

## WHAT TO DO IN AN

# Emergency at Sellafield

This information is prepared for everyone within the Detailed Emergency Planning Zone and the Inner Emergency Planning Zone for the Sellafield Site

### **EMERGENCY INFORMATION**

**Listen to local radio**  
**Monitor social media platforms**  
**Dial the Sellafield Emergency  
Information Line on:**  
**0808 909 8090**

**SEPTEMBER 2023**

**It is important that you study this booklet carefully  
and keep it in a safe and prominent place**

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# Introduction

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## This booklet gives advice on what to do in the event of an emergency at the Sellafield Site.

- Sellafield is Europe's largest single nuclear site and stores and handles industrial size quantities of radioactive material. Although unlikely, an emergency could occur involving material being stored and processed on the Site. In addition, Sellafield also holds a large inventory of other hazardous substances and again although unlikely an emergency could occur involving the chemicals being utilised on the Site.
- It must be stressed that the possibility of such emergencies occurring is remote and that the design and operation of all plants on the site are independently monitored by the Office for Nuclear Regulation (ONR), Health and Safety Executive (HSE) and Environment Agency (EA).
- Current assessments of the radiological hazards indicate that areas between 6.1km & 8km from the centre of the Sellafield Site could be the most likely areas to be directly affected during and following a radiation emergency, this area is referred to as the Detailed Emergency Planning Zone (DEPZ). To see its geographical extent please see **Map A** (pg 14) & **Map C** (pg 21).
- In addition, other assessments of the chemical hazards indicate that an area up to 2km from the centre of the Sellafield Site could be the most likely area to be directly affected during and following a chemical emergency. This area is referred to as the Inner Emergency Planning Zone (IEPZ). To see its geographical extent please see **Map B** (pg 15) & **Map C** (pg 21) i.e. the Inner Emergency Planning Zone (IEPZ) sits within the Detailed Emergency Planning Zone (DEPZ).
- In certain extreme circumstances some people living near to the site or travelling in close proximity to the site may have to be evacuated to ensure greater protection during an emergency. The Police will provide specific advice of any need to evacuate.

# Introduction (continued)

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- This booklet is issued at regular intervals by the Joint Emergency Management and Resilience Team on behalf of Cumberland Council in partnership with Sellafield Ltd and summarises emergency arrangements for the Sellafield Site, which are contained in the multi-agency Sellafield Off-Site Emergency Plan that the emergency services use. The booklet is also available online at the Cumberland Council Website:

<https://legacy.cumberland.gov.uk/emergencyplanning/supportingpages/industrialsites.asp>

- This dark blue/green (2023) booklet has been produced in accordance with Government regulations\* and replaces the similar (green) booklet issued in 2021 which should now be disposed of via your Cumberland Council kerbside recycling box.
- This written information is available on request in other formats and languages. Please contact **(01768) 812500** for assistance.

If you require this document in another format (eg CD, audio cassette, Braille or large type) or in another language, please telephone 01768 812500

আপনি যদি এই তথ্য আপনার নিজের ভাষায় পেতে চান তাহলে অনুগ্রহ করে 01768 812500 নম্বরে টেলিফোন করুন।

如果您希望通过母语了解此信息，  
请致电01768 812500

**Jeigu norétumėte gauti šią informaciją savo kalba,  
skambinkite telefonu 01768 812500**

**W celu uzyskania informacji w Państwa języku proszę  
zatelefonować pod numer 01768 812500**

**Se quiser aceder a esta informação na sua língua,  
telefone para o 01768 812500**

**Bu bilgiyi kendi dilinizde görmek istiyorsanız lütfen  
01768 812500 numaralı telefonu arayınız**

\*The Radiation (Emergency Preparedness and Public Information) Regulations 2019

\*The Control of Major Accident Hazards (COMAH) Regulations 2015

# Your First Actions

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## 1. GO INDOORS AND STAY THERE

In an emergency the best thing to do is to go indoors and read the information in this booklet. Sheltering will help reduce the effects of a radioactive or chemical release.



## 2. CLOSE DOORS AND WINDOWS

If you take care to close all the doors and windows you can greatly reduce any radioactivity or chemical contamination in your home. Switch off fans and heating systems, put out open fires and close all ventilators.



