Draft

ORNL WORK PLAN

Operations, Maintenance and Services

Work Plan Name / Rev: BOOST PRESS. VIA FDC / 0

46941

WORK SCOPE/DESCRIPTION	
Requester (Name/Badge/Division):	Longworth, William / 00037892 / X026
Location of work (Bldg/Rm/Other):	2500 / / FDC located on the Northwest corner of the facility.
Work Plan Title:	Boost Pressure to wet pipe sprinkler system via FDC with fire engine.
Description of Service/Work Needed: Boost the water pressure of the wet pipe sprinkler system utilizing the fire engine's pumping ability via the Fire department connection to the wet pipe sprinkler system.	
Charge Number, if required:	32059402
Work Plan Grade/Worktype:	3 / 0
Author (Name/Badge):	Longworth, William / 00037892
File Attachments:	

Badge	Name	Attachment Desc	File Name
00037892	Longworth, William	Engine connections	Engine connections.JPG
00037892	Longworth, William	Engine fire pump panel	Engine fire pump panel.JPG
00037892	Longworth, William	Engine preconnect hoses	Engine pre-connects.JPG
00037892	Longworth, William	Bldg. 2500 Sprinkler system	Bldg. 2500 Sprinkler system.JPG
00037892	Longworth, William	Bldg. 2500 FDC	Bldg. 2500 FDC.JPG

INSTRUCTIONS

Prerequisites/Precautions:
Assure fire apparatus is in good, operable condition, up-to-date on service and full of water. Operator is properly trained in the operation of the apparatus and the pump. Proper PPE is utilized; gloves, eye and hearing protection. Assure all participants have operable radios for communication. Minimum number of participants: apparatus operator, pre-connected hand line operator in PPE, sprinkler system monitor.

Directions:
Maneuver and stage fire apparatus to obtain clear access to the Bldg. 2500 Fire department connection (FDC). Secure apparatus to avoid movement and safe operation. Deploy pre-connected 2.5 inch hose line to the FDC on North side of the building. Connect hose to the FDC and hand tighten. Engage pumping apparatus per manufacturer's direction. Stage personnel at the Bldg. 2500 sprinkler system to observe and monitor increasing pressure. Sprinkler system monitor will radio system pressures and readiness to pressurize. Pump operator engage pump and select appropriate connected hose to flow water to the sprinkler system. Begin slowly to avoid water hammer and damage to the sprinkler system. Sprinkler system monitor to communicate the need for increased pressure or to halt operation. Pump operator to acknowledge and react to system monitors direction to avoid over-pressurizing the sprinkler system. Upon acceptable pressure, sprinkler system operator will communicate that information and pump operator will stop pumping water, throttle down the pump and disengage the pump from operation.

Post Work Testing:
Observe sprinkler system for decreasing pressure. If noticeable drop in pressure, re-engage engine and repeat above steps to achieve acceptable pressure.

Closeout:
Return fire apparatus to operable and in service condition.

JOB HAZARD EVALUATION

HAZARDS	PERMITS / CONTROLS
Heat/Cold Stress	
Manual Material Handling	ı Establish Controls (Guideline) [apply 30-50-30 criteria for a non-repetitive lifting task] ¡ Reduce weight ¡ Decrease load ¡ Design work area ¡ Facilitate access to material ¡ Optimum environment ¡ Reduce distance /Provide proper storage facilities ¡ Load storage ¡ Eliminate manual lifting/lowering ¡ Eliminate pushing/pulling – Use lifting aids ¡ Other instructions to staff

DOCUMENTATION REVIEW AUTHORIZATION (Approvals are certification of hazards assessment)		
Reviewer / Approver Roles	Signature	Date
Accountable Management (Service Provider, Line, Equipment Owner, or Facility Management)	Loy, Eric	
System Engineer, Accountable Equipment Owner, or Facility Engineer	Masters, Michael	
Task Leader	Longworth, William	
Work Package Concurrence		
Facility Manager		
Operations Supervisor		
Facility Manager Approval To Start Work		
Facility Manager		
Work Start Authorization		
Task Leader		
Work Acknowledged Complete		
Task Leader		
Worker Feedback:		

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PRE-JOB SAFETY REVIEW GUIDE

ID: 46941

Scope of Work: Review work package/plan to ensure all participants understand the work activity.

Hazards: Review the hazards identified in Job Hazard Evaluation (JHE) / work plan (IOP).

- Since the work package / plan was written: 1) Have conditions changed? 2) Are there new hazards? Refer to Field Notes and Focus Areas.

Hazard Controls / Permits: Review:

- Written permits for the work activity.
- Precautions, step warnings, Hold Points ...
- Personal Protective Equipment (PPE)
- Work instructions for information - e.g., steps where hazards are introduced.
- ORNL subject area requirements - e.g., non-permit hazard controls.

Performing Work:

- Discuss group/individual responsibilities for safe & effective work.
- Follow work instructions & safety procedures.
- Availability/location of materials, tools, etc.
- Any previous experiences / lessons learned?
- Response if work cannot be performed as planned.
- What is the worst thing that could happen?
- Are there *Potential error traps* with the job? → →
- Take a minute before: work start & leaving work area.
- Work Hand-off / Turnover - workers & Task Leader

→ Potential Error Traps:

- Time pressures
- Distractive environment
- High workload
- First time evolution
- First day back
- Vague guidance
- Over confidence
- Imprecise communications
- Work stress

Abnormal Situation Response:

- *Stop Work*: Observe an unsafe act, activity or condition that creates an imminent danger.
- *Emergency Response*: Discuss egress paths or other responses if problems are encountered.

Field Notes and Focus Areas: (Use this area as a work space to record notes related to new hazards identified in the field or changed conditions. Record feedback in work package/plan information systems.)

By signing below, I am indicating that I have been briefed on the potential hazards associated with completing this job.

Signature / Badge	Date	Signature / Badge	Date