Flowchart

Sprinkler notification - Emergency Response

→ **Sprinkler activation cause: Fire** — Yes → **Fire Officer**

Reconnaissance by Fire department (FD) Crew

- **Sprinkler activation cause: Unknown**
- **Sprinkler activation cause: Other than fire**
- **Procedure closing sprinker section valve[0]**

Fire Officer → **Fire Officer applies Firefighting in sprinklered building: An action perspective for the Fire Department**

Fire Officer → **Large insert depths or complex building?**

Large insert depths or complex building? — Yes → **Deployment of extra FD-units: Additional tasks and/or risks**

Large insert depths or complex building? → **Fire locatable?[1]** — No → **Deployment of extra FD-units: Additional tasks and/or risks**

Fire locatable?[1] — Yes → **Fire reachable?**

Fire reachable?
- **Area is sufficiently safe for FD deployment?[2]** — No → **Deployment of extra FD-units: Additional tasks and/or risks**
- **Fire source reachable?[3]** — Yes → (continue)

Fire source reachable?[3] — No → **Fuel can burn up in a controlled manner?[4]**

Fire reachable? — Yes → **Sufficient cooling capacity?**

Sufficient cooling capacity?
- **Fire can be extinguished?[5]**
- **Sprinkler controls the fire?[4]**

Sufficient cooling capacity? — Yes → **Follow-up: Fire extinguished, no chance of re-ignition?[6]**

Sufficient cooling capacity? — No → **Preparation for uncontrolled structure fire. Protection of neighboring structures**

Fuel can burn up in a controlled manner?[4] — No → **Preparation for uncontrolled structure fire. Protection of neighboring structures**

Follow-up: Fire extinguished, no chance of re-ignition?[6]
- Yes → **Closing sprinkler section valve(s) monitored by FD Crew (approx.15 min.)[7]**
- No → **Closing sprinkler section valve Monitored by FD Crew until transfer to private party[7]**

Closing sprinkler section valve(s) monitored by FD Crew (approx.15 min.)[7] → **Transfer (of responsibility) to external (non FD) organisation[8]**

Closing sprinkler section valve Monitored by FD Crew until transfer to private party[7] → **Transfer (of responsibility) to external (non FD) organisation[8]**

Legend

[1]
- Gathering information from organisation on site
- Determine activated sprinkler section at FD panel or in pump room
- Reconnaissance by FD Crew or fire officer inside and/or outside building

[2]
- Determine whether sprinkler controls the fire. Check signs of smoke, flow, temperature and flames
- Location activated sprinklerhead(s) inside building easily reachable by floor or stairs?
- Adequate visibility? No chance of disorientation?
- Limited insert depths (without adequate visibility)?
- No automated moving machinery active?
- No live high currents?
- No hazardous substances?

[3]
- Fire source easily reachable by floor or stairs or reachable by FD hose-stream?
- Fire source can be extinguished safely? (falling objects or collapse of warehouse shelving)

[4]
- Continuous monitoring at the fire location by FD Crew & hose with sufficient cooling capacity. (Prevent further escalation)
- Continuous monitoring by the FD Crew at pumproom & sectionvalve(s). If needed: Preparation of water/fuel suppletion by FD
- Removal (if safely possible) or pre-wetting of surrounding fireload
- In case of long fire duration, consider transfer to external (non FD) organisation

[5]
- Prevent unauthorized closure of section valve(s)
- Determine whether sprinkler controls the fire
- Continuous monitoring by the FD Crew at pumproom & sectionvalve(s). If needed: Preparation of water/fuel suppletion by FD
- FD Crew & hose-stream with sufficient cooling capacity at the fire location (for extinguishment of fire)

[6]
- Determine correct sectionvalve(s), usually situated in pump room for closing water supply to section with activated sprinklerhead(s).
- Ensure reliable line of communication between FD crew at fire location and FD crew at pumproom & sectionvalve(s)
- Close correct sectionvalve(s) when:
  1: Continuous monitoring at the fire location by FD Crew & hose with sufficient cooling capacity.
  2: Continuous monitoring by the FD Crew at pumproom & sectionvalve(s).
  3: Fire is extinguished
- Follow-up: Fire extinguished, no re-ignition?
- In case of re-ignition of fire, immediately re-open closed sectionvalve and control fire with FD-hose-stream

[7]
- Continuous monitoring at the fire location by FD Crew & hose with sufficient cooling capacity (Prevention of re-ignition)
- Continuous monitoring by the FD Crew at pumproom & sectionvalve(s)
- In case of re-ignition of fire, immediately re-open closed sectionvalve and control fire with FD-hose-stream
- (preparation of) Transfer (of responsibility) to external (non FD) organisation

[8]
- Transfer of (responsibility) to external (non FD) organisation
- Non functioning sprinkler system: Determine whether temporary additional safety measures are required
- If needed: Continuous monitoring of the fire location pumproom & sectionvalve(s) by external (non FD) organisation
- Secure a fast repair/ re-activation of affected sprinkler system(s)

[0]
- Determine fire is NOT the cause of sprinkleractivation
- Close correct sectionvalve(s)
- Non functioning sprinkler system: Determine whether temporary additional safety measures are required
- Secure a fast repair/ re-activation of affected sprinkler system(s)
- Transfer (of responsibility) to external (non FD) organisation