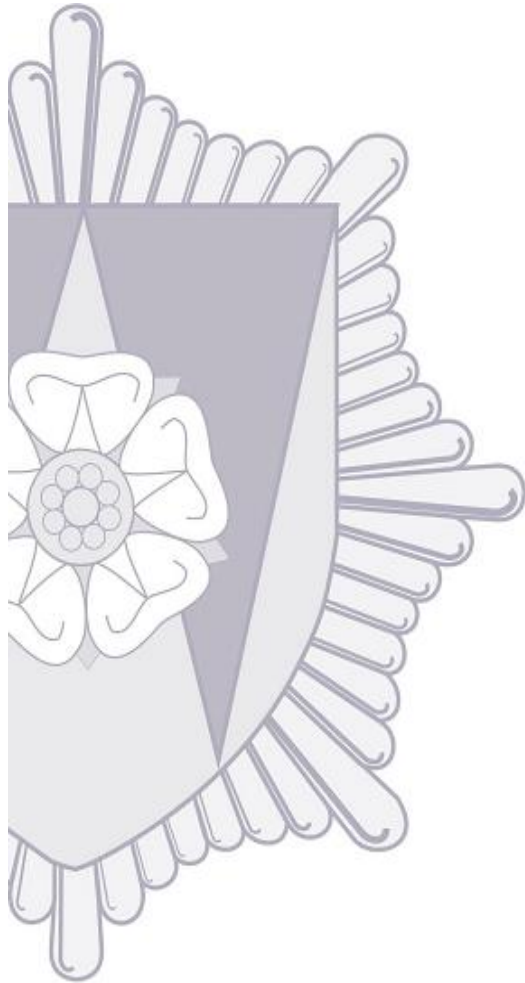


## Summary of WYFRS Policy for the Reduction of False Alarms & Unwanted Fire Signals



Summary version of full policy (FS-POL030)  
Based on the Chief Fire Officers Association (CFOA)  
Policy for the Reduction of False Alarms & Unwanted Fire Signals.

West Yorkshire Fire & Rescue Service

Oakroyd Hall

Birkenshaw

Bradford

BD11 2JX

Date Issued: March 2009

Review Date: June 2011

Ref FS-POL030A

Version No: 2

## **Summary - WYFRS Policy for Reduction of False Alarms & Unwanted Fire Signals**

The policy has been developed in order to reduce the occurrence of false alarms from automatic fire detection and fire alarm systems (AFAS) and to manage the appropriate response from West Yorkshire Fire & Rescue Service (WYFRS) to Unwanted Fire Signals (UwFS).

This policy applies to all premises identified and regulated under the Regulatory Reform (Fire Safety) Order, 2005 (RRFSO) which are or will be installed with automatic fire detection and fire alarm systems (AFAS).

There are two distinct elements which this policy seeks to address:

- False alarms on site, which may contribute to fire safety issues;
- Unwanted fire signals, which are false alarms reported to the fire service.

### **The main policy requirements are:**

- The Responsible Person, as defined under the Regulatory Reform (Fire Safety) Order 2005 (RRFSO), has overall responsibility for the performance of the fire detection and fire alarm systems.
- Prevention of false alarms.
- Prevention of false alarms becoming unwanted fire signals.
- AFAS call filtering.
- WYFRS using the appropriate response to an UwFS.
- Agreed working practices between WYFRS and Alarm Receiving Centre's (ARCs)
- Agreed working practices between WYFRS and Telecare Service Providers (TSPs).

### **This will be achieved by:**

- Promoting the use of competent persons in the design, installation, commissioning and maintenance of systems. WYFRS recommend the use of third party certification schemes through United Kingdom Accreditation Service (UKAS) (or equivalent).
- Promoting the appropriate use of AFAS call filtering on site and effective management of fire detection and fire alarm systems by Responsible Persons.
- Working in partnership with Alarm Receiving Centres (ARC's) and Telecare Service Providers (TSP's) to improve false alarm filtering.
- Adoption of AFAS call filtering through WYFRS control on the 999 system.
- Using Enforcement action under the RRFSO for unacceptable levels of false alarms
- Utilising Community Fire Safety where appropriate.
- Removing our response to AFAS that generate unacceptable levels of false alarms & unwanted fire signals.
- Monitoring the performance of AFAS.

