Clark County Department of Building & Fire Prevention

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TITLE: **HOT WORK OPERATIONS - RENEWABLE**

SCOPE: Clark County Department of Building & Fire Prevention requirements for the submittal and approval of Hot Work Operations. This guideline covers hot work operations such as welding, cutting, open torches, brazing, soldering, grinding, thermal spraying, thawing pipe, installation of torch-applied roof systems, and any other similar activity. Any other associated activity, such as compressed gases, hazardous materials, flammable/combustible liquids, open flames and candles, etc. shall have separate permits prior to commencing those other activities.

PURPOSE: To standardize plan/permit requirements of the Fire Prevention in accordance with the Clark County Fire Code. Hot Work Operations permits are limited to a duration of one year and shall be renewed annually.

DEFINITIONS:

Assessor's Parcel Number (APN): A unique number assigned to each property by the Clark County Assessor's office.

Combination Fixed & Mobile: A business performing both fixed and mobile hot work operations.

Fixed: A business performing hot work operations at a designated location at a specific address.

Hot Work: Operations including welding, cutting, Thermit welding, brazing, soldering, grinding, thermal spraying, thawing pipe, installation or torch-applied roof systems or any other similar activity.

Hot Work Area: The area exposed to sparks, hot slag, radiant heat, or convective heat as a result of the hot work.

Hot Work Program: A permitted program, carried out by approved facilities-designated personnel, allowing them to oversee and issue permits for hot work conducted by their personnel or at their facility. The intent is to have trained, on-site, responsible personnel to ensure that required hot work safety measures are taken to prevent fires and fire spread.

Mobile: A business performing all hot work operations at multiple locations within unincorporated Clark County.

ANNUAL RENEWABLE PERMIT PROCEDURE:

After issuance of your initial permit(s), your permit(s) will be valid for one year. Approximately 30-60 days prior to the expiration of your permit, a renewal notice will be mailed to you with instructions for the annual permit renewal.

If you do not receive this notice, it is your responsibility to submit the renewal application. Please refer to the website for additional information.

PERMIT FEES:

Permit fees shall be assessed in accordance with the Permit Fee Schedule as adopted in the Clark County Fire Code. For applications that are expedited, additional fees shall apply.

SPECIFICATIONS AND SUBMITTAL REQUIREMENTS:

An application must be completed for each submittal. A minimum of three sets of plans and three sets of specifications shall be submitted with the permit application. The plans shall be drawn to an indicated scale (1/8" scale and ¼" scale are preferred). Plans shall show compliance in accordance with the Clark County Fire Code. All submittals must be legible and readable or the plan shall be issued a correction letter for cause.

A permit is required and shall be obtained from FP for hot work operations including, but not limited to:

1. Public exhibitions and demonstrations where hot work is conducted.
2. Use of portable hot work equipment inside, upon, or within 10 feet of a structure. **Exception:** Work that is conducted under a construction permit.
3. Fixed-site hot work equipment such as welding booths.
4. Hot work conducted within a hazardous fire area.
5. Application of roof coverings with the use of an open-flame device.
6. When approved, FP will issue a permit to carry out a Hot Work Program. This program allows approved personnel to regulate their facilities' hot work operations. The approved personnel shall be trained in the fire safety aspects denoted in Chapter 26 and shall be responsible for issuing permits requiring compliance with the requirements found in Chapter 26. These permits shall be issued only to their employees or hot work operations under their supervision.

Three submittal packages are required to be submitted to FP Plans Intake and shall include the items listed within the following table below.

