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Level 2 Administrative Procedure

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11	Revision: Revised Appendix D, <i>Supplemental Information for Personal Flame-Resistant Clothing</i> , to reflect personnel PPE requirements within 35 feet of hot work activity (addresses Department of Energy Management Tracking System 10097); editorial/formatting issues and acronym list updated.	24 and 30

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1.0 PURPOSE

- 1.1 This procedure provides instructions and implements applicable requirements to ensure all cutting, welding, and other hot work is conducted by way of a permit system/process and is accomplished in a manner that is consistent with industry fire prevention practices.
- 1.2 This document implements applicable regulatory requirements. They are listed in Appendix A, *Regulatory Requirements Flow Down*.

2.0 SCOPE AND APPLICABILITY

- 2.1 This Level 2 procedure provides a consistent approach to hot work and applies to all Fluor-BWXT Portsmouth LLC (FBP) self-performed work, whether by FBP employees or contract labor resource personnel. The procedure also serves as a guide to FBP subcontractor operations at the Portsmouth Gaseous Diffusion Plant and can be used directly by FBP subcontractors or as a minimum standard for FBP subcontractors to prepare their own Hot Work Procedure.
- 2.2 Local implementing procedures used by FBP subcontractor personnel must meet or exceed the requirements outlined in this FBP procedure.
- 2.3 The requirements and instructions contained in this procedure apply to hot work conducted in the following FBP locations:
- Areas not designed or approved for hot work
 - Areas approved for such purposes (i.e., fixed weld shops)
- 2.4 The requirements and instructions contained in this procedure apply to the following hot work processes:
- Welding and allied processes
 - Heat treating
 - Grinding
 - Thawing pipe by electrical resistance or open flame
 - Powder-driven fasteners
 - Hot riveting
 - Torch-applied roofing, in conjunction with the requirements of National Fire Protection Association (NFPA) 241, *Standard for Safeguarding Construction, Alteration, and Demolition Operations*
 - Similar applications producing or using a spark, flame, or heat

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Exceptions:

This procedure does not apply to the following:

- Cooking operations
- Electric Soldering Iron
- Laboratory analytical instruments (e.g., Bunsen burners, flash point analyzers, spectrometers)

3.0 GENERAL INFORMATION

- 3.1** A completed and approved FBP-FP-PRO-00072-F01, *Welding/Burning/Hot Work Permit*, may be referred to in this procedure as “Hot Work Permit (HWP).”
- 3.2** Training is required as a prerequisite to issuing permits. Contact FBP Training for specific requirements.

4.0 USE REFERENCES

- A.** FBP-BS-PRO-00062, *Records Management Process*
- B.** FBP-FP-PRO-00026, *Alarm Room Response*

5.0 RESPONSIBILITIES

5.1 Facility Manager (FM)

- 5.1.1** Is authorized to issue permits for the FM’s facilities.
- 5.1.2** Designates in writing other personnel authorized to issue permits in the FM’s facilities.

5.2 Authority Having Jurisdiction (AHJ)

- 5.2.1** Issues and approves HWP’s when needed.
- 5.2.2** Issues requirements for special fire protection (FP) requirements for special operations.
- 5.2.3** Ensures requirements for special FP are submitted in writing to the FM.

5.3 Occupational Safety and Health (OS&H) Personnel

- 5.3.1** Evaluates requests for special FP that affect employee safety requirements.

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5.3.2 Performs hazard analysis to determine appropriate controls for incorporation into the Job Hazard Analysis (JHA), including the Personal Protective Equipment (PPE) requirements in Appendix D, *Supplemental Information for Personal Flame-Resistant Clothing*.

5.4 Fire Protection Manager/Permit Authorizing Individual (PAI)

5.4.1 Supervises the hot work program.

5.4.2 Provides technical support for personnel designated with Issuing Authority (IA) for HWP.

5.4.3 Coordinates with Fire Services personnel for special requirements in support of hot work activities.

5.4.4 Notifies the FBP Fire Protection Engineer (FPE) for special assessments of HWPs.

5.5 Issuing Authority (IA)

NOTE
The IA is the FM or Authorized Representative.

5.5.1 Issues and approves HWPs according to this procedure.

5.5.2 Modifies the HWP when conditions change in a facility that may impact the bounding limitations.

5.6 Supervisor

5.6.1 Monitors hot work activities and ensures the requirements of HWPs and this procedure are executed by the workers under his/her cognizance.

5.6.2 Accepts and signs the HWP.

5.6.3 Ensures HWPs are kept in the hot work areas or in work packages.

5.6.4 Ensures all subcontract and vendor personnel who perform hot work are trained according to this procedure or have submitted a subcontractor hot work program procedure as approved by the FBP PAI or designee.

5.7 Procurement

5.7.1 Ensures all purchase requests for hot work personal protective clothing are approved by OS&H.

5.7.2 Ensures a certificate of compliance is provided by the vendor/supplier when procuring NFPA PPE.

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5.8 Fire Protection Engineer (FPE)

- 5.8.1** Ensures the review of special situations at the request of the HWP issuing authority.
- 5.8.2** Ensures FP evaluations are performed for each welding/burning/hot work operation, when required.
- 5.8.3** Inspects Fixed Weld Shops and issues permits upon request, if approved.
- 5.8.4** Ensures annual inspections of designated, approved fixed weld shops are performed and fixed weld shop permits are issued/reissued upon request.
- 5.8.5** Maintains a listing of approved fixed weld shops.
- 5.8.6** Ensures the review and approval of procedures for welding, burning, and/or hot work applications.

5.9 Fire Protection (FP) Services

- 5.9.1** Ensures fire training facilities are made available for the fire watch training program.
- 5.9.2** Provides Fire Watch Program hands-on training and conducts performance evaluations of trainees.
- 5.9.3** Issues Permit Number to IA, upon request.
- 5.9.4** Maintains FBP-FP-PRO-00072-F03, *Hot Work Permit Number Log*.

5.10 Fire Watch

- 5.10.1** Observes ongoing hot work and ensures fire prevention measures outlined in this procedure and reflected on the permit remain in place during hot work activity.
- 5.10.2** Facilitates further fire prevention measures, if needed, as a result of observing hot work activity.

