

PORTLAND PORT OFF-SITE REACTOR EMERGENCY PLAN



Prepared and updated by Dorset Council Emergency Planning Service in conjunction with the Dorset LRF to comply with the requirements of the Radiation (Emergency Preparedness and Public Information) Regulations 2019 (Issue17, last updated Feb 03, 2025)

PORTLAND PORT OFF-SITE REACTOR EMERGENCY PLAN

SUMMARY

1. The Portland Port Off-site Reactor Emergency Plan (to be referred to in the text also as “the Plan”) has been produced by Dorset Council Emergency Planning Service in conjunction with the Ministry of Defence (HM Naval Base, Clyde) and the organisations of the Portland Port Operational Berth Issues Group (OBIG).
2. The primary aim of the plan is to safeguard the public in the unlikely event of a Nuclear Powered Warship (NPW) reactor emergency at the Deep Water Berth, Portland, which might lead to a radiation emergency requiring urgent protective actions to be implemented to protect the public.

The objectives of the plan are to:

- Preserve life
- Protect the public
- Safeguard the environment
- Allay public fear
- Protect property
- Co-ordinate public information

This document is unclassified and is for use by authorities and persons concerned with public health and safety.

3. The Portland Port Off-Site Reactor Emergency Plan is a requirement of the Radiation (Emergency Preparedness and Public Information) Regulations 2019 (REPPiR). The Plan interfaces with the Site-Specific Operator’s Emergency Plan (SSOEP) produced by the MoD and should be also read in conjunction with the Dorset LRF Recovery Framework, and other relevant plans.
4. A further aim of the plan is to include automatic and pre-planned response actions to mitigate the consequences of an emergency involving a NPW. In addition, the plan involves the establishment of the required command, control and liaison organisation, at the local and national level, capable of the successful implementation of these early measures. The plan also allows consideration by all relevant authorities of the response to a more severe incident by considering Outline Planning Zones (OPZ’s – see relevant chapter), follow-on and recovery aspects of the emergency for which detailed pre-planning is not considered proportionate. Recovery and transition to recovery (TTR) however should be considered as early in the process as possible, ideally starting in tandem with the response phase.
5. In the very unlikely event of a reactor emergency in Portland Port, the general public will be advised of what actions to take by the Local Authority. A Strategic Co-ordinating Group (SCG) and its supporting cells will normally be set up at Dorset Police HQ, DT2 8DZ, or virtual. A Tactical Co-ordinating Group (TCG) could also be set up at this location or at one of the fall-back TCC locations available, or as a virtual arrangement. Virtual SCG and TCG arrangements via MS Teams are a more

practical option, currently adopted as a default by the Dorset LRF. Appropriate arrangements will be agreed in advance by the Dorset LRF Strategic Command group on notification of a planned NPW visit. The TCC/TCG and SCC/SCG will provide the local points for Command and Control, liaison with central government as required, allocation of resources, etc. and will use the media and a help line to issue information and advice in an emergency.

6. Depending on the severity of the emergency and the weather conditions prevailing at the time, there may be a need to implement protective actions downwind of the emergency site. The contingency plans make provision for ensuring that those members of the general public to whom such protective actions may apply are advised promptly.
7. These measures may include:
 - a) Remaining indoors with windows and doors closed to provide shelter from any radioactive cloud that may have been released.
 - b) The administration of Stable Iodine Tablets - SIT's to be taken orally to prevent the uptake of radioactive Iodine by the thyroid gland.
 - c) Restrictions on the use of fresh foods and dairy products to prevent the ingestion of any radioactive material.
 - d) Temporary relocation or evacuation from areas where radioactive material may have been deposited.
8. The plan is regularly reviewed, particularly before a visit of a Nuclear Powered Warship (NPW). Additionally, it is a REPPIR requirement that the plan is exercised and reviewed at least every three years.

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Distribution

This plan is available from the Dorset Council website and also on the Dorset Local Resilience Forum ResilienceDirect site and will not be distributed directly as a hard copy. It is the responsibility of each organisation via their OBIG representatives to be aware of the latest copy of the Plan by using the above repositories.

Dorset Council	Chief Executive
FSA	Chief Executive
MCGA	Chief Executive
Dorset Civil Contingencies Unit	Head of CCU
Dorset Police	Chief Constable
Portland Port Ltd	Manager
NHS England – South West	Head of EPRR
NHS Dorset	Head of EPRR
Environment Agency	South Wessex Area Manager
HSE ONR	Inspector
UKHSA RCCE	Emergency Response Group Leader
DEFRA – London	
DWFRS	Chief Fire Officer
MHCLG RED	SW lead
	Divisional Commander
SWASFT	Chief Ambulance Officer

MoD/ Naval Authorities

NBC Clyde (for Asst-Hd Emergency Planning)

NAVY COMMAND HQ – Portsmouth (for NUCPOLSM, RADPOLSM)

Subsequent cascade via HMNB Clyde

OPERATIONAL BERTH ISSUES GROUP (OBIG)

Civil Authorities

Dorset Council (DC)

Dorset Police

Dorset & Wiltshire Fire and Rescue Service (DWFRS)

South Western Ambulance Foundation NHS Trust (SWASFT)

Maritime & Coastguard Agency (MCGA)

Environment Agency (EA)

Food Standards Agency (FSA)

UK Health Security Agency (UKHSA)

MHCLG RED

Dorset Civil Contingencies Unit (CCU)

Portland Port Limited (PPL)

UKHSA – including RCCE

Public Health Dorset - Local Authority

NHS England – South West

NHS ICB

Health and Safety Executive (HSE) ONR

MOD (N) Representatives

Naval Base Commander Clyde

Defence Nuclear Safety Regulator, MoD, Abbey Wood, Bristol, BS34 8JH

Navy Command HQ

HMNB Devonport representative

RECORD OF CHANGES

Change No (2008)	Authority	Date Inserted	Signature
1	MOD Devonport: change “Z-Berth” to “Operational Berth” throughout.	3.04.08	
2	DC: Page 56, cascade callout changed to reflect Dorset Police alert DC DEPO	3.04.08	
3	Dorset Police: Pages 71, 72: Tactical Command Centre layout changed	3.04.08	
4	Dorset Police: Pages 71, 72: Tactical Command Centre layout changed	06.10.08	

Change No (2010)	Authority	Date Inserted	Signature
1	MOD Devonport: For MoD Distribution <ul style="list-style-type: none"> • MoD (DS & C) change to MoD (Safety, Sustainable Development and Continuity Division) • DLO AD NWG/NARG (for SONART) change to DE & S SM SW (for SONART) • FLEET HQ – Portsmouth (for RADPOLSM) change to NAVY COMMAND HQ – Portsmouth (for RADPOLSM). 	13.01.10	
2	MOD Devonport: For O Berth Issues Distribution Group <ul style="list-style-type: none"> • Change Fleet HQ to Navy Command HQ 	13.01.10	

3	MOD Devonport: also amended para. 1.21, 2.1b, 2.4a, 2.4b, 2.9, 2.10, 2.11, 2.13, 2.16, 2.20, 2.24, 2.25, 2.28, 2.29a, 2.29b, 2.30, 2.31, 3.09, 5.1, 5.3.2, 5.5, Annex 2A, Annex 2B, Annex 2C, Annex A, Annex B	13.01.10	
4	Portland Harbour Authority: 2.21C - Operational Level Bronze is now located on the Top floor of the Main Port Building in Harbour Control	13.01.10	
5	Portland Harbour Authority: 2.28 - first response will be the Duty Marine Officer	13.01.10	
6	Portland Harbour Authority: 2.32a - All personnel entering the port after a reactor emergency will do so via the <u>Main Gate Security</u> . The security officer will call the Operations command centre for further instructions before allowing them to proceed on site	13.01.10	
7	Portland Harbour Authority: provided new layout for the Incident Command Centre (page 70)	13.01.10	
8	Dorset Police: provided new layout for tactical Command centre	26.03.10	
9	HSE: Part 2A – Section 2.1 b)	01.03.10	
10	HSE: Part 2A – Section 2.9	01.03.10	
11	HSE: Part 2A – section 2.10	01.03.10	
12	HSE: Part 2A – section 2.11	01.03.10	

13	HSE: Part 2A – section 2.16	01.03.10	
14	HSE: Part 2A – section 2.16	01.03.10	
15	HSE: Part 2A – section 2.24	30.03.10	
16	HSE: Part 2B – annexe 2A para 1	30.03.10	
17	HSE: Part 2B – annexe 2A para 2 h)	30.03.10	
18	HSE: Part 2B – annexe 2H para 3	30.03.10	
19	HSE: Part 5 – section 5.1	30.03.03	
20	HSE: Part 5 – Annexe B	30.03.03	
21	HSE: Part 6 – section 6.2, 6.5	30.03.10	
23	HSE: Part 6 – section 6.9.1	30.03.10	

Change No (2013)	Authority	Date Inserted	Signature
1	Numerous changes from all partner Agencies, Navy HQ, and bringing in line with relevant developments since 2010, including Atkins review.	22.03.13	<i>Dr. Ovidiu Rominger</i>

Change No (2014)	Authority	Date Inserted	Signature
1	Numerous changes to reflect management changes in the MoD	25.06.14	<i>Dr. Ovidiu Rominger</i>

Change No (2016)	Authority	Date Inserted	Signature
1	Numerous changes and updates, added appendices, inclusion of various agency comments	20.01.16	<i>Dr. Ovidiu Rominger</i>

Change No (2016)	Authority	Date Inserted	Signature
2	Numerous changes to reflect Ex Shortbill 2016 lessons learnt, Redetermination being implemented, and extendibility workshop	12.12.16	<i>Dr. Ovidiu Rominger</i>
1 (2017)	Updates from HMNB Clyde on NERO cascade, and role of MoD Incident Commander	14.02.17	<i>Dr. Ovidiu Rominger</i>
2018 and 2019	Changes to reflect updates over the last 2 years, including LA reorganisation.	01.10.18 – 27.03.2019	<i>Dr. Ovidiu Rominger</i>
2020	Changes required by transition to REPPIR 2019, and latest OBIG updates.	01.09.2019 – 21.05.2020	<i>Dr. Ovidiu Rominger</i>
2022	Latest updates from Agencies in light of statutory exercise Shortbill '22.	01.12.2021 - 04.02.2022	<i>Dr. Ovidiu Rominger</i>
Nov 2024	Numerous updates from OBIG agencies reflecting latest developments, and relocation of the OCC to Britannia Terminal.	01.08.2024 – 01.02.2025	<i>Dr. Ovi Rominger</i>

GLOSSARY OF TERMS

CONTAINMENT

Primary Containment

The compartment surrounding the reactor plant made up of the pressure hull of the submarine and internal bulkheads designed to withstand the build-up of pressure after a severe reactor emergency.

Secondary Containment

The compartment within the submarine hull on either side of the primary containment that can prevent internal leakage from primary containment to the atmosphere.

DECAY HEAT

Heat produced by radioactive decay, particularly of fission products, in the reactor fuel. This continues to be produced after the reactor has been shut down. It cannot be shut off, but gradually dies away after the reactor has been shut down.

DECONTAMINATION

The removal of radioactive material from a person or surface.

DETAILED EMERGENCY PLANNING ZONE

Aka DEPZ. For Portland Port the DEPZ (see map) can be described as an area that extends beyond the minimum radial distance of 1.5 km from the centre point of the operational berth (grid reference SY 6942 7473), with the boundary following in the main, the Dorset Council off-site emergency plan boundary, the inner edges of roads, property boundaries and distinctive pathways on land, and with a radius of 1.5 km across all marine areas. The area includes all of Castletown and Fortuneswell.

EMERGENCY EXPOSURE

The 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 a large number of persons or save a valuable installation or goods, whereby one of the individual dose limits referred to in the Ionising Radiation Regulations 2017 could be exceeded. Such exposures require special authorisation as stated in REPIR Regulation 18.

EMERGENCY REFERENCE LEVELS (ERLs)

Dose criteria, advised by UKHSA, that apply to the justification and optimisation of sheltering-in-place, evacuation and administration of stable iodine.

EMERGENCY WORKER	means any person 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.
GAMMA SHINE	The gamma radiation that would emanate directly from a submarine following a reactor emergency.
INTERVENTION *	An activity that prevents or reduces the radiation exposure of personnel resulting from a radiation emergency or from an event that could lead to a radiation emergency.
MEMBER OF THE PUBLIC *	Any person not being: (a) a person for the time being present upon premises where a radiation emergency is reasonably foreseeable or where a radiation emergency has actually occurred, or (b) a person engaged in an activity of or associated with the response to a radiation emergency.
OFF-SITE NUCLEAR EMERGENCY	A hazardous condition which required the implementation of urgent actions to protect the public.
OFF-SITE EMERGENCY PLAN *	Plan prepared by the local authority designed to mitigate, so far as is reasonably practicable, the consequences of a radiation emergency outside the operator's premises.
OPERATOR *	Any reference to an operator is a reference to: (a) any premises other than a licensed site, where the person who is, in the course of a trade, business or other undertaking carried on by him, in control of the operation of premises, and (b) in the case of a licensed site, is the licensee
OPERATOR'S EMERGENCY PLAN *	Where the operator has made an evaluation in accordance with regulation 4(1) which shows that a radiation emergency might arise, the operator must make an adequate emergency plan designed to secure, so far as is reasonably practicable, the restriction of exposure to ionising radiation and the health and safety of persons who may be affected by radiation emergencies identified by the evaluation.

<p>OUTLINE EMERGENCY PLANNING ZONE</p>	<p>Aka OPZ - means a zone determined in accordance with regulation 9 and covered by the local authority's off-site emergency plan; Outline Planning Zones (OPZ's) refer to the existing capabilities and arrangements able to provide proportionate planning for more severe but extremely unlikely events. This level of planning is looking at distances beyond the DEPZ. In what Portland Port is concerned, this distance has been set out by the operator in the consequences report and agreed by the Secretary of State for Defence at 5km.</p>
<p>STABLE IODINE TABLETS</p>	<p>Tablets containing stable Iodine, which would minimise the uptake of radioactive Iodine into the thyroid gland. Currently abbreviated as SIT's, but previously also known as Potassium Iodate Tablets (PIT's).</p>
<p>PREMISES *</p>	<p>The whole area under the control of the same person where radioactive substances are present in one or more installations.</p>
<p>RADIATION EMERGENCY *</p>	<p>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.</p>
<p>RELOCATION</p>	<p>The movement of members of the general public away from contaminated areas to avoid chronic long-term radiation dose.</p>
<p>REPPIR The Radiation (Emergency Preparedness and Public Information) Regulations 2019</p>	<p>Statutory Regulations relating to:</p> <ul style="list-style-type: none"> a) the assessment of risks from installations holding large quantities of radioactive material b) the production of emergency plans to mitigate such risks c) informing the public about health protection measures to be taken in the event of a radiological emergency and the basic safety standards for the protection of the general public and workers against the dangers of ionising radiation.
<p>REACTOR SAFETY ALERT (RSA)</p>	<p>An abnormal event which poses a special threat to or poses serious concern for reactor safety.</p>

REFERENCE LEVELS*	Are: a) an emergency planning tool aimed at achieving an optimised response over all relevant exposure pathways and protective actions; b) an indicator of the level of exposure considered as tolerable, given the prevailing circumstances; and c) values to inform decisions on protective action and support the practical implementation of the optimisation principle when the response to an emergency is underway. Local authorities should describe in the off-site emergency plan the lowest appropriate reference levels relevant to potential radiation emergencies at the premises for groups or categories of emergency workers who have a role in the off-site plan and for members of the public. For members of the public, local authorities should take advice from UKHSA.
SITE SPECIFIC INTERVENTION LEVEL	Radiation dose selected from the ERL range at which a particular protective action would be implemented. To be expressed as an averted dose defined locally and detailed in local plans.

* Definitions marked by an asterisk refer to definitions set out in REPPIR

LIST OF ABBREVIATIONS

ACC	Assistant Chief Constable
ACMZ	Automatic Countermeasures Zone
CBRN	Chemical, Biological, Radiological, Nuclear
DMV	Defence Monitoring Vehicle
CCU	Dorset Civil Contingencies Unit
CCUDO	Dorset Civil Contingencies Unit Duty Officer
DC	Dorset Council
DLRF	Dorset Local Resilience Forum
DNSC	Defence Nuclear Safety Committee
DPAS	Dorset Prepared Alerting Service
DNSR	Defence Nuclear Safety Regulator
DNEO	Defence Nuclear Emergency Organisation
DRPS	Defence Radiation Protection Services (former DSTL)
DEPZ	Detailed Emergency Planning Zone
DPCB	Dorset Police Casualty Bureau
DWFRS	Dorset & Wiltshire Fire and Rescue Service
EMHQ	Emergency Monitoring Headquarters
EZRC	Exclusion Zone Reception Centre
ERL	Emergency Reference Level
EOP	Emergency Operating Procedure
FSA	Food Standards Agency
UKHSA	UK Health Security Agency
HSE	Health and Safety Executive
IC	Incident Commander
ICC	Information Co-ordination Centre
IRR17	The Ionising Radiation Regulations 2017
MCA	MoD Co-ordinating Authority
MCGA	Maritime and Coastguard Agency
MoD	Ministry of Defence
MoD HQ DNEO	Ministry of Defence Nuclear Emergency Headquarters
NEBUST	Nuclear Emergency Backup Support Team
NBC	Naval Base Commander

NEMT	Nuclear Emergency Monitoring Team
NEMO	Nuclear Emergency Monitoring Organisation
NERO	Nuclear Emergency Response Organisation
NSC THRC	National Security Council (Threats, Hazards, Resilience and Contingencies)
OBIG	Operational Berth Issues Group
OCC	Operational Command Centre
ONR	Office for Nuclear Regulation
NOTAM	Notice to Airmen
NPW	Nuclear Powered Warship
PACRAM	Procedures and Communications in the event of a release of Radioactive Materials
PPL	Portland Port Limited
RCCE	Radiation, Chemical & Climate Environmental Hazards Directorate
REPIIR	Radiation (Emergency Preparedness and Public Information) Regulations 2019
RD	ResilienceDirect (govt secure platform)
RL	Reference Level
RMU	Radiation Monitoring Unit
RREMS	Radiological Response and Emergency Management System
SITREP	Situation Report
SITs	Stable Iodine Tablets, previously known as Potassium Iodate Tablets (PIT's)
STAC	Scientific & Technical Advisory Cell
SCC	Strategic Command Centre
SCG	Strategic Co-ordination Group
SICC	SIT's Co-ordination Centre(s)
SONERT	Staff Officer Nuclear Emergency Response and Training
SWASFT	South West Ambulance Foundation Trust
TASG	Technical Advisory Support Group
TCC	Tactical Command Centre
TCG	Tactical Co-ordination Group
TTR	Transition to recovery

PART 1 : BACKGROUND TO REACTOR EMERGENCY CONTINGENCY PLANNING

1.1 BACKGROUND

- 1.1.1 The Royal Navy operates a flotilla of nuclear-powered warships, which form a vital element of the defence of the UK. The nuclear reactor offers the submarine a level of speed and underwater endurance that cannot be achieved by any alternative method of propulsion. Nuclear power is the only mechanism available to allow HM Submarines to carry out elements of the Navy's task in support of the UK's independent nuclear deterrent, anti-submarine warfare and in the protection of maritime supply routes.
- 1.1.2 The safety of naval reactors is given the highest priority and their design, operation and maintenance is authorised by the Secretary of State for Defence through the Defence Nuclear Safety Regulator (DNSR). They are advised on these matters by a specialist committee, the Defence Nuclear Safety Committee (DNSC), whose membership includes independent nuclear and radiation safety experts. The MoD has all aspects of the Naval Nuclear Propulsion Programme (NNPP) independently assessed by safety and reliability experts whose performance and conclusions are also subject to independent scrutiny. The prime contribution to nuclear safety comes from engineered safeguards, good design, quality in construction, training and competence of staff in operations and maintenance.
- 1.1.3 Such measures ensure that the likelihood of a reactor emergency occurring is extremely remote. Indeed, during more than 60 years of the Naval Nuclear Propulsion Programme there has never been a reactor emergency nor has any radiation incident resulted in a significant hazard to service personnel or a member of the public. Nevertheless, in accordance with best international practice, and the Radiation (Emergency Preparedness and Public Information) Regulations 2019 it is MoD policy to have detailed reactor emergency contingency plans. These plans form an additional level of public protection for use in the extremely unlikely event of an emergency.
- 1.1.4 Ultimate responsibility for ensuring that the appropriate steps are taken to mitigate the effects of a disaster rests with the Chief Constable of the affected area. Co-ordination of central government actions is the responsibility of a lead government department who would keep the Prime Minister and the Cabinet informed in case decisions were needed at that level. The department assuming the lead role is laid down in the Cabinet Office Civil Contingencies Secretariat document "The Lead Government Department and its role – Guidance and best Practice". For all defence related nuclear material emergencies, the Secretary of State for Defence is charged with ensuring the MoD fulfils this lead department role. As such MoD will chair the National Security Council (Threats, Hazards, Resilience and Contingencies) (NSC THRC) Committee to ensure all government

departments are fully involved in supporting the MoD HQ Defence Nuclear Emergency Organisation response. "Emergency Preparedness" the Guidance on Part 1 of the Civil Contingencies Act 2004, its associated Regulations and non-statutory arrangements cover all levels of the national response, from the requirement for a central government contingency plan to the local management structures that are to be implemented. The document also requires that the response to all national emergencies should involve full consultation and co-operation between relevant departments.

- 1.1.5 At the local level, "Emergency Preparedness" nominates the area Police Chief Constable as being responsible for chairing the Strategic Co-ordination Group (SCG) normally located at police HQ, or as a virtual arrangement. The heads of all the various agencies involved in the response will also join the SCG arrangements from which the overall implementation of the contingency plan is managed. To ensure that the MoD response is consistent with the guidelines in REPPIR and "Emergency Preparedness", and the local off-site emergency plan, there is routine liaison with the relevant agencies because MoD's reactors are of a common design forming the basis of both the Site Specific Operators emergency plan, which deals with the actions inside the submarine, and the Off site emergency plan, which deals with public protection. These arrangements are therefore similar for all operational berths.

1.2 REACTOR PLANT AND OPERATION

The Pressurised Water Reactor (See diagram below)

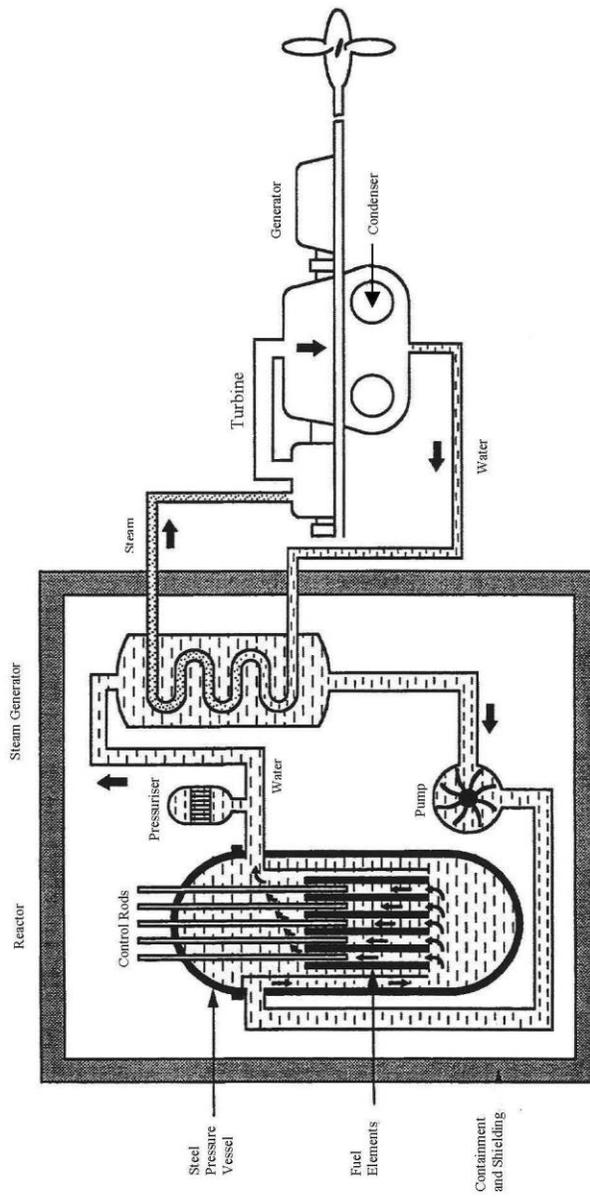
- 1.2.1 A Royal Navy nuclear powered warship is driven by steam turbine machinery. However, unlike a conventional steam driven vessel, which uses fossil fuels to fire its boilers, the source of heat within a nuclear-powered warship is provided by a nuclear reactor. The type of reactor used is known as a Pressurised Water Reactor (PWR).
- 1.2.2 The reactor core contains fuel modules and control rods. To achieve criticality, the state in which the reactor is able to provide useful power, the control rods are slowly withdrawn from the core until the fission reaction is established. The reactor is shut down by re-insertion of the control rods. The heat produced by the fission of the fuel is removed from the core by water contained in a sealed primary circuit. This water is pumped through steam generators where the heat is used to produce steam in a separate, secondary circuit. It is this steam which is used to provide power to the submarine. The primary circuit is kept under pressure to prevent the coolant water from boiling.
- 1.2.3 As well as heat, the fission process also produces radioactive fission products. Unlike some civilian power reactor designs where the minor release of fission products into the primary circuit can be tolerated, submarine fuel modules are designed differently to avoid any such release during normal operation and there has never been an instance when fission products have been released from the fuel.

- 1.2.4 Although the fission products remain contained in the fuel, the gamma radiation that they emit is highly penetrative and thus there is a need for shielding to be fitted around the core and to be built into the submarine's reactor compartment. The shielding installed in RN nuclear powered warships reduces the radiation levels within the manned compartments of the vessel to very low levels. Indeed the average levels of radiation dose received by members of the crew from reactor operation are less than the average natural background levels received by the UK population.
- 1.2.5 The heat produced by the fission process would be sufficient to melt the fuel modules if they were not cooled. Even after shutdown the radioactive fission products continue to generate heat, known as decay heat, and cooling is still necessary for some time. To overcome this, the vessel design incorporates a number of mechanisms that are able to supply cooling to the reactor. These include natural convection so that cooling would continue even on complete loss of electrical power.

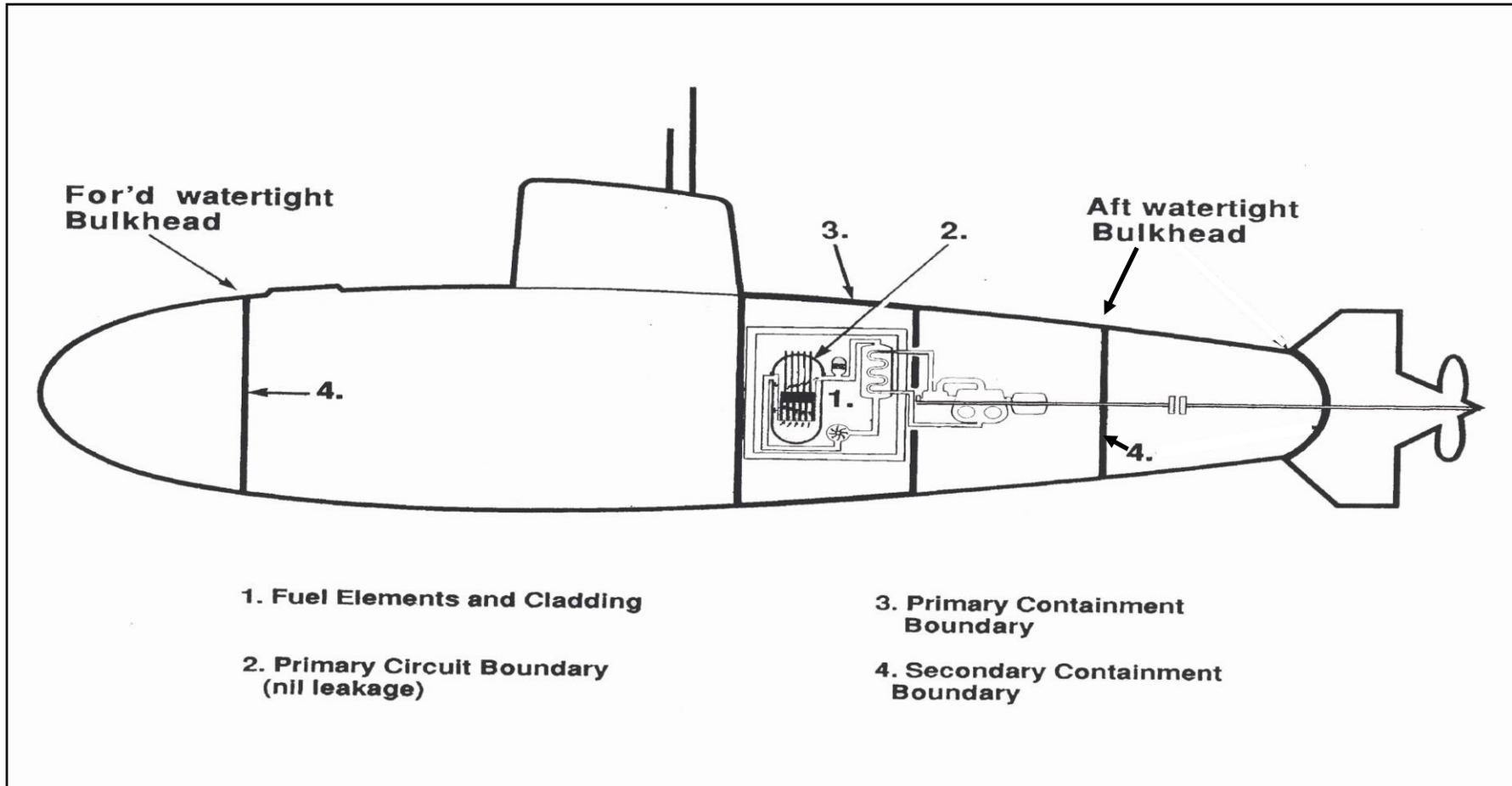
Reactor Containment (See diagram below)

- 1.2.6 Following an emergency, the main potential hazard associated with nuclear reactors would come from the release of fission products from the fuel. As already stated, in order to prevent this, submarine reactor fuel is encased in strong and very high integrity cladding. In addition, beyond this protection there are a number of further barriers designed to contain the fission products should an emergency situation develop. In the first instance, should the cladding fail the primary coolant system, which is a closed circuit, would contain the fission products and prevent further spread.
- 1.2.7 Beyond the primary coolant system, the submarine's reactor compartment is designed and constructed to meet the severe rise in pressure that could result from the very unlikely event of a complete failure of the primary system. This barrier to the release of fission products is termed the Primary Containment. Pipes, ducts and other penetrations between the primary containment and the remainder of the submarine are designed to be shut off automatically, but even if these openings were to allow a slow release of a proportion of fission products, they would still be contained by the immensely strong hull of the submarine which is, of course, designed to withstand the enormous pressures associated with operations at depth. The submarine's pressure hull is referred to as Secondary Containment.