FIXED	MOBILE	COMBINATION FIXED & MOBILE
1. Provide a floor plan of the building indicating the following information: a. Location and type of hot work operations and equipment in relation to combustible materials, elevators, stairs, gangways, means of egress, building openings, or ventilation openings. A minimum of 35 foot separation shall be provided or approved shielding shown. b. Location, type and volume (in cubic feet) of compressed gas cylinders if used. c. Location of ventilation equipment if provided. d. Location of minimum rated 2A 20-B:C fire extinguishers or charged water hose equipped with a nozzle. Must be within 30 feet of hot work operations and accessible without climbing stairs or ladders. 2. Provide a fire watch in accordance with the Clark County Fire Code. 3. Provide a detailed narrative describing the type of hot work operations performed in the field. 4. Maintain a completed	1. Provide a detailed narrative describing the type of hot-work operations performed in the field. 2. Provide a fire watch in accordance with the Clark County Fire Code. 3. Include the type of hot-work equipment to be used. 4. Location, type and volume (in cubic feet) of compressed gas cylinders if used. 5. Maintain a completed (signed) HOT-WORK OPERATIONS/FIRE WATCH PROCEDURES AND SAFETY SIGN-OFF SHEET at the job site.	***FIXED*** 1. Provide a floor plan of the building indicating the following information: a. Location and type of hot work operations and equipment in relation to combustible materials, elevators, stairs, gangways, means of egress, building openings or ventilation openings. A minimum of 35 foot separation shall be provided or approved shielding shown. b. Location, type and volume (in cubic feet) of compressed gas cylinders if used. c. Location of ventilation equipment if provided. d. Location of minimum rated 2A 20-B:C fire extinguishers or charged water hose equipped with a nozzle. Must be within 30 feet of hot work operations and accessible without climbing stairs or ladders. 2. Provide a detailed narrative describing the type of hot work operations performed in the field. ***MOBILE*** 1. Provide a detailed

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(signed) HOT WORK OPERATIONS/FIRE WATCH PROCEDURES AND SAFETY SIGN-OFF SHEET at the job site.		narrative describing the type of hot work operations performed in the field. 2. Include the type of hot work equipment to be used in the field. ***FIXED/MOBILE*** 1. Provide a fire watch in accordance the Clark County Fire Code. 2. Maintain a completed (signed) HOT WORK OPERATIONS/FIRE WATCH PROCEDURES AND SAFETY SIGN-OFF SHEET at the job site.

PERMIT REVISIONS AND RESUBMITTALS:

Revisions to approved plans are required to be submitted and approved. Revisions will be assessed additional plan review fees. A copy of the previously approved plan shall accompany the revised submittal to facilitate the review. Clearly indicate all changes to the revised plans by clouding the change with a delta number to signify the date of plan change. When several changes have been made, a detailed list of changes is required.

Re-submittals to address a Letter of Correction will require a full submittal. These plans require a copy of the red lined plan from the previous submittal to facilitate the review. Clearly indicate all changes by clouding the change with the delta number to signify the date of plan change.

PLANS CHECK STATUS INSTRUCTIONS:

The status of the review can be checked by logging on to:
www.clarkcountynv.gov/building/fire-prevention

INSPECTIONS THAT MAY BE REQUIRED AND SCHEDULING INSTRUCTIONS:

If approved, an inspection will need to be scheduled. To schedule an inspection, go to: www.clarkcountynv.gov/building/fire-prevention.
A fire inspector will review your site in accordance with the approved plans and this guideline and, if compliant, will issue the permit.

The Fire Prevention (FP) may witness and accept inspection, testing and maintenance of fire and life safety systems conducted by approved individuals as required by and within the scope and authority of the Clark County Fire Code.

This Guideline does not take the place of the Fire Code and does not take precedence over any Fire Code requirement or position taken by the Fire Chief. When a conflict exists between the requirements of this Guideline and the Fire Code or the opinion of the Fire Chief, the Fire Code or opinion of the Fire Chief prevails.

Technical Assistance, when required by the Fire Chief, will require a Technical Opinion and Report prepared by a State of Nevada licensed: qualified engineer, specialist, laboratory, or fire safety specialty organization acceptable to the Fire Chief and the owner. The Fire Chief is authorized to require design submittals to bear the Wet Stamp and Signature of a professional engineer.

Acceptance of Alternative Materials and Methods requires a Technical Opinion and Report prepared by a State of Nevada licensed: qualified engineer, specialist, laboratory, or fire safety specialty organization acceptable to the Fire Chief and the owner. The Fire Chief is authorized to require design submittals to bear the Wet Stamp and Signature of a professional engineer.

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TITLE: **Hot Work Operations/Fire Watch Procedures and Safety Sign-off Sheet**

SCOPE: Hot work operations shall be in accordance with this guide and the requirements contained in the Clark County Fire Code.

PURPOSE: To provide standardized sign-off sheet for the Department of Building & Fire Prevention requirements relating to conducting hot work operations.

SPECIFICATIONS AND REQUIREMENTS

Business Name of Contractor conducting the Hot Work:

_____

Business Address of Contractor conducting the Hot Work:

_____

Business Name for Hot Works Location:

_____

Business Address for Hot Works Location:

_____

FP Hot Work Permit Number: _____

Dates of Hot Work Operation Conducted: Start: _____ **End:** _____

Permit Expiration Date: From: _____ **To:** _____

Conducting Hot Work Operations - The use of welding, cutting and other hot work equipment shall be in accordance with the Clark County Fire Code.