# Summary - WYFRS Policy for Reduction of False Alarms & Unwanted Fire Signals

## Policy Operation

The policy can be graphically summarised in the flow chart below which shows where call filtering can be applied to help reduce the numbers of false alarms becoming unwanted fire signals

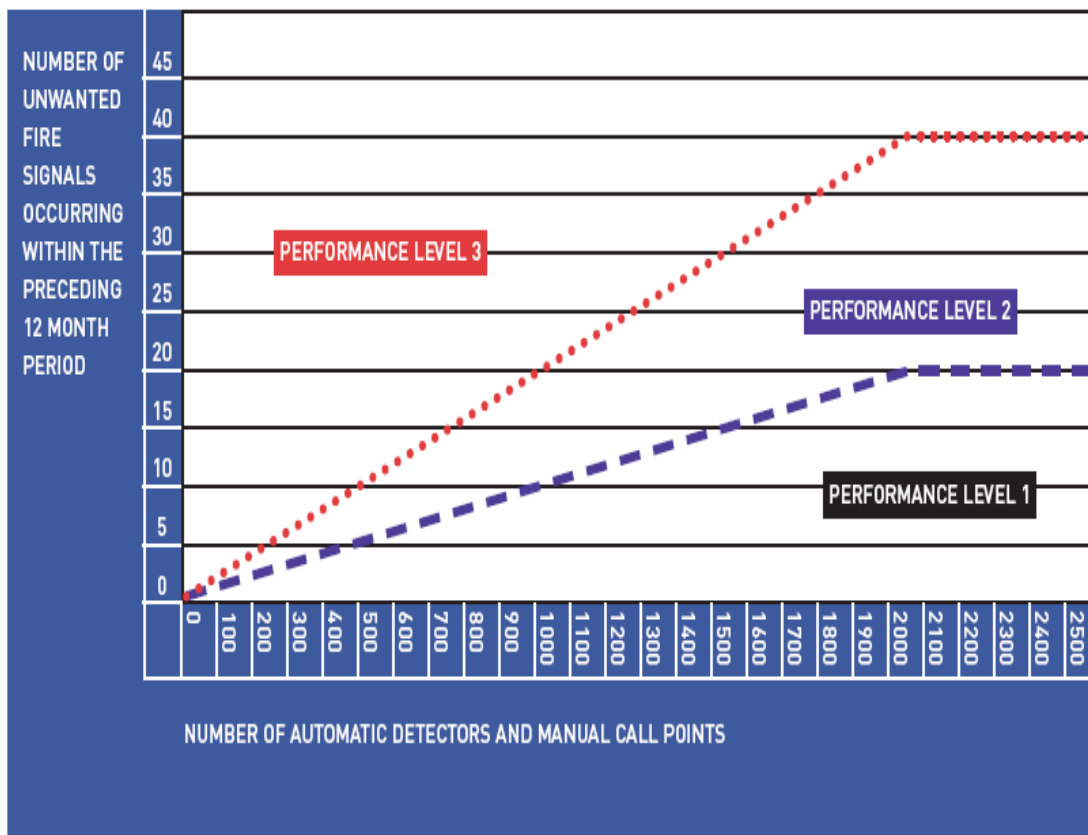


## Summary - WYFRS Policy for Reduction of False Alarms & Unwanted Fire Signals

### Fire & Rescue Service Attendance Levels

WYFRS, will determine the response based on the reliability of the fire detection and fire alarm system performance. Using the graph below the two response options are as follows:

- I. **Attendance Level 'A' - (this relates to performance level 1 & 2 on the graph)** - is an immediate emergency response, resulting in an initial attendance based on a risk assessment of the fire fighting requirements that will be not less than one fire appliance.
- II. **Attendance Level 'B' – (this relates to performance level 3 on the graph)** - no emergency response, until a confirmation of fire is received from the premises via the 999 system or from some other acceptable source. Such confirmation will result in a full or enhanced emergency response, dependant on the information received.



The above graph is only a guide to performance levels and should not be taken as acceptable levels of false alarms. (For clarification, fire alarm systems with up to 100 detectors = 1 to 2 false alarms in a 12 month period, 200 detectors = 2/3 false alarms and 400 detectors = 3/4 false alarms).

For more information on the policy and fire alarm systems go to [www.westyorkshire.gov.uk](http://www.westyorkshire.gov.uk) or contact the Unwanted Fire Signals Team on 01274 473896 or e mail [urn@westyorkshire.gov.uk](mailto:urn@westyorkshire.gov.uk)

## Summary - WYFRS Policy for Reduction of False Alarms & Unwanted Fire Signals

### Short Guide to Reducing False Alarms & Unwanted Fire Signals from Automatic Fire Alarm Systems

*(Intended for use by persons responsible for fire detection and fire alarm systems and fire safety management)*

**A false alarm** - is an actuation of a fire alarm system resulting from a cause other than a fire

**An unwanted fire signal** - is when that false alarm is passed to the fire service

#### 1 - Main Causes of False Alarms / Unwanted Fire Signals

**Cooking Fumes** – being detected by a detector in an adjacent area. e.g. a smoke detector located in a corridor outside a kitchen.

