

**WP 12-FP0055**

Revision 1

# Monthly Surveillance for Fire Suppression System

Surveillance Procedure

EFFECTIVE DATE: 06/09/10

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APPROVED FOR USE

**CONTINUOUS USE**

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**INTRODUCTION** <sup>1, 2, 3, 4, 5, 6, 7, 8</sup>

This procedure provides the instructions for the Monthly Surveillance for the Fire Suppression System by verification of system pressure and valve positions.

This procedure provides instructions for the performance of the monthly **Surveillance Requirement(s) (SR) 4.1.1.1, SR 4.1.1.2, or SR 4.1.1.3 of Limiting Conditions of Operations [LCO] 3.1.1.**

Performance of this procedure generates the following record(s):

- Attachment 1, Monthly Surveillance for Fire Suppression

**REFERENCES**

## BASELINE DOCUMENTS

- NFPA 25, *Standard for Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems*
- DOE-Handbook 1062-96, *DOE Fire Protection Handbook*
- DOE/WIPP-07-3372, *Waste Isolation Pilot Plant Documented Safety Analysis*
- DOE/WIPP-07-3373, *Waste Isolation Pilot Plant Technical Safety Requirements*
- WP 10-2, Maintenance Operation Instruction Manual
- WP 10-WC3010, Maintenance PM/MWI controlled Document Processing
- WP 10-WC3011, Maintenance Process
- WP 12-FP.01, Fire Protection Program
- WP 12-HP3600, Radiological Work Permits
- WP 12-IS.01, Industrial Safety Program
- Various Manufacturer's Operation and Maintenance Manuals

## REFERENCED DOCUMENTS

- WP 04-AD3001, Facility Mode Compliance
- WP 13-1, Washington TRU Solutions LLC Quality Assurance Program

## EQUIPMENT

- None

## PRECAUTIONS AND LIMITATIONS

- The Technical Safety Requirements (TSRs) contains LCOs and Specific Administrative Controls (SACs) which provide specific preventative or mitigative limits and required actions for identified accident scenarios. Failure to comply with LCOs or SACs may constitute a violation and must be immediately reported to the Facility Shift Manager (FSM). The step affected by the LCO/SAC is followed by the LCO/SAC number in bold brackets (e.g., [**LCO 3.X.X**]).
- The order of completion of this work may be modified, or sections may be performed in parallel, provided that proper tagout/lockout is observed and that no hold points are precautionary actions associated with warning statements are bypassed.
- Any employee who has a concern for employee safety, the safety of the environment, or the quality of the activity has the responsibility and authority to suspend the performance of that activity.
- Work shall be stopped when instructions can not be performed, field conditions change, or additional job hazards are identified.
- All personnel initialing this package shall provide the information listed in the Personnel Data Section of Attachment 1.
- Troubleshooting or other activities outside the scope of the procedure may require the initialization of a work order as directed by the Responsible Engineer or Zone Team Leader.
- Failure to meet **SR 4.1.1.1, SR 4.1.1.2, or SR 4.1.1.3** requires entering the required actions of **LCO 3.1.1**, unless the effected system has been declared inoperable.

## PREREQUISITE ACTIONS

- 1.0 Facility Shift Manager (FSM) or designee, or Emergency Services Technicians (EST) Coordinator, conduct a pre-job safety meeting with ESTs.

### SIGN OFF FSM/EST

- 2.0 Record work order number on Attachment 1, if applicable.

**PERFORMANCE****1.0 SYSTEM PRESSURE AND VALVE POSITION FOR RISER IN REMOTE HANDLING AREA OF BUILDING 411**

- 1.1 Verify calibration of 411-PI-003-005 is current and record calibration expiration date on Attachment 1. **[LCO 3.1.1]**

**SIGN-OFF EST**

- 1.1.1 **IF** calibration is NOT current,  
**THEN** contact the FSM.

- 1.2 Record system pressure at 411-PI-003-005 on Attachment 1. Acceptable Criteria  $\geq 105$  psig. **[LCO 3.1.1] [SR 4.1.1.1]**

**SIGN-OFF EST**

- 1.2.1 **IF** system pressure is less than 105 psig,  
**THEN** contact the Facility Shift Manager (FSM).