5.11 Hot Work Qualified Worker

- 5.11.1** Ensures permit approval has been obtained before starting hot work operations.
- 5.11.2** Ensures use of Flame-Resistant (FR) Personal Protective Equipment (PPE), as described in Appendix D, *Supplemental Information for Personal Flame-Resistant Clothing*, or as approved by Occupational Safety, before starting hot work operations.
- 5.11.3** Inspects all equipment prior to use to ensure safe operating condition.

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- 5.11.4** Stops hot work operations if unsafe conditions develop and notifies management and the area Supervisor for reassessment of the situation.

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6.0 ACTIONS

6.1 HWP Processing

IA

6.1.1 Issue HWP per Subsection 6.3 of this procedure.

6.1.2 Re-Issue HWP when requested per Step 6.1.5E.

Supervisor

6.1.3 Ensure HWP is available at the work site.

6.1.4 Upon completion of work, maintain the HWP with the work package.

6.1.5 **IF** the hot work operation exceeds the 24-hour expiration period, **THEN** the Supervisor may extend the HWP an additional 24 hours after performing the following actions:

- A. Review the HWP to ensure changes in work, work location, FP, and other provisions have **not** occurred.
- B. Review the precautions listed on the permit to ensure no changes have occurred.
- C. Obtain concurrence of the FM that no changes have occurred in protection, as identified on the HWP, and perform the following actions:
 - 1) Record the HWP start date, expiration date, and time.
 - 2) Sign in the designated space.
 - 3) Instruct the Fire Watch to sign in the designated space at the bottom of the HWP and verify the signing.
- D. Extend the HWP, as outlined above, providing that no protection changes have occurred, up to a maximum of five 24-hour time periods.

NOTE

A new HWP is required for further extensions beyond the five-extension maximum.

- E. **IF** a new HWP is required for a hot work operation having five 24-hour extensions, **THEN** request IA issue a new HWP for the hot work operation.

IA

- F. **IF** required, **THEN** issue a new HWP for the hot work operation.

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6.2 Fixed Weld Shops

FPE

- 6.2.1** Upon request, survey a specific operation before initiation of hot work to determine specific FP measures.
- 6.2.2** Review proposed fixed weld shops for conformance with the following standards and as specified in Appendix B, *Supplemental Information for a Fixed Weld Shop*:
- A.** Location of Fixed Weld Shop must be in noncombustible/fire resistive structure **OR** FP-approved alternative location.

NOTE

If limited soldering/brazing operations are adequately protected and performed on table tops or workbenches only within specifically identified boundaries defined on the HWP, the AHJ or designee may deviate from the 35-foot requirement described in Step 6.2.2B.

- B.** Shop boundary must be constructed to prevent spark and slag migration outside the approved area, **OR** the immediate space surrounding the defined welding/burning/hot work area must be kept clear of all combustibles for a minimum distance of 35 feet.

NOTE

A one-day gas supply is defined as the required amount in use and connected to an approved manifold. For special determinations, contact FP for guidance.

- C.** Unconnected gas cylinders located in the shops must be limited to a one-day supply.

NOTE

For equipment containing known or previously unknown deposit(s) of Uranyl Fluoride (UO_2F_2), and deposit(s) > safe mass opened to atmosphere, the fire extinguisher must be a portable Carbon Dioxide (CO_2) and/or dry chemical type extinguisher.

- D.** Fully charged fire extinguisher of appropriate size and type must be available at the fixed weld shop.
- E.** **IF** sprinkler protection is available within the building, **THEN** it must be provided over the fixed weld shop.
- F.** Welding/burning/hot work operations must not be permitted while sprinkler protection is impaired, unless approved by FP.

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G. For equipment containing known or previously unknown deposit(s) of UO_2F_2 , and deposit(s) > safe mass opened to atmosphere, ensure a person is to be stationed to valve off the sprinkler system, if inadvertently actuated, any time equipment opening(s) (containing such deposit[s]) remain uncovered.

6.2.3 IF the FP review of the proposed fixed weld shop conducted in Step 6.2.2 determines conformance with the requirements specified, THEN issue an FBP-FP-PRO-00072-F02, *Fixed Weld Shop Permit*, to authorize the fixed weld shop.

6.2.4 Sign FBP-FP-PRO-00072-F02, indicate the approved duration date, and post within the shop.

6.2.5 Re-inspect the shop annually or more frequently, whenever conditions change, and reissue/revise/rescind the authorization permit, as appropriate.

Supervisor

6.2.6 Prior to initiating hot work operations, ensure fixed weld shops display a current, approved, and numbered fixed weld shop permit (FBP-FP-PRO-00072-F02).

6.2.7 Ensure hot work qualified workers are aware of special conditions related to the fixed weld shop as stated on the posted fixed weld shop permit (FBP-FP-PRO-00072-F02).

6.2.8 Ensure FR PPE as described in Appendix D, or as required by Industrial Safety, is in use by all qualified workers prior to initiating hot work operations.

6.2.9 Request a new shop inspection by the FPE upon any changes to the conditions of the fixed weld shop.

6.3 Welding/Burning/HWP (Non-fixed weld shops)

IA (FM or Authorized Representative)

6.3.1 Obtain an FBP-FP-PRO-00072-F01(HWP) for each welding/burning/hot work operation performed outside an approved fixed weld shop.

NOTE

Questions during the processing of an HWP should be directed to the FPE at extension 3500 or 740-897-3500.

6.3.2 Complete the top portion of the HWP to include the following information:

- A.** Date the HWP process began.
- B.** Supervisor or Group Name who the HWP is being issued to.
- C.** Work Order Number that is requiring the HWP.

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- D.** HWP Number, obtained by calling FPE at extension 3500 or 740-897-3500.
- E.** The Building Number.
- F.** Floor/Level/Story where the work is to be completed.
- G.** Column number or line where the work is to be completed.
- H.** Scope of Work.
- I.** HWP Start Date and Time.
- J.** HWP Expiration Date and Time.
- K.** IA Name and Badge Number.

NOTE

Any precaution that is marked "NO" on FBP-FP-PRO-00072-F01, *Welding/Burning/Hot Work Permit*, must be evaluated by a Subject Matter Expert (SME) of the appropriate support group (i.e., FPE, Radiation Protection, OS&H, etc.) to determine how to meet the precaution safely.

N/A indicates the precaution is not applicable to the type of equipment, status of the equipment, equipment not present, or the work being performed.

