



Adams BOCES
Self Insurance Pool



HOT WORK SAFETY

What is hot work? It is any activity that can generate an ignition source, such as cutting, grinding, burning, etc. Hot Work is a very common activity on a worksite, but it can be dangerous. The area where hot work will take place must be prepared so that everyone is safe from a fire or worse an explosion. Even if you don't do hot work be aware of the safety precautions and always keep your eyes open.



HAZARDS

The hazards of hot work are such that every worker needs to pay attention.

- Combustible objects will always be around no matter what precautions you take; sparks and hot metal cannot be controlled and can do serious damage with even the tiniest spark
- Be cautious when cutting through objects. You don't always know if a combustible material will be inside the object you are cutting into
- Sparks can be very small and may not be visible right away. A spark can smolder for hours before becoming hot enough to turn into a flame
- Before working on a tank or vessel make sure that this isn't anything flammable left inside

All employees should be aware of hot work activity going on in order to maintain a safe working environ-

ment. Everyone has the responsibility to watch out for dangerous situations.

HOT WORK OPTIONS

Is there a better way rather than hot work? Ask these questions:

- Is hot work the only option? Consider using:
 - Using a hand saw, electric saw, or pipe cutter
 - Using nuts and bolts, screwed fittings, or couplings
 - Hand filing
 - Using threaded pipe
- Can hot work be performed in the area?
 - Inspect the site to make sure you are aware of all the elements involved. Make sure to check all surrounding areas as well
 - Make sure there aren't hidden hazards.
 - Understand what will happen to the structure if high temperatures are introduced
 - Are there flammable liquids or gases that cannot be shut off
 - Are there concentrations of flammable vapors, gases, or dusts that cannot be extracted
 - Is the area built with anything that is combustible, or can it be relocated or covered with a fire-retardant cloth



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"Don't Get Burned by Hot Work", Factory Mutual Insurance Company, 2003.

All IMA recommendations are purely advisory to help clients identify and effectively control exposures to loss. We do not infer or imply in the making of recommendations and comments that all possible hazards are noted or to indicate that other hazards do not exist. The maintenance of safe premises, operations and equipment, the avoidance of unsafe conditions and practices, and compliance with Federal, State and local statutes and laws are the sole responsibility of the client.

SAFETY MATTERS

FIRE WATCH

A fire watch should stay on site for at least 30 minutes after the hot work is completed and should re-inspect the work site within one hour after the job has been completed to ensure the area is fire safe.



Duties of a fire watch include:

- Arriving at the area prior to start of work to ensure that the area is free of flammable materials
- Preparing and posting a hot work permit which authorizes the work
- Providing a fireproof tarp if necessary
- Ensuring that a fire extinguisher is available
- Watching the work area for any sparks, smoke, or fires

AUTHORIZE THE HOT WORK JOB

Once the fire watch has checked off on the hot work it's time to begin working. The work crew should:

- Discuss the job with the hot work operator and the fire watch
- Read over the permit to determine all the precautions that need to be taken
- Display the signed permit in a prominent location

PRECAUTIONS

Once you have checked the area for any flammable materials remember to:

- Shut off all flammable liquid piping and make sure the lines are drained
- Move all flammable and combustible materials at least 35 feet away from the work site
- Clean the area from lint or dust, remove all scrap material
- Make sure the area is sealed and fire-stop materials are in place
- For items that are too big to move make sure they are protected with noncombustible tarps



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SEGURIDAD CON EL TRABAJO CON CALOR

¿Qué es el trabajo con calor?

Es cualquier actividad que puede generar una fuente de ignición, como cortar, triturar, quemar, etc. El trabajo con calor es una actividad muy común en el sitio de trabajo, pero puede ser peligrosa. La zona donde se llevará a cabo el trabajo con calor deberá prepararse de modo que todos estén protegidos de un incendio o, peor, de una explosión. Incluso si usted no realiza trabajo con calor esté al tanto de las precauciones de seguridad y siempre esté alerta.



PELIGROS

Los peligros del trabajo con calor son tales que todos los trabajadores tienen que poner atención.