- 1.3 Verify isolation valve FW-411-V-052 for the RH Bay is locked OPEN. **[LCO 3.1.1] [SR 4.1.1.2]**

**SIGN-OFF EST**

- 1.3.1 **IF** isolation valve FW-411-V-052 is NOT locked OPEN,  
**THEN** contact the FSM.

**2.0 SYSTEM PRESSURE AND VALVE POSITION FOR RISER IN CONTACT HANDLING AREA OF BUILDING 411**

- 2.1 Verify calibration of 411-PI-003-001 is current and record calibration expiration date on Attachment 1. **[LCO 3.1.1]**

**SIGN-OFF EST**

- 2.1.1 **IF** calibration is NOT current,  
**THEN** contact the FSM.

- 2.2 Record system pressure at 411-PI-003-001 on Attachment 1. Acceptance criteria  $\geq 105$  psig. **[LCO 3.1.1] [SR 4.1.1.1]**

**SIGN-OFF EST**

- 2.2.1 **IF** system pressure is less than 105 psig,  
**THEN** contact the FSM.

- 2.3 Verify the isolation valve FW-411-V-001 for the CH Bay is locked OPEN.  
[LCO 3.1.1] [SR 4.1.1.2] [SR 4.1.1.3]

**SIGN-OFF EST**

- 2.3.1 **IF** isolation valve FW-411-V-001 is NOT locked OPEN,  
**THEN** contact the FSM.

- 3.0 SYSTEM PRESSURE AND VALVE POSITION FOR RISER IN OVERPACK  
AND REPAIR ROOM OF BUILDING 411

- 3.1 Verify calibration of 411-PI-003-003 is current and record calibration  
expiration date on Attachment 1. [LCO 3.1.1]

**SIGN-OFF EST**

- 3.1.1 **IF** calibration is not current,  
**THEN** contact the FSM.

- 3.2 Verify the water supply static pressure for the OP&RR at Pressure Gauge  
Number 411-PI-003-003 is  $\geq$  105 psig. [LCO 3.1.1] [SR 4.1.1.1]

**SIGN-OFF EST**

- 3.2.1 **IF** system pressure is less than 105 psig,  
**THEN** contact the FSM.

- 3.3 Verify the isolation valve FW-411-V-010 for the OP&RR is locked OPEN  
for the OP&RR Riser Inspection. [LCO 3.1.1] [SR 4.1.1.2]

**SIGN-OFF EST**

- 3.3.1 **IF** required isolation valves are NOT locked OPEN,  
**THEN** contact the FSM.

- 4.0 SPRINKLER ISOLATION VALVE POSITION FOR MODULAR OFFICE 41-Z-052  
AND WASTE HOIST CONTROL ROOM

- 4.1 Verify FW-411-V-072 is locked OPEN to Modular Office.

**SIGN-OFF EST**

- 4.2 Verify FW-411-V-073 is locked OPEN to the Waste Hoist Control Room  
Sound Enclosure.

**SIGN-OFF EST**

## 5.0 VALVE POSITION FOR BUILDING 456

5.1 Verify the following isolation valves are locked OPEN: **[LCO 3.1.1]**  
**[SR 4.1.1.3]**

- FW-456-V-001
- FW-456-V-003
- FW-456-V-019
- FW-456-V-020

### **SIGN-OFF EST**

5.2 Verify the isolation valve line-up listed in Table 1 on Attachment 1 is locked OPEN. Indicate by initials which valves are locked OPEN.  
**[LCO 3.1.1]**

### **SIGN-OFF EST**

5.2.1 **IF** the required isolation valves are NOT locked OPEN,  
**THEN** contact the FSM.

## 6.0 VERIFICATION AND VALIDATION

6.1 EST, complete the Surveillance Data Sheet(s) (EA04AD3001-SR1, EA04AD3001-SR2, and EA04AD3001-SR3) and associated documentation for **LCO 3.1.1** as found in WP 04-AD3001 and forward to the FSM.