Pressurised Water Reactor



Reactor Containment



1.3 HAZARDS OF A REACTOR EMERGENCY

Biological Effects of Radiation

- 1.3.1 It is the ionising radiation given off by the fission products that would pose the hazard following any reactor emergency. As the radiation passes through the human body, ionisation events occur which may damage or kill cells. The body is of course being subjected continuously to natural background radiation and has well-developed repair processes to deal with radiation damage. Different human cell types have very different radiation sensitivities but if the radiation dose is great enough and large numbers of cells are killed; signs and symptoms of acute radiation exposure would appear. These acute radiation effects include skin burns and most severely death, but all have a defined threshold of dose below which the effect will not take place.
- 1.3.2 At radiation doses below the thresholds acute effects cannot occur, although cells may have been damaged with the result that exposed individuals have a statistically increased risk of the development of cancer in years to come. Reproductive cells may also have been damaged so those children born to exposed individuals may have a very small increased risk of hereditary defects. For radiation protection purposes, the increased risk of these effects is assumed to be directly proportional to the radiation dose, without any threshold.

Radiation and Contamination

- 1.3.3 In order to understand the hazards of a reactor emergency, it is important to appreciate the meaning of and differences between the term's radiation and contamination. Even in a situation where the fission products remain contained, the penetrating radiation that they give off may still irradiate people in the vicinity. This is termed a radiation hazard. Protection against such a hazard would be afforded by reducing the time people spent close to the fission products, placing shielding between the individuals and the radiation source or increasing the distance between them and the source. If, however, personnel became contaminated with fission products, either on the surface of their body or internally by breathing, eating or drinking, then the subjects carrying the source of the radiation around with them would continue to be irradiated until that source was removed. This is termed a contamination hazard. Some protection against such a hazard can be afforded by the use of protective clothing, and skin contamination can normally be removed by simple washing.

The Hazards

- 1.3.4 Following a severe reactor emergency involving the release of fission products outside the primary circuit, there are 2 distinct ways by which people could be irradiated:
- a) Gamma radiation from fission products retained within the submarine containment would be transmitted in all directions through the vessel's hull. The intensity of this pure radiation hazard would be diminished by

both shielding and distance from the submarine, but excessive levels of radiation could be received by people within, or in close proximity to, the vessel. This hazard is referred to as Hull Gamma Shine.

- b) Less likely is the release of some of the fission products from the submarine to the surrounding atmosphere or water. The release of fission products, the actual radioactive material, would also constitute a contamination hazard.

Release of Fission Products to Atmosphere

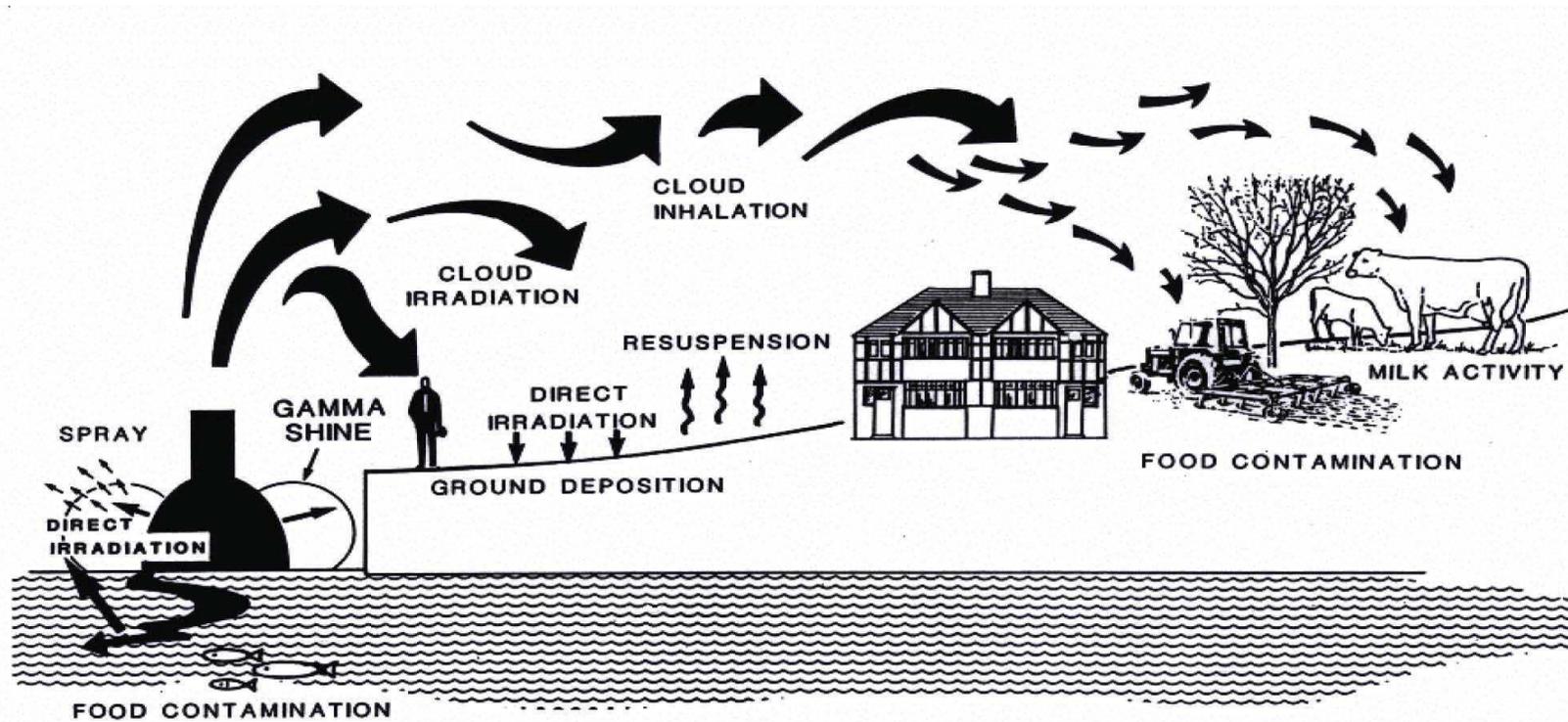
1.3.5 If released to atmosphere the fission products would be dispersed in the area downwind of the vessel. The extent of the hazard and the distance to which such a fission product cloud could be detected would be highly dependent on the weather conditions during the period that the release took place. Such a cloud of radioactive contamination could irradiate people in 6 distinct ways:

- a) Direct radiation from the cloud as it passes by.
- b) By inhalation of radioactive fission products from the cloud. The parts of the body receiving the greatest radiation doses would depend on the chemical and physical form of the individual fission products. It is possible that a significant dose could result from the inhalation of radioactive iodine, which is readily absorbed and concentrated, in the thyroid gland. Another group of fission products, being largely insoluble, would remain in the lung. A third main group would be readily absorbed but would not be concentrated in any particular organ.
- c) Direct radiation from fission products, which have been deposited on the ground. This route, like a) above, would result in fairly uniform whole body radiation exposure.
- d) Direct radiation from beta and gamma emitting fission products, which have been deposited on the skin.
- e) Inhalation of fission products that have been re-suspended after deposition on the ground. This route has been shown to be insignificant compared with doses that would result from b and c.
- f) Consuming food or drink, which has been contaminated by fission products. As a radioactive cloud moves downwind, some of the radioactivity could be deposited onto the surface of food, either growing in fields or exposed on market stalls etc. This superficially contaminated food would cause internal contamination to those who consumed it in the immediate post emergency period. Fission products deposited on the ground may also be taken up by growing plants and animals, which may be eaten directly by man, causing subsequent internal contamination and radiation dose. The contaminated plants and animals may not be eaten directly by man, but may enter a food chain and pass through a number of stages before entering the human diet. For example, radioactive iodine deposited on pasture would be concentrated in the milk of grazing dairy animals, which could present a hazard if the milk was consumed. Peak

levels of radioactive iodine in milk would be reached 2 days after the release, with levels decaying over the next several weeks. After the decay of the iodine, the dominant hazard via the ingestion route would be the take-up of longer lived fission products into the food chain.

- 1.3.6 In the very unlikely event of a release to atmosphere the principal short-term hazards would be direct irradiation from the cloud, inhalation of fission products and irradiation from ground deposition. Food chain contamination, although representing less of a hazard initially, would come to be of increasing significance in the longer term.

Hazards of a Reactor Accident



Release of Fission Products to Water

1.3.7 The radiation effects from fission products released into water would be highly dependent on the state of the tide and the characteristics of the estuary into which the release took place. There are 4 ways in which people could receive a dose of radiation following such a release:

- a) Direct radiation from the water either to those immersed within it or to those in its immediate vicinity.
- b) Ingestion of the water or inhalation of spray.
- c) Irradiation from the deposition of fission products on banks and areas uncovered by the tide.
- d) Fission product contamination of marine food chains.

1.3.8 Following a reactor emergency, the overall hazards to the population resulting from a fission product release to water would be on a smaller scale than for the same magnitude of release to atmosphere. Significant hazards could arise in the localised area around the contaminated water, however, and this area would drift with the tide gradually diluting and dispersing. Food chain contamination could become of increasing significance in the longer term, as would the accumulation of radioactivity in the sediments and mudflats.

1.4 PROTECTION OF THE PUBLIC FROM THE HAZARDS OF A REACTOR EMERGENCY

Prior Information to the Public

1.4.1 Public Information Leaflets will be distributed to all premises within the Portland Port DEPZ. The leaflets will inform members of the public what to do in the extremely unlikely event of a nuclear reactor emergency in the port. This guide has been produced by Dorset Council (DC), in consultation with the Ministry of Defence and relevant Health Authorities, in accordance with the Radiation (Emergency Preparedness and Public Information) Regulations 2019.

Emergency Management

1.4.2 If a reactor emergency were to occur, emergency procedures would be followed by the submarine crew and shore engineering support with the aim of preventing or minimising core damage, maintaining the integrity of containment and minimising any release of fission products. This emergency management strategy would form an important element in the overall protection of the public.

Emergency Protective Actions

1.4.3 UKHSA provides advice on public health protection in the event of radiation emergencies. The advice applies to the protection of public health in a wide range of radiation emergencies and is intended to be applied pragmatically and flexibly during preparedness, response and recovery phases, according to the scale and type of release; location specific factors; and the needs of the local community. The intended audience includes, but is not limited to, public health professionals, local authorities, site operators, regulators, environment agencies and food standards agencies, that is, those organisations who might be represented on any of the following groups: Scientific Advisory Group in Emergencies (SAGE), Scientific and Technical Advisory Cell (STAC) and Recovery Working Group (RWG) and Recovery Co-ordination Group (RCG).

1.4.4 There are two key categories of exposure relevant to radiation emergencies: exposures that are sufficiently high to lead directly to tissue damage, resulting in deterministic effects to individuals; and exposures below those capable of causing deterministic effects but which may lead to an increased risk of health problems, such as cancer incidence, in the future. UKHSA recommends three principles of radiological protection for response to radiation emergencies:

- 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*
- c. *protection strategies for exposures below the thresholds for deterministic effects.*

The first principle of justification applies to all protection strategies, and for all levels of potential exposure. In determining whether a strategy is justified, that is, it does more good than harm, account should be taken of all the expected consequences, both beneficial and undesirable, including: radiation health risks; wider health risks (including psychological impact); consequential injuries; economic consequences; social and environmental factors. The second principle is to plan for avoidance of deterministic effects. UKHSA recommends that priority in both planning and response should always be given to consideration of protection strategies to avoid exposures that could lead to deterministic effects. The third principle of optimisation applies to protection from exposures that are expected to be below the thresholds for deterministic effects. In this region of dose, protection strategies require a balance to be struck between the expected harms and benefits (in the widest sense) of introducing particular protective actions, so that the margin of benefit over harm is maximised.

1.4.5 In describing the framework for managing a radiation emergency it is helpful to use different time phases, namely: early; intermediate; and long-term. The early and intermediate phases correspond to the emergency response, which according to the radiological protection framework is managed as an emergency exposure situation. The long-term phase, corresponding to recovery is managed as an existing exposure situation.

- 1.4.6 Emergency planning - a comprehensive understanding of the risk from radiation emergencies and potential consequences is necessary for appropriate planning. Of particular relevance is the need to consider both likelihood and severity of any exposures. Assessments based on a range of potential site events, including those of very low probability but severe impact, inform detailed and outline planning requirements, including the relevant distances. Detailed emergency plans describe arrangements for immediate implementation of sheltering-in-place, evacuation and administration of stable iodine by having capabilities in place. In contrast, outline plans only contain high level provision for how capabilities could be extended or where they could be obtained from in the short-term following a release. The responsible authority/body decides on what is appropriate and proportionate, based on the consequence assessment, the technical distances recommended, and a range of geographic and demographic factors.
- 1.4.7 Protective actions - for most emergencies, radiation emergency planning focuses on protective actions (urgent protective actions, and longer-term protective actions) to reduce or avoid exposures below the thresholds for deterministic effects.
- 1.4.8 *Urgent protective actions* are those that are required to be implemented quickly for periods of hours or days, in order to protect against exposures received over relatively short timescales. Urgent protective actions include sheltering-in-place, evacuation; the administration of stable iodine; and initial restrictions on food and water supplies. Evacuation is very effective for protecting small communities, provided it is implemented before a release occurs and has been well planned. For large numbers of people or without prior planning, evacuation can lead to serious physical and psychological health risks, including fatalities. Sheltering-in-place is a less disruptive option, although health and wellbeing can be affected by restricted access to medical care or assistance. The administration of stable iodine also has few side-effects and is most effective when accompanied by either sheltering-in-place or evacuation, and if administered less than 24 hours prior to, or up to 2 hours after, inhalation of radioiodine released to atmosphere. In situations where there is a protracted threat of a release, an intermittent release or a release that continues over an extended period, it may be necessary to modify the implementation of some urgent protective actions for example by temporary lifting of sheltering-in-place, supervised re-entry into an evacuated area; or the issuing of second doses of stable iodine.

Restrictions on food and water may be implemented on a precautionary basis (that is within 24 hours) following an airborne release, advising people not to eat unwashed fresh fruit and vegetables that have been outside or not to drink rain water. On the basis of radiological measurement data, statutory food restrictions on marketed foods may follow in a matter of days to prevent contaminated foodstuffs entering the food chain; this can generate large volumes of waste requiring disposal. Similar restrictions will apply to potentially contaminated drinking water supplies or to marketed food from contaminated aquatic habitats.

1.4.9 *Longer-term protective actions* provide protection from longer-term exposures due to contamination of the environment and food supplies. These may include temporary or permanent relocation as well as actions to restrict access to contaminated areas, remediation of land and buildings including decontamination, and further restrictions on food and water supplies. These actions are not urgent, so there is time to plan their implementation to maximise benefit over harm. Nevertheless, there can still be wider health risks associated with some of these protective actions, for example, psychological impact following relocation; or waste management challenges following wide-scale decontamination of land.

Radiological criteria for emergency planning, response and recovery

1.4.10 There are two types of dose criteria: emergency planning thresholds of dose for guiding decisions on actions to avoid deterministic effects; and sets of other dose criteria (Emergency Reference Levels (ERLs), Reference Levels (RLs), Maximum Permitted Levels (MPLs) and Action Levels (ALs)) to optimise protection against lower levels of exposures from the early phase of an emergency through to the long-term. For most emergencies, it is the former criteria that are applicable.

Emergency Reference levels (ERL’s)

1.4.11 *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.

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

Reference Levels (RL’s)

1.4.12 The concept of a *Reference Level (RL)* is the level of dose above which it is judged inappropriate to plan to allow exposures to occur. The RL can be taken as

an indicator of the level of exposure considered as tolerable, given the prevailing circumstances. RLs are tools for supporting the optimisation of protection strategies by maintaining doses as low as reasonably achievable (ALARA – also referred to in the UK as low as reasonably practicable (ALARP)) and are applicable to all areas/zones affected by contamination following the radiation emergency.

- 1.4.13 The objective of defining RLs is to ensure that when implementing protective actions the dose distribution moves towards lower levels of dose, reducing (preferably eliminating) the number of individuals who would be receiving an exposure greater than the selected RL. Optimisation is an iterative process that will, over time, reduce inequalities in the overall dose distribution.
- 1.4.14 The involvement of relevant stakeholders will help to drive the optimisation process. For planning purposes, residual doses in the first year are assessed for a range of emergency scenarios considering any urgent protective actions that have been planned and any restrictions placed on marketed foodstuffs or drinking water. It is these residual doses that are compared to the RL.
- 1.4.15 During response, once urgent protective actions have been initiated, and as more information becomes available, STAC will reappraise the response defined in the emergency plan and consider whether it should be modified. In addition to comparing averted doses with Emergency Reference Levels (ERLs), projected doses in the first year can be compared with RLs to give an additional perspective on the level of protection achieved. This information can be used to indicate whether urgent protective actions need to be extended beyond the DEPZ, whether evacuation of sheltered populations may be required and subsequently whether any further protective actions are necessary (including decontamination, further food restrictions, temporary relocation).
- 1.4.16 Early in an emergency, where the prevailing circumstances are unknown and may be changing rapidly, it is appropriate to use the RL selected during planning. However, as more information becomes available, it will be necessary to reassess the situation to determine whether a new RL should be selected. During the recovery phase, it is appropriate to select a RL in the range of 20 mSv y⁻¹ or below, with a long-term objective of 1 mSv y⁻¹. Further details on the use of Reference Levels in the UK can be found in: Nisbet AF (2019). Public Health Protection in Radiation Emergencies. Chilton, UK, PHE-CRCE-049.
- 1.4.17 Site specific Reference Levels for planning should be set close to, but above, the estimated residual doses in the first year for the 'worst case' emergency scenarios considered as part of the emergency plan for the site. This is likely to be considerably lower than the 100 mSv generic Reference Level. The residual dose should take into account any urgent protective actions that have been planned based on the Emergency Reference Levels (ERLs), and any restrictions placed on marketed foodstuffs or drinking water based on Maximum Permitted

Levels (MPLs) and Action Levels (ALs).

1.4.18 For emergency workers in the off-site plan, such as the emergency services, local authorities will obtain RL information from the employers of these workers who have determined these in accordance with regulation 18(2). Reference levels for each Agency are included in Section 6.

The National Reference Level for the public is set at 100mSv. This includes the dose from both the response and recovery phase over the first year following the accident. All emergency plans should optimise the protection of the public using the Emergency Reference Levels (ERLs) philosophy.

The Consequence Report recommended an Urgent Protection Action (UPA) distance for shelter and SITS of 1.5km. The representative accidents used for recommending the UPA distances would result in the public dose at 500m over 1 year being significantly less than National Reference Level (NEAG).

1.4.19 All the information above and details are included in the latest Public Health Protection in Radiation Emergencies (published May 2019 by PHE) and available at <https://www.gov.uk/government/publications/radiation-emergencies-public-health-protection-2019>

Withdrawal of sheltering-in-place and evacuation advice

1.4.20 There are no predetermined radiological criteria for initiating withdrawal of sheltering and evacuation advice. In general terms, this advice should only be issued when these urgent protective actions have achieved their desired effect by averting doses, or when their continued application will cause more harm than good in the broadest sense. When making decisions on withdrawal of sheltering-in-place and evacuation advice, a large number of radiological and non-radiological factors need to be taken in to account, necessitating a pragmatic and flexible approach.

1.4.21 Radiological factors include: official confirmation that the release has stopped; monitoring data on ambient dose rates, ground deposition and surface contamination; and estimates of effective doses integrated over a range of time periods. Non-radiological factors include: wider health and social needs; caring for livestock; provision of resources for environmental monitoring, decontamination, medical services; and stakeholder opinion.

1.4.22 Withdrawal of sheltering-in-place and evacuation advice does not necessarily signify a return to normality. Evidence from previous radiation emergencies suggests that further protective actions may be required ranging from some simple decontamination techniques to temporary or even permanent relocation.

Other Protective actions

- 1.4.23 In addition to emergency protective actions for which ERLs and RLs are promulgated, a range of other longer-term measures may be applicable to protect the public following a reactor emergency.
- 1.4.24 Food Controls. In the UK the public would be protected from the hazards of fission products in food stuffs by the control and disposal of the contaminated material. Intervention levels for food promulgated by the European Commission are mandatory in the UK and are set at very low levels, based on doses that individuals would receive if they consumed the food for a year following the emergency. It is probable, therefore, that in the event of an emergency involving a release of fission products, food and farm restrictions could extend to distances significantly greater than those to which emergency protective actions were required
- 1.4.25 Relocation. Relocation is the term used to describe the movement of the public from contaminated areas to avoid long term radiation exposure or to allow decontamination to take place. It is therefore distinct from evacuation, which is an emergency protective action aimed at providing immediate public protection. There are no national criteria for the implementation of relocation. Any requirements for relocation would be determined by discussion among relevant local and national agencies with the aim of optimising the protection of the public. The protection provided by adequate emergency protective actions would allow the required time to assess the need for relocation.

PART 2 : ORGANISATION AND ACTIONS ON DECLARATION OF AN EMERGENCY

LOCAL LIAISON ARRANGEMENTS

2.1 Definition of “on-site” and “off-site”

For the purposes of this plan the operator is the Royal Navy. A full definition of the term operator can be found in the glossary.

- a) “On-site” means the “premises”, as set out in Regulation 2(1) in Radiation Emergency Preparedness and Public Information Regulations 2019, which in the case of Portland Port Ltd (not being a nuclear licensed site) is the nuclear powered warship at its geographical location within the port. The MOD has produced a Site Specific Operators Emergency Plan for the premises, which also covers the ACMZ within Portland Port and links in with the Off-Site plan.
- b) “Off-site” means the area outside the nuclear powered warship (including the Detailed Emergency Planning Zone – DEPZ and Outline Planning Zones – OPZ), and in accordance with Reg 11(1) and (Reg 9) REPIR 19, this area is determined by the Local Authority. For MoD sites the Secretary of State for Defence has set the OPZ at a distance of 5km for submarine berths.

2.2 Definition of Portland Port Ltd

For the purposes of this Plan, Portland Port Ltd is as defined in Part 2 Section 4 of the Port Harbour Revision Order 1997, Statutory Instrument 2949.

The area within which the Company shall have jurisdiction for the purposes of pilotage under Part 1 of the Pilotage Act 1987(a) shall include (in addition to the harbour) so much of the area outside the harbour as lies to the west of a straight line drawn from a point at Latitude 50°32.922´N, Longitude 02°24.867´W (Grove Point, Portland) to a point at Latitude 50°37.450´N, Longitude 02°19.317´W (White Nothe, Weymouth), but excluding Weymouth Harbour.

2.3 Operational Berth Issues Group (OBIG)

The Portland Port OBIG consists of representatives from the Local Authority, Ministry of Defence, Royal Navy, emergency services and local representatives of central government departments. Its purposes are:

- a) To inform the public on the scale of any potential risks of radiation hazards that

may be involved in operating nuclear powered warships.

- b) To maintain and review the Off-Site Emergency Plan for Portland.
- c) To ensure that an effective emergency response organisation is in place to respond to a Portland off-site reactor emergency, protect the public and mitigate the consequences of any potential emergency in accordance with the requirements of REPPiR 2019.
- d) The OBIG has the responsibility for reviewing the plan and a checklist of actions and procedures that must be in place before any visit of a nuclear powered warship can occur. Included in that checklist will be that a full risk assessment has been undertaken and that appropriate 24-hour security will be in place around the submarine including waterside.
- e) The OBIG meets when required by planning, NPW visits or exercising requirements, but members may request the Chairman to call meetings outside these requirements, if needed. The Chairman is a Dorset Council Emergency Management officer or manager.
- f) To liaise with the members of the public as necessary in respect of public information issues, and ensure a public campaign is carried out at least every 3 years.

PORTLAND PORT LTD

2.4 Categorisation of Berths

- a) The requirements to maintain reactor safety and to have a site-specific local emergency plan, determine that all berths used by nuclear powered warships must be assessed and their use endorsed by the Defence Nuclear Safety Regulator (DNSR). The berth assessment process examines the safety aspects of navigational hazards, the provision of tugs and other facilities and the existence of any other hazards in the local area. It also contains a description of the population distribution in the area and a brief summary of the emergency organisation. Berths are located so that there are few members of the general public living in the surrounding areas, enabling an effective evacuation of persons from the **Automatic Countermeasures Zone – ACMZ** (approximately 0.4 km zone – see Figure 1, p.43). Special consideration is given to the proximity of public utilities such as schools and hospitals. If there are practical benefits the ACMZ could be reduced to 200m for controlled evacuation of personnel with sheltering out to 400m (as recommended in the Consequence Report).

- b) Berths cleared for use by nuclear powered warships are categorised in terms of their use.
1. Authorised Berths are cleared for the building, commissioning, refitting, re-fuelling or de-fuelling of nuclear-powered warships or for the repair and maintenance of the nuclear plant together with associated tests and trials.
 2. Operational Berths are cleared for operational or recreational visits or stand-offs by nuclear powered warships. Nuclear implicated repairs are not normally permitted, and any change would require specific agreement. The Portland berth is of this type.
- c) During all periods when a nuclear-powered warship is at a cleared berth there is a requirement for a number of specialist personnel to be located in the area for the duration of the visit. They include:
1. Elements of the Nuclear Emergency Monitoring Team (NEMT), able to co-ordinate and carry out radiation monitoring in the event of an emergency.
 2. A qualified Health Physics Adviser.
 3. A MoD nuclear engineer able to provide technical advice.
 4. Personnel to assist with SITs distribution.
 5. Personnel to operate the Exclusion Zone Reception Centre.

Details of the required support services and their operating procedures are contained in an additional document – the Site-Specific Operators Emergency Plan (SSOEP).

A diagram of the port showing the location of the Portland Nuclear powered warship Berth is at Figure 1.

2.5 Location of Berth

For location of Berth please see Figure 1 over leaf. Previous arrangements have authorised two berths in Portland Port. Currently only one berth remains in operation as depicted.

Figure 1: Location of the Operational Berth at Portland Port



2.6 Nuclear Vessel Movement Principles

The primary hazards associated with berthing and movement operations are from collision or grounding. The following principles apply for the movement of nuclear-powered warships bound for Portland when within Portland Port Harbour Control area.

- a) All vessels are to enter and leave the port via the East Ship Channel. They are to give Portland Harbour Control 2 hours notice of their Estimated Time of Arrival (ETA) at the Pilot Station together with their anticipated arrival draught.
- b) Movement to be operationally approved by Portland Port Harbour Master and promulgated in the daily movements signal.
- c) An authorised Portland Pilot will be embarked.
- d) Attended by at least two tugs, transiting between the Pilot station and the berth. Additional tugs as required ensuring safe manoeuvring and separation from other manoeuvring vessels within the vicinity.
- e) Carried out with adequate navigational aids available.
- f) Conducted within established weather and tidal criteria.
- g) Movements of other vessels in the vicinity of nuclear-powered warships are controlled by Portland Harbour Control in a manner that does not put a NPW at risk.
- h) Adequate security arrangements to be put in place prior to, and during the visit.

PLANNING ZONES

2.7 Planning Zones

The basic reactor emergency plan used at all berths cleared for use by nuclear powered warships specifies 4 Zones where differing actions would take place in the event of an emergency. The zones are shown at Figure 3.

2.8 The Exclusion Zone

The Exclusion Zone is the vessel itself in which people would be at greatest risk from the hazards of an emergency. Within this zone, all people are accounted for and are provided with equipment, which can assess their radiation dose. An Exclusion Zone Reception Centre (EZRC)

for personnel evacuating from the zone will be set up and personnel evacuated to this centre will have access to medical, radiation protection, monitoring and decontamination facilities. The EZRC is located in the Britannia building.

2.9 The Automatic Countermeasures Zone (ACMZ)

The Automatic Countermeasure Zone is beyond the Exclusion Zone and is where automatic actions would commence immediately on the declaration of an emergency, irrespective of classification. Within this zone all people not essential to the management of the emergency would be evacuated and issued with Stable Iodine Tablets (SIT's) as directed. Evacuation and alerting of an incident would occur via loud hailer announcements by Portland Port. All people working within this zone must be given instructions on what action they should take in the event of an emergency. The extent of the automatic countermeasure zone is set at a distance of 0.4 km (400 m) from the vessel in all directions. (See Figure 3).

2.10 Detailed Emergency Planning Zone – DEPZ

This zone includes the Automatic Countermeasures Zone and extends to a total radius of approximately 1.5 km from the vessel and beyond as necessary following natural boundaries. The probability of protective actions being required within this zone is very low in absolute terms. To provide the greatest practicable level of public protection it is a requirement that the MoD notify civil authorities specifically at the commencement of an Off-Site Nuclear Emergency (OSNE) so that sheltering and stable iodine tablet distribution can be implemented. The Stable Iodine Tablet (SITs) distribution plan is at Part 5. The MoD and Maritime and Coastguard Agency will assist civil authorities as required in implementing these protective actions.

2.11 Outline Planning Zone (OPZ)

Outline planning builds on the arrangements and capabilities in existing emergency plans to provide commensurate planning for extremely low probability events. For Portland Port this distance has been set out by the operator in the consequences report and agreed by the Secretary of State for Defence at 5km (See Figure 2). The main aim of OPZ planning is to support decision making and identify protective actions that may be needed at strategic level, where those capabilities could be obtained from, and the anticipated time frame over which they will become available, rather than having them in place ready to mobilise without delay (ACOP 2019).

