

SERVICE NO: 111-0000

GENERAL The NFPA 51B-2019 standard outlines the responsibility for hot work and fire prevention precautions.

HOT WORK DEFINITION Hot work is any temporary operation involving open flames or producing heat and/or sparks. This includes, but is not limited to, brazing, cutting, grinding, welding, soldering and torch applied roofing.

PRECAUTION CHECKLIST The Required Precaution Checklist must be performed before commencing any hot work.
All precautions must be checked. Check **N/A** if not applicable.

SUPERVISOR/ REPRESENTATIVE DEFINITION Can be a Shift Supervisor, Lead Hand, Contract Engineer, Contract Supervisor who is authorized to issue a Hot Work Permit.

DESIGNATED HIGH HAZARD AREAS In High Hazard Areas: before hot work can commence, the Precaution Checklist must be verified by a HSPP Supervisor/Representative.

Designated High Hazard Areas:

1. ALL Chip and Hog handling areas
2. Chip and Hog storage areas
3. Kraft and TMP Chip Silos
4. Chip Supply buildings, towers and conveyor systems
5. Paper Machine Dry End
6. Paper Roll Finishing
7. Paper Warehouse
8. Pulp Warehouse
9. Pulp Machine Dryers
10. Pulp Machine Layboy and Baling Lines
11. Deep Sea Dock
12. **Tanks and Vessels** that may or have contained flammable substances, a **Hazard Assessment** must be performed.

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DESIGNATED HIGH HAZARD AREAS con't

13. Where combustible materials are more than 50ft (15m) away from the point of operation but are easily ignited by sparks.
 - **Contact** Fire Protection @ 2257 for access to a charged fire hose
 - **Bring** fully charged and operable fire extinguishers that are appropriate for the type of possible fire to the immediate hot work area.

Spark Watch required for adjoining areas, above, and below.

SPARK WATCH DEFINITION

The act of watching hot work to ensure no fires occur during the work, for the protection and safety of people and equipment.

SPARK WATCH REQUIREMENT

A Spark Watch will be assigned to watch the job site continuously including breaks and for 1 hour after hot work is complete when hot work is performed in **HIGH HAZARD** locations unless Hazard Assessment performed and designated as low hazard.

The Spark Watch requirements are determined by the level of hazard of the hot work.

1. The Spark Watch shall always be present and focused on safe conditions and ensure that no fires develop during hot work operations.
2. The Spark Watch shall have fire-extinguishing equipment readily available.

Note: When high risk of fire can occur (like air arcing) a charged fire hose should be at the Spark Watch persons side, ready for immediate use.

3. The Spark Watch shall be familiar with the facilities and procedures for sounding an alarm in the event of a fire.
4. The Spark Watch should always check areas where sparks may go to ensure hidden spots do not catch fire.
5. Print name and initial the Job Site Copy of the hot work permit.

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FIRE WATCH DEFINITION The act of monitoring the job site after hot work has ceased and it is left unattended.
Hot Work Permits expire at the end of each work shift!

GLOBAL HOT WORK PERMIT A Global Hot Work Permit cannot be used in a High Hazard area!
The Global Hot Work Permit must be verified and signed by an HSPP Supervisor.
A Global Hot Work Permit can be used when workers are in clear view of each other and in close proximity providing the Spark Watch Person can directly observe all hot work.
Any number of workers can perform hot work at the job site as long as it is being effectively watched for fire. Examples would be the inside of a vessel or an area where workers are in clear view of each other and in close proximity.

SMOKE AND HEAT DETECTORS Does the area have smoke and heat detectors? If yes, contact Fire Protection @ 2257 to request disabling of zone. Otherwise, fire alarms, building evacuation, Novac and Deluge System activation may result!

AUTOMATIC SPRINKLER & FIRE HOSE Ensure Automatic Sprinklers and Fire Hose are in service and fully operational. Check the Fire Protection Impairment Board, (located in the hallway between the Tool Crib and Shops.)
HOT WORK IS NOT PERMITTED IN BUILDINGS WHERE SPRINKLERS AND FIRE HOSE VALVES ARE IMPAIRED!

HOT WORK EQUIPMENT Inspect hot work equipment to ensure it is in good repair. Damaged or leaking hoses or hose attachments are especially hazardous with torch cutting and welding equipment.

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**50-FT (15-M)
RULE**

- **Clear a 50-ft (15-m) surface area** around the area of hot work and remove all combustible materials.
- **Protect combustibles that cannot be moved** with fire-resistive tarps/blankets or metal shields. This includes combustible construction, walls, partitions, ceilings, insulation and foam.
- **Remove flammable liquids** such as oils and lubricants from the area.
- Halt any process that produces **explosive atmospheres**. Accumulation of combustible dusts could develop explosive atmospheres.
- **Sweep floors clean.**
- Floors made of combustible material (i.e. plank on steel – chip galleries) shall be kept wet, cover with damp sand, or protected by fire-resistive shields. Where floors have been wet down, personnel operating arc welding equipment or cutting equipment shall be protected from possible shock.
- **Cover all wall and floor openings.**
- **Close all doors and fire doors** to prevent sparks from escaping.
- **Ducts and conveyor systems** that might carry sparks to distant combustibles shall be shielded, or shut down, or both.
- **Use a collection method for controlling sparks.**

IGNITION BY CONDUCTION

Hot work that is performed on pipes or other metal that is in contact with combustible construction shall not be undertaken if the work is close enough to cause ignition by conduction.