## 3. TRY NOT TO USE TELEPHONES

In an emergency, mobile telephone networks may become overloaded and this may prevent emergency calls getting through. If you must make a call, try and avoid using your mobile phone, please use a landline phone and be brief or send a mobile text message.



## 4. LISTEN TO LOCAL RADIO & MONITOR SOCIAL MEDIA

If there is an emergency then information and advice will be broadcast live on Local Radio such as BBC Radio Cumbria 104.1 MHz FM, 206m (1458KHz) MW or CFM on 103.4 MHz FM. In addition, you can monitor Police, Cumberland Council's social media platforms e.g. Twitter™ & Facebook™



## 5. DO NOT ATTEMPT TO LEAVE THE AREA

Never be tempted to leave the area unless the Police have told you to do so. You will be much safer indoors. If you or your family are outside, you are more likely to be exposed to radioactivity or chemical contamination with potential health effects. Also, if you try to leave you may block the roads for the emergency services and other support agencies.



## 6. FOLLOW EMERGENCY SERVICES ADVICE

Listen and take note of the information provided, in most cases by the Police. Do not act upon rumour and/or speculation.

# Notifications of an Emergency at Sellafield

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## Public Telephone Warning System

- This is the primary mechanism for notifying of an emergency but it is an opt in system. If you have not registered on this **FREE** system and wish to do so, please see page 16 for a range of registration options.
- If you are registered with the Public Telephone Warning System you will receive an alert giving advice on actions to take via; landline, mobile phone, SMS [text message] or e-mail.
- Notifications will be made when major exercises occur so as not to cause any unnecessary alarm.

## Sellafield Emergency Information Line

- A pre-recorded message giving brief details of the current (emergency) state at the site is always available on **0808 909 8090**. Calls to this number are free from landlines (mobile operators may make a charge depending on call plan).
- If you need to dial the Information Line during an emergency, please try to avoid using a mobile phone.

## Siren

- Sellafield has now moved to having only one site siren sound. If you do hear the site siren (foghorn), follow the instructions in this booklet. If in any doubt on what is occurring go indoors and call the Sellafield Information Line.
- Please note that the siren is not used to sound the 'all clear'. The end of an emergency at the Site will be announced on local radio and/or via the Public Telephone Warning System.
- The siren is sounded several times a year during exercises and advance notice of this will be given in the Whitehaven News and on BBC Radio Cumbria and CFM. If you hear the siren during an exercise you do not have to take any action. If you are unsure if an exercise is taking place then for more information call the Sellafield Emergency Information Line on **0808 909 8090**.

# What Could Happen - Radiation?

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## Public Telephone Warning System

- An emergency could occur following a fire, explosion, seismic event or serious leak in one of the areas handling radioactive materials at the Sellafield Site. This may result in the declaration of an Off-Site Nuclear Emergency.
- If an emergency does occur, radioactive airborne contamination may be released which may not be visible. The weather conditions at the time of release are an important factor determining the affected areas as the radioactive material is carried down wind, spreading out and depositing on the ground and other surfaces as it travels. i.e. this could affect areas close to the Site and across the whole or parts of the Detailed Emergency Planning Zone (DEPZ).

## Please note that it is impossible for a nuclear bomb-type detonation to occur.

- Radioactive material gives off energy (radioactivity) in the form of particles or waves as it decays. Exposure to such radioactive material has the potential in some people to cause health issues. Types of radiation given off by such radioactive material are:
- **Alpha particles** - heavy positively charged particles, dangerous if swallowed, inhaled, or absorb via a wound into the blood supply for example.
- **Beta particles** - high speed (negatively charged) electrons, dangerous as they can penetrate the skin plus cause burns.
- **Gamma rays** - similar to X-rays that can easily pass through the body and can damage body tissue.
- If you come into contact with radioactive material during an emergency by inhalation or ingestion for example, you can become contaminated.
- Radiation can cause changes in molecules and body tissue or affect DNA; such changes may not be apparent until sometime after an incident. The potential health risks associated with Alpha & Beta particles plus Gamma Rays are the reason why it is vital to go indoors when an emergency occurs.

