PlanningProof of Evidence

Town and Country Planning Act 1990 Section 78 appeal against the refusal of planning permission

Witness: Carolyn Richardson, BSc Hons, CIEH

Subject of Evidence: Emergency Planning

Appeal: APP/W0340/W/22.3312261

Site: Land to the rear of The Hollies, Reading Road, Burghfield

Common, Reading, RG7 3BH

Proposal: Full planning permission for the erection of 32 dwellings

including affordable housing, parking and landscaping. Access

via Regis Manor Road

Date: May 2023

Council Reference: 22/00244/FULEXT



Proof of Evidence

Name: Carolyn Richardson

May 2023

West Berkshire Council Development and Planning

Market Street Newbury Berkshire RG14 5LD

T: 01635 519111

E: appeals@westberks.gov.uk www.westberks.gov.uk/planning

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1. Summary

- 1.1 My name is Carolyn Richardson I have a degree in Environmental Health (BSc (Hons) 1st Class Environmental Health) and a number of Post Graduate Diplomas.
- 1.2 I am a Chartered Member of the Institute for Environmental Health (CIEH) and a member of the Emergency Planning Society.
- 1.3 Since 2018 I have been the Service Manager for Emergency Planning for Bracknell Forest, Royal Borough of Windsor and Maidenhead and West Berkshire Councils, prior to that, from 2006 I was the Emergency Planning Manager for West Berkshire Council having previously been a Principal Environmental Health Officer for the same Council.
- 1.4 My evidence covers the matters relating to the AWE Off-Site Emergency Plan and other matters relating to emergency response and the impact this appeal site would have on the response and therefore the health and wellbeing of the 'new' community and the existing community.
- 1.5 My proof through the different sections will explain the background to the legislation and recent changes; the Detailed Emergency Planning Zone (DEPZ) process for determining and the implications, the development and operation of the AWE off-Site Emergency Plan including the initial response and the recovery implications.
- 1.6 In particular my proof will provide information as to the complexities of responding to emergencies both radiation emergencies and 'normal' emergencies and therefore the impact of additional residential units within the DEPZ of AWE Burghfield.
- 1.7 My proof also details the process for development management undertaken by Emergency Planning and therefore the considerations linked to the impact on the AWE Off Site Emergency Plan of this appeal site, including the pre-app considerations and consultations undertaken.

- 1.8 Throughout my proof I shall demonstrate the complex and challenging nature of responding to incidents, the added 'fear' factor relating to radiation and why the mitigation offered by the appellant is not appropriate.
- 1.9 In view of the above I would respectfully request that the appeal is dismissed and planning permission is refused.

2. Introduction

Qualifications and Experience

- 2.1 My name is Carolyn Richardson I have a degree in Environmental Health (BSc (Hons) 1st Class Environmental Health) and Post Graduate Diplomas in 'Meat Inspection & Other Foods', Acoustics & Noise Control and Leadership & Management.
- 2.2 I am a Chartered Member of the Institute for Environmental Health (CIEH) and a member of the Emergency Planning Society.
- 2.3 Since 2018 I have been the Service Manager for Emergency Planning for Bracknell Forest, Royal Borough of Windsor and Maidenhead and West Berkshire Councils, prior to that, from 2006 I was the Emergency Planning Manager for West Berkshire Council having previously been a Principal Environmental Health Officer for the same Council.
- 2.4 I have extensive knowledge and practical experience in emergency planning across a wide range of risk capabilities including Chemical, Biological, Radiation and Nuclear (CBRN), Hazardous Materials (HAZMAT), site specific risks with hazards such as radioactive materials (REPPIR), chemicals (Control of Major Accident Hazards Regs 2015, COMAH), flooding, wildfires, human aspects, vulnerable people, recovery and event management including most recently the funeral of Her Majesty Queen Elizabeth II and King Charles III Coronation.
- 2.5 Specific training undertaken in the emergency planning field includes Multiagency Gold Incident Command (MAGIC) by the College of Policing, Tactical and Strategic Coordinating Group training, Crisis Communications, and specific radiation training including for nuclear convoys. I have also lead on exercises involving local, regional and national participants.
- 2.6 In addition to the theory relating to emergency response I have extensive experience in responding to emergencies including small scale fires with evacuations, security incidents, adverse weather responses to snow, flooding and heatwaves, major utility outages, AWE incidents, fireworks store fire and explosions and COVID19 response. These incidents have included working at operational (at the scene), tactical and

- strategic levels as well as coordinating vulnerable people responses, staffing a rest centre and leading the recovery and debrief processes.
- 2.7 As part of the senior officers in the Thames Valley Local Resilience Forum (TVLRF) I am a member of the Delivery Group representing all Berkshire Local Authority Emergency Planning Officers, the Executive Group and have chaired a number of capability groups including recovery and Training, Exercising and Organisational Learning (TEOL).
- 2.8 I am also a member of the Local Authority Nuclear Working Group, a national group involving all local authorities across the UK where there are nuclear sites. It also includes the regulators, Office for Nuclear Regulation (ONR), UK Health Security Agency (UKHSA), Dept. of Business, Energy and Industrial Strategy (BEIS) and Environment Agency. As part of this group I was involved in the revision of the National Nuclear Emergency Planning Guidance¹.
- 2.9 In both my main fields of employment in Environmental Health and in Emergency Planning I have been involved in development control activities providing feedback in relation to my professional role at the time.
- 2.10 I have been involved with the Atomic Weapons Establishment (AWE) sites since 2004 as a result of taking part in an Exercise in my capacity of Environmental Health professional, in what was known as the Health Advisory Cell (HAC), now known as the Scientific and Technical Advisory Cell (STAC). Thereafter since 2006 I have worked closely with the AWE staff in order to develop a deep understanding of the hazards, risks, on-site and off-site responses in relation to a radiation emergency.
- 2.11 I confirm that the evidence which I have prepared and provided for this appeal is true to the best of my knowledge and belief. I confirm that the opinions expressed are my true and professional opinions.

¹ National Nuclear Emergency Planning and Response Guidance - GOV.UK (www.gov.uk)

3. Purpose and Scope of Evidence

- 3.1 This proof of evidence has been prepared in response of APP/W0340/W/22/3312261 and the appeal against the refusal to the 'Erection of 32 dwellings including affordable housing, parking, and landscaping. Access via Regis Manor Road' at The Hollies Reading Road Burghfield Common Reading RG7 3BH.
- 3.2 This proof of evidence covers the following area, within Reason for Refusal 2, namely, that the additional residential population would compromise the public safety of the public in the case of an incident at Atomic Weapons Establishment (AWE) Burghfield by reference to both Policy CS8 and to paragraph 97 of the NPPF (2021).
- 3.3 The Council does not give detailed evidence on the degree of radiation that may emanate from an incident at AWE Burghfield, nor on on-site emergency procedures; that evidence is given by the ONR and the AWE.
- 3.4 Instead, as the Reason for Refusal 2 makes clear, the Council's evidence relates to the compromising of the safety of the public resulting from the consequential aftermath impacts and effects (both immediate, short, medium and long term) of an incident at AWE Burghfield on that public safety, and also the well-being of the public, that would result in the triggering of the AWE Off-Site Emergency Plan which is drawn to 'mitigate, so far as is reasonably practicable, the consequences of a radiation emergency outside the operators premises' (REPPIR Reg 11). In so doing the plan must be able to 'put into effect without delay' (ACOP 11(1), 334), in order 'to prove prompt protection of the members of the public in the area'. The plan also should link with any other capability plans which support the response, all with the aim of ensuring public safety and well-being during and after any radiation emergency caused by an incident at either AWE site. Activation of that Plan would require all those within the Detailed Emergency Planning Zone ("DEPZ") to shelter inside buildings for up to 48 hours, along with immediate or subsequent movement of a potentially large number of residents to safe places from the areas affected within the DEPZ and their return after a potentially pro-longed period of time. The resulting effects include the immediate need for emergency temporary housing for that population, subsequent support by way of longer term rehousing requirements, wide-spread traffic impacts, radiation monitoring of people and the environment, residual returns to vacated homes, residual clean-up of contaminated land, and psychological support for the community. There

- are also implications by way of finances, insurance related matters and the 'blight' on the area as a result which will all impact on the well-being effect of those affected.
- 3.5 In more detail, my proof of evidence addresses the following aspects of this area under the heading below:
 - a. The Radiation (Emergency Preparedness and Public Information) Regulations 2019 (REPPIR 19) and the requirements placed upon the Local Authority as a result of the changes in 2019 from May 2019 and the implications arising from these changes including those that relate to land use and development;
 - The determination process and implications of the Detailed Emergency Planning Zone around the Atomic Weapons Establishment sites and specifically AWE Burghfield;
 - c. The requirements of the AWE Off-Emergency Plan including the preparation, validation and response and recovery arrangements in the immediate, short and longer term following a radiation emergency and how these including matters that relate to land use and development;
 - d. The complexities relating to response and recovery to radiation emergencies and other incidents.
 - e. The initial response through to recovery implications of new developments in the DEPZ.
 - f. The development management consultation process with emergency planning including the considerations taken into account and why in relation to this application.

4. Reasons for Refusal

- 4.1 Relevant to this proof of evidence, the application was refused for the following reason:
 - 2. The application is part of an allocated housing site in the Council Local Plan [HSADPD of 2017]. In addition, it lies in the inner protection zone of the DEPZ for AWE site [B] at Burghfield . This public protection zone was formally altered in 2019, after the site was allocated and accepted in the HSADP. Policy CS8 in the WBCS of 2006 to 2026 notes that [inter alia] within the inner zone, in order to be consistent with ONR advice, nearly all new housing will be rejected [para 5.43 of the supporting text], as the additional resident population would compromise the safety of the public in the case of an incident at AWE. This accords with the advice to the application provided by the Council Emergency Planning Service, and the ONR.

In addition, para 97 of the NPPF of 2021 notes that [inter alia] "planning policies and decisions should promote public safety, and take into account wider security and defence requirements by—b] ensuring that operational sites are not affected adversely by the impact of other development in the area. Given the clear objection from both the AWE and the ONR to the application on this basis it is apparent that the application is unacceptable in the context of this advice.

The Council accordingly considers that future public safety would be compromised if the development were to proceed, and potential harm would occur to the future capability and capacity of AWE Burghfield to operate effectively, in the light of the above. These are clear material planning considerations which, despite the site being allocated for housing in the Local Plan, are factors which a responsible LPA cannot set aside.

The proposal is accordingly unacceptable.

5. Background & Legislation

- 5.1 The Atomic Weapons Establishments (AWE) at Aldermaston and Burghfield both within the geographic area of West Berkshire Council are nuclear licenced sites. Only AWE Burghfield is relevant to this Appeal. Both of these Ministry of Defence sites support the UK defence and security work, in particular the nuclear warhead activities. Both sites were previously used in World War II and have been involved in the current work since the 1950s.
- 5.2 The legislative basis relating to protecting the public and the environment from radiation emergencies is to be found in the Radiation (Emergency Preparedness and Public Information) Regulations 2001/2975 (REPPIR 01). Regulation 17 required the local authority to supply information to the public. Regulation 9 required there to be an off-site emergency plan prepared by the Council comprising an:

"adequate emergency plan (in these Regulations referred to as an "off-site 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 such reasonably foreseeable emergencies as are identified in that assessment and the plan shall be prepared in respect of such area as in the opinion of the Executive any member of the public is likely to be affected by such radiation emergencies."

- 5.3 Policies CS1 and CS8 were drafted on the basis of the Council's then emergency plan having regard to REPPIR 01.
- 5.4 More recently, from the 22nd May 2019, those Regulations were replaced by the Radiation (Emergency Preparedness and Public Information) Regulations 2019² (REPPIR 19). REPPIR 19.
- 5.5 The Health and Safety Executive guidance at https://www.hse.gov.uk/radiation/ionising/reppir.htm on REPPIR 19 explains the main changes as follows:

² https://www.hse.gov.uk/radiation/ionising/reppir.htm

The Radiation (Emergency Preparedness and Public Information) Regulations 2019(REPPIR) implement in Great Britain the articles on emergency preparedness and response in the Basic Safety Standards Directive 2013/59/Euratom (BSSD 2013)...

REPPIR 2019 are concerned with preparedness for radiation emergencies. The Regulations establish a framework of preparedness measures to ensure that arrangements are in place to effectively respond to that emergency, both on the site of the emergency situation and off-site where members of the public might be affected. The Regulations ensure that members of the public are provided with information, both before and during an emergency, so that they are properly informed and prepared, in advance, about what they need to do in the unlikely event of a radiation emergency occurring...

There are a number of changes in the new Regulations, with the main changes being:

- A change to the definition of a radiation emergency. A radiation emergency is no longer defined in relation to an emergency scenario have the potential for a specific dose to a member of the public;
- The introduction of Outline Planning, with associated Outline Planning
 Zones. There planning zones are in addition to Detailed Emergency Planning
 Zones: and
- <u>The Local Authority now sets Detailed Emergency Planning Zones</u>. Previously, this was done by the Regulator.
- 5.6 The changes in the new regulations came about following the lessons from the radiation emergency in Japan when an earthquake and subsequent Tsunami caused the Fukushima Daiichi Nuclear Power Plant disaster (2011) and changes made to the Basic Safety Standards Directive 2013/59/Euratom³ (BSSD 2013) which the UK government agreed to implement in order to protect the public and a reduced appetite to the risks associated with nuclear licensed sites.
- 5.7 The HSE Guidance at https://www.hse.gov.uk/radiation/ionising/reppir.htm also explains the main duties on the local authority that shed light on why the Appeal proposal has an impact on public safety:

Local authorities who have an HSE-enforced site with the potential for a radiological emergency are responsible for determining <u>both</u> a Detailed Emergency Planning Zone (DEPZ) and Outline Planning Zone (OPZ), if appropriate, following receipt of the consequence report and a discussion with the operator.

³ https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31996L0029:EN:HTML

DEPZs are about **capabilities** and consider <u>sheltering</u>, <u>evacuation</u>, iodine prophylaxis, <u>and how to put these into effect</u>. <u>These capabilities are pre-planned and can be put into effect quickly once an emergency has been declared...</u>

- 5.8 Therefore, the new Regulations require two zones (and not three), and require the local authority (and not the ONR) to determine these two zones. The DEPZ is also about the capability of sheltering, of actual evacuation of residential populations inside the DEPZ to outside of the DEPZ, and of how these measures are carried out, all in relation to the activity of day to day land uses within the DEPZ.
- 5.9 I note that Policies CS1 and CS8 expressly recognise public safety in the land use context. I am advised and understand that anything that has land use or development effects can be a planning consideration.
- 5.10 The REPPIR 19 legislation has a number of requirements of Local Authorities which have Nuclear Licenced sites located within their areas. In this Appeal, AWE Burghfield is one such site. The requirements include:
 - a. Requirement to determine a geographical area known as the "Detailed Emergency Planning Zone" (DEPZ) (Reg. 8) on the basis of the operator's "Consequence Report" under Regulation 7 and paragraph 2 of Schedule 4,
 - b. Prepare an Off-Site Emergency Plan (Reg. 11),
 - c. Review and test of emergency plans (Reg. 12),
 - d. Provision of information to the community within the DEPZ. These off-site arrangements link with the requirements on the site operators On-site emergency arrangements. (Reg. 21).
- 5.11 Regulation 8(1) DEPZ relates to land in this way:
 - (1) The local authority must determine the detailed emergency planning zone on the basis of the operator's recommendation made under paragraph 2 of Schedule 4 and may extend that area in consideration of—
 - (a) <u>local geographic</u>, demographic and practical implementation issues;
 - (b) the need to avoid, where practicable, the bisection of local communities; and

- (c) the inclusion of vulnerable groups immediately adjacent to the area proposed by the operator.
- 5.12 Regulation 11 requires the local authority to prepare an Off-Site Emergency Plan in line with Schedule 7.
- 5.13 Within REPPIR 19, the Approved Code of Practice⁴ and associated guidance documents the processes to be undertaken to achieve compliance which are clearly set out to which the Emergency Planning Service has adhered to.
- 5.14 In addition to the REPPIR 19 legislation and guidance, there is also the National Nuclear Emergency Planning and Response Guidance⁵ which, although published in 2015, and therefore prior to REPPIR 19, has, in the majority, still relevant content.
- 5.15 REPPIR 19 is not the only legislation relevant to emergency response and recovery in relation to any emergency including a radiation emergency. Other legislation which also applies includes the Civil Contingencies Act 2004⁶ (CCA) and associated guidance.
- 5.16 The CCA legislation places duties on a number of agencies including local authorities. These duties include: to assess risk; put in place emergency plans and business continuity plans; have in place and maintain arrangements to make information available to warn and inform the public; to share information and cooperate with other responders; and provide business continuity advice to businesses and volunteer organisations.
- 5.17 These broad duties cover a wide range of risks including those set out in the Governments National Risk Register⁷ such as flooding, cyber, animal diseases, industrial action, malicious attacks, earthquakes and major fires.
- 5.18 These wide range of risks therefore require a similarly wide range of plans to be in place from Emergency Response Frameworks, Recovery Plans, Animal Disease Outbreak Plans, Vulnerable People, Human Aspects plans and so on. Some are 'core'

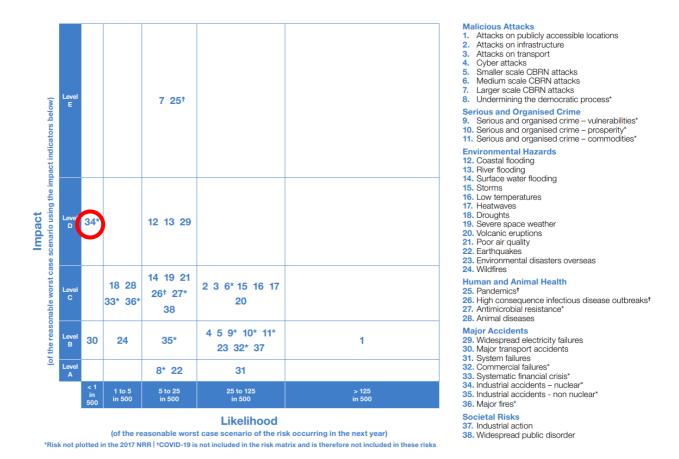
⁴ https://www.onr.org.uk/documents/2020/reppir-2019-acop.pdf

⁵ https://www.gov.uk/government/publications/national-nuclear-emergency-planning-and-response-guidance

⁶ https://www.legislation.gov.uk/ukpga/2004/36/contents

plans which can be adapted for any emergency whilst others are more specific in their function.

- 5.19 Some of the plans are written and maintained by the Local Authority however the vast majority are developed and coordinated through multi-agency working at the Thames Valley Local Resilience Forum. There are currently over 35 such multi-agency plans.
- 5.20 Taking into account the risks associated with nuclear sites within the National Risk Register an Industrial Accident Nuclear is calculated nationally as shown in the table below and as highlighted as Serial 34.



5.21 Significantly, however, whilst the likelihood of the risk of an incident is shown to be one of the *lowest* (<1 in 500 year), the likelihood remains credible (and not impossible). In addition the risk is evaluated to be the second *highest* in relation to its *impact* (Level D) alongside coastal flooding, river flooding and widespread electricity failures and only below in likelihood and impact by Large Scale CBRN attacks and pandemics. Therefore, an incident at AWE Burghfield would have a low likelihood of occurring but, if it were to occur, would have an inversely high impact on the public at large within the

DEPZ area, and possibly beyond, due to the nature of the incident generating ionisation.

5.22 In relation to the impact it can be clearly shown, as set out below, that the level D impacts referred to above are significant by way of financial costs by way of billions of pounds, fatalities, evacuation and shelter, public perception and feeling more vulnerable, environmental damage for approximately a year, although it is likely the environmental damage may be greater than a year, impact on essential services, power supplies and indeed international relations.

