas but may well differ from premises to premises, and internally across departments.

- Touchscreens

- Washrooms, WCs and shower rooms should be subjected to a deep clean, especially if they are / have been available for public use.

- Phones, PC's, keyboards, desks and vending machines.

- Kitchen areas, taps, fridges.

- Wear protective gloves and thoroughly sanitise door handles, keypads and hard surfaces - glass panels, mirrors etc that people may have touched.

- Although the Covid-19 virus cannot survive long on hard surfaces it is advised that these should be cleaned/sanitised thoroughly.

- Use a proprietary sanitiser/wipes where possible to clean before you open to employees and/or the general public.

- Flush toilets, run taps and showers which have been unused for some weeks multiple times to minimise the risk of legionella. Ensure shower heads are properly cleaned.

Operational procedures, refresh induction and task talks

Given that normal business operations have been suspended for some time, due to the Covid-19 restrictions, it is appropriate to ensure that, where practical, key operational rules and procedures are refreshed once employees return to work.

The frequency of task talks needs to be increased, especially for an initial period following the return to work, as employees need to understand that operational practices and policies have changed and this needs to be reiterated to ensure understanding.

Key areas to think about will be:

- Fire alarm testing and associated procedures.
- Fire points and the provision of portable fire extinguishers & hose reels
- Premises security issues.
- Manual handling and lifting.
- Pedestrian and vehicular interfaces.
- Managing the public.
- Service engineer and third-party sub-contractors.
- Personal safety.

Reinstatement risk management

The items and procedures that need to be considered will vary depending on the utility services provided plus the specific equipment and processes involved in your premises.

The first stage will be to put in place a reinstatement plan considering the following:

- Prioritise and schedule tasks to ensure critical items are given immediate attention.
- Review and put in place the resource required to achieve reinstatement;
  - » Using own suitably trained and experienced staff/engineers or, where necessary
  - » Engaging the services of a specialist contractor.
- Time management – ensure sufficient time is allocated to achieve the task fully and safely.
- Review maintenance records and whether routine servicing is overdue.
- Review statutory inspection requirements – are safety inspections overdue? If so, the equipment should not be used and inspection should be prioritised.
- Reinstatement should follow OEM guidelines as a minimum where applicable.
- Lockout and Permit to Work procedures should be reviewed as part of your Covid-19 risk assessment.
- Safety – ensure risk assessments are undertaken, and if PPE is required to complete the task safely then this should be provided.

- Reinstatement checks – depending on the equipment, a final check should be made considering the following where applicable;

  » Check, and where possible test, the operation of condition monitoring devices (vibration, pressure, temperature etc.)
  » Safety interlocks should be checked for functionality.
  » Fuel levels are topped up.
  » Check the level and condition of lubrication and hydraulic oil.
  » Machinery guarding is in place and secure.
  » Fire detection systems are working.
  » Fire suppression systems are working.
  » Areas are left clear of combustible items.
  » Plant room access doors are locked.
  » Final safety check of the operation of the equipment.