2.12 OPZ planning

OPZ planning should only include strategic arrangements and considerations that would be necessary, as the tactical and operational arrangements will be developed on the day. For detail of OPZ considerations please see section 8. Where existing arrangements are already in place covering part or all of the identified outline planning zone the off-site plan acts as a signpost to these (see also list of plans at the end of document).

2.13 Site Specific Intervention Levels (SSIL's)

Any extension of protective actions beyond those pre-planned within the DEPZ should be based on a comparison of projected individual doses with Site Specific Intervention Levels (SSILs). Like ERLs, SSILs refer to the dose that can be averted by taking the protective action. SSILs should be selected from within the ERL range but should be drawn up locally in order to reflect local geography and other factors. SSILs should exist for evacuation within the DEPZ, and for other protective actions within the OPZ. The agreed SSILs for the implementation of protective actions in the Portland plan are as follows:

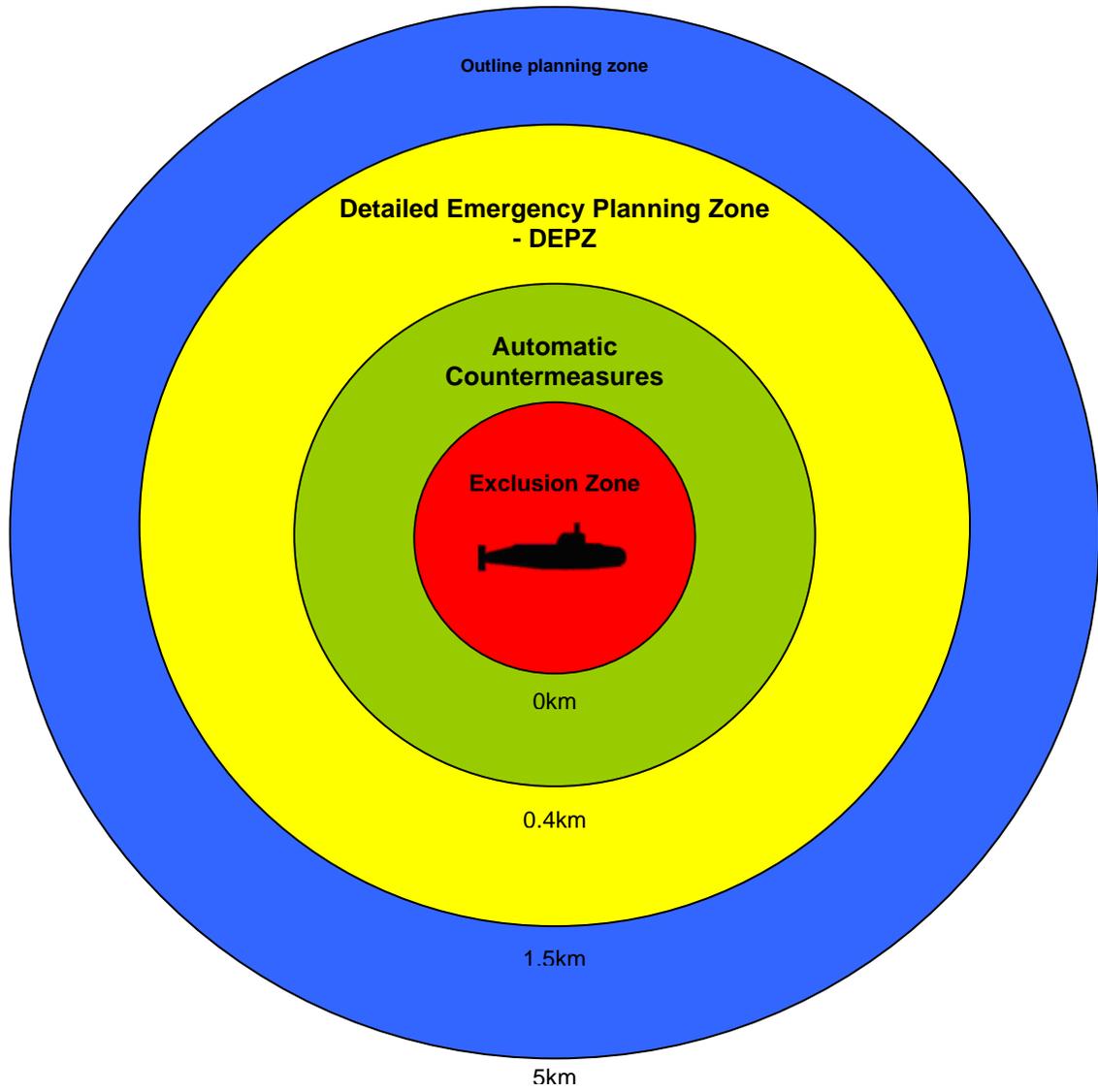
PROTECTIVE ACTION	SITE SPECIFIC INTERVENTION LEVEL (mSv)
Shelter	ERL 3 mSv (Whole body dose)
Stable Iodine Tablets	ERL 30 mSv (Thyroid dose)
Evacuation	To be decided at time of emergency when all factors can be considered

MOD pre-select the ERL as 30mSv for evacuation onto RREMS, and all evacuation protective action advice is based upon this. Evacuation isn't justified as a protective action beyond 200m from the submarine, so is highly unlikely to be implemented in the public domain by the STAC.

Figure 2: Outline Planning Zone



Figure 3: Nuclear reactor planning zones



EMERGENCIES

2.14 General

As described in Part 1, a reactor is designed and operated in such a way that it is extremely unlikely that it would fail in a dangerous manner. However, it is theoretically possible that some sets of circumstances could lead to an emergency in which radiation and/or radioactive contamination would be present outside the vessel.

2.15 Nuclear Reactor Emergency - General

General

It is impossible for an emergency in a naval pressurised water reactor to result in a nuclear bomb type explosion. However, it is theoretically possible that some sets of circumstances could lead to an emergency in which radiation and/or radioactive contamination would be present outside the vessel. The operator has undertaken an assessment of the risk associated with potential emergencies through the identification a range of Representative Accident sequences. Representative Accidents consider the consequences of a full range of radiation emergencies using bounding cases from the REPPIR Risk Framework.

In accordance with REPPIR, MOD reactor emergency arrangements are based on the concept of Representative Accidents, which form the basis of emergency response plans for the protection of the work force and the public who may be affected. The Local Authority has determined that an off-site emergency plan is required for the protection of the public within an area extending to a distance of no less than 1.5km from a submarine berth. A detailed emergency planning zone (DEPZ) is to be determined by the Local Authority by applying the determination principles under Regulation 8(1) – local geographic, demographic and practical implementation factors.

Nuclear Reactor Emergency

The only reactor emergency that can result in a hazard to personnel outside the vessel is one which leads to a release of the fission products normally retained within the fuel elements in the reactor core.

As part of the safety assessment process, which is established to ensure that all reasonably practical measures have been taken to prevent emergencies, detailed analyses are carried out into the mechanisms by which a reactor emergency could be initiated, and the performance of the many safety systems. The results of such analyses provide quantitative estimates of both the probability of emergencies and their consequences in terms of the magnitude of any release of fission products into the environment and the resulting doses. The results of this work have been independently assessed and endorsed by the Defence Nuclear Safety Committee (DNSC).

Radiation Emergency Characteristics

In determining suitable emergency arrangements for the site, the MOD has conducted hazard analyses on the naval reactor. The hazards have been split into two separate types:

- a. Internal Hazards. This assessment focuses on hazards initiating from within the submarine, and the hazard evaluation was conducted independently from the site.
- b. External Hazards. This assessment focuses on hazards initiating out with the submarine. This hazard evaluation was completed as a site-specific accompaniment to the plant hazard evaluation.

These hazards were then plotted on a REPIR risk framework, where a full range of radiation emergencies were taken forward for a detailed consequence assessment. This assessment provides the recommendations for the urgent protective action distances for both the on- and off-site emergency plans for the site.

The range of radiation emergencies for which these recommendations were made are termed the 'representative accidents' and underpin the sites emergency arrangements. These accident scenarios are extremely unlikely, pessimistic in assessment, and require multiple failures of highly engineering systems. Refer to Part 1 for more information on Reactor Plant operation, containment and biological hazards.

The consequence assessment, taking into account all hazard pathways and UKHSA (Radiation, Chemical & Environmental Hazards Directorate - UKHSA RCCE) guidance, recommended the following minimum protective actions:

- a. Controlled evacuation 200 m in all directions from the NPW;
- b. Sheltering 400 m in all directions from the NPW;
- c. Sheltering in the downwind sector out to 1.5 km from the NPW; and
- d. Taking stable iodine tablets (SITs) in the downwind sector out to 1.5 km from the NPW.

Food and drink restrictions would be put into place by other Government departments based on monitoring results and internationally recognised intervention levels.

2.16 Emergency Classifications

Definitions of notifiable alerts are as follows:

Reactor Safety Alert (RSA) – an abnormal event which poses a potential

threat to, or causes serious concern for, reactor plant safety. It is emphasised that a Reactor Safety Alert does not constitute a reactor emergency or require the initiation of either the On-Site or Off-Site plans, albeit Portland Port and the Dorset Council and Dorset Police will likely be informed as a precaution.

“Off-Site Nuclear Emergency” (OSNE) - a hazardous condition which requires the implementation of urgent protective actions to protect the public.

OSNE Qualifiers – The following qualifiers may be used as appropriate for an OSNE:

- Radiation Hazard Confirmed – an Off-Site Nuclear Emergency in which a radiation hazard has been detected.
- Release of Radioactive Material Confirmed – an Off-Site Nuclear Emergency in which a release of radioactive material to the environment has been detected.
- Recovery - an Off-Site Nuclear Emergency in which the emergency response phase has finished, and the recovery phase has formally commenced.

Any OSNE with or without a qualifier would trigger the Off-Site Emergency Plan:

An “Off-Site Nuclear Emergency” (OSNE) refers to a situation where an engineering judgement dictates that fuel plate damage can occur and measures must be put in place to protect the public. This classification definition allows for the precautionary implementation of contingency plans in a period before any hazard exists.

At an “Off-Site Nuclear Emergency” (OSNE) - Radiation hazard confirmed - fission products have been released from the fuel to cause a radiation hazard but containment remains effective in preventing the release of the fission products to the environment outside the pressure hull. It is normally an indicator of severe core damage.

An “Off-Site Nuclear Emergency” (OSNE) - Release of radioactive material confirmed - is declared when a release of fission products outside the submarine has been detected.

While it is convenient to discuss emergency types in terms of emergency classification, in the remote possibility that a severe emergency were to develop it should be recognised that the classification could change with time as the emergency progressed, or as more information became available. An “Off-Site Nuclear Emergency” notification might refer to an initial event, to be followed by a qualified “Radiation Hazard Confirmed” notification report as a hazard inside the submarine was detected followed by a qualifier of “Release of Radioactive Material Confirmed” as monitoring outside the vessel detected that a release had occurred. Generic assessments however demonstrate that for a given classification of emergency the most likely eventual outcome is that the emergency will not develop to the next classification/qualifier.

The multi-agency Off-Site Emergency Plan, including the implementation of automatic protective actions should be instigated in full or such parts as necessary following any declaration of a reactor emergency, irrespective of Classification. This is also a requirement of the Radiation (Emergency Preparedness and Public Information) Regulations 2019 (REPPiR). On receipt of a notification of an “Off-Site Nuclear Emergency”, both the Operator’s on-site and the off-site plans will be activated by means of the cascade call-out.

NUCLEAR EMERGENCY RESPONSE ORGANISATION (NERO)

2.17 Portland Nuclear Emergency Response Organisation (NERO)

- a) Purpose. (1) The purpose of the NERO is to initiate, and subsequently control, the emergency procedures and appropriate actions in the event of a nuclear reactor emergency at Portland Port. (2) The NERO’s role is to protect the public and mitigate the consequences of an emergency.
- b) Overall Structure. The basic structure of the NERO is shown on page 51. It is structured around 3 principal levels of Command and Control in accordance with the central government guidance document “Emergency Preparedness”.
- c) Operational Level (Bronze). Within Portland Port this comes under the co-ordination of the MOD Incident Commander and Portland Port Harbour Master’s representative whose Headquarters are based in the Portland Port Britannia Terminal OCC on the first floor. The Portland Port representative will act as Incident Officer (IO). The Portland Port IO will support the Ministry of Defence Incident Commander. When alerted by the cascade call-out, a Submarine Technical Advisor and a Health Physics Adviser from the Ministry of Defence will deploy to the OCC (located on the Top Floor of the Britannia Terminal), as will representatives from the Emergency Services to give support. Emergency Services will deploy resources in the first place to the RVP located at Chesil Beach Centre Car Park, Portland Beach Road DT4 9XE, and a liaison officer to the Operational Command Centre (OCC) at the Britannia Terminal. Here they will contact the Incident Officer (IO) who will direct them to their posts within the OCC to support operational response, inclusive support of the MoD Incident Commander. Following Tactical decisions, resources will be further dispatched as needed from RVP to the Forward Control Point (FCP), the Britannia Terminal car park. The Operational Level organisation looks inwards and is responsible for directing the activities within the off-site (Portland Port) area. The OCC also provides support to the off-site plan. Also at the Operational level will be the Emergency Monitoring Headquarters (EMHQ) which is a mobile HQ which sets up adjacent to Harbour Control and provides facilities to support the radiological monitoring task undertaken post emergency by the Nuclear Emergency

Monitoring Team (NEMT) (for further details relating to Radiation Protection and Monitoring see Part 4). The SITs distribution centre is located at the Britannia Terminal ground floor within Portland Port, and all distribution will take place from here, under Tactical co-ordination and under the supervision of the SIT's Distribution Team Coordinator (DTC) co-located in the OCC on the Britannia Terminal top floor.

All activities undertaken at the operational level will be in co-ordination with the Tactical and Strategic levels of command and will operate within the policies set at those levels.

- d) Tactical Level. The purpose of the tactical level of management is to determine priority in allocating resources, to plan and co-ordinate all resources involved with the response undertaken, and to obtain other resources as required commanded by a Senior Police Officer and based at the Tactical Command Centre (TCC). The TCC comprises Local Government Cells as well as those from the Emergency Services.

The Tactical Command Centre should have the following equipment:

- Small scale Ordnance Survey map showing the area out to 30km radius (1: 50,000)
- 1:10,000 and 1: 2,500 maps centred on Portland Port

Information available on the following:

- Hospitals
- Schools
- Open markets and bulk food storage depots.

Note: Dorset Police will decide the location of the TCC on advice given by the Incident Commander at Portland Port which could result in the backup TCC location being activated in the event that the main location was not suitably available due to unforeseen circumstances. Virtual arrangements are also an option.

The purpose of the tactical level of management is to determine priority in allocating resources, to plan and co-ordinate all resources involved with the response undertaken, and to obtain other resources as required.

- e) Strategic Level.

The purpose of the strategic level of management is to:

1. establish a framework of policy within which tactical commanders will work
2. give support to the tactical commander(s) by the provision of resources
3. give consideration to the prioritisation of demands and health

requirements

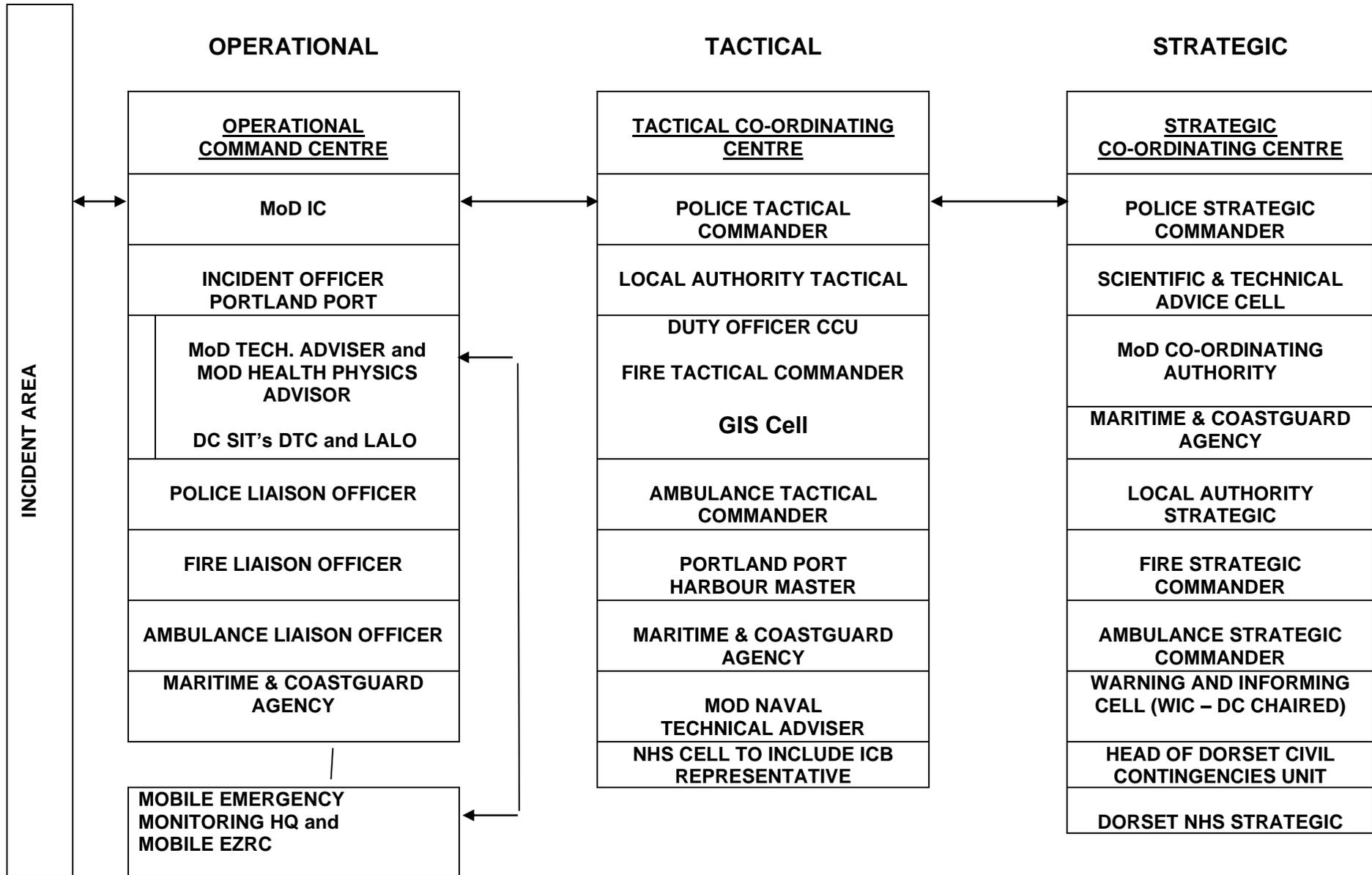
4. determine plans for the return to a state of normality; the transition to recovery (TTR) phase and the initiation of this process as early as possible, ideally in tandem with response.
5. consider intermediate time health requirements and monitoring once the incident is brought under control
6. liaise with the Government Offices and Ministers during the incident.
7. Lead on the establishment of a recovery group, and address long term recovery issues via transition to recovery (TTR) process.

The Strategic Command Centre will be staffed by the Emergency Services, the Scientific & Technical Advisory Cell (STAC), Local Authorities, Government Agencies, MoD Co-ordinating Authority (MCA) and supported by a Warning and Informing Cell – WIC. The Director of Public Health or deputy will chair the STAC along with a team of health advisers, Environmental Health Officers, radiological advisers and the Environment Agency. The Warning and Informing Cell (WIC) is chaired by Dorset Council. The STAC and WIC chairs sit on the Strategic Co-ordinating Group (SCG), and are tasked with actions as required. The MCA arrives from HMNB Devonport. The alternative SCG location may be activated upon the request of Dorset Police in the event that the main location becomes unavailable. Virtual arrangements are also a viable option.

The Chair of the group will change to the Local Authority Chief Executive (or nominee) at a time when the emergency response phase is over and the priority is on remediation and transition to recovery (TTR see section 7). The Strategic group may also change site at that time e.g. to the Dorset Emergency Centre in Dorchester, or any other appropriate venue.

While response and recovery actions may occur simultaneously in the same or different geographical locations, eventually, the emphasis on activities will begin to shift away from response and recovery will become the dominant focus. It is inevitable that some response activities/locations will progress to these recovery actions sooner than others. This is consistent with a gradual transition to recovery rather than a step change (see section 7).

NUCLEAR EMERGENCY RESPONSE ORGANISATION (all details on the day will be included in the “visit directory”)



LOCATION OF COMMAND AND CONTROL CENTRES

Operational Berth – Command settings locations			
Command location	Primary (virtual) option	Primary location	Secondary Location
Strategic Command Centre	Virtual via MS Teams (now preferred initial solution)	Police Head Quarters, Winfrith Technology Park - DT2 8DZ	MICC, Dorchester Fire Station, Peverell Ave West, Poundbury, Dorchester, DT1 3SU
Tactical Command Centre	Virtual via MS Teams (now preferred initial solution)	Police Head Quarters, Winfrith Technology Park - DT2 8DZ	MICC, Dorchester Fire Station, Peverell Ave West, Poundbury, Dorchester, DT1 3SU
Scientific and Technical Advisory Cell	Virtual via MS Teams (now preferred initial solution)	Police Head Quarters, Winfrith Technology Park - DT2 8DZ	MICC, Dorchester Fire Station, Peverell Ave West, Poundbury, Dorchester, DT1 3SU
Information and Communication Cell	Virtual via MS Teams (now preferred initial solution)	Police Head Quarters, Winfrith Technology Park - DT2 8DZ	MICC, Dorchester Fire Station, Peverell Ave West, Poundbury, Dorchester, DT1 3SU
Stable Iodine Tablets Distribution Co-ordination Centre		Britannia Terminal – Portland Port	Royal Manor Health Centre, Easton, DT5 2BJ
Operational Command Centre (OCC)		Portland Port, Britannia Terminal, 1 st floor, Castletown DT5 1PP	

2.18 Nuclear Emergency Monitoring Support Organisation

This is a pre-planned organisation consisting of the personnel and assets described below:

- a) Mobile Monitoring vehicle operated by a driver and health physics monitor.
- b) Mobile Emergency Monitoring Headquarters Vehicle operated by a Monitoring Controller.
- c) Automatic radiation monitoring equipment to continuously monitor the submarine.
- d) A courier vehicle for the collection of samples.
- e) A Health Physics Adviser.

The main tasks that this organisation carries out are:

- a) Radiological surveys around the submarine and in the downwind area.
- b) Co-ordination of monitoring assets.
- c) Collection and dissemination of monitoring data.
- d) Analysis of samples.
- e) Assessment of radiological conditions and provision of advice on protective actions.

The organisation will be supplemented by other monitoring assets and personnel following the declaration of an emergency as below.

2.19 Additional resources

As additional resources DWFRS have Electronic Personal Dosimeters (EPD's) on every front-line appliance. Every DWFRS Hazardous Materials Advisor (HMA) also carry one each.

Some DWFRS pumps carry the Rados 200 Survey Meter for initial monitoring and assessment of the radiation risk.

Fire & Rescue Service National Resilience Capabilities are available and include Mass decontamination units (MDU), Detection Identification and Monitoring units (DIM) and a Decontamination of Body Bag capability. These capabilities are located outside of DWFRS, however they are requested through DWFRS Fire Control and National Resilience Fire Control (NRFC) and are as follows:

Mass Decontamination:

The Mass Decontamination Unit (MDU) can be utilised at any Chemical, Biological, Radiological, Nuclear, explosive CBRN(e) or hazardous material incidents and is transported by a Prime Mover. The MDU is a rear opening container module which stores specialist equipment for public mass decontamination. It also contains a firefighter decontamination structure as well as a generator and lighting. The Mass Decontamination Support Unit (MDSU) can be utilised at any CBRN(e) or hazardous materials incidents and is transported by a Prime Mover. This module carries additional disrobe and re-robe suits (for contaminated persons) plus additional Powered Respirator Protective Suits (PRPS) to provide logistical support to the incident. DWFRS has a MDSU at Bridport Fire Station. MDU's would be provided via mutual aid from neighbouring FRS, with the nearest ones being in Hampshire FRS and Devon and Somerset FRS.

Detection, Identification and Monitoring (DIM):

The DIM Unit and equipment have been provided through the CBRN(e) capability of National Resilience to enable the detection of a range of chemical or radiological hazardous substances. DIM units would be provided via mutual aid from neighbouring FRS, with the nearest ones being in Hampshire FRS and Avon FRS.

Decontamination of Body Bags:

Currently an interim capability is in place to provide decontamination of body bags to support the police CBRN(E) Disaster Victim Identification process.

COMMUNICATIONS AND ALERTING PROCEDURES

2.20 Declaration of a Radiation Emergency and MoD Alerting

It is a responsibility of The Commanding Officer (CO) of the visiting submarine to initially declare an Off-Site Nuclear Emergency (OSNE) at which point all the emergency plans will be put into operation. These initial alerts will be followed up with additional information including updates where appropriate.

2.21 The NERO State of Readiness

The local MOD NERO will be at an "alert" state of readiness throughout the visit; from arrival of the NPW at Pilot Station (in bound) until disembarkation of the Pilot (outbound) on departure. The response times for the various elements of the organisation at the Alert State are as follows (including for virtual arrangements):

Harbour Control - Immediate (manned at all times)

MOD on-site team are all at 1 hours notice to respond, with exception of Incident Commander and Harbour Control, which are at Immediate.

Emergency Monitoring Resources - at 1 hours notice to respond to duty stations at all times.

Incident Officer's Cell Personnel - at 1 hours notice.

Tactical Command Cell Personnel - at 1 hours notice. (including virtual)

Strategic Command Cell Personnel – opened up at 1 hours notice. Personnel on site between 1 and 2 hours, if required – or virtually.

Exclusion Zone Reception Centre (EZRC) - at 1 hours notice.

SITs Distribution Centres - at 1 hours notice.

SITs Distribution Team - at 1 hours notice.

The staffing arrangements for the emergency response cells is detailed in the Portland Port Emergency Plan for Portland Port personnel, The Portland Port Off-site Reactor Emergency Plan for Local Authority personnel and as detailed in the Site Specific Operators Emergency Plan for MoD personnel. Nominated personnel will be re-called by the Cascade Call-out system as detailed in Section 2.24.

The out of hours and weekend arrangements are the same as above whenever the emergency occurs, including response times. NERO contacts for callout cascade include out of hours details.

2.22 Communications

Before the arrival of the NPW at Portland Port, additional telephone links (tested routinely and prior to each NPW visit) are facilitated at the Port to ensure communications links between the following locations:

- Visiting Nuclear powered warship
- Harbour Control Office
- Operational Command Centre (Britannia Terminal)
- Tactical Command Centre
- Nuclear Emergency Monitoring Team
- Exclusion Zone Reception Centre

2.23 MTPAS

The United Kingdom Public Land Mobile Network (PLMN) is susceptible to potential overload during the immediate period following the onset of an emergency. Until recently a potential solution was provided via MTPAS (mobile telephony priority access system) and individual organisation arrangements. However as of 2023 Dorset Police has decided not to continue

to support this scheme in Dorset. While some individual organisations still have this capability, MTPAS should not be relied upon in network overload instances. MTPAS will be replaced by ESN (Emergency Services Network) when this is introduced.

2.24 Cascade Alerting Service

The Submarine Duty Officer will initiate the cascade callout system by contacting HMNB Clyde Duty Naval Base Officer (DNBO), who will then contact Portland Port NERO (see callout cascade diagram). The diagram will normally be populated with the latest numbers and released as part of the "Visit Directory" before an NPW visit. The DNBO when alerted will also carry out a comprehensive alert of MoD HQ and collocated authorities in accordance with their emergency operating instructions.

Activation of collocated team is through the Clyde DNBO, while all other on-site cascade details (e.g. Devonport EMHQ recall the NEBUST) are included in the SSOEP. As these procedures are subject to local changes - this information is not included in the off-site plan.

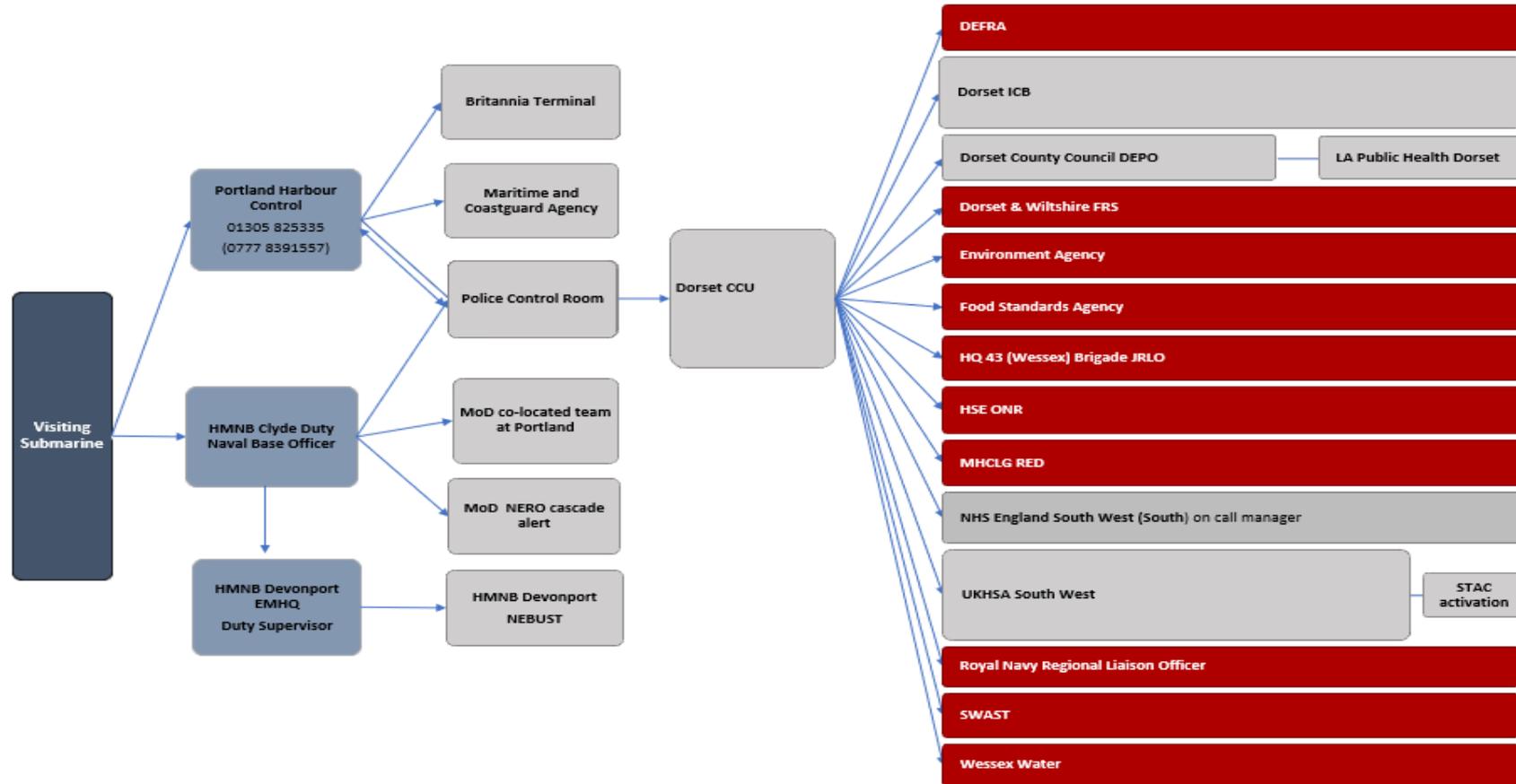
2.25 ResilienceDirect (RD)

ResilienceDirect (RD) is an extranet system introduced in 2014 by the Cabinet Office to facilitate multi-agency sharing of information in planning and response. It is a secure system and allows sharing of information up to OFFICIAL-SENSITIVE. Resilience Direct is recommended by the Cabinet Office but not mandated. In 2018 RD was adopted and used by the member organisations of the Dorset Local Resilience Forum (LRF) when responding to a multi-agency incident or exercise.