Level	Indicative impact scale indicators				
E	 Economic impacts: more than £10 billion. Fatalities in the UK: more than 1000. Evacuation and shelter: 100 thousand people evacuated over 3 days. Public perception: extreme, widespread, prolonged impact owing to significant proportions of the UK population feeling more vulnerable. 	Environmental damage or contamination: of city(ies) or region for more than 5 years. Essential services: lack of health and care services affecting 40% of the population for 30 days. Electricity supply: national loss of electricity supply for any period or regional loss of supply for longer than 1 week. International relations: significant damage to UK relationship with key allies.			
D	 Economic impacts: £1 billion to £10 billion. Fatalities in the UK: circa 201 to 1000. Evacuation and shelter: 20 thousand people evacuated over 3 days. Public perception: high impact owing to millions of UK citizens feeling more vulnerable. 	Environmental damage or contamination: of a county OR city(ies) for approximately 1 year. Essential services: lack of health and care services affecting 20% of the population for 7 days. Electricity supply: major disruption to electricity supply to 1 million people for longer than 18 hours. International relations: moderate damage to UK relationship with key allies.			
С	 Economic impacts: £100 million to £1 billion. Fatalities in the UK: circa 41 to 200. Evacuation and shelter: 5 thousand people evacuated over 3 days. Public perception: moderate impact owing to hundreds of thousands of UK citizens feeling more vulnerable. 	Environmental damage or contamination: damage to/contamination of a local area for 1 year. Essential services: lack of health and care services affecting 10% of the population for 12 hours. Electricity supply: major disruption to electricity supply to greater than 300 thousand consumers for longer than 18 hours. International relations: significant damage to UK relationship with international partner country/organisation.			
В	 Economic impacts: £10 million to £100 million. Fatalities in the UK: circa 9 to 40. Evacuation and shelter: 200 to 1 thousand people evacuated over 3 days. Public perception: minor impact owing to tens of thousands of UK citizens feeling more vulnerable. 	Environmental damage or contamination: of the local area for 1 month OR of building for 1 year. Essential services: lack of health and care services affecting 2% of the population for 12 hours. Electricity supply: major disruption to electricity supply to greater than 100 thousand people for longer than 18 hours. International relations: moderate damage to UK relationship with international partner country/organisation.			
A	 Economic impacts: less than £10 million. Fatalities in the UK: circa 1 to 8. Evacuation and shelter: 50 people evacuated over 3 days. Public perception: limited impact, small numbers of the public (less than tens of thousands) feeling more vulnerable. 	Environmental damage or contamination: of a building for up to 1 month. Essential services: lack of health and care services affecting 1% of the population for 6 hours. Electricity supply: major disruption to electricity supply to greater than 10 thousand people for longer than 18 hours. International relations: moderate damage to UK relationship with any other country.			

The impact scale indicators above set out the types and severity of impacts the UK might expect to see for the different level risks. The list above should NOT be read as a set of criteria that needs to be met in order for an assessed risk to be classified at these levels.

5.23 Whilst it is always hoped for that the likelihood of a radiation emergency arising at an AWE site remains very low, due to the layers of safety put in place, the assertion by the Appellant that it would appear almost impossible for a radiation emergency to occur and that if it did the impact would be limited is wholly misconceived and misplaced. This kind of characterisation by the Appellant discloses that the Appellant does not recognise the reality of an emergency plan being triggered in the circumstances of an incident at AWE Burghfield. It is not an appropriate response by the Appellant in relation to risk management, especially when it relates to the significant potential impact on public safety, their health and their wellbeing, their

welfare and the environment. It also places people into a false state of security. Indeed the National Risk Register refers to a number of emergencies where there *have been* radiation emergencies in the UK and elsewhere by way of Windscale (UK) in 1957, Three Mile Island (US) in 1979, Chernobyl (Ukraine) in 1986 and Fukushima (Japan) in 2011. Therefore, regrettably and notwithstanding safeguards being applied no doubt diligently by all concerned, radiation emergencies can and do happen and therefore remain a credible scenario.

Summary of Evidence:

- 5.24 There are risks, consequences and impacts associated with the AWE sites otherwise the requirements under REPPIR 19 would not be necessary.
- 5.25 Whilst reassuring documents are provided as required under REPPIR 19 by the local authority to the community within the DEPZ stating in the 'unlikely' event of a radiation emergency as part of the local authority management of public expectations within the DEPZ, these public documents importantly do not say that an accident will not happen. Indeed, accidents can and do happen. For example, accepting that flooding is a different hazard but that the principle is the same, in West Berkshire we have experienced significant flooding several times over *successive* years when the likelihood of such events were over a 1:100 year event, and so one might suppose that there would only be one flood in every 100 years.
- 5.26 Therefore, there remains a risk of ionisation radiation emanating from the AWE Burghfield over the extent of the DEPZ within which area the Appeal proposals would be situated, and within which proposals there would be members of the public living there who would be required to be evacuated and undergo radiation monitoring, from that location to a place outside of the DEPZ in line with the local authority's emergency plan being triggered.
- 5.27 The relevance of the above requirements made of the local authority and other responders to this Appeal is that it can appear quite simplistic in relation to what responders do in response to an emergency. But it is not. An emergency plan and emergency response has many layers of complexity in particular when the plan must support people in the community in the very stressful situation of, here, an incident at AWE Burghfield. This stress of people during an emergency can be often extreme in a 'normal' emergency. But, when 'radiation' is mentioned, which (unlike a fire or flood) a

member of the public being evacuated cannot see or smell, the real and genuine fear that arises in members of the public as a result of the incident associated with that by the public is likely to cause significant pressures and physiological trauma on the responders that are not otherwise present in different kinds of emergencies. In a recent IAEA report it is noted that 'many former residence of the evacuated zone in Fukushima have significant fears about moving back, even after decontamination'.

- 5.28 The complexities of response and recovery on both the responders and the communities' will be expanded further throughout this document.
- 5.29 In particular it is the impact on the community and the environment not just in the short term but the long term recovery which drives the work of the local authority.

6. Detailed Emergency Planning Zone (DEPZ)

- 6.1 The Regulation 8 requirement on the Local Authority to delineate a Detailed Emergency Planning Zone (as a result of the operator's delineation of an Inner Zone set out in its Consequences Report evaluation) is a new obligation on the relevant Local Authority since the 2001 Regulations. The DEPZ determination is undertaken by the Local Authority where the nuclear sites are located. Therefore for the AWE sites, this is West Berkshire Council. Prior to determining the DEPZ, required information is provided by the operator of the nuclear site, in this case AWE, in a "Consequence Report". AWE provide two reports, one for each nuclear site, both of which are publically available on the West Berkshire Councils website⁸. Of particular note in relation to this appeal is the AWE Burghfield Consequence Report⁹ and the associated decision report from January 2023. Appendices 1, 2 & 3
- 6.2 The Consequence Report not only provides the information in relation to the minimum geographical distances for setting the DEPZ but also provides the justification behind the recommendation including response times.
- 6.3 Some key points to note from the operator's current Consequence Report relate to:

https://www.westberks.gov.uk/media/48825/AWE-Burghfield-Consequences-Report/pdf/REPPIR B-Site ConsequencesReport web version1.pdf?m=637256670105370000

⁸ Atomic Weapons Establishment (AWE) - West Berkshire Council

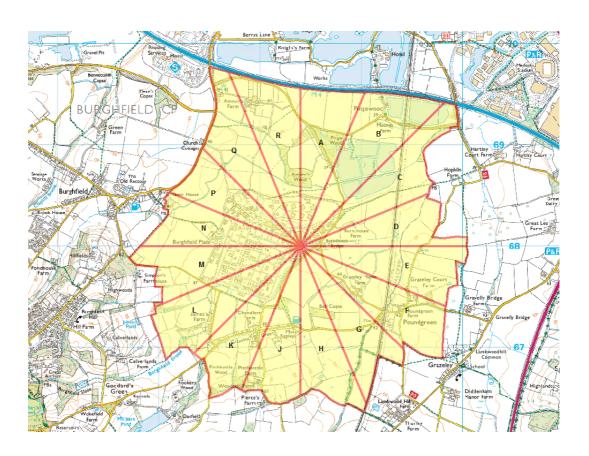
- a. Its evaluation of the *minimum* distance for the DEPZ for AWE Burghfield is 3160m, known as the "Urgent Protection Actions" (UPA) area, with an outer "Outline Planning Zone" (OPZ) of 12km. The Outline Planning Zone is set by the Ministry of Defence.
- b. its recommendation 'that people are instructed, as soon as is practical, to immediately take-cover in a suitable building and to stay inside with the windows and doors all properly shut.' (this is the "sheltering" to which I referred above, and it is required to be immediate).
- c. 'this 'sheltering' action may be necessary for a period of up to two days, or at least until the initial contaminated plume has passed and monitoring of the ground contamination has been undertaken to determine the level of ground shine; and subsequent potential for further dose uptake, (e.g. from contaminated locally produced foodstuffs).' Thus, the period of time for sheltering may be extended.
- d. for the AWE Burghfield site, under certain weather conditions, there is approximately 15 minutes from the time of the incident taking place for the Site Response Group to activate and for public be informed. This results in only 10 minutes for the public to find and access *suitable shelter* for it to be of benefit. This is based on a *no notice* accident which is the most likely type of event for either AWE site. The practical outcome of the above is immediate evacuation of the resident populace from within the geographical area of the DEPZ, including proposed residents of the Appeal development.
- e. the public exposure pathways within the DEPZ include inhalation, short term external irradiation during the passage of the plume, long term inhalation after resuspension, long term external irradiation from ground contamination by the initial plume and ingestion of contaminated foods. This in itself generates a real fear and concerns amongst the public at large about the potential effects of ionisation and regardless of the actual level of ionisation.
- f. The report also details the evaluative rationale behind the respective exposure pathways and that shelter is the recommended *urgent* protective action.

- 6.4 The situation within the DEPZ is not the same as elsewhere in the UK. AWE nuclear sites are very different to the many of the other nuclear licenced sites around the UK. Many of these other sites are very remote locations with very limited communities in the vicinity of the site. They are often on a coastal area and many of them have nuclear reactors which are different to the processes undertaken at the AWE sites. Therefore the area for Urgent Protective Actions, the DEPZ and the response time scales for these other sites are often different to those around AWE.
- 6.5 An example of such a difference is Hunterston B Power Station which states in its Consequence Report that sheltering out to ~2km from the site is recommended, that Stable iodine can be administered up to 5-8 hours following exposure for averting iodine inhalation dose, advise should be issued within 24hr regarding consumption of leafy green vegetables, milk etc downwind of the site along with a 'conservative time factor for implementing the protective measure of 2 hours'. All of these measures are significantly different to the AWE sites where the time to put measures in place from start of incident is 25 mins, stable iodine is not applicable since the materials on site are different and countermeasures such as, not eating vegetables and milk, will be put in place almost immediately.
- 6.6 The relevance of the contents of the Consequence Reports relating to any nuclear licenced site is that it forms the basis under REPPIR 19 as to the minimum size of the DEPZ and therefore the main area of interest for the AWE Off-Site Emergency Plan to cover.
- 6.7 The DEPZs for both Nuclear Licenced sites in the West Berkshire Council area, Atomic Weapons Establishment (AWE) Aldermaston and AWE Burghfield, were first determined under this legislation in *March 2020*. The considerations relating to the size of the DEPZ are set out in the legislation and ACOP which states that the DEPZ should be set taking consideration of:
 - a. local geographic, demographic and practical implementation issues;
 - b. the need to avoid, where practicable, the bisection of local communities and
 - c. the inclusion of vulnerable groups immediately adjacent to the area proposed by the operator'

- In addition the DEPZ cannot be smaller than the UPA as detailed in the Consequence Report.
- 6.8 The procedures undertaken by West Berkshire to determine the DEPZ in March 2020 were ratified following a Judicial Review which challenged the process undertaken by the Council which was dismissed in January 2021.
- 6.9 The DEPZs for both AWE nuclear sites have been reviewed and re-determined in January 2023. There have been two minor changes made to the AWE Burghfield DEPZ with the addition of two small areas to include properties within communities which had previously been excluded. Further information is in Appendix 2.
- 6.10 Prior to REPPIR 19 the determination process was undertaken by the regulators, ONR. The regulators were involved with the determination undertaken by West Berkshire Council in 2020 and 2023 since they are members of the AWE Off-Site Planning Group.
- 6.11 Prior to REPPIR 19 and the changes in the DEPZ size the appeal site was not in the DEPZ. This is significant since as a result of this material change any planning applications within the DEPZ would need to be carefully assessed against the impact on the AWE Off-Site Emergency Plan.
- 6.12 The DEPZ is reviewed and re-determined every 3 years, unless there is a change in operations on the AWE sites and /or the local authority considers there is a change in the local area which necessitates a re-determination. Therefore, it could be considered that any new improved facilities in the AWE sites may reduce the size of the DEPZ. Equally, as happened in 2020, the *methodology* for calculation of the UPA may change based on new evidence which may mean it increases. In addition, over time different *parts* of the AWE site may be used, subject to the normal safety cases and planning processes but that may result in changes in the risk profile and therefore changes in the DEPZ. Therefore, it is not a given that the DEPZ will reduce.
- 6.13 In particular and in relation to the Appeal proposal, another reason for the Local Authority to consider a re-determination, as detailed in the ACOP (250), is in relation to 'developments within or adjacent to the DEPZ taking into account their potential impact on the effectiveness of the emergency plan.' This may mean that if a development came forward and was built adjacent to the boundary of the DEPZ then it could be

considered this splits a community and therefore the DEPZ could be extended further to include that community. This would be the case regardless of the size of the DEPZ because it is the population numbers within the DEPZ that remains a key factor when considering planning applications.

- 6.14 The DEPZ and the process of determination is therefore taken carefully and reservedly by West Berkshire Council, not only for the impact on the community, but also in relation to ensuring compliance with REPPIR 19. Including the provision of the public information and the development of the AWE Off-Site Emergency Plan.
- 6.15 The changes in the DEPZ in terms of population density when the DEPZ changed there was a significant change in the demographics as set out in the tables below.
- 6.16 AWE Burghfield DEPZ and Demographics based on ONR data from 2018:



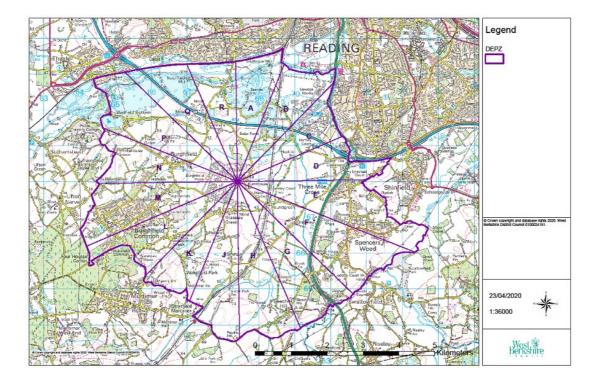
AWE Burghfield DEPZ 2018 MAP

Sector	Residential Properties	Care Homes	Primary Schools	Secondary Schools
Α	0	0	0	0
В	7	0	0	0
С	2	0	0	0
D	0	0	0	0
E	6	0	0	0
F	20	0	0	0
G	2	0	0	0
Н	0	0	0	0
J	4	0	0	0
K	25	0	0	0
L	4	0	0	0
M	3	0	0	0
N	5	0	0	0
Р	4	0	0	0
Q	4	0	0	0
R	3	0	0	0
TOTAL	89	0	0	0

Demographics AWE Burghfield 2018 (excludes mobile home data)

The sector where the appeal site is located is highlighted for Sector M. The map also shows that the appeal site was at that time not in the DEPZ.

6.17 AWE Burghfield DEPZ and Demographics based on Council data from 2022:



AWE Burghfield DEPZ 2022 MAP

Sector	Residential Properties	Commercial	Care Homes	Nursery	Primary Schools	Secondary Schools
Α	23	26				
В	622	58		1	1	
С	9	75		2		
D	809	40				
Е	2189	94	1			1
F	620	112	1	1	2	
G	128	58				
Н	90	17				
J	39	12				
K	45	22				
L	77	23				
M	2566	<mark>141</mark>	3	1	2	1
N	250	21				
Р	162	109	1	1		
Q	32	47				
R	77	69				
TOTAL	7738	934	6	6	2	1

Demographics AWE Burghfield 2022 (excludes mobile home data)

Therefore the increase in numbers as a result of the changes in legislation, AWE analysis and the DEPZ determination process is shown below:

Sector	Residential Properties	Commercial	Care Homes	Nursery	Primary Schools	Secondary Schools
TOTAL 2022	7738	934	6	5	2	1
TOTAL 2018	89	347	0	0	0	0
Difference	+7649	+587	+6	+5	+2	+1

6.18 This was a significant increase in numbers as a whole but if only taking into account the residential units this could equate to 7,738 x 2.4 = 18,571 people. REPPIR 19 required that the AWE Off-Site Emergency Plan should ensure that it is adequate and can support all those within the DEPZ area. Therefore taking into account the total residential units, care homes, commercial units and schools etc. as detailed above then should there be a radiation emergency the response would be a significant undertaking.

Summary of Evidence:

6.19 The information in this section demonstrates the significant changes not only in the processes required under REPPIR 19 but as a result the size of the DEPZ and most importantly the number of premises within the DEPZ. The size of the DEPZ more than

doubling in some areas with the increase in residential properties increasing from **89** for the whole DEPZ in 2018 to **7,738** in 2022 an increase of 7,649 with an increase in population numbers of approximately **18,358**. A significant change in numbers and population to support and protect.

- 6.20 This demonstrates that there was a significant change in the situation in March 2020 with subsequent impact on development control applications proposed within the DEPZ area.
- 6.21 The changes in numbers within the DEPZ and specifically within the sector where this Appeal site is has implications in relation to the AWE Off-Site Emergency Plan and ensuring its adequacy in order to protect public health and wellbeing.

7. AWE Off-Site Emergency Plan

- 7.1 As required under REPPIR 19 legislation and referred to above, the operator is required to have an adequate <u>on</u> site emergency plan (Reg.10) and the local authority must make an adequate <u>off</u>-site emergency plan covering the DEPZ and OPZ. (Reg. 11).
- 7.2 Whilst the two nuclear sites of AWE Aldermaston and Burghfield are within the geographic area of West Berkshire Council (WBDC) the development of the plan requires coordination of a wide range of stakeholders who would be involved in a response relating to a radiation emergency at either site. The development of the most recent plan involved over 27 agencies ranging from the emergency services in the Thames Valley and Hampshire; several government departments and agencies including the Environment Agency and Food Standards Agency, four local authorities due to the cross border nature of the DEPZs and OPZs, health services including Integrated Care Boards and hospitals, utility companies and transport companies (Rail and Road). Therefore, the role of this local authority in developing the plan is coordination and ensuing compliance with the legislation, as set out in Chapter 1 of part 2 of Schedule 6, Chapter 2 of part 2 of Schedule 6, Chapter 3 of part 2 of Schedule 6 and the principles and purposes of Schedule 7.
- 7.3 The first version of the new plan post REPPIR 2019 was developed by May 2020 following the changes to the DEPZ around AWE Burghfield. Since that date there have

been a further 5 updates to the plan as a result of agency changes, changes in procedures and lessons identified following 6 focused exercises on 5 themes undertaken over 2021/2022.

- 7.4 It should however be noted that there has been an AWE Off-Site Emergency Plan in place for many years from the 2001 Regulations that involved the DEPZ and area of extendibility. Since 22nd May 2019, the body charged under the new Regulations of 2019 with defining the DEPZ changed from the ONR (under the 2001 Regulations) to the relevant local authority (under the 2019 Regulations) in this case, West Berkshire Council. There has always been a plan in place which is approved for use but as and when updates are received then the Plan is amended and consulted on as a working revision pending formal approval. This process can take some time depending on the update to be put in place. The Plan is therefore a living document being amended as necessary with regular training and exercising undertaken with the other responders in order to test the adequacy of the Plan, or elements of it. This is recognised in the ACOP as normal practice.
- 7.5 The AWE Off-Site Emergency Plan (the Plan) is a detailed document for all responding agencies to use in a coordinated way and in order to facilitate the protection of the public and/or environment following an emergency involving an onsite release of radiation which is having an effect outside the AWE Aldermaston or Burghfield site boundaries a 'RADIATION EMERGENCY'.
- 7.6 The **aim** of the Plan (2023 version) is to enable an effective response to an incident at either of the Atomic Weapons Establishments which has or could have an impact on the community surrounding the sites.

