Job Safety Analysis Sheet Job Description: Functional Testing of Sprinklers 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 Controlling Team: TAPD Signature:		Designation: Mechanical Engineer Company: FIREPROOF Contract No.(If Applicable):7994355366 Date: 12/10/23