**Objective:**

To establish the standard Operating System for the Fire pump operations.

**Policy:**

Smooth & Effective Operations of the Equipments

**Responsibility:**

Fire Technician/ Shift Engineer/ Operations Manager

**Procedures:**

**Auto operation**

1. Ensure that the fire tank is always full.
2. Ensure power is available to fire fighting control panel.
3. Ensure that there is enough fuel is available in day tank for Diesel Driven Pump.
4. Check all suction and discharge valves are in open position.
5. Switch off the Power Supply and check the pump rotation; it should rotate freely when rotated by hand. Switch ON the Power Supply
6. Turn all the pump mode selector switches to Auto mode.
7. Jockey pump will start if system pressure drops to 6 Kg/Sq.cm, and automatically cut off at 7 Kg/Sq.cm
8. If system pressure drops to 6 Kg/Sq.cm, Sprinkler pump will start.
9. If system pressure drops to 5 Kg/Sq.cm, Hydrant pump will start.
10. If system pressure drops to 3 Kg/Sq.cm, Diesel driven pump will start,
11. Sprinkler pump, Hydrant pump and Diesel driven pumps may start automatically when there is a rapid pressure drop, and will not cut off automatically.
12. Turn all three pumps mode selector switches to Manual position and press Stop Push button.
13. Check and re-install activated sprinklers and closed all fire hydrants, and turn all the pump mode selector switches to Auto.

**Manual operation:**

1. Ensure that the fire tank is always full.
2. Ensure power is available to fire fighting control panel.
3. Ensure that there is enough fuel is available in day tank for Diesel Driven Pump.
4. Check all suction and discharge valves are in open position.
5. Switch off the Power Supply and check the pump rotation; it should rotate freely when rotated by hand. Switch ON the Power Supply.
6. Turn the mode selector switch to Manual for the pump to be operated.
7. Start the pump by pressing Start push button .
8. Observe the discharge pressure gauges and ensure that the discharge pressure does not rises beyond the limits.
9. Stop the pump by pressing Stop push button.

# Safety Precautions

1. Ensure the work area is adequately lighted.
2. Carry all necessary tools, tackles and personnel protective equipments.
3. Tag out / Lock out the respective incomer supply before commencing any electrical work in the panel / motors.
4. Switch off the Power Supply to the panel while checking the free rotation of the pump coupler.
5. Switch ON the Power Supply and ensure the pump panel is on Auto Mode.
6. Ensure the safety guards on the couplers are properly fitted.

**Revision Guide:**

Any change in the system needs review of SOP.