The **objectives** of the Plan are to provide:

- (a) Information about the sites and their hazards
- (b) The roles and responsibilities of each responding agency
- (c) The activation, command & control and coordination procedures
- (d) Protective actions to implement
- (e) Warning and Informing, including communication procedures
- (f) Information about recovery
- (g) Where to find more information.

- 7.7 West Berkshire Council is not there to protect the AWE operation per se but instead the Local Authority has a requirement under REPPIR 19 to have an 'adequate Off-site emergency plan covering that zone or zones' (the zones being the DEPZ and Outline Planning Zone (OPZ)) (Reg. 11) 'and have the capability available to ensure this happens without unnecessary delay' (Para 238 of ACOP). As set out in the ACOP, Para 338 the process for making an adequate plan involves:
 - (a) writing the plan, including the minimum content required by Schedule 6 and meeting the principles and purposes in Schedule 7;
 - (b) implementing the necessary requirements (or seeking confirmation of this) to ensure the plan is capable of being put into effect without delay when required; and
 - (c) testing the plan to demonstrate its adequacy and making any necessary improvements to the plan as identified by the test.
- 7.8 The key point in relation to development control and the above requirements relate to para b. above which if the Plan is not capable of implementing the effect then the Plan could be deemed to be inadequate and therefore West Berkshire Council being non-compliant. Thereafter there could be consequences for AWE.
- 7.9 The Plan in place is detailed but it does not cover everything and does not provide all the answers in one document. Instead each agencies' own response plans and expertise are essential along with other supporting plans and frameworks, as stated in previously. The AWE Off-Site Emergency Plan does give the overall response framework and some specific information in relation to the site, countermeasures and mitigation options in order to support responders in the response.
- 7.10 The AWE Off-Site Emergency Plan Freedom of Information version is available as Appendix 3.
- 7.11 The above statements may appear to give the complete assurance that the Plan and all the supporting plans mean that there are no issues in the ability to respond to an AWE incident at both sites and that it can flex and accommodate everything. Whilst that is the aim with the continual revision and improvement of the Plan, and associated plans, along with the regular testing of not only the Plan and the other supporting documents by this local authority and/or in a multi-agency environment. The reality can

be and is likely to be very difficult and challenging due to the nature of the emergency – i.e. 'radiation emergency', the existing population density, the resource intensity of the response and longevity of the response and thereafter the recovery to return to a form of 'normality'.

- 7.12 The plan when developed is based on the data at the time of writing. This has developed over time and for the current plan is based on the data as detailed in 3.45 to 3.47 and takes into account planning applications approved but not 'built' but where the application is still valid. As of the 2022 annual audit there were 2305 additional residential units with permission to build which were still valid. The majority were approved prior to the changes in the DEPZ with 52 being approved since March 2020, one being 49 dwellings at Kingfisher Grove which was decided at Appeal. Therefore these additional 52 premises result in a total of 2362 additional properties which could at the moment be built within the DEPZ resulting in a total of 10,100 properties (2362 + 7738 existing residential units) and the equivalent of 24,240 people. It should also be noted however these figures are only for the residential units and not the commercial or the vulnerable sites such as caravans, care homes and schools, although it is accepted that many of the children at the schools are likely to reside in the area.
- 7.13 The implication of the above figures is significant by way of the responders being able to support all these people with the vast bulk of these being already in place prior to the changes in the legislation in 2019.
- 7.14 Having regard to the adequacy of the plan and therefore compliance with REPPIR 19 and the ability of the Plan to accommodate this Appeal site consideration needs to be given to the Plan and responders ability to flex and accommodate all. This cannot be confirmed definitively since a real radiation emergency has not happened to test the plan against. However table top exercises and workshops undertaken in 2021/2022 demonstrated that the initial response of alerting the public and advising everyone to go inside and shelter, the coordination processes were in place and able to set up. It was also identified some of the risks associated with the response and recovery including the scale of road closures to be put in place due to the size of the DEPZ, the challenges in relation to evacuation and indeed providing support for those who lived or worked in the area and were not in at the time of the radiation emergency, the time period to undertake the monitoring of the environment and therefore the time lag to

- confirm the scale of the incident, and the assets required to undertake people reassurance monitoring.
- 7.15 Whilst the AWE Off-Site Planning Group aim to ensure that the plan is reviewed to ensure as far as possible the plan is adequate, there is no doubt however that as a result of the changes in the DEPZ in 2020 the plan and responders would be under exceptional pressure. This pressure would be increased should the wind, or lack of it as detailed in the Consequence Report, be such that a wide spread area across the whole of the DEPZ be contaminated and/or a densely populated area be affected. These pressures not only relate to the immediate response but just as importantly in relation to what happens afterwards in the medium (24-48hrs) and long term (days, weeks, months or years).
- 7.16 The challenges, complexities and impacts for communities and responders in relation to the initial response, subsequent actions and recovery to a Radiation Emergency sections and 'ordinary' emergencies are set out in sections 8, 9 and 10.
- 7.17 Therefore the addition of new residents cannot be understated. This was recognised by the planning inspector for the Boundary Hall site (APP/H1705/V/10/2124548) when he recommended that planning permission be refused. This incremental impact is also recognised by the changes made in REPPIR 19 which places more emphasis on the adequacy of the plans and the ability of responders to demonstrate and ensure that they have the capabilities available to undertake their roles as one example.

Summary of Evidence

- 7.18 The aims and objectives of the AWE Off-Site Emergency Plan are there to ensure compliance and adequacy of the plan in relation to an effective response to a radiation emergency.
- 7.19 The Plan is not the only plan that would be used in a response or recovery situation but they do all have limitations mainly in relation to the scale/size of the impact whether relating to the environment or people.
- 7.20 The effect of any additional developments, in particular residential developments, in existing densely populated areas of the DEPZ adds to the complexities and the ability of responders to undertake an effective response. This therefore causes a risk on the new residents and the existing community.

8. Emergency Response and Impacts on Responders and the Community

- 8.1 In order to understand more fully the implications on responders and the community when an emergency happens I have set out below a variety of incidents, many of which I have been involved with directly and therefore have direct experience of the challenges and different levels of complexities or have been involved in the scrutiny of the debriefs and lessons identified as chair of the Thames Valley Local Resilience Forum Training, Exercising and Organisational Learning Group.
- 8.2 There has not been a radiation emergency in the UK since 10 October 1957 at the Windscale site, Cumbria. There are no recent radiation emergencies in the UK to compare with directly. However, what can be drawn from it as to differences to that site as it was and AWE are that the location of the site was quite remote from communities and the communications by way of social media etc. were very different to those now. Lessons were learnt from that incident. However the fact there has not been a radiation emergency since 1957 in the UK does not mean it is not possible and the impact of radiation emergencies can be drawn from more recent radiation emergencies elsewhere and indeed other 'normal' emergencies. All of which demonstrate the reason why placing people in a known risk area is not appropriate.
- 8.3 There are examples of more recent radiation emergencies where learning can be drawn from in relation to the impact both short and long term on the community including the radiation emergencies at:
- a. Three Mile Island, USA 1979 (Reactor Accident). Feedback from some of the community living near the site at the time reported they had thought it was safe to live near the site. However when things went wrong thousands of people evacuated from the area with subsequent concerns such as whether they could have children, would any children born to them in the future be normal, what would happen to their homes and their pets. They did not know who to trust since they had been assured it was safe and it wasn't. This fear was elevated for them at the time since they recalled Hiroshima, Japan in 1945. Therefore whilst the risk of contamination in itself was low, the fear factor the fear of irradiation effects on people, property and food and related mental health concerns and trust relating to the radiation emergency during the incident and following the incident caused significant and far longer term

impacts on the community that was required to be displaced as a result of the incident.

- b. Chernobyl Nuclear Power plant, Ukraine, 1986. The resulting steam explosion and fires were not only experienced in Ukraine where workers and those in the local community were directly affected and are still by the radiation but also across northern areas of the UK. 9800 farms across North West Scotland, Wales, Northern Ireland and Cumbria had controls placed on them by the Food Standards Agency with the final controls only being lifted as recently as 2012 in those geographic locations, no less than 26 years after the event as a result of radioactive particles in the upland peat. This meant that livestock in the area had to be tested prior to moving from the affected areas until 2021 in order to ensure that contamination levels were actually at safe levels. Whilst the AWE sites do not have reactors, they remain munitions factories and the potential implications in the local areas for landowners and farmers could be significant with long term monitoring and controls required.
- Fukushima Daiichi Nuclear Power Plant, Japan (2011). This radiation emergency as C. a result of earthquakes and subsequent Tsunami is still having an effect in the Country over 12 years later. Whilst the situation in Japan was complex at the time since there had been earthquake and Tsunami damage too, the nuclear site was a reactor which AWE sites are not and therefore the scale and contamination have different impacts by way of the clean-up and the processes put in place there were massive. This included over 22 million cubic metres of waste materials with over 1000 temporary storage areas for the waste materials. Whilst the scale may not be the same the recent IAEA report 'Ten Years of Remediation Efforts in Japan' 10 does demonstrate learning and impacts for the recovery phase of any radiation emergency by way of expectations of the communities being 'as low as possible' clean ups; the extensive different types of remedial actions to put in place; the perception in relation to health impacts, similar to those from Three Mile Island; the waste management challenges; the specialist contractors required and the impact on responders in addition to the community. In addition the IAEA reported that the other knock on consequences of this emergency were the reduction in power after the incident and the reduced trust in nuclear power which had a ripple affect across the world. These are examples of the genuine fears and concerns that arise for people who are

¹⁰ https://www.iaea.org/publications/15193/ten-years-of-remediation-efforts-in-japan

displaced by an ionising incident, as well as the long period of time during which those fears and real concerns subsist. The report also stated that 'the initial relocation of thousands of people, leads to impact of social dimensions' with suggestions by the authors that 'management of social identity, in addition to social support is important for mitigating psychological distress after a nuclear accident, and the support for individuals should be focused on the management of both host and evacuee communities in relation areas'.

The report also provides details in relation to the public expectations in relation to remediation which included:

- a. Confusion by the meaning of the Government long term remediation goal and how it would be achieved
- b. Increased distrust in the government by the residents
- c. Shortage of labour for the recovery activities
- d. Volume of contaminated waste and its storage
- e. Communications in particular the post–accident reality including the impact of perception on health. In particular it was noted that despite the knowledge, people living in the contaminated environments will be anxious about radiation related diseases and in particular cancer, although it was noted that their public information in advance was limited.
- f. Evacuation and time periods. The incident happened in March 2011 however the lifting of the evacuation orders in the 'difficult to return zones' may be lifted in 2023 12 years later. Part of the reason for this time period was the lack of maintenance of infrastructure in that time period caused by the long term evacuation. Therefore the area not only required decontamination but repairs to properties and infrastructure to ensure it was habitable prior to occupation. In addition it has been highlighted in a recent IAEA report that 'many former residents of the evacuated zone in Fukushima have significant fears about moving back, even after decontamination'.
- g. Environmental clean-up including agricultural fields, forests, reservoirs, lakes and matters relating to food safety.

h. Financial and reputational damage

Whilst the report can be used to influence the AWE off-Site Plan and therefore learn the lessons there are some elements which are unlikely to be resolved including the perception on long term health impacts; the impacts of evacuation on the community affected and the responding agencies as a result and the time periods which could be involved.

- 8.4 The impacts on responders and the community can also be drawn from more conventional emergencies as set out below are examples of such incidents:
- Buncefield explosion and fire in 2005, (an upper tier Control of Major Accident a. Hazard (COMAH)¹¹ site). This incident caused a change in planning legislation as a result of the 'domino' effect with a large petrol distribution site being adjacent to other businesses and a residential area. The incident is reported to have cost in the order of £100m to local companies, with an increase in unemployment as companies relocated or folded, increased debt in the community, psychological impacts relating to the unemployment, being displaced from homes. 2000 people were evacuated in the initial response with some still not back in their homes a year later due to the damage and remained living in hotels. Reports highlight the emotional and mental health stresses of the incident along with financial concerns. 12 By contrast with ionisation, this was an incident where you could move around relatively freely after the event of the explosion incident and where the damage to property could be seen after the initial fire was extinguished. This is not going to be the case in a radiation emergency. The very invisible nature of ionisation is what makes it so genuinely fearful and so significant a cause for real concerns for a population living within a risk area.

In 2015 reporting of the 'Buncefield' fuel depot (COMAH site) explosion and as reported by the BBC relating to 10 years post the accident residents stated that 'The damage to Mr Mitchell's house took about six months to repair at a cost of about £200,000 but the psychological impact was even more significant, with his family developing post-traumatic stress disorder (PTSD).'13 This is relevant since they knew

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/78 983/Buncefield-Social-Impact-Assessment-Final_20Report_0.pdf

¹¹ https://www.hse.gov.uk/comah/

¹²

¹³ https://www.bbc.co.uk/news/uk-england-beds-bucks-hers-34919922

they lived near a fuel depot but the long term psychological effects including flashbacks and the individual financial effect of the explosion was significant for years afterwards.

b. Flooding in West Berkshire. The impact of your home being at risk or actually flooded has been experienced in West Berkshire several times. There was flash flooding in 2007 when a 1:300yr event affected over 2500 properties by internal flooding. The impact on the responders was significant in that when it was raining it was not safe and /or very difficult to move around the area since vehicles were being stranded. However the impact on the communities affected was much more with people having 1m of water coming through their home destroying everything inside, all to be seen by everyone in days to come when drives and gardens became full of the contents of these homes. This early clear up whilst significant was not the end of the recovery, instead the reality of the whole family living in a family home upstairs for several months, or people moved out until the works were completed which for many was at least 6 months to a year. School work suffered for children living in smaller areas in their homes or due to longer travel times if they had to move out; people also struggled with work again often since they had longer travel times. Many people lived in caravans on their drives over the winter period to save money or due to insurance issues. However the additional hidden impact was the fear of it happening again with anxiety levels increasing every time there was a period of heavy rain. The impact of flooding whether you can expect it, if you live next to a river or not as a result of flash flooding is generally the same. With an initial removal of the obvious damage and muck in the homes but with a very long recovery by way of drying out and repairing the physical damage but with the ongoing mental health concerns. The impact on responders is also great by way of support with the cleanup and through the health system. I have been involved with many of those affected through the Flood Forums in place in Berkshire and have seen the stress and strain on people with some breaking down into tears as a result of the pressures. Following the floods in 2013/2014 West Berkshire Council undertook a survey of those affected. During the floods approximately 181 properties were flooded internally. Of those 36 responders to the survey confirmed that they had moved out of their property. A significant percentage, approximately 31%, left their homes and had to move outside West Berkshire administrative area. The reason given by survey respondents was that the lack of availability of the type of home they needed for their family in the administrative area of West Berkshire.

The table below shows where they moved to:

	Within West Berkshire	Outside West Berkshire
Lived with friends/family	68.4%	31.6%
Rented a house	61.5%	38.5%
Lived in a hotel/B&B	77.8%	22.2%

These events in West Berkshire demonstrate that *without* it being a radiation emergency the impact of flooding on the community in the short term can be, and here was, significant.

But the impact is even more so in the longer term by way of housing availability because evacuated people have to reside in dwellings *somewhere* as each day passes and, in the case of ionisation, for a likely considerable long period before it is certified as safe to return and also a person feels sufficiently comfortable returning to a residence that has been subject to ionisation or a risk of the same.

In addition, the stresses placed on families when living away when work is being done on their homes, or their homes are being made safe for their return, or indeed the stresses related to being out of their homes and outside the area due to the shortages of temporary / rental accommodation in the area cannot be underestimated.

The above flooding evacuation related to only 181 households whereas within the DEPZ area the numbers of residences are already higher than 181 households. Indeed, the Appeal proposals would see some 32 homes and 77 people which would be on top of the existing.

c. Grenfell Tower Fire in 2017. The fire in the 120 flat tower block resulted in 72 lives being lost. However it *also* resulted in longer term residential issues arising from over 200 people being made homeless and having no residence.

In 2021, over 4 years later it was reported that all but 6 households had been rehoused into permanent housing. Therefore, even with the type of tangible incident such as a fire, it can be seen for a relatively small number of people (200) it can take many years (here, 4 years) to find permanent housing for those displaced.

In the interim period the 'community' of residents were rehoused over a wide area of London and the Home Counties as a result the community was split up too.

This event also demonstrates the impact of housing availability and the loss of community and related harm to well-being as a result of being moved or having to move away from the area which added to the physiological recovery.

d. **Salisbury nerve agent poisonings in 2018**. This incident more closely demonstrates the similarities to an AWE radiation emergency in that the nerve agent could not be seen or smelt by a person.

There are a number of points which can be drawn from this incident to demonstrate the longer term impacts on recovering from such an incident including:

- How far the incident was spreading without it being seen. It was not just a town centre incident but the homes of both sets of victims created new incident scenes.
- The fear across the community was significant, particularly after the two local people were affected and one person sadly died.
- The impact on responders, not only as a result of the police officer who became very ill, but the hospital setting and the removal of emergency vehicles from being used again due to potential contamination.
- The community seeing emergency services and the military in full personal protective equipment (PPE).
- The effect on businesses with perhaps the most recognised one being 'Zizzi' where two of the victims had been which was only able to open 8 months after the event. Critical to this was ensuring it was 'clean' to operate again was a significant recovery plan in relation to bringing people back into the city.

The scale of this incident however was relatively small in relation to the potential impact as a result of an AWE radiation emergency.

e. **COVID19 Pandemic 2020**. The start of the CV19 pandemic until when the vaccination programme was rolled out also demonstrates the fear associated with something you cannot see or smell and may cause you significant harm.

The result was general compliance with the requirements and guidance in relation to staying at home, isolating from each other and the wearing of masks. The response also however highlighted some significant challenges faced by the responders by way of overwhelming of the NHS, the significant support required for the vulnerable (either in their homes and or in care/nursing homes), the testing regime put in place and the significant support needed for businesses.

This would also be the case with an AWE radiation emergency in that there would be a risk of the NHS in the immediate aftermath be overwhelmed with 'worried well' and this could be across the UK. The support needed in order to visit vulnerable clients within the area affected could be significant not least in that the carers would need PPE or depending on the hazard may not be able to enter the area and therefore specialist responders would be involved. Testing/monitoring of people and the environment would be required which takes time to set up and there are also limited specialists to undertake this role therefore international support may be required. The support required for businesses to continue afterwards whether in the same location or elsewhere is likely to be significant financially, in addition financial support is likely to be required for any residents since most if not no insurance policies cover for radiation emergencies.

f. Large utility outage 2022. In Oxfordshire in 2022 there was a significant water outage involving over 35000 properties. As part of the plans the identification of vulnerable people was required in order to ensure they were being provided with bottled water directly.

Mutual aid was provided by West Berkshire Council in order to lead on the identification of vulnerable people. The process involves an agreed Thames Valley Local Resilience Forum data sharing protocol with data being shared by a number of agencies to identify all the vulnerable in an area. This could be social care data, assisted bin collection data, supported living and priority service user data from the utility companies. The data when reviewed resulted in over 5000 records. The impact therefore on the responders on checking on all of these residents and supporting them was significant.

The same process would be applied to an AWE incident. It cannot be done in advance and held in a plan since the vulnerable databases regularly change. Any vulnerable person within the AWE area however may need to be supported before they are either evacuated or within a short period of time depending on their vulnerabilities.

The addition, in relation to the Appeal proposals, of 32 further homes and some 77 more people, the development would reasonably be expected to add to the number of vulnerable people in the DEPZ area and therefore the impact upon responders.

g. **Evacuations due to a 'suspect chemicals' 2022**. In 2022 there was a security incident in Bracknell Forest Council area whereby 124 homes were evacuated. When the police evacuated the residents they were asked if they had anywhere else to go, including overnight, in order to assess the needs for overnight accommodation should the incident go into the evening. 25 households, over 30% had nowhere else to go.