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PROCEDURE

Trades Person

1. **Complete** the following information on Copy #1, the Fire Protection Board Copy: Date, Area, Dept, Equipment Number., Work Order Number, Location, Description/Nature of Work, your name and initial.
Important: Expiration date and time cannot go beyond one work shift
2. **Complete** the Required Precaution Checklist. All precautions must be checked. Check N/A if not applicable.
3. **In HIGH HAZARD Areas: before hot work can commence, the Precaution Checklist must be verified by a HSPP Supervisor/Representative.**
4. **Place** the completed Fire Protection Board Copy #1 on the Fire Protection Board, (located in hallway between Tool Crib and Shops.)
5. **Take** the Operations Copy #2 and Job Site Fire Watch Copy #3 to the Control Room Operator responsible for the area where the Hot Work is to be done.
6. **Review** the Hot Work Permit with the Control Room Operator responsible for the area where the hot work is to be done. If you **both agree**, the hot work may proceed. If the work can not proceed, write CANCEL on the permit and return permit to Fire Protection Board.
7. **Enter** the hot work start time and initial the Operations Copy #2.
8. **Request** Control Room Operator to sign on Operations Copy #2 and leave it with Operator.
9. **Post** Job Site Copy #3 in a conspicuous location at the job site.
10. **Do** the Hot Work Permit work.
11. **Enter** the **Finish Time** on the Job Site Fire Watch Copy #3 and leave it posted for the Fire Watch.
12. **Return** to Control Room Operator and sign-off **Time Finished:** on the **Operations Copy #2** to confirm that work is completed. Inform the Operator that the Fire Watch is to start.

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Control Room Operator

1. **Review** the Hot Work Permit Operations Copy #2 with the Tradesperson responsible for the Hot Work to be done.
2. If you **both agree**, the work can continue. If you do not, the Tradesperson will CANCEL the permit.
3. Sign the Operations Copy #2, before the work is started, to indicate your understanding of the hot work to be done.
4. Keep the Operations Copy #2 in the control room.
5. When the hot work has been completed and the Tradesperson has signed off the permit, initiate the Fire Watch.
6. Delegate a Fire Watch from your crew. If unable to provide sufficient personnel for a Fire Watch, notify your Supervisor who will provide personnel.
7. Upon completion of the fire watch, deliver to your Supervisor the Operations Copy #2 and the Job Site Fire Watch Copy #3.

Fire Watch Personnel

1. **Confirm** you have an operating radio or immediate access to a phone in order to respond to any dangerous situation. (Fire Department 2222).
2. **Make** your first fire watch check within 30 minutes of job completion. **Print** your name, initial and the first fire watch time on the Job Site Fire Watch Copy #3.
3. **Ensure** you have access to suitable fire extinguishers and fire hose.
4. **Inspect** areas above, below and behind adjacent walls.
5. **Report** second, third and fourth fire watch checks on the Job Site Fire Watch Copy #3.
6. Sign Off the Job Site Fire Watch Copy #3 when complete.
7. Return the Operations Copy #2 and Job Site Fire Watch Copy #3 to the Control Room Operator.

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Operations Supervisor

1. **Pick up** the Operations Copy #2 and the Job Site Fire Watch Copy #3 from the Control Room Operators.
2. **Confirm** that all Fire Watch Checks have been done and **sign** the bottom of copy # 3. Return copies #2 and #3 to Fire Protection.

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REVISION HISTORY:

REV. NO.	DATE	COMMENTS	BY
00	Dec 4, 1996	New	
01	July 21, 1998	Tradesman-Ensure Fire Hazards	W. Dempster
01	Nov. 5, 1998	Reviewed	L. Bingley
02	Sept 1, 1999	Modifications/moved from area 642	Brian Bowen
02	Aug 24, 2001	Reviewed	M. Stublely
03	April 2004	Revised to match new permits	T. Patterson
04	July 12, 2005	Revised to match new permits	K. Bozak
05	May 16, 2007	Revised to match new permits	K. Bozak
06	July 9, 2007	Revised phone numbers	K. Bozak
07	May 5, 2011	Revised to match new permits	K. Bozak
08	May 5, 2011	Revised to match new permits	K. Bozak
09	Sept 15, 2011	Revised to add 2 more high hazard locations on page 4	G. Dosenburg
10	June 20, 2012	Revised to include Kraft and TMP for Chip Silos	K. Bozak
11	Jan 9, 2013	Supervisor Authorization	K. Bozak & C. Crosby
12	May 1, 2015	Revision to Spark Watch Requirements and Definition	K. Bozak
12	Jan 30, 2018	Reviewed	R. Romphf
13	Oct 19, 2020	Reference NFPA 51B-2019 Standard and modify to suit.	M. Hein

AUTHORIZED BY:  Date Oct 21/20
Maintenance Superintendent Date

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