An individual response page is created for each event and is coordinated by the Dorset Civil Contingencies Unit (CCU). To access the incident response page, a user must have already been authorised access to their own organisation's site on RD and subsequently have requested access (electronically) to the Dorset LRF site.

On notification of a visit, the (Dorset) CCU will create a draft response page with relevant documents uploaded. In the event of an incident this response page will be published to notify partners and the relevant meeting/teleconference details provided. Situation reports will be uploaded on to RD. Should an incident occur, it is advisable that the NEBUST RREMS MoD operator is co-located / communicates with the CCU RD operator at the SCC Winfrith or any other established command centre, to facilitate communication between RD and RREMS, and provide coherent consolidated updates. In a virtual response, it is recommended that NEBUST have RD access to facilitate comms.

Portland Port Nuclear Emergency Response Organisation (NERO) – Callout cascade.



KEY:
 Grey fill = manual telephone notification
 (for DPAS, ensure grey fill contacts are also included within alert for email notification)
 Red fill = automated notification

SUMMARY OF RADIATION EMERGENCY ACTIONS

2.26 Actions required on receipt of an Off-Site Nuclear Emergency Alert

a) By Dorset Council.

1. The Tactical Command Centre and Strategic Command Centre will be activated and preparations for staffing by Local Authority Officers will be made. Virtual arrangements also apply.
2. A liaison officer and a SITS distribution coordinator (DTC) from Dorset Council (DC) will be dispatched to the Operational Command Centre (OCC) at Portland Port Britannia Terminal 1st floor.
3. Inform the DC rostered Gold and Silver Officer of the incident.
4. The position of the vessel, the wind direction and the 0.4 km Automatic Countermeasure Zone will be plotted on an Ordnance Survey Map by DC GIS.
5. Inform the local population that a Nuclear Emergency has been declared via DC Comms – in conjunction with WIC.
6. Stable Iodine tablets would have been pre-distributed to large institutions e.g., community hospitals, prisons, hotels, etc. For further implementation of the Stable Iodine Tablets distribution, see the SITs Distribution Plan at Part 5. Dorset Council will also support UKHSA with establishing an RMU (Radiation Monitoring Unit) if this is required, by identifying appropriate venues (DEPO has information about preidentified sites, but this list is not exhaustive).
7. In the event that the Director of Public Health or their deputy is unavailable to authorise the issue of SITs, pre-scripted letters of authorisation are included in this plan at Annex 5B. This letter has no expiry date.
8. Dorset Council are to set up and open an Information Help Line and advise media of the number. NHS 111 should be the main number for any concerns regarding SIT's or radiation health effects. This help line will be supported by NHS colleagues.

b) By MOD/ Portland Port

Detailed instructions for MoD personnel are included in “Site Specific Operators Emergency Plan - SSOEP” and for Port Authority Staff in the Portland Port Emergency Plan. The actions below summarise the key points of these documents.

1. Duty Marine Officer - Harbour Control will alert the Maritime & Coastguard Agency. Additionally, he/she will inform the crews of all ships berthed within Portland Port. Inside the ACMZ, PPL will inform personnel by loud hailer of the need to evacuate.
 2. All non-essential personnel within the submarine will be evacuated to the Exclusion Zone Reception Centre (EZRC). All personnel within the ACMZ will evacuate to the main muster car park outside the Britannia Terminal where SITs are available for issue if required. All non-essential personnel within the ACMZ, will evacuate via the Main Gate.
 3. The MoD representative will provide details of the potential areas of hazard for shelter advice and the distribution of Stable Iodine tablets.
 4. The Nuclear Emergency Monitoring Team (NEMT) will commence surveys in the immediate area and downwind of the NPW berth.
 5. **If OSNE is declared, then Initial Statement 1 should be issued without delay as an automatic action following activation of the off-site Plan – this needs to be clearly understood by the SCG and WIC;** the same for Supplementary Statement 2 on declaration of OSNE RHC. The MoD Incident Commander can provide information on wind direction to inform the detail of this statement.
- c) Dorset & Wiltshire Fire & Rescue Service (DWFRS). On receipt of an emergency warning, DWFRS will deploy resources to the RVP at Chesil Beach Car park, and a liaison officer to the Operational Command Centre at the Britannia Terminal (See Part 6.4). Chickerell Army Camp (DT3 4DF) has also been designated as Tactical Holding area for all Agencies should this be necessary. A Tactical and Strategic lead will also be deployed to the nominated SCC and TCC. Virtual arrangements also apply.
- d) South Western Ambulance Service NHS Foundation Trust. On receipt of an emergency warning, the Ambulance Service will deploy resources to the

RVP at Chesil Beach Car park, and a liaison Officer should report to the Operational Command Centre at the Britannia Terminal. South Western Ambulance Service NHS Trust would confirm the alert with UKHSA. Chickerell Army Camp (DT3 4DF) has also been designated as Tactical Holding area for all Agencies should this be necessary. A Tactical and Strategic lead will also be deployed to the nominated SCC and TCC. Virtual arrangements also apply.

- e) Dorset Police. On receipt of an emergency warning Dorset Police will inform the Dorset CCU, who are responsible for alerting the civil emergency organisations through the cascade alerting system (See Part 6.3). In addition the Strategic Co-ordination Centre (SCC) will be activated and preparations for staffing will be made to provide support to the Tactical Commanders as per the Visit Directory. Virtual arrangements are now the preferred SCG / TCG option. Should the CCU not be available, the backup will be provided by Dorset Police who will undertake the callout referring to the NERO cascade and utilising the Visit Directory. On receipt of an emergency warning, the Police will also deploy resources to the RVP at Chesil Beach Car park, and a liaison Officer to the Operational Command Centre (OCC) at the Britannia Terminal. Chickerell Army Camp (DT3 4DF) has also been designated as Tactical Holding area for all Agencies should this be necessary.

2.27 Access to Portland Port

In order to cater for any initial response by the emergency services access to Portland Docks area is outlined in part 6.2. Access to the Docks will be restricted by PPL Security personnel who will ensure that only persons carrying appropriate identity cards, emergency services, invited regulatory and advisory bodies or relief personnel, as authorised by the Incident Officer, PPL, are permitted to enter.

- a) All personnel entering the port after a reactor emergency will do so via the Main Gate Security. The security officer will call the Operations command centre (OCC) for further instructions before allowing them to proceed on site.
- b) All personnel making such entries will be issued with Stable Iodine tablets (SITs) at the point of entry as directed by the MOD Health Physics Adviser.
- c) The doses accrued by all personnel forming the emergency response organisation (including the emergency services and other non-Naval personnel) are to be maintained at a level which is "As

Low as Reasonably Practicable” (ALARP) and not exceeding any limits set by individual agencies.

2.28 Arrangements for accessing the Automatic Countermeasure Zone during an emergency.

In an emergency intervention personnel will require access to the ACMZ.

Emergency Services (except liaison officers who will report directly to PPL OCC) will initially deploy at the RVP (Chesil Beach car park) from where resources will be sent as required to the Forward Control Point (FCP) – the Britannia Terminal Car Park at PPL.

Access to the ACMZ during an incident will operate via the Portland Port Main Gate. All personnel wishing to access the ACMZ must report to OCC (operations command centre) in the Britannia Terminal where personnel will be briefed, and issued with essential personnel cards and Stable Iodine Tablets, if required. This includes Emergency services personnel (SWASFT, DWFRS, Police, MCGA). Each individual will be registered at this point so a record of personnel within the ACMZ is achieved.

The MOD HPA and/or EZRC OIC will maintain communications with MOD intervention teams. MOD teams will participate in the briefing of emergency services accessing the ACMZ, but comms when in-situ will be internal to each responding organisation.

A system for post-incident monitoring of personnel who have accessed the ACMZ during the incident will be put into place, with doctors examining the health of each individual that has been subject to emergency radiation exposure.

COMMUNITY EFFECTS

2.29 Distribution of Stable Iodine Tablets (See Part 5)

2.30 Medical Services to the Public

It is not envisaged that any special medical arrangements will be required for the local population, other than the distribution of Stable Iodine Tablets (SITs). Ambulances and coaches may, however, be required for movement of the aged and sick.

2.31 Water Supplies

Mains water supplies are most unlikely to be affected in any way. To reassure the public, however, sampling of main service and open reservoir water supplies will be arranged as required by Wessex Water. The acceptable levels for radioactivity in public water supplies are established by the Department of the Environment, Food and Rural Affairs (DEFRA). Any restriction even under the worst circumstances envisaged is most unlikely.

2.32 Food Supplies

In the UK the Public is protected from the hazards of fission products in food by the control and disposal of the contaminated material.

Intervention levels for food are promulgated by the European Commission and are very low, being based on doses that individuals would receive if they consumed such food for a year following the emergency. It is probable therefore that in the event of a reactor emergency that did release fission products, food and farm restrictions could extend to distances significantly greater than those to which emergency protective actions have been taken. The Food Standards Agency (FSA) is responsible for assessing the risk and imposing the necessary controls.

2.33 Evacuation, Reception and Accommodation – Rest Centres

In the highly unlikely event when evacuation becomes necessary Police will advise the responsible owners – landowner, private resident, head teacher, etc. to evacuate. All the Reception centre details are contained within the Dorset Rest and Reception Centres Plan, and the Portland Off-site Plan should be read in conjunction with this. Staffing and running details are also included in this particular plan. This Plan is available via Dorset Council's Emergency Planning Service.

2.34 Relocation

Relocation is the term used to describe the movement of the public from contaminated areas to avoid long-term radiation exposure or to allow decontamination to take place. It is therefore distinct from evacuation, which is an emergency protective action aimed at providing immediate public protection. There are no national criteria for the implementation of relocation. Any requirements for relocation would be determined by discussion among relevant local and national agencies with the aim of optimising the protection of the public. The protection provided by adequate emergency protective actions would allow the required time to

assess the need for relocation.

2.35 Restrictions on Land Access

It may be necessary in the interests of public safety to restrict access to contaminated areas. Arrangements will be made and implemented by the Police in conjunction with PPL Security personnel as appropriate, and the Local Authority. If needed, MCGA and Police boats will be responsible for policing the waterside area of the ACMZ.

2.36 Restrictions on Waterborne Access

The Incident Officer, PPL will assess the hazard to shipping in the Port and impose any restrictions, as may be necessary.

2.37 Training

All personnel involved in the response are trained in their respective roles within the plan by the employer. Training will be reviewed and updated on a regular basis in order for all personnel to be fully competent in their particular role. All staff responding to an incident involving a nuclear vessel berthed at Portland Port will receive refresher training as appropriate. New staff and staff whose roles have changed will also be given appropriate instruction and training. Training includes those emergency workers identified across all agencies and also those who assist in the management of a radiation emergency on a voluntary basis. The operator should ensure that information, instruction and training is kept up to date and reviewed regularly to ensure it remains current. The employer of any emergency worker who may be required to participate in the implementation of the off-site emergency plan must also ensure that each such emergency worker is provided with suitable and sufficient information, instruction and training.

2.38 Exercising

The plan is regularly reviewed by the OBIG and any changes are incorporated and reflected in exercising. Under the Regulations, the plan must be reviewed and exercised every three years but if considered necessary it may be exercised at shorter time intervals, or as part of a modular approach, by using other exercises and real life incidents, and their elements which are relevant/pertinent to this plan.

CLAIMS PROCEDURES AND REGISTRATION OF PERSONS AFFECTED BY OFF-SITE NUCLEAR EMERGENCY

2.39 Claims principles

Ministry of Defence will deal with claims under the principles for radiation injury and damage (including the sole and absolute liability of the operator) established by the Nuclear Installations Act 1965. The Ministry of Defence is prepared to consider any reasonable claim for compensation for any loss or damage, which can be shown to have been directly attributable to the incident concerned. Each claim will be considered on its merits, taking into account the full circumstances surrounding the incident. Any claim received will be dealt with as expeditiously as possible, but no fixed timescale can be given in view of the wide and varied nature of any possible claim.

2.40 Procedure for claims for Injury, Damage or Loss.

Any person or organisation suffering injury, damage or loss directly attributable to a Reactor Emergency will be entitled to claim compensation. The Department of Social Security (Supplementary Benefits Commission) is also empowered to make various loans to persons who find themselves in urgent financial need as a result of a major emergency.

2.41 Registration of Persons affected by an off-site nuclear emergency

If radioactivity affects areas beyond the submarine it will be necessary to arrange for people in those areas to be registered so that it is possible to prove their presence in the affected areas and for health monitoring.

LOCAL NUCLEAR EMERGENCY RESPONSE ORGANISATION (NERO)

Annex 2A: Functions of key local NERO personnel

1. **The Submarine Commanding Officer**: of the visiting submarine would initially declare a Reactor Safety Alert (RSA) and provide the initial alert for an Off-Site Nuclear Emergency (OSNE). They are responsible for initiating the local NERO response in the event of an incident.
2. **MoD Incident Commander**: is responsible for directing the emergency response within and around the dock area. The IC is supported by the PPL IO in matters relating to Port activities. Duties will include:
 - a) Establishing the scope of the emergency
 - b) Minimising the consequences of the emergency
 - c) Ensuring automatic protective actions are implemented
 - d) Ensuring casualties receive medical attention
 - e) Ensuring unauthorised persons do not enter the area
 - f) Ensuring that all personnel who are authorised to enter the area are subject to full radiation protection control
 - g) Ensuring that relief's are provided for essential personnel
 - h) Authorising individual emergency radiation exposure levels (in consultation with the Health Physics Advisers) to RN personnel. Other employers/organisations must separately authorise exposures to their own staff on the day.
 - i) Ensuring that appropriate instructions and advice are issued to other vessels within the area.
3. **The Tactical Command Centre**: As members of the emergency services and other agencies arrive they will concentrate on their specific tasks within their areas of responsibility. Virtual arrangements also apply. Each agency will liaise fully and continually with others employed in the response to the emergency to ensure an efficient and combined effort. The Police (who also chair the TCG) will act as the co-ordinator of this response, resources will be needed outside those immediately available and therefore a tactical level of command is introduced. Its prime tasks are to determine the priority in allocating resources, to plan and co-ordinate the overall response and to obtain other resources as required.
4. **The MoD Co-ordinating Authority (MCA)**: The MCA is in overall command of all local MoD post-emergency response and procedures. They are also the local representative of the Lead Government Department. A representative will be located at the Strategic Command Group and is responsible for liaising with the local civil authorities and providing them with all relevant information and advice. The MCA reports

to MoD HQ DNEO and is responsible for keeping them informed as the situation develops.

5. **The Strategic Command Centre**: The purpose of the strategic level of command will be to formulate the overall policy within which the response to the nuclear reactor emergency will be made. In addition, the strategic command will ensure that priorities for demands by the tactical command are met as well as setting out plans for a return to normality once the incident has been brought under control. The strategic command will also be aware of the wider role, which may encompass central government interests, handling requests for advice and assistance from individual services and agencies and formulating a media strategy. The Warning and Informing Cell (WIC) and the Scientific & Technical Advisory Cell (STAC) will support the Strategic Co-ordinating Group (SCG). The strategic response comes under the control of the Chief Constable or his representative and will be based at the designated Strategic Command Centre, or virtually. The MCA together with Technical and Radiological Protection Specialists will locate to the strategic level when it is established. Virtual arrangements also apply.
6. **Military Aid to the Civil Authorities (MACA)** MACA is the method by which Defence capabilities may be brought to bear in order to assist civil authorities in filling capability gaps when they are required to respond to incidents and emergencies within their areas of operations. It should be understood that the Armed Forces are funded for Defence purposes, and that the primary responsibility for dealing with civil emergencies lies with Civil Authorities.

Principles of MACA

The provision of MACA is guided by 3 criteria:

- a. Military Aid may be used after it has been determined that all other avenues of mutual aid, other agencies, and the private sector must otherwise be considered as insufficient or be unsuitable.
- b. Where the Civil Authority lacks the required level of capability and it is unreasonable to expect it to develop one.
- c. Where the Civil Authority has a capability, but the need to act is urgent and there is an immediate lack of available resources.

In the event of any type of nuclear reactor emergency within Portland Port, the on-site military response is the responsibility of the Navy Command and will be represented locally by HMNB Devonport. Under these specific

and unique circumstances any request for immediate lifesaving support (MACC Category A) and Defence assistance with longer term Consequence Management, would be co-ordinated in the first instance by the MCA, supported by Headquarters 43 (Wessex) Brigade through either the Joint Regional Liaison Officer (JRLO) or Royal Naval Regional Liaison Officer (RNRLO).

The MCA will be supported at SCG by Commander 43 (Wessex) Brigade or his representative, elements of his staff and the RNRLO where appropriate. Commander 43 (Wessex) Brigade's prime responsibility is to provide advice to the MCA and the chair of the SCG whilst at the same time co-ordinating any further military response in support of the incident and Consequence Management, with particular emphasis (but not exclusively) on off-site support.

Annex 2B: Aide Memoire for MoD Co-ordinating Authority (MCA)

1. Has initial Off-Site Nuclear Emergency alert been sent to MoD?
2. Has MoD (CDS Duty Officer/HQ DNEO) been alerted?
3. Is monitoring taking place outside the Port area?
4. Have Local Authorities/Emergency Services been alerted?
5. Have Local Authorities been advised of recommended protective actions to take?
6. Have the Nuclear Emergency Backup Support Team (NEBUST) been alerted and arrived?
7. Has the MCA spoken directly to the MoD Incident Commander?
8. Has a brief been obtained from Incident Officer Portland Port?
9. Has the MCA enough knowledge of the emergency to brief MoD, L.A./Emergency Services/Media?
10. Is the weather situation known and correctly shown on state boards?
11. Have monitoring readings been received and passed to all concerned ?
12. Has an initial press statement been made by Police? Do MCA and MoD hold a copy?
13. Are arrangements being made to receive the press?
14. Are arrangements being made to deal with telephone enquiries? Do they know what to say?
15. Is the narrative on RREMS being kept?/Are the state boards up to date?
16. Is the MCA cell fully manned? Do the arrangements allow for a prolonged period of operation?
17. Is the MCA cell fully equipped? Are there enough phones/maps/ state boards etc?
18. Has the PACRAM procedure been asked for (via Radiation Protection Cell)?
19. Has the MCA the latest casualty information report?
20. Is a SITREP/Follow up signal being prepared for MoD?
21. Are preparations being made to receive support forces
22. Are arrangements being made for VIP visits?

ADDITIONAL ACTIONS FOR “OSNE – RADIATION HAZARD CONFIRMED”

1. Has the change in classification been cascaded through all response organisations?
2. Do all concerned have a grasp of the radiological consequences of the emergency – does the protective actions strategy need revising?
3. Have Local Authorities been advised of recommended protective actions to take?
4. Is a Notice to Airmen (NOTAM) required for Portland area?
5. Are the Incident Officer Portland Port requests for external support being met?
6. Is an update for the Press statement being prepared?
7. Is a SITREP/Follow up signal being prepared for MoD?

ADDITIONAL ACTIONS FOR “OSNE – RELEASE OF RADIOACTIVE MATERIALS CONFIRMED” EMERGENCY

1. Has the change in classification been cascaded through all response organisations?
2. Have monitoring readings been received and passed to all concerned
3. Do all concerned have a grasp of the radiological consequences of the emergency – does the protective actions strategy need revising?
4. Is radioactive contamination likely to spread beyond the Port area?

ADDITIONAL ACTIONS FOR “OSNE –RECOVERY”

See actions in Annexes 7B, 7C, 7D section 7 – transition to recovery (TTR).

Annex 2C: Aide Memoire for Police Tactical Commander

DUTIES AND RESPONSIBILITIES

Attend and chair the Tactical Co-ordinating Group (TCG) in order to:

- Maintain public confidence;
- Preserve and enhance the organisational reputation of all responders;
- Aid communities to recover from an emergency.

ACTIONS as per MOMI Silver Commander Action Card and Dorset LRF Tactical Commanders Response guide;

1. Establish Tactical & operational command & control structure for the incident;
2. Appoint Bronze Commanders for designated tasks as required;
3. If appointed, liaise with SIO/SIM concerning investigation, evidence gathering & identification issues;
4. Appoint relevant roles to manage the functions within Silver Control;
5. Determine the composition of the Tactical Co-ordinating Group (TCG), agree attendance, formulate agenda & chair meetings;
6. Consult and liaise with the Silver commanders from the other emergency services & partner agencies;
7. Develop a tactical plan (i.e. how resources are to be used) in order to achieve the strategic intentions of the Gold Commander - Review & amend as necessary;
8. Assess resource requirements & deploy personnel according to needs and priorities;
9. Request/Advise Gold Commander of additional resources & logistical arrangements required to deliver the tactical plan;
10. Communicate any changes to the tactical plan both to Gold & Bronze Commanders, ensuring all tiers of command are aware of continuing developments;
11. Ensure all decisions are documented in order to provide a clear audit trail;
12. Ensure all personnel are adequately briefed, consider authorising an Op Order;
13. Establish links with the exiting W&I cell/ Media;
14. Ensure that community issues & other matters, such as business continuity are adequately addressed;
15. To be aware of health and safety issues & to take appropriate action;
16. Consider staff welfare.

ADDITIONAL CONSIDERATIONS

1. Establish current Category of Incident;
2. Ascertain current Wind Direction – Met Office;
3. Establish what radiation monitoring is in place;
4. Establish health and safety situation/review risk assessments;
5. Consider sending nominated liaison officer (OCPS) to Portland Port;
6. Gather technical information from MoD and other sources;
7. Assess level of public information;
8. Plot Plume/Cordons/RVP/Marshalling Area/FCP;
9. Establish location of PPE/CBRN trained staff;
10. Is public information being kept up to date;
11. Has a plume prediction been provided;
12. Identify the need to establish an early recovery co-ordinating group (RCG), and look into transition to recovery as soon as reasonably possible.

Annex 2D: Aide Memoire for Police Strategic Commander

DUTIES AND RESPONSIBILITIES

- Attend, coordinate and chair the Strategic Co-ordinating Group (SCG). Virtual arrangements also apply.
- Take overall responsibility for the multi-agency management of the emergency;
- Establish the policy & strategic framework within which the Tactical Co-ordinating Group (TCG) will work;
- At the earliest opportunity, determine & confirm a strategy, & record a strategy statement;
- Establish a policy framework for the overall management of the event or situation;
- Determine & share clear strategic objectives & review them regularly;
- Prioritise the requests from the TCG & allocate personnel & resources accordingly;
- Formulate & implement media, & public communication strategies, implementing the LRFs Warning & Informing Plan;
- Direct planning beyond the immediate response to facilitate the transition to recovery processes

As Chair, ensure that the following, forms part of the working strategy;

- Maintain public confidence;
- Preserve and enhance the organisational reputation of all responders;
- Aid communities to recover from an emergency.

ACTIONS

As per Police MOMI Strategic Commander Action Card and Dorset LRF Strategic Leaders Response guide.

1. Assume overall command of the incident;
2. Establish & communicate police command structure, appointing relevant Tactical & Specialist roles;
3. Chair & determine the composition of the SCG ensuring relevant & appropriate agencies are informed;
4. Set, review & update the strategy to co-ordinate the major incident, recording strategic aims, objectives & decisions taken;
5. Communicate strategy to Tactical Commanders;
6. Ratify & review progress of Tactical Commanders tactical plans;
7. Ensure adequate audit trails are in place for the recording of strategy, objectives & decisions;
8. Assess resource implications & consider mobilisation issues;
9. Ensure appropriate financial controls are in place;
10. Liaise with local, regional & national organisations, including voluntary sectors, lead government departments and the military;
11. Approve warning & informing messages, including a media strategy, paying particular attention to community reassurance;
12. Ensure that community issues are adequately addressed;
13. Consider business continuity management issues;
14. Consider health & safety issues including the formation of a Scientific & Technical Advice Cell (STAC);

15. Consider staff welfare issues;

16. In conjunction with the local authority and MoD incident commander, consider establishing a Recovery Working Group at the earliest opportunity (see section 7).

**ADDITIONAL CONSIDERATIONS SPECIFIC TO A CBRN INCIDENT AT
PORTLAND PORT**

1. Ensure subject matter experts are present at the SCG.

Annex 2E: Portland Port – Nuclear Emergency Instructions

General

(This is operational level response and the latest detail will always be held in the PPOSP and the Portland Port Emergency Plan.)

1. Prior to a visit of a nuclear powered warship to Portland it is the responsibility of the General Manager (Landside) to ensure all personnel within the Port (employees, contractors and lodging companies) are aware of the dates of the visit and the Evacuation Plan for the Port.
2. If the evacuation order is received, all personnel are to complete all tasks appropriate to the end of the working day, e.g. Security, Safety of Buildings etc, and all personnel are to leave the ACMZ. Stable Iodine Tablets (SITs) (2 in number) are available for issue if required, together with an explanatory leaflet.
3. When a nuclear reactor emergency report is received, priority will be given to the evacuation of the area within a 0.4 (ACMZ) km radius of the nuclear powered warship – NPW. PPL Security will automatically alert personnel within the ACMZ by means of a van using a loud hailer. Barriers will be located to control access to the ACMZ. Alternatively, the use of a portable siren stationed adjacent to the submarine when at berth may also be used to allow clear and timely warning to those in the vicinity of the vessel.
4. Britannia Terminal – This building may hold up to PPL 500 personnel who, initially, will take shelter within the centre, and as directed by the Incident Commander, be issued with and instructed to take SITs if appropriate. Once the Incident Officer (PPL) has assurance that the ACMZ has been evacuated of all non-essential personnel he will instruct PPL Security Personnel to undertake a controlled evacuation of the Britannia Terminal. The evacuated personnel, if needed, will be sent to a local rest centre as suggested by the Local Authority at the time of the incident. (See the Portland Port Emergency Plan for latest specific location for pre-evacuation assembly of PPL personnel).

Visiting Ships

5. In the event of a Nuclear Reactor emergency, visiting ships will be alerted by Harbour Control on VHF R/T Communication Channel 74, or by PPL security if alongside.
6. The following actions are to be taken by the Crews of Ships berthed in Portland Port: As far as practicable shut down ventilation, hatches, scuttles and openings etc. to minimise the possible ingress of radioactive material.

PART 3 : INFORMATION TO THE MEDIA AND PUBLIC

PRIOR INFORMATION TO THE PUBLIC

3.1 Prior information

Prior information will be given to the public within DEPZ. Once the information has been disseminated it will be reviewed and reissued during the period not exceeding three years.

PROVISION OF INFORMATION TO THE MEDIA

3.2 Communication – Media and Public Information

It is possible that news of a reactor emergency may become public before the authorities make any official announcement. Interested parties need to be aware that there is the potential for a delay between the incident entering the public domain and their ability to respond. The media and public may contact the authorities before any operational response cells are running.

From a communications and information context, the priority should be to invoke the LRF Warning and Informing Capability Strategy and establish a Warning and Informing Cell (WIC) at the Strategic Command Centre immediately. This would draw in the local authorities, the emergency services and the MOD and, at a later stage, other government agencies.

3.3 How the Cell Works

The Warning and Informing Cell (WIC) provides the interface with the media and provides public information. Usually chaired by the Local Authority, it is the point of contact for all information for all agencies and will be working alongside the Strategic Co-ordinating Group (SCG). Virtual arrangements also apply. WIC should also work alongside and inform the DC help line service that will be set up to deal with calls from the public at the time of the emergency.

The WIC will be used by all agencies for the release of advice and information to both the public and the media regarding the incident. Specialist briefings by agencies on their own particular actions will be co-ordinated through the WIC. It is essential that agencies inform the WIC of the line they are taking before talking to the media or the public to avoid conflicting information being given out.

3.4 Provision of Public Information

Enquiries from the public will be dealt with by a help line team run by DC (comms or customer services) in conjunction with the local health service and

WIC. The contact number for this help line will be made public/broadcast at the time of the emergency and calls from the public to Portland Port should be re-routed to this number. All casualty enquiries and information will be handled by Dorset Police.

3.5 Dorset Police Casualty Bureau (DPCB)

After a reactor emergency the Dorset Police Casualty Bureau will be activated and its telephone number(s) broadcast to the public.

All enquiries from the public concerning casualties will be directed to the Casualty Bureau.

All information on casualties and missing persons from within Portland Port will be passed to DPCB for collation.

3.6 Notification of Next of Kin

No information identifying casualties will be released until the next of kin have been informed.

The informing of next of kin will be carried out by military welfare organisations for those personnel in the armed forces. The notification of next of kin will be conducted in consultation with Dorset Police Casualty Bureau, based at Poole Police Station. Dorset Police will inform then next of kin of the general public employed in Portland Port.