A key point to remember when planning and undertaking the tasks is that taking shortcuts when reinstating utility services, or starting-up machinery that has been idle, should be avoided as this could lead to costly further disruption.
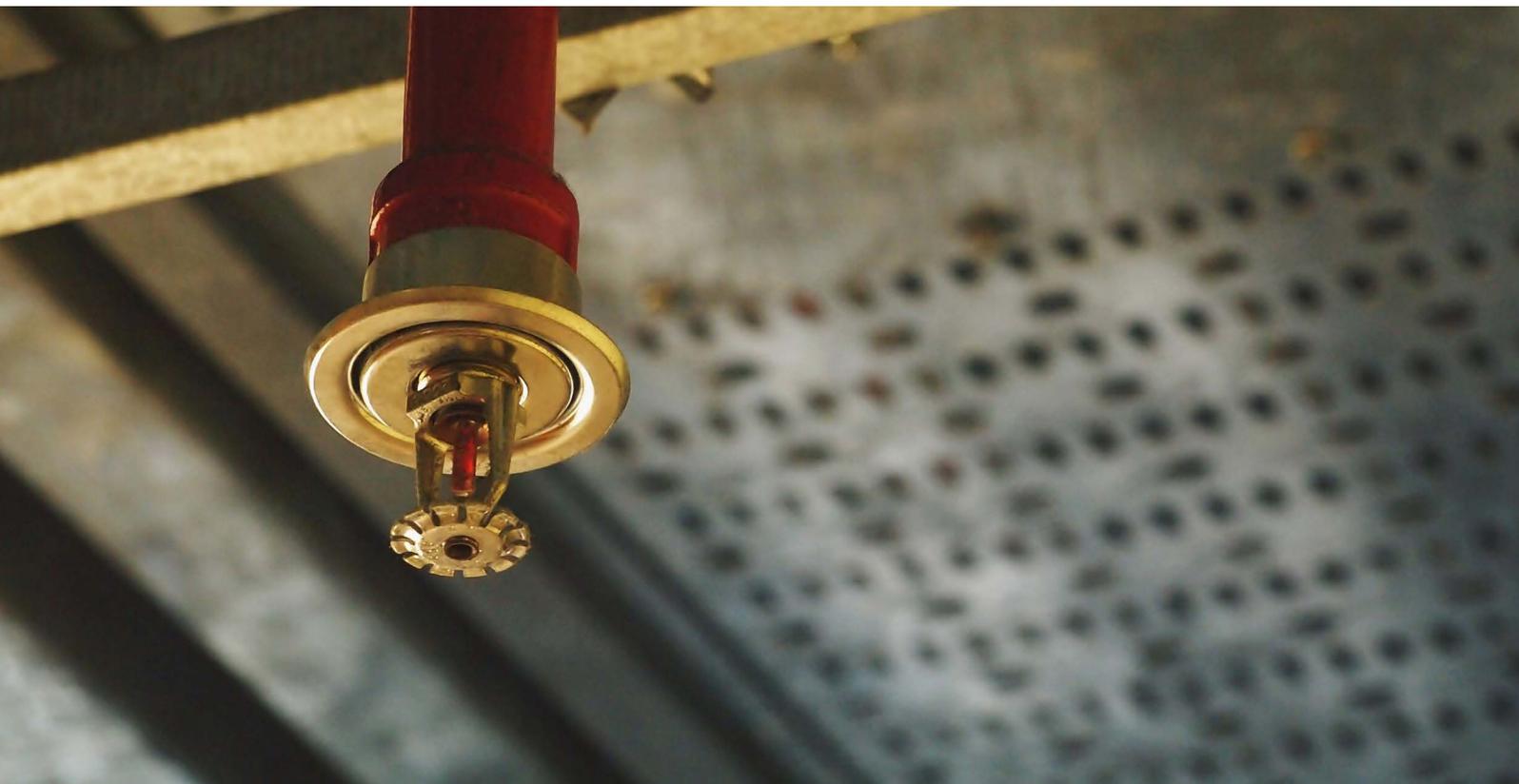
Reinstatement considerations

The following general guidance to be considered:

Ventilation extraction

Building ventilation systems may have been left running for essential humidity and temperature control within the structure. In this instance it is not necessary to do anything with these systems, as any microbes/contaminants will have been carried through the ventilation system and removed from circulation.

The Federation of European Heating, Ventilation and Air Conditioning Associations (REHVA) has carried out research and published a paper (17th March 2020) based on the current experience and knowledge of Covid-19. This can be viewed via the following link: https://www.rehva.eu/activities/covid-19-guidance

The overall management of Covid-19 risk should be achieved through good hygiene and cleaning procedures as defined with the current HM Government guidelines. Further advice can be found here https://www.gov.uk/coronavirus

Ventilation and extract systems should be checked for correct operation and where there is evidence of build-up of dust or fluff and fly, cleaning should be arranged.

Particular attention should be paid to extract systems for kitchens, with a review of the scheduled cleaning programme to ensure it is not overdue, as grease build-up may still be present. Where cleaning is necessary, this should be carried out in accordance with TR19-Grease by a specialist contractor from the Building Engineering Services Association (BESA) website: www.thebesa.com.

To assist, AXA have made exclusive arrangements with Swiftclean who specialise in fire safety cleaning of kitchen extraction systems. Contact Swiftclean on 0800 243 471, or via email at axa@swiftclean.co.uk.

