Hunterston B
Nuclear Power Station

Off-site Contingency Plan

Prepared by Ayrshire Civil Contingencies Team

on behalf of North Ayrshire Council
For the West of Scotland Regional Resilience Partnership

PART 1: EMERGENCY NOTIFICATIONS AND PROCEDURES

1.1 Emergency Notification – Site Incident

When an incident occurs the Hunterston Power Station Emergency Controller (or nominated deputy) will use the cascade charts below (in conjunction with the telephone numbers in **Section 1.4)** to alert relevant organisations who will then cascade the information further as per the cascade. This section of the plan has been redacted

1.2 Emergency Notification – Off-site Nuclear Emergency

When an off-site nuclear emergency incident occurs the Hunterston Power Station Emergency Controller will use the cascade charts below (in conjunction with the telephone numbers in **Section 1.4)** to alert relevant organisations who will then cascade the information further as per the cascade below. Once alerted, each agency will send a representative to the HSCC at This section of the plan has been redacte. A test (Exercise Busby) is carried out on an annual basis to ensure that the information supplied is still current. This section of the plan has been redacte

The police have a more detailed contact list that encompasses the list above.

1.3 Emergency Notification – Information Provided

When an incident occurs at the site, the on-site incident cascade will be implemented and the information provided by the site will be in the form of a METHANE message as below:

M	Major Incident	Yes / No Date Time
E	Exact Location	Wind Speed Wind Direction
T	Type	Security / Nuclear / etc
H	Hazards	Present or suspected Radiological plume Chemical Security / weapons Fire
A	Access	Details of the safe routes to site RVP
N	Number of casualties / missing persons	Number: Type: Severity
E	Emergency Services	Present or Required

On arrival, all initial response emergency personnel will be provided with a dosimeter which will measure levels of radiation and ensure that agreed limits are not reached. Emergency Staff should report to the site emergency controller (*see* tabard in **Section 3.3.1**).

Scottish Fire and Rescue will provide a pre-determined attendance of 3 appliances and 1 aerial appliance incorporating 2 gas suits. In addition to this Flexi Duty Managers would also be mobilised.

A further update will be provided by the site on arrival.

1.4 Telephone Numbers (External) for Initial Contact (listed alphabetically)

1.4.1 Responding Organisations Contact Details

This section of the plan has been redacted

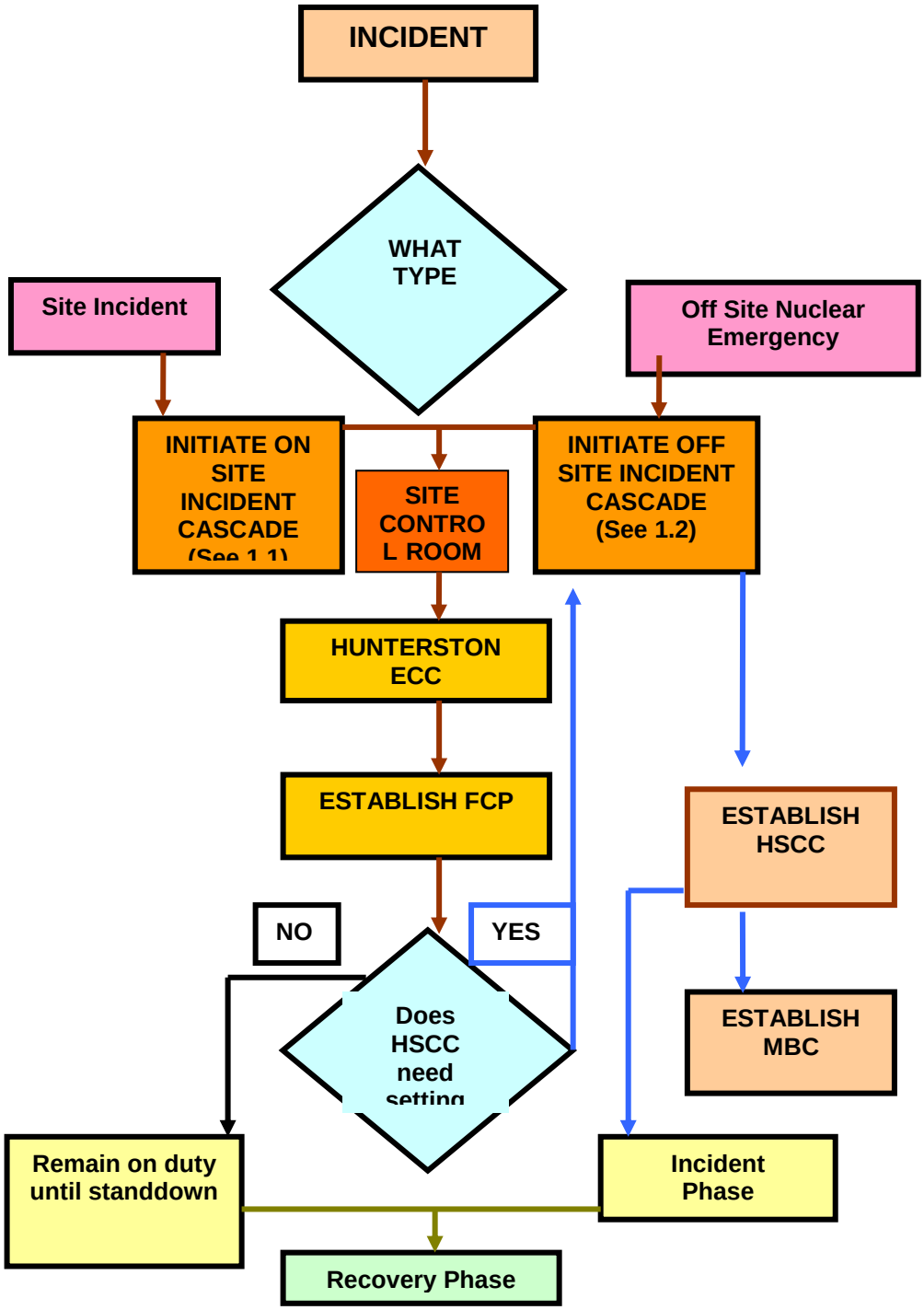
This section of the plan has been redacted

This section of the plan has been redacted

1.5 Site Incident/Off-site Nuclear Emergency Procedure

Definition
"A hazardous condition which is confined in its effect to the boundary of the site security fence" (determined in part by the site boundary monitoring systems (Emergency Plume Gamma Monitoring System (EPGMS)) data and indications)

Definition
A hazardous condition which results, or is likely to result, in the need to implement protective action to protect members of the public beyond the site boundary from a radiological hazard (which may be supported by site boundary monitoring system (EPGMS))



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PART 2: INTRODUCTION

2.1 Legislative Requirements

2.1.1 The *Radiation (Emergency Preparedness and Public Information) Regulations 2019 (REPPIR)* place a statutory duty on North Ayrshire Council to prepare an Off-site Emergency Plan for Hunterston "B" Nuclear Power Station. This duty is carried out on behalf of North Ayrshire Council by the Ayrshire Civil Contingencies Team (ACCT) but will be signed off by the Chief Executive of North Ayrshire Council.

2.1.2 To ensure that there are adequate protections against accidents, REPPIR requires the operator of a site to make a written evaluation "sufficient to identify all hazards arising from work undertaken which have the potential to cause a radiation emergency" and then to take all reasonable steps to prevent and limit the consequences of such radiation emergency. The operator is then required to "consider and evaluate a full range of possible consequences" of radiation emergencies and then send a consequences report to the local authority containing information mandated by Schedule 4 of the regulations upon which the local authority base the scope of their off-site plan.

2.1.3 EDF's 2020 Consequence Report for Hunterson B is available on the NAC website.

2.1.4 Based on the consequence report, the local authority reached a December in December 2020 to amend the DEPZ in accordance with the REPPIR 2019 legislation but that all properties previously included would continue to be included. A map showing the current DEPZ is at **Section 8.15**. An interim decision had previously been made in May 2020.

2.1.5 It is noted that REPPIR requires that the Emergency Plan designed to mitigate, so far as is reasonably practical, the consequences of a radiation emergency outside the operator's premises" and must be sufficiently flexible to respond to the particular characteristics of an event as those characteristics emerge. An Impact Table has been provided at **Part 10** of the plan and provides descriptions of the impact at different dose levels against all the factors identified in the definition of a radiation emergency.

2.1.6 The Hunterston Off-site Contingency Plan is a set of documents describing an integrated emergency management document designed to bring together the emergency arrangements of all the off-site agencies with a role to play in the response to a radiation emergency occurring at Hunterston "B" Nuclear Power Station (see roles and responsibilities in **Part 7**). The supporting documents are included at **Part 10**).

2.1.7 Hunterston A (Magnox Power Station) has no DEPZ and an OPZ of 1km – this outline planning distance is covered within the off-site planning arrangements for Hunterston B as it is within the DEPZ of Hunterston B. An annex outlining arrangements is part of this plan.

2.1.8 This plan adheres to the REPPIR 2019 legislation and has used the Approved Code of Practice as guidance. It provides a framework for the management, coordination and control of the off-site response in which the following responding organisations can work effectively:
EDF Energy - Nuclear Generation
BEIS (Department for Business, Energy and Industrial Strategy)
British Telecom
Food Standards Scotland
Glasgow Prestwick Airport
Glasgow Scientific Services
Government Decontamination Service
HM Coastguard (HMCG)

Meteorological Office
Network Rail
North Ayrshire Council
NHS Ayrshire and Arran
Office for Nuclear Regulation
Police Scotland
Public Health England CRCE (Centre for Radiation, Chemical and Environmental Hazards)
Scottish Ambulance Service
Scottish Environment Protection Agency
Scottish Fire and Rescue Service
Scottish Government
Scottish Water
Other organisations may be integrated into the response depending on the characteristics of the event.

2.1.9 The plan is coordinated by the Ayrshire Civil Contingencies Team (ACCT) on behalf of North Ayrshire Council. The plan is reviewed periodically but at least every three years in advance of the Exercise. The EPCC (Emergency Planning Consultative Committee) meeting also provides an opportunity twice per year to make any amendments to the plan.

2.1.10 ACCT has considered the following principles when preparing the plan:

a) The necessity for the plan to respond to the particular characteristics of a given radiation emergency as those characteristics emerge;

b) The necessity to optimize protection strategies to ensure that the proposed response, as a whole, is predicted to do more to mitigate the radiation emergency and facilitate transition from threat emergency than to increase its duration or consequence, taking into account:

i. The health risks arising from exposure to ionizing radiation as a result of th eradiation emergency, in both the long and the short term;
ii. The economic consequences of the radiation emergency;
iii. The effects of the disruption, both on the premises and the area immediately surrounding it, and on the public perception of the effects of the radiation emergency

c) The necessity of avoiding, so far as possible, the occurrence of serious physical injury to any person or persons;

d) The necessity of ensuring that an appropriate balance is struck between the expected harms and benefits of any particular protective action so as to maximize the benefit of that action.

2.1.11 If there are any significant changes (in accordance with Regulation 21(6)(b)) then the plan will be revised and reissued to take full account of these changes within a reasonable amount of time (less than 3 months).

2.1.12 All correspondence in relation to this Plan should be addressed to acct@south-ayrshire.gov.uk

2.2 Consultation

2.2.1 Emergency Planning Consultative Committee (EPCC)

2.2.1.1 EPCC Terms of Reference provides a multi-agency forum for coordination of the emergency arrangements for Hunterston "B" Nuclear Power Station.

EPCC will:

- Be responsible for approving the Off-site Emergency Plan
- Be responsible for approving amendments to the Off-site Emergency Plan
- Set a programme, attend and review exercises to test the Off-site Emergency Plan prepared for accidents that could occur at Hunterston B Power Station.
- Provide an opportunity for all agencies to confirm that they have sufficient staff trained to provide the response

2.2.2 Scottish Nuclear Resilience Group (SNRG)

2.2.2.1 Chaired by the Scottish Government, the role of the Scottish Nuclear Resilience Group (SNRG) is to provide the strategic direction necessary to identify and progress actions which will improve nuclear emergency planning arrangements in Scotland

2.2.3 Contingency Plan Liaison Group

2.2.3.1 A Contingency Plan Liaison Group has been established from the Emergency Planning Consultative Committee to progress a multi-agency Off-site Contingency Plan in respect of Hunterston B Nuclear Power Station promoting mutual understanding of roles, identification of responsibilities and coordination of response, to enable an efficient and effective response to a Site Incident or an off-site Nuclear Emergency. The Contingency Plan Liaison Group will:

1. will meet at least once a year to review the plan.
2. Produce an Off-site Contingency Plan as required by the *Radiation (Emergency Preparedness and Public Information) Regulations 2019*.
3. Adopt if applicable national best practice.
4. Carry out a full review of the plan on a three-yearly basis with all partners providing to the secretariat their suggested changes on an approved amendment sheet which includes the rationale for making the change.
5. All partners are provided with a copy of the draft plan with all changes highlighted to sign off.

2.2.3.2 The Contingency Plan Liaison Group should at all times bear in mind the objectives of the Responding Organisation responsible for responding to a Site Incident or an off- site Nuclear Emergency.

2.2.3.3 Amendments of an administrative nature can be introduced to the Off-site Contingency Plan by the Secretary without reference to the Contingency Plan Liaison Group.

2.2.3.4 All agencies named in this Plan have been invited to provide comment and/or representation for this group. A list of participating organisations is provided at the front of this document.

2.3 Recovery of Costs

2.3.1 Costs are recovered by the Local Authority, from the operator, for the preparation and testing of the Off-site Contingency plan in accordance with the REPPIR 2019 regulations.

2.4 Purpose of the Plan

2.4.1 In accordance with the REPPIR Regulation 11 the Off-site Emergency Plan has been designed to mitigate, so far as is reasonably practical, the consequences of a radiation emergency outside the operator's premises and to:

1. Provide a framework for the initial response to an emergency at Hunterston "B" Nuclear Power Station to mitigate the effects of a Site Incident or Off-site Nuclear Emergency (Regulation 11(2)) including the health risks arising from exposure to ionising radiation as a result of the radiation emergency in both the long and the short term;

2. Provide details of the site, its hazards and the emergency planning zones;

3. To outline the management structure at Strategic and Tactical levels established in response to any such emergency.

4. To highlight the roles and responsibilities of the participating agencies when responding to an emergency as specified above.

5. To establish in broad terms the initial anticipated actions of the participating agencies in responding to an emergency as specified above.

6. To provide a source of information from which relevant agencies can progress a "Procedures" manual for internal use by the staff of that agency.

7. To outline the actions to be taken to protect the public and the environment outwith the Power Station.

8. To describe the various protective actions which can be taken to minimise the effects of an incident and identify how these protective actions can be applied within the DEPZ (Detailed Emergency Planning Zone) and into the OPZ (Outline Planning Zone) and to ensure that an appropriate balance is struck between the expected harms and benefits of any particular action so as to maximise the benefit of that action.

9. To set out the arrangements for providing the public with specific information relating to the emergency (and any perceived emergency, for example a non-nuclear incident but which may cause alarm).

10. To outline a post emergency recovery strategy for reinstating the off-site environs to a condition as close as possible to their pre emergency status including the economic consequences of the radiation emergency.

2.5 On-site Plan

2.5.1 This plan has been developed to operate in conjunction with the On-site plan but can also function as a standalone plan if required. The most recent version of the On-site Emergency Plan has been considered. If operating independently of the On-site plan it includes arrangements whereby the Police can mobilise responders by undertaking the call out and they can request that the public warning and informing system is activated.

2.6 Site: Staffing Levels and Operation Details

2.6.1 **Premises**

Address:	EDF Energy - Nuclear Generation Hunterston "B" Nuclear Power Station West Kilbride, KA23 9QJ
Telephone No:	This section of the plan has been redacted
Contact:	Central Emergency Planning Group
Grid Reference:	This section of the plan has been redacted All distances mentioned in the report are a radius from the above Grid Reference.
Description of Premises:	Hunterston "B" Nuclear Power Station is a civil nuclear power station used to generate electricity.
Risks/Potential Hazards:	Potential hazards at the power station arise from the presence of hazardous materials. These materials are used in, and arise from, the processes carried out on the site. They include (in alphabetical order):- Ammonia Carbon Dioxide Caustic Soda Fuel Oil Hydrazine Hydrogen Methane Nitrogen Propane Radioactive fission products Sulphuric Acid These materials present potential hazards, which include combustion, asphyxiation, toxicity and exposure to ionising radiation. It is estimated that the potential effects of the majority of these hazards would be restricted to the site. However, a release of radioactive material has the potential to necessitate emergency actions beyond the site boundary.
Access Points:	This section of the plan has been redacted
Lead local authority for off-site planning	North Ayrshire Council
Local Authority Contact	Ayrshire Civil Contingencies Team South Ayrshire Council Newton House, 30 Green Street Lane, Ayr, KA8 8BH

2.6.2 **Operating Hours/Numbers of staff on site**

During Normal day shift hours:	This section of the plan has been redacted
Outwith normal day shift hours:	This section of the plan has been redacted
During Outage periods:	This section of the plan has been redacted
This section of the plan has been redacted	This section of the plan has been redacted
This section of the plan has been redacted	This section of the plan has been redacted

2.6.3 **Operator**

Address:	EDF Energy Nuclear Generation Ltd Barnett Way Barnwood Gloucester Gloucestershire GL4 3RS
Telephone Number:	This section of the plan has been redacted
Contact:	Central Emergency Planning Group

2.6.4 **Site Description**

2.6.4.1 The site has two operating advanced gas cooled reactors (AGRs). This class of reactor has a long history of safe operation. The likelihood of an event occurring is minimized through safety considerations in the siting, design, construction and operation and the granting and compliance with a nuclear site licence regulated by the Office for Nuclear Regulation (ONR). A Nuclear Site Licence is granted only after the ONR has fully satisfied that the licensee is a capable operator and has made an adequate safety case for the station and developed appropriate safety standards. The implementation of these standards demonstrates that an accidental event which might lead to the release of even small amounts of radioactivity is extremely low.

2.6.4.2 Despite constant vigilance, the safeguards incorporated into the design and operation of plant and support systems, and a positive accident prevention culture, hazardous situations that challenge control can occur. Having well-rehearsed emergency arrangements in a state of readiness, as required by REPPIR 2019, provides an additional layer of protection to mitigate the effects of unforeseen events.

2.7 On-site and Off-site Incidents

The site has two main declaration states which allow the rapid promulgation of the correct alarm and mustering of proportionate resources.

2.7.1 **Site Incident**

2.7.1.1 A site incident is defined as “a hazardous condition which is confined in its effect in the boundary of the site security fence”. This may be determined in part by the site’s boundary monitoring system data and indications (Emergency Plume Gamma |Monitoring System (EPGMS))

2.7.1.2 A Site Incident does not call for the full implementation of the Contingency Plan, or, necessarily, the alerting of the off-site emergency services. However, following the activation, the Responding Organisation detailed in this plan will be adapted to respond effectively to the specific circumstances of the event. The declaration of a Site Incident may identify when mitigating actions are required to prevent a radiation emergency occurring. To this end the possibility of a Site Incident developing into an Off-site Nuclear Emergency would be continuously assessed.

2.7.2 **Off-site Nuclear Emergency**

2.7.2.1 An off-site incident relates to a hazardous condition, which results, or is likely to result, in the need to implement protective action to protect members of the public beyond the site boundary from a radiological hazard. This may be supported by the site's boundary monitoring system data and indications (Emergency Plume Gamma Monitoring System (EPGMS)).

2.7.2.2 The declaration of an Off-site Nuclear Emergency identifies when mitigating action may be required to prevent a radiation emergency occurring or that a radiation emergency has begun.

2.7.2.3 A radiation emergency is as defined in REPPIR ("a non-routine situation or event arising from work with ionising radiation that necessitates prompt action to mitigate the serious consequences"):

(a) of a hazard resulting from that situation or event;
(b) of a perceived risk arising from such a hazard; or
(c) to any one or more of:
  i. human life;
  ii. health and safety;
  iii. quality of life;
  iv. property;
  v. the environment;"

2.7.2.4 In addition to the above, all events that may result in **an annual effective radiation dose of 1mSv or more** to one or more person(s) off-site over a period of one year following the event are considered to be a radiation emergency.

2.7.3 Radiation Emergency Phases

2.7.3.1 Managing any nuclear emergency comprises three main phases of Preparation, Emergency Response and Recovery:

Emergency Response			**Recovery**
Early PhaseThreat	Early Phase Release	Intermediate Phase	Long-term phase
Emergency Exposure Situation			Existing Exposure Situation

(replicated from Public Health Protection in Radiation Emergencies document)

2.7.3.2 **Preparation** (pre-planning). Preparing for radiation emergencies is an essential stage of managing any subsequent incident as it sets the conditions for the start of the response. Preparation covers the identification and training of people, the availability of infrastructure and equipment, the development of plans and operating procedures to guide coherent response activity and a validation process to ensuring these interlinked elements remain appropriate.

2.7.3.3 Emergency Response (mitigating an immediate risk or stopping things getting worse). The emergency response phase comprises two separate but closely-related and often overlapping challenges:

a) Early phase: - this activity covers response actions that are aimed at preventing or averting a nuclear emergency developing further and covers both the **threat of release** and an **actual release**. These will be focused on intervention actions taken at the site by the operator and supported by local responders and other national agencies within the nuclear industry. These actions will be supported at the local level by the Strategic Coordinating Group (SCG), led by the Strategic Coordinator with further support from the national level - the Scottish Government Resilience Room (SGoRR) in Scotland; and

b) Intermediate phase – this takes place when the release has been stabilised and further significant releases are unlikely. The response will focus on the best course of action to take to protect people and the environment in the intermediate and longterm.

2.7.3.4 Recovery – long term phase (a longer-term activity of rebuilding, restoring and rehabilitating the community) – This phase formally starts once the situation has been stabilized; i.e. the risk of further radiological release has been removed or reduced sufficiently for recovery to be warranted. However, preparation for the recovery phase will start at the HSCC (Hunterston Strategic Coordination Centre) during the response phase with the formation of a Recovery Working Group led by a local authority Chief Officer. Recovery from a nuclear emergency may be carried out at the local, national or UK level, depending on the scale of the event and its consequences. In contrast to the response phase, the recovery process can take a considerable amount of time (months or years), as it seeks to support affected communities in the restoration of the physical infrastructure and emotional, social, economic and physical wellbeing.

2.7.3.5 Once the emergency phase has passed and the immediate hazard to the public has been mitigated by the implementation of early protective actions, the role of the Strategic Coordinator will pass to the Chief Executive, North Ayrshire Council.

PART 3: PREPARATION

3.1 Participating Organisations

3.1.1 For the purposes of this Plan the Responding Organisation refers to all the participating organisations and agencies with a role to play. The primary purpose of the Responding Organisation is to respond quickly and effectively to an incident that has created or could produce a radiological or other hazard to members of the public living near to the site. The site tabard has been included in the plan however, the tabards for the other participating organisations have not been included as all agencies are well aware of each other's tabards due to joint training and integrated emergency management principles.

3.1.2 The organisations participating in these arrangements and their roles and responsibilities are detailed in **Part 7** of this document.

3.1.3 There are a number of additional plans which may be activated in support of this plan from a number of different organisations. Some, not all, may be listed within this plan and are shown *in italics*.

3.2 Response of the Responding Organisation

3.2.1 In the event of an Off-site Nuclear Emergency this plan calls for the following facilities to be opened, established and made operational (see table below for key facilities). These facilities aim to:

- Minimise the radioactivity released to the environment and bring the release to a stop as quickly as possible;
- Pass information to the authorities that helps them predict the distribution and duration of off-site doses so that they can determine the off-site protective action strategy from an informed position

• This section of the plan has been redacted	Will provide management of the site response to the incident. It houses the Emergency Controller and the support personnel who provide information collation and assessment services, expert advice and the ability to assign and track actions. The ECC would be established shortly after declaration of an emergency and would be manned for as long as was felt necessary. There are a number of facilities in which the ECC can be established.
• This section of the plan has been redacted	The Central Emergency Support Centre is established within 1 hour of declaration of a Site Incident or Off-Site Nuclear Emergency. The CESC provides a range of support functions for the site including technical /engineering assessments, communications / media management and radiological assessment. Once it is established it will take over the interactions with the off-site response and becomes responsible for the liaison with the Strategic Coordination Group and Central Government.

- This section of the plan has been redacted

All organisations will have representatives to participate in Strategic and Tactical meetings and manage the response to the incident at a multiagency level through sharing information, and agreeing strategies, decisions and actions.

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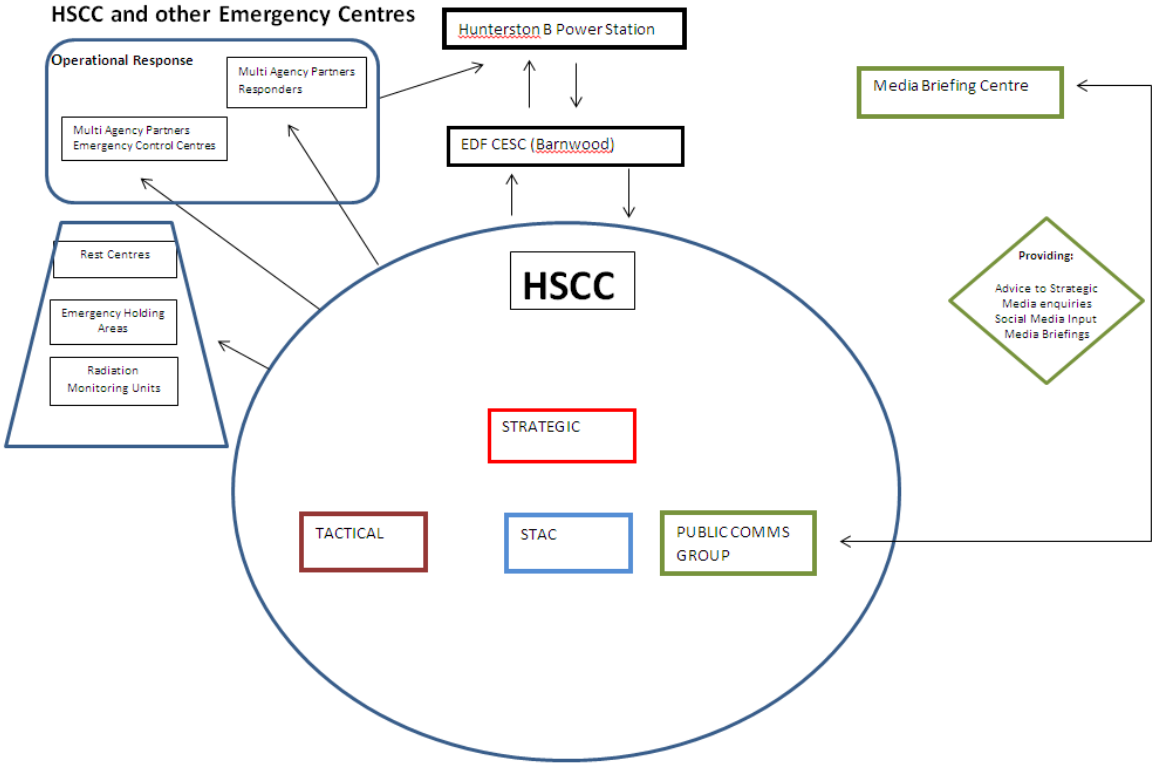
- This section of the plan has been redacted

This facility is separate from the HSCC and the Media Liaison Point and offers a facility which can facilitate large press briefings and manage the coordination of public messaging.

3.2.2 The arrangements to set up the CESC, HSCC and MBC start as soon as the declaration is made. Once the CESC is established, the Emergency Controller at the ECC hands over responsibility for advising on emergency actions outside the site to the CESC Controller and a company technical representative at the HSCC. The Emergency Controller retains responsibility for control of site activities from the ECC and for restoring the plant to a safe condition but liaison with all other organisations with duties under the emergency plan passes to the HSCC.

3.2.3 In the event of an On-site Incident, the CESC would be established, along with the MBC if required.

3.2.4 The diagram below indicates how information flows between the different centres and the site.



3.3 Emergency Workers Equipment including Dosimeter Provision and Training

3.3.1 On arrival at the site, all emergency personnel will be provided with a dosimeter which will measure levels of radiation and ensure that agreed limits are not reached. Emergency Staff should report to the site emergency controller who will be wearing the tabard below (red and white chequered). This will allow ease of movement within the DEPZ if necessary.

Image of Hunterston Emergency Controller Tabard

3.3.2 Those workers outwith the DEPZ area, for example, those at traffic control points, or working within the emergency centres will not require individual monitoring equipment as monitoring will be available via the fixed monitoring units or the mobile units which will be available**.**

3.3.3 There is an Impact Table at **Part 10** which describes the levels of exposure and the impact.

3.3.4 All personnel who are classed as emergency workers must be given some training in their role. Ideally, this will be part of their ongoing training programme and will include generic radiation awareness training and access to information on the site provided by EDF but if that is not possible then training will be available at the Access Control Point to the site where they will be briefed on their task and the risks associated with it and provided with appropriate PPE and RPE. On return they should report to the radiation monitoring unit for decontamination.

3.4 Definition of an Emergency Worker

3.4.1 REPPIR 2019 guidance states that “an emergency worker is someone who may take action to bring help to endangered people, prevent exposure of a large number of people, and prevent harm to the environment or save valuable property, plant or goods. To be in receipt of such exposures, their role will usually involve working on the operator’s premises or in the vicinity of the premises. For example in a detailed emergency planning zone during the radiation emergency. A volunteer from a voluntary organisation may be classed as an emergency worker if they have a defined role in the emergency plan and have been given appropriate training. However, a member of the public volunteering their services on the day of an emergency would not. People providing assistance in the handling of the radiation emergency but unlikely to be exposed to radiation arising from the radiation emergency (eg, people located remote to the premises) are not considered to be emergency workers”.

3.4.2 The DEPZ for Hunterston contains This section of the plan has been redacted households and as it is so few people, there is an expectation that they can self-evacuate. Only in cases where self-evacuation is not possible, will anyone else be expected to go into the DEPZ and they would receive appropriate training if required.

3.4.3 The REPPIR 2019 requires that training and equipment is provided to employees where there is the possibility of that employee receiving any exposure to ionising radiation and makes further provision for employees where an emergency plan is put into place.

3.4.4 Police, Fire and Ambulance staff all adhere to the limits laid down in the Ionising Radiation Regulations (2017) and all the organisations are aware that Regulation 19 of the REPPIR regulations disapplies Regulation 12 (Dose limitation) of the 2017 Regulations to an emergency worker who is engaged in preventing or mitigating the consequences of a radiation emergency.

