



## FFPO Procedure Blue Sheet Form

A. Procedure Title (list manual, procedure series, or specific procedure #)

SPR Accident Prevention Manual

Section 35 Permit Processes and Procedures

B. Procedure Name/series type (i.e., operations, maintenance, etc.) E S & H

C. Check (✓) one of the following:

1.  Procedure(s) accepted “as is” with terminology replaced as denoted in the Site Procedures Approved Terminology Replacement List for the FFPO SPR M&O contract.

2.  In addition to the changes in approved terminology for the FFPO SPR M&O contract, improvements to the procedure are warranted:

Category 1 Finding (Resolution prior to contract start)

Category 2 Finding (Resolution within 90 days of contract start)

Category 3 Finding (Resolution to the Issues Management program)

D. Comments/Notes:

E. Forward a copy of this form to the FFPO Director, Business Management for revision tracking.

Signed

FFPO Reviewer Signature

02/28/14

Date

Steve Mahan

FFPO Reviewer Print Name



## Site Procedures Approved Terminology Replacement List

Approved Terminology Replacements	
Terminology to be Replaced	Substituted Verbiage
AGSC	M&O Contractor or MOC
Boeing	M&O Contractor or MOC
Construction Management Services or CMS contractor	M&O Contractor or MOC
DynMcDermott or DM or Company	M&O Contractor or MOC
DM Contract No.	M&O Contract
<b>Organizational Changes</b>	
William Gibson or "Hoot"	DOE Project Manager or DOE PM
Robert (Bob) McGough or DM Project Manager or CEO	MOC Project Manager or MOC PM
Randy Sutton (Acting) or DM General Counsel	MOC General Counsel or MOC GC
Scott Landry or DM APM, O&M and COO	MOC APM, O&M
APM, Cavern Integrity	Senior Director, Cavern Integrity
Colleen Yates or DM APM, Business Operations and CFO	MOC APM, Business Operations and CFO
APM, Security and Emergency Preparedness or Director, Security and Emergency Preparedness Division	Senior Director, Security & Emergency Preparedness
Henry Schmidt, Jordan Jones, or Duane Johnson	Senior Director, Security & Emergency Preparedness
Leslie Williams or APM, Data Systems or Data Systems Director	Senior Director, Data Systems
William Bozzo or DM APM, ES&H	MOC APM, ES&H
Walt Newcomb or DM Director, Energy & Sustainability	Director, Environmental
J.P. Martinez or DM APM, Engineering	MOC APM, Engineering

**ACRONYMS**

- AGSC ASRC Gulf States Constructors
- APM Assistant Project Manager
- ASRC Arctic Slope Regional Corporation
- CAS Contractor Assurance System
- CFO Chief Financial Officer
- COO Chief Operating Officer
- ES&H Environment, Safety, and Health
- GC General Counsel
- M&O Management and Operating
- MOC Management and Operating Contractor
- O&M Operations and Maintenance
- PM Project Manager

## 35. PERMIT PROCESSES AND PROCEDURES

### Table of Contents

35.1. INTRODUCTION .....	1
35.2. SAFE WORK PERMITS.....	1
35.2.1. Purpose.....	1
35.2.2. Who is Required to Obtain a Safe Work Permit .....	1
35.2.3. What Type of Activity Does NOT Require a Safe Work Permit .....	2
35.3. HOT WORK PERMITS .....	2
35.3.1. Introduction.....	2
35.3.2. Procedures.....	2
35.3.3. Hot Work on Wellheads .....	3
35.3.4. Monitoring Procedures.....	3
35.3.5. Hot Tap Procedures .....	4
35.4. TABLES: PERMIT PROCESSES AND PROCEDURES .....	5

### 35.1. INTRODUCTION

This section provides information on the purposes and procedures for obtaining Safe Work and Hot Work Permits, as well as directions for filling out permit applications (see tables at the end of section).

### 35.2. SAFE WORK PERMITS

#### 35.2.1. Purpose

The purpose of a Safe Work Permit (SWP) is to create and sustain a working environment as free of hazards as possible.