During any emergency people are encouraged to go to friends and families where they can hopefully be more comfortable. But, for many, this is not necessarily an option as was demonstrated in the recent Bracknell incident. In addition paying for hotels or other accommodation is also not necessarily an option for evacuees, in particular if insurance companies do not cover these costs and it may be for a prolonged period of time.

Therefore, rest centres - such as leisure centres - may be utilised but again they are only meant to be for a short period of time in the order of 48-72 hours in the immediate aftermath of an incident. They are resource intensive for the local authority also by way of staffing and the normal operations of these sites.

h. **Asylum and Afghan Hotels.** Other options for evacuated may be considered involve using hotels in which to house the evacuated population that would include, here, the residents of the Appeal proposals. This is often challenging to procure rooms under normal circumstances due to their normal bookings however with the use of hotels recently for Asylum seekers and Afghans by the Home Office the availability of hotels with rooms potentially required in the South of England is very limited.

My experience in West Berkshire in relation to Asylum and Afghan hotels is that the use of hotels is not simple in that it is resource intensive in relation to supporting the occupants, safeguarding issues, continuing education for the children, work related matters, support with basic human needs such as clothing, toiletries and food and most significantly the health and well-being of the guests especially over prolonged periods. Therefore the use of hotels may be a temporary solution but not likely to be the longer term solution.

Summary of Evidence

- 8.5 In summary the above nuclear and 'conventional' emergencies demonstrate the complexities of any response and the impact on those affected and the responders. There is no one cap fits all situation and this would be the same for a radiation emergency.
- 8.6 Significantly the amount of resources and specialists required for prolonged periods of time is often significant and certainly would be the case for a radiation emergency.
- 8.7 It is also clear that, unlike a radiation emergency, for most of the incidents where you could move around relatively freely after the event and where there was damage to property it could be seen. This is not going to be the case in a radiation emergency. As has also been referred to the very invisible nature of radioactive materials is what makes it so genuinely fearful and so significant a cause for real concerns for a population living within a risk area.
- 8.8 The relevance to this Appeal to the commentary about different incidents is that there is a clear assumption in the appellant's documentation that another 32 homes would not be an issue. However this would be another 32 on top of the existing significant number and therefore another 32 to support in an already complex situation which may be to the detriment of others already existing in the area should resources need to be diverted.

9. Specific Response to an AWE Radiation Emergency

9.1 As detailed in Section 6 (6.3.d) the response to an AWE radiation emergency is required to be *fast* in order to afford protection to the community.

- 9.2 In real time, "fast" is as follows. The Consequence Report states that within <u>15mins</u> AWE will have confirmed whether or not the incident will have an effect on the community outside the site boundary and will activate the notification communications as necessary. This will allow <u>10mins</u> for those outside to get into suitable shelter. At the moment this alerting is via a landline.
- 9.3 It is however recognised that less people have landlines therefore in addition media will be notified and social media messages used. Therefore the multiple communication routes will be used to alert as many people as possible as quickly as possible.
- 9.4 The notifications will be for the whole area of the DEPZ initially since the exact area affected will not be known in detail until monitoring has been undertaken which can take time to do.
- 9.5 The use of the new government Emergency Alert¹⁴ system is currently not available for use to alert people in relation to an AWE radiation emergency. This may change in the future which may negate the need for the alert via landlines.
- 9.6 In addition to alerting the public the responders are also activated and they put in place their response actions. These include the following actions, note it is not an exhaustive list:
 - Setting up the full coordination structures which will include COBRA due to the nature of the emergency;
 - b. Putting in place road closures to limit access into the area and then putting in diversions to keep people away;
 - c. Pausing rail movements as necessary;
 - d. Confirming the area(s) likely to be affected. The DEPZ is split into sectors for planning and response purposes should be there be a directional plume. Importantly however for the AWE Burghfield site due to the weather conditions that may be experienced there may not be a directional plume but instead a

¹⁴ https://www.gov.uk/alerts

- more widespread area of contamination around the whole site therefore increasing the impact.
- e. Providing information to the public about what has happened and what to do and importantly what not to do e.g. drive away from the area therefore causing traffic congestion and potential resuspension of the contaminants, not eating anything that was outside at the time of the incident and what to do about pets and farm animals;
- f. Establishing the vulnerable people database for the in the area and what the support may be required for them;
- g. Alerting the UK NHS systems for worried people across the UK;
- h. Confirming the environmental and people monitoring strategies;
- i. Assessing the requirements for urgent evacuation, this is likely to relate to any property within 600m of the site boundary;
- j. Assessing the need for subsequent evacuation, which could be any or all properties within the DEPZ area and thereafter putting in place a bespoke evacuation plan who, how, when, the potential period of evacuation and therefore what people need to take with them etc. and considering the implications of empty properties by way of security and what advice needs to be given to residents to do to their homes before being evacuated etc;
- Radiation monitoring of all those within the affected area, with a limited maximum capacity of approx. 200 who can be monitored per day for each Radiation Monitoring Unit (RMU),
- I. Supporting those out of the area at the time of the incident by way of assistance centres (information locations) and/or rest centres if they cannot go home;
- m. Limiting the use of food related matters such as crops, fruit, vegetables and livestock in the affected area;
- n. Continual communications with accurate information:

- o. Considering the recovery process in readiness for a smooth transition from response to recovery.
- 9.7 The above points give an indication of the activities required. What it does not demonstrate however is the resource intensity of the response for responders. Therefore, to give an indication of the requirements at a recent exercise (Aldex 23), which involved the Strategic and Tactical Coordinating Centres being simulated, over 150 people were involved over an 8hr period. For a real incident this would have to be replicated 24/7 until the formal handover to recovery.
- 9.8 In addition to the coordination centres resourcing would be necessary for a number of tasks including at rest centres, radiation monitoring centres, individual agency coordination centres PLUS there would be an expectation that services would be able to continue for the rest of the community not affected.
- 9.9 Whilst mutual aid would be called up from other local authorities locally and across the UK from local authorities with nuclear sites. Every agency would be doing the same to bolster their resources. Some agencies, including those who have specialist roles such as monitoring will also be activating resources from overseas. It would however put excessive strain on all responders in the response phase which for many would then have to be continued into the recovery phase.
- 9.10 Rest centres arrangements can be used to demonstrate resourcing and limiting factors. If this situation were to arise that evacuation was necessary then within the Plan there are a number of rest centres identified which could support an incident at AWE Burghfield. On average they can accommodate approximately 400 people but the staffing for this over a 24/7 period would be in the order of 25 50 people depending on the time of day for each 6-8 hr shift. Therefore a significant impact over a 24/7 period and replicated over 1, 2 or more sites as necessary.
- 9.11 The location (s) chosen to open as a rest centre will depend on a number of factors including area affected, travel arrangements, access to the site (s) at the time etc.

There are however a number of limiting factors in relation to the use of leisure centres including:

 Staffing the sites 24/7. Not only are there staff required from the site itself there is also a need for:

- rest centre managers
- safeguarding staff (Adults and Children)
- registration staff
- health agencies
- security
- Facilities and space such as catering, toilets, showers, areas to sleep, equipment such as sleeping mats and bags.
- Some premises normally used for reception centres may be being used as RMU's
- 9.12 In addition there is the risk that some people may be contaminated and therefore would either need to be separated from others or would need to have been monitored in advance of going to a rest centre.
- 9.13 Having regard to this application site which is in Sector M as shown in the map below:



9.14 Then based on its location within the DEPZ and with the area where Urgent Protective Actions (UPA) were identified by AWE in their consequence report then the numbers involved of residential, commercial and vulnerable sites are shown in the table below (based on Mar 2023 plan).

Sector	Residential Properties	Caravans	Commercial	Care Homes	Nursery	Primary Schools	Secondary Schools
Α	13		19				
В	20		28				
С	9		43		1		
D	81		2				
Е	192		31				
F	40		19			1	
G	26		38				
Н	9		3				
J	16		4				
K	39		20				
L	<mark>41</mark>		<mark>20</mark>				
M	<mark>395</mark>		<mark>42</mark>	2			
N	<mark>166</mark>		<mark>11</mark>				
Р	99		22	1			1
Q	9		21				
R	36		18				
TOTAL	1191		341	3	1	1	1

- 9.15 This shows that to the edge of the UPA the total numbers of build premises. Taking into account the residential units only then these 1191 units would equate to approximately 2859 people. Taking these residential numbers alone this would equate to a need for up to 9 rest centres. If it was taken to a best case scenario of only 30% requiring support as having no immediate alternative accommodation this would equate to 953 people which would equate to at least 3 rest centres and depending on the outcome of monitoring then requiring to be rehoused = approximatley 397 homes based on 2.4/household.
- 9.16 If again the outcome was that only sectors L, M and N were affected out to the edge of the UPA the numbers would be in the order of 602 premises, 1445 people and therefore 3 rest centres or in best case scenario of 30% requiring support, which would equate to 482 people and therefore at least 2 rest centres.
- 9.17 However, the figures above to not include people to be evacuated from commercial units, schools, care homes and caravan sites which would increase the numbers significantly. In addition it does not include at this time those which have planning approval but are not built or completed yet, albeit that there is a register of such applications which are taken into account during the consulation process. Significantly for this application site there is an approved development at Pond House Farm for 100 dwellings which will, should they be build within their deadline add not only the 100 dwellings but 240 additional residents and the associated impact that will have.

- 9.18 All of the above clearly demonstrates that the area of the Appeal proposals is already densley populated and therefore the impact in relation to evacuation needs by way of rest centres and subsequent rehousing would be a significant logistics and resource intense requirement.
- 9.19 Again applying those figures in the context of the Appeal proposals, the following emerges. There is no evidence that the Appeal site population would have any alternative accommodation to evacuate to.
- 9.20 The result of the Application development (now on Appeal) would be 77 people (excluding children) permanently residing on the Appeal site. 77 people represents an additional 0.4% of the current DEPZ population of 18,571. 77 people is a 2.7% increase on the population in the UPA. 77 people is a 5.3% increase in numbers in the sectors L, M and N in the UPA. Whilst in theory and in isolation these figures may appear relatively low, the practical consequences of the 77 people (excluding children) are not. This is because 77 people (excluding children) equates in practical terms to about 25% of the 300 people that make up at least one rest centre in addition to the additional 100 dwellings/240 people needed to be taken into account. The need for an additional rest centre in consequence is significant in itself.
- 9.21 Linked to this is the responsibility of the Council to rehouse those who are homeless. It may be that as a result of the contamination in the area that people will not be able to go home since the house may be deemed to be unfit for human habittaiton; or it may be the residents do not wish to go back for fear of contamination; or with respect to rest centtres they are normally only intended to be in use for up to 48- 72 hours maximum. Therefore further more suitable housing would need to be found.
- 9.22 Having regard to the current emergency housing available to Councils or the available private rental stock available in the community there is very little available, currently compounded by Ukrainian, Afghan and other migratory schemes and the general lack of available stock in the area.
- 9.23 Indeed there are currently over 40 homeless people placed in hotel accommodation with some having to be placed in Swindon, Marlborough and Didcot so outside the West Berkshire boundaries. This is being experienced across Berkshire and the South East.

9.24 Therefore the risk is that anyone needing rehousing would need to move from the area which would again add to the wellbeing of the residents as a result of breakdown of community cohesion, travel to school etc etc as detailed previously.

Summary of Evidence

- 9.25 The response to a radiation emergency is complex with many agencies involved and many considerations to take into account. Whilst many incidents are complex the radiation element to the response will undoubtably make it more complex.
- 9.26 Whilst the initial countermeasure/ mitigation is shelter this is only an option for up to 48hrs. Therefore at the start of a response consideration is given to who may need to be evacuated, where to and how. A very complex matter not least in relation to the numbers which may be involved and the lack of knowledge as to how long any evacuation may be for. Added to this is the limitation on areas for rest centres, longer term accommondation options and staff resources.
- 9.27 The Appeal site of 32 dwellings and 77 residents would be an additional 77 on top of the existing residents, and of course on top of all the other commercial and vulnerable sites as detailed previously. Therefore, in my opinion there is the likelihood of the requirement for an additional rest centre to accommodate all those evacuated. Which in my opinion, is a material number of additional evacuated people. Also a material effect would be to locate a further rest centre to accommodate the evacuees and subsequently more suitable accommodation, which would further exacerbate the response, the recovery and the impact on those involved since the numbers involved will mean that the rest centres will be some distance from their homes, schools and normal routines. It will result in the community cohesion being broken and therefore the impact on wellbeing increasing detrementally.
- 9.28 Therefore this 'small' increase from the Appeal proposal with all the additional resources necessary would add to the response and recovery requirements significantly on top of the existing community. The whole picture needs to be taken into account which includes the original residental numbers in the DEPZ as of March 2020 (18571), the additional committed developments which have permission within the DEPZ (2362) plus all the commercial and vulnerable sites the majority of which being in place prior to March 2020 and therefore outside the control of the Local Authority at the time of the determination. This data plus the response considerations and

implications in particular in relation to evacuation to rest centres and longer term recovery and support by way of housing requirements clearly sets out that the 'line in the sand' as referred to in the appeal documents has already been met. Therefore placing more people in a known risk area will only add to the complexities of the response to a radiation emergency therefore impacting the response and the risk to their public health and well-being.

9.29 Consequently, as is described in the Reason for Refusal 2, the additional residential population would compromise the safety of the public in the case of an incident at AWE Burghfield because there can be no guarantee of an available rest centre nor alternative accommodation being immediately available in the local just outside the DEPZ for the evacuating population of the Appeal site proposals.

10. Recovery

- 10.1 Following the immediate response to a radiation emergency as described previously there will be a recovery phase. Recovery is the process of rebuilding restoring and rehabilitating the community following an emergency. It however is not just a remedial process but broadly interlinks categories of impact, that can be summarised as aspects of well-being, that the individuals and communities needs to recover from and include:
 - a. Humanitarian (including Health)
 - b. Economic
 - c. Infrastructure
 - d. Environmental

All of the above will be relevant to recovery from a radiation emergency.

10.2 There is a Thames Valley Local Resilience Forum Recovery Plan to support the recovery process. Its focus is more on structure and guidance rather than detail since it covers a wide range of incidents to recover from. The principles within it however include coordination and setting up arrangements where specialists can focus on their

area of expertise to agree the strategy and actions within the plan. There are however a large number of documents to support the process including the Strategic National Guidance¹⁵, the National Nuclear Emergency Planning and Response Guidance, Part 3 – Recovery¹⁶, the UK radiation recovery handbook¹⁷

- 10.3 The recovery phase will commence when there is a formal handover from the Strategic Coordinating Group. The recovery, however, is likely to be complex, as indicated previously from 3.59.
- 10.4 It should be set out clearly that in the case of a radiation emergency, it is very much not the case that those affected, in particular those evacuated, will be able to immediately return to their homes (as they might do after a flood or a fire, and to begin themselves a clean-up of their homes). Instead there will be the requirement for environmental monitoring as per the strategy, people monitoring, remediation of land and building clean up strategy, clear communications, physical clean up and the long term health and environmental monitoring. All of these processes and activities take time due to the particular nature of the material involved.
- 10.5 Regardless of the particular level of radiation contamination there is likely to also be a requirement of continual monitoring of the environment over a number of years. Indeed in 1958 there was an alleged crash on Greenham Common involving the US Air Force which involved a radiation source. In the late 1990s environmental monitoring was taking place in relation to this in order to establish if there were any material in the environment or in the food chain. This involved taking house dust samples, grass, fish and meat samples from the local area. Whilst no evidence was found, there was a genuine fear factor associated with the ongoing monitoring after an incident over a 40 year period. That fear factor also reduces well-being significantly.
- 10.6 How long 'recovery' will take cannot be specified in any emergency plan because there are so many variables to take into account which will only be known at the time of the incident. It may be hours or days but equally it may be months or years. This has been the case as set out from 3.59 in relation to radiation and other non-radiation-type emergencies.

¹⁵ SNG 5thEdition Final March 2017 1 .pdf (publishing.service.gov.uk)

¹⁶ www.gov.uk/government/publications/national-nuclear-emergency-planning-and-response-guidance

¹⁷ www.gov.uk/government/publications/uk-recovery-handbooks-for-radiation-incidents-2015

- 10.7 Recovery is likely to be complex in particular if there is remediation work to property, including the Appeal site proposals, to be undertaken and an evacuation has taken place.
- 10.8 Throughout that period of recovery, the Appeal site residents would be required to be accommodated elsewhere should they have been evacuated or as the recovery strategy directs and remain elsewhere until it is certified that it is safe for the residents to return to their envisaged proposed homes at the Appeal site. It should be noted that depending on the level of contamination then the residential units may be deemed unfit of human habitation under housing legislation. The consequential need for rehousing permanent in alternative accommodation also reduces well-being significantly and disrupts communities because of their fragmentation.
- 10.9 The recovery process including ongoing monitoring is also likely to be an expensive process for all involved, including residents of the Appeal site.
- 10.10 There can be support available in particular by way of the Bellwin scheme ¹⁸ is a Government scheme which may support local authorities as set out in S155 of the Local Government Act 1989. However, it is not a given and there are parameters including that it may only cover 'the costs of *immediate actions* taken in the aftermath of an emergency or disaster' and so not extend to the potentially medium and longer term recovery from a radiation emergency at AWE Burghfield, howsoever long that aftermath may be.
- 10.11 In addition for the residential or commercial properties, there is no insurance in relation to radiation emergencies. As a result there can be expected to be significant costs associated with this type of incident for the owners of these properties including any new properties proposed as in these 32 dwellings at the Appeal site.

Summary of Evidence

10.12Like the response to an emergency the recovery from a radiation emergency will be complex and resource intensive. The time period cannot be predicted since the data at the time will direct the type of recovery and how it will be undertaken. It will also be a costly process due to the experts and specialist resources which will be required.

¹⁸ https://www.gov.uk/government/publications/bellwin-scheme-guidance-notes-for-claims/bellwin-scheme-of-emergency-financial-assistance-to-local-authorities-guidance-notes-for-claims

- 10.13 Regardless of how long or not the recovery process would be, there also remains a real fear and genuine concerns that properties within the DEPZ, including the proposed new properties, would be 'blighted' by the ionising event affecting their property.
- 10.14As can be seen from the above the psychological wellbeing of those living within the DEPZ area is likely to be affected in a significant way and for a significant period, as was the case at Three Mile Island that I have referred to above.
- 10.15Were the Appeal site proposals to be approved by the Secretary of State then the Appeal site residents can expect the same kind of blight and effects on their well-being as a result of a radiation emergency; whereas if the Appeal were refused planning permission, then they would not arise in the first place and well-being would not be affected in the event of an emergency incident.

11. Development Management Assessment Process

- 11.1 As the Application (now Appeal) noted in the Application Form, the developer here chose to not have pre-application discussions with the Council and instead seems to have relied on the grant of outline planning permission for the area of land covered by the allocation before the 2019 Regulations came into force. The Appeal proposal falls within Sector M as has been referred to above. However, there has been a development management assessment process in place in relation to the AWE sites since 2010 and CS8 makes clear the potential for a likely refusal of planning permission as well as the views of the Office for Nuclear Regulation (ONR) being material. The process has varied overtime and has become more considered in relation to the risks and the impacts associated with a radiation emergency from an AWE site.
- 11.2 The process has however been revised almost annually and in particular post 2020 (after the new Regulations had come into force) when Wokingham and Reading Borough Councils were brought within the newly defined geographical extent of the DEPZ drawn by the Local Authority, and when the regulator updated their Land Use process following the revision of the REPPIR legislation and the 2019 Regulations.