# What Could Happen - Chemical?

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- If an emergency does occur, material might be released very rapidly in the form of a highly toxic gas cloud for example, and this could affect areas downwind and close to the Site and across the whole of the Inner Emergency Planning Zone (IEPZ). Under certain circumstances an accident leading to a release could also have implications for the site personnel and in particular those members of the public who are very close to the site boundary i.e. within the Inner Emergency Planning Zone (IEPZ).
- During an emergency the main risk is through the inhalation of released gases that may cause damage to respiratory systems. Hence the advice to shelter indoors within the Inner Emergency Planning Zone (IEPZ) when an Off-Site Chemical Emergency (OSCE) is declared.
- People several hundred metres away from the incident could suffer minor health effects e.g. eye irritation. Moreover, those people with existing underlying conditions such as asthma may be affected and the health effects may not be apparent straight away.
- The health risks associated with a chemical release near the Sellafield site are the reason why it is vital to go immediately indoors when an alert is issued.



# What You May Need To Do

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## Shelter

Sheltering can dramatically reduce the levels of radiation or chemical release you could be exposed to. Therefore, do not hesitate in making your way indoors if notified to do so. This could be in your own home or in the nearest building. See page 10 for additional advice about sheltering. Bring any domestic animals indoors if possible but for any others not within your immediate property, they must be left outside.

## Evacuate

You may be advised to evacuate your home but you must remain in shelter until told to do so. If evacuation is implemented go directly to the facility location as instructed. See page 11 for additional advice about evacuation. Evacuation is most likely to affect those people living/working immediately adjacent to the Site.

## Follow Advice on Food and Water Restrictions

Appropriate action will be taken by the relevant authorities to prevent the sale of contaminated food stuffs to the public. Advice will also be given concerning the safety of drinking water supplies. See page 19 for further advice.

## End of the Emergency

Information concerning the end of the emergency will be broadcast on local radio and/or the Public Telephone Warning System.

# Shelter

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- You must close all doors and windows and switch off ventilation fans, air conditioning and heating systems. Plus put out open fires and shut down multi-fuel stoves. In addition, make sure small window vents are shut.
- If possible, quickly check your neighbours have been warned especially if they are vulnerable and then immediately go indoors and stay there. Please note taking direct/immediate refuge indoors is of vital importance, your health and well-being could depend on it.
- Stay tuned to local radio stations such as BBC Radio Cumbria and CFM plus monitor social media platforms e.g. Cumbria Police and Cumberland Council.
- If your children are at school during an emergency you will naturally want to collect them as soon as possible. However, it may not be safe to do so. They will be looked after as a priority group either at the school or evacuated to a safe place where they will be looked after by the school's staff and those responding to the emergency. Please listen to local radio for advice and details of the arrangements that have been made.
- You will be told by the Police and via local radio when it is safe to go outside again. Please wait for notification and do not rely on rumour/hearsay, your health and well-being depend on it.

# Evacuate

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- If the Police advise you to evacuate and leave the area, they will direct you to a Reception Centre or similar facility, such as a local school. The Police, with support from other agencies such as Cumberland Council will tell you where the Reception Centre is. Registration at a Reception Centre is key to providing ongoing welfare and support.
- Use your own transport if possible and go directly to the Reception Centre. If travelling by car keep all windows closed and turn off the heater and air conditioning system.
- If you have space in your vehicle, please take any neighbours who do not have their own transport. Check your immediate neighbours have been warned, where practicable. If you know of anyone who is elderly or infirm and who might have difficulty during the evacuation, then please help them if you can and if you are unable to, then call the Police.
- Consider taking the following with you in a small holdall/rucksack: a small amount of spare clothing, medicines/special foods you might need plus private documents. If you have children - baby food/clothing/toys/books and if you have pets - food/leads/carriers/cages/baskets.
- If you do not have transport, the Police may ask you to walk to an assembly point from which you will be transported to a Reception Centre or similar facility if it is safe to do so.
- If your children are at school during an emergency you will naturally want to collect them as soon as possible. However, it may not be safe to do so. They will be looked after as a priority group either at the school or evacuated to a safe place where they will be looked after by the school's staff and those responding to the emergency. Please listen to local radio for advice and details of the arrangements that have been made.
- If you wish to stay with friends or relatives elsewhere you will, of course, be free to do so. However, it is vital that you register at the Reception Centre first, so that if someone asks the Police about you, they will be able to say you are safe.