- a. By issuing the permit, DM Operations validates that they have made the work area as safe as possible and authorized the work to be performed based on the description of work.
- b. By accepting the permit, employees signing pre-job briefing and qualification sheet, they are committing to performing the work in accordance with the permit requirements.

#### 35.2.2. Who is Required to Obtain a Safe Work Permit

- a. Anyone performing the work activities listed in Table 35.2 on an SPR site or on an SPR right-of-way is required to obtain a SWP.
- b. If work is performed at an offsite facility (e.g., Sun Terminal), a SWP may be required for both DM plus the offsite facility; therefore, check with Operations Manager or Designee to ensure compliance.

**NOTE**  
 If working at another’s offsite facility, their locks would be first on and last off as they will be responsible for lock out.

- c. Other companies or subcontractors are required to follow the SPR safe work permit procedure. They may also be required to receive a permit from their organization.

### **35.2.3. What Type of Activity Does NOT Require a Safe Work Permit**

An SWP is not required for normal site operations of process equipment when operated within design parameters.

**NOTE**

Examples of the Safe Work Permit (SWP), the SWP Update/Additional Reading form, and Safe Work Permit Form Instructions are located in the appendix of this APM.

**NOTE**

Fueling a vehicle at the site's gas pumps does not require a hot work permit. During fueling, ensure that the vehicle is turned off and do not use a cell phone.

## **35.3. HOT WORK PERMITS**

### **35.3.1. Introduction**

- a. This section specifies minimum requirements for performing hot work in any area or on any equipment that may contain combustible or flammable material.
- b. A Hot Work Permit (HWP) is designed to control operations that produce sparks or that require the use of open flames, where flammable gases or vapors may accumulate, or where operations are conducted in areas with combustible materials.
- c. For the purpose of this section and for the criteria used when issuing an HWP, hot work includes, but is not limited to, the following tasks:
  1. Any work performed in areas that may contain combustible or flammable material that involves:
    - a) Burning, welding, brazing, or soldering
    - b) Any type of open flame
    - c) Use of electrically powered equipment or motor starters (not designed for use in the designated classified area) and other potential ignition sources in locations where flammable gases or vapors are or may be present in quantities sufficient to produce explosive or ignitable mixtures
    - d) Locations that are hazardous because of the presence of combustible dust
    - e) Spark, flame, or high-temperature-producing apparatus, such as tar kettles for roofing repairs
  2. Vehicle traffic (for example, trucks, forklifts, and condor lifts) in areas with electrical classifications of Class 1, Division 1 or 2 areas containing flammable materials.

### **35.3.2. Procedures**

An HWP is required for all work that produce sparks or that require the use of open flames or introduces another ignition source, where flammable gases or vapors may accumulate, or where operations are conducted in areas with combustible materials. Observe the following procedures when an HWP is issued.

- a. A site plot plan/map identifying the Class 1 areas shall be posted at the Safe Work Permit office.

**NOTE**

If working at another facility have them delineate the Class 1 areas.

- b. All items used in Class I areas shall be approved for use in the area classification. An HWP and testing will be performed when items not approved for use in the area classification are used in Class I areas.
- c. All hot work shall be done outside Class I areas if possible. If this is not possible, controls shall be in place and verified.
- d. Continuous or periodic air monitoring may be maintained during exposure. The area where the task is being performed will be assessed to determine whether continuous or periodic monitoring is needed.
- e. A full-time fire watch, knowledgeable of his or her responsibilities, will be present when welding or torch use has fire watch. The operator of the equipment may act as the fire watch if trained and capable of observing the operation.
- f. All unnecessary equipment shall be moved out of the classified areas during hot work.
- g. Before work is done, the employee, the employee's supervisor, and the Operations manager (or designee) will review the work to be done and the required hazard controls.
- h. Alternate/additional controls, if required, shall be documented on the HWP.
- i. An employee qualified to shut down the equipment being used for hot work shall be in the area of the hot work. The employee may be the same employee performing the work. The employee shall be able to mitigate the consequences of the hot work activity by shutting down the particular hot work and making proper notifications.
- j. If work conditions change while hot work is being performed, monitoring (including gas monitoring) and all work activities will be stopped and mitigation actions taken to alleviate unsatisfactory conditions.
- k. The HWP shall be reviewed and evaluated by the supervisor/TR and Operations manager/designee to make sure that conditions have been adequately mitigated to allow work to safely resume.