6.2 FSM, review the completed Surveillance Data Sheet(s) for compliance with **LCO 3.1.1**.

## 7.0 RESTORATION TO OPERATIONAL STATUS

7.1 FSM or designee conducts a post-job review.

### **SIGN-OFF FSM**

## Attachment 1 – Monthly Surveillance for Fire Suppression

Date:		Work Order No.:
PREREQUISITE ACTIONS		
STEP	ACTION	INITIAL(S)
1.0	Pre-job safety meeting.	FSM/EST _____
PERFORMANCE		
1.1 [LCO 3.1.1]	Calibration of 411-PI-003-005 is current. Calibration Expiration Date: _____ Contact FSM if calibration is NOT current.	EST _____
1.2 [LCO 3.1.1] [SR 4.1.1.1]	System pressure at 411-PI-003-005: _____psig Acceptance criteria is $\geq 105$ psig. Contact FSM if pressure is less than 105 psig.	EST _____
1.3 [LCO 3.1.1] [SR 4.1.1.2]	Verify isolation valve FW-411-V-052 for the RH Bay is locked OPEN.	EST _____
2.1 [LCO 3.1.1]	Calibration of 411-PI-003-001 is current. Calibration Expiration Date: _____ Contact FSM if calibration is NOT current.	EST _____
2.2 [LCO 3.1.1] [SR 4.1.1.1]	System pressure at 411-PI-003-001: _____psig Acceptance criteria is $\geq 105$ psig. Contact FSM if pressure is less than 105 psig.	EST _____
2.3 [LCO 3.1.1] [SR 4.1.1.2]	The isolation valve FW-411-V-001 for the CH Bay is locked OPEN.	EST _____
3.1 [LCO 3.1.1]	Calibration of 411-PI-003-003 is current. Calibration Expiration Date: _____ Contact FSM if calibration is NOT current.	EST _____
3.2 [LCO 3.1.1] [SR 4.1.1.1]	System pressure at 411-PI-003-003: _____psig Acceptance criteria is $\geq 105$ psig. Contact FSM if pressure is less than 105 psig.	EST _____
3.3 [LCO 3.1.1] [SR 4.1.1.2]	Verify the isolation valve FW-411-V-010 for the OP&RR is locked OPEN for the OP&RR Riser Inspection.	EST _____
4.1	Verify FW-411-V-072 is locked OPEN to Modular Office.	EST _____
4.2	Verify FW-411-V-073 is locked OPEN to the Waste Hoist Control Room Sound Enclosure.	EST _____
5.1 [LCO 3.1.1] [SR 4.1.1.3]	Verify the following isolation valves are locked OPEN: <ul style="list-style-type: none"> <li>• FW-456-V-001</li> <li>• FW-456-V-003</li> <li>• FW-456-V-019</li> <li>• FW-456-V-020</li> </ul>	EST _____

Attachment 1 – Monthly Surveillance for Fire Suppression

<b>Date:</b>		<b>Work Order No.:</b>	
5.2 <b>[LCO 3.1.1]</b>	Isolation valve line-up listed in Table 1 are/is locked OPEN. Contact FSM if required isolation valve line-up is NOT locked OPEN.	EST	_____
7.1	A post-job review has been conducted.	FSM	_____
<b>COMMENTS:</b>			
<b>PERSONAL DATA</b>			
PRINTED NAME	SIGNATURE	INITIALS	DATE

## Attachment 1 – Monthly Surveillance for Fire Suppression

<b>TABLE 1 BUILDING 456 FIRE SUPPRESSION SUPPLY</b>	
Isolation Valve Line-up	Initials
FW-456-V-001 <b>[LCO 3.1.1]</b> <b>[SR 4.1.1.3]</b>	
FW-456-V-003 <b>[LCO 3.1.1]</b> <b>[SR 4.1.1.3]</b>	
FW-456-V-019 <b>[LCO 3.1.1]</b> <b>[SR 4.1.1.3]</b>	
FW-456-V-020 <b>[LCO 3.1.1]</b> <b>[SR 4.1.1.3]</b>	
FW-456-V-006	
FW-456-V-007	
FW-456-V-012	
FW-456-V-014	
FW-456-V-015	
FW-456-V-016	