Reduced Occupancy and Shutdown: Projects and Hazardous Activity

Risk Engineering Services





Many serious fires have occurred during the maintenance, repair and construction of buildings and machinery. Numerous examples of these have been the result of inadequate control over operations involving the use of cutting, welding, sparks or the local application of heat.

While such hazards can normally be controlled during times of normal site activity, it may be found that current unplanned shutdowns or reduced site activity increase the risk.

For sites where a project, alterations or repairs are already underway, challenges may include how to safely proceed with the works as well as if, when and how to shut down the project.

Conversely, periods of limited or reduced site activity may be an appealing time to undertake projects that would otherwise prove difficult during full occupancy. However, it is important that such works are properly planned and managed to avoid unforeseen complications and to minimise the risk to property.

Where possible, it is preferable to avoid starting work if there is the possibility that the project may not be completed or can't be safely stopped in the event of the site

being suddenly and unexpectedly shutdown.

When it is considered appropriate to proceed with the works, hazardous work activities, such as hot work should be avoided if at all possible.

Hot Work Controls

When Hot Work that is unavoidable and cannot be carried out in a designated workshop, additional procedures will be required, controlled by an effective hot work permit.

Guidance Sample Hot Work Permits and checklists are available from Chubb Risk Engineering Services.

The Permits should be duplicated, with one copy held by the personnel conducting the hot work and one by the supervisor.

Permits should be issued prior to the commencement of work and should be restricted to one shift only, to ensure that good controls are maintained throughout the work area.

The Hot Work permit should be kept at the place of work, ready for examination by site supervision. Avoid starting work if there is a risk that the project may not be completed or can't be safely stopped.

Current Projects

- If adequate numbers of staff are not available to safely continue with projects, safely shut them down, ensuring that fire and security systems can be made operational.
- Do not continue with projects if contractors cannot be suitably supervised and monitored.
- If work can continue, avoid undertaking hazardous activities such as hot work if at all possible.

New Projects

- Do not undertake new projects or works if adequate safety precautions and controls cannot be fully implemented.
- Do not start a new project if it may not be safely completed or can't be easily stopped if the site has to suddenly close.
- Do not undertake new projects if availability of skilled contractors cannot be guaranteed to ensure completion of the job.

If hot work activities are unavoidable, follow these precautions:

Before Hot Work Operations Commence ✓

- ✓ Investigate alternative methods of work. Use cold processes whenever possible.
- ✓ Where hot work is essential aim to remove the components or machinery to a safe welding bay or yard area.
- Check all equipment is in good condition with gas cylinders safely secured.
- An area of at least 11 m around the hot work area should be cleared of flammable/ combustible materials and liquids.
- Floors should be swept clean and gaps and openings should be covered with non combustible sheeting.
- ✓ Hot work should never be conducted on building materials with known or suspected combustible insulation material present, including buildings with EIFS or combustible façade construction.

During Hot Work Operations

- ✓ Automatic sprinkler systems should remain in service in the Hot Work area.
- Automatic fire detection should only be isolated in the area where the work is being performed.

- ✓ A firewatch should be performed throughout the work including breaks.
- ✓ Suitable manual firefighting equipment should be provided for use.
- Means of fire alarm activation and escape should be communicated and displayed.

After Hot Work Operations

- ✓ Fire watch should continue for at least one hour after the work has finished.
- The permit issuer should verify there are no incipient fires before clearing the permit and ending the watch.
- ✓ Supervision should inspect the area and sign off that the work has been completed properly and the area is cleaned of all waste materials.
- ✓ Fire detection in the affected zones should be returned to service.
- All gas cylinders should be removed to a secure area for overnight storage (if work is to continue the following day under a new permit).
- ✓ The completed Hot Work Permits should be filed for review at subsequent property loss prevention surveys.



Further Documents

- Chubb Hot Work Permit & Checklist
- Chubb Shutdown Checklist

Contact us

For more information about protecting your business, contact your local risk engineer or visit us at www.chubb.com

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