# Evacuate *(continued)*

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- If you bring pets to the Reception Centre in a car, leave them in the car but do not fully close the windows. Alternatively, temporary arrangements will be made for them via the registration process at the Reception Centre. Please note 'livestock' will not be able to be accommodated.
- Re-entry to any evacuated areas during the emergency will be restricted by the Police to persons having compelling reasons for doing so. Arrangements could be made, for example, for essential feeding of livestock by farmers. Please contact the Police first before attempting to re-enter as road cordons will be set up automatically on declaration of an Off-Site Nuclear or Off-Site Chemical Emergency.

# Four Alert States

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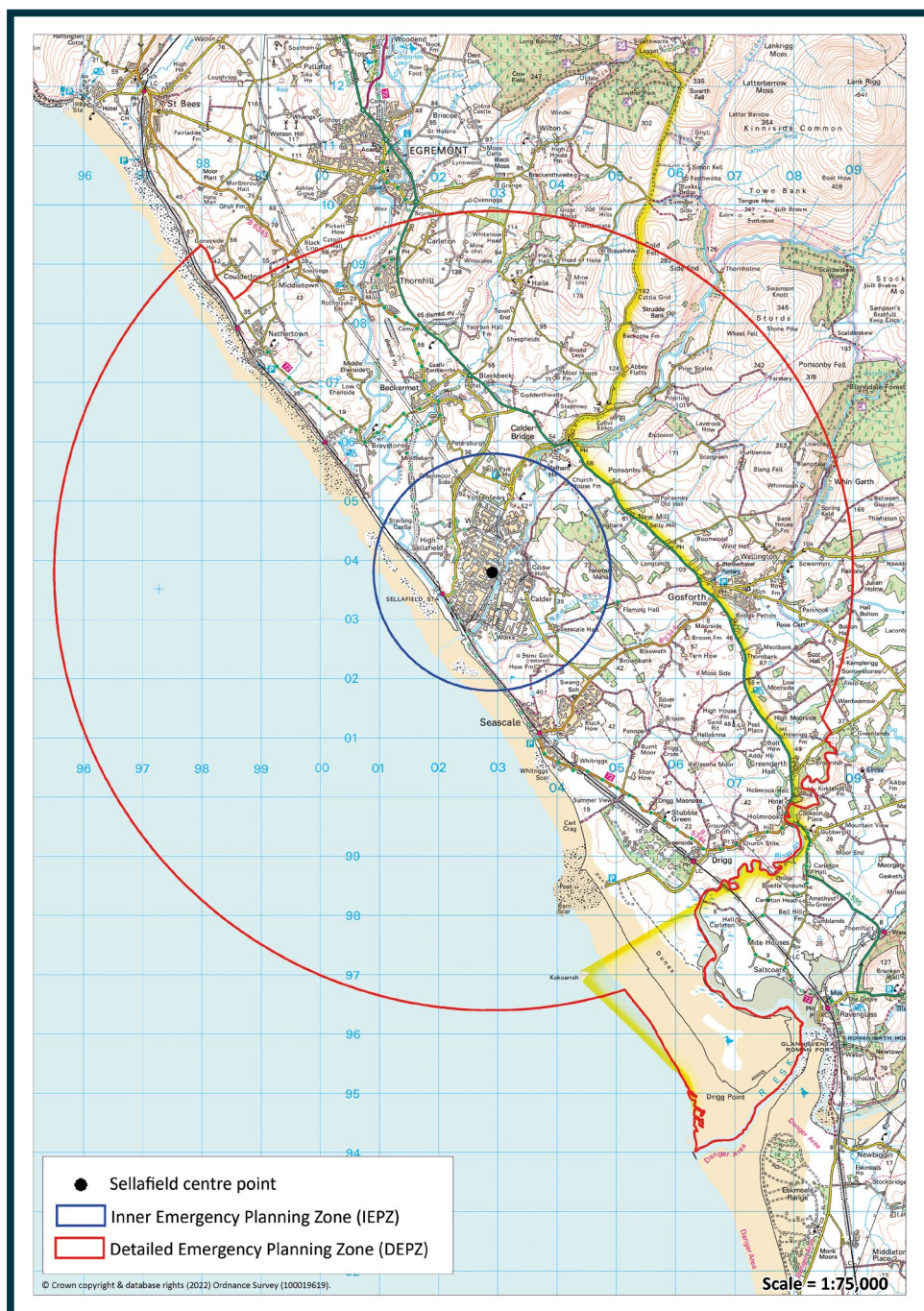
There are four alert states that can generate the sounding of the site siren (foghorn sound) followed by the activation of the Public Telephone Warning System which issues pre-recorded messages and notifications about the nature of the incident and actions to take.