- 6.3.3** **IF** location of work is in an area protected by fixed sprinkler system(s), **THEN** ensure the sprinkler system(s) are in service.
- 6.3.4** **IF** the fixed protection is inoperable/out of service, **THEN** obtain approval from FP before initiating hot work.
- 6.3.5** **IF** location of work is in an area equipped with smoke detection devices or is monitored by a smoke detection system, **THEN** ensure the device(s) or system(s) have been placed out of service by contacting FP.

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NOTE

If IA is uncertain if Flammable/Combustible material is present within piping, vessels, or containers, IA must request the piping, vessels, or container be evaluated by a SME of the appropriate support group (e.g., FPE, Radiation Protection, Engineering, OS&H) to determine if additional requirements are needed.

- 6.3.6** IF the work is being performed on piping, vessels, or containers that have or may have been exposed to any flammable gases or may contain any flammable/combustible material, THEN ensure the system is thoroughly cleaned and/or purged or otherwise rendered acceptable to an FPE.
 - 6.3.7** If installed equipment contains UO₂F₂ deposit(s) > safe mass opened to atmosphere, THEN make arrangements with FP to station a person to valve off the sprinkler system, in inadvertently actuated, anytime equipment opening(s) containing such deposit(s) remain uncovered.
- NCSA-PLANT079*
- 6.3.8** Inspect the area where the proposed hot work operation is to be performed **before** issuing an HWP, to ensure compliance with the provisions of this procedure.
 - 6.3.9** Mark the appropriate box indicated on FBP-FP-PRO-00072-F01 as “YES”, “NO”, or “N/A” for precautions to be taken.
 - 6.3.10** Verify the above precautions (Steps 6.3.2 through 6.3.9) have been reviewed and appropriate actions taken by signing in the space designated “Issuing Authority” on FBP-FP-PRO-00072-F01.
 - 6.3.11** Issue the HWP **before** the start of the welding/burning/hot work operation.
 - 6.3.12** IF the HWP is lost or damaged, THEN issue a new HWP.

Supervisor

- 6.3.13** Ensure HWP is available at the work site.

NOTE

N/A indicates the precaution is not applicable to the type of equipment, status of the equipment, equipment not present, or the work being performed.

- 6.3.14** Prior to initiating welding/burning/hot work operations, ensure the following precautions have been taken and fill out all boxes, in the Supervisor’s Section, on FBP-FP-PRO-00072-F01 marked “YES”, “NO”, or “N/A”:
- A.** Contact OS&H to evaluate chemical hazards produced by welding/burning/hot work operations, such as fumes generated from metals, protective coatings, paints, and cleaners.

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- B.** IF outside a building or structure, THEN use caution in performing hot work around dry grass, leaves, and other combustible material, and consider wetting down area with water.
- C.** Prevent the by-products of hot work activity (flames, sparks, heat, etc.) from impacting or igniting combustible materials within 35 feet of hot work operations by utilizing one or more of the following methods or techniques:

NOTE

Portions of methods/techniques in Step 6.4.4G.1) through Step 6.4.4G.4), in conjunction with additional Fire Watch may be acceptable pending FPE approval.

- 1) Move hot work activity at least 35 feet away from combustible materials.
- 2) Move combustible materials at least 35 feet away from hot work activity.
- 3) Protect combustible materials with noncombustible shields, covers, screens, or building features within 35 feet of hot work activity.
- 4) Contain hot work activity by utilizing non-combustible shields, covers, screens, or building features such that the by-products of the hot work activity (flames, sparks, heat, etc.) do not propagate beyond the containment area, impacting or igniting adjacent combustible materials or associated welding/cutting equipment (i.e., hoses, compressed gas cylinders, regulator, etc.).
- 5) Contact FPE for specific direction if field conditions are such that the above methods/techniques are not practical or possible to follow.

NOTE

Welding/burning, and/or hot work operations pertaining to, or associated with, contaminated material require the same FP measures as identified for basic welding, burning, and/or hot work operations, as identified in this procedure.

- 6.3.15** Contact Radiation Protection to determine the presence of radioactive contamination in areas where welding, burning and/or hot work is planned, and to prescribe radiological controls, if required.
- 6.3.16** Upon completion of work, maintain the HWP with the work package.

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- 6.3.17** IF the hot work operation exceeds the 24-hour expiration period, THEN the Supervisor may extend the HWP an additional 24 hours after performing the following actions:
- A. Review the HWP to ensure changes in work, work location, FP, and other provisions have **not** occurred.
 - B. Review the precautions listed on the permit to ensure no changes have occurred.
 - C. Obtain concurrence of the FM that no changes have occurred in protection, as identified on the HWP, and perform the following actions:
 - 1) Record the HWP start date, expiration date, and time.
 - 2) Sign in the designated space.
 - 3) Instruct the Fire Watch to sign in the designated space at the bottom of the HWP and verify the signing.
 - D. Extend the HWP, as outlined above, providing that no protection changes have occurred, up to a maximum of five 24-hour time periods.
 - E. IF further extensions are desired after a maximum of five 24-hour time period extensions has elapsed, THEN **request** the IA issue a new HWP for the hot work operation in accordance to Step 6.3.1 through Step 6.3.11.

6.4 Welding/Burning/Hot Work Operations

FP Services

- 6.4.1** Coordinate scheduling of servicing and maintenance requirements for FP facilities, equipment, and extinguishers.

Supervisor

NOTE

Welding/burning, and/or hot work operations pertaining to, or associated with, contaminated material require the same FP measures as identified for basic welding, burning, and/or hot work operations, as identified in this procedure.

- 6.4.2** Contact Radiation Protection to determine the presence of radioactive contamination in areas where welding, burning, and/or hot work is planned, and to prescribe radiological controls, if required.
- 6.4.3** Have the atmosphere tested and note the reading in %Lower Explosive Limit (LEL) on FBP-FP-PRO-00072-F01 in the space provided.

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- 6.4.4** IF atmosphere testing is not needed, THEN check “N/A” on FBP-FP-PRO-00072-F01.
- 6.4.5** Prior to initiating welding/burning/hot work operations, ensure the following precautions have been taken and ALL boxes, in the Supervisor’s Section, on FBP-FP-PRO-00072-F01 are marked with “YES”, “NO”, or “N/A”:
- A.** IF any box is marked “NO,” THEN obtain additional evaluation(s) before initiating hot work. Document additional evaluation results in writing and attach to FBP-FP-PRO-00072-F01.
 - B.** Identify the nearest firefighting equipment, phone, and/or fire alarm.
 - C.** IF installed equipment containing UO₂F₂ deposit(s) > safe mass opened to atmosphere, THEN equip the fire watch with portable CO₂ and/or dry chemical fire suppression equipment only.