**Steam and aerosol sprays** – activating smoke detectors

**Contamination of detector** – by ingress of insects, dust etc. This can change the sensitivity of the detector and cause false activations.

**Incorrect type of detector** – used to protect an area. A typical example is where a room protected with a smoke detector has its use changed and a toaster or kettle is introduced.

**Contractors working on site** – causing dust or electrical disturbances which affect the fire alarm system.

**Failure to notify the alarm monitoring centre** – when the system is being tested or maintained.

**Unsatisfactory maintenance / testing programme** – where detectors are rarely cleaned and serviced.

**Incorrect siting of a detector** – in an area where excessive air movement due to mechanical heating, ventilation or open windows prevail.

**Lack of effective management** – in taking responsibility for the fire alarm system, being proactive and reactive to causes of false alarms and managing an initial investigation into the cause of an alarm before the fire service are called.

**Human activity** – the biggest cause of false alarms, people need to be made aware of their actions and responsibilities with regards to fire alarm and detection systems

## Summary - WYFRS Policy for Reduction of False Alarms & Unwanted Fire Signals

### 2 - Ways to Minimise False Alarms Being Passed to the Fire & Rescue Service (F&Rs)

(Subject to a Review of the Fire Risk Assessment)

#### *For Remotely Monitored Fire Alarm Systems*

**Taking the Automatic Fire Detection (AFD) system 'Off Line'** – during the times when the premises are fully occupied. This would then allow for a suitable investigation of an actuation and contacting the fire service via the 999/112 public telephone system confirming a fire.

It is particularly recommended when contractors are on site.

One variation could be that when the system is 'off line' the operation of a manual call point would still pass the signal to the Alarm Receiving Centre (ARC).

**Use of a transmission delay / call filtering** - as recommended in the British Standard 5839 Part1:2002. This would allow for an investigation to confirm a fire, prior to the signal being automatically passed to the F&RS via the ARC.

Note – Consultation with all relevant enforcing authorities should be undertaken when considering transmission delays & call filtering

#### *All Fire Alarm Systems*

**Investigating the cause of a fire alarm actuation** - Whenever possible, all activations of the fire detection system should be investigated to confirm signs of fire.

Most fire alarm systems work on identifying zones in which a detector has actuated, (modern systems can even identify a particular detector head or call point)

In many premises when using this information it should be possible to determine if anyone in the vicinity of the zone has observed signs of fire. If so a 999 call can be made to confirm a fire.

If there are no reports of signs of fire, it should be possible to send suitably trained personnel, with communications, to check the area more thoroughly for signs of fire. e.g. smell, smoke, sounds, heat. Remember they are looking for signs of fire, not a fire itself.....

If there is any evidence, suspicion or doubt, exit the premises and call the fire service.

**Regardless of the method for alerting the Fire Service** - once a fire alarm is sounding at the premises, an evacuation in accordance with the Risk Assessment should take place.

## Summary - WYFRS Policy for Reduction of False Alarms & Unwanted Fire Signals

### 3 - Ways to Minimise False Alarms Occurring

**CORRECT DESIGN** – installation, commissioning, acceptance, maintenance and management of the system should minimise false alarms.

**COOKING** – **Only** done in designated areas

**Appropriate** detectors in kitchen (normally heat)

**Adequate** extraction / ventilation – consider the use of a

**Cookmiser** system

**Adjacent** detectors should NOT be ionisation – use optical/multi sensor

**Doors** not wedged open – consider use of an open door alarm

**Provision** of local mains, self contained smoke detectors to warn occupants of smoke prior to main system actuating (part 6)

**Toasters** - only used in designated areas

**Toasters** - wired into mains or non standard plug

**Toasters** - use conveyor type, less likely to burn

**CONTRACTORS** – **Appropriate** permit to work

**Isolation** of area or take system 'off line'

**Schedule** of work to contain details of how contractor will prevent false alarms

**Cover** detectors (uncover when completed for day)

**Hot work** – Risk assessed to include false alarms

**Management** controls to review performance

**Penalty** clauses

**STEAM** -

**Vents** and extraction to be adequate

**Placing** of detectors, can they be moved further away

**Type** of detectors – use optical/multi sensor/heat

**SMOKING** -

**Be** aware of illicit smoking

**Design** of smoking areas

**MANUAL CALL**

**Is** it needed

**POINT** -

**Can** it be moved

**Use** of lift covers / flaps to be considered

**Audible** warning boxes could be fitted

**Key** operated systems may be suitable

**Consider the use of coincidence alarms** - in certain areas where the activation of a detector would need to be backed up by another activation of an adjacent detector before the alarm system entered full alarm mode. This offers a more reliable arrangement in circumstances when environmental effects can readily cause false alarms, without an increase of risk in the protected area.