Please note two of the four alert states, Off-Site Nuclear Emergency (OSNE) and Off-Site Chemical Emergency (OSCE) require you to go indoors and remain there.

- **Off-Site Nuclear Emergency (OSNE)** | An alert state based on the fact a radiation emergency (e.g. major fire) has occurred which is directly impacting on activity on the Sellafield site and has the potential to affect areas outside the site boundary fence or has already done so. Requires all people within the Detailed Emergency Planning Zone (DEPZ) and Inner Emergency Planning Zone (IEPZ) to immediately find shelter indoors and stay there.
- **Off-Site Chemical Emergency (OSCE)** | An alert state based on the fact a chemical emergency (e.g. toxic gas release) has occurred which is directly impacting on activity on the Sellafield site but also has the potential to affect an area just beyond the site boundary fence or has already done so. Requires all people within the Inner Emergency Planning Zone (IEPZ) to immediately find shelter indoors and stay there.
- **Site Incident** | Principally a radiation or chemical incident (e.g. large spillage of material) which is giving rise to or has the potential to give rise to unsafe conditions on the site, however is not capable of having an effect outside the site boundary fence. You can carry on with your normal day-to-day activities; continue to refer to this booklet and the Sellafield Information Line but any additional safety information regarding actions to take will be sent out via the Public Telephone Warning System.
- **Operational Alert** | An event on or off-site that affects normal operations but not considered large enough to be a Site Incident, Off-Site Chemical Emergency (OSCE) or Off-Site Nuclear Emergency (OSNE). You can carry on with your normal day-to-day activities; continue to refer to this booklet and the Sellafield Information Line but any additional safety information regarding actions to take will be sent out via the Public Telephone Warning System.

# Detailed Emergency Planning Zone

**Map A** Cumberland Council (nee Cumbria County Council) has designated an area approximately between 6.1 km and 8 km from the centre of the Sellafield site as being the area referred to as the Detailed Emergency Planning Zone (DEPZ). On declaration of Off-Site Nuclear Emergency (OSNE) all people within the Detailed Emergency Planning Zone (DEPZ) must immediately find shelter indoors and stay there.