NCSA-PLANT079

NOTE

Welding/burning, and/or hot work operations are not permitted in areas containing flammable vapors above recommended LEL concentrations.

- D.** IF flammable vapors have been present or are suspected, THEN test the atmosphere for flammable vapors.
- E.** Contact OS&H to evaluate chemical hazards produced by welding/burning/hot work operations, such as fumes generated from metals, protective coatings, paints, and cleaners.
- F.** IF outside a building or structure, THEN use caution in performing hot work around dry grass, leaves, and other combustible material; consider wetting down area with water.
- G.** Prevent the by-products of hot work activity (flames, sparks, heat, etc.) from impacting or igniting combustible materials within 35 feet of hot work operations by utilizing one or more of the following methods or techniques:

NOTE

Portions of methods/techniques in Step 6.4.4G.1) through Step 6.4.4G.4), in conjunction with additional Fire Watch may be acceptable pending FPE approval.

- 1)** Move hot work activity at least 35 feet away from combustible materials.
- 2)** Move combustible materials at least 35 feet away from hot work activity.

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- 3) Protect combustible materials with noncombustible shields, covers, screens, or building features within 35 feet of hot work activity.
- 4) Contain hot work activity by utilizing non-combustible shields, covers, screens, or building features such that the by-products of the hot work activity (flames, sparks, heat, etc.) do not propagate beyond the containment area, impacting or igniting adjacent combustible materials or associated welding/cutting equipment (e.g., hoses, compressed gas cylinders, regulator).
- 5) Contact FPE for specific direction if field conditions are such that the above methods/techniques are not practical or possible to follow.

H. Prevent by-products of the hot work activity (flames, sparks, heat, etc.) from migrating through openings (penetrations, cracks, holes, ducts, etc.) in walls or floors within a radius of 35 feet of the hot work activity by utilizing one or more of the following methods:

NOTE

Portions of methods/techniques in Step 6.4.4H.1) through Step 6.4.4H.3), in conjunction with additional Fire Watch, may be acceptable, pending FPE approval.

- 1) Move hot work at least 35 feet away from combustible materials.
- 2) Protect openings with non-combustible shields, covers, screens, or building features within 35 feet of hot work activity.
- 3) Contain hot work activity by utilizing non-combustible shields, covers, screens, or building features such that the by-products of the hot work activity (sparks, etc.) do not propagate beyond the containment area or migrate through openings.
- 4) Contact FPE for specific direction if field conditions are such that the above methods/techniques are not practical or possible to follow.

NOTE

Welding, burning, and/or hot work operations are not permitted within 35 feet of any flammable liquid without special FP approvals.

Tools used to perform hot work operation that utilize flammable liquid by design, (i.e., Petrogen Torch) are permitted within 35 feet of the hot work, provided the flammable liquid is contained in the approved safety container designed for that tool.

I. Remove flammable liquids from within a 35-foot radius of the hot work operation.

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- J. IF**, in special cases, flammable liquids cannot be removed beyond 35 feet, **THEN** contact FPE for guidance or FP to provide special FP.
- K.** Protect and properly place compressed gas cylinders for maximum protection.
- L.** Limit compressed flammable gas to be used to the cylinder(s) connected to the regulator and gauges.
- M.** Notify Fire Services at the alarm desk by calling extension 5909 prior to initiating hot work activities. (Cell phone call: 740-897-5909)

NOTE

If more than one person is assigned as Fire Watch to the job (e.g., a job with multiple levels that must be watched simultaneously), then all who are assigned the responsibility are required to continue the Fire Watch for a minimum of 60 minutes (or longer if directed in the HWP) after completion of the hot work operation.

If one person is assigned as Fire Watch to the job and transfer of responsibility occurs, then only the fire watch that has current responsibility is required to continue the Fire Watch for a minimum of 60 minutes (or longer if directed in the HWP) after completion of the hot work operation, or until Fire Watch responsibility is transferred to another.

The Supervisor or designee must receive a positive confirmation (i.e., via Fire Watch's signature on the HWP) from every individual assigned as Fire Watch to ensure his/her understanding and acceptance of fire watch duties.

- N.** Assign and schedule Fire Watch to continue for a minimum of 60 minutes (or longer, if directed in the HWP) after completion of the hot work operation.
 - 1)** Ensure all individuals assigned to Fire Watch sign in the space provided on FBP-FP-PRO-00072-F01 prior to commencing Fire Watch and when transferring fire watch responsibility to a replacement.
 - 2)** **IF** fire watch duties are transferred, **THEN** ensure a signature record is maintained on FBP-FP-PRO-00072-F01.
- O. IF** welding/hot work is performed in close proximity to a sprinkler head, **THEN** a wet rag, welding cover material, welder's glove, or other item(s) that offers similar protection must be laid over the sprinkler head immediately prior to the hot work activity and must be removed immediately following the completion of the hot work activity.

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- P. Ensure the HWP has been signed, verifying the area has been inspected with all precautions implemented.
- 1) Ensure each affected Supervisor verifies no changes or discrepancies have occurred.
 - 2) **IF** changes have occurred or discrepancies exist which were not present when the permit was issued, **THEN** IA must issue a new HWP covering the changes and/or correcting the discrepancies.

IA

- 3) **IF** changes have occurred or discrepancies exist which were not present when the permit was originally issued, **THEN** issue a new HWP to cover the changes and/or discrepancies.

Fire Services

- 6.4.6 Receive notification from the Supervisor of hot work activities outside of a fixed weld shop, if applicable, and record information on FBP-FP-PRO-00026-F01, *Fire Station Journal*.
- 6.4.7 **WHEN** requested, **THEN** issue HWP # to requestor and log the new number entry on FBP-FP-PRO-00072-F03, *Hot Work Permit Number Log*.

Fire Watch

NOTE

More than one Fire Watch may be necessary to watch the area and the person performing hot work. For example, welding on a catwalk may require a Fire Watch with the person performing the hot work and one below to cover the area.

One fire watch **must** be in sight of the person performing hot work at all times when the hot work activity/ignition source is in progress/underway.

Appendix C, *Supplemental Information for a Fire Watch*, can be referenced as needed.

