Fire Alarm Trouble Signals

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Common Causes of Trouble Signals

- Phone line/communication interruptions
- Faulty smoke detector
- Electrical power loss
- Silenced alarm
- Tamper switch activated
**Staff Education**

- Staff should be aware that a trouble signal is an amber/yellow light on the alarm panel.
- The trouble light is accompanied by a noise (different from an actual fire alarm).
- Staff should know who to contact if the light/noise occurs.
- The trouble signal alarm should not just be “silenced” without addressing the underlying cause of the trouble signal.
- Nursing staff who work at the nurses’ station near the panel, should be educated on the policies/procedures. These staff may be asked during survey/inspection what they would do if the panel sounded an alarm and an amber light appeared on the panel during their shift as part of the emergency preparedness inspections.

**Regulations**

- NFPA 72, 2010 edition; 14.2.1.2.2:
  System defects and malfunctions shall be corrected.
- 19 CSR 30-85.022 (10) (G) [SNF & ICF]
- 19 CSR 30-86.022 (9)(G) [RCF I, RCF II, ALF I, & ALF II]
  Upon discovery of a fault with the complete fire alarm system, the facility shall correct the fault. I/I
- 19 CSR 30-85.022 (9)(H) [SNF & ICF]
- 19 CSR 30-86.022 (9)(H) [RCF I, RCF II, ALF I, & ALF II]
  When a complete fire alarm system is to be out-of-service for more than four (4) hours in a twenty-four- (24-) hour period, the facility shall immediately notify the department and the local fire authority and implement an approved fire watch in accordance with NFPA 101, 2000 edition, until the complete fire alarm system has returned to full service. I/I
Confirm the Trouble Signal Source

- Many times it may be unknown what caused the trouble signal and whether or not the trouble will impair the system and keep it from operating correctly.
- If the trouble is unknown or the extent of the trouble is unknown, err on the side of caution and suspect the system will not function properly during an actual event.
- A fire watch needs to be initiated and notify all required individuals (DHSS, local fire department...) until the system is corrected or confirmation is received from a contractor that the system will not be hindered during an actual emergency.
  - Most times this confirmation cannot be received until the contractor has been out to the facility and diagnosed the problem(s).
  - This may result in a fire watch continuing while parts are ordered and/or installed.
  - Even if the fault will not hinder the system, the issue still needs to be addressed.

How to Conduct a Fire Watch

- How to conduct a Fire Watch in all levels of care:
  - A designated individual(s) with no other assigned duties performs continuous walking rounds.
  - Example: If rounds are routinely every 15 minutes and staff complete in 10 minutes, staff are required to begin rounds again.
  - Fire Watch is conducted in all affected areas of the building.
  - Resident rooms, attics, basement, boiler rooms, etc.
  - Must enter every area to observe for signs (smoke, flame) of fire.
**Fire Watch Documentation**
(What Needs to be in the Policy)

- **Documentation:**
  - Staff must record the start time of each fire watch
  - Staff must initial each entry
  - Procedure must be outlined in facility policy

- **Additional policies affecting certified facilities**
  - When will fire watch will be started
  - Who will be contacted and their contact information
  - Maximum amount of time for a fire watch tour
  - Water outage will render the sprinkler system inoperable

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**New Technology May Cause the Fault**

- Telecommunication standards have changed over the years and continue to change, mainly due to internet usage and speeds.
- The telephone company may upgrade your facility’s telephone lines.
  - This may happen without your knowledge.
  - This may occur without a telephone company representative entering your facility.
- Older systems may not be compatible with the new telephone technologies.
- Any changes to a telephone line may prompt a trouble signal.
Changing a Fire Alarm System

- Any changes to a fire alarm system need to be approved though the DHSS Engineering Consultation Unit (ECU).
- This may be something simple like adding a cellular phone line instead of using traditional phone line(s).
- Major projects such as a panel replacement need to be approved through the ECU as well.
- When in doubt, feel free to call the engineering unit:
  - David East (573) 526-8521
  - Carrie Brixey (573) 526-5350

Questions???