3.7 Provision of Information to the Public

There is a requirement under REPIR 2019 for Local Authorities to provide information to the public in the event of a radiation emergency. Pre-scripted initial press releases for use by the Police and the WIC during the stages of the emergency are contained in paragraphs 3.09 to 3.10.

3.8 Pre-prepared Initial Public Safety / Media Statements

Notes About Usage

Statements have been pre-authorized by all relevant parties and must be issued, without delay, on declaration of OSNE.

The Police Press Officer will release the following public information statement following the initial contact from Portland Port.

This must be authenticated to ensure its credibility.

3.9 Off-Site Nuclear Emergency at Portland Port

(A hazardous condition which requires the implementation of urgent protective actions to protect the public).

Pre-Prepared Media Statement - Initial Statement 1:

OSNE declaration will arrive from the submarine CO to the Clyde DNBO. DNBO will inform Dorset Police by telephone plus email a pro-forma. The email pro-forma includes a request for Dorset Police to activate the jointly agreed public information media statement. The advice to the Dorset Police (Tactical commander) will be to issue the following press statement:

'An incident occurred at (time, day and date) on board the nuclear-powered vessel HMS..... which is alongside the Deep Water Berth, Portland Port. Emergency services have been alerted and are responding. As precautionary measure we are delivering preventative tablets known as Stable Iodine tablets (SITs) to members of the public within 1.5 km of the site in the following areas (list areas here). DO NOT TAKE THESE TABLETS UNTIL TOLD TO DO SO.

As a further precautionary measure, in the same areas, people are advised to take shelter, the instructions for which are:

- *Go indoors and stay there but also prepare to be evacuated.*
- *Close all doors, windows and ventilators.*
- *Switch off any ventilation or air conditioning systems which draw air from outside the building.*
- *Do not try to collect children from school, the school authorities will look after them.*
- *Food and produce which has been stored uncovered and outside, and water from private supplies should not be consumed until advised otherwise.*
- *All businesses in the vicinity of Portland Port are advised to send their employees home, while all visitors and customers should leave the area.*

Keep tuned to one of the following TV or Radio channels:

- *TV: BBC1, BBC2, Meridian TV, West Country TV*
- *Radio: BBC Radio Solent 96.1 FM & 103.8 FM Greatest Hits Radio Dorset 96 & 97.2 FM*
- *X (formerly)Twitter: @DorsetCouncilUK*
- *Facebook: @DorsetCouncilUK*

Updates will be given when further information becomes available.'

3.10 Off-Site Nuclear Emergency – Radiation Hazard Confirmed

Pre-Prepared Media Statement - Supplementary Statement 2:

Further press statements will be developed as part of the press strategy within the media cell at the SCC, However, should the situation worsen, to that of an OSNE (Radiation Hazard Confirmed), then the following statement is to be released by Dorset Constabulary:

'Further to the press release of (time), and on the advice of the Director of Public Health, members of the public within 1.5 km of the Deep-Water Berth, Portland Port, who have previously been issued with Stable Iodine Tablets (SITs) should now take them, in accordance with the accompanying written instructions. Members of the public advised to do so should continue to remain indoors.

PART 4 : RADIATION PROTECTION AND THE SCIENTIFIC AND TECHNICAL ADVICE CELL (STAC)

RADIATION PROTECTION AND MONITORING ORGANISATION

4.1 Monitoring Information

The immediate radiation protection advice and monitoring support is based on resources from within Dorset. Additional resources from the Ministry of Defence and other organisations and companies will become available during the hours following the emergencies.

4.2 Health Physics Advisers

A Health Physics Adviser is provided to the MOD Incident Commander at PPL. The MCA and STAC support are also provided by MOD. MOD HPAs are advising the IC and MCA on the MOD response at Operational level.

4.3 Monitoring at Operational Level (Bronze)

The local radiation monitoring arrangements are described at section 2.18.

4.4 Health Physics Adviser to the MoD Incident Commander

The main priorities are included in the SSOEP for Operational level RP/monitoring organisation.

4.5 STAC and the Strategic Level

a) The Scientific & Technical Advice Cell (STAC)

- Provide a single point of scientific advice to the SCG on the scientific, technical, environmental and public health consequences of the incident via a nominated STAC representative
- Monitor and co-ordinate the responding science and technical community to deliver SCG high-level objectives
- Agree any divergence from agreed arrangements for providing science and technical input
- Pool available information and arrive, as far as possible, at a common view on the scientific and technical merits of different courses of action

- Agree with the SCG Chair on the advice to be given to the public on the health aspects of the incident and advice on actions to protect the public, including the consequences of any evacuation or containment policies.
- STAC will **not** advise on occupational health requirements, for example Personal Protective Equipment (PPE).
- Any individual organisations requesting information directly from STAC should be advised to route their enquiry to their representative at the SCG/TCG.
- Advice and guidance as part of the SCG and STAC arrangements on the need to initiate personal monitoring, and the establishment of the RMU.

b) Core Members of the Scientific & Technical Advice Cell (STAC)

- UKHSA
- Local Authority Director of Public Health (County/Unitary)
- Local Authority Environmental Health (District/Unitary)
- Fire & Rescue Service
- Environment Agency
- Site Operator / Owner
- HSE
- FSA
- DEFRA
- Water Company
- Met Office
- APHA
- AWE - CBRN Incidents
- ONR - UK Nuclear installations
- NHSE SW
- Health Physics Adviser for the MoD Co-ordinating Authority

4.6 Duties of the MoD Health Physics Adviser to the STAC

- MOD provides two HPAs to Strategic. One as part of the NEBUST in support of the MCA, the other directly to the STAC.
- Advising on the magnitude and the extent of the hazards to the general public and any protective actions necessary.
- Liaison with medical staff concerning personnel contamination levels

and radiation doses and provision of radiation protection support to the treatment of casualties off-site.

4.7 Roles of Environmental Services and Consumer Protection

DEFRA might seek assistance from specifically designated local authority officials to act as investigation officers to assist DEFRA with the collection of milk samples from farms in the affected area. DEFRA will advise on the day their sampling requirements.

4.8 Roles of Food Standard Agency

- To advise on risks to health from the food supply, short and long term.
- To advise on precautions and bans on fresh food movement, harvesting and dispersal and sale.
- To participate in press conferences and briefings as required.
- To liaise with and advise other health professionals and national experts.

4.9 Roles of UKHSA (incl. RCCE)

UKHSA South West Region

- Provide specialist services (inc. Health Protection, Field Services, Radiation Chemical & Environment, Communications & Emergency Preparedness Resilience & Response) in provision of public health advice and support relating to the health aspects of the incident (including any necessary public protection measures), and act as a gateway to national sources of specialist health protection advice,
- Activate and coordinate the provision of a Scientific and Technical Advice Cell (STAC), during relevant responses, including arranging a Chair, Deputy, Manager, Loggist and administrative support. If required this includes ensuring the transition of STAC support from the SCG to the recovery working group during the recovery phase,
- Support the development of public health messages during the response and recovery,
- Provide advice and support regarding monitoring impacts on public health and longer-term surveillance,
- Deploy suitable representatives to SCG, TCG, Communications and Recovery Group as required,

- Provide suitable representatives to an Air Quality Cell if convened and support with analysing any monitoring data.

UKHSA RCCE

- Maintains constantly available radiation, extreme weather events and chemical on-call systems to receive alerts to possible incidents.
- Is responsible for the provision of expert advice and information relating to the public radiological protection aspects of an emergency.
- Will deployment senior staff to key locations, as required.
- Will set up an Emergency Operations Centre at UKHSA RCCE, Chilton, Oxfordshire. The key functions of this centre will be to gather relevant information (particularly radiation monitoring information), to assess this information and to provide expert advice based on this information.
- Will deploy and co-ordinate radiation-monitoring teams capable of measuring environmental contamination and measurements of radioactivity on or in people. Specialist support will be provided to Radiation Monitoring Units (RMUs) as appropriate and where resources allow.
- Undertake the role of national radiation monitoring co-ordination - UKHSA RCCE will co-ordinate the radiation monitoring resources made available to it in the event of an emergency and prepare a monitoring strategy
- Provide expert advice on radiological issues for the recovery phase.
- Will Liaise effectively with stakeholders in the response at a local, regional and national level including, but not limited to, the Food Standards Agency (FSA), the Environment Agency (EA), Local Authority and water companies.

4.10 Roles of Wessex Water

- To advise on the quality of drinking water.
- To advise on precautions to be taken with the drinking water.
- To advise on the contingency plans that Wessex Water have to provide safe quality drinking water.
- To advise on contingency plans that Wessex Water has to assist the region.
- To participate in press conference/briefings as required.

- To liaise/advise with other health professionals/national expertise.

4.11 Roles of the Environment Agency

- Provide advice on the impact of the incident on:
 - water in the environment;
 - radioactive and conventional waste;
 - the natural and built environment;
- Provide advice to multi-agency partners on the protective and remedial measures which can be taken to reduce the impact on the environment
- Provide Environment Agency representatives with specialist knowledge of radioactive substances at relevant multi-agency centres;
- Activate internal incident management structures to support the response;
- Advise DEFRA on technical and regulatory aspects of the response and recovery;
- Provide information to the public and the media, in consultation with the Lead Government Department and the SCG associated with the affected site;
- Manage flows of regulated waters if appropriate, to minimise impact;
- Check for breach of site operator's environmental permit, where relevant;
- Pursue relevant regulatory investigations in accordance with the Environment Agency's statutory duties;
- EA will advise on the management, segregation, and disposal of wastes, including wastes contaminated with radioactivity;
- In its response the EA will be aware of the CBRN Framework and ensure they have the latest pertinent documentation.

During the Recovery Phase, the Environment Agency will:

- Advise on the management and disposal of wastes, including wastes contaminated with radioactivity;
- Advise on the impact of radioactive contamination in the environment and appropriate remedial and protective measures;
- Support the work of the Recovery Co-ordinating Group to assist the

community in returning to normality;

- Work with partner organisations to identify feasible remediation options and support the development of a Recovery Strategy;
- Implement Regulatory Position Statement 'the management of radioactive wastes following a major incident' to facilitate the efficient management and disposal of radioactive wastes;
- Consider whether the Radioactive Contaminated Land regime will apply in the recovery phase and whether we have a role as the Enforcing Authority.
- N.B. Emergency Workers. The Environment Agency default position is we DO NOT send our staff to a DEPZ or site boundary during emergency response and therefore would not be classed as Emergency Workers.

PART 5 : STABLE IODINE TABLET DISTRIBUTION PLAN

5.1 Introduction

The issue of Stable Iodine Tablets (SITs) is considered an important protective action. Arrangements have been agreed in advance to ensure that in the unlikely event of an emergency occurring to the nuclear reactor aboard a visiting nuclear-powered warship (NPW) to Portland, actions will be undertaken to ensure that effective distribution is carried out at an early stage. This section outlines the arrangements for the distribution of SITs to residents situated downwind of the emergency within a 30° sector, to a distance of 1.5km+ as per the Detailed Emergency Planning Zone (DEPZ). The detailed walk route information for the SIT's distribution process is available separately to those organisations involved in the distribution itself (MoD, MCGA, DC) and does not form part of this plan.

5.2 Stable Iodine Tablet Distribution Policy

5.2.1 General

The decision to issue SITs and for identifying the relevant sectors will be taken at Tactical Command in liaison with the Director of Public Health and then cascaded to Operational Command to implement. The policy for issuing and taking of Stable Iodine tablets is set out below summarising when individuals in each zone will be issued with and take this medication.

a. **Exclusion Zone** (The Nuclear-powered warship)

Exclusion Zone and ACMZ actions are SSOEP (on site) responsibilities and should not be pursued by off-site response. However, for information only, at declaration of an Off-Site Nuclear Emergency (OSNE) with NO radiological hazard detected all non-essential personnel will be evacuated from the NPW to the Exclusion Zone Reception Centre (EZRC) and issued with SITs, to be taken when instructed. On declaration of OSNE with a radiological hazard detected all persons on the submarine will be issued with SITs and will take them immediately.

b. **Automatic Countermeasure Zone** (ACMZ) – 0.5 km radius

Exclusion Zone and ACMZ actions are SSOEP (on site) responsibilities and should not be pursued by off-site response. However, for information only, at OSNE with NO radiological hazard detected, PPL staff will follow their emergency plan and go to the Britannia terminal for off-site dispersal (for latest information see the Portland Port Emergency Plan). ACMZ evacuees at OSNE will be issued SITs if remaining on the PPL footprint, to be taken when instructed.

c. **Detailed Emergency Planning Zone (DEPZ) – 1.5 km + radius**

At OSNE, transient public ie shoppers, workers or visitors downwind of the nuclear emergency will be evacuated away from the area to a safe location by the Police, using loudhailers, from where they will be permitted to disperse. A risk assessment will be carried by the Police Tactical Commander to ensure that wherever possible police officers are not placed in a situation where they will receive additional levels of radiation. As such, this evacuation action is only applicable up until OSNE-RHC i.e. in a no-hazard environment. Above 5 msv emergency workers would be governed by SCG/STAC advice. (Police section 6.3).

Residents within the affected area will be advised to go to shelter, stay in and listen to the radio for further instructions, while all businesses will be advised to close and send their employees home. SITs will be distributed by a Naval and Maritime & Coastguard SITs distribution team (SITs DT); the public will only be advised to take the tablets if the situation escalates to an Off-Site Nuclear Emergency – Radiation Hazard Confirmed.

Those within pre-distribution sites will be allocated this medication by their site co-ordinators. See list of pre-distributed sites at Annex 5A.

If the incident progresses to an Off-Site Nuclear Emergency – Radiation Hazard Confirmed, the public will be advised to take the SITs immediately. On completion of the SITs distribution in the downwind sector(s) an assessment will be made as to whether there is a need to commence distribution to additional sectors in the DEPZ.

5.2.2 Stable Iodine Tablet Distribution Policy - Schools

Schools within the DEPZ are identified as pre-distribution sites (Annex 5A). These have been pre-distributed SIT's and each site has specific nominated contacts responsible for the safe storage, and distribution within the school if required by a Portland Port NPW radiation emergency.

DC Emergency Planning Service will alert schools to a radiation emergency and parents/guardians will be advised not to collect their children from school at any OSNE classification. The children will shelter at their schools during the OSNE. Teachers will be advised regarding the issue of Stable Iodine tablets and the Director of Public Health will give authorisation for issue of tablets to pupils and staff.

5.2.3 Notification

The authority to issue SITs to the public in the event of a radiation emergency rests with the Director of Public Health and the NHS Dorset ICB.

In the event of an emergency, NERO callout cascade will notify the Consultant

Physician in Health Protection at UKHSA South West, the NHS England – South West On Call Manager, and the Director of Public Health.

5.2.4 Deployment and Response

The Dorset Public Health Consultant from the Local Authority will attend the Tactical Command Centre and may request representatives of the NHS Dorset ICB to attend the Tactical Command Centre. Virtual arrangements also apply.

The Director of Public Health (or their Deputy) will authorise the distribution and taking of Stable Iodine tablets. A signed DPH pre-authorisation letter if unable to gain contact with DPH is included in the Plan (see Annex 5B).

Information regarding the issue and taking of Stable Iodine tablets will be broadcast on local radio, TV and social media as soon as notified.

5.3 Roles and Responsibilities in delivering SITs

The Royal Navy and Maritime Coastguard Agency will distribute SITs on behalf of The Director of Public Health.

The decision to take the tablets, and instruction to take the tablets, will be authorised by the Director of Public Health.

5.3.1 SITs Distribution Team Leader (DTL)

A SITs DTL will be nominated by the Royal Navy (RN) from the NPW crew on the arrival of a Nuclear-powered warship (NPW) to Portland, and will be responsible to the MOD Health Physics Adviser to the Incident Commander for:

- a. Co-ordination and administration of the SITs Distribution Team (DT) prior to and throughout the duration of a visit;
- b. Co-ordination of transport and communications throughout the duration of the visit.

5.3.2 SITs Distribution Team (DT)

The SITs Distribution Team will be formed of up to 11 RN personnel from the visiting NPW and up to 11 MCGA personnel. In the event of an OSNE the SITs DT will deliver Stable Iodine tablets door to door within the designated area, with the exception of specific locations which have been identified as pre-allocated sites. Detailed arrangements to ensure that this function is carried out are contained in paras 5.10 and 5.11.

5.3.3 SITs Distribution Team Co-ordinator (DTC)

The SITs DTC will be located at the Operational Command Centre (OCC), and his/her role is to communicate to the Tactical Incident Commander the progress / timing of distribution and any issues encountered (including shortage of SITs, missing addresses, vulnerable people, etc.), by staying in regular contact with the MoD DTL and the MOD HP at Operational level – Portland Port. The SIT's DTC will be nominated by Dorset Council.

The role of the SITs distribution team co-ordinator will be to:

- a. Co-ordinate the overall distribution throughout the pre-planned protective action zones (individual walk routes) as decided at the time and identify any issues with the distribution and address these as necessary;
- b. Provide a central record of all SITs deliveries and progress of delivery; as part of this process inform the Tactical Commander and CCU RD manager of progress, so that this information can be passed onto the TCG and uploaded on RD;
- c. Collate queries from addresses where distribution of SITs has been unsuccessful and co-ordinate the delivery to these addresses via each SITs Co-ordination Centre and MoD DTL (see para 5.9).

5.4 Pre-deployment briefing

All personnel involved in SITs distribution will receive briefings on arrival of the NPW to the berth from the co-located Health Physics Adviser to ensure they are fully competent to perform their role and understand the potential radiological and non-radiological hazards.

5.5 Pre-visit arrangements

HMNB(C) Emergency Planning Dept is to stand up the Naval and Maritime & Coastguard Agency SITs DT and ensure the following:

- a) the SITs distribution packs have been placed in the Britannia Terminal SIT's distribution room, and that the contents are checked in accordance with Annexes 5E and 5F;
- b) Transport (1 x 20 Seat Mini-bus provided by MoD) will be located at the EZRC.
- c) That provision of airwave (or similar) for the entire team is available and tested / functional. (reliance on personal mobile phones should not be

considered or be part of the SITs process as demonstrated by past exercises).

5.6 Arrangements during the visit

The SITs DT will be located in the Portland area and will be at the appropriate NERO state of readiness throughout the visit.

The SITs DT will be required throughout the visit of the NPW and will be stood down on the authority of the Health Physics Adviser.

The SITs DT team are given a radiological protection brief from the co-located Health Physics Adviser.

RN personnel in DT won't get route familiarisation, and training is by way of pre-deployment briefs. Route experience is brought by the local MCGA members of DT only.

The re-call arrangements and communications are checked prior to the team being stood down to the appropriate NERO readiness state.

The Health Physics Adviser is given a list of all team members and their contact details.

5.7 Pre-distribution of SITs

DC have identified within the Plan a number of residential properties and vulnerable groups within the DEPZ, and beyond in some cases. These properties/groups will hold supplies of SITs and have been identified on all distribution route guides for information only.

5.8 SITs Distribution route documentation

In recognition of the geographic location of the berth in relationship to the population located within the DEPZ, the SITs distribution plan has been arranged into 24 zones. These zones have been broken down into 11 manageable distribution routes (see Annex 5C).

The distribution route documentation has been developed to ensure a successful distribution of SITs in a reasonable time scale. They include the location and identification of all properties to be delivered to and those which have been pre-distributed. Examples of these documents are at Annexes 5C & 5D. Full SIT's distribution documentation is not provided with this plan, but available to those involved in the SITs distribution process only. DC are to allow for frequent review and to manage the detailed SITs distribution route documentation separately as a live document.

5.9 SITS Co-ordinating Centres (SICC)

SITs Co-ordinating Centres (SICC) to cover the SITs distribution routes have been identified and are located in:

- a) Portland Port - Britannia Terminal (main centre)
- b) Easton Health Centre - Portland (backup only)

The SICC has 3 functions:

- a) A co-ordination centre for the SITs DTL whilst the SITs DTs are on the ground;
- b) A shelter station for the SIT DTs on release of radioactive material being confirmed;
- c) An emergency rendezvous point for the SITs DTs.

The SITs DTL will take with him / her an additional 1000 SITs and explanatory medication leaflets from the SICC. This will enable the SITs DTL to deliver to properties missed by the SITs DT.

5.10 Actions on declaration of an off-site nuclear emergency

Alerting and Rendezvous Point – On receipt of a recall message at RSA the Health Physics Adviser will inform the SITs DTL who will alert members of the SITs DT who will immediately report to the Britannia Terminal for a briefing by the SITs DTL.

Distribution Route Allocation – The Health Physics Adviser to the Incident Commander (IC) is to confirm with the SITs DTL the initial distribution route area at RSA.

The SITs DTL is to allocate at least 2 persons to each distribution route at RSA, recording their names and call signs/telephone numbers on the Team Leader Check Off List and then issuing the correct distribution route pack.

The SITs team members are to pick up a personal safety pack at RSA also. All RSA actions are undertaken to ensure prompt deployment at OSNE declaration.

Once the first team is ready (including team leader), the SITs DTL will give a final safety brief which is to include the following:

- a) Ensure communication between the Health Physics Adviser (HPA) and the SITs Distribution Team Co-ordinator (DTC) located at OCC. Airwave/Comms between the SITs Distribution Leader and SITs Team Members and between the SITs Distribution Team Leader and DTC

should be tested separately. This is to free up comms between DTs and provide single point of contact between Operational and Tactical levels.

- b) Entering the call signs/telephone numbers on distribution route guides;
- c) Instructing team members to take their personal SITs.

SITs distribution is an automatic OSNE protective action within the DEPZ and should be treated as such (Annex 5B provides pre-authorisation in the event of the DPH & deputy absence).

Once closed up, the SITs DTC will confirm with the Health Physics Adviser the deployment and details of the SITs DT and assume command and control of the teams on the ground (see 5.3.3).

5.11 SITs Distribution Team

The SITs DTL is responsible for ensuring that all SITs DTs are dropped off at their designated drop-off points 'D'. When the last team has been dropped off, the SITs DTL is to inform the Health Physics Adviser to the MoD Incident Commander and the DTC.

Once on the ground the SITs DT are to deliver their SITs as quickly as possible to the properties on their allocated distribution route.

SITs (strip of 10) and an explanatory leaflet (see Annex 5G) are to be delivered through the letterbox of all properties identified on the allocated distribution route matrix and recorded.

An audible alarm (door bell/knocker) is to be used at each property to alert the household; however, it is not the distribution teams task to explain what is happening.

If confronted the teams are to advise people to stay in doors switch on their television and/or radio and listen to the advice being broadcast. If they are being overwhelmed then they are to immediately contact the SITs DTL who will contact the DTC who will alert the police.

All questions on Stable Iodine Tablet health issues are to be directed to the NHS 111 helpline or the local help line – number to be made public at the time of an emergency.

SITs DTs that find properties not identified on their distribution route matrix, are to deliver SITs to them and record the details on the sheet provided (check if not pre-distributed). Each distribution route pack has been allocated 10% above its requirement of SITs for this purpose.

If there is evidence of unattended children or those with disabilities who are unable to fend for themselves, the location is to be reported to the SITs DTL who will notify the SITs DTC who will alert the police.

On completion of the distribution route each SITs DT are to contact the SITs DTL and confirm completion prior to proceeding to their pre-arranged rendezvous. DTL confirms completion of each route, and escalates any specific issues with DTC.

5.12 Actions on declaration of an off-site nuclear emergency – release of radioactive material confirmed

Tests of the distribution process have confirmed that a distribution can be completed to a worst-case area (based on population within and geographical spread) within a short time scale (less than 1 hour), therefore the distribution process is low hazard, and does not require PPE. However in the event of the distribution being incomplete at declaration of RRMC, then the DT are to regroup and the DTL will contact the MOD HPA for advice on completing the distribution in the safest manner.

5.13 Recovery / redeployment of SITs Teams

On completion of SITs distribution to an area and recovery of all SITs DT members, the SITs DTL is to notify the SITs DTC of the DT status. The SITs DTC will then discuss with the IC Health Physics Adviser the recovery/redeployment of the SITs team, including the potential requirements for de-contamination.

In the SIT's updating process, the DTC will also inform the Tactical Commander and CCU RD manager of the progress so that updated information can be maintained on this platform.

Annex 5A: Pre-distributed SITs Sites

ADDRESS	SITs	Co-ordinator	Deputy
3 The Verne and 4 The Verne (within prison compound, at the top) <i>Received: Date</i>	30	Restricted contact information available to SIT's DT's only	Restricted Contact Information
Aqua Hotel Castletown, Portland Dorset, DT5 1BD <i>Received: Date</i>	150		
Beach House Hotel, 51 Chiswell, DT5 1AW (vacant - up for sale) <i>Received: Date</i>	100		
Crabbers Wharf (hotel/ self-catering) 9 flats/units <i>Received: Date</i>			
Royal Yachting Association House. Portland House. DT5 1FA <i>Received: Date</i>			
Portland Outdoor Centre DT5 1BD <i>Received: Date</i>	150		
Easton Health Centre Park Estate Road Portland, Dorset DT5 2BJ <i>Received: Date</i>	15000		
Fairfield Day Centre (MWTF) 0900-1630 Fairfield Day Centre East Street Portland Dorset DT5 1NF <i>Received: Date</i>	100		
Foyle Bank Sheltered Housing Foylebank Court, Foyle Bank Way, Castletown, Portland, Dorset DT5 1BA <i>Received: Date</i>	150		
Gatehouse Surgery (Private) Gatehouse Surgery Castle Road Portland, Dorset, DT5 1AU Mon-Fri 0800-2000 <i>Received: Date</i>	100		
Grove Infants School The Grove, Portland, Dorset, DT5 1DB (school now closed) <i>Received: Date</i>	150	Restricted contact information available to SIT's DT's only	Restricted Contact Information
HM Young Offenders Institute 104 The Grove Easton, Portland Dorset, DT5 1DL <i>Received: Date</i>	1500		
Osprey Leisure Centre DT5 1BD <i>Received: Date</i>	200		
Outlooks Childrens Nursery Castle Rd, Portland, DT5 1AU <i>Received: Date</i>	100		

ADDRESS	SITs	Co-ordinator	Deputy
Portland Hospital Castle Road, DT5 1AX <i>Received: Date</i>	200		
Royal Breakwater Hotel Castletown, DT5 1BD <i>Received: Date</i>	200		
The Bunker, Victoria Square (Dive Hostel) (11) <i>Received: Date</i>	100		
The Governors House (within prison compound, at the top) <i>Received: Date</i>	10		
The Verne Immigration removal Centre Dorset, DT5 1EQ <i>Received: Date</i>	1500		
Vindelis Court 1 to 25 and Mantle Close 15 to 22 (sheltered accommodation)	150		
Weymouth and Portland Sailing Academy Osprey Quay Portland, DT5 1SA <i>Received: Date</i>	200	Restricted contact information available to SIT's DT's only	Restricted Contact Information
Youth Hostels – YHA, Castle Road and Boscawen House <i>Received: Date</i>	200		
Isle of Portland Aldridge Community Academy (IPACA) Osprey Quay Campus, Lerret Rd, Portland DT5 1FN (via Royal Manor) Now closed	250		
Portland Heights Hotel Yeates Rd., DT5 2EN <i>Received: Date</i>	100		
Atlantic Academy Portland Osprey Quay Campus, Lerret Rd, Portland DT5 1FN Now closed	600		
Allsorts Brackenbury Three Yards Close, Portland DT5 1JN (Now closed)	50		
All properties on Old Hill Street as below: The Priory Flat 1 Rectory Flat 1A Rectory Flat 2 Rectory Flat 3 Rectory Old Hill House Pitthays Cottage Priory House Vindelis	100		

Annex 5B: SIT's Letter of authorisation

NB. This letter has no expiry date*

To be used for the duration of a Nuclear-Powered Vessel visit to Portland Port

Re: Portland Port Off-site Reactor Emergency Plan

The authority to issue Stable Iodine Tablets (SITs) to the public in the event of a radiation emergency rests with the Director of Public Health.

In discussion with Public Health Dorset, the MoD and Dorset Council, who have prepared the Portland Port On-site and Off-site Reactor Emergency Plan, it has been agreed that I will pre-authorise the issuing of these tablets in specific circumstances **only in the event that both I and my deputy are unavailable.**

In relation to the above plan:

1. I hereby authorise the issuing of Stable Iodine tablets to defined members of the public if an Off-Site Nuclear Emergency is declared.

At this stage, the public will be advised not to take the tablets but to await further instructions.

2. If an Off-Site Nuclear Emergency – Radiation Hazard Confirmed/Release or Radioactive Material Confirmed is declared, I hereby authorise the issuing of Stable Iodine Tablets to defined members of the public for immediate consumption.