- 6.4.8 Locate nearest phone and fire alarm box, or use other method for requesting emergency assistance; ensure a suitably rated Fire Watch fire extinguisher is readily accessible prior to commencement of hot work operations.
- 6.4.9 Maintain a position from the hot work activity/workers performing hot work such that immediate emergency actions can be taken to prevent and/or extinguish fires involving materials and/or personnel.
- 6.4.10 Take immediate emergency actions to prevent and/or extinguish fires involving materials and/or personnel.

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6.4.11 Continue Fire Watch for a minimum of 60 minutes (or longer, if directed in the HWP) after completion of the hot work operation.

Hot Work Qualified Worker

6.4.12 Ensure Permit approval has been obtained before starting hot work operations.

6.4.13 Ensure use of FR PPE, as described in Appendix D, *Supplemental Information for Personal Flame-Resistant Clothing*, or as required by Industrial Safety, before starting hot work operations.

6.4.14 Inspect all equipment prior to use to ensure safe operating conditions.

6.4.15 Ensure Fire Watch Personnel are present and prepared.

6.5 Prohibited Welding/Burning/Hot Work Operations

Supervisor

6.5.1 Ensure welding/burning/hot work operations are **not** performed:

- In explosive atmospheres (e.g., mixtures of flammable gases, vapor, liquids, or dusts with air).
- In explosive atmospheres that may develop inside un-cleaned or improperly prepared drums, tanks, or other containers or equipment that previously contained such materials, or where such materials may develop in areas with an accumulation of combustible dusts.
- Where explosive chemicals, compounds, liquids, or similar materials are stored.
- Where an oxygen-enriched atmosphere may be encountered.
- In any area outside an approved fixed weld shop without an approved HWP.
- In sprinkler-protected buildings where such protection is inoperable/out of service (e.g., no water flow capability at individual sprinkler system), and FP approved precautions have not been taken.

6.5.2 Contact FP to confirm if sprinkler protection is inoperable/out of service.

6.6 Special FP Requirements

IA

6.6.1 **WHEN** situations develop requiring special FP, **THEN** contact FPE for evaluation and the AHJ or designee for special approval considerations.

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OS&H

- 6.6.2 Evaluate requests for special FP that affect worker safety requirements.

AHJ

- 6.6.3 Review all special FP requests.
- A. Approve a special FP requirement for a special operation as long as it is determined that appropriate FP measures are employed.
 - B. Submit approval (or designate a qualified individual) for special FP in writing to the FM.

6.7 Closeout/Completion of Non-Fixed Shop Permit Activity

Supervisor

- 6.7.1 Ensure any covers, materials, etc., installed on sprinkler heads to support the performance of this procedure have been removed from the sprinkler heads.
- 6.7.2 Ensure any FP system taken out of service is put back into service by notifying FP.
- 6.7.3 Ensure good housekeeping practice has been followed for the location/area where the welding, burning, and/or hot work activity was performed.
- 6.7.4 Ensure FBP-FP-PRO-00072-F01 is signed off/closed out properly and is maintained in the work package, and any FPE evaluations/special guidance is attached.
- 6.7.5 **IF** a person was stationed to valve off the sprinkler system, according to Step 6.3.7, **THEN** ensure the person remains in place until the installed equipment containing UO₂F₂ deposit(s) > safe mass has had all openings properly covered.
- NCSA-PLANT079*
- 6.7.6 Notify Fire Services at the alarm desk by calling extension 5909 and advising the completion of hot work activities. (Cell phone call: 740-897-5909.)

Fire Watch

- 6.7.7 **WHEN** hot work has been completed, **THEN** ensure removal of protective covers from the sprinkler heads immediately following the termination of the heat/ignition source.
- 6.7.8 Complete sections of FBP-FP-PRO-00072-F01 dedicated to the Fire Watch's responsibility and return to Supervisor, **OR** inform Supervisor that Hot Work evolution is completed and ready for inspection prior to HWP removal.

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7.0 RECORDS

7.1 Records Generated

- A. FBP-FP-PRO-00072-F01, *Welding/Burning/Hot Work Permit*
- B. FBP-FP-PRO-00072-F02, *Fixed Weld Shop Permit*
- C. FBP-FP-PRO-00072-F03, *Hot Work Permit Number Log*
- D. FBP-FP-PRO-00026-F01, *Fire Station Journal*
- E. Records listing approved fixed weld shops are maintained by FP

7.2 Requirements

Records generated or received as a result of performing this procedure shall be managed according to FBP-BS-PRO-00062, *Records Management Process*.

8.0 DEFINITIONS/ACRONYMS

8.1 Definitions

- A. **Approved** – Acceptable to the fire protection Authority Having Jurisdiction (AHJ).
- B. **Authority Having Jurisdiction (AHJ)** – An experienced Fire Protection professional designated to resolve FP issues for FBP.
- C. **Combustible Liquid** – Liquid containing a flash point at or above 100°F. Combustible liquids are subdivided as follows:

NOTE

When a combustible liquid is heated for use to within 30°F of its flash point, then it must be handled according to the requirements for the next lower class of liquids.

- 1) Class II liquids include those having flash points at or above 100°F and below 140°F (e.g., kerosene, fuel oils No. 1-D and No.2-D, Naphtha, mineral spirits).
- 2) Class IIIA liquids include those having flash points at or above 140°F and below 200°F (e.g., asphalt, fuel oils No. 4-5-6, brake fluid).
- 3) Class IIIB liquids include those having flash points at or above 200°F.
- D. **Explosive Atmosphere** – A condition of the atmosphere when the concentration of flammable gases/vapors is in the range between the lower explosive limit (LEL) and the Upper Explosive Limit.