3.4.5 No other organisations have staff with an emergency response role within the DEPZ and if there is a requirement for staff to enter into the DEPZ during an incident then they will be given training of the risks at the time. This also applies to voluntary organisations who may be assisting. However, it may be that some workers may have to enter into the DEPZ (or OPZ) to assist in the evacuation or the distribution of stable iodine tablets within the OPZ. These could include:

- Council workers (HSCP staff, bus drivers)
- Private hire bus drivers

3.4.6 Staff who are required to work within the RMU may be also be exposed and should receive training of their role.

3.5 Acute / Response Phase protective actions, Radiological Hazard

3.5.1 The operator's Consequence Report has defined an area around the site requiring protective actions from which North Ayrshire Council has determined the Detailed Emergency Planning Zone (DEPZ). A map of this area is shown at **Section 8.15.1**. In the event of a release of radioactive material from the site presenting a hazard to the public the following early protective actions may be recommended:-

Sheltering	Residents in the affected area will be requested to stay indoors with doors and windows closed and ventilation systems turned off. The benefits of sheltering is further explained in **Section 10.12**
Stable Iodine Tablets	Stable Iodine Tablets are pre-distributed to all households and premises in the DEPZ. The Telephone Warning system (PETIS) will be used to promulgate the message that they take these tablets in conjunction with either sheltering or evacuation. The pre-distributed Stable Iodine Tablets are securely packaged and are issued with a Government Advice Leaflet and an explanatory leaflet. Wider distribution of stable iodine will be decided by the STAC based on radiological conditions. They will advise the SCG as appropriate. Stable Iodine Tablets are shelf life items and it is the responsibility of NHS Ayrshire and Arran to ensure that those pre-distributed are kept in date. Distribution will be carried out by NHS Ayrshire and Arran using the residents list maintained by North Ayrshire Council.
Evacuation	The affected population can be evacuated in order to avoid (or potentially to avoid) relatively high short-term exposures. For those people within the area who are not residents, eg, walkers, boat users, etc, information will be given using all means available, to take immediate shelter in an adequate building (brick built structure). They will be advised that if this is not possible, they

should leave the area, possibly attending the Radiation Monitoring Unit, if established, for reassurance.

The Consequence Report has indicated that Evacuation would only be required to 300m and there are no properties within this area, Evacuation may be considered for properties near the site for prolonged or severe events on the advice of STAC.

Food and Water Control

Controlling potentially contaminated food and water supplies will be achieved through the duties placed on the appropriate UK statutory bodies and the equivalent for the Scottish Government ie, FSA, FSS, SEPA and Scottish Water.
Estimates published in the Consequence Report indicated that control of milk would be required to 41km and control of unprocessed leafy green vegetables to 43km downwind. However, it is acknowledged that the specific weather and incident conditions on the day will significantly influence where restrictions may be required.

3.5.2 The operator has estimated that the dose to the most exposed members of the public (taken to be someone outside, 100m directly downwind for 12 hours following the start of the release) in the absence of protective actions would be approximately 13.5 mSv effective dose. If stable iodine is taken in a timely fashion this would drop to approximately 4.5mSv. Assuming that shelter averts 40% of the inhalation dose, the dose avertable by timely sheltering is approximately 5.5 mSv." It would be expected that doses would be lower for those further away from the site or off the centre line of the plume

3.5.3 To avoid confusion in the first few hours, advice will take into account the difficulties which may be experienced by the Responding Organisations and the public if the recommendations on protective actions are changed at short notice.

3.5.4 The protection of the public is based on the principles of radiological protection as expressed by Public Health England (PHE 2019 PHE-CRCE-049):

a. All protection strategies should aim to do more good than harm (justification);
b. Protection strategies should aim to avoid the occurrence of deterministic effects (avoid deterministic effects);
c. Protection strategies for exposures below the thresholds for deterministic effects should aim to maximize the benefit achieved (optimization).

3.5.5 Continuous consideration of protection of the public will take place within the HSCC through the STAC (Strategic Technical Advice Cell) and / or the Strategic Coordinating Group including:

- Consideration of restrictions on the use of food, water and animal feed
- Protection of property, for example closing ventilation to minimise contamination of outdoor spaces, goods, etc
- Any other action concerning protection of members of the public, for example restrictions on ourdoor activities.

3.5.6 Within a few hours there will be sufficient radiological measurements together with an isotopic analysis of the release to make a fuller assessment of the hazard to members of the public and the protective measures may be continued, extended or terminated in line with advice from the STAC. PHE CRCE would advise the STAC on the radiological aspects of the situation.

3.6 Acute / Response Protective Actions Implementation Plan

3.6.1 Telephone Alert System (PETIS)

3.6.1.1 On receipt of the message alerting the police to an Off-site Nuclear Emergency, Police Scotland will:

- Request that EDF confirm when the automated telephone alert system (PETIS) has been activated by the CESC, advising those residents within the DEPZ to take shelter and to tune into the local television or radio stations.

- Issue a holding statement to the media and / or social media (**Section 3.15**).

3.6.2 Stable Iodine Tablets Issue

3.6.2.1 NHS Ayrshire and Arran have predistributed Stable Iodine Tablets to residents within the DEPZ. The Site Emergency Controller can authorise the immediate protective actions of sheltering and taking Stable Iodine Tablets, as agreed with NHS Ayrshire and Arran. These were distributed to all households in summer 2017 and are due to be redistributed in 2021.

3.6.2.2 The instruction to those in the DEPZ to take stable iodine tablets will be given on the declaration of an off-site nuclear emergency, unless there is a specific reason that this should not be done. This is to maximise the effectiveness of this protective action.

3.6.3 Evacuation

3.6.3.1 Any decision to evacuate sectors of the DEPZ will be made by the Strategic Commander based on the advice of the Site Emergency Controller, The CESC Controller or the STAC as appropriate. They in turn will base their advice on the results of the mobile radiation monitoring teams (both on and off site), local weather conditions and estimates from the station operators of the scale and likely duration of the radioactive release.

3.6.3.2 Police Scotland will request the local authority to open a designated Rest Centre. See **Part 10** and further details are contained within the *Care for People Community Emergency Support Centre procedural documents.* It is likely that the Rest Centre will also be used as an Evacuation Holding Area where people will be able to go through a dry decontamination process before being transported to the Radiation Monitoring Unit Radiation monitoring can be carried out in accordance with the Public Health England document, *Standard Operating Procedure for Public Decontamination at Evacuee Holding Areas*.

3.6.3.3 Police Scotland will be responsible for progressing any evacuation of DEPZ sectors that may be decided upon by those managing the response. Evacuation will be progressed in the manner most appropriate to the circumstances taking cognisance of Police Scotland intervention levels contained within **Part 7.**

3.6.3.4 Police Scotland have no powers to compel people to leave their homes. In the event of occupants refusing to evacuate, they will be advised to shelter in their homes.

3.6.3.5 If the decision to evacuate one or more DEPZ sectors is taken, Police Scotland will require the support of relevant organisations:

- the HSCC/MBC will ensure suitable messages are broadcast to support any evacuation required.
- EDF Energy will contact each of the premises in the designated sector using the automated message warning system or such other measures as may be appropriate and explain the need for evacuation, transport arrangements and the location of the Rest Centre or Evacuation Holding Area.
- EDF Energy will refer the residents to the emergency arrangements contained within the *Hunterston Power Stations Emergency Information for Local Residents Calendar.*

3.6.3.6 A list of the premises within the DEPZ is available from the local authority (based on the address list for the calendar, which is issued every December) and a copy should be forwarded to the rest centres / evacuation holding areas. Each household will complete the Registration Card attached to the *Hunterston Power Station Emergency Information for Local Residents Calendar.* On leaving the area this card should be passed to the police officer at the Police Access Control Point. All of this is clearly explained within the calendar which they receive annually.

3.6.3.7 Police Scotland will also:

- Ascertain whether any transport is required and if so advise the Police Tactical Commander, who will make the necessary arrangements through the local authority.
- Officers will liaise with the local authority in documenting all persons arriving at and leaving the centre.
- Request people being evacuated to check in at the Rest Centre, even if they intend to stay with relatives or friends out with the evacuated sectors so that they can be confirmed as having left the area.
- Obtain medical advice before effecting the removal of any person who is chronically ill, confined to bed or housebound.
- Set up Casualty Bureau if required.

3.6.3.8 To assist the police in identifying which properties within the DEPZ have been evacuated, residents are asked to hang a sheet within a front window of their property before leaving. This is also explained in the calendars they receive annually.

3.6.3.9 It may be that the fault in the reactor could result in a release which could be considerably greater and last for a longer duration. This could lead to the recommendation that protective actions of shelter and stable iodine be extended further downwind. Further details are available at **Part 9** and in the OPZ Annex.

3.7 Later Protective Actions, Radiological Hazard

3.7.1 Whilst the collection of milk, locally and grown foodstuffs will commence so that the imposition of longer term protective actions may be considered by the STAC and appropriate advice given to the SCG. Source and drinking water samples will also be taken as required. This data will enable the STAC to consider any longer term protective measure. As soon as possible, those living within the DEPZ should be provided with the advice not to eat uncovered food / garden produce or drink from exposed water sources until it is safe to do so. This is carried out by Environmental Health Officers and other relevant agencies.

3.7.2 If protective actions are required to be extended into the OPZ then there are arrangements to evacuate further areas or to provide Stable Iodine Tablets. Where this is required the NHS will arrange further distribution of the Stable Iodine Tablets, as appropriate, to other affected individuals when they have been evacuated to a Rest Centre. NHS Ayrshire and Arran may ask other Category 1 responders to assist with the actual distribution of Stable Iodine Tablets. It is important that there is a balance between the expected harms and benefits of any particular protective action so as to maximise the benefit of that action.

3.7.3 Protection strategies should be predicted to do more to mitigate the radiation emergency and facilitate transitions form the emergency to an existing exposure situation (Recovery phase) than to increase its duration or consequences taking into account:

a. The health risk arising from exposure to ionising radiation as a result of the radiation emergency in both the long and the short term;
b. The economic consequences of the radiation emergency
c. The effects of the disruption, both on the premises and the area immediately surrounding it and on the public perception of the effects of the radiation emergency.

3.7.4 The SCG will be constantly reviewing the release or predicted release and weather conditions to determine if a modification of the protective action strategy is required. This will include, seeking to benefit from a period where the release rate is relatively low, or the wind out to sea, to temporarily lift shelter instructions to allow people to organise themselves better (reunite families, obtain necessary supplies, voluntary evacuations, etc). These variations will be communicated to the affected population using the telephone warning and informing system (PETIS) and local media.

3.8 Pre-determined Information and Dose Levels

3.8.1 Arrangements for the provision of radiation protection advice and the control of exposure to radiation of employees on site are the responsibility of the site operator. The management of emergency exposure during any radiation emergency for identified site intervention personnel is detailed in the relevant *On-site Emergency Plan* and follows ALARP principles. Whilst the emergency services have listed below their individual intervention levels all intervention will be conducted in such a way to minimize exposure.

3.8.2 REPPIR 2019 Regulation 2(1) states that an Emergency exposure is “an exposure of an employee engaged in an activity of or associated with the response to a radiation emergency or potential radiation emergency in order to bring help to endangered persons, prevent exposure of other persons or save a valuable installation or goods, whereby one of the individual dose limits referred to in paragraphs 1 and 2 of Part 1 of Schedule 3 to the 2017 Regulations could be exceeded. The management framework to be used by agencies with staff identified as being likely to deploy in the event of a radiation emergency is as follows:

Pre-Planning will:

- Identify people who can receive emergency exposures;
- Train and equip people to conduct likely intervention tasks;
- Have arrangements for medical surveillance and dosimetry;
- Name those responsible for managing emergency exposures;
- Specify limits of emergency exposures

Implementation will:

- Check the fitness of people who will receive emergency exposure;
- Check properly equipped and instructed for intervention task;
- Manage emergency exposures by limiting dose levels except in extreme circumstances to save life;
- Assess the dose received during emergency exposure.

Record Keeping

- Ensure dose records are kept by approved dosimetry services;
- Provide copy of dose record to employee;
- Report any emergency exposure and resulting action to ONR.
- Have arrangements for medical surveillance and dosimetry;
- Name those responsible for managing emergency exposures;
- Specify limits of emergency exposures.

3.8.3 Any workers who would be required to operate in an area of potential exposure (or are already within the area of the time of the potential exposure) may be exposed to a level below 20 mSv, which is in the current Ionising Radiation Regulations and adheres to the ALARP principles.

3.8.4 Estimates have been provided by the operator of the expected dose rates at two distances downwind of the release point over the five hours of the release phase of a reference accident for people who have not and who have taken stable iodine before entering the plume are shown below. There is information available within the HSCC about what these doses mean in layman's terms for improved understanding:

Distance downwind / M	Unprotected dose rate mSv/per hour during the release (5 hours)	Protected dose rate if stable iodine is taken before exposure mSv/per hour during the release (5 hours)
Between 100m and 300m	2.0	0.6
Between 300m and 1km	0.8	0.25
1km and further	0.2	0.06

(from Estimates of Radiation Doses to Off-site Responders to a Nuclear Emergency: Look Up Tables for Estimates of Maximum Dose – 11 March 2020).

Note: *these are estimates based on a reference accident.* They should **not** be used in a real event without advice from a health physicist or RPA.

3.8.5 Somebody working 100m downwind **unprotected** by stable iodine could be inhaling radioactive dusts and gases sufficient to give a dose uptake rate of 2mSv an hour. If they were there for two hours their dose would be 4mSV if there for 30 minutes their dose would be 1 mSV. (t*hese rates are approximate).*

3.8.6 The above table can be used as the basis for the risk assessment for a task that requires someone to go through the cordon into the affected area. For example, a homecare worker going to support an infirm person in their home or an ambulance crew responding to an emergency. This is further explained within the wallcharts within the HSCC.

3.8.7 Firstly, an estimate would be made of the downwind distance the worker would be working at, including the travel route. If this is more than 100M but significantly short of 1km then the dose rate at 100M would be used. If the distance was about or more than 1km then the 1km distance would be used.

3.8.8 The prevailing wind for the area comes from the south west, so this would blow from the site towards the north east of the site. There is a wind rose for Prestwick on the Met Office website.

3.8.9 A planned entry into the affected area should only be undertaken by someone who has taken the appropriate dose of stable iodine tablets and in this case, the dose rates should be those in the protected column. By multiplying this dose rate by the estimated time the responder will be within the plume you get an upper bound of the responder's potential dose to include in the risk assessment to determine if the task should be undertaken or delayed until the dose rates drop further.

3.8.10 If exposure to radiation is an expected result of a mission into the affected area then all reasonable steps to reduce that dose should be taken including:

- Consideration of the route to be taken in and out of the area – minimise time downwind of the release and maximise the distance downwind where possible;
- Do the job as quickly as practical (consider bringing the person being cared for out of the area rather than giving the care in the area if practical);
- Delay the care, balancing the resulting detriment against responder dose

3.8.11 Any staff member going into the affected area will be provided with "just in time" training and information prior to entering.

3.9 Dose Limits / Monitor / RPA

3.9.1 The dose limits used in the *Ionising Radiations Regulations 2017* and all responders, through their RPA will adhere to these unless there is a need for an employee to help endangered person, prevent exposure of other persons or save a valuable installation or goods when an **emergency exposure** may be received. Only those classed as **emergency workers** under the legislation will be permitted to receive an emergency exposure rate.

3.10 Emergency Dose Levels to Employees

3.10.1 REPPIR 2019 states that exposure to radiation should be as low as reasonably practical and must prioritise reducing doses to all persons to be low an effective dose of 100mSv but does permit a level of 500mSv in exceptional circumstances. A table demonstrating the effects of varying levels of radiation is available in **Part 10**

3.10.2 In addition to the above, the three emergency services will adhere to the intervention levels laid down in the *Ionising Radiation Regulations 2017 as listed below:*

3.11 Intervention Levels

3.11.1 Intervention levels for the emergency services are contained within the Roles and Responsibilities section at **Part 7**.

3.12 Disapplication of Dose Limits

3.12.1 Should it be required, Regulation 19(1) of the Regulations provides for the disapplication of dose limits where necessary to respond to a radiation emergency. Disapplication of dose limits can only be done on instruction by the employer and, most likely, on the advice of the RPA for each organisation. In the case of **those responding to an incident at** Hunterston B, there will be no individuals authorised to receive a dose above that in the IRR 2017 as staff will be rotated to ensure that the limit is not breached.

3.13 Understanding of Emergency Reference Levels (ERLs)

3.13.1 The criteria upon which the advice to introduce early protective actions is based on the guidance presented to the Government by the PHE CRCE in their document *Public Health Protection Radiation Emergencies (PHE CRCE 049)* published in May 2019 and the table below has been replicated from the document.

Recommended ERLs for the planning of sheltering-in-place, evacuation and the administration of stable iodine

Protective Action	**Effective dose or organ dose**	**Averted dose (mSv)[a]**	
		Lower	**Upper**
Sheltering	Effective	3	30
Evacuation	Effective	30	300
Stable Iodine	Thyroid[b]	30	100

[a] in recognition of their higher cancer risk, the doses are those potentially averted in young children
[b] mSv equivalent dose to the thyroid

3.13.2 Emergency Reference Levels are dose criteria that apply to the justification and optimisation of sheltering-in-place, evacuation and administration of stable iodine. They are most appropriately expressed in terms of averted dose (mSv effective dose or mSv equivalent dose to the thyroid), over a period of up to 7 days following a release. ERLs are provided in pairs. The upper and lower ERLs are indicative, rather than precise values. The lower ERL indicates the likely balance of averted dose against all the other consequences of implementing the protective action in situations that are favourable for its implementation. The upper ERL indicates the likely balance in unfavourable circumstances, for example, where there is only outline planning, weather conditions are extreme or larger numbers of people are involved. ERLs recommended by PHE for the planning of sheltering-in-place, evacuation and administration of stable iodine are given in the table above.

3.13.3 It is vital that regular consideration is given to revising the emergency levels to those contained within the IRR 2017 during any incident. This will be considered by the Strategic Coordinating Group within the HSCC on the advice of STAC. The regulations also state that the Secretary of State may also set a reference level if required.

3.14 Resources for Response (ability to sustain a response for 24 hours)

3.14.1 REPPIR 2019 expects that there are sufficient resources available for a response. The local responders should ensure that they have adequate cover to sustain the running of the HSCC for a period of 24 hours. EDF and the ALRP have developed a training programme which runs regularly to ensure that there is a pool of sufficiently trained staff to respond. It is, however, the responsibility of the individual responding organisations to prepare, revise and test their operational procedures described within this plan.

3.15 Holding Statement and Warning and Informing

3.15.1 A public telephone warning system (PETIS) has been established by the site operator. It is the policy for EDF for the message to be activated by CESC and **not** by the Hunterston site. The undernoted message is to be passed to residents within the DEPZ without delay:

HUNTERSTON "B" MESSAGE
"This is a message from EDF Energy - Nuclear Generation. An Off-site Nuclear Emergency has been declared at Hunterston "B" Nuclear Power Station. Please stay indoors and shut all doors and windows. Take your Stable Iodine Tablets as instructed in the leaflet. Tune into local

radio and television for further information." You should also refer to the emergency arrangements contained within *Hunterston Power Stations Emergency Information for Local Residents Calendar.*

3.15.2 Once the message is relayed to the DEPZ, EDF should **immediately** inform Police Scotland Service Overview. The target time for EDF to carry out this is within one hour of the Off-Site Nuclear Emergency being declared.

HOLDING STATEMENT FOR HUNTERSTON
Police Scotland, Corporate Communications will issue the following approximate media message.

"Police Scotland and other emergency services are currently at Hunterston B Power Station, Ayrshire after a report was received of an incident occurring at (insert time) on (insert date).

Enquires are ongoing to establish the nature of the incident but early indications are that there may be a risk to the public in the immediate vicinity.

As a precaution, residents within the Detailed Emergency Planning Zone; the area immediately surrounding the power station are being advised to take shelter indoors and tune into local television or radio stations or check social media channels for further information which will be made available as soon as the facts are confirmed.

NOTE TO NEWS EDITORS:
Staff from Police Scotland, Corporate Communications are en route and will be establishing a Media Briefing Centre at This section of the plan has been redacted ***indue course.***

Media will be alerted to the timings of the briefings once the centre is established. All further media statements on this incident will be made through the Media Briefing Centre only."

Further statements will be discussed and agreed at the PCG (Public Comms Group) (see **Section 6.15**).

3.15.3 **Agreed Guidelines**

3.15.3.1 The provision of information to the public following an off-site release of radiation is a legal requirement. This provision requires coordination to ensure that consistent information is being provided by the responding organisation s at the HSCC.

3.15.3.2 This information may be provided to the public by a number of different routes:

- Directly to the media present at the media briefing centre via press releases, statements, press conferences or one-to-one interviews.
- By fax or e-mail directly to media outlets.
- Via public help lines operated by participating organisations (N.B. Police Casualty Bureau is not a public information helpline).
- By public information broadcasts on TV or radio networks
- By social media through the agencies involved twitter addresses
- Via NHS utilities such as doctor surgeries, health centres and hospitals

3.15.3.3 A **Public Comms Group (PCG)** will be established to develop strategic media issues, to coordinate the release of public information, and also to ensure that all parties who need to see the information have done so and that they are satisfied with the contents.

3.15.3.4 The arrangements for the HSCC provide for the appointment of a PIC (Public Information Coordinator) by Police Scotland who will attend the SCG meetings to ensure that information cleared for release to the public is clearly identified. Each organisation will be expected to liaise with the PIC in respect of all information routes identified above.

3.15.3.5 The PIC will ensure that a full record of all statements issued from the HSCC and from organisations away from the Centre is maintained.

3.15.3.6 It is recognised that different organisations have different needs, however public safety must have primacy. The anxiety of any group to address its own agenda must not be allowed to divert from the primary objective of resolving the incident and getting essential information into the public domain quickly and efficiently.

3.15.3.7 It is vital that press officers work closely together, and it is important that staff remaining in public relations functions at organisational headquarters do not issue any statements without consulting their colleagues at the HSCC beforehand. It is therefore suggested that the following guidelines are followed before information is released to the media:

- All relevant press statements relating to the management of the incident must be seen by each of the agencies before they are issued. Basic company statements containing background information do not come into this category.

- All participants involved in the public relations effort must restrict their comments to areas of their own expertise. In the unlikely event of a conflict of interests between parties the PIC will arbitrate to ensure that conflicting briefings are not issued.

- **Matters relating to casualties - deceased or injured - will be handled by Police Scotland**. Under no circumstances should anyone else issue this information, as only the Police will be fully aware whether next of kin have been notified.

- All statements should be clearly marked with the name of the issuing organisation, the release number, time issued and the name of the responsible person who can be contacted for more information

3.15.3.8 Co-ordinated communications with the public through the PCG will continue throughout the incident until its end. The specific messaging will depend on the incident but will use a range of methods including, but not limited to:

- Approved media statements;
- Media interviews;
- Social media;
- Use of the PETIS system;
- Door to door visits within the DEPZ;
- Communications with rest centres, if open;
- Internal communications within involved agencies.

3.15.3.9 A dedicated telephone number may be made available which the public can access which will be able to provide information.

3.16 Information to the public in the event of a PERCEIVED emergency

3.16.1 The REPPIR 2019 regulations also require the off-site plan to consider **perceived risk** which may arise from a situation or an event. For example a fire at the site which does not pose any risk for a radiation release however, the public may be alarmed by the smoke and by the number of emergency vehicles making their way to the site. To this end, it is important that the site informs other agencies **in the first instance** that an incident has occurred at the site but that it is not a radiation emergency and this should be included in their initial METHANE message.

3.16.2 If any agency receives information from a source other than the site regarding an incident at Hunterston B they should **in the first instance** make contact with Hunterston B to get confirmation of what has occurred. A telephone number has been provided to relevant agencies to confirm an incident at the site if they receive notification from anyone other than the site.

3.16.3 A PETIS message will **not** be issued to the residents within the DEPZ however, further details on non-nuclear incidents are explained within the calendars.

3.16.4 Utilising PETIS for a non-radiation incident is likely to alarm residents, especially if the incident occurs when they are sleeping and they could well otherwise be totally unaware of any incident.

3.16.5 It is important that this information is provided to the public as soon as possible and the following Holding Statement for Non-Radiation Emergencies should be issued as soon as possible:

3.16.6 **HOLDING STATEMENT FOR NON RADIATION EMERGENCY INCIDENTS AT HUNTERSTON**

Police Scotland, Corporate Communications will issue the following approximate media message.

"An incident has occurred at Hunterston B Nuclear Power Station. Please note this is not a radiation release and there is no risk from radiation and there is no risk to the public.

The ongoing incident is a *[insert incident type]* and further updates will be available on social media.

PART 4: RESPONSE AND RECOVERY

4.1 Emergency Response: Early Phase

4.1.1 Declaring an Emergency

4.1.1.1 **Declaration of an Emergency** - The Emergency Controller or his nominated deputy is responsible for declaring a Site Incident or Off-Site Nuclear Emergency (**Section 1.1 and 1.2**).

4.1.1.2 A declaration or initiation of the emergency response organisation will be made as early as possible when it is suspected that normal control or management of the site cannot be maintained or site lockdown is required. This enables the emergency response organisation to be in place prior to full consequences of the event occurring. **By taking a conservative and precautionary approach it is accepted that the emergency arrangements may be invoked without becoming operational.**

4.1.2 Conditions for Taking Emergency Actions

The Hunterston "B" reactors are fully equipped with automatic protection systems and key reactor plant information is displayed in the control room. In the event that this information indicates abnormal conditions, for example, a sudden loss of gas pressure, an unexpected rise in reactor temperatures, a Site Incident or Off-site Nuclear Emergency will be declared. Conditions for taking emergency action are shown below

4.1.3 Site Incident

Declaration	Condition	Response/Actions
Site Incident	Conditions as stated in the Hunterston "B" Emergency Plan (On-site Plan), ie A hazardous condition which is confined in its effect to within the boundary of the site determined in part by Emergency Plume Gamma Monitoring System (EPGMS) data and indications	Declaration by Site Emergency Controller or nominated deputy. Initiate notification procedures at **Section 1.1** Site staff would form an Emergency Response Organisation under the direction of the Site Emergency Controller, who is also responsible for providing advice to the emergency services and the NHS on any measures to protect the public and initiating all emergency action necessary to protect the workforce. Technical support to the site is provided by the Central Emergency Support Centre (CESC), Barnwood. The MBC will be opened if required. See **Part 7** for individual Agencies agreed actions

4.1.4 Off - Site Nuclear Emergency

Declaration	Condition –	Response/Actions
Off-Site Nuclear Emergency	Conditions as stated in the Hunterston "B" Emergency Plan (On-site Plan),ie A hazardous condition which results, or is likely to result, in the need to consider urgent protective actions to protect the public outside the boundary of the site which may be supported by (EPGMS) from a radiological hazard	Declaration by Site Emergency Controller or nominated deputy. Initiate notification procedures at **Section 1.2** Site staff would form an Emergency Response Organisation under the direction of the Site Emergency Controller. Arrangements to set up HSCC and MBC start as soon as declaration is made. The site continues to provide advice until such times as CESC is operational. HSCC takes over responsibility for advising on off-site emergency actions and liaison with external agencies. The Site Emergency Controller retains responsibility for control of restoring the plant to a safe condition and liaison will take place between the Emergency Intervention personnel. HSCC and MBC coordinated by Strategic Coordinator (Senior Police Officer in emergency phase passing, at an agreed time to the Chief Executive of North Ayrshire Council for the recovery phase). The Strategic Coordinator is responsible for decisions relating to public safety. Technical support to the site is provided by the Central Emergency Support Centre (CESC), Barnwood. See **Part 7** for agreed actions of individual agencies.

4.1.5 Mitigatory Action

4.1.5.1 The site will take protective action to reduce radiation exposure including:

- Reducing and where possible, preventing the potential for conditions to develop that would result in exposure or a release of radioactive material requiring emergency response action on and off the premises;
- Mitigate source conditions that may result in exposure or a release of radioactive material that require, or are likely to require urgent or longer term protective actions on and / or off the premises; and
- Prevent escalation of an emergency and to return the facility to a safe and stable state.

4.1.5.2 In the event that there is some notice that an incident may occur then there is an opportunity for organisations to better prepare. This can be done by:

- provide advice on what protective actions they should take
- allowing time to make arrangements for vulnerable people within the DEPZ
- allow time to consider how the wider public should be informed and what arrangements they should be making

4.1.6 Responsibility for Declaring or Standing Down an Emergency

4.1.6.1 **Cancellation of Declaration:** The process to cancel any declaration state once the conditions of the site have been brought under control is as follows:

- **Site Incident** – The Site Emergency Controller may cancel the declaration; consulting with the Central Emergency Support Centre (CESC) if operational. This decision will be relayed to the Police to allow local responders to be briefed.
- **Off-site Nuclear Emergency** – The Site Emergency Controller, in consultation with the CESC and ONR may cancel the declaration. The SCG is to be informed of the decision through the Company Technical Advisor (CTA) to allow the wider response strategy to be updated. The STAC Chair is responsible for ordering the cessation of urgent protective actions. The SCG will agree to cancel any Major Incident declaration.
- For standing down an off-site Nuclear Emergency, the PCG will ensure that a press release / statement is issued through multiple channels, including:
  - Media channels (both press and broadcast)
  - Social media
  - websites

4.1.7 Agendas and Attendees

4.1.7.1 A full pack of agenda exemplars and attendees is found at **Part 6**.

4.1.8 Evacuation Arrangements

4.1.8.1 Public Health England has developed a Standard Operating Procedure which can be put in place at a rest centre (or other suitable facility) which is used as an Evacuation Holding Area. This is led by NHS Ayrshire and Arran. There is also a plan available for the evacuation of Isle of Cumbrae and Police Scotland have generic arrangements for evacuation of areas.

4.1.9 Roles and Responsibilities

4.1.9.1 This section details the agreed roles, responsibilities and actions of those agencies expected to respond to a Site Incident and an Off-site Nuclear Emergency at Hunterston “B” Nuclear Power Station. It is for each responding agency to ensure that it has adequate internal plans and resources to meet commitments under this Plan. Full roles and responsibilities are found at **Part 7**.

4.1.10 RPA – Roles and Responsibilities

4.1.10.1 A number of organisations have their own RPA. An RPA must have the knowledge, experience and competence required for giving advice on occupational and public exposure to assist with the employer’s preparations for responding to an emergency. For further information please refer to the RPA for your organization.

4.1.10.2 EDF make relevant information available to RPAs as required by the planning process.

4.2 Emergency Response: Intermediate Response

4.2.1 MBC / PCG

4.2.1.1 Throughout the emergency, the Media Briefing Centre and the Public Communications Group will be continually updating the media messages following the release of the initial holding statement which will take place almost immediately that an incident is declared.

4.2.1.2 There will be press conferences taking place regularly and there is also a Media Liaison Point at Fairlie Marina from where the site can be seen.

4.2.1.3 There are TVs placed around the HSCC which are capable of being used to update the HSCC internally or to connect to local / national TV news channels. The Briefing Area (situated in front of the TiiMS machine) within the HSCC consisting of numerous whiteboards. These will be updated regularly by Police Scotland. Similar arrangements are available at the MBC.