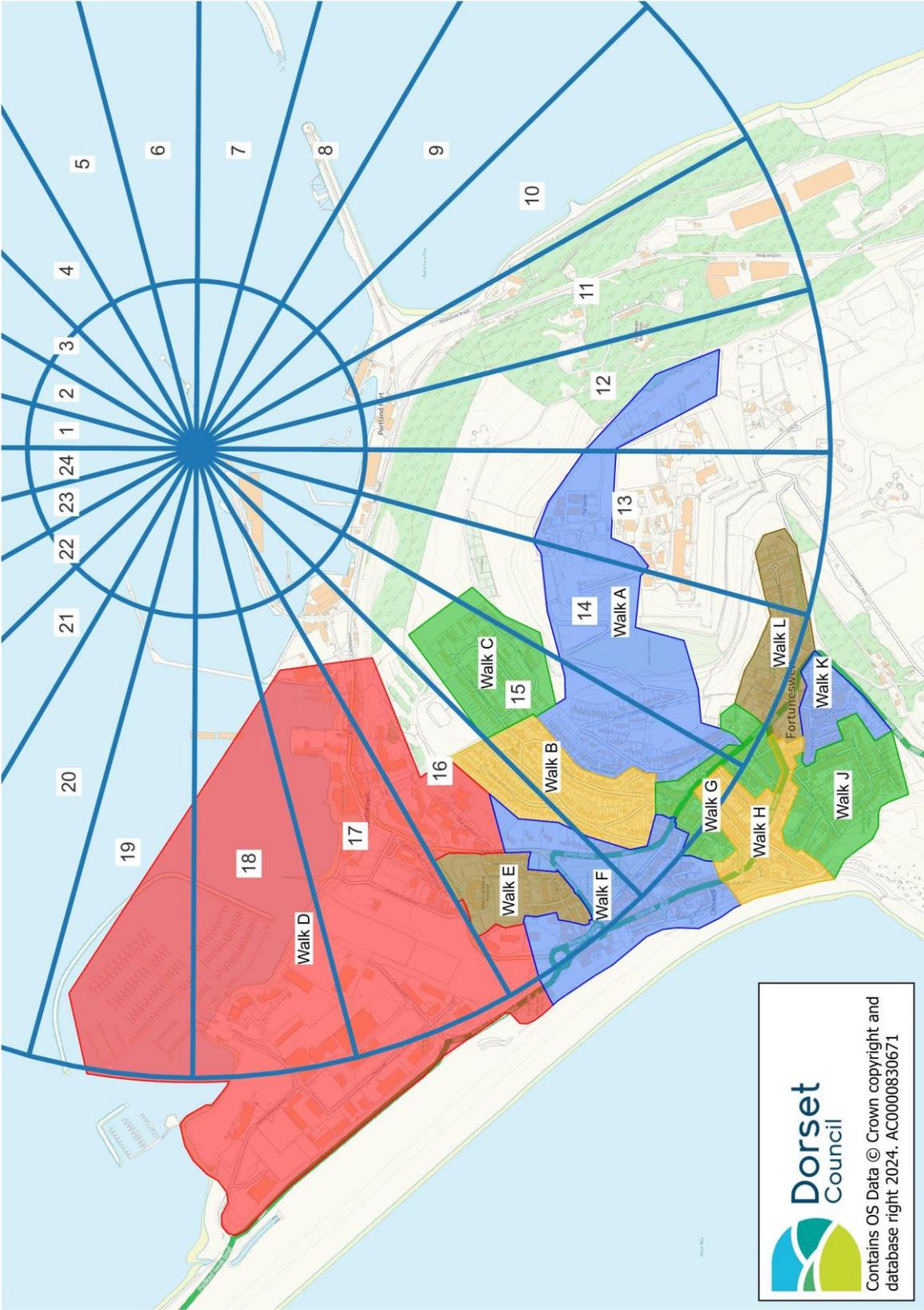
Mr. Sam Crowe



Director of Public Health

*in case the Director of Public Health changes in between plan updates, this letter is to be re-signed separately by the new Director and supplied to Dorset Council Emergency Planning, HMNB Clyde and Navy Command.

Annex 5C: Distribution route map



Annex 5E: SITS Tean Personal Safety Packs

1.	Stable Iodine Tablets (Personal Use)	02
2.	Safety Instruction Leaflet	01
3.	Smock Foul Weather (High visibility strips)	
4.	Mobile phone/radio for SITs DT (Individual)	01
5.	Identification for Staff	01
6.	Dosimetry	01
7.	Torch	02

Annex 5F: SITS Distribution Route Pack

1.	Stable Iodine Tablets (as per route)
2.	Stable Iodine Tablet Leaflets (as per route)
3.	Copy of SITs Distribution Plan
4.	Distribution Route Matrix
5.	Distribution Route Map
6.	AZ Map of Distribution Area
7.	Chinagraph markers

Annex 5G: Stable Iodine Information Leaflet

Please read this leaflet now.

Do not take the enclosed medication until advised to do so.

WHY HAVE I BEEN GIVEN THESE TABLETS?

There is an extremely small chance of an incident concerning one of the Royal Navy Nuclear Submarines that very occasionally visit Portland Port. It is possible that radioactive iodine may be released into the environment following this incident. This is harmful to humans and especially dangerous to young babies and children.

Each tablet contains 65mg of Potassium Iodide (PI), which will release 50mg of non-radioactive iodine into your body. This will fill up the thyroid gland (situated in your neck) and stop the thyroid from taking up radioactive iodine, giving you protection for 24 hours.

WHEN SHOULD I TAKE THE TABLETS?

Tune in to local radio, television, or local authority social media, where further information and advice will be available. If you need to take the tablets you will be advised to do so.

WHAT SHOULD I DO IF I AM A PREDISTRIBUTED SITE? (Hospital, hotel, school, prison, etc.)

Please ensure everyone onsite is distributed tablets from the stock you hold and are prepared to take these when instructed to do so through the local radio, television or local authority social media. Every pre-distributed site has a number of staff who know where the medication is stored.

WHO SHOULD TAKE THE TABLETS?

Everyone, except those who have been told by their doctor that:

- they are sensitive to iodine, *OR*
- they suffer the very rare medical conditions of dermatitis herpetiformis or hypocomplementaemic vasculitis.

If you do not know if you have these medical conditions, then you SHOULD take the Potassium Iodide tablets when told. It is very important that children and women who are pregnant or breastfeeding take these tablets. This is because the fetus and young children are particularly sensitive to the effects of radioactive iodine.

HOW MANY TABLETS SHOULD I TAKE?

The enclosed strips contain ten tablets. The number each person should take depends on their age as follows:

Adults (including pregnant and breast-feeding women)	2 Tablets
Children aged 3-12 years	1 Tablet
Children aged one month - 3 years	½ Tablet
New-born babies up to one month	¼ Tablet

HOW SHOULD I TAKE THE TABLETS?

If you can, swallow the right dose for your age with water. If you or your children find it hard to swallow tablets, crush the right number of tablets and mix with a teaspoon of something like jam, honey or yoghurt. For babies who are not yet eating, crush their dose and then dissolve it in a small quantity of milk or juice, shaking well.

HOW OFTEN SHOULD I TAKE THE TABLETS?

One dose will protect you for 24 hours. Do not take more than the single dose unless you are specifically instructed to do so. In the very unlikely event of a prolonged incident, you will be given further instructions. Continue to listen to local radio, television and local authority social media until the incident is over.

WHAT IF THERE ARE NOT ENOUGH TABLETS FOR EVERYONE?

Children and women who are pregnant or breast-feeding should be treated first. Then call the Helpline telephone number which will be broadcast by local radio, TV stations and local authority social media, and let them know how many more you need.

WHAT ARE THE SIDE EFFECTS?

Most people do not get any problems. Some people may feel a little sick for a while. Other, very rare problems include a rash, swollen salivary glands, headache, wheezing or coughing. If you have any health concerns about taking the tablets please call NHS 111.

WHAT IF I TAKE TOO MANY TABLETS?

If you, or anyone else, swallows a lot of the tablets at the same time then phone your doctor or nearest casualty department immediately.

SHOULD I SEE A DOCTOR AFTERWARDS?

Most people will not need to see their doctor after taking the tablets. However, if you have to see your doctor for other reasons, you should tell him/her that you have taken Potassium Iodide.

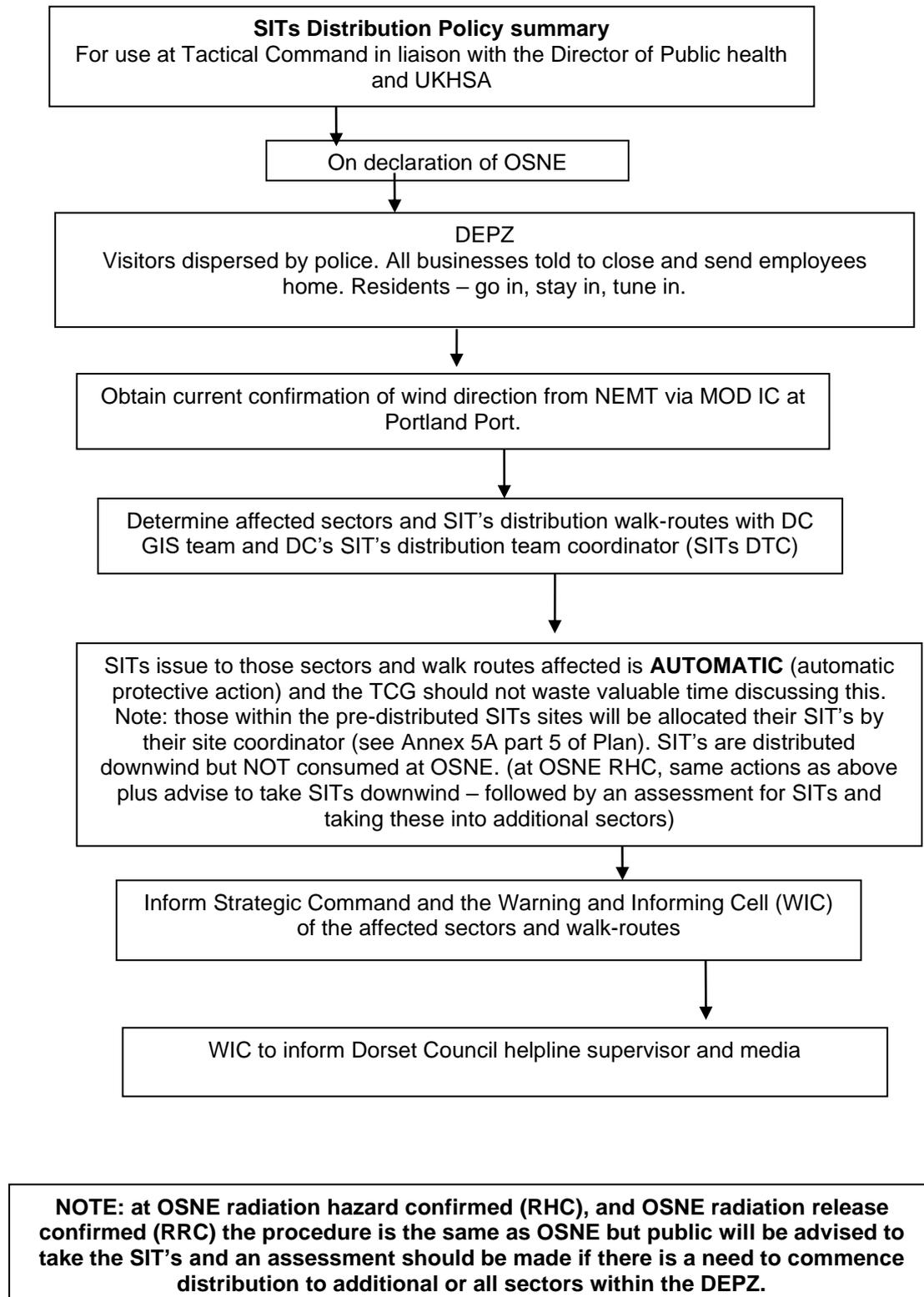
If you have a baby under three months old, you should make an appointment to see your doctor. This is because it is important for a doctor to check the thyroid hormone levels of young babies if they have taken Potassium Iodide.

If you are in the last three months of your pregnancy, you should make an appointment to see your doctor. This is because umbilical cord blood samples should be taken at birth for the baby's thyroid hormone measurement, if you have taken Potassium Iodide in the last three months of pregnancy.

WHAT IF I HAVE TABLETS LEFT OVER?

After the incident, please hand in any left-over tablets to your local GP surgery.

Annex 5H: SITs Distribution process for reference at tactical command



PART 6 : EMERGENCY SERVICES / AGENCIES RESPONSE

6.1 Introduction

6.1.1 Emergency exposures permit an employee to exceed an IRR17 radiation dose limit for employees over the age of 18 years of age. Not all radiation emergencies will involve emergency exposures for intervention personnel - the emergency exposures and emergency dose levels for the operational response are detailed in the MOD SSOEP. The emergency exposures and emergency dose levels, which have been notified to the HSE, are detailed in the PPOSP. The potential emergency exposures for emergency services are justified for life saving or for preventing or reducing the radiation exposure of workers or the public. Those emergency services who have an Emergency Workers status identified dose limits for each organisation later in this part (sections 6.3 -6.12).

6.1.2 Non-Emergency Exposures: These are radiation exposures to employees in NERO roles supporting the Off-Site Emergency Plan. The radiation exposures for this group of personnel must not exceed the relevant IRR17 radiation dose limits. This will include personnel supporting the Strategic, Tactical and Bronze Command and Control organisations as well as emergency services personnel and doctors, nurses and local authority personnel etc.

6.1.3 Other Contingency Plans

Other Contingency plans which could be activated in conjunction with this plan:

1. Dorset LRF Warning & Informing Capability Strategy
2. NHS England – SW Incident Response Plan
3. NHS Dorset ICB Incident Response Plan
4. Dorset Council Emergency Response Plan
5. Dorset Multi-Agency Response Guide (DMARG)
6. Dorset & Wiltshire Fire and Rescue Service Major Incident Procedure
7. South Western Ambulance Service Trust Major Incident Plan
8. Dorset LRF Strategic Leaders' Response Guide
9. Dorset LRF Tactical Commanders' Response Guide
10. Dorset LRF Recovery Framework
11. Radiation Monitoring Unit Framework SW LRFs, 2024, V1.0

6.2 Dorset Police

6.2.1 **Notification.** HMNB Clyde DNBO will inform Dorset Police HQ - Control Room. The message should be ideally in a METHANE format (e.g):

M	Major Incident declared?
E	Exact Location (location, type and name of vessel)
T	Type of Incident (off-site nuclear emergency). a qualifier may be applied either "Radiation Hazard Confirmed" or "Release of Radioactive Material Confirmed" (For definitions see PART 2)
H	Hazards present, potential or suspected (including prevailing weather conditions)
A	Access – routes that are safe to use
N	Number, type, severity of casualties
E	Emergency Services present / required

6.2.2 **Deployment.** On receipt of the warning Dorset Police Control will authenticate the message with HMNB Clyde DNBO.

6.2.3 Dorset Police will then activate OpLink for virtual SCG, TCG, STAC and WIC using the NERO call cascade.

6.2.4 Officers from Dorset Police will proceed to the Tactical Co-ordination Centre – or dial into the MS Teams TCG teleconference. In addition, the Strategic Co-ordination Centre will also be activated (or virtual SCG if this option has been chosen) and led by a Police Strategic Commander, and staffing will be made available to provide support to the Tactical Commanders, as per the NPW Visit Directory.

6.2.5 Police Officers are not designated as 'intervention personnel' and are not subject to emergency exposures. Wherever possible contingency plans should not seek to place police officers in a situation with RL above 5 millisieverts. As such, Police are not to be deployed within the DEPZ, but rather support the off-site plan with cordons, command and control, having supported the evacuation or shelter of those in the affected area as is appropriate to the circumstances.

If an emergency road closure is required to prevent vehicle access to an affected area, Dorset Police can direct vehicles, thereby giving a lawful instruction which, should the public refuse to abide by, can be dealt with accordingly e.g. arrest. A cordon can be put in place and members of the public advised not to enter but police cannot PREVENT pedestrians from entering a cordon unless it is in relation to terrorism. Police can only ADVISE them it is unsafe. If they have children with them Police can take the children into Police care for their own safety.

However, in respect of Emergency Worker status:

Dorset Police have authorised trained employees identified for radiation emergencies;

- These assets are trained to deploy to incidents assessed and identified as CT;
- Reference levels they work to is the Atomic Weapons Establishment (AWE) advised UK-wide reference level of 5mSv. Advice on RLs should come from Police appointed RPA.
- PPE would be PRPS, but again would take advice depending on the incident;
- The stance is that Police emergency workers are not to be deployed within the DEPZ, but rather support the off-site pan with cordons, command and control.

6.2.6 Where an unforeseen circumstance arises which requires a police presence, a specific risk assessment will be undertaken at the time. There will remain a need to manage the risk and exposure levels will be kept as low as possible given all the circumstances.

6.2.7 If a Police Liaison Officer is deployed to Portland Port as part of their roles they will have to **complete the SITREP at Appendix 1** and transmit via email to the Police Tactical Staff Officer for the Tactical Commander and Tactical Co-ordinating Group (TCG).

6.3 Dorset & Wiltshire Fire and Rescue Service (DWFRS)

6.3.1 **Notification.** DWFRS will be notified as per the NERO callout cascade by automatic message. It will be made clear that the call is to attend a nuclear reactor emergency situation.

6.3.2 **Deployment.** Minimum first attendance will be an appropriate number of appliances to the Chesil Beach car park RVP, and a liaison officer attending the OCC at Portland Port, Britannia Terminal first floor. Additional attendance will depend on the extent of the situation. If appliances are needed, they will be asked to attend the FCP at the PPL Britannia Terminal car park. All DWFRS attending onsite will enter Portland Port via the Main Gate unless otherwise directed. A fast track permit to enter will be considered before and during a NPW visit or on declaration of OSNE.

6.3.3. **Reception.** Upon arrival at the Main Gate, should the incident present a radiological threat, appliances and personnel will proceed to Britannia Terminal car park to receive a briefing and enable a risk assessment to be completed by DWFRS personnel. Only then will personnel and appliances be deployed to the scene.

6.3.4. **Response.** Officers from DWFRS will be provided at the following locations:

- a) Strategic Command Centre (or virtual SCG if this option has been chosen).
- b) Tactical Command Centre (or virtual TCG if this option has been chosen).
- c) Operational Command Centre.

6.3.5 As required by REPIR Regs 18 and 20 DWFRS has identified the possible need for some of its employees to be subject to emergency exposures.

Where there is no immediate risk to life DWFRS should follow the principle of working to zero exposure. If not possible DWFRS should work to a dose constraint of 5mSv per incident, but always follow ALARP, as low as reasonably practicable, methodology.

The annual dose limit of all firefighters should not exceed 20mSv, however, we do adopt the fallback of a 100mSv dose limit for informed firefighter volunteers, where 'Emergency exposure would save life or maintain critical infrastructure'.

PPE used would be personal issue EPD, Rados 200 Survey Meter, BA and Fire Kit/Paper Suit/GTS depending on whether there was a contamination/irradiation risk.

Dose limit	Circumstances
5 mSv per incident	<p>It is recommended that a dose constraint of 5 mSv per incident is introduced at operational incidents. The reasons for this level of constraint are:</p> <ul style="list-style-type: none"> • It corresponds to the alarm setting on the electronic personal dosimeters supplied through the fire and rescue service national resilience project, which would naturally prompt staff to leave the hazard zone • It is in line with dose reference levels used by the ambulance service • If a firefighter were to receive a dose in excess of one third of any formal dose limit (i.e. 1/3 of 20 mSv), the employer must conduct an investigation into the circumstances. This would equate to approximately 6 mSv for a whole body dose as measured by an EPD; by using 5 mSv as the dose constraint level this should avoid crossing this reporting threshold.
20mSv annual limit (all firefighters, including female)	To save life or maintain critical infrastructure
100mSv dose limit of informed firefighter volunteers	<p>Emergency exposure to save life or maintain critical infrastructure</p> <p>Deployment of informed personnel to be in line with service procedure and only after guidance from HMA/ HMEPA and authorised by Brigade Manager</p>

6.3.6 If a Police Liaison Officer is not available at Portland Port the DWFRS Liaison Officer will have to complete the SITREP at Appendix 1 and transmit via email to the Police Tactical Staff Officer for the attention of the Tactical Commander and Tactical Co-ordinating Group (TCG).

6.4 South Western Ambulance NHS Foundation Trust (SWASFT)

- 6.4.1 **Notification.** SWASFT will be notified as per the NERO callout cascade by automatic message. It will be made clear that the call is to attend a nuclear reactor emergency situation.

However, it is important to note that the alert may originate from a source other than Dorset Police and in these circumstances, it may not be clear at the outset that the alert appertains to a nuclear incident.

SWASFT will confirm that the UKHSA SW Region, including the Director of Public Health, and the NHS England – South West on call manager are aware.

- 6.4.2 **Deployment.** Initial first attendance will be an appropriate number of vehicles as well as commanders. The number and type of vehicles initially will depend on the extent of the incident.

In the absence of any clear information of the nature or extent of the nuclear incident, the predetermined attendance will be as per the SWASFT Incident Response Plan for a Major Incident **Standby**.

In the event of a Major Incident **Declared** the pre-determined attendance for a Declared Major Incident will be dispatched as per the SWASFT Incident Response Plan.

Further specialist responders in the form of the Special Operations Response Team (SORT) may also be dispatched depending on the type of incident. This team have the capability to both support Chemical, Biological, Radiological, Nuclear (CBRN) incidents or Marauding Terrorist Attacks (MTA) incidents.

All ambulance personnel will deploy to the RVP at Chesil Beach Car Park unless otherwise directed. One liaison officer will report to Portland port OCC, Britannia Terminal First floor.

- 6.4.3 **Reception.** If called forward, all ambulance personnel and vehicles will enter the Port via the Main Gate. Upon arriving ambulance resources may be directed to a holding area alongside the Forward Control Point (FCP) at the Britannia Terminal car park and will be briefed before proceeding any further.

Upon arrival at either the holding area, or the forward control point, ambulance personnel from the Hazardous Area Response Team (HART) and Special Operational Response Team (SORT) will be issued with emergency packs from their own stocks. Each emergency pack contains.

- a) 1 x Personal Electronic Dosimeters (PEDs)
- b) 1 x Particulate Respirator

The PED must be switched on using the black “on” button, which is located at the top right hand side of the dosimeter. Ambulance staff must monitor their PEDs and make regular reports of the readings to the Ambulance Officer in the Tactical Command Centre (TCC). The fact that their PED has alarmed must be reported to the Ambulance Officer in the TCC, who in turn will report this to the Ambulance Officer in the Operations Command Centre, Portland Port.

Stable Iodine Tablets (SITs) will be supplied from the central stock distributed on behalf of the UK Health Security Agency (UKHSA) / NHS England (NHSE).

SWASFT staff will be instructed to take SITs based on the advice provided by UK Health Security Agency (UKHSA) or the scientific advice agreed and provided through the Strategic Co-ordinating Group (SCG). SWASFT follow the guidance that is provided; however the expectation is that all personnel remaining in or entering the ACMZ post OSNE, including SWASFT, are issued with SITs, and will take these at OSNE RHC.

6.4.4 Response. Ambulance Officers will be deployed to the following locations:

- a) Strategic Command Centre (SCC), or dial into virtual SCG.
- b) Tactical Command Centre (TCC), or dial into virtual TCG.
- c) Incident Commander's Cell

Ambulance resources with the exception of the Hazardous Area Response Team (HART) will **not** be deployed into the Inner Cordon (Automatic Countermeasures Zone (ACMZ)). The Inner cordon will be set at approximately 400 metres from the incident, or nearer if practical.

Prior to the emergency, in accordance with REPIR 2019, South Western Ambulance NHS Foundation Trust (SWASFT) will:

- a) Identify those staff who may be subject to emergency exposures; which would be members of the ambulance services Hazardous Area Response Team (HART). All HART team members have access to a RAM GENE and have personal dosimeters and can be designated as Emergency workers.
- b) Identify staff who are authorised to permit other suitably equipped and trained staff who may receive emergency exposure to radiation to attend the incident which would be members of the ambulance services Hazardous Area Response Team (HART) following a full risk assessment to support lifesaving activities.
- c) Provide those staff with appropriate training in the field of radiation protection and such information and instruction as is suitable and sufficient for them to know the health risks created by the exposure to radiation and the precautions which must be taken.

In the event of staff receiving an emergency dose of radiation, South Western Ambulance NHS Foundation Trust will:

- a) Make arrangements for medical surveillance by an appointed doctor or employment medical adviser to be carried out without delay for those staff who receives emergency exposure.
- b) Make arrangements with an approved dosimetry service for dose assessments to be carried out on those staff who receive emergency doses. (This will be separate from any other assessment previously made). These dose assessments are to be made available to the appointed doctor or employment medical advisor carrying out the medical surveillance,

SWASFT, and the Health & Safety Executive (HSE).

- c) Contaminated casualties with non-life threatening injuries will be decontaminated by MoD personnel **before** transportation to hospital. This decontamination will take place at a safe distance from the incident and will occur before any secondary triage or clinical intervention (other than basic life support or airway protection.)

Where a safe system of works permits, treatment and transport of contaminated casualties with life threatening injuries will not be delayed.

6.4.5 **Triage.** Each Front Line Resource is equipped with a MAJAX bag which will hold a supply of SMART Triage Cards to be used during a major incident. These cards should be used to display the patients triage category and attached to the patient. Additional supplies are contained within the Equipment Support Units, National Mass Casualty Equipment Vehicles and HART vehicles.

The triage categories are:

Red	P1	Immediate
Yellow	P2	Urgent
Green	P3	Delayed
Black	Dead	

Triage, as detailed in its own Incident Response Plan will be carried out by SWASFT.

6.4.6 **Radiation Exposure.** South Western Ambulance Service NHS Foundation Trust does not have its own Radiation Protection Advisor – this role is contracted to the UK Health Security Agency (UKHSA) who will provide the required scientific advice, including reference levels. SWASFT has a number of Tactical Advisors / National Interagency Liaison Officers (NILO) who are trained Radiation Protection Supervisors and will provide basic advice but will consult UK Health Security Agency (UKHSA) in line with the radiation contract held between UKHSA and SWASFT.

Frontline ambulance personnel who are not acting in the capacity as a Special Operations Response Team (SORT) operative or Hazardous Area Response Team (HART) operatives will work up to a dose rate of 1 mSv per incident.

SORT and HART operatives (designated as emergency workers) will endeavour to work up to a reference level of 5 mSv.

The maximum dose rate that SWASFT emergency workers will be exposed to is 100 mSv, which is for life threatening interventions only, and will require staff to be fully trained, briefed and willing. This will need to be authorised by a trained and competent tactical commander.

6.5 NHS England – South West

- 6.5.1 **Notification.** In the event of an incident, Dorset CCU will notify the NHS England South West on call manager, as well as the Dorset ICB on call manager (as per NERO callout cascade).
- 6.5.2 **Deployment.** When notified the on call Director for NHS England South West will attend the SCG as required. When circumstances allow further NHS England staff will attend in support as required.
- 6.5.3 When deployment of the Health Strategic lead from NHS England is delayed, the ICB are able to represent and lead the health response as required in consultation with NHS England. NHS Dorset ICB will deploy Tactical Liaison Managers to the Tactical Command Centre, or virtually as the need dictates.
- 6.5.4 NHS Dorset ICB Tactical will alert NHS 111 that there has been an incident in preparation for potential public concern and queries.
- 6.5.5 NHS Dorset ICB Tactical will liaise with SW Ambulance Tactical regarding casualty arrangements and if appropriate establish links with the designated receiving hospital to assist in acute bed availability planning.
- 6.5.6 If required, NHS England – South West will, in consultation with NHS Dorset ICB, establish its own or a joint Incident Co-ordination Centre.
- 6.5.7 The designated Hospitals are Dorset County Hospital and Poole Hospital.

6.6 UKHSA and Local Authority Director of Public Health

- 6.6.1 Notification. Notification in the event of an incident Dorset CCU will notify UKHSA SW Region.
- 6.6.2 Deployment. Activation of a STAC is on the request of the SCG Chair. The UKHSA SW Regional Deputy Director or their representative and/or the Local Authority Director of Public Health will attend the Strategic Command Centre and chair the STAC.
- 6.6.3 UKHSA SW Region where available will provide UKHSA liaison officers to attend the TCG meetings
- 6.6.4 Response. The Local Authority Director of Public Health or their deputy will authorise the distribution of SIT's Stable iodine tablets

6.7 UK Health Security Agency - RCCE

- 6.7.1 UKHSA RCCE 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. UKHSA has guidance on Public Health Protection in Radiation Emergencies. This guidance is accepted as a basis for the current nuclear emergency arrangements. These meetings can also be held virtually via MS Teams.

6.7.2 On receipt of an alert, UKHSA RCCE will determine the appropriate level of its response to the emergency. This level of response might include all or some of the following:

1. Deployment of senior staff to a number of key locations. These would include:
 - The SCC (to provide advice on the Strategic Co-ordinating 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 Co-ordination Centre (TCC) or virtually via MS Teams.
 - Scientific Advisory Group for Emergencies (SAGE).
 - Cabinet Office Briefing Room (COBR) in support of Department of Health and Social Care (DHSC).
2. Set up an Emergency Operations Centre at UKHSA RCCE, Chilton, Oxfordshire. The key functions of this centre will be to gather relevant information (particularly 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 key stakeholders in the response at a local, regional and national level including, but not limited to, the Food Standards Agency (FSA, the Environment Agency (EA), Local Authority and water companies.

6.7.3 Radiation Monitoring and Monitoring Co-ordination - A fundamental component of the UKHSA RCCE 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 Co-ordination and Control Team Leader based in the Chilton Emergency Operations Centre who reports directly to the UKHSA RCE Operations Director.

6.7.4 In addition to deployment and management of RCCE monitoring teams, UKHSA also has a national monitoring co-ordination role during radiation

emergencies. UKHSA will co-ordinate the radiation monitoring resources made available to it in the event of an emergency and prepare a monitoring strategy for approval by the Strategic Co-ordinating 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).

6.7.5 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 organisations 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.

6.7.6 UKHSA has no power to commandeer resources and UKHSA 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. UKHSA RCCE will periodically provide organisations with what information it has as the incident develops, this should include:

- A summary of the incident situation
- UKHSA RCCE local rules for its own monitoring teams being deployed
- UKHSA RCCE radiological risk assessment for its own monitoring teams being deployed

6.7.7 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;
3. work under the supervision of their own management structures; and
4. be self-sufficient in terms of PPE (including RPE where appropriate)

Requests for additional radiation monitoring resources from other civil organisations will be made via DESNZ, if authorised to do so by the SCG.

6.8 Dorset Council

6.8.1 Notification. Dorset CCU will notify Dorset Council Duty Emergency Planning Officer (DEPO) via DPAS. It will be clear that the call is for response to a reactor emergency situation. DEPO will proceed with the activation of NERO as required internally to DC. All contact details will be included in the pre-visit directory as part of NPW pre-visit arrangements. One more staff will be allocated to DEPO to assist with callout cascade and calls to pre-distributed sites if necessary.

6.8.2 Response. Personnel from Dorset Council will be at the following locations:

- Strategic Command Centre. Virtual arrangements also apply.
- Tactical Command Centre. Virtual arrangements also apply.
- WIC – chaired by DC. Virtual arrangements apply.
- STAC – Environmental Health representation. Virtual arrangements apply.
- OCC Portland Port – the SIT's DTC and support/LALO.

6.8.3 As required by REPIR '19 Reg 18 Dorset Council has considered the possible need for some of its employees to be subject to emergency exposures and has concluded it will have no such emergency workers.

6.8.4 Dorset Council will assist with contacting pre-distributed sites by telephone.

6.8.5 Dorset Council will also be supplying the SIT's distribution team coordinator (DTC) and a liaison officer who will be based at the operational command centre (OCC) in Britannia terminal first floor.