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- E. Fire Watch** – A designated individual trained in fire prevention and suppression who observes welding/burning/hot work operations. This individual is required to receive periodic training in the fire-watch training program administered by the plant training organization (see Appendix C, *Supplemental Information for a Fire Watch*).
- F. Fixed Weld Shop** – A maintenance or construction area or shop defined and segregated from non-weld areas by easily identified boundaries and approved by an authorized FP representative.
- G. Flammable Liquids** – Liquids containing a flash point below 100°F. Class I liquids are subdivided as follows:
 - 1) Class IA includes those having a flash point below 73°F and having a boiling point below 100 degrees F (e.g., Pentane).
 - 2) Class IB includes those having flash points below 73°F and having a boiling point at or above 100°F (e.g., Naphtha, benzene, denatured alcohol, gasoline, crude petroleum, toluene).
 - 3) Class IC includes those having flash points at or above 73°F and below 100°F.
- H. “Fully Charged”** – Applies to stored pressure portable fire extinguisher which contain an expellant gas such as nitrogen. Fully charged means there is sufficient pressure to expel contents.
- I. Hot Work Qualified Worker** – The person performing the Hot Work.
- J. Inoperable** – When used in the context of sprinkler system operation, indicates a condition of no water flow capability at an individual sprinkler system where work is being performed and/or a condition in which the fire water system is supplying less than 4000 gallons per minute (gpm) capacity for 4 hours.
- K. Issuing Authority (IA)** – Facility Manager or authorized representative with operating jurisdiction over the equipment or facilities where the work covered by the permit is being performed (this title applies to the responsible person initiating HWP, as identified in this procedure).
- L. Listed/Labeled** – Equipment or materials to which has been attached a label, symbol, or other identifying mark of an organization, acceptable to the AHJ, indicating compliance with appropriate quality standards or performance in a specified manner.
- M. Lower Explosive Limit (LEL)** – The minimum concentration of a flammable gas or vapor in air (usually expressed in percent by volume at sea level), which will ignite if an ignition source is present.
- N. Permit Authorizing Individual (PAI)** – Fire Protection Manager or authorized representative with oversight of the hot work procedure and HWP process.

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- O. Short-Duration Thermal Exposure from Fire** – A period of egress from or accidental exposure to thermal events, including but not limited to, vapor cloud fires, jet flames, liquid fires (pool fires or running liquid fires), solids fires (fires of solid materials or dust fires), or warehouse fires.
- P. Readily** – As used in this procedure, a portable extinguisher that is easily acquired for prompt use in case of fire.
- Q. Supervisor** – The person responsible for supervising employees performing construction, maintenance, modification, test, and/or inspection work.
- R. Time Period Extension** – The designated 24-hour period identified for extending the coverage of an issued HWP for completing a specific hot work operation.
- S. Welding/Burning/Hot Work** – Refers to all methods of welding; arc and torch cutting; open-flame brazing, burning, and soldering; other portable torch open-flame operations; and other spark-producing operations (e.g., grinding).
- T. Welding/Burning/Hot Work Permit (HWP)** – A form (FBP-FP-PRO-00072-F01) that provides an authorization from the Issuing Authority to perform Welding, Burning, and/or Hot Work outside a fixed weld shop. This permit specifies special fire safety precautions to be followed.

8.2 Acronyms

- A. AHJ** – Authority Having Jurisdiction
- B. CO₂** – Carbon Dioxide
- C. FM** – Facility Manager
- D. FP** – Fire Protection
- E. FPE** – Fire Protection Engineer
- F. FR** – Flame-Resistant
- G. HWP** – Hot Work Permit
- H. IA** – Issuing Authority
- I. JHA** – Job Hazard Analysis
- J. LEL** – Lower Explosive Limit
- K. NFPA** – National Fire Protection Association
- L. OS&H** – Occupational Safety and Health
- M. PAI** – Permit Authorizing Individual

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- N. **PPE** – Personal Protective Equipment
- O. **SME** – Subject Matter Expert
- P. **UO₂F₂** – Uranyl Fluoride

9.0 SOURCE REFERENCES

- A. Title 10 CFR 851, *Worker Safety and Health Program*
- B. Title 29 CFR 1910, *Occupational Safety and Health Standards*
- C. Title 29 CFR 1926, *Safety and Health Regulations for Construction*
- D. ANSI/ASC Z49.1, *Safety in Welding, Cutting, and Allied Processes*
- E. DOE Order 420.1C, Change 3, *Facility Safety*
- F. *Environmental, Safety & Health Safety and Health Bulletin #DOE/EH-0196 Issue no 97-3 dated July 1997*
- G. NCSA-PLANT079, *Opening Equipment Containing Greater Than a Safe Mass of Uranium-Bearing Material*
- H. NFPA 10, *Standard for Portable Fire Extinguishers*
- I. NFPA 25, *Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems*
- J. NFPA 51B, *Standard for Fire Prevention During Welding, Cutting, and Other Hot Work*
- K. NFPA 55, *Compressed Gases and Cryogenic Fluids Code*
- L. NFPA 241, *Standard for Safeguarding Construction, Alteration, and Demolition Operations*
- M. NFPA 2112, *Standard on Flame-Resistant Clothing for Protection of Industrial Personnel Against Short-Duration Thermal Exposures from Fire*
- N. NFPA 2113, *Standard on Selection, Care, Use, and Maintenance of Flame-Resistant Garments for Protection of Industrial Personnel Against Short-Duration Thermal Exposures from Fire*
- O. OSHA 29 Code of Federal Regulations (CFR) 1910.252 Subpart Q, *Welding, Cutting, and Brazing*
- P. OSHA Title 29 CFR 1926, Subpart J, *Welding and Cutting*

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Appendix A
REGULATORY REQUIREMENTS FLOW DOWN

1. Title 10 CFR 851, *Worker Safety and Health Program*
2. Title 29 CFR 1910, *Occupational Safety and Health Standards*
3. Title 29 CFR 1926, *Safety and Health Regulations for Construction*
4. DOE Order 420.1C, Change 3, *Facility Safety*
5. NFPA 10, *Standard for Portable Fire Extinguishers*
6. NFPA 25, *Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems*
7. NFPA 51B, *Standard for Fire Prevention During Welding, Cutting, and Other Hot Work*
8. NFPA 55, *Compressed Gases and Cryogenic Fluids Code*
9. NFPA 241, *Safeguarding Construction, Alteration, and Demolition Operations*
10. NFPA 2112, *Standard on Flame-Resistant Clothing for Protection of Industrial Personnel Against Short-Duration Thermal Exposures from Fire*
11. NFPA 2113, *Standard on Selection, Care, Use, and Maintenance of Flame-Resistant Garments for Protection of Industrial Personnel Against Short-Duration Thermal Exposures from Fire*
12. OSHA 29 Code of Federal Regulations (CFR) 1910.252 Subpart Q, *Welding, Cutting, and Brazing*
13. OSHA Title 29 CFR 1926, Subpart J, *Welding and Cutting*

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Appendix B
SUPPLEMENTAL INFORMATION FOR A FIXED WELD SHOP

NOTE

WHEN a combustible liquid is heated for use to within 30°F of its flash point, **THEN** it must be handled according to the requirements for the next lower class of liquids.

