

Job Safety Analysis Sheet

Job Description: Functional Testing of Sprinklers

JSA Ref. No.

Facility: MODEL ENGINEERING COLLEGE, THRIKKAKARA

Work Area / Equipment:

Permit No.
Date:

PERSONAL PROTECTIVE EQUIPMENT & TOOLS: Hard Hat, Safety Shoes, Hand Gloves, Coverall, Portable Radio, Step Ladder

SEQUENCE OF BASIC JOB STEPS	POTENTIAL HAZARDS	Yes / No	PRECAUTIONS
Planning	Non – compliance of HSEMS Procedures		☐ Refer HSEMS Procedure - Doc. No. SA.KOC.004 "Permit to Work" and SA.KOC.020 "Plant Safety Override Registration". ☐ Take a Cold Work Permit from Asset Owner. ☐ Refer manufacturer instruction for functional testing & maintenance of Sprinklers.
	Unintended Shutdown of Facility / Equipment		☐ Assess the risk & Override the Fire Shutdown & Sprinkler actuation of the zone where Sprinkler to be tested. ☐ Note Firewater Pump will start in auto mode as soon as fire water header pressure comes down due to sprinkler actuation. ☐ Do not remove override prior to resetting the alarm in the panel.
	Lack of Communication		☐ Plan the work involving personnel responsible for preparation of Sprinklers Testing. ☐ Arrange the spare sprinkler to replace the defective one. ☐ Conduct Tool Box Talk. ☐ Maintain a radio communication between worker at Sprinkler location & person stationed near F & G panel / Control Room.
Functional Testing	Failure of Firewater Supply		☐ Confirm the line of manual isolation valve on firewater header. ☐ Ensure the opening of Deluge / pneumatically operated Butterfly Valve in auto mode.
	Water Splash		☐ Use Waterproof Jacket / Raincoat.
	Blocked / Defective Sprinkler		☐ Confirm all sprinklers are functional and releasing water at appropriate angle as well as direction. ☐ Replace the defective sprinkler.
	Fault Alarm		☐ Confirm the alarm through radio communication; whenever Sprinklers are function tested in auto mode.
	Leaking Sprinkler		☐ Ensure the closure of Deluge / Butterfly Valve after functional testing.
	Water Ingress into Instrumentation / Electrical Junction Boxes	☐	☐ Ensure all Electrical / Instrumentation Junction Boxes in the area are properly sealed.
Windup & Housekeeping	Scattered Materials & Residue Hazard		☐ Reset the fire detection alarm at F & G panel. ☐ Remove the Fire Shutdown override after evaluating the risk. ☐ Ensure proper wind up & housekeeping at worksite.
Additional Hazards (Other than indicated above)			
JSA Done By	Name: ROICE JOSE C Designation: Mechanical Engineer Company: FIREPROOF Contract No.(If Applicable):7994355366 Date: 12/10/23		
	Controlling Team: TAPD Signature:		