

## HOT WORK PERMIT

### Permit Initiation – Turn In To Plant Manager

Permit Initiator:		Phone/Pager:	
Date:	Start:	am <input type="checkbox"/> pm <input type="checkbox"/>	Expires:
Location:	Equipment:		
Description of Work:			

### Pre-Work Job Site Inspection

Unit Operator Signature:	Gas Test: Time _____ am/pm LEL _____ %												
Safety Spec. Signature (if needed):	Gas Test: Time _____ am/pm LEL _____ %												
Responsible Supervisor Notified Print Name: _____													
Managers Signature for Authorization to Proceed:	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Fire Extinguisher</td> <td style="width: 25%;">Fire Watch</td> <td style="width: 25%;"></td> </tr> <tr> <td>Dry Chemical <input type="checkbox"/></td> <td>Required?</td> <td></td> </tr> <tr> <td>CO<sub>2</sub> <input type="checkbox"/></td> <td>Yes <input type="checkbox"/></td> <td></td> </tr> <tr> <td>Fire Hose <input type="checkbox"/></td> <td>No <input type="checkbox"/></td> <td></td> </tr> </table>	Fire Extinguisher	Fire Watch		Dry Chemical <input type="checkbox"/>	Required?		CO <sub>2</sub> <input type="checkbox"/>	Yes <input type="checkbox"/>		Fire Hose <input type="checkbox"/>	No <input type="checkbox"/>	
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CO <sub>2</sub> <input type="checkbox"/>	Yes <input type="checkbox"/>												
Fire Hose <input type="checkbox"/>	No <input type="checkbox"/>												
Special Precautions: (do not issue hot work permit while opening/blinding is in effect)													

### On-Site Job Communication

Signature of Person Doing Work:	Phone/Pager:
Unit Operator Signature:	
<i>Post Hard Copy At Work Site</i>	

### Permit Closeout

Job Completed? Yes <input type="checkbox"/> No <input type="checkbox"/>	Signature of Person Doing Work:
<i>Return Hard Copy to Plant Manager &amp; Notify Unit Operator</i>	

### HOT WORK PERMIT ITEMS TO CONSIDER

1. Adequate access/escape route?
2. Flammable materials removed?
3. Sumps/drains checked and covered?
4. Trash removed?

5. Welding leads and connectors properly insulated or are there worn or bare spots where arcing could occur?
6. Welding machines grounded at nearest point to the weld? If not, is there a continuous path to ground between the work and the machine?
7. Fire equipment checked and at work site?
8. Fire blanket or catch basins needed for overhead hot work?
9. Fire watch needed?
10. Opening/blinding permit in effect?
11. Adequate ventilation?
12. Equipment isolated (electric, pneumatic, hydraulic)?
13. Communications checked (radio, etc.)
14. Hot tap package complete and attached?
  - A. Flow requirements met?
  - B. Pressure requirements met?
  - C. Engineering signed off on calculations?
  - D. U.T. report for the same line, and numbers correspond with those on line and elsewhere in package?
  - E. Welding procedure attached?
  - F. Is the work being done on the right line?
15. Purging requirements met?
16. Ladder/scaffold properly set?
17. Considered relocating the wellhead shelter when welding on the structure?

Close Out Permit With Appropriate Physical Plant Manager When Work Is Complete

## **HOT WORK PERMIT**

### **Purpose/Scope**

The Hot Work Standard minimizes the potential of fire or explosion in classified areas by defining responsibilities and requiring a Hot Work Permit. This applies but is not limited to open flame, welding, burning, grinding; use of non-intrinsically safe electrical tools and instruments; work in electrical circuits; or use of spark producing devices in a classified area. This also applies to work on portable and

mobile containers which contain or have contained flammable or combustible materials, and impedance thawing.

Mobile heaters physically connected to classified area and all stress-relieving of piping are subject to this standard. Indirect fired mobile heaters used for well houses and well service activities placed more than 10 feet from a classified area, are not subject to this standard.

A Hot Work Permit is required for stationary trucks, cranes and other mobile equipment operating within 10 feet of a classified area. Vehicles in transit operating within 10 feet of a classified area shall require operator notification but not a permit.

Maintenance shops specifically constructed for the work performed (machine shops, welding shops) are exempt from the Hot Work Standard.

### **Objectives**

1. Ensure the work area is inspected and combustibles and flammables are isolated from the hot work.
2. Establish fire watches when applicable.
3. Provide communication with all departments concerned.
4. Control how open flame or spark-producing equipment is used.
5. Formally document all hazardous conditions and special requirements of the work area.

### **Permit Initiation**

A Physical Plant Manager responsible for getting the work done will initiate or authorize the initiation of the permit at a designated location.

### **Responsibilities**

#### **Unit Operator:**

1. Inspect the work area and adjacent area for a distance at least 35' around the hot work site, including the other side of any wall or barrier, to which sparks or heat might spread.
2. Ensure the equipment and area have been properly prepared and are ready for the safe performance of the work.
3. Ensure that line to be demolished or removed are properly identified and marked.
4. Make necessary tests for flammable and/or other hazardous conditions.
5. Show the persons doing the work the locations of the nearest communications equipment and applicable safety devices.
6. Check placement and condition of proper fire extinguishers and other safety equipment.
7. Inform fire watch of potential fire hazards.
8. List special precautions as necessary.
9. Sign the permit after the above conditions have been met.
10. Ensure that the hard copy of the permit has been posted at the work location.
11. Prevent an operation from being performed which has the potential to cause the area or equipment to

become unsafe while the permit is in effect.