- 11.3 The latest development control process guide for professional partners of the Local Authority was begun to be reviewed in late 2022. The intention then was to make it a public document to assist developers. But, the final version was paused due to the 3 yearly review and determination of the DEPZ due in January 2023 and is currently being amended in relation to the changes.
- 11.4 Regardless of the *status* of the document, the principles as to *what* applications the Emergency Planning, and as necessary the AWE Off-Site Planning Group as a whole or as individual agencies, are consulted on has remained broadly the same.
- 11.5 As a result, the relevant Emergency Planning Service for the geographic area of the application site is consulted with respect to any planning application within the DEPZ, or the other consultation zones as detailed by the ONR. This would normally be West Berkshire, Wokingham Borough, Reading Borough and Basingstoke and Deane Borough Councils.
- 11.6 The zones are set out on the ONRs website¹⁹ when emergency planning would be consulted on the application in addition to ONR and as shown below:

Zone	Description			
On the nuclear site	Within the nuclear site boundary.			
Detailed Emergency Planning Zone (DEPZ)	The DEPZ where set by a Local Authority.			
Outer Consulation Zone (O <mark>C</mark> Z)	Extends from the perimeter of the DEPZ out to a distance defined by ONR from the centre point of the site, where this distance is determined by the nature of the site. For sites without a DEPZ, the OCZ extends outward from the site perimeter fence.			
12km zone	A circular zone of 12km radius around all nuclear sites, for certain types of significant development due to the potential for such developments to pose an external hazard to sites.			
Special case	ONR also requests to be consulted on planning applications, irrespective of distance from nuclear sites, for special cases. These represent developments that either introduce a new hazard or change the existing external hazards posed to nuclear sites.			

11.7 Each application for planning permission is evaluated by emergency planning professionals on their own merits but specifically in relation to the impact the development would have on the AWE Off-Site Emergency Plan, on responders capabilities and the community in the short and long term and in so doing the public health and wellbeing impact on the occupants of the buildings.

¹⁹ https://www.onr.org.uk/land-use-planning.htm

- 11.8 The consultation process in outline is:
 - a. Development Control consult internally with the respective Emergency Planning officer and the Office for Nuclear Regulation;
 - b. The Emergency Planning Officer reviews the application taking into account several factors relating to the Plan and the impact on it. Where appropriate the officer will respond directly to Development Control to provide feedback or ask for clarity in relation to the application.
 - c. The Emergency Planning Officers from West Berkshire, Hampshire (on behalf of Basingstoke and Deane), Reading and Wokingham Councils meet on a regular basis to consider applications in order to ensure consistency in approach.
 - d. In more complex or large applications the AWE Off-Site Planning Group is consulted. This group is made up of all the responders who have a role in the Plan, which can be as many as 27 different agencies. They provide feedback as necessary relating to their agency and the impact which can vary significantly.
 - e. Feedback is provided by the relevant local authority Emergency Planning Officer to the relevant Development Control service and to ONR.
- 11.9 The specific considerations relating to the AWE Off-Site Plan include evaluating the effect of the application upon the following factors:
 - a. Whether the proposed development is with the DEPZ or OPZ
 - b. The proximity of the proposal to the AWE site boundary
 - c. The type of development e.g. residential or commercial
 - d. The numbers involved by sector and distance from the site, including the adjacent sectors to support response by plume directions. This also includes a review of valid approved applications but not built, for which there is at least an annual review.
 - e. Any impact on short term sheltering 24-48hrs

- f. Impact for medium to long term sheltering
- g. Likely requirement for immediate evacuation
- h. Impact for subsequent evacuation rest centres etc
- i. Impact on the Warning and Informing process
- j. Impact on any difference between day or night
- k. Vulnerable people considerations
- I. Impact on external issues e.g. parents wishing access to children
- m. Impact on the access and egress routes
- n. Recovery implications
- 11.10 In this Application (now Appeal), the increase in numbers, and in rest centres are factors and so too are the immediate and subsequent needs for sheltering and evacuation, the recovery implications including as to recovery of well-being after an emergency incident, access and egress routes.
- 11.11 In addition, the Appeal site is situated *on* the access and egress route between AWE Aldermaston and Burghfield where resources will be moving to and from in addition to responders. Therefore a potential impact should the residents not shelter but decide to leave the area.
- 11.12 In the appellants Pre-Application Planning Statement it is noted that para 3.4 refers to a comment made by ONR in July 2019 stating that ONR had consulted with the Council in relation to the reserved matters application 19/00772 in relation to 28 dwellings and that they (ONR) confirmed that 'they have provided adequate assurance that the proposed development can be accommodated within their off-site emergency planning arrangements.' The date however is significant since at that point the Consequence Report had not been received (Nov 2019) and the determination of the DEPZ process had not been completed (Mar 2020) therefore the reference to this by the appellant was irrelevant to the proposal. In addition, as I understand it, that

application related to reserved matters approval and not to the prior grant of outline planning permission, reference 16/01685/OUTMAJ dated 30th October 2018 that was granted *before* the 2019 Regulations came into force in May 2019

- 11.13 Having regard to this Application (now Appeal) no order of consultation was providing a formal response to the application 22/00244 was made on 17 March 2022. Thereafter in September 2022 a pre application enquiry (22/02020/PreApp) was made to the Council in relation to the same proposal as 22/00244. A meeting was held with the applicants on 27 September 2022.
- 11.14As a result of the meeting a further review and evaluation to this Appeal site was undertaken with the details relating to this made by emergency planning set out in Appendix 4.
- 11.15As I have summarised above the notes clearly shows the scale of the figures in relation to the application site in relation to numbers of people, the likely increase in vulnerable people, the evacuation impact, the fact the development is also on the access and egress route between AWE Aldermaston and Burghfield where resources will be moving to and from in addition to responders, plus the recovery implications.
- 11.16The pre-application proposal was discussed at an AWE Off-Site Planning Group meeting on 24 November 2022. This was attended by ONR, Thames Water, UK Health Security Agency, AWE, National Highways, Reading BC, Berkshire Health Care NHS, Environment Agency, Royal Berkshire Hospital, Food Standards Agency, Thames Valley Police, Hampshire CC and Wokingham BC. The application was discussed with a conclusion to advise against in line with the pre-application information from the Appellant/Applicant as detailed above.
- 11.17 It had been noted that it was an allocated site but colleagues make clear in their Planning Evidence that the allocation was not unconditional and was based also on Policy CS8 which they describe. As a result of the material changes in legislation from May 2019 which resulted in the changes in the DEPZ and associated implications on the AWE off-Site Emergency Plan with the significant change in demographics in the new DEPZ to the 'Inner Zone' existing prior to 2020, the Council considered that it was appropriate, having regard to the potential harm to the public's safety and to their resulting reduced well-being during recovery processes, that a recommendation of refusal be made.

- 11.18 It was noted that the Appellant appeared to accept by its previously proposed legal agreement for a site specific emergency mitigation plan that this a need to mitigate the emergency planning issues including in relation to rest centre impacts. Indeed, that was apparently done in Basingstoke and Deane Borough Council area regarding Boundary Place, Tadley. But, in relation to this Appeal site, this Local Authority considers that this was not appropriate or workable to have site specific emergency plans. These dwellings are intended mainly for the open market and will be mostly individual privately owned properties with no overall control such as one landlord. Therefore, the Emergency Planning mitigation that had been proposed by the Applicant (now the Appellant) by way of individual emergency plans for the dwellings of the Appeal site or a legal agreement were also considered to be not workable for individual dwellings.
- 11.19 In theory, an emergency plan *may* be applicable for commercial premises. But this is a very different arrangement than private dwellings proposed by the Appeal proposal in that there are requirements for single employers to ensure the health, safety and welfare of their staff and processes which can be put in place to ensure employees and visitors follow the emergency plan. Therefore, the reference to the Café in Burghfield Common, referred to by the Appellant, is a different situation and cannot be compared to the situation in this Appeal where permanent residential accommodation is proposed inside of the DEPZ in which people would reside.
- 11.20 The approach of the Appellant is indeed very similar to many applications received in relation to building in flood risk areas. But the approach is a misconception in assuming that an individual residential emergency plan would be the answer to all the issues generated by a radiation emergency that have been referred to above. By contrast with a radiation emergency, the invisible and potentially long term result of such an incident is not the case as in flooding. A resident surrounded by water cannot go in or out as a result of their not having followed an emergency plan and to have not taken heed of the Environment Agencies flood alerts and warnings and therefore call upon the emergencies services or other responders to help them. These applications would be refused based on the impact on the residents and the responders relating to the flooding. By analogy, when there is a radiation risk and therefore a potential impact on the residents and the responders, the same result, however, should follow: a refusal of residential planning permission within the geographical extent of the DEPZ.

- 11.21 As a result of having an additional 77 people placed within the geographical extent of the DEPZ and within the area where urgent protective actions are necessary as a result of the harm which many be caused, the impact of that number of additional residents on the AWE Off-Site Emergency Plan, on responders, and on the diversion of resources to support those additional residents from the already large existing population the recommendation of the Emergency Planning Service and the AWE Off-Site Emergency Planning Group was to advise against the development because public safety would be compromised as a result of the proposal's additional population within the DEPZ.
- 11.22 The AWE and the ONR also (for their own reasons) objected to the Appeal proposals.

Summary of Evidence

- 11.23 The Appeal site and the mitigations put forward by the appellant were considered not just by the Councils Emergency Planning Service but also carefully considered by the AWE Off-site Emergency Planning Group as per the development control process.
- 11.24 The mitigations put forward were, in the opinion of the group, misconceived, misplaced and unworkable. In addition they did not provide any assurances that the addition of a further 32 homes would not impact on the AWE Off-Site Emergency Plan and therefore there would not be an impact on the residents' safety and well-being, in the short, medium and long term, as a result.
- 11.25The outcome of a careful review of the proposals was to advise against the development.

Appendix 1 AWE Burghfield Consequence Report 2019

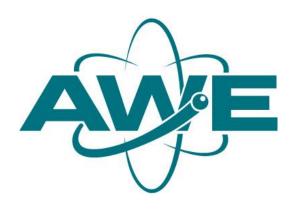
Appendix 2 AWE Burghfield Letter 2022

Appendix 3 DEPZ Determination Report 2023

Appendix 4 AWE Off-Site Emergency Plan FOI Version 2022

Appendix 5 Pre-Application Considerations

Appendix 1



ATOMIC WEAPONS ESTABLISHMENT

AWE BURGHFIELD

CONSEQUENCES REPORT

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Introduction

This document is the consequences report for the Burghfield Site, as required under Regulation 7(1) of The Radiation (Emergency Preparedness and Public Information) Regulations 2019 (REPPIR 2019).

The following information has been titled to relate specifically to the REPPIR 2019 Schedule 4 items required to be included within this report.

Part 1 - Factual Information

- 1. Regulation 7(3) Schedule 4, paragraph 1(a) Name and address of the operator:
 - AWE plc, Aldermaston, Reading, Berkshire, RG7 4PR.
- 2. Regulation 7(3) Schedule 4, paragraph 1(b) Postal address of the premises where the radioactive substance will be processed, manufactured, used or stored, or where the facilities for processing, manufacture, use of storage exist:
 - AWE plc, Burghfield, Reading, Berkshire, RG7 2PQ.
- 3. Regulation 7(3) Schedule 4, paragraph 1(c) The date on which it is anticipated that the work with ionising radiation will commence or, if it has already commenced, a statement to that effect:

The Burghfield Site has been occupied in support of the UK nuclear deterrent since 1950 and work with ionising radiation has been conducted on the site since that date.

Part 2 – Recommendations

- 1. Regulation 7(3) Schedule 4, paragraph 2(a) The proposed minimum geographical extent from the premises to be covered by the local authority's offsite emergency plan:
 - a. The proposed minimum geographical extent to be covered by the Local Authorities Off-Site Emergency plan is an area extending to a radial distance of 3160m from the Burghfield Site centre location.
 This is illustrated on Map A in Appendix A.
 - b. In addition to the minimum geographical extent recommended above, an Outline Planning Zone, extending to a radial distance of 12km around the Burghfield Site centre location, has been determined by the Secretary of State for Defence, in accordance with Regulation 9(1)(c).
 - This is illustrated on Map B in Appendix B.
- 2. Regulation 7(3) Schedule 4, paragraph 2(b) The minimum distances to which urgent protective actions may need to be taken, marking against each distance the timescale for implementation of the relevant action; and paragraph 3(a) The recommended urgent protective actions to be taken within that zone, if any, together with timescales for the implementation of those actions.

- a. The following distance is recommended for the urgent protective action of sheltering. This is the largest distance determined by detailed consequence assessment of a range of source terms and includes consideration of a range of weather conditions and vulnerable groups within the population.
- b. The minimum distance to which urgent protective actions should be taken corresponds to an area with radial distance of 3160m.
- c. It is recommended that people are instructed, as soon as is practical, to immediately take-cover in a suitable building and to stay inside with the windows and doors all properly shut. This 'sheltering' action may be necessary for a period of up to two days, or at least until the initial contaminated plume has passed and monitoring of the ground contamination has been undertaken to determine the level of groundshine; and subsequent potential for further dose uptake, (e.g. from contaminated locally produced foodstuffs).
- d. It is recommended that the declaration of a Radiation Emergency, by the operator, to the Local Authority is the trigger for implementing the off-site emergency plan and initiating all the above recommended urgent protective actions.
- e. Category F weather conditions typically has an associated mean wind speed of 2ms⁻¹. From the event site, there will be an average of approximately 1500 seconds (25 minutes) from the initiation of the event until the leading edge of any plume travels to the minimum distance recommended for urgent action. Assuming no early warning of the onset of any incident, and that the Site Response Group could take up to an estimated 15 minutes to set-up and formally notify the Local Authority, there remains approximately 10 minutes to inform the public, and for the public to find suitable shelter, in order to realise any substantive benefit from the sheltering action.
- 3. Regulation 7(3) Schedule 4, paragraph 3(b) Details of the environmental pathways at risk in order to support the determination of food and water restrictions in the event of a radiation emergency:
 - a. The release of radioactivity from the Burghfield Site as a result of a fault condition has the potential to result in doses to the public through a range of exposure pathways, including:
 - i. First-pass inhalation of air in the plume of contamination;
 - ii. Short-term external irradiation during passage of the plume Cloudshine;
 - iii. Long-term inhalation after resuspension, from ground contaminated by the initial plume;
 - iv. Long-term external irradiation from ground contamination by the initial plume Groundshine;
 - v. Ingestion of food crops contaminated by the initial plume.
 - b. The relative importance of the different exposure pathways is dependent on the type of accident and the potential radioactive isotopes which may be released.

- c. The most likely predicted accidents would spread material by explosive distribution, these are non-fission incidents, where the material that would dominate in this type of release will be plutonium (which is an Alpha emitting actinide) in an inhalable particulate form.
- d. For potentially more energetic events, a range of fission products would be produced meaning that both internal (inhalation) as well as external exposure (irradiation) would dominate.
- e. For the majority of fault sequences, the material released would be in the form of fine particulates of plutonium oxide and the predominant exposure pathway to individuals outside the Burghfield Site during the passage of the plume would be by inhalation. As the plume travels downwind, deposition mechanisms would deplete the plume and leave radioactive material on the ground. Most forms of plutonium are removed from biological pathways by being fixed in the soil and only small amounts are concentrated by biological processes into the food chain, primarily through grazing animals. However, the material can be resuspended by the action of the weather, or by farming practices, or any other disturbance processes, resulting in a potential for longer term inhalation doses.
- f. Doses to the public resulting from this consequence may include contributions from cloudshine, first-pass inhalation, long-term inhalation following resuspension, and groundshine.
- g. Overall, the primary concern for early response decision-making to radiation emergencies involving possible accidents at the Burghfield Site only merits consideration of the first-pass inhalation dose and therefore sheltering is the recommended urgent protective action.

Part 3 - Rationale

- 1. Regulation 7(3) Schedule 4, paragraph 4 The rationale supporting each recommendation made:
 - a. The release of radioactive particles small enough to be respirable have the potential to result in radiological doses to the public from a range of exposure routes, most notably:
 - First-pass inhalation of air from the plume of contamination;
 - Long-term inhalation after resuspension of ground contamination by the initial plume;
 - Ingestion of food crops contaminated by the initial plume;
 - Long-term external irradiation from ground contamination by the initial plume.
 - b. It has been assessed that the first-pass inhalation dose is the most significant by far, for initial emergency response purposes, which has resulted in the recommendation to shelter as the most appropriate urgent protective action. This should be coupled with a restriction on the consumption of all locally produced food, until the direction of the plume and the extent of the contamination has been

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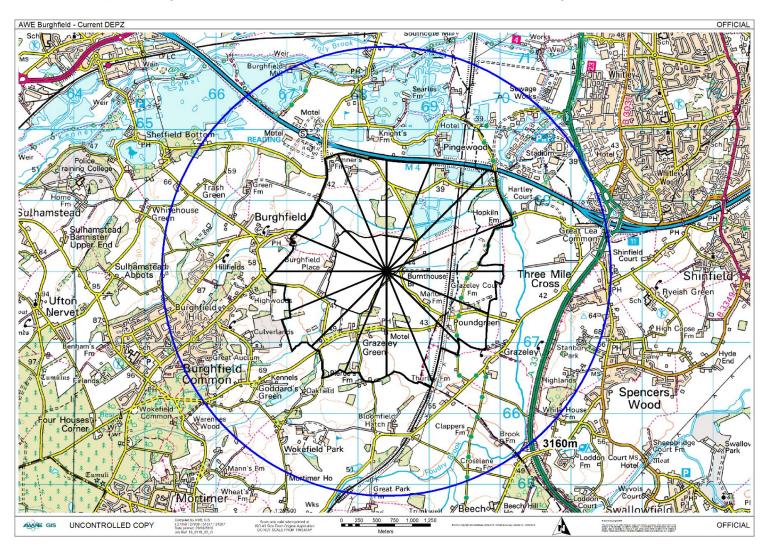
fully investigated, examined and understood. Appropriate local instructions should then be made available to the public based on the prevailing conditions.

- c. The recommendation for the minimum emergency action distance at the Burghfield Site originates from the Consequence Assessment carried out under REPPIR 2019. The guidance set out in the Approved Code of Practice is to use the largest candidate distances recommended for the urgent protective actions identified against the lower Emergency Reference Level. This 3160m distance is selected as the minimum geographical extent of the Detailed Emergency Planning Zone (see appendix C for definition) about the Burghfield Site Centre Location.
- d. This distance has increased from the REPPIR 2001 ONR determination. The REPPIR 2001 determination was based on a 5mSv dose contour using 55%Cat D weather conditions. Under REPPIR 2019, the minimum distance for urgent protective actions is based on a 7.5mSv dose contour. However, in accordance with the new requirements of REPPIR 2019, the 'reasonable foreseeability' argument is no longer allowed, and several different requirements have had to be taken into consideration, these being that the assessment must:
 - Consider age, and other characteristics which would render specific members of the public especially vulnerable;
 - Include all relevant pathways;
 - Consider a representative range of source terms;
 - Consider a range of weather conditions to account for consequences that are less likely, but which have greater consequences.
- e. A further consideration is the geographical area around the site and the potentially significant period that these adverse weather conditions could be experienced.
- f. AWE has analysed the dose from a range of weather conditions and has decided to base its proposal on a weather category that is less likely, but which could provide significantly greater doses. Consideration of less likely weather categories, which occur around 12% of the time in the local geographical area, increases the 7.5mSv dose contour to 3160m around the site centre location.
- 2. Regulation 7(3) Schedule 4, paragraph 5(a) The rationale for its recommendation on the minimum distances for which urgent protective action may need to be taken:
 - a. The minimum distance is established from the guidance provided in support of the Regulations, for the appropriate source terms, and is based on the requirement to identify a distance that has the potential to deliver a 3mSv dose saving, when adopting the recommended urgent protective action; which in this case is sheltering.
- 3. Regulation 7(3) Schedule 4, paragraph 5(b) The rationale for agreement that no off-site planning is required.
 - a. Given the content of this Consequences Report, this requirement does not apply to the Burghfield Site.