**35.3.3. Hot Work on Wellheads**

- a. A qualified person or supervisor knowledgeable of well control procedures shall be present when the wellhead is open and depressurized.
- b. If more than one employee or employer will be working in the Class I area when hot work is being performed on wellheads, emergency shutdown procedures shall address their interaction and responsibilities.
- c. Procedures shall require a person or persons be appointed for shutdown responsibilities, and procedures shall be reviewed by all participants before work is started.
  - 1. This will ensure that employees understand their roles when responding to an upset.
  - 2. The review will also address first response, warning systems, and evacuation routes.
  - 3. This review shall be conducted by the supervisor/technical representative (TR) responsible for the work and documented.

**35.3.4. Monitoring Procedures**

- a. Ensure lower explosive limit (LEL), oxygen (O<sub>2</sub>), carbon monoxide (CO), and hydrogen sulfide (H<sub>2</sub>S) atmospheric gas monitoring is conducted and recorded based on the following:
  - 1. For HWPs on hydrocarbon process lines and flammable fuel lines; entries into permit required confined spaces (PRCS) for welding, burning, cutting, and brazing; open

- wellhead work; and work in Class I Division 1 or 2 areas, perform any required gas test within 30 minutes of beginning work.
- a) For all other HWPs, perform any required gas test within 1 hour of beginning work.
  - b) Unless a formal deviation request has been approved by New Orleans Operations and New Orleans Safety, permitted work will not proceed until the LEL is zero.
2. If H<sub>2</sub>S readings exceed 10 parts per million (ppm), work will not continue until written approval to exceed 10 ppm has been given by New Orleans Operations and New Orleans Safety.
  3. In general, work will not be allowed in areas where oxygen levels are less than 19.5 percent or greater than 22 percent without appropriate respiratory equipment.
    - a) These areas should be considered confined spaces, and entry, including allowable oxygen levels, will be governed by an approved confined spaces permit.
  4. The presence of CO must be checked when work involves the use of internal combustion equipment in low-lying areas, confined spaces, excavations, or unvented areas.
    - a) CO levels will not exceed 35 ppm unless the work is governed by an approved safety plan requiring the use of engineering controls or respiratory equipment.
- b. Equipment used for air monitoring shall be calibrated, field tested, and operated according to the manufacturer's requirements.
    1. Employees shall check the calibration date on the equipment to ensure it complies with the manufacturer's requirements.

### **35.3.5. Hot Tap Procedures**

All procedures for welding of the saddle, metal type, pre-weld testing, minimum flow and maximum pressure all are covered in the Corrective Maintenance Procedure (CMP) that is produced by engineering.

#### **WARNING**

The following lines or equipment must not be hot tapped under any circumstances:

1. Those operating below atmospheric pressure.
2. Those used for acetylene, chlorine, hydrogen, oxygen, peroxides, or hydrochloric or sulfuric acid.
3. Air lines.

- a. ASME-code vessels may be hot tapped only if formal written approval has been obtained from Engineering.
- b. All pumping into or out of tanks must be stopped at least eight hours before hot tapping.
  1. Hot taps must not be made above the liquid level in the tank; a minimum of three feet of liquid must be above the hot tap location.
- c. Before the hot tap nozzle is welded into place, nondestructive testing must be performed to ensure that the metal in the area to be welded is at least 1/4-inch thick to prevent burn-through.
  1. The exact area at which the weld can be safely performed must be marked. Before beginning, the welder must demonstrate that the welding apparatus is set with reverse [electrode (+)] polarity.
  2. The welder must then be informed of the minimum wall thickness in the area of the weld.
- d. Hot tapping requires close coordination among the Operations manager or designee, the personnel responsible for the job, and the personnel performing the work.