4.2.1.4 An agenda is available for the Public Comms Group at **Part 6.**

4.2.1.5 The public will be seeking information most likely, as follows:

The public will need to know:	• Basic details of the incident: what, where, when (and the who, why and how, if possible) • Implications for health and welfare • Advice and guidance (eg, stay indoors, symptoms, preparing for evacuation, etc) • Reassurance
The public will want to know:	• Other practical implications such as the effect on normal routine, power supplies, telephones, schools, water supplies, food, etc. • A helpline number • What is being done to resolve the situation
Broadcasters will require:	• Well thought out and joined up media briefing arrangements between emergency services, local authority and other organisations, capable of providing agreed information at speed. • An immediate telephone contact • A media rendezvous point close to the scene

4.2.2 Strategic Decisions on Protective Actions

4.2.2.1 The operator will have issued the initial protective actions to be taken within the DEPZ and any further decisions relating to further protective actions either within the DEPZ or the OPZ (or areas within it) will be taken at the HSCC during the regular meetings based on information from the on and off-site monitoring equipment and the situation within the site. The situation will be kept under review and the protective actions will be withdrawn or reduced in extent as early as is sensible in order to allow the community to return and for economic activity to resume albeit probably subject to some restrictions which will be kept under review and withdrawn when appropriate.

4.2.3 Optimisation and Justification

4.2.3.1 The ACOP (771) advises that "protection strategies should be optimized and require a balance to be struck between the expected benefits and detriments of introducing particular protective actions, so that the margin of benefit over detriment is maximized. This applies to all consequences of implementing protective action including radiation health risks, wider health risks (including psychological impact); consequential injuries, economic consequences; social and environmental factors."

4.2.3.2 Whilst there are no towns within the DEPZ, early consideration will need to be given to the towns in the path of the plume closest to the site. Early consideration should also be given to the advice being provided to Isle of Cumbrae owing to the logistics of getting people off the island should evacuation prove to be necessary. This has been further considered as part of the OPZ arrangements and are included in an Annex to the North Ayrshire Council Civil Contingencies Plan for Response and Recovery.

4.2.3.3 Should there be a requirement to extend protective actions to areas within the OPZ this will conveyed by public messaging.

4.2.3.4 Careful consideration will be given to extending protective actions beyond the DEPZ by the STAC to take account to the consequences listed above. The harm which may be caused to a large amount of people trying to flee from the area could be far worse than the effects of the radiation they may be exposed to.

4.3 Emergency Response: Recovery

4.3.1 What is Recovery

4.3.1.1 Recovery will be considered almost from the outset of any incident and arrangements are in place for the establishment of the Recovery Working Group. Recovery (unlike Response) is led by the Local Authority and when the incident is handed over to the local authority from the Police a Handover Certificate will be completed **Section 6.25**.

4.3.1.2 Recovery is defined as 'the process of restoring and rebuilding the community in the aftermath of any incident'. Recovery requires the direct involvement of those who understand the complexity of working with people and communities, and their relationships with the services, systems and infrastructure that supports them. Management at all levels needs to be flexible, adaptable, and where necessary, innovative in its approach.

4.3.1.3 Recovery is a complex social and developmental process, the manner in which recovery is undertaken is critical to its success. Although the role of the Recovery Working Group (RWG) comes into its own when the emergency phase is over, **it is essential that recovery is considered as soon as it is apparent that off-site contamination is likely to occur**. The RWG will therefore establish a core group at the **outset of a radiation emergency.**

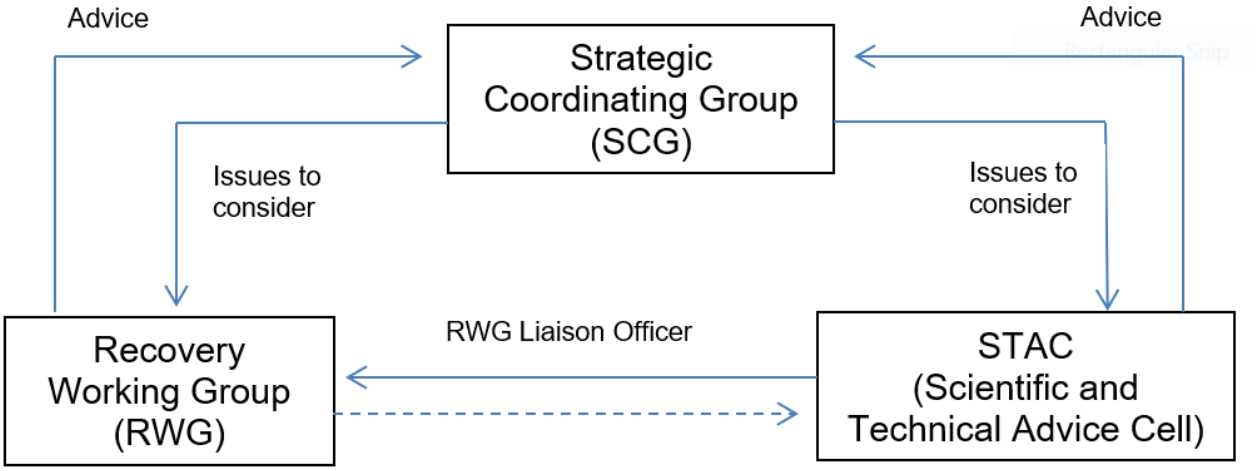
4.3.1.4 The role of the RWG is to characterise the extent and nature of the off-site contamination, and identify options and strategies for clean-up of contamination and disposal of wastes, taking into account the principles of justification and optimisation. It should identify priorities, timescales and costs for the options, propose options for consideration by the SCG and prepare plans for their implementation through the Tactical Group. It will advise on, assess recovery monitoring and maintain records of actions

4.3.1.5 Key issues, requiring resolution may include the following:-

- What is the level of contamination, extent, nuclide composition?
- How effective are protective actions at removing radioactivity or reducing doses?
- What are the doses with and without the protective actions
- What are the doses to the people implementing the protective actions?
- What are the resource, time and cost implications?
- Are there important issues related to the timing of the incident?
- Are there important issues related to other aspects, e.g. to the environmental, economic, social, cultural, ethical, political etc. dimensions?

4.3.1.6 During the emergency phase the RWG Chair will present advice to the Strategic Coordinating Group (SCG) through the Chief Executive, North Ayrshire Council for decision and action.

In Response



4.3.1.7 There are a number of subgroups that will sit underneath the Recovery Working Group and will provide updates at the Recovery Working Group meetings including:

- Care for Affected People
- Community Engagement / Liaison
- Finance / Compensation
- Business and Economic Recovery
- Environmental and Infrastructure
- Public Comms

The RWG will draw on international and national guidance concerning intervention following nuclear incidents in undertaking its work.

4.3.1.8 Such policies should establish a coherent framework for the sustainable rehabilitation of living conditions in areas with long term contamination. It should provide a way of integrating and coordinating an approach involving all stakeholders and dimensions. This involves direct involvement of the public and local professionals.

4.3.2 Decontamination and Restricted Access and Access Measures

4.3.2.1 A study undertaken for NEPLG has shown that, even for a UK nuclear reactor incident the amount of decontamination and restricted access measures to safeguard the public from direct radiation exposure is likely to be limited.

4.3.2.2 Some decontamination might be considered desirable to minimise short-term exposures, but in this case, relocation of the population for a few days, to allow decay of short-lived material, is also an option. More details to assist on relocation / evacuation of the population is available in the OPZ section of the plan.

4.3.3 Environmental Monitoring and Impacts

4.3.3.1 The chances of widespread decontamination occurring are extremely remote. However, the study undertaken by NEPLG also showed that a reference incident could have an impact on local agricultural produce. In such circumstances, European Union maximum permitted levels for radionuclide's in foodstuffs are likely to be exceeded out to a distance of about 25km from the site. EDF's Consequence Report states that advice be issued within 24 hours to restrict consumption of leafy green vegetables, milk and water from open sources / rain water downwind of the site to a distance of 43km. This would require statutory interdiction by the FSS in order to prevent contaminated foodstuffs entering public supply and which would need to be managed as a waste. The report also states that the variables of weather on the day will have a significant impact on where restrictions may be necessary and therefore 43km is only an indicative start point and an assessment by FSS would be necessary to confirm the required extent of any restrictions.

4.3.3.2 The monitoring of radioactivity present in the environment as a result of a radiation emergency will continue throughout the recovery phase coordinated by the RWG.

4.3.3.3 For minor contamination resulting from relatively small incidents, the recovery work may be delegated in its entirety to the site working on the basis of advice from the STAC.

4.3.3.4 For more serious contamination resulting from larger incidents the responsibility for management of the recovery responsibilities should be carried out directly from the HSCC under North Ayrshire Council control (assuming that by this time the Council has taken over from the police). The Council will draw upon the site expertise and resources as appropriate.

4.3.3.5 In the unlikely event of an Off-site Nuclear Emergency leading to a significant spread of radioactivity in the environment, key considerations for environmental monitoring are:

- The PHE CRCE will be responsible for the coordination of the monitoring programme and take the lead in the interpretation of the results however, individual organisations will remain responsible for the management and safety of their equipment and personnel.
- Supporting additional monitoring units from the UK Nuclear Industry will be used to provide comprehensive coverage (operator's other sites, other operators, MOD, etc). RIMNET will be used as the agreed channel to bring together monitoring results, and managed by DEFRA.
- In addition to the above the following monitoring will be carried out:
    - **People Monitoring:** NHS Ayrshire and Arran are responsible for activating local facilities for monitoring in relation to people, specifically to provide reassurance to members of the public. Additionally, monitoring resources from nuclear operators would be made available to provide assistance in undertaking personal monitoring as part of public reassurance measures.

- **Environmental Monitoring:** SEPA has contactors who carry out environmental monitoring programmes in support of their regulatory responsibilities including surveys of radiation levels and radiochemical and spectrometric analysis of raw water sources which are used for drinking water supplies and monitoring of radioactive fallout in air and rain. SEPA also carries out routine monitoring of the food chain in coordination with FSS in support of its regulatory activities.
- **Food Monitoring:** FSA/ FSS is responsible for arrangements for monitoring and food sampling and assessing the results to define any area to be subject to food advice and controls. In the early stages following an incident FSA may take environmental samples as a surrogate for food in order to refine their advice. Environmental Health Officers are principally responsible for monitoring food in the retail chain. Trading Standards Officers are responsible for screening potentially contaminated non-food goods.
- **Water Monitoring:** utility companies and authorities are responsible for ensuring the portability of public drinking water supplied to their customers – including its radioactive content – and identifying potentially contaminated water supplies. Local Authorities are responsible for ensuring the continued wholesomeness of private drinking water supplies serving multiple premises.

4.3.5 Radioactive Waste

4.3.5.1 The Food Standards Scotland (FSS) will provide up to date risk assessment advice to determine if food is fit for human consumption. In the event that food is not fit for human consumption, disposal of radioactive waste will take place in accordance with Scottish Environment Protection Agency (SEPA) (who implements the requirements of the *Radioactive Substances Act) Guidelines.*

4.3.5.2 In the context of an Off–site Nuclear Emergency, milk is an important foodstuff because it is produced continually in large quantities. However, the availability of both practical advice and policy level guidance on the management of contaminated milk is limited.

4.3.5.3 Both the FSS and SEPA are able to advise the SCG on the area and consequences arising from potential Food and Environmental Protection Act (FEPA) orders.

Scottish Environment Protection Agency Role:
SEPA can advise on the management and disposal of wastes contaminated with radioactive activity and advise DEFRA on the regulatory matters relating to the management and disposal of radioactive wastes.

Food Standards Scotland Role:
The FSS can also advise on the disposal of contaminated foodstuffs. In the event of a significant accident, the FSS would propose an appropriate disposal strategy. This strategy would be finalised in conjunction with the food and farming industries, interested government departments and other response agencies, the speed of such decisions would be based on their needs.

4.3.6 Removal of Protective Actions

4.3.6.1 The removal of protective actions will be considered by the SCG on an ongoing basis and taking into consideration all the information available.

PART 5: DETAILED EMERGENCY PLANNING ZONE (DEPZ)

5.1 DEPZ Information

5.1.1 The DEPZ is a defined area around Hunterston B in which emergency arrangements are planned in detail and can be readily implemented. The DEPZ is determined by the local authority based on the Consequence Report.

5.1.2 Using the information contained within the Consequence Report, the DEPZ has been determined by ACCT on behalf of the local authority. In order to do so, there was a full walkround of the area and, as per the REPPIR 2019 regulations, consideration was given to "local geographic, demographic and practical implementation issues and the need to avoid, where practicable, the bisection of local communities; and the inclusion of vulnerable groups immediately adjacent to the area proposed by the operator". Hunterston B Nuclear Power Station is situated in a sparsely populated area with the nearest settlements being West Kilbride (almost 4km away) and Fairlie (more than 4km away).

5.1.3 All residents within the proposed DEPZ were written to prior to the completion of this plan and a copy of the letter was also sent to the Chair of the Site Stakeholder Group.

5.1.4 The final decision on the DEPZ was taken by the Council in December 2020 following an interim decision being taken by the Chief Executive as a temporary measure in May 2020 to comply with the Regulations. The final decision, although changing the shape of the DEPZ did not alter the number of properties included within it.

5.2 Prior Information to Local Residents

5.2.1 Public Information and Prior Information to Local Residents

5.2.1.1 Under the provisions specified in REPPIR (Regulation 21 and Schedule 8) the following categories of information must be provided to the public:

- Prior information. (*Hunterston Power Stations Emergency Information for Local Residents Calendar)*
- Information in the event of a Radiation Emergency provided in a leaflet from PHE.

5.2.1.2 REPPIR requires that residents of the DEPZ are provided with the following information which is refreshed on an annual basis:

1. Basic facts about radioactivity and its effects on persons and the environment.
2. The various types of radiation emergency covered and their consequences for the general public and the environment.
3. Emergency measures envisaged to alert, protect and assist the general public in the event of a radiation emergency.
4. Appropriate action to be taken by the general public in the event of a radiation emergency.
5. The authority or authorities responsible for implementing the emergency measures and action referred to above.
6. The extent of the DEPZ

5.2.1.3 North Ayrshire Council are responsible for the provision of prior information for the public and consults with other relevant organisations on the content. The prior information is distributed to residents / businesses in the DEPZ in the form of an annual calendar

5.2.1.4 The calendar makes it clear that whilst sirens may be audible from the site and that the emergency services may be seen attending the site, unless they are informed via PETIS that it is not a nuclear incident.

5.2.1.5 In addition to the above, a redacted version of the Off-site Plan and the calendar information will be made available on the council's website (with a link to this for councils within the OPZ).

5.3 Further DEPZ Information

5.3.1 Properties

5.3.1.1 There are This section of the plan has been redacted premises within the DEPZ and a map of the sectors can be found at **Section 8.15.1** to this plan.

This section of the plan has been redacted

5.3.1.2 A full list of the properties is available from ACCT or North Ayrshire Council. This will be verified on an annual basis as the calendar is issued.

5.3.1.3 If urgent protective actions are activated, North Ayrshire Council will cross-check the DEPZ list with the Health and Social Care database to ensure that there is no-one requiring temporary assistance (eg, care at home client, recently discharged from hospital, etc).

5.3.1.4 There is however, a care facility for five people providing 24/7 care and associated staff within the DEPZ and further details are available from ACCT or North Ayrshire Council and the Care Commission.

5.3.2 Settlements

5.3.2.1 There are no Settlements within the DEPZ.

5.3.3 Pets

5.3.3.1 **Sheltering**
When owners of pets are warned to take shelter and to take Stable Iodine Tablets they are advised to keep pets indoors or to place outdoor pets like rabbits and guinea pigs under cover.

5.3.3.2 **Evacuation**
When residents are required to evacuate they are advised to take their domestic pets with them to the Rest Centre, within a pet transporter such as a cage or basket. Once at the rest centre, the Council's Environmental Health Officer will take care of the animals as pets will not be accommodated within the Rest Centres unless they can. Further details are contained within the *Care for People Community Emergency Support Centre procedural documents.*

5.3.4 Livestock

5.3.4.1 For practical reasons farm livestock will have to remain in situ, unless it is possible for the farmer to get them undercover.

5.3.4.2 On evacuation to a Rest Centre the farmer should report to the Rest Centre Manager what the current situation is regarding his livestock.

5.3.5 Public Footpaths

5.3.5.1 The Ayrshire Coastal Path follows the Coastline and A78 Cycle Path through the DEPZ, and is regularly used by walkers. There is a gate at Portencross Castle on the southside which can be closed and it would be closed by Police on the northside.

5.3.6 Air Traffic

5.3.6.1 Police Scotland will arrange for an airspace restriction through the Civil Aviation Liaison Officer if this is required.

5.3.7 Rail Traffic

5.3.7.1 British Transport Police will deal with rail traffic restrictions through the vicinity by liaising with Network Rail and the train operating companies.

PART 6: RESPONSE FROM HSCC (Meetings, Agenda Templates and Attendees)

6.1 Arrival at HSCC

6.1.1 The provision of an off-site facility at the HSCC and Media Briefing Centre (MBC) are important components in the off-site emergency arrangements for Hunterston Power Station. The HSCC provides accommodation for representatives of all the agencies with a major role to play in this plan allowing a coordinated multi agency approach. Further information is detailed in the *HSCC User Guide*.

6.1.2 The HSCC will be located at This section of the plan has been redacted, and the MBC is sited at This section of the plan has been redacted/ See **Section 8.15.7** for Location Map.

6.1.3 Once activated, all agencies should send staff to the HSCC at This section of the plan has been redacted o coordinate the incident. There is an expectation that the centre will be operational within one to two hours of an emergency being declared. The HSCC is a standalone facility and is opened by Police Scotland officers who are dispatched from a nearby station. In addition, there are a number of other responders with access to the facility including NHS Ayrshire and Arran and North Ayrshire Council (via ACCT). Due to the number of people / organisations who would be expected to attend either the HSCC or the MBC and that they would be responding from a local, regional and national offices, a table below, outlining each agency and when they might expect to have people on site is provided:

This section of the plan has been redacted

6.1.4 Teleconference facilities are available for each meeting and the times of the meetings are available by contacting the Security Desk at HSCC on **Telephone Number** This section of the plan has been redacted

6.2 Roles / Membership of Decision Making And Advisory Groups

6.2.1 The purpose of this section is to clarify the role and composition of the various decision making/advisory groups operating within the HSCC and their interface during the emergency phase of an incident.

6.2.2 Model agendas for the Strategic Coordinating Group, the STAC, Recovery Issues and Strategic Media Advice Cell Sub-Groups are contained later within this Section. These model agendas are for guidance purposes only and it is for the Chairperson of each group / sub-group to modify the agenda to meet the needs of the situation.

6.2.3 **It is incumbent on each individual agency to maintain a comprehensive record of all actions undertaken during an incident for evidential referral in any subsequent enquiry. There is a basic template document available to maintain a log of messages / replies and actions. A copy of this template is available within the HSCC User Guide for information. Each agency is responsible for maintaining their own participatory record.**

6.3 Strategic Coordinating Group (SCG)

6.3.1 This group will only be composed of members whose role it is to make strategic decisions on behalf of their agency. The group must be small and dynamic, coming together for focused meetings, and armed with sufficient information from their own agency to allow group strategic issues to be discussed and decisions made.

6.3.2 Items of discussion will include:

- The release prognosis from the operator, with independent oversight by ONR, detailing an expected trends in release rate and isotopic composition with time, any plans to intervene and the expected results of such intervention;
- The current and predicted weather conditions and the effect that has on area at risk, dose rates and avertable dose;
- The numbers at risk from the plume, the steps being taken to advise them and support them and the responses from them;
- Messages being broadcast to the public by the media and the volume and tone of social media activity;
- Resources currently deployed and those expected to be available over the course of the response

6.3.3 The above will be discussed at the different meetings taking place in the HSCC and information will be shared with multiagency partners where relevant.

6.3.4 Below is the Strategic Coordinating Group Agenda and a list of those who would be expected to attend.

6.4 SCG - Roles of Members

Strategic Coordinator (Police Scotland - senior ranking officer).

- Chairs the SCG and coordinates the emergency response phase, towards the restoration of normality.
- Declares when the HSCC and MBC are operational.
- Overall responsibility for the management of the MBC and determining the timing and representation at multi-agency media briefings. The views of appropriate organisations will be taken into consideration.
- Appoint an MBC Manager. All media representatives from participating organisations will be expected to work as a coordinated team at the MBC.
- Appoint a Public Information Coordinator (PIC) and all media representatives from participating organisations will be expected to work as a coordinated team.
- In the Recovery Phase of an incident the Chief Executive or their nominee of North Ayrshire Council will fulfil this role or their nominees.

Tactical Commander ('Police U' Division Commander or representative)

- Informs the SCG of all issues arising from the Tactical Group requiring strategic direction, and implements the decisions of the SCG.

Public Information Coordinator (Police Scotland Corporate Communications Representative)

- Advises the SCG on any key issues of public/media concern from all agencies and on the media/information strategy.
- Implements decisions of the SCG requiring dissemination of information to the public.

Scottish Fire and Rescue (Senior ranking officer)

- Responsible for apprising the SCG of fire service activity during the emergency phase of the incident.
- Work within a coordinated team and provide an overview of fire service activity to be included in media briefing.
- Provide relevant information relating to fire service activity off-site which may impact on the on-site incident during the emergency / recovery phase.
- Ensure appropriate decision making logs and contemporaneous notes are recorded and made available to SCG.

Scottish Ambulance Service (Senior ranking officer)

- Advises the SCG on matters related to the Scottish Ambulance Service response to the incident.
- Communicates with the various Scottish Ambulance Service command structures involved, including Tactical Commander and the National Command & Coordination Centre

North Ayrshire Council (Chief Executive or nominated representative)

- Supports the emergency services during the emergency phase and advises the SCG of matters pertaining to recovery.
- Prepares to take over the coordination role from Police Scotland when the emergency phase is over.

STAC Chair (Director of Public Health or nominated rep)

- Informed by the Scientific and Technical Advice Cell (STAC), he/she advises the SCG on the effects of the emergency and the appropriate protective actions to be implemented to protect the public and personnel.

NHS Ayrshire and Arran (Chief Executive or nominated rep)

- Advises the SCG on matters related to the NHS response to the incident.

EDF Energy

- Sends a Company Technical Advisor (CTA) who will advise the SCG on the effect of the emergency on site and its prognosis. The CTA will liaise with the ONR representative and advise of any concerns in making strategic decisions. The CESC Controller will teleconference into the SCG meetings to provide EDF updates until the CTA arrives.
- Until the arrival of the PHE - CRCE representative, the CTA will also provide advice on the effects on the environment off site and the appropriate measures to protect the public.
- Until the STAC is established, the CTA will also provide advice on the effects off site.

Scottish Government (Liaison Officer)

- Advises the SCG on national level issues/decisions and implements all strategic decisions requiring national level support. The representative must ensure that the SCG takes account of any Scottish Ministerial concerns.

Office for Nuclear Regulation

- Provides advice to Government

The following officials will not sit at the table but MAY be required to support their agency representative:

- Police Staff Officer and Police Emergencies Procedure Adviser;
- North Ayrshire Council - Chair of Recovery Group;

The advice of the following organisations is captured via the STAC and there is no requirement for these organisation to attend a Strategic meeting: eg, *SEPA; Scottish Water; BT; HM Coastguard; Food Standards Scotland; Met Office; Network Rail; PHE CRCE*

Police Strategic Minute Taker will also attend meetings. SCG meetings must be timed to support members' attendance at Tactical, STAC and RWG meetings.

6.5 Agenda for Hunterston Strategic Coordinating Group

Teleconference Details
This section of the plan has been redacted

TIME / UPDATE		LOCATION	
CHAIRPERSON:		MINUTES:	

Agenda items are subject to a Closed Minute as the disclosure of any information would substantially prejudice the safeguarding of National Security.

1	**Introductions**	Chair / ALL
2	**Strategy Setting or Review of Strategic Objectives**	Chair / ALL
3	**Declaration of Actions for Urgent Attention / Decisions**	
4	**Confirmation of Decisions on Urgent Actions**	

ADJOURN AS NECESSARY TO ACTION URGENT ISSUES –
NO MORE THAN 5 MINUTES

5	**Approval of Minutes / Outstanding Actions Update**	ALL
6	**Strategic Level Incident Report (by exception only)** **Using 3-minute brief**	ALL
	• Include update by Tactical Group	Tactical Chair or Rep
7	**Site Situation Update**	EDF
8	**Radiation**	
	• Radiation Monitoring	STAC Chair
	• Radiation Levels	STAC Chair
	• Weather / Plume Prediction	STAC Chair
	• Establishment of Groups	Chair
9	**Health Issues**	
	• Protective Actions	STAC Chair
	• Casualties	Scottish Ambulance Services / NHS
10	**Access to / Control of Affected Area (Strategic Issues)**	Police Tactical Lead
	• Road	
	• Rail	
	• Air	
	• Sea	
11	**Public Information and Media Issues**	
	• Update from Public Comms Group	PCG Chair

12	**Recovery Issues**	
	• Recovery Issues	RWG Chair
	• Other Strategic Issues	
13	**Review of Actions and Strategy**	Chair
	• Agree Ownership	ALL
	• Agree Timescales	ALL
14	**Time of Next Meeting**	Chair
15	**Post Meeting Actions**	
	• Distribute Minute	Police
	• Distribute Record of Decisions	Police
	• Ensure Decision Log is updated and complete	Police
	• Agree Timescales	

CHAIRS OF MEETINGS SHOULD CONSIDER THE TIMINGS OF THIS MEETING TO ALLOW OTHER GROUPS TO MEET AND FEED INTO THE STRATEGIC GROUP ACCORDINGLY

6.6 Strategic Coordinating Group: List of Expected Attendees

Organisation	Name of Representative	
Police Scotland: Strategic Coordinator (most senior ranking officer)		
Police Scotland: Tactical Commander (U Division Commander or representative)		
Police Scotland Public Information Coordinator (Police Public Comms representative)		
Scottish Fire and Rescue (most senior ranking officer)		
Scottish Ambulance Service (most senior ranking officer)		
STAC Chair (Director of Public Health or representative or Local Authority during Recovery)		
NHS Ayrshire and Arran Chief Executive (or representative)		
North Ayrshire Council Chief Executive (or representative)		
EDF Energy: Company Technical Advisor		
Scottish Government: Resilience Senior Representative		
Office for Nuclear Regulation		
Others who may attend:		
Police Scotland: Staff Officer		
Police Scotland: Emergency Procedures Advisor		
North Ayrshire Council: Chair of the Recovery Group		
SEPA		
Scottish Water		

6.7 Tactical Group

6.7.1 The Tactical Group will be chaired by the Police Tactical Commander and meet initially until the first Strategic Meeting. Following this meeting the Police Tactical Commander will call meetings of the Tactical Group, as and when necessary to pass on strategic decisions and report issues/advice back to Strategic.

6.7.2 The role of the Tactical Group is to implement the strategic decisions made by the SCG and is the principal forum where all agencies meet to assess information and implement measures.

6.8 Tactical Group - Roles of Members

6.8.1 The following are key members of the Tactical Group. Representatives from other agencies will join if / when appropriate.

Police Tactical Commander
- Chairs Tactical Group and manages all Police actions through the COSC police cell.
- Is a member of the SCG and informs the SCG of all issues arising from Tactical Group requiring Strategic direction and implements the decisions of the SCG

Scottish Fire and Rescue Service Senior Officer
- Manages all Scottish Fire and Rescue Service actions through the HSCC fire and rescue cell.

Scottish Ambulance Service Senior Officer
- Manages all ambulance service activities and communicates with the Ambulance Incident Commander.

HM Coastguard (HMCG)
- Manages all maritime activities.

North Ayrshire Council Representative
- Manages all of the local authority and liaises with the NAC ECC when established.

NHS Ayrshire & Arran Representative
- Manages all NHS activities and liaises with NHS Ayrshire and Arran Emergency Management Team and NHS Ayrshire and Arran Strategic Coordinating Centre where established

Scottish Resilience
- Links to the Scottish Government Departments at Tactical level.

SEPA
- Initial SEPA Officer will liaise with SEPA colleagues, consider further attendance and expertise available from SEPA, and initiate any organisational support services as appropriate.

Other members
- Representative of the **STAC;**
- Representative of the **Recovery Working Group;**
- Representative of **Food Standards Scotland.**
- **Scottish Water; Network Rail; Met Office; PHE-CRCE; British Telecom**

A Police Tactical Minute taker will attend meetings. The Tactical Group must be timed to support member's attendance at SCG, STAC/RWG meetings.

6.9 Agenda for Hunterston Power Station Tactical Coordinating Group

Teleconference Details
This section of the plan has been redacted

TIME / UPDATE _____ LOCATION _____

CHAIRPERSON: _____ MINUTES: _____

Agenda items are subject to a Closed Minute as the disclosure of any information would substantially prejudice the safeguarding of National Security.

1	**Introductions**	Chair / ALL
2	**Strategy Setting or Review of Strategic Objectives**	Chair / ALL
3	**Declaration of Actions for Urgent Attention / Decisions**	
4	**Confirmation of Decisions on Urgent Actions**	

ADJOURN AS NECESSARY TO ACTION URGENT ISSUES –
NO MORE THAN 5 MINUTES

5	**Approval of Minutes / Outstanding Actions Update**		ALL
6	**Site Situation Update**		Chair
7	**Tactical Level Incident Report (by exception only) Using 3-minute brief**		ALL
8	**Radiation**		
	•	Radiation Monitoring	STAC Rep
	•	Radiation Levels	STAC Rep
	•	Weather / Plume Prediction	Met Office
9	**Health Issues**		
	•	Early Protective Actions	STAC Rep
	•	Later Protective Actions	STAC Rep / SEPA
	•	Casualties	Scottish Ambulance Services / NHS
10	**Cordons / Containment Issues**		
	•	Road	Local Authority
	•	Rail	Network Rail
	•	Air	CAA (Via Police Scotland)
	•	Sea	Coastguard
11	**Update from Public Comms Group**		PCG Chair or Rep

12	**Responders**		ALL
	•	Staff welfare	
	•	Unions	
	•	Risk Assessments	
	•	Protective Equipment	
13	**Logistics**		
	•	Transport	ALL
	•	Equipment	ALL
	•	IT	ALL
	•	Procurement	ALL
	•	Finance	ALL
14	**Recovery Planning / Community Update**		
	•	Update from Local Authority	RWG Chair
15	**Investigation Issues**		Chair
16	**Review of Actions and Strategy**		
	•	Agree Ownership	ALL
	•	Agree Timescales	ALL
17	**Time of Next Meeting**		
18	**Post Meeting Actions**		
	•	Distribute Minute	Police
	•	Distribute Record of Decisions	Police
	•	Ensure Decision Log is updated and complete	Police
	•	Agree Timescales	

CHAIRS OF MEETINGS SHOULD CONSIDER THE TIMINGS OF THIS MEETING TO ALLOW OTHER GROUPS TO MEET AND FEED INTO THE STRATEGIC GROUP ACCORDINGLY

6.10 Tactical Coordinating Group: List of Expected Attendees

Organisation	**Name of Representative**	
Police Scotland: Tactical Commander (U Division Commander or representative)		
Scottish Fire and Rescue (a senior ranking officer)		
Scottish Ambulance Service (a senior ranking officer)		
HM Coastguard		
North Ayrshire Council Head of Service (or representative)		
Recovery Working Group Representative		
NHS Ayrshire and Arran (representative)		
Scottish Government: Resilience Senior Representative		
STAC Representative		
Recovery Working Group Representative		
Food Standards Scotland		
Others who may attend:		
SEPA		
Scottish Water		
Network Rail		
Met Office		
PHE-CRCE		
British Telecom		

6.11 Scientific and Technical Advice Cell (STAC)

6.11.1 In the event of a radiation emergency, it is vital that the Police Strategic Coordinator and the members of the SCG are given clear authoritative advice on the effects of the emergency on public health, environmental, scientific, technical and on the appropriate off-site protective actions to be implemented to deal effectively with the immediate and long-term consequences of an incident at Hunterston. There is a need to ensure that this advice is coordinated.

