

False alarm calculations and MCP's

There appears to be some confusion over false alarm calculations and call points.

To start with, a false alarm is "a fire signal resulting from a cause(s) other than fire" so activating an MCP on purpose or accidentally is a false alarm.

It can be with good intent or malicious. These are both classes of false alarm.

The question of false alarm rate calculation and do you count activations from MCP's?

The false alarm rate calculation is expressed as

$$\text{False Alarm Rate} = \frac{\text{Number of false alarms over the last 12 months}}{\text{Total number of detectors}} \times 100$$

The number of false alarms **does** include false alarms from MCP's

The total number of detectors does **not** include the number of MCP's

So, using the question below as an example (there are issues with this question but I'll get to that later)

$$5 = \frac{2}{40} \times 100$$

This gives us a false alarm rate of 5

The questions we tend to see are of the when do you carry out a an in-depth or a preliminary investigation?

So, with false alarm rate of 5 and 40 detectors we would carry out a preliminary investigation

Preliminary triggers are either of:

- 2 or more false alarms from any one MCP/detectors (other than those of good intent)
- More than 1 false alarm/25 detectors per year (4/100)

8. A maintenance technician is carrying out periodic inspection and test of a 4-zone addressable FD&A system comprising 40 detection devices. When inspecting the log book, the technician notes 2 entries for false alarms as 'good intent' due to a yard broom handle falling onto the MCP. What further action should the technician take during the inspection?
- i. Carry out an in-depth investigation
 - ii. Carry out a preliminary investigation
 - iii. Replace the manual call point
 - iv. Recommend fitting a plastic cover
 - v. Record for review, no further action required
 - vi. Report the false alarms to a supervisor
- a. i & iii
 - b. ii & iv
 - c. iii & v
 - d. ii & vi
- B

Now back to the issues I alluded to earlier

9. A maintenance technician is carrying out periodic inspection and test of a 4-zone addressable FD&A system comprising 40 detection devices. When inspecting the log book, the technician notes 2 entries for false alarms as 'good intent'. What further action should the technician take during the inspection?
- i. Carry out an in-depth investigation
 - ii. Carry out a preliminary investigation
 - iii. Replace the manual call point
 - iv. Recommend fitting a plastic cover
 - v. Record for review, no further action required
 - vi. Report the false alarms to a supervisor

So same question as before? Read it again.

No something has been deleted does this change the answer?

No, the answer is the same as the false alarm rate is the same. But as the call point activations are from good intent so the first trigger for a preliminary has gone. As we discount call point activation that where of "good intent"

More than 1 false alarm/25 detectors per year (4/100)

So, lets change the question again.

10. A maintenance technician is carrying out periodic inspection and test of a 4-zone addressable FD&A system comprising 52 detection devices. When inspecting the log book, the technician notes 2 entries for false alarms as 'good intent' due to a yard broom handle falling onto the MCP. What further action should the technician take during the inspection?
- i. Carry out an in-depth investigation
 - ii. Carry out a preliminary investigation
 - iii. Replace the manual call point
 - iv. Recommend fitting a plastic cover
 - v. Record for review, no further action required
 - vi. Report the false alarms to a supervisor

Does the answer change?

The false alarm rate is now 3.8 so under the trigger for a preliminary investigation has not been reached.

But the 2 activations from a call point? The premises manager has classed these as good intent. But the cause was due to a yard broom handle falling onto the MCP. Which is unwanted alarm (accidental damage) so classifying the activations from the MCP as the correct cause means, yes we carry out a preliminary investigation

2 or more false alarms from any one MCP/detectors (other than those of good intent)

If we say that the premises manager has classed them correctly and remove the words "due to a yard broom handle falling onto the MCP"

We don't carry out an investigation as we discount false alarms with good intent from the call points