**35.4. TABLES: PERMIT PROCESSES AND PROCEDURES**

<b>TABLE 35-1. REQUIRED SAFE WORK PERMIT ATTACHMENTS*</b>	
<b>Attachment</b>	<b>APM Section</b>
Alternate Confined Space	Section 10
Confined Space Permit	Section 10
Confined Space Rescue Plan	Section 10
Reclassified Confined Space	Section 10
Controlled Evacuation Committee (CEC) Checklist	Section 12
Job Hazard Assessment (JHA)	Section 27
Lockout/Tagout Log	Section 29
Pre-Job Briefing and Qualifications Form	Section 27
<b>NOTE</b>	
<b>The following documents do not have to be attached to the SWP.</b>	
Contingency Review Committee (CRC)	Section 11
Excavation Plan	Section 19
PPE Hazard Assessment (PPE HA)	Section 36
*Attachments required when applicable to SWP task.	

<b>TABLE 35-2. SAFE WORK PERMIT REQUIREMENTS</b>		
<b>WORK ACTIVITY REQUIRING SWP</b>	<b>APM SECTION</b>	<b>BRIEF DESCRIPTION</b>
Hot Work	Section 35	Activities that may introduce an ignition source in Class 1 Division 1 or 2 electrical areas or where flammable gasses or vapors may accumulate, or in areas with combustible materials.
Excavation	Section 19	Any man-made cut, cavity, trench, or depression in the earth surface formed by earth removal.
Safe Clearance	Sections 12, 15, & 29	Requires barriers, barricades, critical lift, energy control procedures (lockout/tagout), Radiation Safety, work on electrical systems 480 volts and above. (NOTE: Critical Lift Determination is defined in DOE-STD-1090-2011, Section 2)
Confined Space Entry	Section 10	Examples of SPR Confined Space Areas – Not All Inclusive: a. Storage tanks (open top, internal, external floating roof) b. All sumps and pits c. Sewers d. Pig traps and piping e. Oil/water separator units f. Heat exchangers g. Transformers
Work Authorization	Section 35	Work area that may impact operations and/or security systems but does not meet the requirements of any other permit type identified in SWP Section II.

<b>TABLE 35.3. PERMIT PROCESS AND PROCEDURES RESPONSIBILITIES</b>	
<b>Position or Department</b>	<b>Responsibilities</b>
Site Director	a. Approve “Technically Competent Individuals” authorized to sign SWP. b. Approve Initiators authorized to prepare and sign the SWP. c. NOTE: Documented lists are to be maintained in SWP Office.
Operations Manager (or Designee)	a. Complete Safe Work Permit Training (DM Lesson Plan ESSH 1700). (NOTE: Documented on TAAR.) b. Review the description of work activity before authorizing permit. c. Ensure process systems are prepared for work activities. d. Determine whether lockout is required or if fire and/or security system(s) must be disarmed in areas covered by the SWP. e. Ensure Lower Explosive Limit (LEL), Oxygen (O <sub>2</sub> ), and Hydrogen Sulfide (H <sub>2</sub> S) atmospheric gas monitoring is performed prior to work being initiated and results recorded in Section II Block 14. (Use SWP Update / Additional Reading Form, if necessary.) (NOTE: APM Sections 10 & 35. This testing is to ensure area is safe for work activities and not intended for exposure monitoring purposes.) f. Sign and issue the SWP to the “Craftsman Assigned” for posting at the primary work location. Signature signifies systems and equipment are prepared and available to perform task safely. g. When appropriate, review and sign SWP Update / Additional Reading Form for each day a permit is extended. (NOTE: Initiator must sign also.) h. Conduct inspection of the site to verify permit accuracy. Initial and date SWP in Section IV upon completion of satisfactory inspection. i. Do not allow issuance of an additional SWP for a task until the Initiator has returned the original copy of the “original” SWP. j. Upon completion of work, ensure operational systems and equipment are restored to operational readiness and all safety barriers / requirements put in place by Operations have been removed in accordance with applicable procedures. NOTE: If all SWP requirements are not completed, notify the Initiator to complete the task(s). k. Maintain copies of SWPs with appropriate attachments according to the M&O Records Inventory and Disposition Schedule (RIDS). (NOTE: SWPs including confined space entry shall be kept for 30 years.)
SWP Initiator, Initiator’s Supervisor (or Designee)	a. Complete Safe Work Permit Training (DM Lesson Plan ESSH 1700). (NOTE: Documented on TAAR.) b. Prepare the SWP in accordance with the guidelines in this procedure. If conditions change during performance of work, notify Control Room; permit shall be cancelled and a new permit issued. c. Attach all required documents. (Refer to Table 35-1.) d. Select and check all applicable boxes in Section II to identify the type(s) of work being authorized. (NOTE: May require more than one type of work.) e. If the task requires use of a Buddy System or Heat Stress Program, indicate this in Section II Box 13.