6.11.2 The STAC should consider the following actions:

- Confirm that the pre-prepared urgent protective actions of shelter and stable iodine prophylaxis within the DEPZ has been implemented;
- Monitor the situation on the site and predict and measure the radiation dispersion off-site;
- Continually review and consult on the need to extend protective actions (including food and water controls;
- Provide timely information to the Public Comms Group and advice to those in the affected area and beyond the affected areas;
- If the plan has to be extended in time, the protective actions will be kept under continuous review and any real opportunity to relieve the pressure on those subject to protective actions, such as taking advantage of low airborne concentrations (where the wind is out to sea of the fault sequence is in a lower release phase) to allow the temporary breaking of shelter to reunite families, obtain necessary supplies and to support vulnerable people) will be noted and discussed.

6.11.3 The STAC should have a standard core membership to ensure consistency and to support a rapid response. Thereafter the composition of the STAC can be tailored to reflect the nature, scope and scale of the specific incident, as agreed with the SCG or Tactical Chair.

6.11.4 A meeting of the **STAC core group should be held as quickly as possible** to carry out initial health and environmental risk assessment and to identify the ongoing requirements for specialist advice to the SCG and/or Tactical. In some circumstances the initial STAC discussions and advice to the lead responder can be made by telephone. Adequate contact arrangements should therefore be in place.

6.12 STAC – Roles of Members

STAC Chair - The STAC should initially be chaired by a senior representative of the local NHS Board, normally the Director of Public Health or a Consultant in Public Health (Medicine). The Chair of STAC will be required to liaise with the Chair of SAGE during the incident. The chair of the STAC may change as the incident progresses but only when there are no issues in relation to public health to consider.

Deputy Chair - In order that coordinated work in the STAC group continues during periods when the Chair is reporting to the main SCG Strategic or to other groups, a member of the STAC should be briefed to act as a deputy chair.

Leadership - Irrespective of which agency chairs the STAC, the chairperson should have the relevant skills/experience to chair complex technical meetings, in order to fulfil the remit of the cell in providing coordinated advice. The lead individual should be someone at an appropriate level of seniority within their agency.

Training - Ideally, STAC chairpersons should have undergone specific training to familiarise themselves with the requirements of the role.

Core members of the STAC:

- NHS – Director of Public Health/Consultant in Public Health Medicine;
- ONR;
- Local Authority – Senior Environmental Health Officer;
- Scottish Fire & Rescue Service – HAZMAT Officer/Local Scientific Adviser;
- Public Health England - CRCE – Consultant;
- SEPA Representative;
- EDF Representative.

Additional members may include:

- NHS Radiation Protection Adviser;
- Food Standards Scotland (FSS);
- Scottish Government, Agriculture, Food and Rural Communities
- Scottish Government, Rural Payments and Inspection Division (RPID)
- Police Scotland
- Scottish Water;
- Met Office.
- SAGE Chair or nominated rep (via Teleconference)

STAC meetings must be timed to support members' attendance at SCG, Tactical and RWG meetings.

STAC Support Team

A dedicated Support Team from NHS Ayrshire and Arran will be required to facilitate the STAC. The role and responsibilities of the Support Team are:

- Operating the STAC function for the duration of the incident;
- Recording and logging all calls to and requests for advice from the STAC;
- Maintaining action and decision logs and producing minutes of STAC meetings;
- Maintaining a "focus board" or equivalent to record live issues and status of STAC actions;
- Maintaining a current STAC members briefing board listing all current STAC members and chair; and
- Any additional practical and facility support as requested by the STAC chair.

Further details can be found within the *WoSRRP STAC Plan.*

6.13 STAC Agenda

Teleconference Details
This section of the plan has been redacted

Scientific & Technical Advice Cell (STAC) Agenda		
1	**Nomination/ confirmation of lead agency**	
2	**Introduction of attendees, roles and responsibilities** **Purpose of STAC:** *To carry out an impact assessment and provide a single line of scientific and technical advice to Strategic Command.*	
3	**Declaration of items for urgent attention** *Are resources under pressure? Are additional resources required?*	
4	**Decisions on items for urgent attention** *Breakout time to action urgent items as agreed above. Confirm how long / reconvene time*	
Gather information and intelligence		
5	**Update on situation**	
	What has happened?	*What is the M/ETHANE[1] message?*
	What is happening now?	*Update from STAC members on organisation activities*
	What is being done about it?	*What is it being implemented?*
6	**Additional information from individual STAC members** *Not covered in the METHANE. Are resources under pressure? Are additional resources required?*	
7	**Identification of other agencies who should be represented in the STAC** *Consider inviting Category 2 Responders or others relevant to the response*	
Agree/ review objectives and actions – Initial Risk Analysis		
8	Suggested objectives: • Review advice already given and actions taken to date • Undertake a review of Health Risk Analysis • Agree urgency of advice and timescales for feedback	• Evaluate & identify lessons • Facilitate investigations and inquiries (preserve and manage records) • Agree timelines and battle rhythm.
Consider Powers, Policies And Procedures – Risk Management		

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[1] http://www.jesip.org.uk/methane

9	**Legislation:** *Public Health Scotland Act 2008 Any powers applicable?* *Any other applicable legislation?* **Emergency Plans** *Which Emergency Plans are we working to?* *Should Evacuation and Shelter be considered (refer to LRF guidance)?*
	Risk Communication Media Messages *Identify key messages, key target groups* *Agree messages for SCG,agree responsibilities for transmitting communications with media/ communications staff.*
	Recovery *Consider feed into Recovery Group*
Identify Options and Contingencies	
10	**Discuss and agree advice to be provided to SCG**
	Review vital arrangements/ resources including staff continuity
Take Action and Review What Happened	
11	**Allocation/review of STAC actions** • *Review actions and action owners from meeting* • *Review timescales for actions*
12	**Any other business**
13	**Date, Time and Location of next meeting**

CHAIRS OF MEETINGS SHOULD CONSIDER THE TIMINGS OF THIS MEETING TO ALLOW OTHER GROUPS TO MEET AND FEED INTO THE STRATEGIC GROUP ACCORDINGLY

6.14 STAC (Scientific, Technical Advice Cell: List of Expected Attendees

Organisation	**Name of Representative**	
CORE MEMBERS		
NHS Ayrshire and Arran STAC Chair during response (see below) (Dir. Public Health Medicine or representative)		
Consultant in Public Health (Medicine) STAC DEPUTY Chair (nominated by the Chair)		
Office for Nuclear Regulation		
North Ayrshire Council (Senior Environmental Health Officer)		
Scottish Fire and Rescue (HAZMAT Officer / Local Scientific Advisor)		
PHE-CRCE (Consultant)		
SEPA (Representative)		
EDF Energy (Health Physicist) (Representative)		
ADDITIONAL MEMBERS		
NHS: (Radiation Protection Adviser) (Health Protection Nurse) (Pharmaceutical Adviser) (Resilience Adviser)		
Scottish Government Agriculture, Food and Rural Communities Representative		
Scottish Government Rural Payments and Inspection Division (RPID) Representative		
Police Scotland (Representative)		
Scottish Water (Representative)		
Met Office (Representative)		
SAGE Chair (or nominated representative) (via teleconference)		

6.15 Public Comms Group (PCG)

6.15.1 The primary purpose of the PCG is to advise the SCG on media strategy and to ensure consistent communication with the media. It is not media facing but is designed to formulate strategy and propose key avenues of delivery. The PCG brings together media representatives of the key organisations involved.

6.15.2 The PCG will ensure that statements are issued regularly from the SCG and should include statements which can be put onto a variety of social media sites.

6.15.3 When the event moves into the recovery phase, the leadership of the PCG is assumed by the Local Authority Press Officer.

6.16 PCG - Roles of Members

6.16.1 The membership of the PCG needs to be flexible to respond to the specific circumstances, but the core membership will be as follows:

Public Information Coordinator (Police Scotland Corporate Communications Representative)

- Advises the SCG on any key issues of public/media concern from all agencies and on the media/information strategy.
- Implements decisions of the SCG requiring dissemination of information to the public.
- Chairs the PCG

North Ayrshire Council – Most Senior Communications Officer

- Attends the PCG and chairs the group in the Recovery phase.

NHS Ayrshire & Arran – Communications Officer

- Provides advice on health aspects from STAC and NHS.

Scottish Fire and Rescue Service representative

- Provide information on behalf of the Scottish Fire and Rescue Service

EDF – Most senior Communications Officer

- Provides information on behalf of the operator.

Other organisations, eg, *SEPA; Scottish Water; BT; Met Office; Network Rail; PHE CRCE*

PCG **meetings must be timed to support members' attendance at SCG.**

Model agendas for the Strategic Coordinating Group, the Tactical Coordinating Group, the STAC, Strategic Media Advice Cell and Recovery Sub-Groups are contained later within this Section. These model agendas are for guidance purposes only and it is for the Chairperson of each group / sub-group to modify the agenda to meet the needs of the situation.

6.17 Model Public Comms Group Agenda

PUBLIC COMMS GROUP

MODEL AGENDA

(FOR GUIDANCE ONLY - actual agenda content will be at the discretion of the Working Group Chairperson)

Teleconference Details
This section of the plan has been redacted

1	Attendance apologies	Chair
2	Chairperson's remarks	Chair
3	Outstanding actions of feedback from last press conference	Chair
4	Communications Strategy	Chair / ALL
5	Roles and Tasks	ALL
6	Issues from Strategic Coordinating Group	Chair
7	Issues from other Agencies	ALL
8	Emerging Media issues	ALL
	• Casualties	
	• Monitoring	
	• Protective Actions	
	• Traffic Management	
	• Media coverage and social media sentiment	
9	Other key issues	ALL
10	Contents of Press Releases	ALL
11	Time of next meeting	

CHAIRS OF MEETINGS SHOULD CONSIDER THE TIMINGS OF THIS MEETING TO ALLOW OTHER GROUPS TO MEET AND FEED INTO THE STRATEGIC GROUP ACCORDINGLY

6.18 Public Comms Group : List of Expected Attendees

Organisation	**Name of Representative**	
Police Scotland: **Chair** Public Comms Representative		
North Ayrshire Council (most senior Communications Officer)		
NHS Ayrshire and Arran (most senior Communications Officer)		
EDF Energy (most senior Communications Officer)		
Scottish Fire and Rescue (most senior Communications Officer)		
Communication Officers from the following organisations may also attend:		
SEPA		
Scottish Water		
Network Rail		
Met Office		
PHE-CRCE		
British Telecom		

6.19 Recovery Working Group (RWG)

6.19.1 Although the role of the RWG comes into its own when the emergency phase is over, **it is essential that recovery is considered as soon as it is apparent that off-site contamination is likely to occur**. The RWG will therefore establish a core group at the **outset of a radiation emergency.**

6.19.2 The role of the RWG is to characterise the extent and nature of the off-site contamination, and identify options and strategies for clean-up of contamination and disposal of wastes, taking into account the principles of justification and optimisation.

6.19.3 It should identify priorities, timescales and costs for the options, propose options for consideration by the SCG and prepare plans for their implementation through the Tactical Group. It will advise on/assess recovery monitoring and maintain records of actions (see **Section 4.3** for further information on Recovery Protocols).

6.19.4 **A recovery strategy reflects a pattern of decisions that set the long term direction of the overall recovery process and determines its success.**

6.19.5 During the emergency phase the RWG Chair will present advice to the SCG through the Chief Executive, North Ayrshire Council (or nominee).

RWG meetings must be timed to support members' attendance at SCG, Tactical and Scientific Technical Advice Cell (STAC).

6.20 RWG - Roles of Members

6.20.1 The membership of the RWG needs to be flexible to respond to the specific circumstances, but the core membership will be as follows:

North Ayrshire Council – Most appropriate Chief Officer
- Chairs the RWG.

NHS Ayrshire & Arran – Most appropriate Officer
- Provides advice on health aspects.

STAC representative - Consultant in Public Health Medicine
- Provides Public Health Advice.

Public Health England – Centre for Radiation, Chemical and Environmental Hazards
- Provision of protection advice and information.

Scottish Environment Protection Agency
- Provides advice on effects on the environment.

Scottish Government – Rural Affairs & Environment
- Provides advice on practicalities of intervention.

Food Standards Scotland
- Provides advice on contamination of the food chain.

Scottish Water
- Provides advice on the effects on public water supplies and the wastewater infrastructure.

Police Scotland

- Provides assistance with public order issues.

Scottish Fire and Rescue Service

- Provides specialist advice on HAZMAT materials.
- Apprise SCG of fire service activity in the recovery phase of an incident.

Met Office

- Predict plume characteristics based on weather forecast information.

RWG meetings must be timed to support members' attendance at SCG, Tactical and STAC.

Model agendas for the Strategic Coordinating Group, the STAC, Recovery Issues and Strategic Media Advice Cell Sub-Groups are contained within this Section. These model agendas are for guidance purposes only and it is for the Chairperson of each group / sub-group to modify the agenda to meet the needs of the situation.

The transfer of coordination will be by mutual agreement and will be recorded in writing. Guidance for the Recovery Phase handover criteria is shown at Section 6.24.

6.21 RECOVERY WORKING GROUP (Initial) MODEL AGENDA for RESPONSE PHASE

Teleconference Details
This section of the plan has been redacted

1. Welcome, Introductions and Apologies *(including teleconference participants)* *(Circulate List of Attendees)*	Chair / secretariat
2. Agree purpose of the group *(only for initial meeting)* • *To coordinate the multiagency recovery with the sole aim of returning the community affected to normality.* • *To identify options and develop a recovery strategy* • *To establish communication links and sharing information with other groups* • *To determine the frequency and location of the group meetings* • *To agree membership of the group* • *To ensure accurate record keeping of all decisions/actions.*	Chair and members
3. Develop and agree Recovery Strategy (*only for initial meeting*) *To decide on the overall recovery strategy, taking into account the principles of radiation protection policy of justification, optimisation and limitation* • *Consider clean-up of contamination and disposal of wastes, health and welfare, communications, care for people, economy, infrastructure and environment,* • *To identify priorities, timescales and costs for the options, for consideration by the Strategic Coordinating Group and prepare plans for implementation through the Tactical Group.* *(this needs approved by the Strategic Coordinating Group and will be presented by the NAC Strategic rep)*	Chair and members
4. Outstanding actions (*only for subsequent meetings - see previous minute)*	Chair / secretariat
5. Issues from Strategic Co-ordinating Group *See Action Log from SCG meetings/update from NAC Strategic rep*	Chair
6. Update from Sub Groups *(once established)* *Consider long term resourcing and reporting mechanisms for Sub Groups to avoid duplication of effort*	Chair
a. STAC • *Reporting on long term Health Issues including restrictions on consumption of agricultural/ marine produce and Radiation Monitoring Unit* • *Report on extent of environmental contamination, feasibility of and options for decontamination and costs, where known*	STAC/FSS reps
b. Care for Affected People • *Report on affected community including long/short term re-housing, reassurance and psychosocial issues* • *Consider establishing Humanitarian Assistance Centre for the dissemination of information and support to the affected community*	Care for People rep
c. Environmental and Infrastructure • *Consider long term continuing environmental monitoring programme* • *Consider sources of specialist equipment, personnel or premises* • *Consider the long term impacts of any road and rail restrictions for the affected community*	Local Authority rep
7. Other key issues • *Consider Scaling and Stand down procedures for Sub Groups*	
8. Review Actions and agree timescales	Chair / secretariat
9. Time and date of next meeting	Chair / secretariat

6.22 Recovery Working Group: List of Expected Attendees

Organisation	Name of Representative	
North Ayrshire Council **Chair** Senior Environmental Health (or representative)		
NHS Ayrshire and Arran		
STAC Representative		
PHE-CRCE		
SEPA		
Scottish Government Rural Affairs and Environment Representative		
Food Standards Scotland		
Scottish Water		
Police Scotland:		
Scottish Fire and Rescue (HAZMAT Officer / Local Scientific Advisor)		
Met Office		
EDF		

6.23 RECOVERY WORKING GROUP

(*Subsequent)* MODEL AGENDA for RECOVERY PHASE

Teleconference Details
This section of the plan has been redacted

1. **Welcome, Introductions and Apologies** *(including teleconference participants)* *(Circulate List of Attendees)*	Chair and secretariat
2. **Agree purpose of the group** *(only for initial meeting)*	Chair and members
• *To coordinate the multiagency recovery with the sole aim of returning the community affected to normality.*	
• *To identify options and develop a recovery strategy*	
• *To establish communication links and sharing information with other groups*	
• *To determine the frequency and location of the group meetings*	
• *To agree membership of the group*	
• *To ensure accurate record keeping of all decisions/actions.*	
3. **Review Initial Recovery Strategy**	Chair and members
• *To decide on the overall recovery strategy, taking into account the principles of radiation protection policy of justification, optimisation and limitation*	
• *Consider clean-up of contamination and disposal of wastes, health and welfare, communications, care for people, economy, infrastructure and environment,*	
4. **Outstanding actions** (*only for subsequent meetings - see previous minute)*	Chair and secretariat
5. **Update from Sub Groups** *(once established)*	Chair
• *Consider long term resourcing and reporting mechanisms for Sub Groups to avoid duplication of effort*	
a. STAC	STAC/FSS reps
• *Reporting on long term Health Issues including restrictions on consumption of agricultural/ marine produce and Radiation Monitoring Unit*	
• *Report on extent of environmental contamination*	
• *Feasibility of and options for decontamination and costs, where known*	
b. Care for Affected People	Care for People rep
• *Support of affected community including long/short term re-housing and psychosocial issues*	
• *Consider establishing Humanitarian Assistance Centre for the dissemination of information and support to the affected community*	
c. Community Engagement/Liaison	Local Authority rep
• *Consider impacts if long term restriction on access to affected area are in place*	
• *Engage with local community including local elected member to ensure the needs of the affected community are represented*	
• *Consider regeneration of affected area*	
d. Finance/Compensation	EDF, Local Authority, Government reps
• *Seek financial aid or compensation for affected community and local businesses (claims under the Nuclear Installation Act 1965 see also information on EDF website)*	
e. Business and Economic Recovery	Government / Local Authority rep
• *Consider long term economic impacts on the affected area*	
• *Liaise with local food suppliers and farms*	

f. Environmental and Infrastructure

STAC, PHE – CRCE, SFRS, SEPA, FSS, NHS, Scottish Water reps

- *Consider long term continuing environmental monitoring programme*
- *Consider sources of specialist equipment, personnel or premises*
- *Consider the long term impacts of any road and rail restrictions for the affected community*

g. Public Communications

Public Comms rep(s)

- *Initially public messaging will focus on the response phase however subsequent meetings will support the recovery elements*
- *Provide ongoing information on the recovery and the return to normality to the affected community, staff, stakeholders and the wider public through all available communication channels*

6. Other key issues

Chair and members

Consider Scaling and Stand down procedures for Sub Groups

7. Review Actions and agree timescales

Chair and secretariat

8. Time and date of next meeting

Recovery Working Group: List of Expected Attendees

Organisation	**Name of Representative**	
North Ayrshire Council **Chair** Senior Environmental Health (or representative)		
NHS Ayrshire and Arran		
STAC Representative		
PHE-CRCE		
SEPA		
Scottish Government Rural Affairs and Environment Representative		
Food Standards Scotland		
Scottish Water		
Police Scotland:		
Scottish Fire and Rescue (HAZMAT Officer / Local Scientific Advisor)		
Met Office		
EDF		

6.24 Recovery Phase Handover Criteria

STRATEGIC COORDINATING GROUP
RECOVERY PHASE HANDOVER CRITERIA

The following are suggested criteria that may be appropriate to help determine when or if a handover can take place between the police and local authority as efforts move from response to recovery.

- The Office of Nuclear Regulation (ONR) has declared the On-site incident contained and no significant risk of reoccurrence
- Public safety protective actions in place and working effectively
- No significant issues remain to be resolved from the early post - incident phase
- North Ayrshire Council is satisfied that it has in place the staff, infrastructure and processes to take over coordination from the Police and there is an agreed process for the phased transition of support functions.
- The HSCC is functioning effectively and has the necessary:
  - ❖ Resourcing
  - ❖ Communications
  - ❖ Logging and media coordination support
- Individual organisations are functioning effectively with
  - ❖ Resourcing
  - ❖ Communications
  - ❖ Management of outstanding issues
- Central Government supports the hand-over
- North Ayrshire Council is able to accept Chairmanship of the Strategic Coordinating Group
- The senior Representative of Police Scotland and the Chief Executive, North Ayrshire Council are both in support of the hand-over
- Further doses will be treated as “existing situations”
- Other key issues

Further details on Recovery Protocols can be found at Parts 4 and Part 10

6.25 Suggested Handover Certificate

Suggested Handover Certificate

[Note: This certificate has been written assuming the Strategic Coordination Group is being chaired by the police and the Recovery Group is being chaired by the local authority]

Upon this Status Certificate being signed by both the Local Authority and the Police, the Command and Control for dealing with the aftermath of the incident is to be taken over by North Ayrshire Council.

In addition to any requirements laid out in specific contingency plans relevant to this emergency:

1. There is no known further risk to life in relation to this specific emergency.

2. The circumstances dictate it more appropriate for Command and Control to rest with North Ayrshire Council in that the phase is clearly now one of recovery.

3. There are no serious public order or crime prevention issues which impact on the overall strategic coordination of the recovery phase.

4. Scottish Fire and Rescue Service together with the Scottish Ambulance Service are operating at a level which does not necessitate a Strategic Coordination Group to coordinate and facilitate their activity.

5. There are no known scenarios which may require the reinstatement of the Local Resilience Partnership in relation to this emergency in the foreseeable future.

6. It is noted that future radiation exposures will be treated as “existing situation”

7. North Ayrshire Council is satisfied that it has in place the infrastructure and processes to take over coordination from the Police.

Signed: **……..…….. North Ayrshire Council**

Signed: **……..…….. Police Scotland**

Date and Time Signed: **……..……..**

(extracted from the NAC Civil Contingencies Response and Recovery Plan 2016 (with minor amendments to reflect inclusion of Strategic Coordinating Group)

PART 7: Roles of Responsibilities of Responding Organisations

7.1 Office for Nuclear Regulation

The Office for Nuclear Regulation (ONR) is responsible for regulating nuclear and conventional safety for the UK nuclear facilities. In the event of an emergency; ONR is responsible for monitoring the activities of the operators, Local Authority and responding agencies and keeping the central Government and devolved administrations fully informed on all matters related to the response.

Using its statutory powers, ONR will inspect and review the activities of the operator to ensure that they are taking all responsible steps both to restore the plant to a safe state and to minimize the risk to the general public.

Actions

On being notified of a site incident or off-site emergency, ONR will:

- Send inspectors to the affected site's emergency facilities and to the appropriate off-site facility (SCC) who will monitor the situation and the steps taken to restore control and provide advice through the STAC.
- Send inspectors to the operators Central Emergency Support Centre (CESC) at Barnwood Gloucester.
- Set up its own Incident Suite at Redgrave Court, Bootle, to provide a technical assessment capability and to support the Chief Nuclear Inspector and the ONR inspectors on the site, at the off-site facility or at the CESC.
- Make independent assessments of the likely course of the accident, its consequences and consider any implications for other nuclear installations.
- Deploy the Chief Nuclear Inspector to the SGoRR. The Chief Nuclear Inspector will act as an advisor to central Government in nuclear emergencies and will give advice based on ONR's assessments to Government departments, devolved administration, HSE, and the operators as appropriate.

The ONR is responsible for ensuring that nuclear operators, Local Authority and responding agencies make adequate arrangements to respond to a nuclear emergency.

As the licensing authority for Civil Nuclear Installations, the ONR will be informed of a 'site incident' or an 'Off-site Nuclear Emergency' occurring at Hunterston B Power Station. In the event of such a declaration, the ONR is responsible for:

- Establishing the ONR Incident Suite at Redgrave Court, Bootle, Merseyside to provide an assessment facility and deployed ONR Inspectors
- Sending ONR Inspectors to the affected site (and other locations as required) in connection with the responsibilities detailed below
- Investigating the circumstances of the incident, monitoring events on the affected site and satisfying itself that the appropriate actions are being taken by the site licensee to restore the plant to a safe condition
- Considering implications for safety at other nuclear sites
- Advising Central Government Departments on the likely course of the accident, its consequences and the implications for other nuclear installations
- Advising the ONR Inspectors at the SCC on the likely course of the accidents and its consequences
- Investigating the circumstances of the event, if it considered that a breach of health and safety legislation may have occurred.

7.2 EDF Energy - Nuclear Generation

Roles and Responsibilities

In the event of an Off-site Nuclear Emergency at Hunterston "B" Nuclear Power Station, EDF Energy - Nuclear Generation will provide advice on any early protective actions necessary to protect the public until such times as the STAC assumes this responsibility at the HSCC. Further to this provision, EDF Energy - Nuclear Generation will provide radiological survey information including the results of the analysis of air samples out to 40km from the Site in accordance with the Site Emergency Plan. The Company also has a responsibility to inform the Food Standards Agency of any release who in turn will notify Food Standards Scotland. EDF Energy - Nuclear Generation will remain responsible at all times for activities on Hunterston "B" Site.

At the HSCC, the Company Technical Adviser (CTA) will be the formal EDF Energy - Nuclear Generation source of advice to the Police and other agencies. When the responsibility for providing advice has passed to the STAC, the CTA will provide support and advice to the STAC.

Agreed Actions

Site Incident

On declaration of a Site Incident at Hunterston "B", the operator will: -

1. Notify the relevant agencies, see **Part 1** (Site Incident).
2. Establish the ECC on Site under the direction of a Site Emergency Controller.
3. Deploy Site Emergency Teams to mitigate effects.
4. Deploy Off-site Survey Teams to monitor off-site conditions.
5. Establish the CESC.
6. Establish a Media interface.

Off-site Nuclear Emergency

On declaration of an Off-site Nuclear Emergency at Hunterston "B", the operator will:

1. Notify the relevant agencies, see **Part 1** (Off-site Nuclear Emergency).
2. Establish the ECC on Site under the direction of the Site Emergency Controller.
3. Deploy Site Emergency Teams to mitigate effects.
4. Deploy Off-site Survey Teams to monitor off-site conditions.
5. Trigger PETIS for Off Site Nuclear Emergency
6. Provide advice from the Site Emergency Controller initially and then from the CESC to participating agencies on the need or otherwise for early protective actions until such times as responsibility for this function is accepted by the STAC.
7. Inform Police Scotland if residents and businesses within the DEPZ have been notified
8. Provide emergency services with dosimeters at the ACP
9. Provide specialist PPE to those emergency services responding to site that services could not reasonably be expected to already have
10. Deploy emergency staff at the HSCC to provide information on the development and resolution of the incident and advice on response activities.
11. Provide information to agencies attending the HSCC and support the integrated management approach under the coordination of the Strategic Coordinator.
12. Establish a Media Interface and support the coordinated approach in the Media Briefing Centre.

7.3 British Telecom (BT)

Roles and Responsibilities

Site Incident

No action.

Off-site Nuclear Emergency
On receipt of a call to the BT National Emergency Linkline number (See **Section 1.4** for contact telephone number):

- BT may assist with advice on communications issues and possible options to the Category 1 and 2 incident commanders, and other members of the Strategic Coordinating Group prior to or during an incident.
- BT may engage with Scottish Government Offices and Devolved Administrations in planning for and responding to major incidents.
- Assist Category 1 and 2 responders to maintain their services during incidents.
- Assist Category 1 and 2 responders so they may in turn help BT to maintain services.
- BT may provide an emergency response, including restoration of essential services where infrastructure damage has occurred. BT also engages between the telecommunications industry on matters of mutual interest.

7.4 British Transport Police

Roles and Responsibilities

The railways are a unique policing environment with a unique set of needs. The British Transport Police is the national police force for the railways providing a policing service to rail operators, their staff and passengers throughout England, Scotland and Wales.

Under the Civil contingencies Act 2004 British Transport Police is one of three national Category 1 Responders with responsibility across the United Kingdom. Consequently the scope of the organisation under the Act is reserved to the UK Government.

Any incident on or effecting the Railway Infrastructure within Scotland will involve at least two police forces (BTP and Police Scotland). It is important that the division of responsibility between the two forces is clear, to ensure that there is no interference to the prime function of rescue and treatment of casualties, or cause the duplication of scarce police resources.

Agreed Actions

Site Incident

No action.

Off-site Nuclear Emergency

- Responsible for the liaison with Network Rail and the Train Operating companies to ensure that any necessary closure of the line is put in place;
- Link into the Hunterston Strategic Coordination Centre and with the appointed RIO to ensure the safety of the travelling public.

7.5 Food Standards Scotland

Roles and Responsibilities

The Food Standards Agency (FSA) is responsible for food safety in England, Wales and Northern Ireland. Food Standards Scotland (FSS), which was established on 1 April 2015, is responsible for food safety in Scotland. FSS's role is to help protect the public from risks to health which may arise through the consumption of food.

In the event of a radiological emergency in the UK (including those in or affecting Scotland), the food safety incident response will be led by the FSA unless it is mutually agreed that FSS will take over the lead. FSS will provide the on-site response in Scotland. FSA and FSS will collaborate closely, maintain compatible incident management plans and ensure effective communication throughout the emergency.

In the event of an emergency the FSS will lead the Scottish Government's response on food / feed safety issues, assess the impact of the emergency on the food / feed chain and implement any necessary protective actions.