1. Fixed Weld Shop shall be located in noncombustible/fire resistive structures unless otherwise approved by the FP.
2. The identified shop boundary shall be constructed to prevent spark and slag migration outside of the approved area; or the immediate space surrounding the defined welding/burning/hot work area shall be kept clear of all combustibles for a minimum distance of 35 feet, or combustibles shall be protected from sparks and slag.

Exceptions:

 - The AHJ or designee may deviate from the 35-foot requirement for limited soldering/brazing operations performed on table tops or workbenches by specifically identifying boundaries.
 - Such approved activities are limited to the confines of the identified area.
 - This and other such special considerations by the AHJ or designee may be enacted provided the surrounding area is adequately protected and shall be stated on the permit.
3. Unconnected gas cylinders located in the shops shall be limited to a 1-day supply.
 - A 1-day supply is defined as the required amount in use and connected to an approved manifold. For special determinations, contact FP for guidance.
4. Fully charged fire extinguisher of appropriate size and type shall be available at the fixed weld shop.
 - For equipment containing a known or previously unknown deposit of UO₂F₂ deposit > safe mass opened to atmosphere, the fire extinguisher shall be a portable CO₂ and/or dry chemical type extinguisher.
5. If sprinkler protection is available within the building, it shall be provided over the fixed weld shop. Welding/burning/hot work operations shall not be permitted while sprinkler protection is impaired unless approved by FP.
 - For equipment containing a known or previously unknown deposit UO₂F₂ deposit > safe mass opened to atmosphere, a person shall be stationed to valve off the sprinkler system, if inadvertently actuated, anytime equipment opening(s) (containing such deposit) remain uncovered.
6. FBP-FP-PRO-00072-F02, *Fixed Weld Shop Permit*, authorizing the fixed weld shop shall be issued by the FP representative after review of the proposed shop for conformance to Items 1 through 5.
7. The authorization permit shall be posted within the shop and shall be reissued annually after a special inspection by an FP representative. The signature of the FP representative shall be required on the posted permit with the approved duration date.
8. The shop Supervisor shall request a new shop inspection upon any changes to the condition of the fixed weld shop.
9. The shop Supervisor and person performing the hot work shall ensure the personal protective equipment described in Appendix D, *Supplemental Information for Personal Flame-Resistant Clothing*, is in use.

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Appendix C
SUPPLEMENTAL INFORMATION FOR A FIRE WATCH
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1. A dedicated full-time fire watch is required for welding/burning/hot work operations performed outside of approved fixed weld shop and as designated in construction subcontracts.
2. Fire watch is a dedicated task associated with all hot work operations excluding an approved fixed weld shop. However, in special circumstances the person assigned this task can perform air sampling operations of the hot work area. If this additional activity or similar activity is required it must be approved by the FP with special instructions.
3. The fire watch must have appropriate, fully charged fire extinguishing equipment readily available and be trained annually. This equipment shall be in addition to existing fire protection equipment at the welding/hot work site.

NOTE: Use only extinguishers marked FIREWATCH EXTINGUISHER. When working outside a fixed weld shop, extinguishers that are tagged FIRE WATCH EXTINGUISHER are to be used. Obtain a Fire Watch Extinguisher from Fire Services or from an established Fire Watch Extinguisher bank and return them at the completion of the job to the bank or to Fire Services before the due date.

4. Fire watches are required to be familiar with facilities and procedures for sounding an alarm in the event of a fire.
5. Fire watches shall review and sign FBP-FP-PRO-00072-F01, *Welding/Burning/Hot Work Permit*, prior to commencing fire watch.
6. A fire watch is maintained for at least one hour after completion of welding/hot work operations to detect and extinguish smoldering fires. All fires are to be reported to FPS.
7. Lists of current trained fire watches are maintained by the plant training group.
8. Routine facility inspections by the FP, Engineering, and/or OS&H include verification that all individuals observed performing fire watch are authorized for that function.
9. A fire watch may be required under specific circumstances in approved fixed weld shops at the discretion of the Supervisor, but should not normally be required.
10. For installed equipment containing known or previously unknown deposit of UO₂F₂ deposit > safe mass opened to atmosphere, a fire watch, equipped with portable CO₂ and/or dry chemical fire suppression equipment, shall be established during cutting/welding.

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Appendix C
SUPPLEMENTAL INFORMATION FOR A FIRE WATCH
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11. FP may require its personnel to stand by during high-hazard operations.
12. Fire watches receive “hands on” training with portable fire extinguishers during their initial training.
13. Fire watches attend an annual refresher on the use of fire extinguishers.
14. The fire watch shall ensure personal protective equipment worn by the person performing hot work is the flame-resistant (FR) type described in Appendix D. If FR protective equipment is required for the fire watch, it will be noted on the Hot Work Permit.
15. All personnel working under the Hot Work Permit shall be briefed to its requirements.

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Appendix D
SUPPLEMENTAL INFORMATION FOR PERSONAL FLAME-RESISTANT CLOTHING

Flame-resistant (FR) clothing for persons performing hot work and fire watches shall be appropriate for the hazards associated with the work. OS&H shall be contacted to assist with the hazards assessment and for approval when less than the standard requirements for full body coverage is evaluated for specific types of hot work. Specific PPE for the work to be performed will be outlined in the Job Hazard Analysis (JHA) or the work package.

When the hot work hazard involves potential from short-duration thermal exposure from fire, only NFPA 2112 FR compliant outer garments shall be worn.

Standard requirements for FR outer garments shall include the following:

- Full body coverage to include coveralls, jackets/pants, or equivalent.

Additional outer garments may include FR leather protectors, hoods, etc.

Anti-Contamination clothing worn during hot work performed under a radiological work permit shall be FR.

Leather mid-to-high top safety shoes.

Incidental segments of non-natural fabric, e.g., elastic in waistband may be permitted on the under garments. If gloves are needed for hot work, the outer gloves shall be FR.

Any gloves worn under the FR gloves (e.g., for radiological control purposes) shall be assessed for burn hazards, and use or limitation of use shall be addressed on applicable work permits.

Any equipment worn over FR garments shall be fire resistant or assessed for burn hazards, and use or limitation of use shall be addressed on applicable work permits. This includes:

- Fall protection equipment, respiratory protective equipment, personal monitoring/sampling equipment, tool belts/pouches, security media, tape, and any other equipment or material worn.