<b>TABLE 35.3. PERMIT PROCESS AND PROCEDURES RESPONSIBILITIES</b>	
<b>Position or Department</b>	<b>Responsibilities</b>
	<p>f. Ensure the Supervisor of all employees affected by the SWP has completed the JHA, PPE HA, and Training portions and signed Section III, Block 15 of the SWP. Once complete, submit the SWP to Operations for approval with all applicable documents attached.</p> <p>g. Review the SWP and all applicable documents with the personnel assigned to perform the work prior to the start of the work. (See Table on SWP Attachment Requirements.)</p> <p>h. Designate an assigned craftsman in SWP Section I Block 8 “Craftsman Assigned”.</p> <p>i. Ensure general housekeeping is maintained during work activities.</p> <p>j. Ensure initial gas monitoring has been performed as required, results recorded, and person who performed the test initials the SWP Section II Box 14. If gas testing is required in &gt;3 areas, use the SWP Update/Additional Reading Form.</p> <p>k. Whenever a fire watch is required, ensure it is maintained for 30 minutes after work is completed. (NOTE: See APM Section 46.)</p> <p>l. Ensure an SWP involving potential exposure to energy sources of 480 volts or more is signed by a designated “Technically Competent Individual” (TCI). (NOTE: If a TCI is not available, Site Safety Specialist may sign if approved by the Site Director.)</p> <p>m. When SWP work is completed, ensure all safety barriers have been removed in accordance with applicable procedures. (Example: lockout/tagout, excavation barriers, etc.)</p> <p>n. Prior to checking Section III Block 19 “Job Complete”, ensure area is restored to normal and equipment is ready for return to service.</p> <p>o. Sign, date, and enter time in Section III Block 18 PERMIT CLOSED.</p> <p>p. Return the “original” SWP to Operations to be closed. NOTE: If original is lost, close out the Operations copy for the record. If damaged or otherwise illegible, initiate a new SWP.</p> <p><u>SPECIAL CIRCUMSTANCE: Work Incomplete at End of Day</u></p> <p>q. If work is incomplete at end of day and plans are to continue work AND conditions remain unchanged, complete and submit SWP Update / Additional Reading Form at the end of the day.</p> <p>r. The SWP Update / Additional Reading Form must be prepared for each day the permit is extended. Attach copy of each day’s Update Form to each copy of the original SWP. NOTE: Update is allowed for no longer than a period of 15 calendar days.</p> <p>s. On day work is to resume, verify all safety barriers / requirements for work are still in place and work conditions are unchanged.</p> <p>t. Sign appropriate blocks of the SWP Update / Additional Reading Form. (NOTE: Ensure Operations Manager or Designee also signs.) Note other activities affecting the task on the SWP update form as they differ each day/</p> <p><u>SPECIAL CIRCUMSTANCE: Work Performed at Another Facility</u></p> <p>u. SWP may be required for both DM plus the other facility. Check with the Operations Manager or Designee to ensure compliance.</p>

