16 - FIRE PROTECTION

Title: Fire Protection **Doc. No.** 2015-MMTS-16

Approval Signatures and Date

Prepared/Reviewed by:		Date: 3/12/15
Approved by:	Burton Packard	Date: 3/11/15
Approved by:	BOYNTONJASON.D.1228903430	Date:
Approved by:		Date: 3/11/15

	Initial Release		Annual Review/No Revision Required		Annual Review/Update (see history below)

***NOTE:** This document will be reviewed at least annually to ensure its suitability.*

Revision History

Rev. No.	Change description	Author
1	Change description Crosswalk Between NDEP CAPP Review Comments (dated 2014-12-09, 2015-01-30 and 2015-02-26) and Mercury Storage and Transfer Program Document Contents March 10, 2015	Burton Packard and Renee Rodriguez

***NOTE**: Hard copies of this document may not be the current version. Refer to the "IAmTheKey" to verify the current version.*

Reference Documents

Document number	Document title
QP.EMS.HG.0006	Mechanical Integrity Procedure (Tier 1)
Chapter 12, SOC.OHS.SP.0002	Lockout/Tagout

16.1. PURPOSE

This procedure addresses inspection, testing and maintenance of the Fire System Equipment within the MMTS, and is designed to address CAPP requirements as defined by the Mechanical Integrity Procedure.

***NOTE:** Site Hot Work Permit and/or Lockout/Tagout procedures may apply to some steps within this procedure.*

16.2. SCOPE

This procedure applies to staff and contractors that inspect, test, or maintain the Fire System Equipment within the MMTS.

16.3. INSPECTION AND TESTING

16.3.1. Equipment Needed

- Inspection and Testing Forms—See Section 18.10 below.
- Equipment Testing Tools

16.3.2. Inspection and Testing

- Facility Manager identifies CAPP-regulated Fire System Equipment subject to this procedure, and identifies the schedule for conducting inspections and tests based on manufacturer's information or good engineering practices, or more frequently if determined to be necessary by previous experience in operating the equipment.
- Staff (or contractors) will perform inspections and tests of the CAPP-regulated equipment. Safe work practices, such as the HWAD Lockout/Tagout and Hot Work supporting procedures, apply to equipment identified in this procedure.

16.3.3. Items to be Inspected and Tested

The items to be inspected or tested are listed in Table 16.1, and related information documented on the form shown in Section 16.7.

- Type ABC fire extinguishers
- Heat, smoke, and infrared sensors
- Annunciators/alarms
- Signal acquisition and formatting system
- Wireless transmission system

16.3.4. Documentation of Inspection and Testing

Staff (or contractors) document the following on the appropriate inspection/testing forms:

- Date of the inspection or test,
- Name of the person who performed the inspection or test,
- Serial number or other identifier of the equipment on which the inspection or test was performed,
- Description of the inspection or test performed, and

Results of the inspection or test.

If there is a deficiency, staff (or contractor) will contact cognizant personnel at FES to determine the proper course of action which may include contacting personnel at the Trouble Desk to prepare a follow-on Work Order under Maximo or equivalent.

Table 16.1 Equipment list for inspection and testing of the Fire System Equipment

Equipment item	Inspection/test frequency
Type ABC fire extinguishers	Test annually with records kept in the Fire Station
Heat, smoke and infrared sensors	Frequency determined by FES or vendor
Annunciators/alarms	Frequency determined by FES or vendor
Signal acquisition and formatting system	Frequency determined by FES or vendor
Wireless transmission system	Frequency determined by FES or vendor

16.4. MAINTENANCE

16.4.1. Maintenance Staff

FES staff (or contractors) will correct any deficiencies in the equipment that are outside the acceptable limits for the safety of personnel and property before using the equipment again. Where maintenance is required, FES or contractor initiates actions via a work order under Maximo or equivalent.

NOTE: Deficiencies posing immediate threat to safety, health, or the environment, as identified in this procedure, are corrected immediately. Otherwise, deficiencies are evaluated and prioritized by the FES Chief and Facility Manager and corrected accordingly.

16.4.2. Quality Assurance/Quality Control

- The Facility Manager, FES Chief or designee changes and checks new equipment, instruments, and controls before implementation/installation to ensure suitability with the process. This is to be achieved by following the FES procedures.
- The Facility Manager, FES Chief, or designee ensures that maintenance materials, spare parts, and equipment are suitable for the process for which they will be used.
- Quality Control will be performed in accordance with the HWAD FES procedure.
- After verification that the part/component has been installed correctly, the lock out/tag out devices shall be removed and the system energized if required.
- Verify replacement part is functional and operates in accordance with operating manual or best engineering practices.

16.4.3. Scheduled Maintenance

Maintenance of the fire system equipment shall be performed on a schedule determined by the FES based on experience, standards, and vendor recommendations.

16.5. METRICS

Weekly, monthly, biannual, and/or annual inspections, tests and maintenance will be tracked and the results documented. Deficiencies found will be trended and that information will be used to evaluate the need for more frequent inspections or tests.

16.6. RECORDS

- The FES Chief, FES staff, and/or contractor will manage and maintain training records.
- Inspection, testing and maintenance records for each piece of regulated equipment are to be maintained for a period of at least five years after the inspection/test/maintenance activity.

16.7. FORMS

Fire System Inspection, Testing and Maintenance Form

Equipment item	Inspection/ test frequency	Date of inspection/ test	Performed by:	Equipment serial no.	Description of inspection/test	Results
Type ABC fire extinguishers	In accord with a list maintained by Fire and				As described in I.O.P.FFO.0001.	

	Emergency Services					
Heat, smoke and infrared sensors	Annually				Tested by FES and records maintained in the Fire Station – Put in MAXIMO to generate an annual work order	
Annunciators/ alarms – Part of Fire Alarm Panel	Based on MAXIMO work order				In accord with I.O.P.FST.0016	
Signal acquisition and formatting system – Part of Fire Alarm Panel	Based on MAXIMO work order				In accord with I.O.P.FST.0016	
Wireless transmission system – Part of Fire Alarm Panel	Based on MAXIMO work order				In accord with I.O.P.FST.0016	

Form, DZHC 167-E, which is titled "Maximo Preventive Maintenance Form"