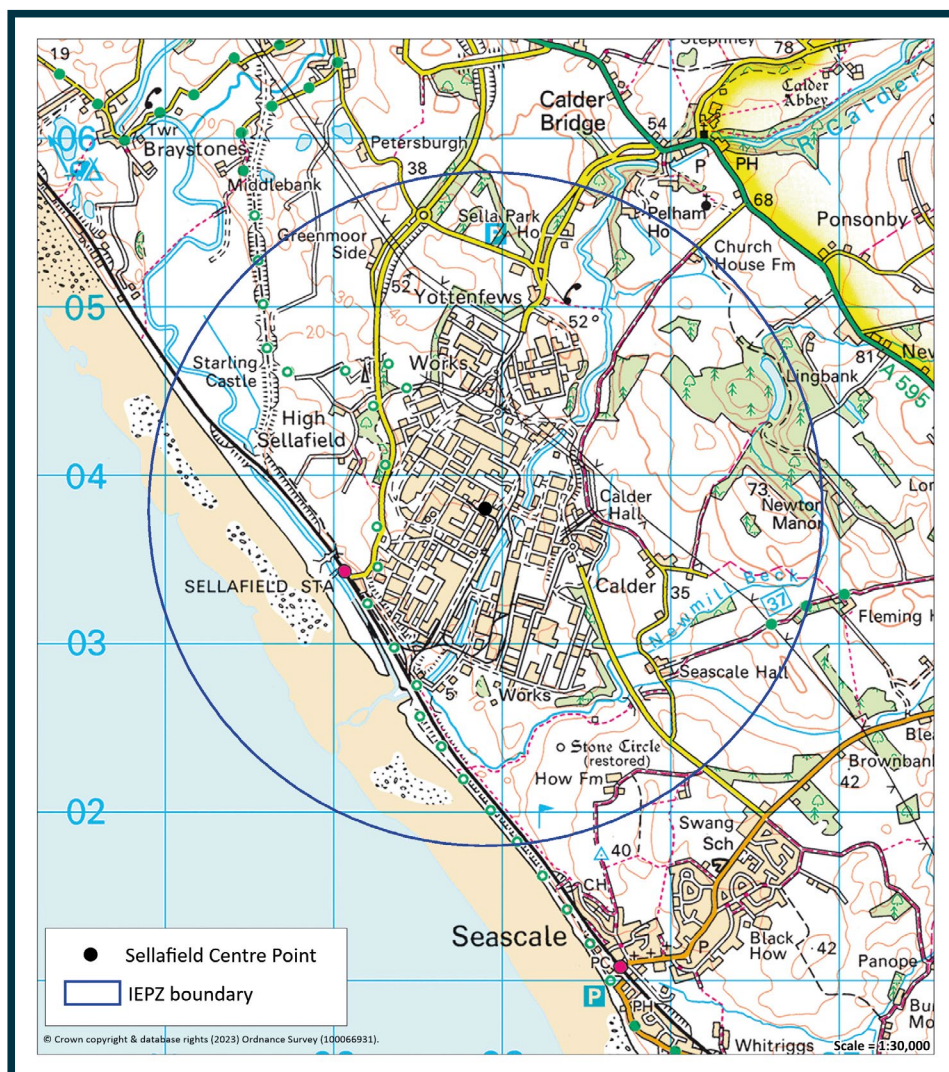


# Inner Emergency Planning Zone

**Map B** Cumberland Council (nee Cumbria County Council) has designated an area 2 km from the centre of the Sellafield site as being the area referred to as the Inner Emergency Planning Zone (IEPZ). On declaration of Off-Site Chemical Emergency (OSCE) all people within the Inner Emergency Planning Zone (IEPZ) must immediately find shelter indoors and stay there.

Please note all actions for the Detailed Emergency Planning Zone (DEPZ) also cover the Inner Emergency Planning Zone (IEPZ).

Given the proximity of several properties within the Inner Emergency Planning Zone (IEPZ) there is also an elevated risk from a radiation emergency and therefore a possibility of the need to evacuate during an emergency.



# Public Telephone Warning System

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Residents and business in the Detailed Emergency Planning Zone (DEPZ) and the Inner Emergency Planning Zone (IEPZ) can ask to be alerted whenever the siren is sounded. This is the primary mechanism for notifying of an emergency, it is an opt in system but it is **FREE**.

If you are registered with the Public Telephone Warning System you can receive an alert giving advice on actions to take via any of the following:

- Landline
- Mobile phone
- SMS [text message]
- E-mail

Notifications will be made when major exercises occur so as not to cause any unnecessary alarm.

- A short-pre-recorded message will then tell you what actions you need to take.
- Should an Off-Site Nuclear Emergency (OSNE) have occurred, the pre-recorded message will tell all persons in the Detailed Emergency Planning Zone to go indoors (remain there), close doors and windows, listen to Local Radio and follow the advice in this booklet.
- Should an Off-Site Chemical Emergency (OSCE) have occurred, the pre-recorded message will tell all persons in the Inner Emergency Planning Zone to go indoors (remain there), close doors and windows, listen to Local Radio and follow the advice in this booklet.
- Should a Site Incident or an Operational Alert have occurred then you can carry on with your normal activity. If in doubt ring the Sellafield Emergency Information Line on **0808 909 8090**
- The system will be tested on a number of occasions each year. In advance of a test or an exercise taking place announcements will be placed in local print media. The pre-recorded message will state clearly that it is a test/exercise.