<b>TABLE 35.3. PERMIT PROCESS AND PROCEDURES RESPONSIBILITIES</b>	
<b>Position or Department</b>	<b>Responsibilities</b>
Site Safety Specialist	a. Inspect any site area or equipment upon request and provide consultation on safety matters. b. Inspect SWPs <u>daily</u> for excavation, confined space, electrical high voltage ongoing tasks because of the potentially high risk level of this type of work. c. Monitor or conduct gas tests when requested. d. Require additional tests at any time during work to ensure that affected area, equipment, and material are free from hazards to personnel. e. Conduct special testing that may be required in unique or unusual situations as required by the SWP. f. Conduct weekly review of selected SWPs (to include ALL contractor / subcontractor SWPs) and perform onsite inspections. Initial and date SWP Section IV at completion of an inspection. g. For tasks involving potential exposure to energy sources of 480 volts or more, if a Technically Competent Individual is not available, review the SWP and verify that hazards have been controlled or mitigated. Sign SWP Section III, Block 17. (NOTE: Only if approved to do so by Site Director.)
All Affected Personnel Performing Work On the SPR, On An SPR Right-of-Way, or Offsite (i.e., Sun Terminal), including contractors and subcontractors	a. Review, understand, and comply with the SWP, all attachments, and the JHA and/or PPE Hazard Assessment associated with the task. b. Perform work ONLY for which training has been provided. c. When designated as “Craftsman Assigned”, ensure the SWP is maintained at the work site. Return to the “SWP Initiator” when work conditions change, at end of shift, or when work is complete. d. Conduct gas testing when required ONLY IF TRAINED TO DO SO. e. Perform housekeeping of work area. f. Inform personnel entering the work area of the hazards and required controls. <u>SPECIAL CIRCUMSTANCE: Work Performed at Another Facility</u> If work is performed at an offsite facility (i.e., Sun Terminal), an SWP may be required for both DM plus the offsite facility. Check with the Operations Manager or Designee to ensure compliance.
SMTRs, Technical Representative (TR) for Contractors/ Subcontractors	a. Complete Safe Work Permit Training (DM Lesson Plan ESSH 1700). (NOTE: Documented on a TAAR.) b. Review and concur with the SWP and initial Block 2, Section I block of the SWP. Deliver the permit to Operations for approval. c. Ensure the required hazard analysis and activity hazard analysis has been developed for the task. (NOTE: TR may initiate SWPs and assume responsibilities for “SWP Initiator” above.) d. Ensure a PPE Hazard Assessment is completed by contractors performing work under the Basic Safety contract boilerplate requirements for onsite services. (NOTE: Required for major service and construction contracts only.) e. Coordinate contractor activities with Operations and any other personnel who may be affected by the permitted work or within the work area.

<b>TABLE 35.3. PERMIT PROCESS AND PROCEDURES RESPONSIBILITIES</b>	
<b>Position or Department</b>	<b>Responsibilities</b>
	f. Ensure that contractor employees have been briefed on the SWP conditions, and understand and enforce the SWP requirements.
Contractor Employees	a. Initiate SWP ONLY if trained to do so. (NOTE: SWP Training DM Lesson Plan ESSH 1700. Document on a TAAR.) b. Review, understand, and comply with the SWP, all attachments, and the JHA and/or PPE Hazard Assessment and/or Activity Hazard Analysis associated with the task. c. When designated as “Craftsman Assigned”, ensure the SWP is maintained at the work site. Return to the “SWP Initiator” when work conditions change, at end of shift, or when work is complete. d. Coordinate with M&O Area Operator or Control Room Operator prior to start of work. Update changes in equipment status and completion of work in an operational area. e. Perform housekeeping of work area. f. Conduct gas testing when required ONLY IF TRAINED TO DO SO.
M&O Area Operator	a. Inspect the area protected by the SWP to ensure that all potentially hazardous equipment and material is properly identified and isolated prior to start of work. b. Conduct gas testing when required ONLY IF TRAINED TO DO SO. c. Inspect the area protected by the SWP periodically to ensure that work is being performed safely and in accordance with the SWP. Initial and date SWP Section IV. d. Upon completion of work, return equipment to operation. e. Upon completion of work, inspect the work area to verify its safety and housekeeping.
Personnel Entering Areas Protected by SWP	Before entering an SWP area, consult with employees performing the work to ensure compliance with established hazard controls.
Personnel Performing Walk-through Inspection of Areas Protected by an SWP	a. Ensure work is being performed safely and in accordance with the SWP. Initial and date SWP Section IV Box 21. b. See Walk-through Inspection definition in Glossary for more information.
Technically Competent Individual (TCI)	a. For tasks involving potential exposure to energy sources of 480 volts or more, review the SWP and verify that hazards have been controlled or mitigated. Sign SWP Section III, Block 17. b. If not available, the Site Safety Specialist may sign if approved by Site Director.
Craftsman Assigned	a. Post the authorized SWP with all applicable documents at the primary work location. (NOTE: Contractor SMTR may also post the permit.) b. Maintain the SWP during the job and return it to Initiator for closeout.
Supervisor of All Employees Affected by an SWP	a. Ensure that you and all personnel under your supervision who prepare, submit, review, approve, and issue an SWP receive SWP Training DM Lesson Plan ESSH 1700. (NOTE: Documented on a TAAR.) b. Confirm that Job Hazard Analysis (JHA) and/or Personal Protective Equipment (PPE) Hazard Assessment (HA) are available and adequate for the task to be performed. c. Review the JHA and/or PPE HA with employee(s) prior to their