Specific responsibilities are:

- To liaise with relevant partners to determine the level of any contamination in the food / feed chain;
- To take action to ensure that food / feed which exceeds maximum permitted levels does not enter the food / feed chain;
- To liaise with relevant partners, as necessary, to implement restriction orders under the Food and Environment protection Act 1985 to restrict the supply, movement or sale of produce from the affected area.
- To provide support, advice, information and guidance to local authorities, businesses and the public on the implications for food and feed;
- To provide support and advice to the Scottish Government and partners dealing with the emergency;
- To ensure that subsequent recovery arrangements take account of food and feed safety issues

Agreed Actions

Site Incident
No action

Off-site Nuclear Emergency
On receipt of advice of an Off-site Nuclear Emergency the FSA will carry out a rapid assessment of the emergency's potential impact on food safety, using whatever information is available. FSA will notify FSS of the release and FSS will:

- Attend the Hunterston Strategic Coordinating Centre (HSCC), as appropriate;
- Provide scientific advice relating to food via the Scientific and Technical Advice Cell (STAC);
- Provide the precautionary advice area in which relevant Maximum permitted levels in food and feed might be exceeded, as determined by the Food Standards Agency. The areas affected by this precautionary advice can often be much larger than those areas where immediate protective actions, such as sheltering, have been implemented;
- If it is assessed that levels of radioactivity in any potential food and feed produced may exceed Maximum permitted levels, Food Standards Scotland will liaise with Scottish Government Rural Inspections Directorate (SGRPID) and the local authority to gather relevant information on the local area (eg, the type of extent of regional agricultural practices);
- Liaise with local authorities to take action to ensure that food contaminated to unacceptable levels does not enter the food chain;

- Liaise with relevant partners, as necessary, to implement restriction orders under the Food & Environment Act 1985 (FEPA) to restrict the supply, movement or sale of produce from the affected area;
- Liaise with the Public Comms Group and prepare press releases to provide advice to the public, businesses and stakeholders regarding any implications for food / feed.

7.6 DEFRA CBRN Emergencies

Roles and Responsibilities

Department for Environment, Food and Rural Affairs (Defra) CBRN Emergencies is concerned with the recovery of the open and built environment following a chemical, biological, radiological, nuclear (CBRN) or major hazardous materials (HazMat) incident.

CBRN Emergencies' primary functions are -

- To provide advice, guidance and assistance on decontamination related issues to responsible authorities in their contingency planning for, and response to, chemical, biological, radiological and nuclear (CBRN) and major HazMat incidents
- CBRN –a deliberate act involving Chemical, Biological, Radioactive or Nuclear materials.
- Major HAZMAT – an accident, regardless of scale, involving Chemical, Biological, Radioactive or Nuclear materials where the incident is in excess of local capability and/or knowledge and authorities request CBRN Emergencies' framework services.
- To maintain and build on the CBRN Emergencies' framework of specialist suppliers and ensure that responsible authorities have access to these services if the need arises
- To advise central Government on the national capability for the decontamination of buildings, infrastructure, transport and open environment, and be a source of expertise in the event of a CBRN incident or major release of HazMat materials

Contact details are available at **Section 1.4**

CBRN Emergencies' operational capability includes -

- Facilitate the rapid decontamination of CBRN releases using private-sector capability
- On call 24/7 to provide access to CBRN Emergencies expertise and Framework services
- Provide expert scientific and technical advice to relevant groups, including Science and Technical Advice Cell (STAC) and Recovery Coordination Group (RCG), on the most appropriate decontamination methods

CBRN Emergencies' also produces the Strategic National Guidance: The decontamination of buildings, infrastructure and the open environment exposed to chemical, biological, radiological or nuclear materials.

Agreed Actions

Site Incident

No action

Off-site Nuclear Emergency

- Provide an early presence at the HSCC or equivalent, to provide direct advice on the potential impact of decisions made during the incident response phase on short, medium and longer term decontamination approaches;

- Establish liaison with specialist suppliers to prepare for possible deployment for decontamination of the above;

- Provide advice and guidance to a STAC / RWG at the HSCC or equivalent, in the development of a decontamination strategy as part of an over-arching recovery strategy;
- Work with specialist agencies (e.g. specialist police and military resources) on specific aspects of decontamination as they might impact positively or adversely on their operations;
- Work with other Government agencies (e.g. SEPA, PHE CRCE, FSS) to develop joint strategies to deal with the consequences of a radiological event upon the environment;
- Work with responders to identify, address and resolve operational issues arising from the possible deployment of specialist suppliers to undertake decontamination following a nuclear event;
- Provide guidance and advice to a STAC / RWG during delivery of a decontamination strategy;
- Participate in the development of decontamination priorities at Local, Regional and National levels.

7.7 HM Coastguard

Roles and Responsibilities

HM Coastguard (HMCG) is the Search and Rescue branch of the Maritime and Coastguard Agency (MCA). HMCG has a statutory duty under the *Coastguard Act 1925*, by order of the Secretary of State for Transport, as amended by Statutory Instrument, for the initiation and coordination of civil maritime and some inland Search and Rescue within the United Kingdom Search and Rescue Region.

This includes the mobilisation, organisation and tasking of adequate resources to respond to persons either in distress at sea, or to persons at risk of injury or death on cliffs or shoreline of United Kingdom.

HMCG has the responsibility of broadcasting marine safety information, including navigation warnings, weather, subfacts and gunfacts information on Very High Frequency and Medium Frequency. HMCG Coastguard Operations Centre (CGOC) Belfast will use scheduled and non-scheduled radio broadcasts to give alerts to commercial shipping, fishing vessels, yachts and other pleasure craft on Radio and Satellite Systems.

- HMCG Search and Rescue Teams are equipped with 4x4 vehicles, lighting, rope, water and mud rescue equipment and VHF Radio Communications.
- HMCG teams are able to communicate with rescue vessels at sea, Search and Rescue helicopters, Police/ Air ambulance units and fixed wing search and rescue aircraft. They are also able to set up and man, local helicopter landing sites.
- For non-coastal incidents, HMCG Rescue Teams will carry out duties delegated to them in support of the other Emergency Services.

Agreed Actions

Site Incident

No action.

Off-site Nuclear Emergency

- CGOC Belfast will open an incident in their Command and Control System, and establish and maintain communications with the HSCC and Police Scotland Service Overview.
- CGOC Belfast will dispatch personnel to attend at the HSCC and, if required, an Incident Officer to the Police Forward Control Post.
- HMCG will initiate alert broadcasts on Radio and Satellite Systems at the request of Police Scotland / HSCC Liaison Officer.
- HMCG will conduct enquiries to establish the safety of vessels or persons, which may be in potential danger areas, in consultation with the Police / HSCC Liaison Officer.
- HMCG may task Coastguard units to assist the other emergency services, and will respond to any other requests through the HSCC Liaison Officer.

7.8 Met Office

Roles and Responsibilities

The Met Office is responsible for providing weather and plume dispersal information as part of Procedures and Communications in the event of a Release of Radioactive Material (PACRAM).

Agreed Actions

Site Incident

The Met Office will provide the responding organisation s with meteorological forecasts, advice and specialist services in the event of any non-malicious CBRN release into the atmosphere. Advice can be provided either by Met Office Exeter or the Civil Contingencies Advisors.

Off-site Nuclear Emergency

- The Met Office will provide the emergency authorities with meteorological forecasts, advice and specialist services in the event of any non-malicious nuclear release into the atmosphere.
- Met Office EMARC (Environmental Monitoring and Response Centre) Forecasters will respond to an emergency, by providing an immediate verbal assessment of the wind direction and an estimate of the likely plume characteristics.
- The forecaster will then provide a more detailed written forecast (PACRAM forecast form B) together with an area at risk map of the area. This should be available to the requestor within 20 minutes of the request. It will be sent via fax and/or email (as required). Note that all PACRAM forecasts are also emailed to Barnwood, Food Standards Scotland (FSS) and RIMNET for info. Should other Government agencies make enquiries of the Met Office in relation to the incident (e.g. Police, Local Authority), then the same PACRAM information will be forwarded to that agency.
- The forecaster will issue PACRAM with updates as appropriate or as requested, e.g. possible changes in wind direction, and/or respond to requests for further information as required.
- Note that, if requested by the emergency services, a Met Office Civil Contingency Advisor can attend the HSCC to provide direct liaison between the Incident Commanders and forecasters at the Met Office HQ.

The role of an Advisor during an incident is:-

1. To ensure that the management teams are aware of all the meteorological factors which could impact on the incident.
2. To ensure consistency of information, and that all responders within are able to utilise this information.
3. Where required to interpret this information for the responders.
4. To source other scientific advice available from the Met Office (e.g. from dispersion scientists) and to act as a point of contact between the Met Office and responders. This will free up responders resources to enable them to utilise their specific skills effectively.
5. Respond to weather related enquiries.
6. If required and appropriate, to arrange for routine forecasts and other information to be supplied in the recovery phase.
7. To assist in the audit trail by documenting all meteorological requests and responses.

Information on any plume, including all PACRAM forecasts, can be uploaded on to the Met Office Hazard Manager website so that all information is available to all responders. Hazard Manager is available to all Cat 1 and Cat 2 responders at all times.

7.9 Neighbouring Councils

General

East Ayrshire, South Ayrshire, Inverclyde, Argyll and Bute, Renfrewshire border North Ayrshire Council. East Renfrewshire, East Dunbartonshire are all within the 30km OPZ. In addition, West Dunbartonshire and the City of Glasgow are all within the 43km radius of the Hunterston Power Station may require monitoring arrangements for food and milk, etc.

It may be required that information is passed onto these authorities to enable them to carry out appropriate monitoring should any incident dictate.

Agreed Actions

Site Incident

No Notification or action will be provided by North Ayrshire **unless** an indication is given that the incident is likely to extend to an Off-site Nuclear Emergency and the actions will be:

- Once contacted regarding an incident contact will be made with the Chief Executive or appropriate senior manager
- Assess the likely involvement of your council
- Put in place the normal response to an incident if that is considered appropriate

Off-site Nuclear Emergency

On receipt of notification consider implementation of REPPIR procedures / arrangements.

- Consider a possible request for mutual aid
- Update website and twitter informing people within the local authority area that there has been an incident at Hunterston and continue to do so at the request of the PCG
- Update elected members and senior officers of the council
- If requested, send an officer to the HSCC regarding the council's involvement or arrange a liaison officer
- Be prepared to provide information on vulnerable sites (ie, schools, carehomes, etc) within your local authority in anticipation of protective actions being extended to the OPZ
- If requested, send an officer to participate in the Public Comms Group or provide mutual aid to the Communications Team for North Ayrshire.
- Possible request to monitor out to 40km for foodstuffs, etc (will be confirmed by the STAC).
- Possible request to monitor beyond 40km for foodstuffs, etc (will be confirmed by the STAC).
- Activate your own Emergency Control Centre if that is considered necessary
-

It should be noted that the OPZ is only activated once the current protective actions are extended.

7.10 Network Rail in Scotland / Scotrail

Roles and Responsibilities

Network Rail is the owner and operator of the railway infrastructure in the UK. All train operations are controlled by them although services are provided by Train Operating Companies and Freight Operating Companies.

The Scottish Route of Network Rail is controlled from its Control Room in Glasgow and it is from here that any emergency response will be initiated and coordinated. On-call staff are strategically located throughout the region, available to respond to incidents around the clock. It is Network Rail who manages any incident affecting the railway on behalf of the railway industry.

In the event of an Off-site Nuclear Emergency being declared in respect of the Hunterston Site, Network Rail will assume this role by appointing a Rail Incident Officer (RIO) who will attend at the Hunterston Strategic Coordination Centre This section of the plan has been redacted.

The RIO will liaise with other railway agencies as may be required, in respect of the suspension of rail transport on the Largs branch and on any other affected routes. The RIO will also facilitate any request to use rail services for evacuation or other emergency purposes.

Agreed Actions

Site Incident
No action.

Off-site Nuclear Emergency
On receipt of advice of an Off-site Nuclear Emergency at Hunterston "B" Nuclear Power Station from the Police, Network Rail Control will activate the relevant section of the Network Rail Emergency Plan. This involves alerting a designated individual who will assume the role of RIO. The RIO will proceed to the HSCC and may be accompanied by an assistant who will provide administrative assistance at the HSCC. Network Rail may also elect to nominate a senior officer to act as Rail Incident Commander, although it must be noted that this person will not attend the HSCC but will operate at a strategic level from Network Rail HQ in Glasgow.

On arrival at the HSCC, the RIO will:

- Identify themselves to security staff.
- Proceed to the designated accommodation position.
- Confirm their arrival to Network Rail Control and to other agencies.
- In liaison with other agencies at the HSCC and Network Rail Control, formulate rail industry strategy and facilitate its implementation.

7.11 NHS Ayrshire and Arran

Roles and Responsibilities

Provision is made for a response to medical emergencies as a normal feature of the work of the NHS. The role of the NHS encompasses health care and the protection of public health.

Emergency arrangements have been made by the NHS to deal with the treatment of large numbers of casualties, public health incidents and the treatment of casualties contaminated with radiation or toxic materials, i.e.

- *NHS Ayrshire and Arran Major Incident Plan.*

In response to an incident at the Hunterston Site the NHS responsibilities may be summarised as making provision for:

1. Arrangements for the reception and treatment of casualties.
2. The coordination of NHS arrangements with the emergency services, local authorities and where appropriate, the site operator.
3. Patients who are contaminated with radioactive material and have a life threatening injury will be decontaminated at the hospital and monitoring will be undertaken by NHS Ayrshire and Arran staff.
4. Monitoring of members of the public and attendants who are, or who may be contaminated with radioactive material in the immediate post incident period.
5. Establish and chair a Scientific Technical Advice Cell which will provide appropriate and definitive advice to protect the public and responders.
6. Participation in the Strategic, Tactical and Recovery Working Group at the HSCC.,
7. Liaise with Scottish Government Health and Social Care Directorate and with other NHS Boards.
8. Subsequent validation monitoring of a sample of the population to confirm calculated assessments of population exposure or monitoring of individuals who have reason to suppose that they have been exposed to higher than average levels of contamination.

Agreed Actions

Site Incident

1 When notified of an onsite incident by Police Scotland, the CPH(M) will carry out the following:
   - Liaise with Police Scotland to keep updated of the situation
   - Notify the Chief Executive/ Director on call
   - Notify the Corporate Communications Team to liaise with Police Scotland Corporate Communications as well as partner agency communications reps to ensure there are no conflicting press releases.

There will be close communication and liaison between all parts of NHS Ayrshire and Arran.

Off-site Nuclear Emergency

1. When notified by Police Scotland the Consultant in Public Health (Medicine) (CPH(M)) will, after carrying out the actions contained within the NHS Ayrshire and Arran Public Health Response to a Radiological Incident Plan will attend the HSCC with a STAC support team.
2. The Chief Executive or Director on call will take on the role of Strategic representative at the HSCC and attend the SCG to ensure coordination of NHS arrangements with those of the site operator and other agencies
3. As part of the emergency protective actions it may be needed to issue Stable Iodine Tablets. The authority to issue these rests with the DPH (Director of Public Health). In the event that the DPH or CPH(M) is not immediately available, the DPH has given the EDF Site Emergency Controller at Hunterston B Power Station delegated authority to issue the message to households in the DEPZ who have pre-distributed tablets to take the tablets.
4. As part of the internal NHS Ayrshire and Arran processes start the arrangements for the collection of the locally held stocks of Stable Iodine Tablets.
5. Make arrangements to receive casualties at University Hospital Crosshouse including those who are seriously injured and externally contaminated and any contaminated self presenters.
6. The deployment of resources from across NHS Ayrshire and Arran including those in the Health and Social Care Partnerships as required to deal and manage the incident.
7. Ensure close communication and liaison is established and maintained between all parts of NHS Ayrshire and Arran Strategic Coordination Centre.
8. If required arrange for the collection of additional Stable Iodine Tablets from local and national stocks.
9. Implement the Ayrshire Radiation Monitoring Unit Plan.
10. There will be close communication and liaison between all parts of NHS Ayrshire and Arran. There may be a need to open the NHS Coordination Centre in such circumstances.

7.12 North Ayrshire Council (incl. Glasgow Scientific Services)

Roles and Responsibilities

1. To discharge the legislative requirements placed upon it by the *Radiation (Emergency Preparedness and Public Information) Regulations 2019*, by preparing, maintaining and exercising an Off-site Emergency Plan for Hunterston "B" Nuclear Power Station-Site.
2. To provide appropriate support to all relevant agencies in their response to the emergency.
3. To provide welfare, care and support to people affected by the emergency staff responding to an incident both in the short and long term.
4. To provide temporary accommodation to local residents, or holidaymakers, who require to be evacuated by the police from their homes/ accommodation.
5. In liaison with the other authorities, ensure the public is kept adequately informed with regular and accurate information.
6. In conjunction with other agencies prevent / limit any damage or pollution of the environment.
7. To endeavour to return the situation to normal as soon as possible without jeopardising the effectiveness of the emergency response.
8. To provide the Strategic Coordinator during the Recovery Phase.

Glasgow Scientific Services

9. Liaise with Environmental Health regarding a suitable sampling protocol for food, water and other appropriate environmental substances.
10. Analyse samples for radioactivity received from, and report back to, North Ayrshire Council / STAC

Agreed Actions

Site Incident
When notified of a Site Incident by the Police Service Overview, ACCT on behalf of North Ayrshire Council will, where appropriate, and through the Services listed below, carry out the following:-

1. Liaise with Police Scotland to keep updated on situation.
2. Notify Executive Directors and Heads of Service and put on stand-by.
3. Appoint a Communications Officer who will liaise with EDF Energy - Nuclear Generation, and Police Scotland Corporate Communications Officers to ensure no conflicting press and media releases.
4. Keep Elected Members of the Council informed.

Off-site Nuclear Emergency
When notified of an Off-site Nuclear Emergency by Police Scotland Service Overview, ACCT on behalf of North Ayrshire Council will, where appropriate, and through the Services listed below, carry out the following:-

Democratic Services:
1. Arrange for appropriate representatives to attend the This section of the plan has been redacted
2. Be represented at all multi agency meetings and briefings at the HSCC.
3. Initiate and coordinate the necessary response of Council resources as requested by the Responding Organisations.
4. Inform Executive Directors and Heads of Service as appropriate
5. Establish the Council Emergency Control Centre within NAC HQ (if required).
6. Arrange for mutual assistance, initially from South and East Ayrshire Councils if required.
7. Notify other adjacent Local Authorities and those within the OPZ (see **Section 1.4** and **Section 1.2**).
8. Activate any additional plans for example, Business Continuity plans to ensure that the Council is able to resource both the response to the incident and normal council operations.

9. On completion of the incident carry out an internal debrief with those Services responding to the incident, notifying any amendments required to the Plan and highlighting best practices.
10. Incorporate the necessary amendments to the multi-agency review of this Plan.

Corporate Communications

1. A communications officer will be appointed to liaise with the Site Operators representative and Police Scotland Corporate Communications to ensure cohesion in all press and media releases.
2. Participate in the PCG
3. Coordinate the NAC response to any public helpline requirements.
4. Update Council website and media streams including Council Customer Services as required and appropriate.
5. Keep Elected Members of the Council informed.

Environmental Health

1. Consult with appropriate agencies regarding (possible) pollution of the environment and ensure relevant remedial and recovery measures are implemented.
2. Liaise with Glasgow Scientific Services in connection with the above.
3. Sample milk, water or other products if appropriate.
4. Attend STAC meetings.
5. Liaise with STAC / Public Health colleagues.
6. Undertake environment monitoring where appropriate.
7. Provide advice on the location of suitable premises for the accommodation of displaced pets.
8. Provide advice to the Recovery Working Group, if established.

GLASGOW SCIENTIFIC SERVICES (appointed by Environmental Health. Details available from Scottish Fire and Rescue Services)

1. Advise on a suitable sampling protocol for environmental materials for North Ayrshire Council, Environmental Health.
2. Prepare for receipt of environmental materials for radioactivity analysis.
3. Analyse environmental samples as and when they arrive, and report back results to North Ayrshire Council, Environmental Health Officer via sub-contracting to PHE. Public Health England located at GQEUH (formerly Southern general). Glasgow.
4. Consult with appropriate agencies regarding possible contamination of the environment.

Trading Standards

1. Liaise with SGRPID to advise farming community on the effect of radiation.
2. Liaise with SGRPID in the enforcement of emergency animal movement legislation.
3. Assist with the monitoring of non-foodstuffs.

Roads

1. Provision of signs and resources to assist in road closures and diversions.
2. Arrange for the closure of gate at Hunterston Castle on the Ayrshire Coastal path.

Transport

1. The provision of transport, if required and safe to do so, to take evacuees to / from any Rest Centre (s)
2. Coordinating the provision of any transport requirements.

Waste Resources

1. Liaise with SEPA on the disposal of contaminated waste.
2. Provision of plant, transport and labour

Facilities Management

1. The provision of catering services for affected people at Emergency Rest Centre(s).

Housing

1. Responsibility to provide alternative / temporary accommodation for members of the public evacuated to Emergency Rest Centre(s).
2. Assume responsibility for damaged property owned by the Service.

Connected Communities

1. Arrange for the use of Community Centres that are required to be used as Emergency Rest Centre(s).

Education

1. Evacuation of schools within the hazard area (if required).
2. After school hours, arrange for children living within the affected areas to be taken to Emergency Rest Centre(s).
3. Provide school closure information to Corporate Communications.

HEALTH AND SOCIAL CARE PARTNERSHIP

1. The activation, staffing and management of the Emergency Rest Centre(s).
2. The temporary care of evacuees at the Emergency Rest Centre(s).
3 Identify any vulnerable persons within the affected population, assess their needs and respond accordingly (this will include participating in training if staff are required to enter the DEPZ.
4. Establish the Major Incident Support Team as required.
5. In conjunction with the Police Scotland, carry out the documentation of the evacuees
6. Coordinate the effort of the voluntary welfare organisations.
7. Coordinate the effort of the Community Resilience Teams who may be able to assist

7.13 Police Scotland

Roles and Responsibilities

Responding to emergencies is a normal feature of the work of Police Scotland. The normal roles and responsibilities of the Police encompass the protection of life, property and the environment.

In responding to an incident at Hunterston "B" Nuclear Power Station Site, the Police responsibilities can be summarised as follows:

1. The saving of life in conjunction with other emergency services.
2. Coordination of the emergency services and other subsidiary organisations during the emergency phase of the incident.
3. To call out or place on standby essential services.
4. The protection and preservation of the scene.
5. The investigation of the incident in conjunction with other investigative bodies where applicable.
6. Identification of the victims on behalf of the Procurator Fiscal who is the principal investigator when fatalities are involved.
7. The collation and dissemination of casualty information.
8. The restoration of normality at the earliest opportunity.
9. Coordination of the response to the media.
10. Application of protective actions to protect the public.

Agreed Actions

Site Incident
On receipt of the message alerting Police Scotland to the incident the following action will be progressed:

1. Immediately contact the On Call EPA West and On Call CBRN TACAD (who shall contact the CBRN Centre in Ryton and the Atomic Weapons Establishment (**AWE),** Police Scotland's Radiation Protection Advisor (**RPA).** CBRN TACAD shall provide specialist briefings ("local rules") **PRIOR** to officers being deployed.
2. Alert the agencies shown in **Section 1.1** (Site Incident) by repeating verbatim the message received from EDF Energy - Nuclear Generation
3. **Having first ascertained that it is safe to do so and identifying a safe access route and addressing any additional PPE requirements**, send an Inspector to the appropriate Emergency Control Centre, Hunterston Site, to be briefed by the Emergency Controller and monitor the situation.
4. Establish liaison between the Emergency Control Centre and Police Scotland Service Overview, Glasgow.

Off-site Nuclear Emergency

Operational Dose Limit
The Operational Dose Limit for an incident attended by the Police is 5 milli-Sieverts (mSv) (*Ionising Radiation Regulations 2017)*.

Emergency Dose Limits
The Emergency Dose Limit is dependent upon the circumstances of the incident and the individual's circumstances. CBRN TACAD will promulgate "Local Rules" (Pg 32, Section 3.9) from AWE. For example, a female who has declared a pregnancy has a lower limit. For detailed guidance please refer to **NPCC National Police Chiefs Council Operational Response to the Police Service for Operations & Incidents Involving Radiation 2016.**

Radiation Emergency: a non-routine situation involving radioactive material that requires prompt action to mitigate any resulting risks to life, property or the environment.

Emergency Worker: any person who has a defined responding role in an emergency plan and who might be exposed to radiation as a result of a radiation emergency.

All responding Police Officers will be defined as **Emergency Workers** within the DEPZ and OPZ to comply with REPPIR 2019.

In a **radiation emergency** the following Dose Limits apply:

In certain circumstances following advice from the Radiation Protection Advisor:

- Emergency Exposure Dose Limit 1: 100 mSv. This applies to simple non-life saving rescues, maintaining important plant and reducing further doses to responders and the public (Page 22, Section 3.5.12 (Figure 3.5));
- Emergency Exposure Dose Limit 2: 500 milli-Grays (mGy). This applies to life saving intervention only and also includes intervention to save critical infrastructure which, if not attended, may yet threaten public and / or responder life.

The above guidance (Page 22, Section 3.5.12) states:

"under REPPIR, all personnel to receive an emergency exposure MUST be an **informed volunteer**. An informed volunteer is a person that:

- Is not under undue pressure from others to undertake the intervention and volunteers of their own accord;
- Has received a suitable briefing on the work to be undertaken and understands the risks and hazards involved in undertaking the intervention;
- Has had the opportunity to ask any questions regarding the radiological and general safety aspects of the intervention to be undertaken.
- Understands that they can decide not to undertake the intervention at any time if they choose to do so.

NB It is a requirement that supervisors with briefing responsibilities are trained and understand the above guidance and that they must **not** task any police service staff or officers inappropriately. Incident specific briefings known as "local rules" will come from the CBRN TACAD (RPA, AWE).

Dosimeters will be provided at the ACP for use.

On receipt of the message alerting Police Scotland to the **Off-site Nuclear Emergency (OSNE)** the following action will be progressed:-

1. Immediately contact the On Call EPA and on call CBRN Tactical Advisor who shall contact the CBRN Centre in Ryton. Contact will then be made with the Atomic Weapons Establishment **AWE** (who are Police Scotland's Radiation Protection Advisor **RPA**) who shall provide specialist briefings **PRIOR** to officers being deployed and advice will be provided on the level of PPE required.
2. Alert the Agencies shown in **Section 1.2** (Off-site Nuclear Emergency) repeating verbatim the message received from EDF Energy - Nuclear Generation.
3. Establish liaison between the Emergency Control Centre and Police Scotland Service Overview, Glasgow.
4. **Having first ascertained that it is safe to do so and identifying a safe access route and addressing any additional PPE requirements** send an Inspector to the appropriate Emergency Control Centre, Hunterston Site, to be briefed by the Emergency Controller and monitor the situation.
5. Confirm with the site operator(s) that the DEPZ automated warning system has been actuated.

6. Establish a Forward Control Post (**Section 8.3**).
7. Establish and manage the Rendezvous Point (**Section 8.3**).
8. Establish traffic control points. (**Section 8.15.3**).
9. Send an officer to the HSCC of appropriate rank to commence setting up the HSCC and to perform the role of Police Cell Manager and deputy Tactical Commander.
10. Send an officer to the HSCC of an appropriate rank to perform the role of Strategic Coordinator along with relevant supporting staff.
11. Police Scotland Corporate Communications shall issue holding statement to the media. (**Section 3.15**).
12. Send the Divisional Commander or representative to the HSCC to act as Tactical Commander along with a relevant support team. The Tactical Commander will also represent Police Scotland at the Strategic Coordinating Group.
13. Establish an Incident Control Point.
14. Deploy resources to manage the media response.
15. Provide security for the HSCC / MBC.
16. Provide officer to perform Briefing Officer Role.
17. Implement a message / action system within the HSCC.
18. Provide officer to perform role as STAC representative.
19. Provide officer to perform role as RWG representative.
20. Establish Casualty Bureau if required.
21. Implement the decision of the Tactical Commander / Strategic Coordinator to coordinate the progression of protective actions prior to the HSCC being established.
22. Send Documentation Teams to receiving Hospitals and Rest Centre(s) if applicable.
23. Investigate incident and report to the Procurator Fiscal if circumstances dictate.

NB. *The above information is currently being reviewed and shall be updated upon Police Scotland receiving the latest version of the* ***'NPCC Operational response to the Police Service for Operations & Incidents involving Radiation'*** *document.*
March 2020.

7.14 Public Health England - Centre for Radiation Chemicals and Environmental Hazards (PHE CRCE)

PHE CRCE is responsible for the provision of expert advice and information relating to the public radiological protection aspects of an emergency to government and any strategic group set up to manage the response.

Agreed Actions

On receipt of an alert PHE CRCE will activate its own emergency plan. This level of response provided will be dependent on the nature of the incident but will include some or all of the following:

1. Deployment of senior staff to a number of key locations. These would include:
   - The HSCC (to provide advice on the Strategic Coordinating Group (SCG), the Scientific and Technical Advice Cell (STAC) and the Recovery Group and to provide assistance on radiological protection aspects of the emergency.
   - The Media Briefing Centre (MBC)
   - Multi-Agency Tactical Coordination Centre (TCC)
   - The Central Emergencies Support Centre (CESC)
   - Scientific Advisory Group for Emergencies (SAGE)
   - Cabinet Office Briefing Room (COBR) in support of DH
   - Cabinet office Briefing Room (COBR) in support of Department of Health and Social Care (DHSC)
   - The Devolved Governments emergency centres (as appropriate).

2. Set up an Emergency Operations Centre at PHE CRCE HQ, Chilton, Oxfordshire. The key functions of this centre will be to gather relevant information (particular radiation monitoring information), to assess this information and to provide expert advice based on this information.

3. Deploy radiation-monitoring teams capable of measuring environmental contamination and measurements of radioactivity on or in people. Support will be provided to Radiation Monitoring Units (RMUs) as appropriate and where resources allow.

4. Undertake the role of national radiation monitoring co-ordination.

5. Provide expert advice on radiological issues for the recovery phase.

6. Liaise effectively with the key stakeholders in the response at a local, regional and national level including the Food Standards Agency, Food Standards Scotland, Scottish Environment Protection Agency (SEPA), the local authority, Environmental Health Departments and water companies.

Radiation Monitoring Teams and Monitoring Coordination

A fundamental component of the PHE (CRCE) radiation emergency response plan is maintenance of capability to deploy radiation monitoring teams capable of measuring environmental contamination and undertaking measurements of radioactivity on or in people. Teams can be deployed from Chilton (Oxfordshire), Leeds and Glasgow. Their deployment and tasking is controlled by the Monitoring Control team leader based in the Chilton Emergency Centre who reports directly to the PHE CRCE Operations Director.

In addition to deployment and management of CRCE monitoring teams, PHE also has a national monitoring coordination role during radiation emergencies. PHE will coordinate the monitoring resources[2] made available to it in the event of an emergency and prepare a monitoring strategy for approval by the Strategic Coordinating Group (SCG). This responsibility covers the responsibility for monitoring people and the environment (in the Detailed Emergency Planning Zone (DEPZ), Outline Planning Zone (OPZ) and further afield, as required).

The monitoring strategy will be developed and updated in consultation with external stakeholders in radiation monitoring and will take account of monitoring being undertaken by organsiations with statutory or existing radiation monitoring responsibilities, to achieve the most effective use of the available radiation monitoring resources.

The strategy does not change or re-allocate any existing responsibilities that organisations might hold with regards to radiation monitoring.

