

To The Point

Reduced Occupancy and Shutdown: Projects and Hazardous Activity

CHUBB®



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 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 construction, 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 construction is properly planned and managed to avoid unforeseen complications and to minimize the risk to the 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 shutdown. When it is considered appropriate to proceed with construction in such cases, hazardous work activities, such as hot work should be avoided, if possible. Hot work is defined as work involving burning, welding, or a similar operation that is capable of initiating fires or explosions.

Hot Work Controls & Permits

When there is hot work that is unavoidable and cannot be carried out in a separate designated area or 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 Consulting.

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.

Chubb Risk Consulting

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. This will ensure that fire and security systems can be made operational.
- Do not continue with projects if contractors cannot be suitably supervised and monitored.
- Avoid undertaking hazardous activities such as hot work, if at all possible.

- If it may not be safely completed or can't be easily stopped if the site must suddenly close.
- If availability of skilled contractors cannot be guaranteed to ensure completion of the job.

Further Guidance

- [Chubb Hot Work Permit & Guide](#)
- [Chubb Shutdown Checklist](#)

New Projects

Avoid starting construction or new projects if there is any question of the following instances:

- If adequate safety precautions and controls cannot be fully implemented.

Learn More & Connect

For more information on protecting your business, contact your local risk engineer, visit the [Chubb Risk Consulting Library](#), or check out www.chubb.com/riskconsulting.

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 35 ft. 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 facade construction.

- ✓ A fire watch should be performed throughout the work - including breaks.

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.

- ✓ 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 closing 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.