<b>TABLE 35.3. PERMIT PROCESS AND PROCEDURES RESPONSIBILITIES</b>	
<b>Position or Department</b>	<b>Responsibilities</b>
	<p>commencing work. Check blocks 5a and 5b in Section I of the SWP.</p> <p>d. Confirm that all workers assigned to perform task(s) are trained to perform the task(s). Check block 5c in Section I of the SWP.</p> <p>e. Sign Section III Block 15 confirming the JHA exists, has been reviewed, is adequate, and workers assigned are trained to perform the task.</p> <p>f. If the task described on the SWP indicates a possibility for exposure to crude oil, issue a Gas Alert Extreme personal H<sub>2</sub>S detector to all employee(s) performing the task, and note in the Safety/PPE in SWP Section II. Sign-out of specific personal monitors is recorded on an equipment checkout log.</p>

<b>TABLE 35.4. HOT WORK RESPONSIBILITIES</b>	
<b>Position or Department</b>	<b>Responsibility</b>
Operations Shift Supervisor or Designee	<p>a. Ensure, whenever possible, hot work in Class 1 areas is avoided.</p> <p>b. Ensure that alternate controls for the operation are in place before issuing the HWP.</p> <p>c. This permit will not be issued if there is a practical alternate way to do the work without introducing an ignition source into a classified area.</p> <p>d. Make certain that hot work is performed only if no other practical means exist to do the job or if the equipment cannot be removed from the operating area.</p> <p>e. Determine if further procedures or precautions are needed because of the size, complexity, or special characteristics of the job.</p>
Supervisors/TR	<p>a. Review tasks to be done in Class I areas and decide whether a way exists to perform tasks without introducing an ignition source into a classified area.</p> <p>b. Determine what controls are necessary if work must be done in Division I areas.</p> <p>c. Review the controls with the employees.</p> <p>d. After work begins, ensure the controls remain in place.</p>
Technical Experts (TEs)	<p>a. TEs include Site Safety Specialists, site ES&amp;H managers, Fire Protection/Emergency Management specialists, New Orleans safety administrators, and Systems Safety and Engineering experts.</p> <p>b. Review and concur with technically complex, test, or new procedures requiring hot work within a Class I area.</p>
Employees	<p>a. Limit hot work in Class I areas to work that can be performed only at that location.</p> <p>b. Ensure that controls are in place when work must be done in Division I areas, and stay within those controls.</p> <p>c. Understand how to shut down the hot work and mitigate the consequences of the hot work.</p>
Fire Watch	<p>a. Know the hazards involved and know how to operate detection, communication, and firefighting equipment to be used during the job.</p> <p>b. Maintain a constant knowledge of weather conditions, noting any change in the work environment.</p>