PHE has no power to commandeer resources and PHE would not expect to take direct tactical control of any resources made available. Each organisation is responsible for ensuring that their staff are properly trained, and its resources are adequately maintained. Operational responsibility would be retained at each monitoring organisation's emergency centre. PHE CRCE will periodically provide organisations with what information it has as the incident develops, this should include:

- A summary of the incident situation
- PHE CRCE local rules for its own monitoring teams being deployed
- PHE CRCE radiological risk assessment for its own monitoring teams being deployed.

Organisation's monitoring teams will however need to:

1. Be self sufficient in respect of their own accommodation, transport, meals, communications etc;
2. Have appropriate health physics skills to competently carry out the agreed monitoring tasks;
1. Work under the supervision of their own management structures; and
2. Be self sufficient in terms of PPE (including RPE where appropriate).

If requesting support from Ministry of Defence radiation monitoring resources, PHE will submit a Military Aid to Civil Authorities (MACA), request if authorised to do so by the SCG.

[2] Radiation monitoring resources include resources for:

1. undertaking direct radiation monitoring of the environment and people;
2. collecting samples from the environment or people;

undertaking laboratory analysis of samples from the environment or people.

7.15 Scientific Advisory Group for Emergencies (SAGE)

It is anticipated that the SAGE will be activated in support of Cabinet Office Briefing Room (COBR) for all nuclear emergencies where 1) there has been an off-site release of radiological material, 2) an off-site release is considered possible or 3) there is an incident that has serious implications for the site itself and those on it.

During COBR activation, SAGE is responsible for coordinating and peer reviewing, as far as possible, scientific and technical advice to inform national-level decision-making. SAGE also supports Ministers in making evidence based decisions on key national policy questions. During a nuclear scenario, it is anticipated that SAGE will focus on three primary subject areas – peer review of the Science and Technical Advice Cell (STAC), horizon scanning and protective actions required (e.g. understanding how the situation may evolve), and on-site technical diagnosis / prognosis.

Peer review of scientific advice
SAGE provides expert oversight of the scientific advice informing emergency response decision-making through its peer review function. SAGE will and must have a close, collaborative and supportive working relationship with the STAC, which will advise the SCG at the local strategic level on protective measures. In this role, SAGE peer reviews and adds value to local scientific advice (and the information/assessments it is based upon), providing subsequent reassurance to COBR (and STAC itself) that this advice is appropriately shaping decisions. Despite the close working and information sharing between SAGE and STACs, STACs remain accountable to SCGs and does not in any circumstance become a sub-committee of SAGE, but remains focused on the advice requirements at the local level.

Horizon scanning function
SAGE's horizon scanning function contributes to government's responsibility to determine the likely development of the emergency, by using joint agency modelling and assessment (JAM) based on available scientific and technical data. JAM delivery partners provide SAGE with an evolving but consolidated projection of how the event will develop. This allows government to ensure an effective response across a range of credible scenarios by preparing in advance for potential future events.

SAGE will also have a role in advising COBR of the required protective actions, using monitoring data, modelling data (including JAM) and expert advice.

Site technical diagnosis/prognosis
This function requires SAGE to examine the events occurring at the nuclear site (or, if the event is transportation, the incident site) from a technical perspective, to understand the developing scenario and what is being done to bring the incident under control. Again, this will focus on understanding how events could unfold in the future. This will require close interaction and cooperation with the site operator (or carrier), STAC and nuclear regulator.

Communication between SAGE and STAC is essential to ensure a coordinated approach. The chairs of both SAGE and STAC should be in regular contact. The STAC chair will dial into SAGE and vice versa. SAGE will also include relevant Chief Scientific Advisers from Devolved Administrations too, to ensure join up with the Devolved regions.

For further information, see Nuclear Response Guide for the SAGE:

7.16 Scottish Ambulance Service

Roles and Responsibilities of the Scottish Ambulance Service in relation to a major incident

The purpose of the Service is to provide immediate care to patients at the scene of an incident and care during transportation, to, from and between healthcare facilities. To supplement road transport, the Service operates and controls an integrated air ambulance service using fixed wing aircraft and helicopters.

In the case of an incident requiring decontamination of people exposed to hazardous substances in the community the Service would assume responsibility for the triage and decontamination of those affected, as an extension of normal operational or major incident procedures.

In responding to an incident at any location in Scotland, responsibilities may be summarized as follows:

- Save life and provide immediate care for patients at the scene of the incident and in transit to hospital.
- Alert~~ing~~ Hospital Services and other relevant NHS agencies.
- Manage clinical decontamination for people affected by hazardous substances prior to their evacuation from the scene.
- Evacuate, where practicable, the injured from the scene in order of medical priority.
- Arrange and ensure the most appropriate transport for the injured to the receiving hospital(s).
- Supply patient care equipment to the scene of a major incident.
- Transport essential medical staff and their equipment to the scene.
- Alert the British Red Cross and St Andrew's First Aid and co-ordinate their work in support of the SAS.
- Provide and maintain communications equipment for key medical staff and voluntary organisations at the scene.
- Restore the service to normality*.

Action at the scene:

Tactical priorities of the Scottish Ambulance Service:

Command:	establish command, control and coordination
Safety:	self, crews and patients
Communications:	METHANE reports, ambulance control and responders
Assessment:	resources required, hazards and threats
Triage:	establish primary triage
Treatment:	access patients and begin treatment based on triage priorities
Transport:	distribute patients to definitive care considering capability, capacity, availability and suitability of staff and facilities

Actions of the first ambulance crew at the scene of a major incident

- Carry out a quick reconnaissance of the incident site and report back to Control
- Liaise with Police, Fire or other Incident Officers or Site Operators to gather information.
- Declare a “Major Incident” as appropriate and act as the initial Ambulance Control Point.
- Establish Command, Control and Communications for the Service
- Designate appropriate priority roles to manage ambulance activity at the scene
- Maintain a decision / action log

Note “Scottish Ambulance Service will, in the first instance, report to the RVP at the This section of the plan has been redacted **and will only proceed to the Hunterston Site when it is declared safe to do so”.** Dosimeters will be provided at the Gatehouse for use.

7.17 Scottish Environment Protection Agency

Roles and Responsibilities

SEPA is responsible for environmental protection in Scotland and adopts an integrated approach to the protection and enhancement of water, air and land and associated natural resources. SEPA is responsible for the administration and enforcement of the *Environmental Authorisations (Scotland) Regulations 2018 (EASR)*. Under EASR SEPA is responsible for the authorisation of radioactive waste on and from the site and maintains an independent monitoring regime for radioactivity in food and the environment around the site.

During an emergency SEPA may make environmental measurements in support of its function and may contribute any environmental measurement capability to other organisations involved. SEPA will, take protective action to mitigate serious consequences to the environment and assist in the transition to recovery if requested, provide advice to government on sampling and measurement of radioactive contamination in the environment, potable and surface waters, and the food chain. SEPA will advise on and authorise the management of any radioactive waste arising as a result of an incident. SEPA will also advise on any off-site decontamination undertaken in the remediation phase. SEPA will ensure that information passed from the HSCC/SCG/STAC to the SEPA Radioactive Substances Technical Hub is entered on the RIMNET system.

Agreed Actions

Site Incident

1. Investigate and take appropriate action with respect to enforcement duties.

Off-site Nuclear Emergency

In responding to the incident SEPA will

1. Provide appropriate representatives, as required, to meet local coordination arrangements.
2. Set up and staff SEPA Radioactive Substances Technical Hub.
3. Provide advice on the environmental impact of a radiological incident to relevant organisations.
4. Provide information on the environmental effects of the incident where appropriate.
5. Maintain operational links with appropriate organisations to ensure an integrated response to the incident.
6. Advise on appropriate disposal of radioactive waste and, if appropriate, authorise such disposals.
7. Determine if a breach of site authorisation has occurred and gather relevant information if necessary.

7.18 Scottish Fire and Rescue Service

Roles and Responsibilities

Responding to emergencies is a normal function of the Scottish Fire and Rescue Service These core responsibilities also include rescues from collapsed structures or major industrial incidents, the control of incidents involving hazardous materials and substances, the safeguarding of the environment, and the safety management of all persons in and around defined areas of Fire and Rescue operations.

Scottish Fire and Rescue Service is capable of rapidly mobilising trained personnel and a broad range of specialist appliances and rescue equipment. In an emergency situation, these resources and technical expertise may be utilised as directed by the Incident Commander to assist other agencies in discharging their respective roles

Agreed Actions

Site Incident

On receipt of information reporting that an incident has occurred at the Hunterston Site the following actions will be initiated:

1. Scottish Fire and Rescue Service Operations Support Centre will mobilise an appropriate response in accordance with current Integrated Risk Management policy.
2. In accordance with established procedures the Operations Support Centre will confirm with other agencies, in particular Police Scotland Service Overview, that they also have received notification.
3. On arrival at the main security gate area appliances and personnel will be directed to the holding area to await further instructions. Dosimeters will be supplied at the ACP for use.
4. The Officer in Charge of the first attendance will, in conjunction with Site representatives if available, carry out a risk assessment on the nature and extent of the incident, the appropriate actions to be initiated and consider if any further Scottish Fire and Rescue Service resources or other service attendance is immediately required.
5. Scottish Fire and Rescue Service will assume control of all firefighting and rescue activities.

An Officer, of at least Watch Commander, level will be escorted to the Emergency Control Centre to act as the advisor and liaison officer for Scottish Fire and Rescue operations. The Officer performing this task need not be the Incident Commander but must at all times remain in radio contact with the Incident Commander. This Officer may be relieved of this duty as additional Senior Officers attend the incident.

Scottish Fire and Rescue Service Liaison Officer will:-

1. Make contact with the Site Emergency Controller in order to gather information relevant to the incident.
2. Maintain radio contact with the Incident Commander at all times.
3. Utilise information from the Emergency Controller to assess the situation and in turn inform the Incident Commander, updating this information, as it becomes available.

The Incident Commander will: -

1. Request the assistance of SFRS Radiation Protection Advisor (RPA)
2. Assign an Officer to take charge of the holding area. This Officer will ensure that no person advances beyond this point except on the orders of the Incident Commander.
3. Remain at the holding area and await an assessment of the incident before formulating a plan of action.
4. Utilise this information when available, along with Scottish Fire and Rescue Service operational risk assessment data to form a plan of action, prioritising rescue, fire fighting and measures to deal with hazardous substances or situations, in accordance with documented Scottish Fire and Rescue Service procedures and at all times acting in coordination with the Fire and Rescue Liaison Officer.
5. Follow the instructions and recommendations of Health Physics Monitors to ensure that crews at work are not exposed to excessive doses of radiation or contamination; ensure the use of additional layer of PPE (BETA hoods provided by the site operator) to enhance the safety of personnel.
6. Liaise with the AIC and MC (if present) on the priority rescues and evacuation of casualties.
7. Identify and request such additional resources as may be appropriate.
8. Implement the plan, maintaining operational control within the area of Fire and Rescue activity and liaison with the other Category 1 and Category 2 responders in attendance.
9. Continually evaluate the situation, the effectiveness of actions being taken, and any potential for development, preparing to brief a more Senior Officer on progress.
10. Participate in investigations as appropriate and prepare reports and evidence for enquiries
11. Standby during non-emergency recovery phase to ensure continued safety at the incident location area.

Oncoming Senior Officers, where appropriate, will take command at Tactical and Strategic levels. These Officers will act in consultation with all other agencies present to ensure a coordinated response to the incident.

Off-site Nuclear Emergency

On receipt of the message alerting the Scottish Fire and Rescue Service to an incident requiring Hunterston Strategic Coordination Centre (HSCC) to come into operation, Scottish Fire and Rescue Service Operations Support Centre will mobilise the following officers:

- The Duty Assistant Chief Officer
- The Duty Area Commander
- Group Commander, HQ Operations (Response and Resilience) West Service Delivery Area HQ

On arrival Scottish Fire and Rescue Service representatives will:

1. Proceed to the designated accommodation position and activate the communications equipment.
2. Formulate the Fire and Rescue strategy and instigate its deployment.
3. Handle requests for information and carry out associated administrative tasks.
4. Gather information on Fire and Rescue activities.
5. Assess the effects of the incident on Scottish Fire and Rescue Service resources.
6. Provide advice and information to other Scottish Fire and Rescue Service Operations Support Centres.
7. Provide advice and information to the Centre Emergency Management Team to allow the overall scale of the incident and its likely development to be established so that suitable actions can be anticipated and planned for.
8. SFRS will work in collaboration and share information with partners as appropriate.

Dose Limits

The Ionising Radiation Regulations (*2017*) set limits for workers. The Fire and Rescue Service have generally adopted these limits.

Male: 20 mSv per year or single incident;
Female: 13 mSv in any consecutive period of 3 months or (Reproductive single incident with a maximum of 20mSv per year capacity)
Anyone: 100 mSv in exceptional circumstances and on a voluntary basis for life saving purposes.

National Inter-Agency Liaison Officer (NILO)

The NILO function compliments existing Strategic, Tactical and Operational inter-agency coordination. Within the Incident Command System (ICS) the role is defined as:

'A trained and qualified officer who can advise and support Incident Commanders, police, medical, military and other government agencies on the FRS's Operational capacity and capability to reduce risk and safety resolve incidents at which a FRS attendance may be required."

The NILO role falls into two main functions:

- Proactive response: Intelligence led operations where the blue light services pre-planning focus will be on risk reduction, risk and asset management and communication
- Reactive response and mobilising: Where the underpinning knowledge, skills of the other agencies capabilities can be used to bring the incident to a safe conclusion.

Therefore, the role of the NILO will include:

- Bridge the intelligence and information sharing between the partner agencies involved.
- Improve inter-agency planning, operational preparedness, liaison and response at emergencies, terrorist-related and other critical incidents.
- Improve cooperation and understanding amongst agencies on matters of organisational capacity, capability and command.
- Reduce risk to the public, operational personnel and the environment.

There are four main categories of incident types at which the NILO may be involved:

- Conventional and CBRN(E) terrorism, including MTA
- Major Incidents
- Complex or protracted police led incidents
- Spontaneous and planned serious public order.

Note: Whilst the initial concept of the NILO was primarily focussed around the above incident types the skills can be utilised across a wide range of incidents.

7.19 The Department for Business, Energy and Industrial Strategy (BEIS) and The Scottish Government (SG)

Roles and Responsibilities

Nuclear Energy is a reserved matter. BEIS is the Lead Government Department (LGD) in the event of a nuclear emergency at a civil nuclear site in England, Wales or Scotland. BEIS is the policy lead for civil nuclear which includes on-site aspects of any response. Emergency plans and exercises are required for all REPPIR civil nuclear sites. Policy implications of an emergency and regulatory response will fall to BEIS.

Scottish Government will play a key role in supporting the response at a Scottish civil nuclear site, with off-site consequence management planning, response and recovery devolved to Scottish Government.

BEIS' main function is to provide strategic national direction on policy impacts, oversee national response and manage international liaison.

Agreed Actions

Site Incident
No Action

Off-site Nuclear Emergency

BEIS:

During a civil nuclear emergency, the Department for Business, Energy and Industrial Strategy (BEIS) will:

- Act as the Lead Government Department (LGD) for a civil nuclear emergency in England, Scotland or Wales. BEIS will work closely with Scottish Government who retain responsibility for off-site consequence management at Scottish civil nuclear sites.
- Activate its Emergency Operations Centre (EOC) in London.
- Provide accurate, timely briefing and situational awareness for UK Government Ministers and manage UK parliamentary interest.
- Coordinate national public messaging.
- Manage the Radiological Response Emergency Management System (RREMS) and monitor the delivery of the Joint Agency Modelling (JAM) process and products.
- BEIS would send a liaison officer to the Scottish Government Resilience Room (SGoRR) for an emergency at a Scottish civil nuclear site.
- Liaise with international organisations (International Atomic Energy Agency, the European Commission and countries with bilateral arrangements) on notification, information sharing and any offers of aid.
- Coordinate the deployment of national-level assets.

Off-site Nuclear Emergency

Scottish Government

Upon receipt of notification, the Scottish Government will:

- Activate its Scottish Government Resilience Room (SGoRR) arrangements to support the local response.
- Notify BEIS, Cabinet Office (via the Civil Contingencies Secretariat – CCS) and Scottish Resilience Partnerships on call team.
- Scottish Government Liaison Officer(s) (SGLO) will be deployed to the Strategic Coordination Centre and will liaise with SGoRR. Initially this will be an officer from the West of Scotland Regional Resilience Partnership who will undertake the role of interim SGLO.
- A SG liaison officer will be deployed to the BEIS EOC.

SG's Resilience Division will lead the operation of SGoRR. SGoRR will schedule 'officials' and 'ministerial' meetings during the response and recovery phases. Typically, SGoRR will include participants from the main affected Scottish Government Directorates including the Resilient Essential Services and Communities Unit, and representatives of relevant agencies.

Main functions:

- provide strategic national direction in respect of off-site consequence management planning, response and recovery;
- capture and maintain off-site consequence management situational awareness of the emergency, and brief COBR and Scottish Ministers;
- provide up-to-date information to CCS to produce the national SitRep;
- ensure effective communication between local, Scottish and UK levels, including the coordination of reports on the response and recovery effort;
- be the main source of information from central Government to the public and media;
- liaise with UK Government(BEIS, EOC and COBR) to ensure effective information exchange;
- support the response and recovery efforts as appropriate, including appropriate allocation of national resources;
- provide the focal point on public health and NHS resilience issues at Scottish level;
- animal welfare - provide advice and support activity to minimise the impact of radiation on food production and water supply.

APHA

APHA is an agency of Defra, but works in Scotland on behalf of the Scottish Government

The Animal and Plant Health Agency (APHA) is regulator for animal by-products (ABPs) legislation, including disposal of ABPs (eg animal carcasses and animal derived products including waste meat, milk etc). It oversees the approval, registration and inspection of ABP facilities. Regulator for animal welfare monitoring and animal diseases (including deliberately introduced diseases).

[Note: SEPA also regulates animal by-products where they are destined to be incinerated, landfilled, composted or to produce biogas].

7.20 Scottish Water

Roles and Responsibilities

Scottish Water has responsibility for establishing procedures for protecting and decontaminating water treatment facilities, related infrastructure and the public water supply, maintaining sewerage treatment facilities, related infrastructure and protecting the aquatic environment. Scottish Water must be contacted immediately there is any indication of potential contamination to any raw water source or sewerage system, or potential for actual contamination of or damage to Scottish Water's water and wastewater infrastructure.

In responding to an incident at the Hunterston Site Scottish Water's responsibilities may be summarised as follows:

Public Water Supply

- Ensure that any immediate risks to Scottish Water staff / contractors working on the public water system are adequately controlled.
- Assess the risk of contamination of the public water supply (including raw water sources).
- Assess the risk / impact of damage to the water network and related infrastructure.
- Arrange and coordinate sampling and analysis of public water supplies (including raw water sources) as appropriate and where relevant, in conjunction with SEPA.
- Collate information on the level and nature of any contamination of public water supplies (including raw water) sources.
- Assess the risk to the public health from impacted / contaminated public water supplies
- Assess the risks to staff, contractors, the public and other third parties including the environment of any damage to and / or contamination of the water infrastructure.
- Take any measures required to minimise the risk to public health from contaminated public water supplies.
- In coordination and where appropriate, agreement with other stakeholders, take the required measures to minimise risks to Scottish Water staff, contractors, the public and other third parties including the environment of any contamination of the public water infrastructure.
- Provide advice to customers and Licenced Service Providers (LRPs) on public water supplies in accordance with the Public Health Guidelines issued.
- Where there is a disruption to the public water supply, Scottish Water will, where practicable and with the support of Police Scotland and other relevant stakeholders arrange for the provision of alternative supplies of drinking water to impacted customers.
- In consultation and agreement with SEPA, HPS, PHE and other stakeholders, take the required measures to decontaminate and / or recover impacted public water infrastructure.

Sewerage (Wastewater) Network

- Ensure that any immediate risks to Scottish Water staff / contractors working on the sewerage system are adequately controlled.
- Assess the risk of contamination to the wastewater network and related infrastructure.
- Assess the risk / impact of damage to the wastewater network and related infrastructure.
- Arrange and coordinate sampling and analysis of process, point discharges, sludge and other relevant environmental samples in conjunction with SEPA and other stakeholders.
- Collate information on the level and nature of the contamination of the wastewater network and related infrastructure.
- Assess the risks to Scottish Water staff, contractors, the public and other third parties including the environment of any damage to and / or contamination of the wastewater network and related infrastructure.

- In coordination and where appropriate agreement with SEPA and other stakeholders take the required measures to minimise risks to Scottish Water staff, contractors, the public and other third parties including the environment of any contamination of the wastewater network and related infrastructure
- In consultation and agreement with SEPA, HPS, PHE and other stakeholders take the required measures to decontaminate and /or recover any impacted areas of the wastewater network and related infrastructure.

Initial Actions

The alerting party must inform Scottish Water that the incident location is Hunterston Nuclear Power Station and where appropriate that the incident is a "Radiation Emergency". A specific request must be made to talk to the **Duty Emergency Planning Support (DEPS)**.

The Scottish Water member of staff receiving the call will either transfer the call direct to the DEPS or if it is outwith normal working hours call the DEPS and arrange for them to contact the raiser of the alert. The DEPS will then contact the raiser direct.

Notes: The caller must have their contact details ready in order that these can be taken by the Scottish Water member of staff in case the initial phone call is disrupted.

It is important that Scottish Water is immediately advised if the Hunterston Strategic Coordination Centre has been activated in order that the appropriate staff can be mobilised as rapidly as possible.

See **Section 1.4** for details of how to contact Scottish Water

PART 8: CONTACT INFORMATION / KEY LOCATIONS / KEY INFORMATION

8.1 Contact Information

8.1.1 Responding Organisations.

Please refer to the telephone contact details contained at **Part 1** of the plan.

8.1.2 Glasgow Prestwick Airport Contact Telephone Numbers

Please refer to the numbers contained within the Hunterston SCC User Guide at **Section 10.7**.

8.1.3 Key Locations and Contact Telephone Numbers

Address	Telephone Number
Saltcoats Police Office, Glencairn Street, Saltcoats	101
North Ayrshire Council HQ, Cunninghame House, Irvine	01294 310000
This section of the plan has been redacted	This section of the plan has been redacted
University Hospital, Ayr	01292 610555 (in hours only)
University Hospital Crosshouse	01563 521133
This section of the plan has been redacted	This section of the plan has been redacted
This section of the plan has been redacted	This section of the plan has been redacted
Ayrshire Civil Contingencies Team, Glasgow Prestwick Airport	This section of the plan has been redacted 0300 123 0900 Option 4 (out of hours)
This section of the plan has been redacted	This section of the plan has been redacted

8.1.4 Contact Information – Airwave

8.1.4.1 Hunterston B Power Station is located 3 miles South of Largs on the A78 in North Ayrshire. Airwave is primarily provided by STR *** Police Station with a number of secondary sites providing coverage should this site fail. Predicted coverage is level ** which provides good handheld coverage around the site and this level of coverage can be maintained from the next best site. STR ** has * base radios providing the capacity for up to ** simultaneous voice transactions. This should therefore have sufficient capacity to cover and incident at this location and normal airwave business in the area.

8.1.4.2 **Initial Phase (Spontaneous Incidents Only)**

Participant Group:	This section of the plan has been redacted
Suggested Talkgroup:	This section of the plan has been redacted
Alternative if in use:	This section of the plan has been redacted
Call Sign:	This section of the plan has been redacted
Comments:	This section of the plan has been redacted
ACR / Event Area Monitoring:	This section of the plan has been redacted

8.2 Hunterston B Emergency Control Centre

8.2.1 Hunterston "B" has an Emergency Control Centre (ECC) within the Hunterston Site complex. The "B" Station emergency facility is located at the Administration Buildings, Hunterston Power Station and would be established by EDF Energy - Nuclear Generation. (Telephone contacts are listed in **Section 1.4**). Communication between the Site Emergency Controller and the Emergency Intervention staff will be coordinated through the Site ECC. This may involve the use of encrypted radios, messages and decisions made will be noted on the Situational Boards within the ECC.

8.3 Rendezvous Point / Forward Control Post

8.3.1 This section of the plan has been redacted

In the initial stages of an incident the Rendezvous Point (RVP) and the Forward Control Post will be co-located enabling the immediate deployment of the first emergency responders.

8.3.2 This section of the plan has been redacted

All other resources detailed to attend the incident but not required as part of the initial emergency response should be directed to attend This section of the plan has been redacted for logging, briefing, equipment issue and deployment. (Telephone contact is listed in **Section 1.4**).

8.4 Media Liaison Point

8.4.1 A Media Liaison Point will be established by Police Scotland. The purpose of the Media Liaison Point is to provide a police point of contact close to the scene for members of the press and media who will be directed to attend at this location which will offer easy access and a vantage point for photographs and filming.

8.4.2 The **primary** Media Liaison Point will be established in the public access **carpark area** to the side of This section of the plan has been redacted. There is a public access walkway which provides a closer vantage point.
This section of the plan has been redacted

8.4.3 A **secondary** Media Liaison Point may be established adjacent to This section of the plan has been redacted
This section of the plan has been redacted

8.5 Hunterston Strategic Coordination Centre (HSCC)

8.5.1 This section of the plan has been redacted

8.5.2 A location map for the above is found at **Section 8.15.7**.

8.5.3 The back-up facility for the HSCC is the This section of the plan has been redacted

8.5.4 Established by Police Scotland the purpose of the Off-site Facility at HSCC is to relieve the load on the affected site by taking responsibility for all activities not directly concerned with rectifying the situation at the site. It is at this Centre that the various agencies will progress the strategic and tactical elements of command and control in response to the incident. (Telephone contact number is listed in **Section 1.4**).

8.5.5 The HSCC does not have the collective authority to issue executive orders to individual responder agencies and each organisation will retain its own responsibilities and command authority.

8.5.6 Once contacted by Police Scotland the This section of the plan has been redacted will notify the airport on call manager of a Hunterston incident. The on call manager may assist in opening the off-site facility if required.

8.5.7 During any incident the Air Traffic Watch Manager will monitor air traffic and re-route air traffic if necessary.

8.5.8 Information on the current situation can be found on the board in the SCC Coordination area or from The Incident Information Management System (TiiMS) located in the Information Centre. Full details of the functions are described within the *Hunterston Strategic Coordination Centre User Guide.*

8.6 North Ayrshire Council Emergency Control Centre

8.6.1 North Ayrshire Council, This section of the plan has been redacted
Map reference – NS365277

Responding to the incident North Ayrshire Council (NAC) may provide tactical level coordination of the local authority response to the incident from their ECC, managing Council resources on any policy and advice received from the HSCC. Information relating to this facility is contained within the current version of the *NAC Emergency Control Centre Guide.*

8.7 Media Briefing Centre

8.7.1 This section of the plan has been redacted
This section of the plan has been redacted

The purpose of the MBC is to provide a single authoritative source of information concerning the emergency for the media and the public. It will also be the principal source of information to other media and public information points such as local authority information desks to ensure consistency in public statements. The MBC will include a central location for media interviews and briefings, and access to responding organisations personnel. (Telephone contact number is listed in **Section 8.15.7**).

8.8 Receiving Hospitals

8.8.1 University Hospital Crosshouse, Kilmarnock KA2 0BE.
Established by NHS Ayrshire and Arran
This section of the plan has been redacted

8.8.2 This hospital has been designated as suitable for receiving casualties involved in an incident at Hunterston "B" Nuclear Power Station. It has facilities for dealing with patients who have been exposed to external radioactive contamination.

8.8.3 Other hospitals will be designated as required by the Scottish Ambulance Service. (Telephone contact number is listed in **Section 1.4**).

8.9 Rest Centre(s)

8.9.1 This section of the plan has been redacted
This section of the plan has been redacted

8.9.2 This section of the plan has been redacted
This section of the plan has been redacted

8.9.3 The purpose of the Rest Centre(s) is to provide shelter for members of the public who have been displaced as a result of an incident at the Hunterston Site. From these centres, the Local Authority can make arrangements to provide for the necessary welfare needs of those displaced. (Telephone contact number is listed in **Section 1.4**).

8.9.4 Centres will be established by North Ayrshire Council. Where further centres are required, they can be arranged through North Ayrshire Council *Care for People Community Emergency Support Centre procedural documents*.

8.9.5 These centres will also be utilised as an area where dry decontamination can be carried out.

8.10 Radiation Monitoring Units (RMU)

8.10.1 The purpose of an RMU is to provide information on levels of radioactive contamination on or in people, by facilitating individual monitoring (also known as personal monitoring or people monitoring). This information will be used to inform decisions on some of the measures that could significantly reduce dose to individuals, and to advise and inform affected members of the public. There is Scottish Government document which provides further guidance available here

8.10.2 North Ayrshire Council has agreed that they will provide a facility which can be utilized as a Radiation Monitoring Unit in the first instance. It may be that further locations will be required and this will be agreed at the HSCC.

8.10.3 EDF have some radiation monitoring equipment on-site which **may be** available to use at the Radiation Monitoring Unit.

8.11 Scottish Government Resilience Room (SGoRR)

8.11.1 This section of the plan has been redacted
This section of the plan has been redacted

8.11.2 On receipt of notification of a radiation emergency, the Scottish Government (SG) will activate its emergency response arrangements through the Scottish Government Resilience Room (SGoRR), and set up its emergency room in Edinburgh. The Scottish Government Liaison Officer (SGLO) at the SCC will liaise with SGoRR.

8.11.3 The Scottish Government's Resilience Division will lead the operation of SGoRR. SGoRR will schedule officials and ministerial meetings during the response and recovery phases. Typically, SGoRR will include participants from the main affected Scottish Government Directorates including Resilient Essential Services and representatives of relevant agencies.

8.11.4 In the event that UK level arrangements are initiated, SGoRR will work with COBR and other relevant UK departments, which will be available to advise and support as required.

8.11.5 When a Scientific Advisory Group for Emergencies (SAGE) is activated it will provide advice to and interact with SGoRR, as well as the STAC.

8.12 OPZ Distance and Data

8.12.1 The OPZ has been set at 30km radius of the site by REPPIR 2019. This plan contains further details on the vulnerable sites and demographic information contained within this area. In the event of an incident the OPZ area will be considered in conjunction with the wind direction to ensure the most vulnerable areas of the OPZ are dealt with. See **Part 9**.