Fire watch - Shall be provided during hot work activities and shall continue for a minimum of 30 minutes after the conclusion of the work. The fire watch shall include the entire hot work area. Hot work conducted in areas that include horizontal or vertical fire exposures that are not observable by a single individual shall have additional personnel assigned to fire watch to ensure that exposed areas are monitored.

Individuals designated to fire watch duty shall have fire-extinguishing equipment readily available and shall be trained in the use of such equipment. Individuals assigned to fire watch duty shall be responsible for extinguishing spot type fires and communicating an alarm. No other duties shall be assigned to personnel performing fire watch duty.

Fire watch is not required when the hot work area has no fire hazards or combustible exposures. However, a final check is required 30 minutes after completion of operation to detect and extinguish smoldering fires.

Restricted areas – Hot work shall not be conducted in the following areas unless approval has been obtained from the Fire Prevention:

1. Areas where the sprinkler system is impaired.
2. Areas where there exists the potential of an explosive atmosphere, such as locations where flammable gases, liquids or vapors are present.
3. Areas with readily ignitable materials, such as storage of large quantities of bulk sulfer, baled paper, cotton, lint, dust or loose combustible materials.

The Hot work Site - Shall be inspected by the individual responsible for the hot work for compliance.

Pre-hot work check - A pre-hot work check shall be conducted prior to the hot work operations and shall determine all of the following:

1. Notify facility personnel (owner/owner representative) providing location, type of work to be performed, duration of hot-work operations on a daily basis, AND FOLLOW ALL THE IN-HOUSE INTERNAL HOT WORK PROCEDURES.
2. Hot work equipment to be used shall be inspected by the operator prior to use and equipment shall be in satisfactory operating condition and in good repair.
3. Hot work site is clear of combustibles or combustibles are protected.
4. Exposed construction is of noncombustible materials or that combustible materials within 35 feet are protected.
5. Openings within 35 feet are protected.
6. Floors within 35 feet are kept clean.
7. No exposed combustibles are located on the opposite side of partitions, walls, ceilings or floors.
8. If hot work area is accessible to anyone other than operator of hot work equipment, warning sign(s) stating "**CAUTION – HOT WORK IN PROCESS – STAY CLEAR**" must be displayed.
9. Fire watches, where required, are assigned.
10. Fire extinguishers and fire hoses (where provided) are operable and available.
11. Approved actions have been taken to prevent accidental activation of suppression and detection equipment in accordance with the Clark County Fire Code. The automatic sprinkler protection shall not be shut off while hot work is being performed unless otherwise approved by the fire code official.
12. If any of these conditions cannot be met, then the hot work operation shall not be performed.

Fire Watch Personnel Qualifications:

1. Be physically capable and willing to walk the building during the duration of the shift. The floor should be walked in a time period not to exceed 5 minutes, with the entire building being toured every 15 minutes.
2. Walk the designated hot work areas and other fire exposures continuously during the entire hot work operations (except for breaks) and continue fire watch 30 minutes after the conclusion of the work. Replacement fire watch personnel must be provided to continue fire watch during personnel breaks.
3. Be equipped with, and able to use a bullhorn (or other loud sounding device), flashlight, remote radio and cellular phone.
4. Be capable of and willing to assist employees vacating the building in an emergency situation while utilizing a flashlight to illuminate the path of egress for evacuating employees.
5. Be trained in the use of a portable fire extinguisher and capable of extinguishing a small incipient fire utilizing a portable fire extinguisher.
6. Be instructed in and be familiar with emergency notification and evacuation procedures and capable of notifying employees of an emergency and then assisting employees to evacuate the building. All fire watch personnel on the property are responsible for responding immediately to any building where a fire condition is discovered. Upon discovery of a fire, fire watch personnel shall contact the Fire Prevention immediately (Dial 9-1-1), then advise all other fire watch personnel of the emergency in order to obtain their assistance in notifying and evacuating employees.

_____,_____

(Print Name, Title, Contact Phone Number)

I have read, understood, and agree to follow the fire watch procedures for hot works and will follow all the fire watch safety procedures listed above. This document shall be maintained at the job site and produced upon request.

Signature:_____Date:_____