An assessment of the hazards and approval by OS&H is required if less than full body coverage as described above is to be used.

If less than full body coverage is required for specific hot work, clothing worn under any FR outer garments shall be all-natural fabric (e.g., cotton).

For example, if FR lab coats are used in lieu of FR coveralls, cotton coveralls or other natural fabric clothing shall be worn under the lab coat.

Personnel located within 35 feet of hot work activities, who are not directly involved and maintain a safe distance from the hot work activity, are not required to use FR PPE. If FR PPE is not indicated, clothing should be all-natural fabric (e.g. cotton).

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**Attachment A
WELDING/BURNING/HOT WORK PERMIT**



WELDING/BURNING/HOT WORK PERMIT

↓ ISSUING AUTHORITY COMPLETES THIS SECTION ↓			
Date: _____	Issued To: _____	Work Order #: _____	HWP #: _____
Building: _____	Floor: _____	Column: _____	Scope of Work: _____
Permit Starts (date/time): _____		Permit Expires (date/time): _____	
Issued by: _____			Badge Number: _____
<p>Do not weld, burn, or perform hot work until the following precautions are taken and maintained. If conditions change during the course of the work, the permit is void and a new permit must be issued. If a precaution is marked "no", then an additional review by a support group, such as fire services, occupational safety & health, industrial hygiene, or radiation protection; is necessary to determine how to meet the precaution safely and documentation should be attached to the permit. Contact Fire Protection at extension 3500 or 740-897-3500 for HWP assistance.</p>			
THE FOLLOWING PRECAUTIONS HAVE BEEN TAKEN:			Yes No N/A
Applicable building sprinkler system is in service. (Contact extension 3500 or 740-897-3500 for assistance.) (6.3.3)			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Smoke detectors in area have been placed out of service. (6.3.5)			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
System cleaned and/or purged of internal and/or external flammable combustibles if necessary. (6.3.6)			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Above precautions have been completed. (6.3.10) Issuing Authority Signature _____			
↓ SUPERVISOR COMPLETES THIS SECTION (ALL BOXES MUST BE CHECKED 6.4.4) ↓			
Radiological contamination determination has been completed. (6.4.2)			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Firefighting equipment, nearest phone, and fire alarm boxes identified. (6.4.3)			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Atmosphere tested for flammable vapors if needed. (% LEL _____) (6.4.4, 6.4.5 D)			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Chemical hazards evaluated by OS&H (coatings, paints, cleaners, metal fumes.) (6.4.4 E)			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
No combustible materials within 35 feet of hot work or additional protection method/technique implemented. (6.4.5 G 1-5)			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Protection of openings within 35 feet of hot work implemented. (6.4.5 H 1-4)			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
No flammable liquids within 35 feet of hot work (6.4.5 I) or FPE contacted for guidance. (6.4.5 J)			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Provisions made for safe placement of compressed gas cylinders. (6.4.5 K)			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Fire Services notified of hot work. (Call Alarm Room Desk at extension 5909 or 740-897-5909.) (6.4.5 M)			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Fire Watch(es) for Hot Work activity provided. (Remain 60 min. after completion.) (6.4.5 N)			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Work area was inspected with all precautions fully implemented. (6.4.5 P) Supervisor Signature _____			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Hot Work Qualified Worker: All equipment is inspected prior to use to ensure it is in safe operating condition. (6.4.14)			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
Initial Fire Watcher(s) Designated: _____		Signature (Initial Fire Watch[es]) _____	
Transfer of Fire Watcher Responsibility: _____		Signature (Fire Watch[es]) _____	
Transfer of Fire Watcher Responsibility: _____		Signature (Fire Watch[es]) _____	
Transfer of Fire Watcher Responsibility: _____		Signature (Fire Watch[es]) _____	
PERMIT EFFECTIVE TIME PERIODS			
<p>This permit may be renewed at the expiration of a 24-hour time period provided that precautions listed above have been reassessed and no changes have been made. If no changes have occurred, the Supervisor notifies the IA of the permit extension and enters start (date/time) and expiration (date/time) for the new time period. The Supervisor and designated fire watcher(s) sign the permit for each approved 24-hour time period extension. Time period extensions for welding/burning/hot work operations are provided for up to 5 time periods before a new permit issuance is required. This is only effective providing no changes affecting this permit have occurred. Allowance for time intervals between time period extensions may be permitted again, only if no changes occur during the interval.</p>			
	Start Date/Time	Expiration Date/Time	*Signature of Supervisor or designee
1 st	_____	_____	_____
Extension	_____	_____	_____
2 nd	_____	_____	_____
Extension	_____	_____	_____
3 rd	_____	_____	_____
Extension	_____	_____	_____
4 th	_____	_____	_____
Extension	_____	_____	_____
5 th	_____	_____	_____
Extension	_____	_____	_____
*Includes Fire Services Notification of Hot Work			
THIS PERMIT MUST BE AVAILABLE AT THE WORKSITE			

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**Attachment B
FIXED WELD SHOP PERMIT**



FIXED WELD SHOP PERMIT

**FIXED WELD SHOP
PERMIT NUMBER**

(Fire Protection Issued Number)
Use **Black Ink Only**

DURATION: FROM _____ TO _____

LOCATION: _____

PROTECTED BY SPRINKLER SYSTEM NO. _____

THIS FIXED WELD SHOP COMPLIES WITH ALL APPLICABLE FIRE PROTECTION REGULATIONS. CHANGES IN THE CONFIGURATION AND/OR OCCUPANCY OF THE FIXED WELD SHOP **SHALL** VOID THIS PERMIT. OPERATIONS **MUST** BE SUSPENDED, ONCE A PERMIT IS VOID, UNTIL A VALID PERMIT IS ISSUED. THE RESPONSIBLE SUPERVISOR OF THE FIXED WELD SHOP IS RESPONSIBLE FOR REQUESTING A VALID PERMIT BEFORE THE CURRENTLY ISSUED PERMIT IS VOID OR EXPIRES. RETURN ALL VOID OR EXPIRED PERMITS TO THE FIRE PROTECTION REPRESENTATIVE.

RESPONSIBLE SUPERVISOR OF THE FIXED WELD SHOP:

(PRINT/SIGN NAME) PHONE _____

FIRE PROTECTION REPRESENTATIVE:

(PRINT/SIGN NAME) PHONE _____