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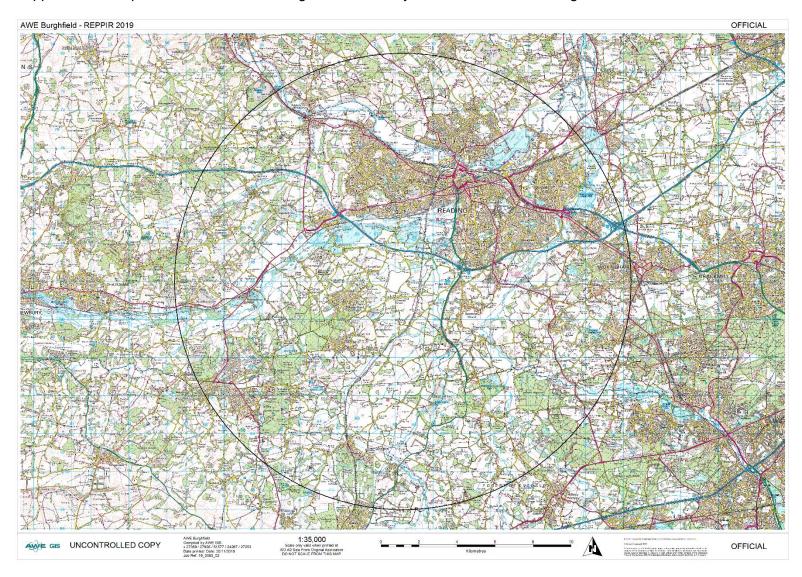
Appendix A: Map A – The ragged bold black sector is the current boundary of the Detailed Emergency Planning Zone. The Proposed Urgent Action Distance (blue circle) is set at 3160m for the Burghfield Site.



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Appendix B: Map B – The Outline Planning Zone Boundary, set at 12Km for the Burghfield Site.



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Appendix C: Definitions

Detailed Emergency Planning Zone (DEPZ)	A zone determined in accordance with Regulation 8 of the REPPIR 2019 Regulations. This is now covered by the Local Authority's off-site emergency plan
Outline Planning Zone (OPZ)	A zone determined in accordance with Regulation 9 of the REPPIR 2019 Regulations and covered by the Local Authority's off-site emergency plan.

Appendix 2



ATOMIC WEAPONS ESTABLISHMENT

AWE BURGHFIELD

Declaration of No Change REPPIR 2019

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Introduction

This document contains a "declaration of no change" for AWE Burghfield, in accordance with Regulation 6(2)(b) of The Radiation (Emergency Preparedness and Public Information) Regulations 2019 (REPPIR 2019).

Review of AWE Burghfield's last hazard evaluation and consequence assessment

Regulation 6(2) of REPPIR 2019 provides that:

"For such time as the work with ionising radiation in respect of which an evaluation made pursuant to Regulation 4(1) continues, the operator must, within 3 years of the date of the completion of the last evaluation (whether made in accordance with Regulation 4(1) or this paragraph), or longer, if agreed by the regulator, either-

- (a) make a further evaluation; or
- (b) if there is no change of circumstances which would affect the last Consequences Report required by Regulation 7, make a declaration to that effect."

A review of the last AWE Burghfield hazard evaluation and consequence assessment carried out in 2019, as required under Regulation 6(2) of REPPIR 2019, has been completed.

This review process has been undertaken in accordance with the requirements of Regulation 6 of REPPIR 2019 and the current Approved Code of Practice and guidance (second edition 2020).

The evidence gathered by the review process has concluded there has been no change in circumstances or material change which would affect the conclusions of the previous hazard evaluation or consequence assessment required by Regulations 4(1) and 5(1).

Declaration of No Change

This document is a "declaration of no change", in accordance with Regulation 6(2)(b).

The 2022 review of the 2019 hazard evaluation and consequence assessment has concluded the Consequences Report (Issue 1) dated November 2019 continues to provide the necessary information for the local authority (in this case West Berkshire District Council) to prepare an off-site emergency plan.

Appendix 3

AWE Detailed Emergency Planning Zone

Decision Paper: Service Director Development &

Regulation

Date of Decision: 19th January 2023

Report Authors: Jonah Maddocks & Carolyn Richardson

1 Purpose of the Report

- 1.1 To provide information and the decisions made in relation to the determination of the Detailed Emergency Planning Zones (DEPZ) around both Atomic Weapons Establishment (AWE) sites review process as required under Radiation (Emergency Preparedness and Public Information) Regulations 2019 (REPPIR19).
- 1.2 To confirm the next steps to ensure compliance with REPPIR19.

2 Executive Summary

- 2.1 This report explains the need to determine the Detailed Emergency Planning Zones (DEPZ) around both Atomic Weapons Establishment (AWE) sites as required under the Radiation (Emergency Preparedness and Public Information) Regulations 2019 (REPPIR19).
- 2.2 The DEPZ is the defined zone around the nuclear site where it is necessary to predefine protective actions which would be implemented without delay to mitigate the likely consequences of a radiation emergency.
- 2.3 There are requirements in REPPIR19, the associated Approved Code of Practice (ACoP) and guidance detailing why, how and when to determine or review any DEPZ.
- 2.4 Under REPPIR19 the operator needs to undertake a review of hazard evaluation and consequence assessment within 3 years of the date of the completion of the last evaluation (or longer if agreed with the regulator or earlier should there be material changes in operations on the nuclear site).
- 2.5 The last determination for both AWE sites was in March 2020 with the last Consequence Report received in November 2019.
- 2.6 In undertaking this statutory review the Council has followed the legislation, ACOP and guidance.
- 2.7 The Council had two months to comply from the date of receipt of the information from AWE. This was received on the 18th November 2022 and therefore the date for completion of the process is 18 January 2023. In view of the timeframe over the festive period and the internal governance structure a request was made to the Regulators.

AWE Detailed Emergency Planning Zone

Office for Nuclear Regulation, with a request for an additional day to complete the determination process.

- 2.8 The options considered are detailed in this report.
- 2.9 The decision was to:
 - (a) Amend the DEPZ for AWE Burghfield as detailed in Appendix A.
 - (b) Make no changes to the DEPZ for AWE Aldermaston.

3 Supporting Information

- 3.1 There is a legal process in place in order to allow the DEPZ to be determined by the Council which is clearly set out in the legislation, ACoP and guidance. This is summarised in this section with respect to the process for the AWE sites.
- 3.2 The role of the Council is to:
 - (a) To determine the boundary of the Detailed Emergency Planning Zone (DEPZ) for each site, based on a minimum area identified by the operator (AWE), taking into account those matters detailed within the legislation and guidance such as local communities, geographical features, etc. As noted above, the DEPZ is the geographic area that the AWE Off-Site Emergency Plan must cover in detail and the Council, along with the other agencies involved in the AWE Off-Site Emergency Plan, must be able to support.
 - (b) To provide information to the public within the DEPZ areas.
 - (c) To review and revise the AWE Off-Site Emergency Plan in compliance with REPPIR19 (taking into account any changes in the DEPZ).
- 3.3 The Council was required to comply with REPPIR19 by updating the DEPZ by the 18th January 2023. Officers therefore prepared the key actions and timeline in relation to this deadline. As a result of internal governance and the festive period a request was made to ONR for an additional day to finalise the process.
- 3.4 The primary focus for the Council in respect of REPPIR19 is public safety. All actions should be focussed around ensuring the Council protects its residents and businesses, mitigates risk where possible and works closely with AWE and other partners to deliver, in the event of an incident, a comprehensive off-site response by virtue of a good quality Off-Site Emergency Plan.
- 3.5 In order to undertake the requirements there are a number of steps required of the operator in advance as set out below.
 - 3.6 Hazard Evaluation and Consequence Assessment (HECA) (Regulations 4, 5 & 6)
 - 3.7 The first part of the process requires AWE as the site operator to provide a Consequence Report to this Council and the Regulators. In order to do so, AWEs

- technical experts undertook a Hazard Evaluation and Consequences Assessment (HECA).
- 3.8 AWE Aldermaston and AWE Burghfield have different inventories of radioactive and explosive materials and therefore different fault scenarios are applicable to each site under the legislation.
- 3.9 The process is undertaken within 3 years of the date of the completion of the last evaluation of where the operator proposes a material change, or where a material change occurs, in the work with ionising radiation to which an operator was required to make an evaluation pursuant to regulation 4(1).

3.10 Consequence Report (Regulation 7)

- 3.11 Based on the results of the assessment, AWE, as the operator, must propose the minimum area for any Urgent Protective Actions (UPA) required in the unlikely event of a radiation emergency with an off-site impact.
- 3.12 The UPA forms the basis of the information provided to the Council and the regulators, ONR, in a document called the Consequence Report (CR). These reports, one for each AWE site, set out the minimum areas to be included in the DEPZ, what the urgent protective action(s) should be and how quickly it would need to be put in place in order to protect the public.
- 3.13 The latest Consequence Reports for each site were received by the Council on the 18th November 2022.
- 3.14 There has been **no change** to the UPA areas for either AWE site under the REPPIR19 HECA. It should also be noted that for both sites there has been no change in activity or risk.

3.15 AWE Aldermaston Consequence Report Summary:

- (a) Urgent Protection Actions (UPA) area for the site is a 1540m radius. However based on analysis of vulnerable groups exposure to tritium it was further recommended to extend the minimum area out to 2000m.
- (b) Outline Planning Zone (OPZ) area for the site is a radius 15km.
- (c) The recommended Urgent Protective Action (UPA) is shelter.
- (d) Timescales for undertaking the UPA (Shelter) is as soon as possible.

3.16 AWE Burghfield Consequence Report Summary:

- (a) Urgent Protective Actions (UPA) area for the site is a radius of 3160m.
- (b) Outline Planning Zone (OPZ) area for the site is a radius of 12km.
- (c) The recommended Urgent Protective Action (UPA) is shelter.

(d) Timescales for undertaking the UPA (Shelter) is as soon as possible and no later than 25 minutes from the start of the incident.

3.17 Developing the DEPZ (Regulation 8)

- 3.18 The distances identified in the Consequence Reports determine the **minimum** boundaries for the area to be included in the DEPZ and subsequent OPZ.
- 3.19 In addition to the minimum geographic extent, the UPA, then taking into account the details set out in the regulations, ACoP and guidance, there are additional requirements to consider when developing the DEPZ.
- 3.20 Reg 8 (1) requires that the local authority must determine the DEPZ on the basis of the operator's recommendation made under (paragraph 2) of Schedule 4 and may extend that area in consideration of:
 - (a) local geographic, demographic and practical implementation issues;
 - (b) the need to avoid, where practicable, the bisection of local communities; and
 - (c) the inclusion of vulnerable groups immediately adjacent to the area proposed by the operator.
- 3.21 Those properties within the DEPZ are therefore afforded a means of warning and informing process to alert them to take shelter as soon as possible and minimise the risk to their health.

3.22 The ACOP provides further details to be considered:

- 3.23 The DEPZ must be based on the minimum geographical extent proposed by the operator in the consequences report and should:
 - a. be of sufficient extent to enable an adequate response to a range of emergencies; and
 - b. reflect the benefits and detriments of protective action by considering an appropriate balance between;
 - i. dose averted; and
 - ii. the impact of implementing protective actions in a radiation emergency across too wide an area.
- 3.24 In defining the boundary of a DEPZ, geographic features should be used for ease of implementing the local authority's off-site emergency plan. Physical features such as roads, rivers, railways or footpaths should be considered as well as political or postcode boundaries, particularly where these features and concepts correspond with other local authority emergency planning arrangements.

3.25 Actions undertaken to determine the DEPZ

- 3.26 The process for assessing and developing the DEPZs for both sites followed the legislative requirements and included:
 - (a) A desk top exercise was initially undertaken to review maps and consider the options.
 - (b) Site visits were subsequently conducted in the areas concerned to confirm what was shown on the map was the same in reality, having regard to any new developments, changes in features etc. This was jointly undertaken, where appropriate, with the Emergency Planning Officers from Wokingham, Reading and Hampshire Councils. These were undertaken in advance of receipt of the Consequence Report (CR) due to the timings involved in the process. If the CR had been significantly different then further site visits would have been undertaken.
 - (c) A review of all the planning applications which have been approved but not developed which were still valid was undertaken in order to check they were not going to result in a bisection of the DEPZ should they be built in the next 3 years. At this time there are no developments with planning permission which will impact the DEPZ boundary as determined within this report.
 - 3.27 The output of this process was a draft DEPZ with justifications as to why some suggested amendments to the DEPZ were offered, all of which were based on the legal requirements. These are shown in Appendix A.

3.28 Liaising with relevant organisations

- 3.29 Although no formal consultation is required under the legislation and the ACoP, the guidance suggests that the Council may liaise with other organisations to consider the draft DEPZ.
- 3.30 In view of the cross border implications of the revised DEPZ area, liaising with the AWE Off-Site Planning Group (OSPG) was considered the best approach, since it was already a formed group of agencies with knowledge of the AWE sites and emergency planning in detail. As a result the AWE OSPG was consulted.
- 3.31 On the 24th November 2022 there was a meeting of the AWE OSPG where a presentation was provided giving background information and the proposed details of the DEPZs for each site, as well as access to map with the potential changes.
- 3.32 At the time of the meeting there was general agreement with the proposed changes.
- 3.33 The AWE OSPG was given a further two weeks to consider the proposals and provide any suggested changes by 9 December 2022.
- 3.34 The results of the consultation with the AWE OSPG confirmed that the group agreed with the proposals for the AWE Burghfield Site DEPZ changes.
- 3.35 There was some feedback in relation to the AWE Aldermaston proposed changes however as noted in Appendix A the implications are more in relation to formalising a situation which already happens by way of notifications etc. and not splitting a

community. The disadvantage to this however is there are properties to the south of the potential expansion, leading to the possibility of more properties being added into the DEPZ which is some distance away from the area where Urgent Protective Actions are necessary.

3.36 Proposed options with Rational

- 3.37 Following the receipt of the Consequence Reports and using the legislation, ACoP and guidance in undertaking the actions detailed in 5.25 to 5.35 the proposed options are:
 - (a) Confirm the minor changes for AWE Aldermaston site as detailed in Appendix A to the AWE Aldermaston DEPZ.
 - (b) Confirm one or both changes for the AWE Burghfield site as detailed in Appendix A to the AWE Burghfield DEPZ
 - (c) Make no changes to one or both AWE site DEPZ.
- 3.38 There are no changes for the OPZs for either site.

4 Implications of Proposed DEPZs

- 4.1 Should options 3.37 (a) or (b) have been approved then the minor increases to both DEPZs will result in eight additional properties being included in the DEPZ. Therefore they would need to be formally written to in order to ensure they are aware of the changes regardless of the fact they have received the booklet and AWE Connect Newsletter previously.
- 4.2 There would also be some questions in relation to the above changes since there is no change in the UPA, no change in the risks etc. It could also be seen that it was not concluded effectively in 2020. It is however considered that that the options for changing either DEPZ is instead fine tuning the DEPZ following the first determination by this Council in 2020 which is what formal reviews should do.
- 4.3 There would be no changes to land use planning policies.

5 Feedback from Governance Consultation

5.1 In addition to the AWE Off-Site Planning Group the process and proposed outcomes were considered in advance of a final decision by the Councils Corporate Board, Ops Board and Opposition leaders were briefed.

6 Decision by Service Director – Development and Regulation

- 6.1 The Service Director- Development & Regulation reviewed the reports prepared and discussed with officers in relation to the proposals in advance of confirming the determination of the DEPZ as per his delegated authority under the Scheme of Delegation as:
 - (a) Amend the DEPZ for AWE Burghfield as detailed in Appendix A.

AWE Detailed Emergency Planning Zone

(b) Make no changes to the DEPZ for AWE Aldermaston. This decision was taken having regard to the details in Appendix A and in particular the potential further extension to the south of Baughurst as a result of more properties south of that area. Therefore the proportionate decision was to make no changes to the DEPZ for AWE Aldermaston.

7 Next Steps

- 7.1 As a result of the DEPZ determination the following steps will be undertaken:
 - (a) Revising the AWE Off-Site Emergency Plan in order to mitigate the impact for those people/properties now included in the DEPZ.
 - (b) Informing the new properties within the DEPZ that they are in the DEPZ and what they should do in the event of an incident at either of the sites. A multi-agency Communications Plan lead by WBDC has already been developed to contact these properties, as well as the wider communities of the changes.
 - (c) The DEPZ leaflet and website will also be updated and sent to all residents within the DEPZ before the 31st March 2023.

8 Conclusion

8.1 The proposed changes to the DEPZs for both AWE sites as required have received careful consideration, with due consideration to the legislation, ACOP and guidance.

9 Appendices

9.1 Appendix A – DEPZ options

Officer details:

Name: Jonah Maddocks

Job Title: Senior Emergency Planning Officer

Tel No: 01635 503535

E-mail: jonah.maddocks@westberks.gov.uk

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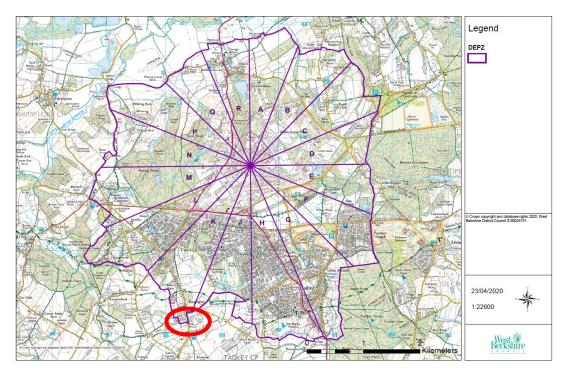
AWE Detailed Emergency Planning Zone

Version	Date	Description	Change ID
1			
2			

Appendix A DEPZ Amendment Options (Regulation 8 (2))

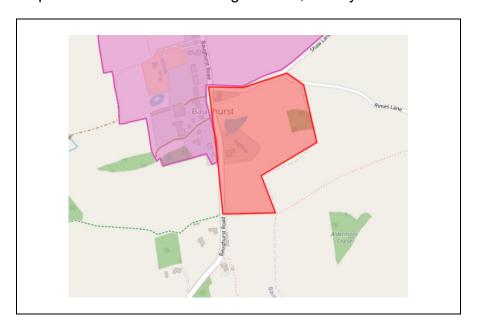
Set out in this appendix are the existing and proposed changes to the AWE Aldermaston and Burghfield DEPZs with relevant justifications. These are based on the requirements of the legislation, ACoP and guidance, site visits and consultation.

Existing AWE Aldermaston site DEPZ (Mar 2020 - Jan 2023):



Potential Changes to AWE Aldermaston site

On reviewing one area of the existing AWE Aldermaston DEPZ there was the potential for changes at the southern end as shown on the map below and as shown by the circle on the map above in the area of: Baughurst Rd, Tadley RG26 5LP



AWE Detailed Emergency Planning Zone

Justification Comments:

The map shows the bisection of the Baughurst community on the eastern side of the road.

The potential option is to extend the DEPZ by following a public footpath which would act as a clearly visible defining feature.

Factors to consider are that:

- (a) The road, as per the DEPZ, acts as a clear boundary for the DEPZ.
- (b) The number of additional properties would be five.
- (c) Any additional developments proposed in the area would impact on the DEPZ for the future, should all other considerations remain the same, therefore the potential for additional significant development in the area would likely be advised against. Consideration to any such application would however be considered on a case by case basis.
- (d) It does not cut off any additional access routes to surrounding areas, though it would remove an alternative route of access to the area outside the DEPZ. The road may need to have a closure on it and therefore access in and out will be limited.
- (e) The 3 yearly booklet and the quarterly AWE Connect Newsletter is already distributed to the addresses so they could currently be considered to be part of the DEPZ.
- (f) The telephone alerting will also already include the properties within this area since it is based on postcodes.
- (g) There are however additional properties to the south of the potential extension of the DEPZ which could result in a further expansion to include these properties. This would mean expanding the DEPZ at some distance from the Urgent Protective Action area.

Decision: On balance it was considered appropriate **not** to include the above option with the DEPZ for AWE Aldermaston remaining the same.