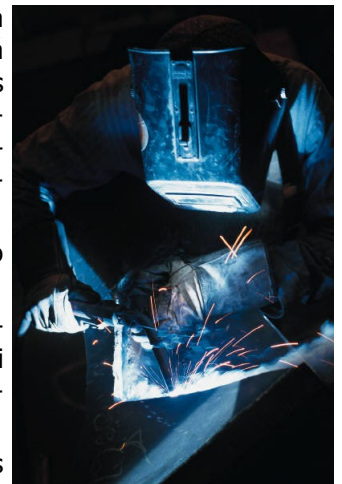
- Siempre habrá objetos combustibles alrededor, independientemente de las precauciones que se tomen; las chispas y el metal caliente no se pueden controlar y pueden causar graves daños con incluso la chispa más diminuta
- Sea prudente cuando tenga que cortar objetos. No siempre se sabe si hay un material combustible dentro del objeto que se va a cortar
- Las chispas pueden ser muy pequeñas y es posible que no sean visibles inmediatamente. Una chispa puede arder sin llamas durante horas antes de volverse lo suficientemente caliente para convertirse en una llama
- Antes de trabajar en un tanque o recipiente asegúrese de que no haya quedado nada inflamable adentro

Todos los empleados deberían estar al tanto de cualquier actividad que se lleve a cabo con trabajo con calor para mantener un entorno laboral seguro. Todo el mundo tiene la responsabilidad de estar pendiente de situaciones peligrosas.

OPCIONES DE TRABAJO CON CALOR

¿Existe una alternativa mejor que el trabajo con calor? Hágase las siguientes preguntas:

- ¿El trabajo con calor es la única opción? Piense en utilizar:
 - un serrucho, sierra eléctrica o cortador de tubos
 - tuercas y pernos, accesorios atornillados o empalmes
 - una lima manual
 - tubos roscados
- ¿Se puede realizar trabajo con calor en el área?
 - Inspeccione el sitio para asegurarse de que está al tanto de todos los elementos involucrados. Asegúrese asimismo de inspeccionar todas las zonas aledañas
 - Asegúrese de que no haya peligros ocultos
 - Entienda lo que le pasará a la estructura si se introducen temperaturas altas
 - ¿Hay líquidos o gases inflamables que no se pueden cerrar?
 - ¿Hay concentraciones de vapores, gases o polvos inflamables que no se pueden extraer?



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- ¿La zona está construida con cualquier cosa que sea combustible, o se puede trasladar o cubrir con una tela de combustión lenta?

VIGILANCIA ANTIINCENDIOS

Se debería mantener la vigilancia antiincendios en el sitio al menos durante 30 minutos después de que se haya terminado de realizar el trabajo con calor y debería volverse



a inspeccionar el sitio de trabajo dentro de la hora siguiente después de que el trabajo se haya terminado de hacer para garantizar que la zona no presenta peligros de incendios.

Entre los deberes de un vigilante antiincendio están:

- Llegar a la zona antes del inicio del trabajo para garantizar que el área esté libre de materiales inflamables
- Preparar y fijar el permiso de trabajo con calor que autoriza dicho trabajo
- Proporcionar una lona incombustible, si es necesaria
- Asegurarse de que haya disponible un extintor de incendios
- Inspeccionar el área de trabajo para determinar si hay cualquier tipo de chispas, humo o incendios

AUTORICE EL TRABAJO CON CALOR

Una vez que el vigilante antiincendio haya realizado la inspección del trabajo con calor, es hora de comenzar a trabajar. La cuadrilla debería:

- Hablar sobre el trabajo con el operario del trabajo con calor y con el vigilante antiincendio

- Repasar el permiso para determinar todas las precauciones que hay que tomar
- Exhibir el permiso firmado en un lugar prominente

PRECAUCIONES

Una vez que haya examinado la zona para determinar si hay cualquier material inflamable, recuerde:

- Cerrar toda las tuberías con líquidos inflamables y asegurarse de que todas las líneas se hayan drenado
- Mover todos los materiales inflamables y combustibles a por lo menos 35 pies (10,66 metros) de distancia del sitio de trabajo
- Limpiar el área de pelusas o polvo, retirar todo material de desecho
- Asegurarse de que toda la zona esté aislada y que los materiales cortafuegos estén instalados
- Para aquellos artículos que sean demasiado grandes para poder moverlos, asegúrese de que estén protegidos por lonas incombustibles



HAZARDS OF HOT WORK

- Sparks and hot metal cannot be controlled
- Be cautious of cutting through objects in case of a combustible material inside
- Sparks can smolder for hours
- Drain tanks or vessel of flammable liquid
- Maintain your equipment



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PELIGROS DEL TRABAJO CON CALOR

- No se pueden controlar las chispas ni el metal caliente
- Sea prudente cuando tenga que cortar objetos en caso de que haya materiales combustibles adentro
- Las chispas pueden arder sin llamas durante muchas horas
- Desagüe tanques o recipientes de líquidos inflamables
- Mantenga a su equipo en buen estado



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SAFETYMATTERS

MEETING TOPIC: *HOT WORK SAFETY*

DATE: _____

LOCATION/DEPARTMENT: _____

PRINT NAME

SIGN NAME

By signing this sheet you are acknowledging participation in this training.