8.13 Traffic Control Points and Diversions

8.13.1 By establishing the following traffic control points, vehicular movement to and from the Detailed Emergency Planning Zone can be controlled (See map at **Section 8.15**) :-

This section of the plan has been redacted

8.13.2 **Diversions**

8.13.2.1 **Northbound**
This section of the plan has been redacted

8.13.2.2 **Southbound**
This section of the plan has been redacted

8.14 Food and Water Safety Information

8.14.1 Summary of food safety, livestock/animal health, milk and fish/shellfish responsibilities in the event of nuclear radiological emergency in Scotland

8.14.1.1 **Food safety**

- Food Standards Agency (FSA) will lead the food safety incident response unless it is mutually agreed that Food Standards Scotland (FSS) take over the lead.
- FSS will attend the Strategic Coordination Centre (SCC) in Scotland and link into the Scottish Government Resilience Room (SGoRR). FSA will link into COBR.
- FSA will provide radiological modelling which considers the long term effects of ingesting radioactive contamination and technical advice. FSS will provide precautionary food safety advice to food businesses and consumers.
- Public Health England (PHE) Centre for Radiation, Chemical and Environmental Hazards (CRCE) will coordinate monitoring effort including both sampling and analysis for the assessment of the impact on the human food chain together with other monitoring programmes e.g. for the environment. FSA will coordinate the production of radiological food monitoring data/reports and provide to FSS, SEPA and PHE. FSA will provide up to date risk assessment advice to FSS who will work closely with SEPA, PHE, Local Authority Environmental Health/Trading Standards teams, Scottish Government (SG) including the SG Legal Department (SGLD), SG Animal Health and Welfare Division (SG AHWD), SG Rural Payments and Inspections Division (SG RPID), Marine Scotland and others to ensure that food controls are put in place.
- FSA and FSS will liaise to input into the appropriate monitoring programme for assessment of the impact on human foodstuffs.
- FSS will provide advice on food contamination issues to the Strategic Coordinating Group (SCG), Scientific and Technical Advice Cell (STAC) and Recovery Working Group (RWG) within the SCC and responder organisations. FSA will liaise directly with the Science Advisory Group for Emergencies (SAGE).
- FSS may advise Scottish Ministers to issue statutory food restriction orders under the Food and Environment Protection Act 1985 (FEPA[3]), to restrict the supply, movement or sale of produce from the affected area. This is to ensure that contaminated food, which may pose a risk to human health, does not enter the food chain. FSS will liaise with SGLD, SG Agriculture Food and Rural Communities (AFRC) Directorate and Local Authorities to develop the FEPA, which once in place, is enforced by Local authority enforcement officers or Marine Scotland if the affected area is offshore outwith the Local Authority's jurisdiction.
- SEPA will provide advice to ensure contaminated foodstuffs are disposed of appropriately in accordance with the best advice available e.g. UK Recovery Handbooks for Radiation Incidents

[3] FEPA powers are used to make emergency orders in relation to any type of hazard which poses or may pose a risk to human health through food

8.14.1.2 **Livestock and animal health**

- In implementing food safety advice and controls, animal welfare issues must also be considered. For example, it may be possible to shelter animals and switch off ventilation to reduce exposure to contamination but this may not be suitable for prolonged periods. Therefore, for animal welfare reasons it may be appropriate to allow some exposure to radioactivity even where this means the animals will no longer be suitable for food production. This may be a decision for STAC and the SCG within the SCC in conjunction with FSS, SG AHWD and the Animal and Plant Health Agency (APHA)[4].
- SG AHWD will provide advice and support activity to minimise the impact of the radiological contamination of livestock.
- SG AHWD's policy responsibilities include the health and welfare of livestock, working, companion and zoo animals.
- FSS, following liaison with FSA and SG AHWD, will consider the need for advisory and statutory controls on livestock movements on the basis of food safety and AHWD will consider the need for similar measures on the basis of welfare. If restrictions are required, FSS will share food risk assessments with SG AHWD to inform animal welfare decisions.
- SG AFRC Directorate will coordinate communication with farms on the movement of livestock.
- SG AFRC Directorate will provide guidance to STAC / farmers on the milking of cattle.
- SG RPID will be available to offer on the ground local agricultural knowledge to FSS, as required.
- Local Authority Environmental Health/Trading Standards enforcement teams will provide information regarding locations of food businesses and farms in the vicinity, as required.
- APHA will undertake some of the practical work on SG's behalf, such as providing local veterinary advice where appropriate.
- The Strategic team and STAC within the SCC, in conjunction with FSS, SG, Local Authorities and APHA will take decisions on matters such as the need for evacuation of animals, the housing of evacuated animals, particularly companion animals, and movement restrictions.

8.14.1.3 **Milk**

- For milk consumption, FSA will undertake a risk assessment to decide if restrictions on the supply of milk are required.
- FSS will work with local authorities to enforce any restrictions as required and make arrangements for the monitoring and analysis of milk from affected farms.
- SEPA will provide advice to the STAC on the potential disposal of any affected milk. Local responders at STAC may need to agree the options for the disposal of milk and this may need to be escalated to SAGE if disposal cannot be managed locally.
- SG AFRC Directorate will provide guidance to STAC / farmers on the milking of cattle.

[4] An agency of the Department for Food, Environment and Rural Affairs (DEFRA) that works on behalf of Scottish Ministers

8.14.1.4 **Fish/Shellfish**

- FSA will carry out a risk assessment to determine if shellfish harvesting restrictions are required. FSS hold details of the various shellfish harvesting sites around Scotland. SEPA and Marine Scotland can provide advice and information on freshwater fisheries and aquaculture.
- FSS will also liaise with Marine Scotland should sea fish be affected by the nuclear radiological emergency.
- FSS will liaise with Local Authorities, SEPA and Marine Scotland who hold details of approved fishery establishments.

8.14.5 **Water**

- The Drinking Water Quality Regulator for Scotland is responsible for ensuring that water supplies are safe to drink, and will work with stakeholders such as Scottish Water, local authorities and health boards to coordinate work to preserve safe public and private drinking water supplies and provide consistent advice to consumers in accordance with the UK Recovery Handbook for Radiation Incidents – Drinking Water Supplies[2].
- Scottish Water has statutory responsibility for the provision of the public water supply in Scotland and is responsible for ensuring that the drinking water that it provides to its customers meets the standards set by the Public Water Supplies (Scotland) Regulations 2014 in coordination with the other agencies involved.
- Scottish Water will issue advice to Domestic Customers and agree the message to be communicated to Business Users with the Licenced Service Providers who provide the retail elements of water and sewerage service provision to non-household customers in Scotland.
- Local authorities will issue advice to the owners of private water supplies on any actions they should take, following guidance from government and health professionals.
- Scottish Water will, in agreement with and where required support from other agencies, identify and undertake the required programme of infrastructure checks and sampling of the public water supply to ensure that any threats to, or impacts on, the quality of the public water supply are identified.
- SEPA will provide advice on the impact of any contamination in the environment including water courses and the potential impact on both public and private water supplies.
- FSS, following liaison with FSA, will provide advice on bottled water products and use of water in food production.

Further guidance
National Nuclear Emergency Planning and Response Guidance
Nuclear Response Guide for the Scientific Advisory Group in Emergencies (SAGE)
Preparing Scotland 4

8.15 Maps, Plans and Photographs

8.15.1 Hunterston Detailed Emergency Planning Zone Map (but not including properties which are also included)

This section of the plan has been redacted

8.15.2 Hunterston Detailed Emergency Planning Zone (showing properties)

This section of the plan has been redacted

8.15.3 Hunterston Outline Planning Zone (10km radius)

This section of the plan has been redacted

8.15.4 Hunterston Outline Planning Zone (extended to 40km radius to include food restrictions)

This section of the plan has been redacted

8.15.5 Hunterston B Site Plan

This section of the plan has been redacted

8.15.6 Traffic Control Points Map

This section of the plan has been redacted

8.15.7 Location Map – HSCC / MBC

8.15.7.1 Hunterston Strategic Coordination Centre Address

This section of the plan has been redacted

8.15.7.2 Travel Directions to Hunterston Strategic Coordination Centre (HSCC)

This section of the plan has been redacted

8.15.7.3 Location Map – Media Briefing Centre at This section of the plan has been redacted

This section of the plan has been redacted

PART 9: OUTLINE PLANNING ZONE (OPZ) ARRANGEMENTS

9.1 The Outline Emergency Planning Zone

9.1.1 This Plan is supported by the *Civil Contingencies Act 2004, Civil Contingencies Planning (Scotland) Regulations 2005* and the guidance contained within Preparing Scotland issued in 2005 and has built in flexibility and extendibility in accordance with Nuclear Emergency Planning Liaison Group guidance.

9.1.2 An Outline Planning Zone (OPZ) around the site has been identified by REPPIR 2019 at Regulation 9 Schedule 5 as being 30km from the site. A map of this area is shown at **Section 8.15.** Arrangements have been made for the consideration of implementation of early protective actions in this Zone as soon as possible following the declaration of an emergency.

9.1.3 The OPZ extends into a number of local authorities in addition to North Ayrshire it also extends to East Ayrshire, South Ayrshire, Renfrewshire, East Renfrewshire, Inverclyde and Argyll and Bute. Consultation has taken place with these local authorities and agreement reached regarding prior information to the public via their websites.

9.1.4 To facilitate an easier understanding of the data within the OPZ the information is broken into 5 km bands around the site

9.2 OPZ Pockets of Detailed Planning

9.2.1 As the dose levels are unlikely to be exceeded outside the DEPZ, those living outside the DEPZ can have a high degree of confidence that doses sufficient to require protective actions are very unlikely in their locations and no preparations are required, however in a severe accident consideration might be given to extending shelter advice and the taking of stable iodine beyond the DEPZ.

9.2.2 There are lists of detailed planning contained within an additional Annex to this plan which includes details on populations, schools, carehomes, caravan sites, etc and how this information can be provided quickly and currently during any incident.

9.2.3 The maps available both within the HSCC and as part of this plan at **Part 8** have split the OPZ into sectorised zones. This will enable any protective actions to be activated within the OPZ dependent on risk and wind direction. The information contained within this section of the plan has used the zones so that the HSCC can easily highlight what areas may be affected and assist in developing a strategy for these areas.

9.2.4 Decisions will however, be taken at the HSCC on further protective actions that may be required outwith the DEPZ. This decision will be taken by the Strategic Group on the recommendation of the operator or the STAC and a response within the OPZ will be activated.

9.2.5 Should there be a requirement for Stable Iodine Tablets within the OPZ, NHS Ayrshire and Arran have locally held stocks available and have procedures in place to access these stocks in the first instance.

9.2.6 Should protective actions be required beyond the DEPZ and into neighbouring towns then this will be communicated via public messaging. Initially, this will be stay in and close all windows and doors but in the unlikely event that stable iodine is required then this will be considered by the HSCC. Details of pre-determined locations for drive through access are included in the OPZ Annex. If evacuation is then required then further arrangements will be required to be made at the HSCC to ensure that all people are accounted for.

9.2.7 A specific evacuation plan has been developed for Isle of Cumbrae as this is an island community and is part of the *North Ayrshire Council Civil Contingencies Response and Recovery Plan*. Police Scotland has generic evacuation procedures which will be utilized in the event that the HSCC decides that an evacuation of any area is required.

9.2.8 Both the DEPZ and OPZ of Hunterston B go over the sea and potentially could affect a number of vessels. This will be considered within the HSCC, if required, with HM Coastguard putting out a radio message requesting vessels to avoid entering the area.

9.2.9 The plan already includes pre-determined traffic control points at the edge of the DEPZ and some further into the OPZ and these will be reconsidered if there is a requirement to extend protective actions into the OPZ.

- Although the main public safety protective actions envisaged for implementation in the OPZ are sheltering and stable Iodine tablets, prophylaxis, traffic flow from the area might become problematic if a large number of people decide to self-evacuate.
- The Police will identify suitable traffic control points (see **Section 8.13**).
- Control points may also have to be identified at the outer edges of the OPZ in order to regulate access to any areas where protective actions have been implemented.

9.3 Neighbouring Local Authorities' Consultation and Cooperation

9.3.1 Meetings took place prior to the development of this plan in 2019 with the neighbouring local authorities who are now included in the OPZ. They have agreed to assist with the details of their vulnerable sites, some of which has been included in the OPZ section.

9.4 OPZ Website Statement

9.4.1 Arrangements are in place for neighbouring authorities to have a message on their websites to be updated with information directing back to North Ayrshire Council to ensure that there is only one source of information.

9.5 Roles and Responsibilities and Mutual Aid

9.5.1 The roles and responsibilities of agencies will continue to apply to the OPZ. The following are however applicable:

9.6 Mutual Aid

9.6.1 The Responding Organisation have arrangements with neighbouring organisations or organisational areas for the supply of additional personnel and equipment. Consideration will need to be given to the probable longer-term involvement, particularly in the later stages of recovery and clean-up, of some personnel in the NHS and Local Authorities and the need to support their departments with additional material and staff resources.

9.6.2 The OPZ covers all of North Ayrshire and parts of East Ayrshire, South Ayrshire, Argyll and Bute, Inverclyde, Renfrewshire and East Renfrewshire council areas. In addition, a Memorandum of Understanding for mutual cooperation has been agreed between all thirteen Local Authorities in the West of Scotland Regional Resilience Partnership area.

9.6.3 The Consequence Report is recommending that extendibility is out to 43km for radiation monitoring of foodstuffs would involve the following Council areas: South Ayrshire, East Ayrshire, Inverclyde, East Renfrewshire, Renfrewshire, East Dunbartonshire, West Dunbartonshire and Glasgow City Council. However, the decision made at the SCG will be based on the current information that is available and may make a different recommendation.

9.7 Radiation Monitoring

9.7.1 Radiation Monitoring will be established for people who may have been contaminated. PHE has provided guidance on what to do initially if a person considers themselves to have come into contact with radiation.

9.7.2 Whilst the radiation units are being established Scottish Ambulance has produced the **REMOVE REMOVE REMOVE** advice detailed below:

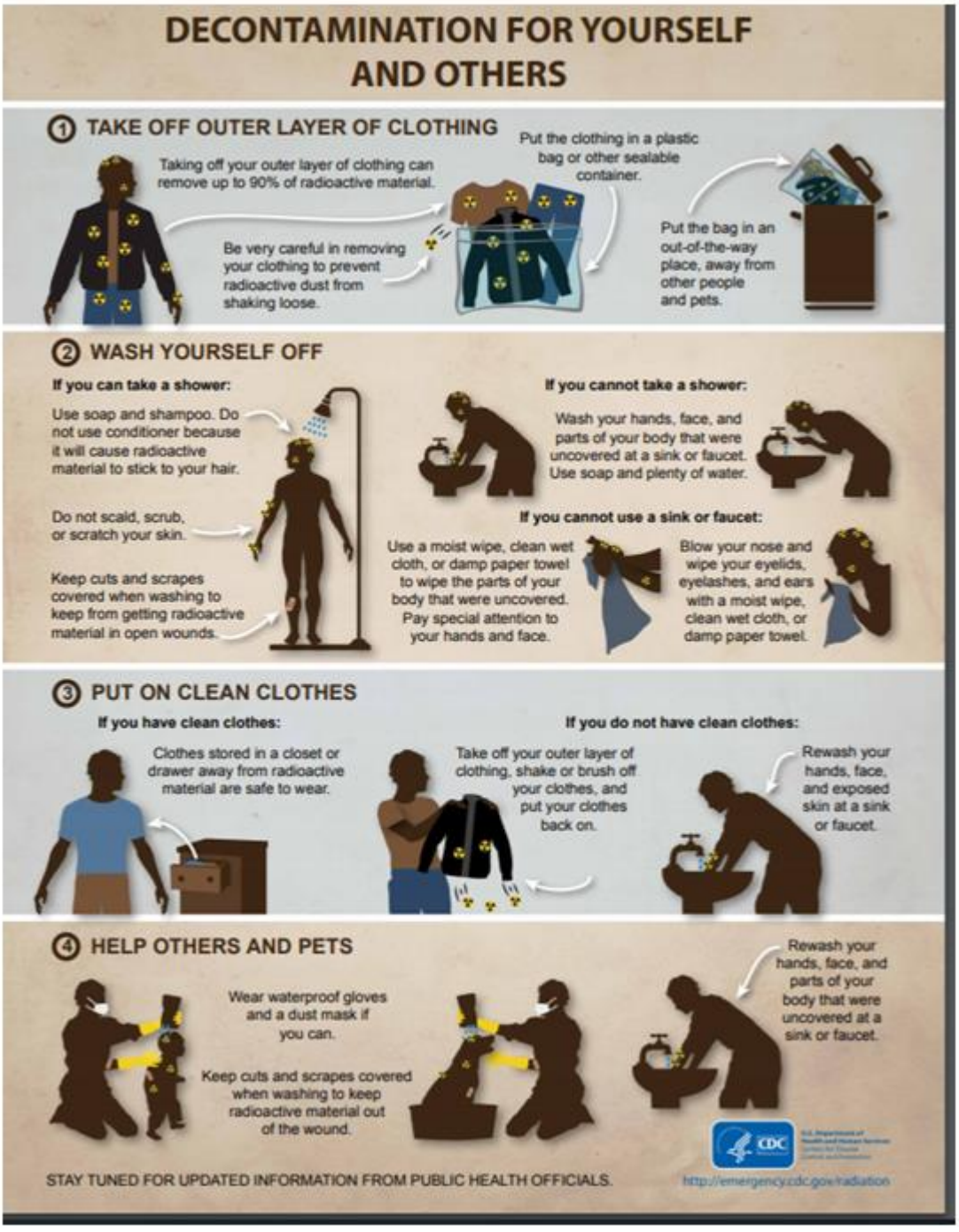
If you think someone has been exposed to a **HAZARDOUS SUBSTANCE** use caution and keep a safe distance to avoid exposure yourself.

TELL THOSE AFFECTED TO:

REMOVE	**Themselves**	From the immediate area to avoid further exposure to the substance. Fresh air is important If the skin is itchy find a water source **Report:** use METHANE
REMOVE	**Outer Clothing**	If affected by the substance. Try to avoid pulling clothing over the head if possible. Do not smoke, eat or drink **Do not pull off clothing stuck to the skin**
REMOVE	**The Substance**	From the skin using a dry absorbent material to either soak it up or brush it off. **RINSE continually with water if the skin is itchy or painful**

ACT QUICKLY: These Actions Can SAVE LIVES

9.7.3 PHE has also provided the following poster (from CDC (Centers for Disease Control and Prevention)) which should be utilised within the centres.



9.7.4 A Radiation Monitoring Unit will be established at a location which is easily accessible by road from both This section of the plan has been redacted. EDF have stated in their on-site plan that they have equipment and personnel which can be utilised in the first instance for radiation monitoring at this facility and they will make best endeavours to support the RMU, however more equipment will be required.

9.7.5 Radiation monitoring will be extended into the OPZ as detailed below.

Agency	Responsibility to Monitor
EDF Energy - Nuclear Generation	Up to 40km from Hunterston
Food Standards Scotland	Food to determine levels of radioactive contamination within the food chain, including animal feed, in order to establish areas where food controls are required.
Public Health England	Coordinate available monitoring resources
Local Authorities (North Ayrshire and Argyll and Bute Councils)	Private water supplies and food in order to support FSS and to enforce any food safety controls.
Ministry of Defence	Provision of additional monitoring equipment
NHS Ayrshire and Arran	Monitoring of People
Radioactive Incident Monitoring Network (RIMNET)	Gathers Data from a network of gamma dose monitors across the UK and passes information to local authorities
Scottish Water	Public Water Supplies Wastewater Infrastructure including discharge points (in consultation with SEPA, etc)
SGRED	Animal welfare, farming and fishing
SEPA	Environmental Monitoring

9.8 Information on Population and Local Infrastructure

- The current estimated population within the towns contained within the OPZ, 30km of Hunterston is 250,559
- The estimated population numbers have been based on 2005 Small Area Population Estimates provided by General Register Office for Scotland. These estimates do not include any visitors / tourists who may be staying in the area and provides only a rough guide to the scale of operations necessary.
- A number of isolated households and farms exist in the OPZ and the area beyond the site. These may need special consideration in the event of public safety protective actions being implemented.
- A number of schools, businesses and institutions are located within the OPZ and the area beyond the site, which may require special consideration in the event of public safety protective actions being implemented.
- Both neighbouring villages of Fairlie and West Kilbride have primary schools and North Ayrshire Council's Education Department will contact them.

9.9 Rest Centres / Evacuation Holding Areas

9.9.1 In the event of protective actions being implemented in the OPZ, other suitable Rest Centre(s) will be identified and managed as per *Care for People Community Emergency Support Centre procedural documents.*

PART 10: TRAINING, SUPPORTING DOCUMENTATION, REFERENCE, GUIDANCE MATERIALS

10.1 Training

10.1.1 It is the responsibility of each organisation to ensure that officers are trained appropriately in respect of the roles and responsibilities of that organisation, and have an awareness of the wider multi-agency organisation, in the context of this contingency plan. REPPIR 19 requires that each organisation confirms that they are prepared and are sufficiently trained and this will be confirmed at the EPCC meetings.

10.1.2 The CPLG / ALRP have a three-yearly rolling training programme for all agencies who have a role to play in the response to an incident at Hunterston B are invited to participate. This is available from the ALRP Training, Exercising and Learning subgroup. Each organisation is responsible for keeping the record of training that their staff has attended.

10.1.3 There are a number of Level 1 exercises arranged every year and these are reported to the EPCC. There are a number of site familiarization visits arranged (generally 3) throughout the year and these are generally well attended.

10.2 Exercise Training Record / Modular Inputs

10.2.1 The training which has taken place since 2016 is included below:

Exercise/Training	Date
Extendibility Workshop	20th April 2016
Exercise Kestrel – Familiarisation	28th July 2016
Exercise Kestrel – Message Support	31st August 2016
Exercise Kestrel Prepare – Notification Exercise	31st August 2016
Exercise Kestrel – Communications	7th September 2016
Exercise Kestrel – STAC Training	15th September 2016
Exercise Kestrel – Level 2 Exercise	21st September 2016
Hunterston Familiarisation Visits	Late 2017 / early 2018
Hunterston SCC Familiarisation Training and Exercise	5th October 2017
Hunterston Familiarisation Visits	Late 2018 / early 2019
Hunterston SCC Familiarisation Training and Exercise	13 March 2019
Hunterston STAC Training (2 sessions)	8 May 2019
Hunterston Admin/Support Staff Familiarisation Training	14 May 2019
Hunterston Familiarisation Visits	19 November 2019
Hunterston Familiarisation Visits	February 2020

10.3 Testing

10.3.1 The intention is that all elements of the plan will be tested within a three year cycle by the use of live play and/or desk top exercises. Each exercise will include, where relevant, lessons learned since the previous exercise.

10.3.1 There is an annual test of the telephone cascade (Exercise Busby).

10.4 Debriefs

10.4.1 All significant exercises require a debrief report to be completed, ideally within three months, which is signed off by ACCT and EDF following agreement by the Exercise Planning Group. The debrief should include:

a) An overview of the exercise;
b) Highlight the strengths and weaknesses of the emergency plan as shown by the exercise, focusing on areas where the plan was insufficient, or could not be implemented;
c) Highlight areas where the operator's emergency plan and the Off-site Emergency Plan were not aligned (where both are tested together);
d) Include any lessons identified and recommendations to resolve these, including any required changes to the plan; and
e) Include any significant actions associated with part (d) with an assigned action owner and agree time to complete the action and implement any change.

10.4.2 The ALRP already has well established processes in place to evaluate the exercises and make improvements / amendments to the plan.

10.4.3 In addition, any lessons learned from the exercise will be shared with relevant organisations and partners (for example, the national Local Authority Working Group).

10.5 Recovery

10.5.1 The North Ayrshire Council Civil Contingencies Response and Recovery Plan details generic recovery arrangements that will be used during any major emergency within North Ayrshire. All stakeholders involved in progressing a recovery strategy should take cognisance of the reference and guidance material contained within the following documentation.

- National Nuclear Emergency Planning and Response Guidance
  UK Recovery Handbook for Radiation Incidents 2015 issued by PHE CRCE.

10.5.2 These documents provide both legislative and radiological information, data sheets, decision trees etc on a multiplicity of recovery issues. A brief synopsis of factors identified in the above literature contains the following topics:

- General information
  - Framework for developing a recovery strategy
  - Scenarios
  - Radionuclides
  - Radiation Protection Principles
    - Radiation Protection Principles and criteria
    - Health effects
    - Types of radiation hazard
    - Recovery phase systems

- Agricultural food production
  - Radiation protection criteria for agricultural food production
  - Agricultural food production systems
  - Agricultural protective actions
  - Waste disposal options
  - Management options

- Domestic food production
  - Radiation protection criteria for domestic food production
  - Domestic food production systems
  - protective actions for use in gardens, allotments and from the wild
  - Waste disposal options
  - Management options

- Inhabited areas
  - Recovery criteria in inhabited areas
  - Nature, extent and character of contamination
  - Estimating doses in inhabited areas
  - Considering appropriate recovery options
  - Assess consequences of implementing recovery options
    - Choice to do 'no clean up'
    - Clean up while people are in situ
    - Protection of workers
    - Management of contaminated waste
    - Comparison of options

- Drinking water
  - Drinking water supplies
  - Monitoring of supplies
  - Recovery options
  - Estimating doses and activity concentration

- Waste water
  - Potential impacts on sewage system
  - Estimating the nature of potential radiation discharges to sewer
  - Monitoring of sludge contamination in waste water systems

10.6 Supporting / Reference Documents

10.6.1 The documents below have been used to assist in the development of this plan.

Title	Organisation	Date
Radiation (Emergency Preparedness and Public Information) Regulations	Health and Safety Executive	*2019*
Radiation (Emergency Preparedness and Public Information) Regulations 2019	Health and Safety Executive	2019
Public Health Protection in Radiation Emergencies (PHE-CRCE-049)	PHE CRCE	2019
UK Recovery Handbook for Radiation Incidents – Food Production Systems handbook Version 4.1	PHE CRCE	February 2019
UK Recovery Handbook for Radiation Incidents 2015 – Drinking Water Supplies handbook Version 4.2		December 2018
Hunterston 'B' Power Station Emergency Plan Ref: HPS/EP Rev 20	EDF Energy - Nuclear Generation	January 2019
Hunterston B Off Site Contingency Plan – Annex containing OPZ information	North Ayrshire Council	September 2020
HSCC User Guide	EDF Energy - Nuclear Generation	
EDF Energy Consequence Report for Hunterston B Nuclear Power Station	EDF Energy - Nuclear Generation	January 2020
UK National Nuclear Emergency Planning and Response Guidance (NNEPRG) – Concept of Operations, Planning, Response, Recovery	HM Government and Scottish Government	2015/16
Nuclear Response Guide for the Scientific Advisory Group in Emergencies (SAGE)	DECC	2015
Preparing Scotland	Scottish Government	Various
Civil Contingencies Response and Recovery Plan	North Ayrshire Council	February 2016
Isle of Cumbrae Evacuation Plan *(part of Civil Contingencies Response and Recovery Plan)*	North Ayrshire Council	June 2020
Care for People Community Emergency Support Centre -procedural documents V10	Pan-Ayrshire	2018
National Ambulance Resilience Unit (NARU) Guidance on dealing with Radiological Incidents and Emergencies. (Version 3.0)	Scottish Ambulance Service	October 2019
NHS Ayrshire and Arran Major Incident Plan	NHS Ayrshire and Arran	Various dates
West of Scotland Scientific Technical Advice Plan	WoSRRP	March 2016
WoSRRP Resilience Arrangements: Part 2 - Response and Recovery (Version 2)	WoSRRP	February 2017
NPCC National Police Chiefs Council Operational Response to the Police Service for Operations & Incidents Involving Radiation.	The Association of Chief Police Officers	
Food Standards Scotland Incident Management Plan	Food Standards Scotland	May 2015
SOP / Tech note: A081: Hunterston Power Station	Strathclyde Fire and Rescue Service	9 December 2011
Hunterston Strategic Coordination Centre Guidance (Version 3)	EDF Energy - Nuclear Generation – Power Station	April 2019

Title	Organisation	Date
Disruptive Weather Response Arrangements	Ayrshire Local Resilience Partnership	July 2020
Estimates of Radiation Doses to Off-site Responders to a Nuclear Emergency: Look Up Tables for Estimates of Maximum Dose	EDF Energy	March 2020
Standard Operating Procedure for Public Decontamination at Evacuee Holding Areas, V2.1	PHE-CRCE	September 2016

10.7 HSCC User Guide and Telephone Numbers

10.7.1 A *User Guide* has been produced by the Emergency Planning Group, EDF Energy - Nuclear Generation, Barnett Way, Barnwood, Gloucestershire GL4 3RS, based on NEPRG guidance, in consultation with members of the Emergency Planning Consultative Committee.

10.7.2 Full details of the facility layout, equipment availability and information sources can be found detailed in the HSCC User Guide, available within the HSCC.

10.7.3 In the initial stages of the incident and the HSCC being opened, Police Scotland will carry out the function of Registration and temporary Office Manager until the EDF representatives arrive when it will be further discussed with Torness representatives and Police Scotland.

10.7.4 Those attending the HSCC gain entry as follows:

- Press the bell for attention and proceed to register at the security desk;
- Representatives will be required to produce photographic identification;
- Sign in at the security desk
- Attend briefing area for initial briefing on the ongoing incident and their roles within the HSCC
- After the briefing representatives will then be directed to their designated desks.
- Ensure to keep checking the TV screens / monitors around the centre as these may have more up to date information

10.7.5 Information on the current situation can be found on the board in the SCC Coordination area, the TV screens / monitors or from The Incident Information Management Systems (TiiMS) located in the Briefing Area. Any queries regarding the facility or facilities provided / available should be directed to the SCC Coordinator (Police Scotland) when the centre is in use and to EDF Energy Emergency Planning at other times.

10.7.6 The EDF Energy Company Team at the HSCC will be able to support multi-agency partners to access relevant information on The Incident Information Management System (TiiMs) and will provide updates on the situation at the site. Until the Company Team arrive, partners at the HSCC can contact the EDF Energy CESC for support on locating information on TiiMS. These will then be used to provide an update of the current situation at meetings and for the updates boards, etc

10.7.7 Agencies are advised to bring Wi-Fi enabled computers if they require dedicated access to the Internet. The HSCC does not have a computer printer. Agencies are advised to bring a printer compatible with their computer if they require to print data.

10.7.8 Connection instructions for the Wi-Fi internet access are included in the HSCC User Guide.

10.7.9 Teleconference facilities are available within the HSCC as below:

	Strategic Coordinating Group (SCG) / Tactical Group	Public Comms Group (PCG)	Scientific and Technical Advice Cell (STAC) / Recovery Working Group
Toll Number	This section of the plan has been redacted		
Toll Free Number			
Participant PIN Code			
Moderator PIN Code			
Customer Service (in case of difficulties)			

Multi-agency partners who are likely to take some time to reach the HSCC and will therefore be required to teleconference into the meetings should make contact with Police Scotland at the Security Desk in the HSCC (**Telephone Number** This section of the plan has been redacted) to ascertain when the first meetings of these groups are scheduled.

10.7.10 The Centre uses a Message Action system to pass information throughout the centre and a sample of form and instructions are contained within the *HSCC User Guide.*

10.7.11 Below is the details of the Hunterston Strategic Coordination Centre Contact Telephone Numbers. These numbers have been extracted from the *HSCC User Guide* Revised guide and copies of the HSCC User Guide are available on all desks

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10.8 Rest Centre Management

10.8.1 North Ayrshire Health and Social Care Partnership have a set of *Care for People Community Emergency Support Centre Guidelines* which include Emergency Centre Procedures. These should be used in conjunction with the following information to ensure an effective response.