Existing DEPZ for AWE Burghfield site (Mar 2020 – Jan 2023)

Potential Changes to AWE Burghfield site

On reviewing the area around the existing AWE Burghfield DEPZ there were 2 areas which were considered to be amended to correct minor areas of ambiguity as shown in the map above and sections of the maps below

 The Six Bells Shinfield, Church Lane, Shinfield, Reading, RG2 9DA - Easting 472593 | Northing 168524



Justification Comments

- a. Previously the site had been excluded since the building identifies with the Shinefield 'Community' and not Spencers Wood which is the rest of the area included in the DEPZ.
- b. This change would therefore use the full length of the road as the boundary rather than go around one property.
- c. The road, as per the DEPZ, acts as a clear boundary for the DEPZ.
- d. Any additional houses proposed in the area would impact on the DEPZ for the future, should all other considerations remain the same, therefore the potential for additional significant development in the area would likely be advised against. Consideration to any such application would however be considered on a case by case basis.
- e. The road may need to have a closure on it and therefore access in and out of the property will be limited.
- f. The 3 yearly booklet and the quarterly AWE Connect Newsletter is already distributed to the addresses so they could currently be considered to be part of the DEPZ.
- g. The telephone alerting will also already include the properties within this area since it is based on postcodes.

Decision: On balance it was considered appropriate to include the above change to the DEPZ for AWE Burghfield.

2. Near Basingstoke Road, Swallowfield, Reading RG7 1PT - Easting 472105 | Northing 165364



Justification Comments

- a. This change would redefine the DEPZ fully along the River Loddon and correct a mapping error as a result of a split in the flow of the river.
- b. The river acts as a clear boundary for the DEPZ.
- c. The change would result in the addition of two properties.
- d. Expanding the DEPZ to bring in the 2 properties would better identify them with the properties adjacent to them in their community, and improve the warning and informing in the event of an incident at AWE.
- e. Expanding the DEPZ will prevent the properties receiving different advice over sheltering in the event of an incident, which are in close proximity to each other, that differing advice could undermine their confidence and therfor safety in the warning messages.
- f. The 3 yearly booklet and the quarterly AWE Connect Newsletter is already distributed to the addresses so they could currently be considered to be part of the DEPZ.
- g. The telephone alerting will also already include the properties within this area since it is based on postcodes.
- h. Any additional houses proposed in the area would impact on the DEPZ for the future, should all other considerations remain the same, therefore the potential for additional significant development in the area would likely be advised against. Consideration to any such application would however be considered on a case by case basis.

Decision: On balance it was considered appropriate to include the above change to the DEPZ for AWE Burghfield.

Appendix 4

AWE Off-Site Emergency Plan

Joint Emergency Planning Unit

If you are being alerted regarding activation of this plan go to SECTION 3 Page 25 for the callout notifications

You should also check your own agency major incident plan/action cards for agency specific actions.

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Section One

1 Introduction & Plan Administration

1.1 Introduction

The Atomic Weapons Establishment (AWE) sites, Aldermaston (A) and Burghfield (B), are required to comply with several pieces of legislation including Radiation Emergency Preparedness and Public Information Regulations 2019 (REPPIR) as a result if the hazardous materials and processes they undertake on site in particular radioactive sources.

Serious failures in plant operation or process conditions and/or physical damage to a research or production facility at either of the AWE sites, might conceivably lead to a release of radioactive material or other hazards which could present a local problem within the sites boundaries and potentially outside the sites boundaries and therefore affect the wider community.

The likelihood that such a scenario could endanger the public outside a site boundary is considered to be low. However, due to the potential hazards from the AWE sites and the possibility of a release of radioactive or toxic material to the environment, sufficient in severity to necessitate action to be taken to protect employees, the public and the environment, this AWE Off-Site Emergency Plan (this plan) has been developed.

Off-site emergency arrangements are also a requirement of the Radiation (Emergency Preparedness and Public Information) Regulations 2019 (REPPIR) as a result this plan sets out the emergency arrangements for a multi-agency response to any on-site emergency with actual or potential off-site consequences at the AWE Aldermaston or Burghfield sites.

This plan has been prepared by West Berkshire District Council (WBDC) in conjunction with the AWE Off-Site Planning Group.

This plan sets out the multi-agency response. It is the responsibility of each responding organisation to prepare revise and test their own plans in relation to the operational procedures described in this Plan in order to discharge their responsibilities under these arrangements.

1.2 Aim & Objectives

The **aim** of this plan is to enable an effective response to incident at either of the Atomic Weapons Establishments which has or could have an impact on the community surrounding the sites.

The **objectives** of this plan are to provide:

- (a) Information about the sites and their hazards
- (b) The roles and responsibilities of each responding agency
- (c) The activation, command & control and coordination procedures
- (d) Protective actions to implement
- (e) Warning and Informing, including communication procedures
- (f) Information about recovery
- (g) Where to find more information.

1.3 Legislation

Nuclear Installations Act 1965. The principal hazard to the public from a serious accident at the AWE sites will be the release of radioactive materials. There may be risks to health as a result of such a release. Therefore all activities on all nuclear sites in the UK are regulated under the Nuclear Installations Act 1965 and a Nuclear Site License is granted to sites with the proviso they satisfy a number of license conditions. One of these conditions requires that adequate emergency arrangements are in place.

The Radiation (Emergency Preparedness and Public Information Regulations 2019 (REPPIR) came into effect in 2019 (replacing REPPIR 2001). One of the aims of REPPIR is to protect members of the public from a release of radioactive material from premises working with radioactive materials where an accident could result in a radiation emergency. A radiation emergency is defined as 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

For the purposes of REPPIR 19, in addition to consideration of perceived risks, all non-routine events that may result in an annual effective radiation dose of 1 mSv or more, to one or more person(s) off-site over a period of one year following the event, are considered to be a radiation emergencies.

REPPIR 19 also requires that the lead local authority must:

- i. Determine the Detailed Emergency Planning Zone (DEPZ) (Reg 8).
- ii. Prepare, revise, test and implement the AWE Off-Site Emergency Plan (Reg 11). The plan should bring together the emergency arrangements of all the off-site

agencies with a role to play in the intervention and mitigation of an emergency occurring at the premises, and prepare arrangements to supply information to members of the public in the event of a radiation emergency actually occurring, however it may occur.

- iii. Provide information to the population within the DEPZs so they are informed and prepared in the unlikely event of a radiation emergency occurring (Reg 21, Part 2, Schedule 8).
- iv. Have information available to those within the Outline Planning Zone (OPZ) (Reg 21 Part 2, Schedule 8)

Other Legislation

There are various other materials and processes on the AWE sites which may give rise to other risks which may affect the community should there be an accident. These risks are reduced by way of other legislative requirements including:

- (a) Control of Major Accident Hazards (COMAH)
- (b) Health & Safety at Work etc. Act 1974
- (c) Environmental Protection Act 1990
- (d) Food and Environmental Protection Act 1985

More information about the materials and hazards on site is detailed in Section 2.

1.4 Supporting Plans

As a requirement of the Civil Contingencies Act 2004 (CCA), Category 1 responders maintain a number of plans which may also be activated in support of this plan. There are too many plans to detail them all in this plan, however some of key supporting multiagency plans include:

- (a) Hampshire & Isle of Wight (HIOW) and Thames Valley Local Resilience Forum (TVLRF) Emergency Response Arrangements (ERA)
- (b) Thames Valley Local Resilience Forum Communications Plan
- (c) PHE South East Scientific and Technical Advisory Cell Plan
- (d) Thames Valley Local Resilience Forum Recovery Plan
- (e) Hampshire and Isle of Wight Local Resilience Forum (HIOW LRF) Community Recovery Plan
- (f) HIOW & TVLRF Radiation Monitoring Unit Interim Operational Plan

In addition there are individual agency plans and although not a Category 1 Responder, AWE also maintains On-Site Emergency Plans for the Aldermaston and Burghfield sites.

1.5 Plan Review & Revision Record

Ser	Date	Reason for amendment	
1	Nov 2000	New Legislation	
2	Jan 2004	Learning from Exercise	
3	2005	Learning from Aldex 04	
4	July 2009	Changes in Organisation	
5	July 2011	Learning from Aldex 10	
6	Mar 2012	Cascade and Contacts updated	
7	Oct 2013	Plan revision following Health review and Cascade exercises	
8	Mar 2015	Learning from exercises and organisational changes	
9	Oct 2015	Feedback on content – amendments made	
10	Dec 2015	Feedback on final draft plus issue of national guidance	
11	Oct 2016	Changes to DEPZ for AWE Aldermaston (AWE (A))	
12	Nov 2017	Changes due and learning from Aldex 16	
13	Sept 2018	Changes due to DEPZ changes at AWE Burghfield (AWE (B))	
14	Jan 2019	Changes to public dose from a reference accident	
15	May 2020	REPPIR 2019 introduced with new duty holder positions	
15.1	Oct 2020	Further updates from May 2020 consultation	
15.2	Nov 2020	Updates received from October 2020 consultation	
15.3	2020/2021	Updates prior to Workshops	

1.6 Management of the Plan

The plan owner is West Berkshire District Council (WBDC). WBDC will ensure the plan is updated in accordance with:

- (a) Following any major incident or near incident at the site(s)
- (b) Following a major incident or near incident at other sites where lessons have been identified
- (c) Following any organisational or process changes
- (d) On at least a 3 yearly basis a full formal review will be undertaken

Following any review and revision the plan will be forwarded to all members of the AWE Off-Site Planning Group as appropriate for consultation and agreement.

WBDC will circulate any amendments to those involved via ResilienceDirect (RD):

Each organisation should inform the AWE Off-Site Planning Group of changes that are relevant to the plan and, therefore, the response to an off-site incident.

1.7 Contributors

This plan was prepared by West Berkshire District Council in conjunction with the AWE Off-Site Planning Group, consisting of Emergency Planning Officers and professionals drawn from the following organisations:

AWE Plc

Basingstoke and Deane Borough Council (BDBC)

Clinical Commissioning Group (CCG) (Berkshire West)

Environment Agency (EA)

Food Standards Agency (FSA)

Ministry of Housing Communities and Local Government (MHCLG) Resilience and Emergency Division (RED)

Defra CBRN Emergencies Team

Hampshire County Council (HCC)

Hampshire Constabulary

Highways England

Office for Nuclear Regulation (ONR)

Met Office

Ministry of Defence (MOD)

National Health Service (NHS) England/NHS Improvement and Health systems across West Berkshire and Hampshire

Network Rail

Public Health England (PHE) South East (SE)

PHE Centre for Radiation, Chemical and Environmental Hazards (CRCE)

Reading Borough Council (RBC)

Royal Berkshire Fire and Rescue Service (RBFRS)

Royal Berkshire Hospital (RBH)

South Central Ambulance Service NHS Foundation Trust (SCAS)

Thames Valley Police (TVP)

Thames Water (TW)

West Berkshire District Council (WBDC)

Wokingham Borough Council (WBC)

1.8 Plan Distribution

The plan is available to distribute to all contributing organisations on Resilience Direct.

1.9 Feedback on the Plan

If readers have constructive comments to make regarding this plan then they should be put in writing to:

Joint Emergency Planning Unit,
West Berkshire District Council,
Council Offices,
Market Street,
Newbury,
BERKSHIRE
RG14 5LD
emergencyplanning@westberks.gov.uk

Section Two

2 About the Premises

2.1 Site Addresses

AWE Aldermaston AWE Burghfield Aldermaston The Mearings

Nr Reading Burghfield, Nr Reading

Berkshire Berkshire RG7 4PR RG30 3RR

2.2 Site Purpose

The Ministry of Defence (MOD) owns both the sites and contracts AWE plc to operate both sites. Their primary function is to carry out work in support of the UK Nuclear Deterrent Programme.

AWE, the Atomic Weapons Establishment, has been central to the defence of the United Kingdom for more than 50 years. It provides and maintains the warheads for the country's nuclear deterrent, Trident.

Trident is a submarine-launched, inter-continental ballistic nuclear missile weapons system, carried by Royal Navy Vanguard-class submarines. The role of AWE is to design, manufacture, maintain and decommission the warheads for the Trident system, ensuring optimum safety and performance, but also to maintain a capability to produce a successor system should the Government require one in the future.

The work at AWE covers the entire life cycle of nuclear warheads; from initial concept, assessment and design, through to component manufacture and assembly, in-service support, and finally decommissioning and disposal.

The AWE Aldermaston (AWE (A)) site is located in Berkshire, between Tadley and Aldermaston on the Berkshire/Hampshire border. The AWE Burghfield (AWE (B)) site is located in Berkshire between Burghfield Village and Reading.

Both sites are large multi acre sites and contain a wide range of industrial and office facilities.

Both sites were granted Nuclear Site Licensing in 1997 when crown immunity was removed from MOD sites.

2.3 AWE Aldermaston – Site Specific Information

This site is the company's headquarters and is a former WWII airfield, the site is now a centre providing advanced research, design and manufacturing facilities.

REDACTED ON BASIS OF SECTION 23 & 24

Associated mapping Ordnance Survey Maps:

- (a) OS Landranger Newbury & Wantage, Sheet 174, 1:50,000
- (b) OS Landranger Reading & Windsor, Sheet 175, 1:50,000

Unlike many other nuclear establishments, AWE Aldermaston is located inland and not on the coast. To the south of the site is the urban community of Tadley and to the North is a slightly more rural area and the village of Aldermaston.

2.4 AWE Burghfield – Site Specific Information

AWE Burghfield, a former WWII munitions factory, is the site responsible for the complex final assembly and maintenance of warheads while in service, as well as their decommissioning.

REDACTED ON BASIS OF SECTION 23 & 24

Associated mapping Ordnance Survey Maps

- (a) OS Landranger Newbury & Wantage, Sheet 174, 1:50,000
- (b) OS Landranger Reading & Windsor, Sheet 175, 1:50,000

Similar to the AWE Aldermaston the AWE Burghfield site is inland but is in a more rural setting with the nearest communities being several kilometres from the site boundary.

Background information relating to the location and demographics around both AWE sites can be found on West Berkshire District Council's website

Mapping Demographics

2.5 On Site AWE Material Hazards

Both AWE sites have a range of potentially hazardous materials on site, both non-nuclear and nuclear materials. All materials are stored and used in an approved manner as required by legislation.

The summary of the materials used on the sites are:

- (a) radioactive materials plutonium, uranium and tritium, plutonium being potentially the most hazardous
- (b) conventional explosive components which are also manufactured and tested. Explosives are stored in approved and licensed storage magazines. In common with other MOD establishments that store and process conventional explosives, a "safeguarding map" (used to provide guidance in planning future development) is lodged with the local authority.
- (c) Chemical substances with the AWE (A) site has been designated a lower tier site under the Control of Major Accidents Hazards (COMAH) Regulations 2015 due the volumes and type of chemicals involved.

Further more detailed information about the specific hazard information is provided in the table and subsequent paragraphs set out below. Further information can be found in the chemical hazards compendium.

The table below provides information on identified hazards, what may go wrong and the potential off-site consequences.

Identified Hazard	Scenario	Potential Off-Site Consequence
Asbestos	Since many buildings at AWE were constructed in the 1950s and 1960s, asbestos may be released as a result of a conventional fire affecting one of these buildings.	Contamination of individuals and properties with asbestos. Long term risk of ill health as a result of significant exposure. No short term health effects. Potential to displace limited numbers of members of the public for the medium term whilst monitoring and decontamination is completed.
Beryllium	Release of beryllium from a facility may result in contamination of downwind areas. A release of beryllium may be combined with a release of radioactive material	Contamination of individuals and properties with beryllium. Long term risk of ill health as a result of significant exposure. No short term health effects. Potential to displace limited numbers of members of the public for the medium term whilst monitoring and decontamination is completed.
Bulk storage of Transformer Oil	Escape of transformer oil in significant quantities from a facility may result in contamination of areas outside the site boundary.	Environmental pollution of drains and watercourses outside the site boundary.

Identified Hazard	Scenario	Potential Off-Site Consequence
Environmental pollution by chemicals	A major accident of a chemicals from a delivery vehicle on-site but near to the site boundary may result in environmental contamination outside the site boundary.	Pollution of water courses, possible limited effect on drinking water quality
Explosives Explosive hazard may result in hazards being projected off site beyond the site boundary.		Projectile hazard may require cordoning and/or evacuation of premises/areas outside the site. Road closures and diversions. Displacement of members of the public for a considerable period.
Fissile Radioactive Material	Criticality incident in certain facilities may result in an elevated radiation dose at the site boundary.	Elevated (but not life-threatening) radiation dose rates within very limited areas of the site boundary. Local cordons may be required around limited areas of the site boundary and may extend across public roads.
Inert Gases	A major accident of an inert gas from a delivery vehicle near to the site boundary may result in an asphyxiating atmosphere outside the site boundary.	Potential asphyxiation of individuals that do not remove themselves or are not removed from the hazard area promptly. Potential requirement for significant cordon around the incident scene requiring short-term evacuation of members of the public.
Natural Gas	The leakage of natural gas on the site may result in a flammable atmosphere outside the site boundary.	Conflagration of flammable atmosphere resulting in blast wave, burns and blast injuries as well as property damage in very limited areas outside the site boundary.
Pressurised cylinders/ containers	Reaction of a pressurised container in a fire or other initiating event may result in a projectile hazard outside the site boundary.	Projectile hazard may require evacuation of premises/areas outside the site. Road closures and diversions. Displacement of members of the public for a period of up to 24 hours.
Radioactive Material	Release of radioactive material from a facility may result in contamination of downwind areas outside the site boundary.	Significant downwind radioactive contaminations of individuals, premises, transport routes. Sheltering and evacuation (as well as temporary or permanent relocation) of potentially contaminated areas may be

Identified Hazard	Scenario	Potential Off-Site Consequence
		required, involving the displacement of potentially large numbers of members of the public for an extended period.
Radioactively contaminated water	A release of water potentially contaminated with radioactive material from the Aldermaston or Burghfield sites may result in the contamination of water courses.	Pollution of water courses, with possible effect on drinking water quality.
Release of toxic chemicals	A major accident of a toxic chemical from a facility may result in a hazard requiring a cordon extending outside the site boundary.	Respiratory problems, chemical burns in localised areas outside the site boundary. Potential for a cordon requiring evacuation of very limited areas outside the site boundary in the short-term.
Smoke	A significant 'conventional' fire on the site may result in combustion products being released outside the site boundary.	In certain meteorological conditions, toxic smoke may drift downwind and cause respiratory problems in members of the public. Traffic restrictions and limited evacuation of downwind areas may be required.
Steam	A major failure of the AWE steam main in certain locations may result in a localised steam (heat) hazard outside the site boundary.	Localised release of steam, high temperatures, poses risk of steam burns to individuals in immediate vicinity. Possible requirement for localised road closure immediately adjacent to the site boundary.

Note the term Major Accident has been used above and relates to the definition provided by COMAH 2015 legislation:

An occurrence will be a major accident if it meets one the following three conditions:

- (a) It results from uncontrolled developments at an establishment to which the Regulations apply; and
- (b) It leads to serious danger to human health or to the environment, inside or outside the establishment; and
- (c) It involves one or more dangerous substances defined in the Regulations, irrespective of the quantity involved.

2.6 Radioactive Materials Information – Including response considerations

Plutonium

General Information

Plutonium metal is chemically very reactive and oxidises in moist air (or in a fire) to form plutonium oxide that can exist as fine particles, invisible to the naked eye due to their size, that may become "airborne" and be carried downwind for considerable distances (kilometres). They can land on and "contaminate" surfaces and pose an inhalation hazard. Plutonium oxide is insoluble in water but a water wash will help remove oxide dust particles (simple decontamination) and damp them down to minimise resuspension. The levels of dispersed material would normally decrease as the distance from the event location increases, until they became undetectable.

Radiological Information

Plutonium emits alpha radiation which cannot penetrate more than a few centimetres of air, a film of moisture, intact skin or clothing. It will not cause radiation burns to the skin and external radiation from a cloud or deposits is negligible. However alpha emitters inhaled or ingested pose a potentially significant radiological hazard.

Health Hazards

If plutonium oxide is breathed in, or enters the body through a cut, then any material that is retained (and not coughed up or washed out) will slowly be dissolved by body fluids and be distributed round the body. Plutonium is taken up by the cells of the bone surfaces and the liver, from where it is slowly excreted over many years in the urine and faeces. Living cells in any organ that is exposed to alpha radiation from plutonium may be killed, or damaged in such a way that the statistical risk of developing a cancer at some time in the future is increased.