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- If you wish to register on the Sellafield Public Telephone Warning System you can do so on [sellafield.registration-site.co.uk](https://sellafield.registration-site.co.uk) or use the following QR code:



If you need to change or check your numbers please contact:

**Joint Emergency Management and Resilience Team\***

Cumbria Fire & Rescue Service HQ,  
Carleton Avenue, Penrith CA10 2FA

**Tel (01768) 812500**

[emergency.planning@westmorlandandfurness.gov.uk](mailto:emergency.planning@westmorlandandfurness.gov.uk)

Please note that this system is only available to householders/premises within the Detailed Emergency Planning Zone (see **Map C** pg 21).

*\*The Joint Emergency Management and Resilience Team cover Cumberland Council and Westmorland and Furness Council.*

# Environment

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Although the information in this booklet is about actions designed to protect people during an emergency at Sellafield, the emergency services and other agencies/organisations do take actions to protect the environment during an emergency.

Within the vicinity of the Sellafield site there are several Sites of Special Scientific Interest (SSSI), Special Areas of Conservation (SAC) plus a Marine Conservation Zone and a Ramsar [wetland] Site.

These areas will receive appropriate attention during an emergency when resources allow and it is safe to do so.

# Water & Food Restrictions

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- The Food Standards Agency will produce precautionary advice regarding the safety of food in the early stages of an emergency. Cumberland Council's Trading Standards Department will, if required by the Food Standards Agency, take appropriate action to prevent the sale of contaminated foodstuffs to the public.
- Advice will be given to farmers, fishermen and other food producers.
- Mains water supplies would not initially be affected by a radioactive or chemical release and so water for drinking etc. should be drawn fresh from the tap.
- If you have a private water source, use alternative supplies until the safety of your water has been confirmed.
- The Environment Agency, United Utilities and Cumberland Council Environmental Health Officers will arrange for sampling to be carried out and will issue advice concerning the safety of drinking water supplies.

## End of Emergency

- When the emergency is over, information will be broadcast on local radio.

## Household Insurance

- Household insurance policies do not normally cover damage from radioactive or chemical releases. Claims for compensation following an accident will be dealt with by the Nuclear Decommissioning Authority and Sellafield Ltd who will announce details of how claims can be submitted.

[www.gov.uk/government/organisations/nuclear-decommissioning-authority](http://www.gov.uk/government/organisations/nuclear-decommissioning-authority)

# Further Information

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Further information i.e. prior to an incident can be obtained via:

## **Cumberland Council Resilience Manager**

Joint Emergency Management  
and Resilience Team

Westmorland and Furness Council\*  
Fire & Rescue Service HQ  
Carleton Avenue, Penrith CA10 2FA

**Tel (01768) 812500**

<https://legacy.cumberland.gov.uk/emergencyplanning/supportingpages/industrialsites.asp>

## **West Cumbria Site Stakeholder Group**

### **The Secretary**

West Cumbria Sites  
Stakeholder Group

Albion Square, Albion Street,  
Whitehaven CA28 7NA

**Tel 07764 880 100**

[www.wcssg.co.uk](http://www.wcssg.co.uk)

[secretary@wcssg.co.uk](mailto:secretary@wcssg.co.uk)

Further information i.e. during an incident can be obtained via:

## **List of Social Media/Radio Stations**

@Cumbriapolice

@CumberlandCouncil

BBC Radio Cumbria 104.1 MHz  
FM, 206m (1458KHz) MW, CFM  
103.4 MHz FM

## **Sellafield Emergency Information Line**

**0808 909 8090**

Please keep the booklet in a handy location and inform visitors/guests of actions that may need to be taken in an emergency. In addition, if you move to a new house please leave the booklet for the new owners.

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*\*The Joint Emergency Management and Resilience Team covers Cumberland Council and Westmorland and Furness Council.*

# Map of the Detailed Emergency Planning Zone incorporating the Inner Emergency Planning Zone and sectors A-M

**Map C** (The emergency services may use the sector locations when issuing messages or instructions during an emergency. NB there is no Sector 'I').