10.8.2 A Rest Centre is a safe and secure place for the temporary accommodation of people affected by the emergency. It may be opened for a short or prolonged period depending on the circumstances and this may involve overnight facilities in the short term.

10.8.3 It is also a place where information can be collated, and through the registration process, assist the authorities to identify future requirements. Additionally it is a source of information for the Casualty Bureau, which may be established by Police Scotland in one of their premises.

10.8.4 Casualty Bureau is a system used by Police Scotland to collate information on persons possibly involved in major emergencies by recording specific details of victims at the scene, at hospitals and at any Rest Centre(s). Should the Police initiate the Casualty Bureau, it is vital that the Casualty Bureau Form is completed in addition to the information required by the Local Authority during the registration process.

10.8.5 It is normally the SCG who recommend whether or not to evacuate and define the area to be evacuated. Their recommendation will take account of advice from the STAC and other relevant individuals and other organisations.

10.8.6 The two designated Rest Centre(s) for members of the public within the DEPZ affected by an incident at the Hunterston site are This section of the plan has been redacted.

10.8.7 There is a slight possibility that some of those arriving at the Rest Centre(s) could have their outer clothing and exposed body parts contaminated due to passing through a radioactive plume. Arrangements are in place for people to go through the dry decontamination process at the rest centres.

10.8.8 Evacuees may be required to attend a Reassurance Monitoring Unit. A Reassuring Monitoring Unit will determine if an individual has been exposed to or contaminated by a radiological substance. During the reassurance monitoring process, if an individual is found to have external contamination they will be decontaminated using established national guidelines. If the individual is found to have internal contamination they will be referred to specialist NHS facilities. Reassurance monitoring will be arranged by NHS Ayrshire and Arran with support from other agencies.

10.8.9 If considered necessary, Stable Iodine Tablets may be dispensed at the Rest Centre(s) supervised by staff from NHS Ayrshire and Arran.

10.8.10 Should additional premises be required, a full list of available Rest Centre(s) is available through the *Care for People Community Emergency Support Centre procedural documents.*

10.8.11 Where transport for the movement of people affected by the incident is required this should be sought through the Council Emergency Control Centre.

10.8.12 Primary Rest Centre facilities are located at :-

This section of the plan has been redacted

10.8.13 In the event that the emergency services requires local authority assistance to open the Rest Centre(s), contact will be made via the ACCT. (See **Section 1.4**).

10.9 Glossary and Abbreviations

ACCT	Ayrshire Civil Contingencies Team deal with all matters relating to the Plan on behalf of North Ayrshire Council
ACP	Access Control Point (at site)
AFRC	Agriculture Food and Rural Communities. Directorate - Scottish Government.
AHWD	Animal Health and Welfare Division – Scottish Government
AIC	Ambulance Incident Commander
ALARP	As low as reasonably practicable, this involves weighing a risk against the trouble, time and money needed to control it. Thus, ALARP describes the level to which we expect to see workplace risks controlled.
ALRP	Ayrshire Local Resilience Partnership
APHA	Animal Plant and Health Agency
BEIS	Department for Business Energy and Industrial Strategy
BT	British Telecom
CBRNe	Chemical Biological Radiological or Nuclear
CCO	Civil Contingencies Officer
CCS	Civil Contingencies Secretariat
CESC	Central Emergency Support Centre
CGOC	Coastguard Operation Centre
COBR	Cabinet Office Briefing Rooms. UK Government's dedicated crisis management facilities, which are activated in the event of an emergency requiring support and coordination at the national strategic level.
CPH(M)	Consultant in Public Health (Medicine)

CTA	Company Technical Advisor
CRT	Coastguard Rescue Team
DEPS	Duty Emergency Planning Support (Scottish Water)
DEPZ	Detailed Emergency Planning Zone
DPH	Director of Public Health
ECC	Emergency Control Centre
EOC	See BEIS section
Effective Dose	the sum of dose to whole body from external radiation and from internal radiation
Emergency exposures	An exposure of an employee engaged in an activity of or associated with the response to a radiation emergency or potential radiation emergency in order to bring help to endangered persons, prevent exposure of other persons or save a valuable installation or goods, whereby one of the individual dose limits referred to in paragraphs 1 and 2 of Part 1 of the Schedule 3 to the 2017 Regulations could be exceeded. Emergency exposures can only be received by emergency workers
Emergency Workers	Defined in the regulations as persons or responding organisations who has a defined responding role in an operator's emergency plan or a local authority's off-site emergency plan, and who might be exposed to radiation as a result of a potential or actual radiation emergency.. The guidance however, states that those unlikely to be exposed to radiation arising from the radiation emergency (eg, people located remote to the premises) are not considered to emergency workers.
EPGMS	Emergency Plume Gamma Monitoring System (Site boundary monitoring system)
Evacuee Holding Area	A place where those who were in the vicinity of the site can go for radiation monitoring before being taken from the area
FSS	Food Standards Scotland
GDS	Government Decontamination Service
GLO	Government Liaison Officer
HAZMAT	Hazardous Materials
HMCG	HM Coastguard
Intervention Personnel	pre-identified people who respond to prevent or decrease the exposure of persons to radiation from a radiation emergency or from an event which could lead to a radiation emergency
HPS	Health Protection Scotland
HSCC	Hunterston Strategic Coordination Centre
ICRP	International Commission on Radiological Protection
LGD	Lead Government Department
LRP	Local Resilience Partnership
MBC	Media Briefing Centre

MC	Medical Commander
MOD	Ministry of Defence
MRCC	Maritime Rescue Coordination Centre
NEPRB	Nuclear Emergency Planning and Response Project Board
NHS	National Health Service
OPZ	Outline Planning Zone
ONR	Office for Nuclear Regulation
PETIS	Public Emergency Telephone Information System
PHE CRCE	Public Health England (Centre for Radiation, Chemical and Environmental Hazards)
PIC	Public Information Coordinator
PCG	Public Comms Group
PPE	Personal Protective Equipment
Radiation Emergency	A non-routine situation or event arising from work with ionising radiation that necessitates prompt action to mitigate the serious consequences: a. Of a hazard resulting from that situation or event; b. Of a perceived risk arising from such a hazard; c. To any one or more of: i. Human life; ii. Health and safety; iii. Quality of life; iv. Property; v. The environment
REPPIR	Radiation Emergency Preparedness and Public Information Regulations 2019
RIMNET	Radioactive Incident Monitoring Network
RIO	Rail Incident Officer
RM	Risk Management
RMU	Radiation Monitoring Unit
RPA	Radiation Protection Adviser
RPE	Radiation Protective Equipment
RPID	Rural Payments and Inspections Division – Scottish Government
RRP	Regional Resilience Partnership
RVP	Rendezvous Point
RWG	Recovery Working Group
SAGE	Scientific Advisory Group for Emergencies (Group of scientific and technical experts that is established to provide a common source of advice to inform decisions made during the central government response to an emergency.
SCC	Strategic Coordination Centre

SCG	Strategic Coordinating Group
SEPA	Scottish Environment Protection Agency
SGLO	Scottish Government Liaison Officer. A member of the Scottish Government Liaison Team deployed to the multi-agency coordination centre known as the SCC.
SGoRR	Scottish Government Resilience Room
SGRED	Scottish Government Rural and Environment Directorate
SGRPID	Scottish Government Rural Payments and Inspections Directorate
STAC	Scientific and Technical Advice Cell
TAG	Technical Assessment Guidance
TiiMS	The Incident Information Management System
VHF	Very High Frequency

10.10 Consequence Report

10.10.1 The operator has performed a hazard evaluation as required by regulation 4 of REPPIR19, identified a range of faults and events that could lead to a release of radioactivity from the site and estimated the potential consequences of these faults and events as required by regulation 5. They have provided the local authority with a consequence report as required by regulation 7 of REPPIR19.

10.10.2 The Consequence Report was received in January 2020 and has been added to North Ayrshire Council's website

10.10.3 The Consequence Report includes the recommended minimum distance for the DEPZ, the recommended minimum distances for urgent protective actions. The recommended Outline Planning Zone which is set by REPPIR 2019 at 30km.

10.10.4 The Consequence Report assists the local authority in their determination of the DEPZ in accordance with the legislation. Further details of the DEPZ are found at **Part 5**.

10.10.5 The planning assumptions within the Consequence Report are:

- The event is most likely to be a fault on one reactor or system (although thought has been given to managing simultaneous faults on multiple systems);
- The site must be able to manage independently of external help for a period of 24 hours (although the expectation is that external help would be provided with a few tens of minutes);
- The population demographics will not change significantly between reviews of the plan (the local authority emergency planning team is made aware of major planning applications within the DEPZ and OPZ and will consider the need to review the off-site plan on a case by case basis).

- Appropriate arrangements should be considered in the DEPZ to a distance of 2000m for individuals for whom it is not possible to offer appropriate shelter in solidly built buildings and stable iodine tablets. This may include transient populations such as users of local recreational facilities.
- Whilst potential dose to such individuals is not expected to exceed the lower ERL for evacuation, the doses could be above the lower ERLs for sheltering and stable iodine. Appropriate arrangements will therefore be needed to ensure that any individuals that fall into this category can be adequately protected, which may be most practically achieved by evacuating them from the immediate area.
- There are a range of potential events which could occur at the site which relate to conventional industrial hazards (e.g. fires, chemical spill) which may require an emergency response, including off site support, but do not lead to a release of radioactive material. These would be declared as a Site Incident. It is understood that such events could be perceived as a radiation emergency by the public, and therefore all such events will include necessary notifications to relevant organisation so that reassurance requirements can be enacted.

10.10.6 The Consequence Report concluded that the urgent protective action of the administration of stable iodine was justified out to a distance of 2 km downwind and the implementation of sheltering justified out to a distance of 1 km downwind. It has been agreed to recommend shelter and stable iodine as a combined countermeasure out to 2 km from the site.

10.10.7 The consequence Report states that some, but not all, potential faults could occur with little or no warning. Thus the off-site plan should provide the capability to implement some urgent protective actions (sheltering and the taking of stable iodine tablets) as quickly as is reasonably practical. The consequence report is based on a composite fault which assumes the most pessimistic attributes from a number of fault sequences in terms of time to release and quantity of activity released it, therefore, does not correspond to the release from a specific individual fault. The operator's safety case suggests that most, but not all, releases of radioactivity would be terminated **within 5 hours of initiation**. Termination of the release could be due to the operator actions re-establishing containment or the complete depressurisation of the reactor coolant system limiting the motive force driving the release.

10.10.8 The site has trained and equipped teams able to assess and repair damage on site. The strategy for managing a depressurising reactor (one with a leak) with damaged fuel (a pre-requisite for the depressurisation to represent an unplanned release) is to stop the release and repair the damage. This may require that the pressure in the cooling circuit is reduced, which means discharging at least some of the radioactivity in the circuit to atmosphere. The pressure reduction (depressurisation) can be achieved by leaving the reactor to leak but the site will be trying to divert some of the coolant gas through blow-down filters which can remove some of the radio-iodine and particulate activity.

10.10.9 The operator has estimated that the dose to the most exposed members of the public, taken to be those 100M downwind of the release for the 12 hours following the start of the release, in the absence of protective actions would be 16 mSv effective dose. With stable iodine taken in a timely fashion this would drop to 4.2 mSv. Assuming that shelter averts 60% of inhalation dose, the dose avertable by timely sheltering is 9.6 mSv.

10.10.10 Assessments indicate that the radiation concentrations in milk and in unprocessed leafy green vegetables under likely dispersion conditions could exceed the Euratom Maximum Permitted Levels (MPL) to a distance of about 43 km. The operators recommended that advice be issued against the consumption of milk, unprocessed leafy green vegetable, rainwater or water from open sources from within the affected area until monitoring establishes the deposition and crop uptake pattern.

10.10.11 On the basis of the operator's consequence report and discussion with stakeholders it has been agreed that the default urgent protective actions strategy will be to recommend shelter and the taking of stable iodine by all those within 2 km of the site. This plan describes the preparations to allow these actions to be put into place without undue delay and the process to be followed should an off-site nuclear emergency declaration be made.

10.10.12 There are ways in which the faults outlined above could continue to develop with the reactor heating up to temperatures that cause further fuel damage. The Operator has made strenuous efforts to reduce the probability of these developments to very low levels. Should they occur the release from site could be considerably greater and last for a longer duration than the depressurisation phase. These faults could lead to the recommendation that those near the site be evacuated and that the areas subject to shelter and stable iodine advice be extended further downwind. Consideration has been given to how these extended protective actions could be managed. This information is in the Outline Planning section of the plan.

10.10.13 The on-site strategy for dealing with these faults is to have a number of diverse methods to apply the necessary cooling to the reactors. This includes solutions that are stored on site and further solutions that are stored off-site in case the event includes widespread site damage.

10.10.14 Details of the availability and function of special equipment including fire-fighting materials, damage control and repair items can be found in the Operator's on-site plan and will be available at the HSCC.

10.11 Public Health Response / Consultation with PHE

10.11.1 North Ayrshire Council sought the independent advice of PHE to consider the EDF Consequence Report and can confirm that PHE agreed with the findings in the Consequence Report.

10.12 Effectiveness of Protective Actions

10.12.1 Effectiveness of Shelter In Place

10.12.1.1 Sheltering during a radiological release from a nuclear reactor reduces external radiation dose by providing shielding between the cloud of radioactivity and the exposed person and by providing a barrier to air exchange which reduces airborne concentrations inside the building and therefore inhalation dose to persons in the building. Both depend on the nature of the release and the nature of the building. The reduction in inhalation dose also depends on the weather conditions.

10.12.1.2 PHE 2019 recommends that averted dose estimates be based on a dose reduction factor of 0.6 (a 40% reduction in dose) for shelter although the factor can vary from 0 to 1 depending on circumstances. It is generally assumed, and will be assumed in this plan, that caravans and other lightweight structures do not provide the same level of protection for shelter in place as a well-built home.

10.12.1.3 Any structure where doors and windows can be closed (so not tents or barns) offers some degree of protection from the inhalation of airborne radioactive material. The degree of protection offered by a structure will vary depending on how air permeable it is and how it manages air exchanges. Sheltering in temporary structures such as caravans and mobile homes can therefore be appropriate but if there is the option of sheltering in a more substantial structure then this should be used. When considering lifting sheltering and introducing relocation or introducing evacuation, consideration should be given prioritising to those in less protective dwellings.

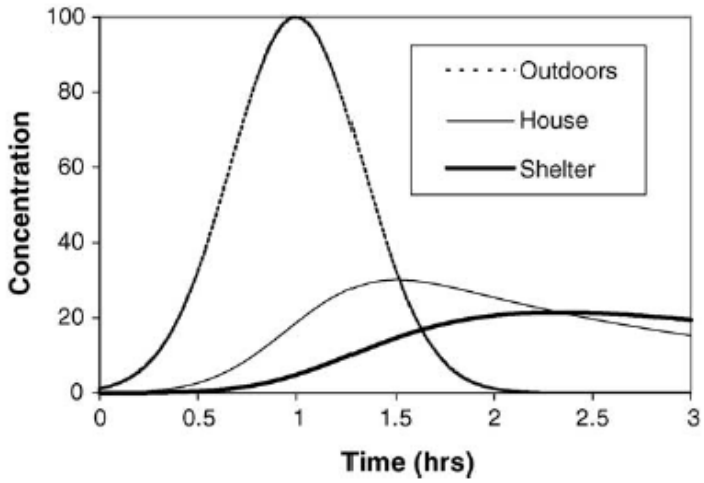
10.12.1.4 The diagram below demonstrates how doses are reduced depending on the types of shelter available.

Cloud Gamma Dose Reduction of Building

From EPA-400/R-17/001

The numbers represent dose reduction factors. A dose reduction factor of 10 indicates that a person in that area would receive 1/10th of the dose of a person in the open. A dose reduction factor of 200 indicates that a person in that area would receive 1/200th of the dose of a person out in the open.

10.12.1.5 Inhalation dose will be reduced inside the building relative to outside depending on the rate of exchange of radioactive gases and dusts between the inside and outside of the building. This would depend on the building and the weather conditions.

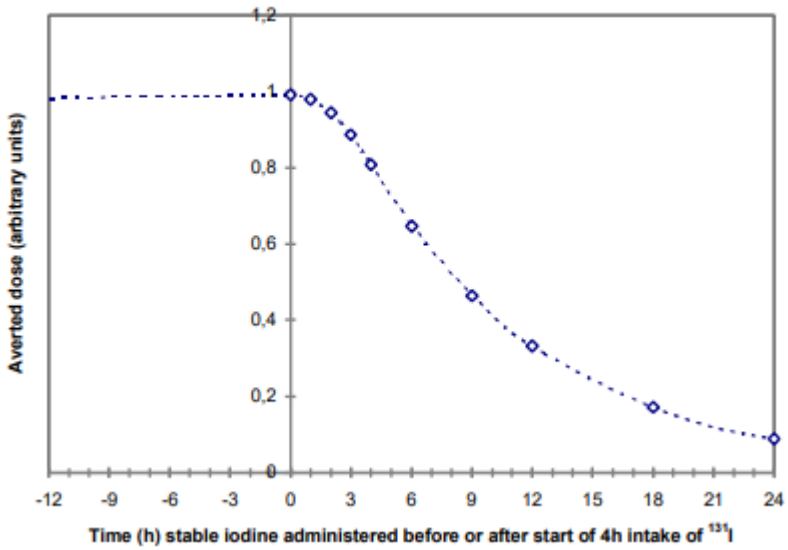


From Effectiveness of expedient sheltering in place in a residence, Journal of Hazardous Materials A119 (2005) 31–40

10.12.2 Effectiveness of Taking Stable Iodine

10.12.2.1 Stable iodine administered before, or promptly after, intake of radioactive iodine can block or reduce the accumulation of radioactive iodine in the thyroid. *(World Health Organisation, Guidelines for Iodine Prophylaxis following Nuclear Accidents Update 1999)*

Relative Indoor / Outdoor Concentrations – 2 hour release (Effectiveness as a function of time four hour exposure)



10.12.3 Potential public response

10.12.3.1 Whilst there is an expectation that those within the DEPZ will follow instruction and take shelter, national work on evacuation planning conducted by the Cabinet Office indicates that many people will elect to self-evacuate when faced with a perceived risk to life. Previous work done on another EDF nuclear power station The [Sizewell] evacuation plan uses the following assumptions based upon national work (and whilst it is useful the Sizewell DEPZ contains far more households):

- Up to 75% of people in the DEPZ will self-evacuate on declaration of an Off-site Nuclear Emergency rather than adopt the automated countermeasure of shelter and take stable iodine tablets.
- Up to 25% of people within the DEPZ will remain, of which up to 15% may require support to evacuate.

10.12.3.2 Feedback on the public response will be sought from sources such as the public telephone lines, personnel on traffic control duties and social media to confirm that those people within the DEPZ have evacuated. Arrangements are in place for householders to leave their evacuation card with Police Scotland at the Traffic Control Point so that it is confirmed that they have vacated the area. This information is contained with the calendar they receive annually.

10.12.4 Food and farming controls

10.12.4.1 The Department for Environment Food and Rural Affairs (Defra) can act under the Food and Environment Protection Act (FEPA) (1985) and appoint Investigation / Enforcement Officers from [where]. They may also act to minimise the effects of the emergency on the agricultural, fisheries and food industries in the affected area.

10.12.4.2 Certain advice has already been issued to local farmers but if required, they will provide supplementary advice on farming, fisheries and food, supported by the Police and the local authorities if necessary and practicable.

10.12.4.3 The EU has published a table of Maximum Permitted Levels (MPL). The MPLs represent a judgement on the optimum balance between the beneficial and detrimental consequences of introducing food restrictions across the EU; they do not represent a boundary between safe and unsafe levels. Steps will be taken to ensure that food above these levels does not reach the market.

Table replicated PHE-CRCE-049 showing the maximum permitted levels of radionuclides in food marketed in the EU (Council Regulation (Euratom) 2016/52 of 15 January 2016)

	Maximum permitted levels (Bq kg^{-1})[b]				
Radionuclide	**Baby Foods**	**Dairy Produce**	**Minor Foods**	**Other Foods**	**Liquid Foods**
Sum of isotopes of strontium, notably ^{90}Sr	75	125	7,500	750	125
Sum of isotopes of iodine, notably ^{131}I	150	500	20,000	2,000	500
Sum of alpha emitting isotopes of plutonium and trans-plutonium elements, notaby ^{239}Pu and ^{241}Am	1	20	800	80	20
Sum of all other radionuclides of half-life greater than 10 days, notably ^{134}Cs and ^{137}Cs[c]	400	1,000	12,500	1,250	1,000
Note: b: the level applicable to concentrated or dried products is calculated on the basis of the reconstituted product as ready for consumption c: ^{14}C and ^{40}K are not included in this group					

10.12.5 Water Supply

10.12.5.1 General arrangements for monitoring the quality of the public water supply are the responsibility of Scottish Water. General arrangements for monitoring the quality of private water supplies are the responsibility of the relevant local council. Emergency response monitoring arrangements will be agreed with the Drinking Water Quality Regulator (DWQR) for Scotland. Scottish Water and impacted local councils may require the support of other agencies including SEPA to carry out these arrangements. In the emergency response phase of the incident the assessment of the results of any sampling carried out will be made by the STAC, supported by relevant key specialists as required. Scottish Water / Local Councils will ensure that DWQR is kept fully informed of both the assessment of any results produced, along with any direction or guidance issued by the STAC. In addition Scottish Water will, as required by existing direction, ensure it regularly briefs other key stake holders including the Critical Infrastructure Resilience Unit (CIRU) and Water Industry Division within Scottish Government of any impacts identified and direction or guidance issued by the STAC or DWQR.

10.12.5.4 PHE has recommended UK action levels (ALs) for radionuclide activity concentrations in drinking water, following an emergency, as set out in Table 7. PHE advises that these ALs for drinking water supplies represent a balance between the harms and benefits likely to arise from restrictions; they do not represent a boundary between safe and unsafe levels.

10.12.5.5 Consumption of drinking water at the AL would result in exposures of at most a few mSv effective dose committed over 1 year. It should be noted that these ALs are more conservative than the screening OILs for drinking water published by IAEA (2011).

Table replicated from PHE

	Recommended UK Actions Levels for drinking water supplies [a, b]
Radionuclide	**Action Levels (Bq l^{-1})**
Sum of isotopes of strontium, notably ^{90}Sr	125
Sum of isotopes of iodine, notably ^{131}I	500
Sum of alpha emitting isotopes of plutonium and trans-plutonium elements	20
Sum of all other radionuclides of half-life greater than 10 days, notably ^{134}Cs and ^{137}Cs[c]	1,000
Note: a: NRPB, 1994 b: these Action Levels refer to all water supplies which are intended, at least in part, for drinking and food preparation purposes. See text for advice on the urgency with which contaminated drinking levels should be replaced c: ^{14}C and ^{40}K are not included in this group	

10.13 Exposure Levels and ImpSamarasact

10.13.1 Below is an Impact Table which describes the levels of exposure and the impact.

1 Human life (Acute exposure / Deterministic Effects)	Catastrophic **(>1Sv)** Death and life changing consequences severe deterministic effects possible	Significant **(100-1000 mSv)** Possibility of moderate deterministic effects.	Moderate **(10-100 mSv)** No potential for deterministic effects below threshold dose	Minor **(1-10 mSv)** No potential for deterministic effects below threshold dose	Limited **(less than 1 mSv)** No potential for deterministic effects below threshold dose
2 Health & Safety (Cancer induction)	Catastrophic **(>1Sv)** Possibility of life changing consequences because of significant (>5%) increased risk of cancer induction	Significant **(100-1000 mSv)** Possibility of life changing consequences increases because of small (0.5-5%) increased risk of cancer induction	Moderate **(10-100 mSv)** Possibility of life changing consequences increases because of very small (0.5%) increased risk of cancer induction	Minor **(1-10 mSv)** Minimal impacts and unlikely to have life changing consequences	Limited **(less than 1 mSv)** Normal background
3 Quality of Life	Catastrophic **(>1Sv)** Complete reconstruct-ion of life activities	Significant **(100-1000 mSv)** Initial re-construction and continued interruption of normal life activities	Moderate **(10-100 mSv)** Enforced prevention or interruption of normal life activities	Minor **(1-10 mSv)** Potential self imposed restrictive changes in normal life activities.	Limited **(less than 1 mSv)** Sustained normal life activities
4 Property	Catastrophic **(>1Sv)** Asset value completely lost	Significant **(100-1000 mSv)** Major asset value and depreciate-ion	Moderate **(10-100 mSv)** Potential or real asset value depreciate-ion	Minor **(1-10 mSv)**Assumed asset value depreciate-ion	Limited **(less than 1 mSv)** Asset value sustainable or dominated by market forces
5 Environment	Catastrophic **(>1Sv)** Exclusion zones increase and heavy restrictions extended to further distance	Significant **(100-1000 mSv)** Exclusion zones of environment-al areas and heavy restrictions	Moderate **(10-100 mSv)** Restricted or temporary loss of environment-al growth or produce	Minor **(1-10 mSv)** Reluctance to use environ-mental areas and produce	Limited **(less than 1 mSv)** Sustained environment-al conditions

10.14 Written Agreements by Partners

10.14.1 All agencies with a role within the plan have been consulted and have been involved in the writing of this plan. All agencies are part of the wider Hunterston training programme and are given regular opportunities to participate in training which is led by the EPCC and supported locally by the Ayrshire Local Resilience Partnership's subgroup for Training, Exercising and Learning. All agencies involved are aware of the requirement to be able to function for 24 hours and need trained staff to do this in order to implement this plan and the protective actions that may be required within the DEPZ or OPZ.

10.14.2 All organisations will confirm at the EPCC (which meets twice a year) that they are prepared to respond and this will be recorded. Any significant changes to the Off-site Plan are also discussed as part of the agenda.

10.14.3 Most organisations can make staff available 24/7 however, it may take longer to get staff to the HSCC outwith normal office hours or over a public holiday. The plan includes details of the teleconference numbers for each meeting and arrangements on how to find out the times of the teleconferences. Copies of the agendas have been included in the plan to support teleconferencing.

See **Part 10** for Regulation 12 compliance matrix.

10.15 Amendment Record

10.15.1 Detail has been provided below of the amendments to the plan over the past five years. All amendments are agreed by the CPLG and a rationale is requested for all amendments.

Amendment Date	Pages Amended	Amended By	Date
March 2014	Full document review	Ayrshire Civil Contingencies Team	March 2014
January 2016	Full document review	Ayrshire Civil Contingences Team	April 2016
January 2017	Full document review following exercise	Ayrshire Civil Contingences Team	August 2017
October 2018	Full document review prior to exercise	Ayrshire Civil Contingences Team	May 2019
May 2019	Full document review to meet REPPIR 2019	Ayrshire Civil Contingences Team	October 2020
February 2021	Paragraphs: 2.1.4; 3.15.2; 5.1.4; 8.15.1; 8.15.2; 8.15.3; 10.15.1	Ayrshire Civil Contingencies Team	February 2021

10.16 Regulation 12 Compliance

10.16.1 Checks should be made by the CPLG that the following has been carried out:

An adequate test of the operator's emergency plan or detailed planning in the off-site emergency plan should demonstrate:

A That the plan meets the principles and purposes of an emergency plan set out in Schedule 7
B That the plan meets the requirements of Regulations 10 or 11 (as appropriate) and the appropriate paragraphs of Schedule 6
C That the plan can be practicably implemented and will be effective in the response to a radiation emergency to secure, so far as reasonably practicable, the restriction of exposure to ionizing radiation and the health and safety of workers and members of the public
D The completeness, consistency and accuracy of the emergency plan and other documentation used by responding organisations
E The adequacy of the equipment and facilities and their operability
F The competence of emergency responders to carry out the duties identified for them in the emergency plan
G Whether any reasonable improvements can be made to the plan

An adequate test of outline planning in the off-site emergency plan should demonstrate:

A That the plan meets the principles and purposes of an emergency plan set out in Schedule 7
B That the plan meets the requirements for outline planning in Regulation 11 and the appropriate paragraphs of Schedule 6
C That the plan provides a credible basis for a response to a radiation emergency in the outline planning zone by demonstrating that high level actions have been identified, including where capabilities could be obtained from and how (this may be through expansion of arrangements in the detailed emergency planning zone where one exists)
D The completeness, consistency and accuracy of the emergency plan and other documentation used by responding organisations
E The competence of emergency responders to carry out the duties identified for them in the emergency plan
G Whether any reasonable improvements can be made to the plan

10.17 Distribution List

10.17.1 Ayrshire Civil Contingencies Team (ACCT) will be responsible for the distribution of plans and amendments to the appropriate Emergency Planning liaison contacts within the relevant organisation. Each organisation is thereafter responsible for the internal promulgation and maintenance of any required plan copies held.

EDF Energy – Nuclear Generation
Argyll and Bute Council
British Telecom
East Ayrshire Council
East Lothian Council
East Renfrewshire Council
Food Standards Scotland
Glasgow Prestwick Airport
Glasgow Scientific Services

HM Coastguard (HMCG)
Inverclyde Council
Magnox Ltd
Met Office
Network Rail
NHS Ayrshire and Arran
NHS Greater Glasgow and Clyde
North Ayrshire Council
Office for Nuclear Regulation
Police Scotland
Public Health England CRCE
Renfrewshire Council
Scottish Ambulance Services
Scottish Environment Protection Agency
Scottish Fire and Rescue Service
Scottish Government
Scottish Water
South Ayrshire Council
East Dunbartonshire Council
West Dunbartonshire Council

10.18 Nuclear Claims Liability

10.18.1 Claims against operators of Nuclear Installations made under the *Nuclear Installation Act 1965 as amended* (NIA65) are insured up to the statutory limit of operator liability, namely £140M per event per site. The Government and international convention signatories are liable for death, injury and property damage in excess of the Act limit.

10.18.2 Contingency planning arrangements have been developed to deal with claims flowing from a nuclear incident that causes injury to any person or damage to any property of any person other than the licence holder.

10.18.3 The operator is responsible for incorporating site specific planning into its emergency management arrangements and invoking the plan. The purpose of the plan is to provide an effective mechanism to deal with the potentially high volumes of claims that may arise immediately following an Off-site Nuclear Emergency and thereafter to process claims from third parties made against the Operator in compliance with good business practice, insurance policy terms and conditions and legal codes.

10.18.4 Upon confirmation from the operator that a release of nuclear material from site has occurred, issue an agreed press statement identifying contact details for the submission of claim notifications i.e. Operators website address with link to the claims site and contact telephone numbers.

Annex A: Hunterston B Outline Planning Zone Arrangements (to 30km)

The Hunterston B Outline Planning Arrangements are available on Resilience Direct.

Annex B: Hunterston A Outline Planning Zone Arrangements (to 1km)

The Hunterston A Outline Planning Arrangements are available on Resilience Direct.

END OF DOCUMENT