6.8.6 Dorset Council will work with the UKHSA/STAC via the SCG in confirming the need to initiate personal monitoring, and the establishment of an RMU. Dorset Council has a number of pre-identified RMU sites that can be used for this purpose. Nonetheless, it is the role of the SCG to initiate the activation of RMU response following STAC recommendation. Currently RMU response is based on the latest [Radiation Monitoring Unit Framework SW LRF's](#) available on RD.

6.9 Office for Nuclear Regulation

6.9.1 For an off-site nuclear emergency at a MoD site, including Operational Berths, ONR may deploy staff to the affected site, the Off-Site Facility (OSF), and the National Security Council (Threats, Hazards, Resilience and Contingencies) (NSC THRC) Committee in London. ONR will provide advice to these teams during the event.

6.9.2 ONR will witness, monitor and record operator's actions; take enforcement action if appropriate; and provide independent information/advice to senior staff in HSE, relevant authorities and other government departments. ONR's response will be led and managed by the ONR Response Centre Director.

6.9.3 ONR will ascertain the facts surrounding the emergency, assess the safety of the affected site, including the licensee's or operator's proposed actions, deploy ONR staff as required, and formulate ONR strategy and response.

6.9.4 The **ONR Site Team** will:

- a) Ascertain the facts on the emergency including establishing the adequacy of actions taken to secure a safe plant state and the advice given to the authorities off-site,
- b) Submit routine reports on events at site to the ONR Response Centre,

- c) Represent ONR at or near the site if required

6.9.5 The **ONR Off-site Facility Team** will:

- a) Provide advice and support to the ONR Response Centre Director,
- b) Consider all aspects of the emergency which affect the site,
- c) Provide advice to the Off-Site Facility (OSF) strategic co-ordination group,
- d) Represent ONR at local press briefings.

6.10 Maritime and Coastguard Agency

The Maritime and Coastguard Agency (MCGA) is an Executive Agency of the Department of Transport.

The Maritime and Coastguard Agency is responsible for:

- Minimising loss of life amongst seafarers and coastal users.
- Responding to maritime emergencies 24 hours a day.
- Developing, promoting and enforcing high standards of marine safety.
- Minimising the risk of pollution of the marine environment from ships and, where pollution occurs, minimising the impact on UK interests.

6.10.1 Notification. MCGA will be notified as per the NERO callout cascade by Portland Harbour Control. It will be made clear that the call is to attend a nuclear reactor emergency situation. As RN SITs DT are assembled at RSA, MCGA will be recalled during this phase to ensure a prompt deployment at OSNE declaration.

6.10.2 MCGA will open an Incident in their Command and Control System, and establish communications with the Police Incident Control. The Coastguard Operations Centre (CGOC) responsible for the council in which the incident occurs, will be alerted, to co-ordinate Coastguard actions on or near to the scene.

6.10.3 Deployment. If the SCC is activated, the MCGA will dispatch suitable personnel to attend. Until the arrival at the SCC of the CG Liaison Officer (CGLO) or CG Tactical Commander, information flow will remain via the Police, either at the SCC, or Police Operations Control Room. MCGA are also represented at Operational level in PPL, where they will be supporting amongst other with SIT's distribution. (see 6.11.8)

6.10.4 HM Coastguard will initiate Maritime Safety Information (MSI), Alert or Distress broadcasts as necessary using Radio, NAVTEX and/or Satellite Communications Systems at the request of the Police Incident Commander/SCC Liaison Officer.

- 6.10.5** HM Coastguard will conduct enquiries to establish the safety of Vessels or persons which may be in any potential danger areas, in consultation with the Police Incident Commander and SCC Liaison Officer.
- 6.10.6** HM Coastguard will alert the MCGA Duty Counter Pollution and Salvage Officer to the incident.
- 6.10.7** Should there be an associated and concurrent Maritime Search and Rescue (SAR) incident, HM Coastguard will continue to fulfil its statutory obligations and may task declared facilities afloat and on shore to assist the other emergency services, in consultation with the Police Incident Commander and after appropriate risk assessment of the operating environment.
- 6.10.8** HM Coastguard will assist with the distribution of Stable Iodine tablets as per Part 5, SITs Distribution Plan.
- 6.10.9** Coastguard Rescue Officers (CROs) are not designated as ‘intervention personnel’ for radiation hazard incidents and should not be subject to emergency exposures. Wherever possible contingency plans should not seek to place CROs in a situation where they will receive additional levels of radiation.
- 6.10.10** Coastguard activity in response to this plan is to support the SITs distribution plan, as this is seen by the MOD as a non-radiation hazard operation. Radiation awareness and training in relation to SITs distribution is provided by the MOD. PPE used would be issued Coastguard PPE overalls, gloves, eye protection, weather protection and radiological PPE as issued to SITs. Should an unforeseen circumstance arise, HM Coastguard will conduct a dynamic risk assessment and take advice from the Police commander and MOD.

6.11 MHCLG RED

Following activation of MHCLG RED (Ministry of Housing, Communities & Local Government – Response & Recovery Directorate) emergency response arrangements (see NERO cascade), MHCLG RED will send a Government Liaison Officer to the Strategic Co-ordination Centre to form part of the Government Liaison Team (within two hours). He/she will work closely with the MoD Co-ordinating Authority (MCA) appointed by MOD and will also liaise closely with representatives from other Government agencies.

Their main duties will be as follows:

- to act as the GLO at the SCG;
- to liaise with the MCA prior to their arrival, and ensure appropriate communication channels are in place with the Strategic Commander for MCA situational awareness / briefing as required, unless MCA arrives first;
- to work with the MCA as part of a Government Liaison Team;
- where necessary, assist in the co-ordination between Government, and local bodies by facilitating discussions and contact and by acting as a liaison point

- to communicate situation reporting on local consequence management to MHCLG RED and other relevant Government departments as required;
- to assist in recovery planning from the outset of preparations, which might be expected to start in the emergency phase. For this, MHCLG RED will attend meetings of the Recovery Working Group as soon as this has been established.

Where necessary, MHCLG RED will activate an operations centre to:

- facilitate national co-ordination and assurance for situation reporting on national consequence management.
- Report to COBR (See Appendix 2)
- facilitate mutual aid requests and address requests for national assets
- liaise and share information with devolved administrations
- support MHCLG staff in discharging their role and engage other necessary bodies
- co-ordinate and support MHCLG attendance at COBR at ministerial and official levels
- communicate Top Line Briefs to LRFs
- support the LGD with organising Ministerial or VIP visits in consultation with local partners whilst the SCG is still standing

A Response Co-ordinating Group (ResCG) may be convened where the response to an emergency would benefit from some co-ordination or enhanced support at a cross-SCG level. In such circumstances, MHCLG may, on its own initiative, or at the request of local responders, or of the LGD, in consultation with the Cabinet Office, convene a ResCG in order to bring together appropriate representatives.

In the emergency response phase two officials from MHCLG RED will be deployed to form a Government Liaison Team with nominated representatives from MOD. These representatives will be scaled back as appropriate as and when the lead government department for recovery officials arrive. MHCLG RED will support the transition from response to recovery by supporting an effective handover by MoD as Lead Government Department for the Response to Lead Government Department officials taking up responsibility for supporting local responders and any Recovery Group(s).

6.12 Dorset Civil Contingencies Unit

Dorset Civil Contingencies Unit (CCU) undertakes a generic role for all major incidents declared within the Dorset LRF boundaries.

Notification

Dorset Police Control will notify Dorset Civil Contingencies Unit Duty Officer.

Dorset Police will confirm if a major incident has been declared, pass a METHANE message and request the CCU activate:

- OpLINK NERO via DPAS to notify, if scheduled, the time of a multi-agency teleconference and/or where the Strategic Co-ordination Centre (SCC) and Tactical Co-ordination Centre (TCC) will be located and any specialist cells e.g. Science and Technical Advice Cell (STAC) and Warning and Informing Cell (former ICC).

Response

The Head of Dorset Civil Contingencies will attend the Strategic Co-ordinating Group (SCG) as Strategic Liaison Officer. The duty CCU Officer will attend the Tactical Co-ordinating Group as Tactical Liaison Officer.

Regardless of location, if a Resilience Direct incident response page has been established, the CCU Officers will manage the page, including the following information:

- Activate the news banner with the dates and times of SCG/TCGs;
- Add to the news banner, agency reporting deadlines;
- Attend SCG and TCG to record and allocate and update on actions via RD;
- Monitor progress on actions and prompt organisations regarding deadlines and response.

Venue

If the SCC has been activated and located at Dorset Police HQ, Winfrith or Dorset & Wiltshire Fire and Rescue Service (DWFRS), Poundbury, then the Dorset CCU Duty Officer will task all available Dorset Civil Contingencies Unit staff to 'stand up' the SCC in conjunction with Dorset Police or DWFRS staff as applicable. Virtual arrangements also apply. Regardless of location (Dorset Police HQ Winfrith, DWFRS Poundbury or Dorset Council Dorchester) or virtual, CCU staff will support the co-ordination centre whilst local corporate staff will provide facility management.

REPPIR incident

Dorset CCU staff are not emergency workers i.e. likely to receive any exposure as a result of their role in the plan.

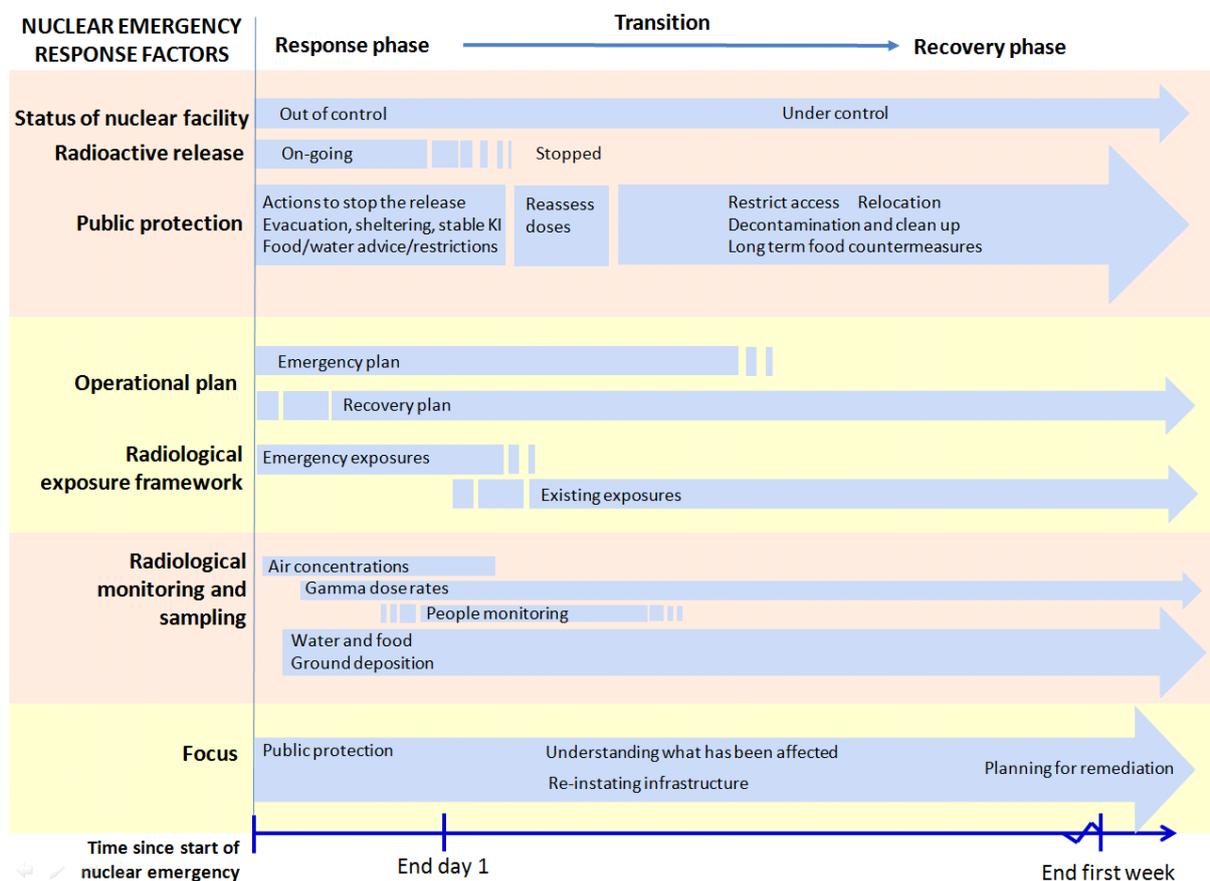
PART 7 : RECOVERY PROCEDURES AND TRANSITION TO RECOVERY

7.1 Background

This section should be read and actioned in conjunction with the DLRF Recovery Framework, UK Recovery Handbook for radiation incidents 2024 and NEAG paper 13, 2020 and contains a flowchart for the On-Site Commander and Military Co-ordinating Authority to guide the notification to the SCG that the site is ready to transition to recovery. Under REPIR 19 the off-site plan has to specify responses for all the phases of a radiation emergency, therefore also specify the actions to be taken to ensure a smooth transition to the recovery (TTR) phase.

As response progresses, the emphasis on activities will begin to shift away from response and recovery will become the dominant focus. Some response activities/locations will progress to recovery actions sooner than others. This is consistent with a gradual transition to recovery rather than a step change. A process map for transition is also included at Annex 7A.

Nuclear Emergency Response factors



REPPIR 19 defines the recovery phase as an “existing exposure condition” (Para 435, REPPIR 19 ACOP), stipulates that planning for recovery should begin at the earliest opportunity following the onset of an emergency, and run alongside the response.

“existing exposure situation” means an exposure situation which does not call or no longer calls for the implementation of any protective action from an emergency plan;

When the state is returned to an existing exposure situation, the situation is no longer in an emergency phase and has fully transitioned to the recovery phase or beyond.

The declaration state OSNE - Recovery has been adopted to signal that the emergency response phase has finished, and the recovery phase has commenced.

REPPIR 19 does not place a requirement to have a recovery plan per se, rather that the TTR is a mechanism by which the response phase is formally declared over, and the recovery phase commences.

7.2 Transition to Recovery

The boundary between the response phase and the long-term recovery phase cannot be defined exactly, since the circumstances and progression of the emergency will influence the determination of when response is considered to have ended. Initial planning for recovery will run in parallel with the response phase, although the recovery phase will officially start once there is no threat of further release and the radiological situation is well characterised. Care should be given to TTR actions which are carried out in parallel with the response phase actions so that they do not impact/deplete the response phase arrangements, organisation and/or infrastructure

It is the responsibility of the Strategic Commander to ask for the establishment of a Recovery Co-ordinating Group (RCG) at the earliest opportunity, who will operate in parallel with response, recording response issues pertinent to recovery and addressing these. The local authority should convene the Recovery Co-ordinating Group asap following this direct request from the SCG. Virtual arrangements also apply.

In turn the RCG will advise the SCG on actions to reduce the impact of the emergency and scale of recovery and will agree its priorities with the SCG. The chair and overall co-ordination of the RCG will be undertaken by Dorset Council.

By taking on board recovery related issues from the response phase, strategic objectives, and assessment of the wider and longer-term impact of the emergency, the RCG should be able to identify several broad themes to be addressed by individual working/ specialist sub groups (aka Recovery Working Groups – RWG's).

Broad RCG objectives may include:

- Conduct a formal Recovery Impact Assessment (based on the preliminary RIA conducted by the SCG if carried out – see LRF Recovery Framework);
- Ensure utilities and transport networks are brought back into use as soon as practicable;
- Determine at an early stage if there is an opportunity for longer term regeneration of the infrastructure and/or environment;
- Determine at an early stage if there is any financial aid available to assist recovery efforts;
- Ensure environmental protection and recovery issues are co-ordinated;
- Determine at an early stage if there is an opportunity for longer term economic development as part of the recovery process;
- Determine at an early stage if there is an opportunity to enhance the resilience of the area (physical and social) through humanitarian assistance measures;
- Ensure information and media management of the recovery process is coordinated through the Communications, Media and Warning and Informing Sub-Group; and
- Ensure effective protocols for political involvement and liaison are established.

In a dynamic approach the TTR process requires consideration of:

- Has the onsite incident been contained (including non-radiological hazards)?
- Has the release of radioactivity stopped?
- Is there no significant risk of further radiological release?
- Have on-site urgent protective action been fully implemented?
- Is infrastructure essential to support community recovery functioning normally (communications, transport, utilities, health and social services)?
- Will there be any exclusion areas during the recovery phase?
- Does delaying the TTR necessitate the additional distribution of Stable Iodine Tablets due to changes in the wind direction (actual or forecast) or to provide a second dosage?

The transition from response to recovery also requires agreement on establishing a new reference level (RLs) appropriate for existing exposure situations and around which to optimise protection.

For the longer-term recovery phase (constituting an existing exposure situation), RLs relate to the total residual dose estimated to be received in a year, once the emergency exposure situation is declared over. UKHSA considers it appropriate in planning to select a RL of 20 mSv y⁻¹ or below, with a long-term objective of 1 mSv y⁻¹. Furthermore, and depending on the duration of the recovery phase, it may be appropriate over time to re-evaluate and lower the RL to accompany any improvement in the radiological situation.

As part of the transition process (see also Annex 7A):

- The On-site Commander will take advice from the MCA, who should keep the SCG informed of the sites progress and complete the actions in the checklist at Annex 7C.
- The On-site Commander and MCA should ensure that the information at Annex 7D is available to support decisions by other responding organisations.
- There may be a period when the On-site Commander and MCA agree that the site is ready to TTR having completed all the actions at Annexes 7B and 7C and are waiting for approval for formal transition from the SCG. During this time the site should continue to gather information to support the recovery phase.
- The MCA should inform all Defence responders as soon as the SCG has agreed TTR based on all advice and evidence collected. Once the SCG has endorsed the site for transition the declaration OSNE (recovery) should be transmitted to all Defence responders.

Following OSNE (Recovery) a formal handover to Recovery will take place between the Strategic Police Commander and the Dorset Council RCG chairman (formal letter proforma included in the LRF Recovery Framework).

All information collated as part of the response phase will be handed over to those responsible for the recovery phase including records of radiological data, events, decisions taken and actions carried out, as appropriate. This should include a report on the status of all response phase actions and outstanding issues, as well as an outline of the long-term impact assessment. When ready, a debrief report with lessons learnt following the end of the response phase will also be forwarded to the RCG.

7.3 Longer Term Protective Actions

Following the end of a release of radionuclides to the environment, it is important to determine whether the magnitude of the residual doses warrant further protective actions to be implemented in the long-term as part of the recovery strategy, and further considerations, when urgent protective actions are withdrawn.

These longer-term protective actions and remediation considerations may include:

- Temporary or permanent relocation;
- restricting access to contaminated areas,
- clean up of contamination and disposal of wastes,
- remediation of land and buildings,
- restrictions on food and water supplies,
- follow-up health surveillance,

- compensation claims

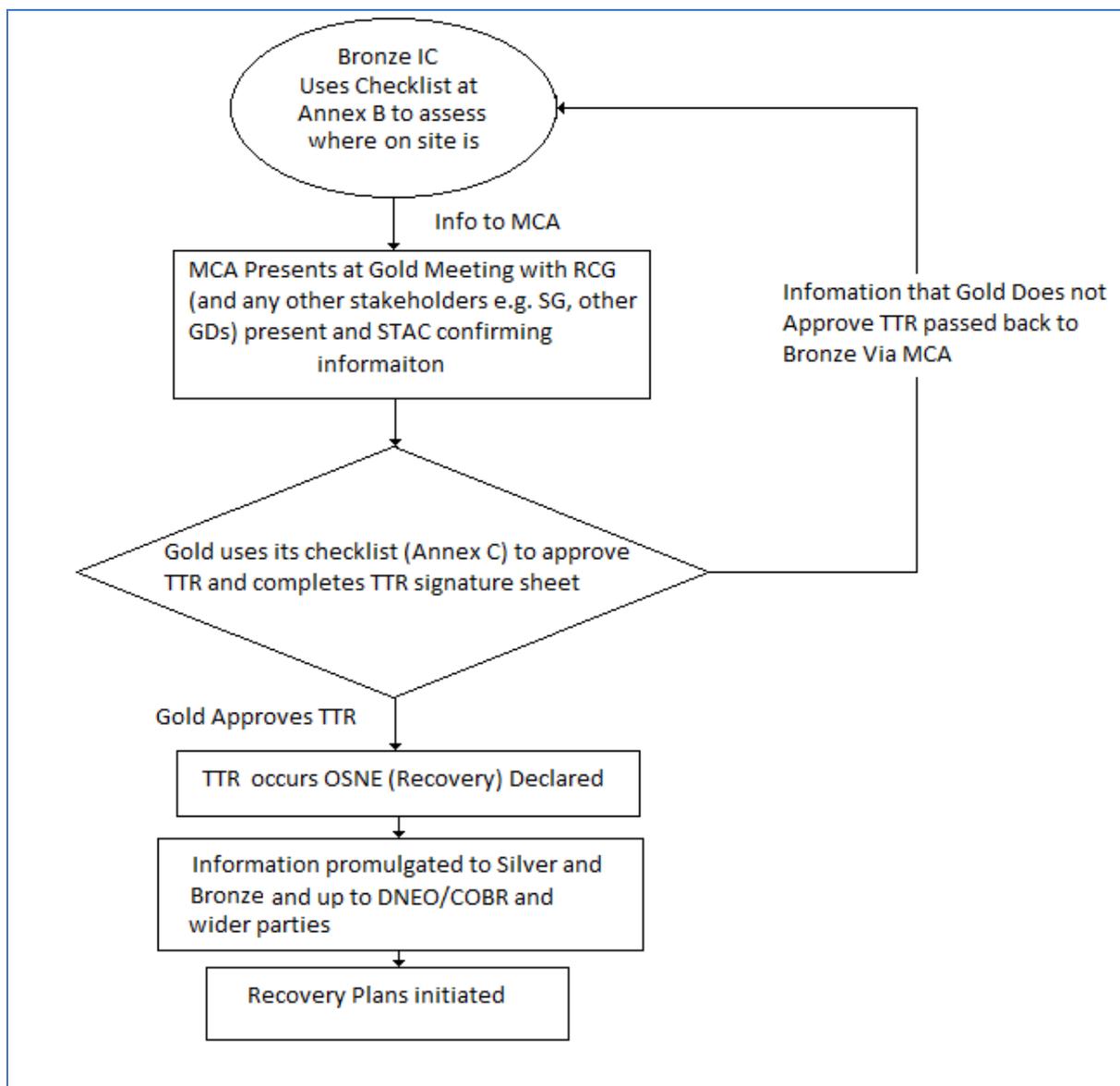
7.4 Further Information and Advice

Further information and advice on remediation a procedure is now contained in the PHE-CRCE-018 UK Recovery Handbooks for Radiation Incidents: 2015 v4 details can be accessed on the following website:

<https://www.gov.uk/government/publications/uk-recovery-handbooks-for-radiation-incidents-2015>

This publication been developed to assist in the management of contaminated food production, inhabited areas and drinking water supplies following a radiation incident.

Annex 7A: Process map for TTR



Annex 7B: On-site Commander TTR Checklist*

	By	Yes/No
The DIREMS / TREMS readings are stable	HP	o
The airborne hazard is at levels close to those before the emergency.	HP	
The on-site monitoring capability is sufficient to support the initial stage of on-site recovery	MC / HP	
All subsequent interventions can be managed as IRR 17 as existing emergency situations (IRR (Misc Provisions) 18)	HP and TASG	
The technical assessment is that there will be no further release of radiological material	TASG	
The facility is secure and stable	TASG	
The land site is secure and stable	MDP / MGS	
The seaward site is secure and stable	MDP / MGS	
There are sufficient resources to maintain security during the initial recovery stage	MDP / MGS	
The PPL is ready to TTR	PPL	
The On-Site plan has been fully implemented e.g. Evacuation of non-essentials, (NB: if on site plan has not been fully implemented then a rationale on why parts have not been implemented).	IC	
All casualties have been dealt with	IC	
There are no other on-site hazards that are likely to require reinstatement of the emergency phase	IC	
Crime scene evidence gathering will not be disrupted by transitioning to recovery	IC	
On-site recovery team has been identified and is ready to stand-up	IC	
The aims for the on-site recovery plan have been established	IC	

*The IC (incident commander) should inform the MCA of the outcome of this checklist. The site is ready to transition if all responses are positive, but may transition earlier, following consultation with the MCA.

Annex 7C: MOD Co-ordinating Authority TTR Checklist *

	By	Yes/No
The OSC has informed the MCA that the site is stable, secure and ready to commence recovery actions	IC	
MOD HP support is available to the STAC to provide interpretation of monitoring results to assist with the recovery phase	MOD HPA	o
MOD monitoring assets are available to support the initial stage of recovery	MOD HPA	
Additional MOD monitoring resources have been identified if requested	MOD HPA	
The broad details of the extent and scale of the release have been quantified, confirmed and correlated.	MOD HPA	
DNEO in MOD HQ has been informed that the site is ready to commence recovery actions	MCA	
All crime scene evidence preservation actions have been promulgated to the site.	MCA	
The Joint Resilience Liaison Officer has been informed (if deployed) that the site is ready to commence recovery actions.	MCA	

*The MCA should keep the SCG informed of progress against this checklist.

From the MOD perspective the SCG should not enter the recovery phase until all responses are positive.

Annex 7D: Information that will assist the transition, and which is required by responding organisations to inform decisions

*

	Held by	Yes/No
Monitoring Results	RREMS	
Status of responding monitoring forces	Monitoring Controller / MOD HPA	o
Accident diagnosis and prognosis	TASG / TGG	
Site stability and security	IC	
All casualties have been dealt with	IC	
Site awareness of crime scene evidence preservation actions	IC	

*The MCA should inform the SCG of the outcome of this checklist.

PART 8 : OUTLINE PLANNING ZONE (OPZ)

8.1 Background

Outline planning builds on the arrangements and capabilities in existing emergency plans to provide commensurate planning for low probability events. Where a site has a detailed emergency planning zone, outline planning operates at distances beyond the detailed emergency planning zone but can also be undertaken in the detailed emergency planning zone (i.e. in the case that some protective actions may not be required in the detailed emergency planning zone except for severe emergencies).

For Portland Port the OPZ distance has been set out by the operator in the consequences report and agreed by the Secretary of State for Defence at 5km. The operator's description of the geographical extent for the outline planning zone should be a circular radial distance (km) with the centre point clearly indicated (See Figure 2).

The main aim of OPZ planning is to support decision making and identify protective actions that may be needed at strategic level, where those capabilities could be obtained from, and the anticipated time frame over which they will become available, rather than having them in place ready to mobilise without delay (ACOP 2019).

OPZ planning should only include strategic arrangements and considerations that would be necessary, as the tactical and operational arrangements will be developed on the day. These plans should build on the capability of other plans that exist for generic emergency planning arrangements. Where existing arrangements are already in place covering part or all of the identified outline planning zone the off-site plan should act as a signpost to these.

This plan is building on existing generic Dorset LRF approaches (see plans list at the end of this document), as well as the findings of an extendibility workshop held in 2017 which was replicated across several operational berths, with uniformity of process and approach in mind (Katmal Limited report). The extendibility workshop identified requirements for shelter and distribution/taking of SITs out to 5km, which have been taken forward as the basis of response for outline planning.

The extendibility report (full report available from Emergency Planning Dorset Council – reference at end) decided that a protective action is practicable if it can be implemented in an area within a suitable timeframe. The area around the berth was divided into 12, 30° sectors for planning purposes; this approach was maintained for OPZ planning. Vulnerable facilities such as schools and hospitals are pre-identified.

A three-colour system is used to rate further protective action planning across these preidentified sectors (see specific sector maps later in the section):

- **Green:** The protective action is considered both practicable and worthwhile to implement using existing plans or modest additions to them;
- **Amber:** the protective action would be both practicable and worthwhile but for it to be implemented successfully it would require some additional, locally actionable, work to be completed (in some cases after additional national guidance);
- **Red:** Protective action either impracticable or would require major work and/or resources.

		Shelter		Stable Iodine Distribution
Portland Harbour and Marine Areas				
Sectors 1, 11 & 12		Shelter does not really apply in this area. Strategy would be to warn and inform and ask itinerants and water users to disperse.		People leaving the water once warned could be dispersed over a wide sea frontage making distribution and control difficult.
Portland Harbour.				
Sectors 2 & 10				Numbers could exceed the current local stocks of PITs during the bigger events.
Fishing		Warning and informing and then supporting population across the wide expanse of water and large perimeter would be challenging.		However, bigger events are formally managed so there would be good channels for the transmission of advice and delivery of countermeasures.
Sectors 9 & 11				
Chesil Beach				

Isle of Portland				
Sector 6		While the resident population can shelter it may be harder to accommodate a large number of itinerants.		Stocks of PITs exist on the Isle but door to door distribution within the warning time may be impractical with current resources. Other options would be required.
Sector 7				

South Weymouth (Inner)			
Sector 11		Warning and informing could be improved if the EA flood system, or similar, could be used.	
Sector 12		Sheltering of the resident population would be possible.	
South Weymouth (Outer)			
Sector 11		As for inner area but with greater demand placed on the finite resource available.	
Sector 12		As for inner area but with greater demand placed on the finite resource available.	

8.2 OPZ Sectors

Building on extendibility work and multiagency consultation, the area around the berth remained divided into 12 30° sectors for OPZ planning purposes too. Sector maps and a summary of these areas/sectors is presented below, including some characteristics which would assist in response considerations for OPZ.