Water systems checks

Legionella checks - this is important because standing water can generate Legionella bacteria growth.

Generally, the advice is that temperature control is the traditional strategy for reducing the risk of legionella in hot and cold-water systems:

- Cold water systems should be maintained, where possible, at a temperature below 20°C.
- Hot water should be stored at least at 60°C and distributed so that it reaches a temperature of 50°C (55°C in healthcare premises) within one minute at the outlets.

However, much will depend on the type of water systems, so please check using the below link to the HSE website or seek expert advice from water treatment companies specializing in this area.

- Check with your water treatment provider, if your systems are under contract or you have an FM management company in place.
- Run all water systems, hot and cold, for at least 15 minutes to clear any standing water in the systems.
- Include showers, if this is relevant to your premises.
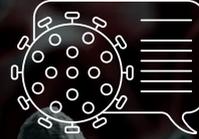
More detailed advice is available from the HSE Website via the following link
https://www.hse.gov.uk/legionnaires/hot-and-cold.htm

Cooling towers and calorifiers should form part of the legionella checks.

Where the incoming water supplies have been isolated at the stopcock and systems drained, reinstating and refilling should be conducted in a slow controlled manner checking for any leaks and to avoid water hammer which can cause damage to pipes, connections and fittings.

Electrical power

The planning stage should have established whether the system is overdue its Electrical Installation Condition Report – if this is the case then arrangements should be made for this to be undertaken by a suitable company who are members of the following:

- ECA Electrical Contractors Association www.eca.co.uk
- NICEIC www.niceic.org.uk
- NAPIT www.napit.org.uk
- SELECT (Scotland Only) www.select.org.uk

Prior to reinstating power, the checks of the site power supplies undertaken by a trained and authorised competent person should include an initial visual check of all aspects including transformers, switchgear, cables etc. During idle periods there may have been nests made, or damage caused by rodents, as an example or vegetation may be encroaching and surrounding an external transformer.

Generators – have they been regularly tested during the lockdown period? If not consider a maintenance visit prior to resuming the standard regular running testing. Fuel, lubrication oil and cooling water should be checked and consider performing a load test to ensure the generator is operating correctly.
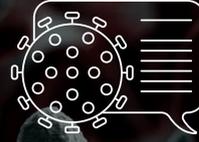
Boilers, ovens, kilns & furnaces

Prior to reinstating any fired equipment whether that be for heating, hot water or processes, you should review when the last maintenance visit was conducted and consider bringing forward the next inspection. The firing up sequence should be followed per the OEM guidance after ensuring all and combustion controls are correctly working (pre-purge cycle, flame failure, fan running, pilot light monitoring). Flues and chimneys should be checked for condition, blocking and any damage.

Gas supplies

Initial checks should be made by smell for evidence of leaks prior to and after turning valves back on. Where fitted, the operation of automatic emergency shut off solenoid valves should be checked for operation – this may be at the incoming supply valve or on individual items of plant such as boilers.

External oil storage tanks

Inspect tanks for evidence of leaks or damage and the fuel levels. Check the integrity catchment bunds and also accumulation of water or debris within the bund. Where water has accumulated, this will need to be removed and safely disposed of. Where the oil is transferred to the building for use in boilers or equipment, check the integrity of pipes and valves for leaks and also the operation of fire safety cut off valves.

Elevators & escalators

Review the status of statutory inspection requirements and arrange for visit by specialist to conduct if necessary. Elevators & escalators should be checked by a competent person or contractor before being brought back into service. Lift motor rooms should be inspected and kept locked.

Refrigeration Plant

Check the integrity and operation of the system including overdue maintenance schedules, temperature monitoring and alarms, plus where ammonia is used, detection systems, alarms and ventilation are checked.

Air compressors, pressure tanks and pipelines

Review the status of statutory inspection requirements and arrange for a visit by a specialist to conduct if necessary. Inspect the general integrity of pressure vessels, valves, pressure relief valves and pipes for signs of damage, blockage or corrosion.

Manufacturing process equipment start-up

For other general manufacturing start up guidance, refer to the Manufacturing Sector start-up guidance.