12. Monitor the work as it progresses to ensure that the conditions of the permit are not changing.
13. Stop the work if a change occurs which creates an unsafe condition. Work shall not resume until a safe condition is restored.
14. Review Hot Work Permit Items To Consider checklist.
15. Inspect and gas check the work area periodically.
16. Advise relief operators of any permit in effect.
17. Inspect the work site after any interruption has occurred prior to resuming work.
18. Immediately after the work is completed, inspect the work area and adjacent areas to determine that they are in a safe place.

#### Managers:

1. Ensure that facility operations, construction or maintenance will not be adversely affected by the proposed work activities.
2. Ensure that the proper personnel are notified of work to be done, and approval received.
3. Sign the Hot Work Permit, certifying that the job is ready to proceed.
4. Hold hard copies of the permits until the work is ready to start.
5. Notify proper personnel when the permit is closed out.
6. Ensure all participants in the Hot Work Permit process have fulfilled their duties and responsibilities.
7. Be satisfied that the proper precautions for hot work have been taken.

#### Person Doing the Work:

1. Read, understand and follow the conditions listed on the Hot Work Permit.
2. Advise other workers of any special precautions or conditions pertaining to the job.
3. Survey the work area to confirm safe work conditions. Know the location of the nearest telephone, fire alarm, emergency communication system, fire extinguisher, safety shower, first aid kit, etc., before starting work, and know how to use them.
4. Confine all sparks and slag as close to the work area as possible.
5. Be constantly aware of conditions in the immediate work area, and be ready to stop work if conditions change. Do not resume work without approval of the Unit Operator.
6. Clean up and secure the work area after completion of work each shift. At the end of the shift or upon completion of the work, whichever comes first, return the permit to the Production Office or designated location, and sign the original. If the job is incomplete and the person or crew temporarily leaves the unit, the worker must notify the Unit Operator.

When any alarm or Emergency Announcement is made, stop all work, disconnect all electrical equipment, and secure all gas cylinders. Do not resume any work until notified by the Unit Operator.

#### Fire Watch:

1. Observe an area of at least 35' around the hot work site, including the other side of any wall or barrier, and maintain the area free of combustibles and tripping hazards.
2. Have no other duties assigned while on watch.
3. Understand and follow the conditions listed on the Hot Work Permit.
4. Be trained in the use of fire extinguishing equipment provided.
5. Understand the alarms and where and how to activate them.
6. Notify the Person Doing the Work if any sparks are not contained at the work area.
7. Sound the alarm for assistance and extinguish any small fires started by sparks or slag.

8. Remain on the scene from the start until 30 minutes after the completion of all hot work.

Safety Department Representative:

Shall provide an independent assessment of the work area and sign the permit for and permits involving welding, burning and grinding on any in-service piping and during hot work inside a confined space.

### **Special Considerations**

In-service piping requirements

Welding on in-service piping or equipment will require a written procedure from engineering. This procedure shall include location, piping or equipment specifications, non-destructive examination, stress-relieving information, and any other procedure that is deemed necessary to insure the job can be performed safely. The procedure will be approved by the Manger and Safety Representative.

Welding on in-service equipment refers to any welding t be done on equipment or pipelines which are to remain in service and which have not been depressured, blinded or purged.

When welding on rotating equipment, be sure to ground strap is a s close to the area being welded as possible.

Blinding Requirements

Hot work on depressurized, shut-in, or temporarily out-of-service process handling equipment, piping, and vessels requires a full-rated blind as close to the work as possible.

A double block and bleed does not meet the blinding requirements for hot work. To allow a double block and bleed, a variance is required.

Neoprene Module Interconnects

Neoprene module interconnects (weather boots) are combustible. Additional precautions, such as covering with fireproof material, must be taken when cutting, welding or grinding is to be done in close proximity to the module interconnects.

Duration of Permits/Permit Close Out

Permits will be in effect until job completion but will not extend beyond the end of the shift in which the permits were issued.

**Regulations reference:**

California Code of Regulations, Title 8:

Subchapter 15. Petroleum Safety Orders--Refining, Transportation and Handling  
Article 5. Fire and Explosions §6777. Hot Work Permits.

Subchapter 7. General Industry Safety Orders  
Group 16. Control of Hazardous Substances  
Article 108. Confined Spaces §5157. Permit-Required Confined Spaces.

Subchapter 7. General Industry Safety Orders  
Group 16. Control of Hazardous Substances  
Article 109. Hazardous Substances and Processes §5189. Process Safety Management of Acutely Hazardous Materials

Subchapter 7. General Industry Safety Orders  
Group 10. Gas Systems for Welding and Cutting  
Article 88. Fire Prevention in Welding and Cutting Operations §4848. Fire Prevention and Suppression Procedure.

Subchapter 7. General Industry Safety Orders  
Group 11. Electric Welding  
Article 90. Electric Welding, Cutting and Heating §4851. Arc Welding and Cutting.