Portland Harbour and Marine Area Sectors (1,2, 9-12)



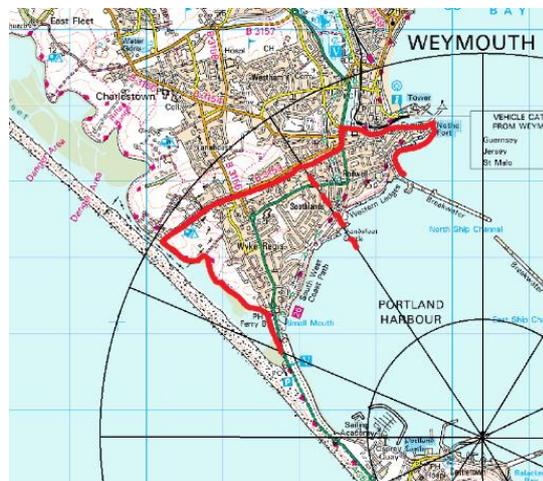
- No population
- Variety of boats
- Surfing, diving, sailing
- Fishing, walking
- Boats coming in and out of harbour

The Isle of Portland Sectors (6,7)



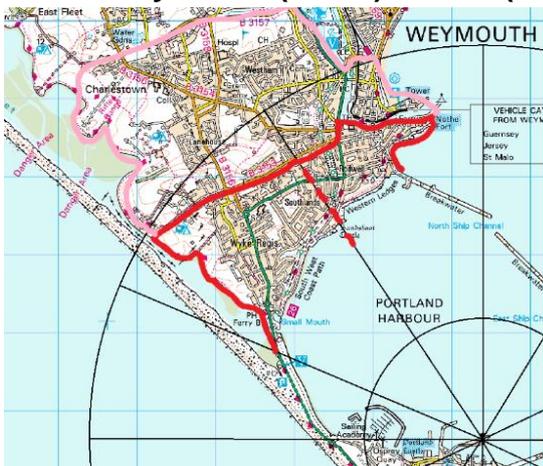
- 4010 residential addresses
- HM YOI (approx. 600 capacity, pre-distributed)
- Cove Holiday Park and Caravan Park
- Easton Health Centre (holds extra 15 k SIT's)
- St Georges school (440) and Atlantic Academy (1150)
- Portland Bill and SW path visitors

South Weymouth (inner) Sector (11, 12)



- The Weymouth sectors were each divided into two with the “inner” zones being that area south of the B3513 and the “outer” zones to the north.
- 11 inner – 4,009 properties – 10,002 residents
- 12 inner – 1,868 properties – 46,70 residents
- Schools, marina, hospitals, holiday parks, camping, Nothe Fort, RNLI station, Sandfoot Castle, Sailing club.

South Weymouth (Outer) Sector (11,12)



- 11 Outer - 8507 properties - 21267 residents check with GIS
- 12 Inner - 5968 properties - 14920 residents
- Railway station
- Bridges medical centre
- 3 schools and Budmouth college
- Littlesea holiday park
- W&P community mental health centre
- Granby industrial estate

Local Authority OPZ planning does not ask for the undertaking of additional plans beyond those already existing generic ones and those requirements under REPIR '19, and proportional planning applies. A number of considerations for OPZ response are included based on the assessment of the characteristics of the sectors identified above.

8.3 OPZ Considerations

OPZ activation is unlikely to be 360 degrees, and in order to ensure a timely and efficient response to the incident it is important to have a clear understanding of the characteristics of the OPZ sectors affected as early as possible.

Some of the OPZ sectors are heavily populated, which raises the question as to what would be the best approach for SIT's delivery. Based on resources availability and logistic challenges - the population within 5 km, particularly in the holiday season and during major events, is such that door to door distribution of SITs would not be possible in all areas within the warning period - it is recommended that a collection approach is taken for Portland OPZ's. Local assets identified that could be used as collection stations include local rest centres, libraries, pharmacies and surgeries. If a collection station approach is taken, then leaflets will be handed out with the SIT's, as these sectors would not have benefitted of prior information. The population within 5 km, particularly in the holiday season and during major events, is such that door to door distribution of SITs would not be possible in all areas within the warning period with current resources. This protective action would be applied incrementally from close to the scene outwards as resources allowed with cruder but quicker processes, such as local collection points, in the wider area.

Enable the Emergency Services to send a text message to all mobile phones in an area (cell broadcasting) about the emergency and what to do. This needs to be addressed with the appropriate operators which are part of the Category 2 responders LRF group and the LRF Resilient Telecoms Plan.

Number of extra SIT's available – a number of extra 15k SIT's is stored on Portland at the Eason Health Centre. These are to be used primarily for the isle of Portland (sectors 6,7), but depending on the specifics of the incident (wind, plume, etc) can be used wider. However, given the high population numbers in some sectors (e.g. 11 and 12) extra SIT's from the national stockpile (with approx. a 4 hour delay built in) or other nearby berths (Portsmouth, Southampton) have to be considered as soon as possible as the local stock may not be sufficient.

Transport of SIT's to the collection sites will be facilitated by local Dorset Council transport services, and MoD resources will be used to transport extra requirements from the adjacent berths and national stockpile to a central distribution point from where DC will take the lead. DC depots or the Old Radio Station near Dorchester can be used for this purpose.

Most of the area has experience of preparing for and responding to floods, evacuating areas in response to the discovery of unexploded bombs and

managing large crowds of visitors (Olympic legacy). This provides transferable skills and experience at LRF level in the Weymouth area which is readily available in a number of other plans (see plan section at the end).

For marine sectors there could be many boats of a range of sizes in the water, particular during sailing events. Many of the events would be controlled from the sailing school offering some immediate ability to communicate with those in or on the water.

A variety of other tools can be used to warn those on and in the water. These include marine band radio, flares, sirens and loud hailers. Those alerted would be expected to land and/or disperse where possible (There may not be sufficient doses of SITs available for all water users and at all potential landing sites at peak time). There will also be a variable number of support vessels in the area including police launch, tug boat and other support vessels that will assist with the clearing of the harbour.

OPZ sectors will not have received the information leaflets, but use of a mix of traditional and social media would be adequately successful at alerting members of the public at home or in some workplaces, particularly if there is a warning period of a few hours. If a collection station approach is taken, then leaflets will be handed out with the SIT's, including detail on dosage. Media will also actively point towards the Portland Port web page which holds all the detailed information, including the Plan and public information leaflets.

For those itinerants particularly on the Isle site, there are a number of hotels, schools and halls that could offer shelter to itinerants if required. Notices will be put in car parks asking itinerants to report to a distribution centre for advice and SITs, on return to their car. Digital traffic signage can also be used and EA VMS boards, and Police and MCA loudhailers along coast areas where cars park casually outside dedicated car parks.

While many of the population could shelter for up to 24 hours without too much difficulty, vulnerable groups will have to be considered. GIS teams and the DLRF vulnerable people plan will be used to gain an insight into this information. Most of this information is likely to be identified at the time of the incident due to the ongoing changing nature of vulnerable people data.

Good traffic management is required to help itinerants and local self-evacuees leave the area in good time. The way in and out of Weymouth may clog up in an incident despite the Olympic relief road. Current flow at peak hours is a good indicator and Police and DC highways are to support this process.

A road block at the Ferry Bridge will be used to prevent more traffic coming on to the Isle and traffic management will be required to keep the main roads free of blocks for those leaving the area. Chesil Beach A354 car park on the causeway is also used as a Rendezvous Point and will need to be cleared of visitors as a matter of course. SIT's could be made available to people coming out of affected areas / itinerants at imposed road controls.

PART 9 : APPENDICES

Appendix 1: SITREP Template Portland Port

Appendix 2: SCG SITREP Template for COBR

Appendix 3: Generic TCG Agenda

Appendix 4: Generic SCG Agenda

Appendix 5: Associated plans and guidance documents

Appendix 1: SITREP Template Portland Port

SITREP
Portland Port

The following template needs to be filled out in the Portland Port Operational Control Centre, by the Police liaison Officer or Fire Service Liaison Officer if Police are not present at Portland Port with all the relevant on site information and transmitted via email to the Police Tactical Staff Officer for the Tactical Commander and Tactical Co-ordinating Group (TCG).

On receipt of the document it will be the responsibility of the Police Tactical Commander’s Staff Officer or the Tactical Room Manager (if appointed) in Tactical Control to populate the relevant off site information and transmit to the Dorset Civil Contingencies Unit (ccuduty@dwfire.org.uk) and to the Portland Port Incident Control Centre. The Dorset Civil Contingencies Unit Duty Officers will disseminate to other agencies via Resilience Direct as well as to the SCG Chair.

The template should be sent as a minimum hourly, more frequently if required. If there is a major insertion this must be phoned through to TCC via Tactical Control as well.

The information currently available should be forwarded and the template not held up while information currently not available is sought.

This should be a consolidated template with old information in black and new information in red.

If technical information is inserted into the template an explanation should be also be inserted in layman’s terms to allow all decision makers to understand the information.

Clarification of the information contained within the template should be done via the relevant liaison officer in the various command centres.

This template should only be sent once command structures have been set up. **METHANE will already be in use.** Notification of any incident should be via the pre agreed cascade.

All boxes within the template are expandable.

Principles for Joint Working:

Co-Locate	Portland Port Incident Control (Forward Control Point Britannia Terminal car park)
Communicate	Flow of information to emergency service control rooms, TCC, SCC
Co-Ordinate	JESIP huddle utilising Joint Decision Model (JDM) followed by update to TCC/SCC
Joint Understanding of Risk	Integrated multi-agency response plan
Shared Situational Awareness	METHANE

INCIDENT		
(M) Major Incident declared?		
(E) Exact Location (location, type and name of vessel)		
(T) Type of Incident (off-site nuclear emergency). a qualifier may be applied either “Radiation Hazard Confirmed” or “Release of Radioactive Material Confirmed” (For definitions see PART 2, PARAGRAPH 2.16): (what’s happened)		
(H) HAZARDS Present		
Radiation release in Submarine	On site	
Contamination detected outside the Submarine (levels, locations, what does this mean/equate to)	On site	
	Off site	
Other hazards (e.g. fire, RTC)	On site	
	Off site	
Time/Date		
(A) Access – routes and locations that are safe to use		
Command Centres & RVPs	On site	
	Off site	
Cordons	On site	
	Off site	
Access/Egress (red routes, blocked routes, areas to be avoided etc)	On site	
	Off site	
Wind Speed/Directionm/s..Direction	Weather Conditions (inc predicted conditions)	Cat: (OSNI / OSNE –with qualifiers)
(N) Number, type, severity of casualties		
Casualties: (location, number, triage info, issues, self presenters etc)	On site	
	Off site	
Missing persons/unaccounted	On site	
	Off site	
Fatalities	On site	
	Off site	

Dispersal off base (when, which gates, time, number – must be done in consultation with Tactical Commander)	
(E) Emergency Services present / required	
Organisations Responding (inc number of staff and relevant equipment)	On site
	Off site
ADDITIONAL INFORMATION	
Protective actions	
Shelter (number, locations & issues)	On site
	Off site
SITs Distribution (authorised, numbers, timescales, locations & issues)	On site
	Off site: (time started/completed)
Evacuation (number, locations & issues)	On site
	Off site
MEDIA ISSUES (INC SOCIAL MEDIA, have press releases been issued)	On site
	Off site
TRANSPORT ISSUES	
Road	On site
	Off site
Rail	On site
	Off site
Air (inc air exclusion zone)	On site
	Off site
Maritime (inc exclusion zone, any port restrictions.)	On site
	Off site
COMMUNITY ISSUES	On site
	Off site
RECOVERY ISSUES	On site
	Off site
OTHER RELEVANT INFORMATION	
Completed By	
On site Name: Organisation	Off site Name Organisation Time:

Appendix 2. SCG SITREP Template for MHCLG

(to be completed by the SCG in support of MHCLG RED)

OFFICIAL – SENSITIVE (when complete)

EVENT/INCIDENT			
DATE & TIME			
SCG CHAIR	<i>(name and contact details)</i>		
SITREP POINT OF CONTACT	<i>(name and contact details for amendments / collation)</i>	SITREP No.	

SUMMARY OF GUIDANCE FOR COMPLETION OF THE TEMPLATE (REMOVE WHEN COMPLETE)

Please observe the following key points in completing the SITREP template:

- This SITREP will focus on the strategic dimensions of the emergency and issues arising from that. It will be based on operational reporting, but the strategic issues should not be obscured by operational detail.*
- The template is intended for use in civil emergencies and CT incidents alike.*
- The RAG status will reflect a judgement of the situation, progress and likely developments – there is no detailed method or metrics to follow, just a defensible judgement of these three dimensions.*
- Reporting the assessed quality of information, together with source and time is critical.*
- Where images (e.g. maps) and tables (e.g. progress against key indicators) support situational awareness they will usually be appended in annexes.*

SITUATION OVERVIEW

A concise and strategic overview of the situation, its impacts and implications. This should be written as paragraph of text or using a few bullet points, and will draw on the operational (METHANE) reporting, but emphasise the strategic dimensions and issues.

SUMMARY OF THE RESPONSE

A concise overview of the operational response, drawing attention to any current or foreseen resource or capability issues. This should also summarise the Command, Control and Co-ordination (C3) arrangements that have been established.

FORWARD LOOK

A summary of possible developments, emerging risks and critical uncertainties that have potential strategic implications for the response and recovery effort.

RESOURCE ISSUES

A summary of current and foreseeable resource and capability issues, highlighting any potential or possible requirements for assistance, for example mutual aid between responders or through MACA.

STRATEGY	
Working strategy	<i>A course of action integrating ends, ways and means to meet policy objectives.</i>
Overarching aim	<i>A short, precise and measurable statement of the overall end state you want to achieve. Influenced by, and consistent with, overarching policy.</i>
Objectives	<i>A list of steps, phases or tasks that have to be completed in order to achieve the overarching, strategic aim.</i>
Public comms strategy	<i>A statement of intent and brief description of the course of action to inform and communicate with the public.</i>

AGENCY SITUATION REPORTS TO INCLUDE SUMMARIES OF:
<ul style="list-style-type: none"> • Direct and wider impacts • The operational response • Significant risks, emerging issues • Assumptions and critical uncertainties • Forward look • Other resilience issues arising • RAG status explanation • Point of contact and time/date of last update/check of the information

Emergency Services	RAG Status	
Police	R A G	
Fire	R A G	
Ambulance	R A G	
Maritime & Coastguard Agency	R A G	
Other	R A G	

Local Authority(ies)	RAG Status	
Local Authority NAME Department NAME	R A G	
Local Authority NAME Department NAME	R A G	

Health	RAG Status	
NHS England	R A G	
UKHSA	R A G	

Met Office	RAG Status	
Current situation	R A G	
Forecast	R A G	
Likely impacts and risks arising	R A G	

Environment Agency	RAG Status	Note: For pluvial and groundwater flooding the Lead Local Flood Authority (LLFA) will also be involved and reporting
Current situation	R A G	
Forecast	R A G	
Likely impacts and risks arising	R A G	

Animal & Plant Health Agency	RAG Status	
Current situation	R A G	
Forecast	R A G	
Likely impacts and risks arising	R A G	

Transport	RAG Status	
National Highways	R A G	
Highways Authority (see LA)	R A G	
Network Rail	R A G	
British Transport Police	R A G	
Train Operating Company	R A G	
Other	R A G	

Utilities	RAG Status	
Electricity	R A G	
Gas	R A G	
Water	R A G	
Telecoms	R A G	
Other	R A G	

Voluntary Sector	RAG Status	
Organisation NAME	R A G	
Organisation NAME	R A G	

Military	RAG Status	
Overview	R A G	
By unit or by capability area	R A G	Capability areas would for example include logistic support, EOD (explosives), engineering or air support.

Summary of other involved groups	RAG Status	
STAC	R A G	
Humanitarian Assistance	R A G	
Recovery Group	R A G	
Other	R A G	

Other Responders	RAG Status	Note when other org's are involved, their input will usually be included in the report of their 'sponsoring organisation'
Organisation NAME	R A G	
Organisation NAME	R A G	

ASSESSMENT OF PUBLIC PERCEPTION OF THE SITUATION, RESPONSE EFFORTS AND PROGRESS
<i>This should reflect the perception, established from a range of sources including social media, of different public and community groups, including residents, businesses and those who are indirectly as well directly affected by events.</i>

PUBLIC AND COMMUNITY RESPONSE
<i>This should cover:</i>
a) Key messages being issued, in line with the public communications strategy;
b) Means being employed to send key messages to public and community groups;
c) Means being employed to receive communications from public and community groups.

OTHER ISSUES NOT COVERED ELSEWHERE

DATE AND TIME OF NEXT SITREP UPDATE

GUIDANCE NOTES FOR COMPLETING THE SITREP TEMPLATE (REMOVE WHEN COMPLETE)

- The primary audience for the SITREP is the SCG. Additional audiences will include MHCLG Emergency Room, COBR, neighbouring or otherwise affected SCGs and other stakeholders as required.
- The SITREP will draw heavily on METHANE and other forms of reports from the tactical and operational levels but these should be summarised to emphasise the strategic issues
- The SITREP will usually be drafted in advance of an SCG meeting, then completed and disseminated up/down/sideways as required following the meeting, with agreed actions.
- The SCG and its support staff should determine who completes the SITREP. The GLO/GLT will have a role in synthesising strategic information from the completed SITREP for onward transmission to COBR.

Logic of the template

- The template is a starting point for situational reporting at the strategic level
- The template can be adapted if necessary to fit the specifics of a situation
- Adaptation should not however be done to reflect personal preferences

Protocols for updating

- Material that is new or revised since the previous SITREP should be in red text

- The date/time/source of material should be prominent and clear

RAG status

- The RAG status is an honest and defensible appraisal of three dimensions of the emergency: a) the situation, b) the response to it and c) foreseeable developments.
- Because three dimensions are being combined into a single indicator, and in the absence of a prescribed method of doing so, the RAG status will reflect the collective judgement of the SCG.
- There is no merit in ‘talking up’ or taking an unrealistically optimistic view of where things stand and how they are projected to develop.
- The relevant text entry should adequately explain the RAG status given.
- Indicators of the three levels are defined as follows:

RED	<p>SITUATION: The incident is having a strategically significant impact; normal community business has been significantly affected.</p> <p>RESPONSE: The response is at or has exceeded the limits of capacity or capability, and further resources are required.</p> <p>FORWARD LOOK: The situation is expected to either get worse or remain at this level for the short to medium term.</p>
AMBER	<p>SITUATION: The incident is having a moderate impact with issues of strategic concern; normal community business has been affected, but the situation is being effectively managed.</p> <p>RESPONSE: The response is being managed, at this time, within current resources and through the activation of local contingency plans and/or coordinated corrective action; mutual aid might be required in the short to medium term.</p> <p>FORWARD LOOK: The situation is not expected to get any worse in the short to medium term although some disruption will continue.</p>
GREEN	<p>SITUATION: There is limited or no strategic impact from the incident; normal community business has largely returned or is continuing.</p> <p>RESPONSE: Ongoing response is being managed locally, and within the capacity of pre-planned resources.</p> <p>FORWARD LOOK: The situation is expected to improve with residual disruption being managed.</p>

Reporting provenance and quality

- The source/time and assessed quality of information should be clearly and prominently reported.
- Where critical uncertainties (i.e. factors that are unknown, but which have the potential to strategically alter the situation if they become known) exist they should be clearly identified and associated risks set out.

Defining concepts and terms for common understanding

- Where common understanding of a concept or term is necessary for shared situational awareness it should be clearly explained.
- Common understanding of terms cannot be assumed – terms should be defined.
- Where agreed definitions exist these should normally be adopted and explained (e.g. there is a definition of ‘flood’ in the Water Flood and Water Management Act 2010).
- Acronyms and abbreviations should be minimised, and always explained at their first use in every issue of the SITREP.

Examples of content for each of the template sections, including nature and severity of impacts and other details as required. **Note** that this is an indicative list, not a comprehensive checklist to report against:

<p>Key locations (incl. grid reference and/or postcode)</p>	<p>Relevant timings (e.g. timescale to mobilise assets or shut down a facility)</p>
<p>Impact on health and humanitarian assistance</p> <ul style="list-style-type: none"> • Casualties / fatalities / missing persons • Public Health / primary and secondary healthcare / welfare • Mortuary capacity and operations • Humanitarian assistance - Rest Centre and other facilities occupancy • Social care 	<p>Impact on essential services</p> <ul style="list-style-type: none"> • Electricity, gas, water, telecoms, fuel • Sanitation, waste management, sewage • Burials/cremations • Transport: aviation, maritime, rail, road, bus • Postal services • Status of reserves or alternative supplies
<p>Economic impact</p> <ul style="list-style-type: none"> • Businesses directly and/or indirectly affected (numbers or range if estimate) • Supply chain consequences • Impact on workforce • Impact on tourism • Rural economy: farms, food production sector, etc. 	<p>Environmental impact</p> <ul style="list-style-type: none"> • Water or land contamination, air pollution • Waste management issues which may be associated with the response • Impact on agriculture • Food availability/supplies • Animal welfare
<p>Impact on communities</p> <ul style="list-style-type: none"> • Private dwellings, public premises / assets • Vulnerable people/groups, homecare • Evacuation • Housing and temporary accommodation • Community transport • Education • Community response; nature and extent • Engagement by the voluntary sector 	<p>Response and capability issues</p> <ul style="list-style-type: none"> • Specified, implied, essential, and potential tasks • Weather: forecast and associated risks • Current status of resources / capabilities (dispositions and availability) • Mutual aid including military support • Key considerations and assumptions • Constraints on the operation (e.g. time, resources, sustainment, demand) • Contingency planning • Capacity of local tier to respond / requests for support from national tier / central government • Finance, Bellwin Scheme
<p>Emerging recovery issues</p> <ul style="list-style-type: none"> • Infrastructure and essential services repair and/or reconnection • Financial assistance (e.g. business rates or council tax relief) • Insurance issues • Any bureaucracy or “red tape” challenges • Future resilience investment • Lessons (to be) identified 	<p>Criminal justice issues</p> <ul style="list-style-type: none"> • Public order/crime • Prisons and probation • Courts • Protection of property • Community safety / community cohesion Issues

Appendix 3: Generic TCG Agenda

TACTICAL CO-ORDINATING GROUP (TCG) AGENDA (incorporating JDM & METHANE)		
<ol style="list-style-type: none"> 1. Introductions (to include Loggist/Action Manager) 2. Explain meeting etiquette (silence is agreement). 3. Items requiring urgent attention (Refer to Sitreps on RD by exception) 4. Breakout as necessary 5. Main agenda following the Joint Decision Model (JDM) 		
JDM	Heading	Subject
Gather Information and Intelligence	METHANE	<ul style="list-style-type: none"> • What is happening/has happened? • What do I know? • What else do I need to know?
	People at risk	<ul style="list-style-type: none"> • Casualties • Missing persons • Vulnerable people • Evacuated
	Property at risk	<ul style="list-style-type: none"> • Currently affected • Likely to become affected
	Services at risk	<ul style="list-style-type: none"> • Electricity/Gas supplies • Water supplies and treatment systems • Transport network: road and rail • Phone network providers • Food supplies

JDM	Heading	Subject
Assess Risks and Develop a Working Strategy	Current risks	<ul style="list-style-type: none"> • Prioritise based on greatest risk of harm. • Do I need any specialist advice (STAC)?
	Current situation	<ul style="list-style-type: none"> • Radiation Monitoring / Levels / Weather
	Working Strategy	<p>An effective strategy should:</p> <ul style="list-style-type: none"> • Provide clarity of purpose (are we dealing with whole incident or just the offsite response?) • Recognise public safety as a priority (minimise harm) • Reflect the multi-dimensional risks in priority order • Be achievable • Be dynamic to reflect changes in circumstances • Be specific to the emergency
Consider Powers, Policies & Procedures	Command Structure	<ul style="list-style-type: none"> • Are Operational (Bronze) Commanders co-located? • Has a Strategic Co-ordinating Group (SCG) been convened?
	Resources available	<ul style="list-style-type: none"> • People and equipment • SIT's stocks • Communications, buildings, transport, access routes • Regional and national support • Business Continuity

JDM	Heading	Subject
<p>Identify Options and Contingencies</p>	<p>Rescue & Recovery</p>	<ul style="list-style-type: none"> • Implement cordons and access control • Establish Rendezvous Point • Establish Marshalling Area • Establish Evacuation Assembly Point • Rest Centres • Casualty Clearing Station • Ambulance Loading Point • Survivors Reception Centre • Friends and Families Reception Centre • Press Liaison Point • SIT's distribution process – discuss and task as appropriate, monitor progress
	<p>Identification & Investigation</p>	<ul style="list-style-type: none"> • Appoint Senior Investigating Officer (SIO) • Appoint Senior Identification Manager (SIM) • Open Casualty Bureau • Put in place mortuary arrangements
	<p>Additional considerations for TCG if SCG has not been convened</p>	<ul style="list-style-type: none"> • Warning and informing lead • Information regarding essential services availability • Advice regarding health issues (STAC) • Recovery Working Group and TTR • Is there an Outline Planning Zone (OPZ) impact • If no SCG is sitting, no STAC will be called

JDM	Heading	Subject
<p>Take Action & Review</p>	<p>Allocate</p>	<ul style="list-style-type: none"> • Task down to Bronze(s) • Report up to Strategic SCG if active
	<p>SIT's distribution</p>	<ul style="list-style-type: none"> • Stable Iodine distribution status (if applicable). This is a standing Agenda Item.
	<p>Review</p>	<ul style="list-style-type: none"> • Recap decisions, together with rationale • Review actions to clarify ownership and deadlines for completion with Actions Manager • Explain how notes will be made available and actions can be viewed/updated (RD) • Set 'Battle rhythm', to include deadline for future sitreps, agree frequency, location and format of meetings and set time and date of next TCG. • Confirm current contact numbers and who else needs to be invited to future meetings. • AOB (by exception)

Appendix 4: Generic SCG Agenda

STRATEGIC CO-ORDINATING GROUP AGENDA (incorporating JDM & METHANE)		
Item No	Description	Lead
1	Roll Call Meeting etiquette (explain silence is agreement)	Chair
2	Purpose of the meeting and command level	Chair
3	<i>Declaration of Items for urgent attention (Refer to Sitreps on (RD by exception))</i>	Chair
4	<i>Decision on items for urgent attention</i>	Chair
5	<i>Breakout time to action if required</i>	
Take Action and Review	Review outstanding action/minutes of previous meeting (via RD Action Manager) if applicable)	Chair
Gather Information and Intelligence	Specialist / Subject Matter Expert Updates on the situation <ul style="list-style-type: none"> - Tactical command update - Joint intelligence cell - Radiation Monitoring / Levels / Weather 	Respective attendees
	Situation reports by exception from cells/attendees: <ul style="list-style-type: none"> - <u>MoD</u> - <u>Emergency Services</u>: Police, DWFRS, SWASFT, MCGA - Local Authorities: DC - Health: NHS England, - Environment Agency - Joint Regional Liaison Officer (JRLO) - Resilience Emergencies Division (RED) - Warning & Informing representative - Science and Technical Advice (STAC) rep - Utilities - Voluntary Agencies - Other 	All members

Item No	Description	Lead
Assess Risks and Develop a Working Strategy	Risk assessment	Chair
	Outline Key Strategic issues to consider: <ul style="list-style-type: none"> - Requests for assistance - Recovery group and transition to recovery - Vulnerable people - Cost tracking/ Bellwin recovery scheme 	All members
Consider Powers, Policies and Procedures	Command structure and resources available, establish battle rhythm	All members
	Consider powers, policies and procedures	All members
Identify Options and Contingencies	Planned actions going forward – by exception: <ul style="list-style-type: none"> - MoD - <u>Emergency Services</u>: Police, DWFRS, SWASFT, MCGA - <u>Local Authorities</u>: DC - SIT's distribution update (if applicable) - <u>Health</u>: NHS England, UKHSA - Environment Agency - Joint Regional Liaison Officer (JRLO) - Resilience Emergencies Division (RED) - Warning & Informing representative - Science and Technical Advice rep - Utilities - Voluntary Agencies - Other 	All members
Take Action and Review	Conclusion: <ul style="list-style-type: none"> - Confirm strategic aim and allocation of actions - Complete SCG situation report (for submission to MHCLG) 	Chair
	Date and Time of Next Teleconference/Meeting	Chair
	Closure of Meeting	Chair

Appendix 5: Associated plans and guidance documents

This Plan should be read in conjunction with:

ACPO Emergency Procedures Manual

Council Directive 2013/59/Euratom of 5 December 2013 laying down basic safety standards for protection against the dangers arising from exposure to ionising radiation

Dorset Council Emergency Response Plan

Dorset Council Emergency Contacts Directory

Dorset Council Rest and Reception Centre Plan

Dorset Council Psychological Trauma Response Plan

Dorset Council Temporary Mortuary Site Logistics Plan

Dorset & Wiltshire Fire & Rescue Service Emergency Incident Procedures

Dorset LRF Emergency Contacts Directory

Dorset LRF Recovery Framework

Dorset LRF Site Clearance Plan

Dorset LRF Mass Fatalities Response Plan

Dorset LRF Identification of Vulnerable People Plan

Dorset LRF Warning and Informing Capability Strategy

Dorset LRF Multi-Agency Response Guide

Dorset LRF Strategic Leaders' Response Guide

Dorset LRF Tactical Commanders' Response Guide

ICRP Publication 111. Ann ICRP 39(3)

ICRP (2009). Application of the Commission's Recommendations to the Protection of People Living in Long-term Contaminated Areas after a Nuclear Accident or a Radiation emergency

IRR Regulations 2017

Local Authority Mutual Aid Provision Memorandum of Understanding

Local Health Resilience Partnership Health Community Response Plan

MOD Site Specific Operators Emergency Plan Portland, Issue 10.2

NHS Dorset ICB Incident Response Plan

Nuclear Emergency Planning Liaison Group Consolidated Guidance

Off J Eur Commun L13/1

UKHSA STAC Plan V3.00

UKHSA Response to Dorset County Council on Potential Radiation

Monitoring Unit Locations v3 final

PHE CRCE advice paper (PHE – CRCE - 049) and NEAG paper 13, 2020

PHE-CRCE-018 UK Recovery Handbooks for Radiation Incidents: 2015 v4

Radiation Monitoring Unit Framework SW LRF's 2024 V 0.1

UK Recovery Handbooks for Radiation Incidents 2015 – Abstract

UK Recovery Handbooks for Radiation Incidents 2015 – Food Production Systems

UK Recovery Handbooks for Radiation Incidents 2015 – Inhabited Areas

UK Recovery Handbooks for Radiation Incidents 2015 – Drinking Water Supplies

UK Recovery Handbook for Radiation incidents 2024

Portland Operation Berth, Extendibility Assessment Workshop Report, Katmal Ltd., produced by Keith Pearce

South Western Ambulance Service NHS Trust Major Incident Plan

SW LRF STAC Plan



Please forward any queries or suggested amendments for this plan to:

Emergencyplanning@dorsetcouncil.gov.uk