Potential Impact relating to an Off-Site Radiation Emergency

Consideration	Impact from Plutonium
Environmental & Building Issues.	Plutonium could be dispersed as particles of oxide dust into the atmosphere and would be carried along by the prevailing wind to form a "plume" of solid particles, rather like a cloud or plume of smoke.
	Dispersed radioactive material would fall to earth again; landing on surfaces to produce a fine but invisible layer of radioactive material loosely called "contamination". The area involved would extend from the origin of the event within the site to areas downwind from it. The levels of dispersed material would normally decrease as the distance from the event increased, until they became undetectable.
	Later, any activity that disturbed deposited plutonium oxide particles might lead to its re-suspension in the air and to the inhalation of airborne particles. The magnitude of the hazard would depend on the level of deposited material, the proportion of it re-suspended and the length of time for which an individual was exposed to it.

Consideration	Impact from Plutonium
Human Health Issues.	Dispersed material containing plutonium could present a hazard if it were to find its way into the human body. This could occur if airborne particles of plutonium oxide were to be inhaled from the passing cloud. The magnitude of the hazard would depend on the level of deposited material, the proportion of it re-suspended and the length of time for which an individual was exposed to it, increasing the statistical risk of developing cancer in the future.
Food & Water Issues.	If foodstuffs or water contaminated with deposited material were consumed, radioactive materials might be ingested and enter the body, increasing the statistical risk of developing cancer in the future

Uranium

General Information

Enriched Uranium is similar chemically to plutonium, but significantly less hazardous. Like plutonium it forms an insoluble particulate dust.

Depleted Uranium is very much less hazardous than enriched uranium.

Radiological Information

Uranium emits feebly penetrating alpha particles. In an incident it would behave similarly to plutonium and could be dispersed by fire as particles of oxide.

Health Hazards

Particles might be inhaled from the passing cloud or by disturbing (resuspending) deposited material. Radioactive material might be ingested if contaminated substances were consumed.

Potential Impact relating to an Off-Site Radiation Emergency		
Consideration	Impact from Uranium	
Environmental & Building Issues.	Uranium could be dispersed as particles of oxide dust into the atmosphere and would be carried along by the prevailing wind to form a "plume" of solid particles, rather like a cloud or plume of smoke.	
	Dispersed radioactive material would fall to earth again; landing on surfaces to produce a fine but invisible layer of radioactive material loosely called "contamination". The area involved would extend from the origin of the event within the site to areas downwind from it. The levels of dispersed material would normally decrease as the distance from the event increased, until they became undetectable.	
	Later, any activity that disturbed deposited uranium oxide particles might lead to its re-suspension in the air and to the inhalation of airborne particles. The magnitude of the hazard would depend on the level of deposited material, the proportion of it re-suspended and the length of time for which an individual was exposed to it, increasing the statistical risk of developing cancer in the future.	
Human Health Issues.	Dispersed material containing uranium could present a hazard if it were to find its way into the human body. This could occur if airborne particles of uranium were to be inhaled from the passing cloud.	
Food & Water Issues.	If foodstuffs or water contaminated with deposited material were consumed, radioactive materials might be ingested and enter the body, increasing the statistical risk of developing cancer in the future.	

Tritium

General Information

Tritium is a radioactive form of hydrogen gas. Tritium gas, like hydrogen gas is flammable and in a fire would burn readily to form radioactive tritium oxide and might form tritiated water by replacing an ordinary hydrogen molecule in water vapour In the absence of fire the gas (like hydrogen) will disperse upwards rapidly due to its very low density and be of little hazard. Tritium might replace some of the hydrogen in water, oils and plastics and contaminate them.

Radiological Information

Tritium emits very low energy radiation, beta particles that have very low penetrating power. The radiation is unlikely to penetrate intact skin and clothing and will not cause radiation burns to the skin. External radiation from a passing cloud or from deposited material would be negligible.

Health Hazards

Human body tissues are composed largely of water. If tritium enters the body either as a gas (inhalation) or as tritiated water or contaminated food (ingestion) it will spread quickly through the body water and tissues. It is excreted in the urine and the detection limit in urine is a small fraction of the level believed to be of any radiological significance. If tritium is taken into the body, after about ten days the natural turnover of body water will reduce the amount by half. Drinking more fluids will increase the rate of tritium excretion.

The most vulnerable groups likely to be affected by an off-site release involving tritium would be breast fed infants and an unborn child. This is because the mother may ingest or inhale the tritium (in the form of tritiated water) and pass this on to the unborn child or pass to the breast fed infant through the contaminated mother's milk.

Potential Impact relating to an off-site emergency

Consideration	Impact from Tritium
Environment & Buildings	Tritium that remained in the form of gas would behave similarly to hydrogen and would disperse rapidly and upwards due to its very low density.
	Both tritiated water and tritium gas might be carried along by the prevailing wind to form a "plume" or cloud. The water content of the atmosphere and the turnover of water in the environment would ensure the rapid dispersion and dilution of any tritium or tritiated water that was released, as a result significant levels of tritium contamination occurring outside the AWE site involved is unlikely
Human Health	Tritium emits very low energy beta particles that are unlikely to penetrate clothing or skin. External radiation from the passing cloud or from deposited material containing tritium would be negligible.
	Dispersed tritium containing material could present a hazard if it were to find its way into the human body. This could occur if airborne tritiated material was inhaled from the passing cloud,

Consideration	Impact from Tritium
	was absorbed through the skin, or if contaminated foodstuffs were consumed.
	In the case of breast feeding or pregnant mothers, a proportion of the inhaled/ingested dose will be transferred to the unborn child or passed on to the breast feeding infant through contaminated mothers' milk
	If tritium containing material was inhaled or ingested it would be rapidly dispersed throughout the body tissues (which themselves consist largely of water) and would be excreted in the urine. Measures can be taken to promote excretion of urine (and hence of tritium) and minimise the consequences of any intake of tritium that may have occurred.

2.7 Regulators

The processes carried out both the sites require compliance with Nuclear Installation Act 1965, the Explosive Regulations 2014, the Control of Major Accidents Hazards Regulations 2015 (COMAH), the Ionising Radiations Regulations 2017 and the Radiation Emergency Preparedness and Public Information Regulations 2019 (REPPIR).

As a result of the above legislation the processes and materials held on both AWE site(s) are both subject to inspection by the Regulators. A number of regulators are involved depending on the legislation, these include (but not limited to):

- a) The Office for Nuclear Regulation (ONR)
- b) Environment Agency
- c) Health & Safety Executive
- d) Defence Nuclear Safety Regulator (DNSR)

The regulators must be satisfied as to the safety of the processes and handling of radioactive and toxic materials.

2.8 Possible Incidents

There are a number of systems that are in place in order to prevent, as far as possible, an incident from occurring in the first place. These systems, employed by the operator, are monitored by the Regulators who can use enforcement powers as necessary to ensure the systems are satisfactory. As a result, failures in plant, process or research operations should be significantly reduced and therefore the risk to the public outside the sites should also be reduced.

It should be noted that the following incidents are **not possible**:

- (a) An explosion resulting in a nuclear yield is not possible by virtue of the safety features in the design of the weapon
- (b) A reactor accident with off-site consequences is also not possible as neither site has an operating nuclear reactor with a significant core inventory of fission products.

(The "Herald" nuclear reactor at AWE Aldermaston was closed in the 1980s and its nuclear fuel removed from the site).

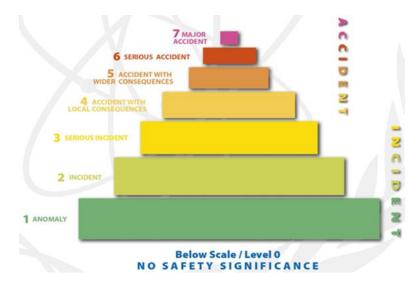
A radiation emergency may be caused as a result of a significant breach in the multiple containment barriers at a radioactive materials handling facility such as a major fire which might cause the dispersal of radioactive material in particulate form into the atmosphere. Any of the materials handled at the AWE sites (plutonium, uranium and tritium) might therefore be involved.

An accident involving the dispersion of plutonium would present the greatest potential hazard to the public if it were to occur.

2.9 Magnitude of Accident

The International Nuclear & Radiological Event Scale (INES) was introduced in 1990 by the International Atomic Energy Agency (IAEA) in order to enable prompt communication of safety significant information in case of nuclear accidents. The primary purpose of INES is to facilitate communication and understanding between the technical community, the media and the public on the safety significance of events. The aim is to keep the public as well as nuclear authorities accurately informed on the occurrence and consequences of reported events.

A number of criteria and indicators are defined to assure coherent reporting of <u>nuclear</u> <u>events</u> by different official authorities. There are 7 levels on the INES scale; 3 <u>incident</u>-levels and 4 <u>accident</u>-levels, as illustrated in the diagram over.



The INES Scale (International Atomic Energy Agency (IAEA)

Although an accident caused by a failure in plant, process, research or production operations should not endanger the public outside the site, it is possible that an accident, with consequences extending beyond an AWE site boundary might occur.

Section Three

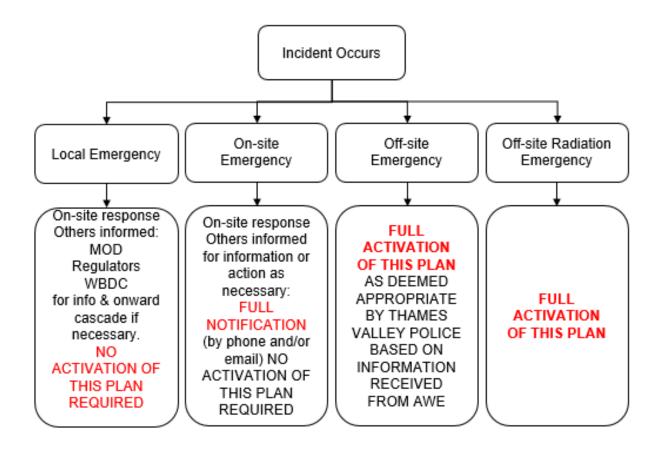
3 Plan Activation & Immediate Actions

3.1 Plan Triggers

This plan is triggered when it is believed a site emergency might or will cause an impact off site to the public and/or the environment regardless of the incident category (<u>Section 3.2</u> & <u>Section 3.3</u>)

3.2 Activation Process

This plan is activated by AWE notifying Thames Valley Police of an incident and recommending activation of the plan.



3.3 IMMEDIATE ACTIONS – Primary Notification Cascade

If you are being alerted about an off-site incident follow the activation procedure below for the callout notifications contact details are stored on Resilience Direct.

Notifying Agency	Agencies Notified		
AWE	 Thames Valley Police (TVP) MOD First Point of Contact (FPOC) incl Military Coordinating Authority (MCA) Staff ONR Environment Agency (Radiation Incident Hotline) Royal Berkshire Fire & Rescue Service (RBFRS) South Central Ambulance Service NHS Foundation Trust West Berkshire District Council BT - Public Telephone Altering System 		
Thames Valley Police	 Hampshire Constabulary and other Police Forces if required West Berkshire District Council SCAS RBFRS Ministry of Housing Communities and Local Government (MHCLG) – Resilience and Emergency Division (RED) Strategic Coordinating Centre (SCC) Activation including: Highways England British Transport Police (BTP) Met Office Civil Aviation Authority (CAA) if No Fly Zone required. 		
Royal Berkshire Fire and Rescue Service	 Health and Safety Executive Environment Agency Hampshire Fire and Rescue Service West Berkshire District Council Met Office 		
Hampshire Constabulary	As per their normal Major Incident Plan		

Notifying Agency	Agencies Notified		
South Central Ambulance Service NHS Foundation Trust	 Public Health England South East NHS England/NHS Improvement - South East On call (Hampshire and Thames Valley (HTV)) Designated Receiving Hospitals: Royal Berkshire Hospital Trust Hampshire Hospitals NHS Foundation Trust 		
Public Health England South East	Public Health England – Centre for Radiation, Chemical and Environmental Hazards (CRCE)		
NHS England/NHS Improvement South East (HTV)	 CCG On-call for affected area: Berkshire West CCG North Hampshire CCG NHS England/NHS Improvement - South East (Hampshire and Thames Valley) 		
Designated Receiving Hospitals: Royal Berkshire Hospital Hampshire Hospitals NHS Foundation Trust	 CCG On-call for affected area: Berkshire West CCG North Hampshire CCG 		
ONR	None		
West Berkshire District Council	 Berkshire Director of Public Health (DPH) & PH Consultant for Emergency Planning (EP) Hampshire County Council Reading Borough Council Wokingham Borough Council Any schools and nurseries in WBDC area Any residential care homes in WBDC area MHCLG - Resilience and Emergency Division Food Standards Agency Thames Water Canal & River Trust Network Rail Highways England Voluntary Sector as necessary Ward & Parish Council Members and MPs 		

Notifying Agency	Agencies Notified	
Other neighbouring Local Authorities as necessary:		
Hampshire County Council (for Basingstoke & Deane Borough Council (BDBC)) for AWE (A)	 Normal activation Any schools and nurseries in affected area Any residential care homes in affected area Ward & Parish Council Members and MPs 	
Reading BC for AWE (B)		
Wokingham BC for AWE (B)		
Resilience and Emergency Division	Cabinet Office as required by scale of event.	
MCA Staff	MOD Headquarters (HQ)	
	Activation of the Headquarters Defence Nuclear Emergency Organisation (HQ DNEO) in MOD Main Building.	
MOD HQ	Activation of the Chief of Defence Staff Duty Officer (CDSDO) alert of other government departments and agencies required to respond to an activation of the Cabinet Officer Briefing Room (COBR).	

3.4 Incident Categories

Should an incident occur at an AWE site then the following categories are used:

Descriptor	Description	Examples	Scale of Activation
		(not exhaustive)	
LOCAL EMERGENCY	Any incident which requires only local emergency arrangements to be activated and has no consequences extending beyond	Local spillage of hazardous material not extending beyond facility boundary. Industrial accident causing casualties	On-site response Others informed: MOD Regulators WBDC for info & onward cascade if necessary.
	the building/facility boundary/localised area	but no other non- localised hazards.	NO ACTIVATION OF THIS PLAN REQUIRED
ON-SITE EMERGENCY	Any incident that requires emergency management at site level and has consequences extending beyond building/facility/locali sed area but not beyond the relevant	Criticality excursion. Minor release of radioactive material outside a facility boundary. Security incident.	On-site response Others informed for information or action as necessary: FULL NOTIFICATION (by phone and/or email) NO ACTIVATION OF THIS PLAN
	site boundary.	Significant incident	REQUIRED. FULL ACTIVATION
OFF-SITE EMERGENCY	Any incident that has actual or potential NON-RADIOLOGICAL offsite implications.	Significant incident where the hazard extends beyond the site boundary and poses a potential risk and/or causes significant disruption to the public outside the site.	OF THIS PLAN AS DEEMED APPROPRIATE BY THAMES VALLEY POLICE BASED ON INFORMATION RECEIVED FROM AWE
OFF-SITE RADIATION EMERGENCY	Any incident that has actual or potential off-site RADIOLOGICAL implications.	Incident resulting in an actual or potential release of radioactive material or energy over the site boundary.	FULL ACTIVATION OF THIS PLAN

3.5 Site Situation Report (SITREP)

Below is the AWE Incident Reporting Form which would be sent to professional partners at the start and as necessary during an incident

SITE SITUATION REPORT (SITREP)			
AWE EXERCISE/ INCIDENT/ EMERGENCY*			
Time of incident:	At approximately:		
Major Emergency Declared	Local/ On-Site/ Off-Site / Radiation Emergency *		
Exact Location	AWE(A) or AWE(B) Facility		
Type of Emergency	Concise description.		
Hazards	Concise description.		
Access	E.g. Direction/ Gate.		
Number & Type of Casualties	Estimated number.		
Emergency Services Present & Required	Attending/ requested.		
	Sheltering in sectors?		
Protective actions	Notification to community in DEPZ.		
	External Roads closed.		
Weather	Wind from degrees +/- degrees,		
vveatriei	Average speed? Metres/second.		
	Ministry of Defence Police (MDP) have secured the site		
Site Actions	Site undercover (sheltering).		
Site Actions	Cordon Size		
	Gate closures		
	Site Evacuation		
	AWE Emergency Operations and Control Centre (EOCC) Aldermaston (A) is activated.*		
Command & Control:	AWE Emergency Operations and Control Centre (EOCC) Burghfield (B) is activated.*		
	Ad hoc/Fall-back EOCC is activated at*		
ACTIONS for Agencies:	You are requested to activate the procedures in line with the AWE Off-Site Emergency Plan and be prepared to send officers to the SCC and/or the AWE Emergency Operations and Control Centre (EOCC) Aldermaston (A) as set out in the AWE Off-Site Emergency Plan.		
Shelter Completed by: Date & Time:			

3.6 Actions by on-site Emergency Managers

The following tables show the on-site actions on activation which would be initiated by the Emergency Manager (AWE (A)) or Emergency Manager (AWE (B)) and the off-site plan implications/actions.

3.6.1 On-site plan actions - no off-site risk

Ac	ctions on-site	Off-site Implications	
a.	Alarms are raised across the site	a.	If no offsite implications then there is no
b.	There are a number of local onsite alerting signals that apply		action to be taken. It should also be noted that:
	to a single building or a small group of buildings including public address messages	b.	These systems are periodically tested and, on occasions, can be heard outside the site depending on the wind direction. No action is
C.	These alerts are for the staff, contractors and visitors on-site.	tests is provided to the local communit representation on the AWE Local Liais	messages are overheard Notification of any
d.	The full on-site plans will be put in place should alarms which are not tests are sounding.		representation on the AWE Local Liaison

3.6.2 On site Plan actions – Off-site implications

Actions on-site by AWE	Off-site Implications	
Assessment & Activation a. If alerting signals do sound (not a routine test), or if any event	Thames Valley Police will formally activate this plan using cascade details in the contacts directory	
occurred that might have caused public disquiet (such as visible smoke or emergency service activity) or any other more significant off-site consequences, then AWE will	Following the initial notification as per cascade each organisation would activate its own call-out and notification procedures to ensure that all appropriate national agencies or organisations, are notified of the emergency	
recommend activation of this plan to Thames Valley Police	b. Ensure the appropriate staff attend the relevant multi-agency locations including the	
b. AWE will activate MOD response	Strategic Coordinating Centre (SCC), covering roles in the:	
	 i. Strategic Coordinating Group (SCG) ii. Scientific & Technical Advice Cell (STAC) 	
	 iii. Recovery Coordinating Group (RCG) iv. Media Advisory Cell (MAC) and support as necessary v. and other sub groups as set up 	
	c. Tactical Coordinating Group (TCG)	

Actions on-site by AWE	Off-site Implications
	d. Emergency Operations and Control Centre (Aldermaston) at the Aldermaston site as requested
	e. attend their own agencies emergency operations centres/incident rooms
	f. Ensure the relevant trained staff attend the site.
Information	Agencies would respond according to their roles
AWE will provide information to those agencies it makes initial contact with, confirming:	and responsibilities (as per Section 11).
a. The details of the incident	
b. A provisional categorisation	
c. Follow up Situation Report (SITREP) via email/ ResilienceDirect.	
Warn & Inform Public	Community to follow advice provided
In the event of a radiation emergency, AWE will also activate a telephone alerting system to give early warning to members of the public in the locality and to advise on the initial protective actions to be taken. This information will include:	Note: the AWE telephone alerting system is run as an 'opt-out' basis only; only those individuals or organisations that specifically request that their details are removed from the system are excluded from the system database.
a. A notification that there is an incident at the relevant AWE site	
b. Advice to remain inside with windows and doors closed (sheltering)	
c. Advice to listen to local radio and television for Public Service Broadcasts.	
Media Plan	Once the off-site emergency arrangements are
a. AWE will initiate the AWE emergency comms/media plan	activated, Thames Valley Police will initially coordinate Media Advisory Cell and the emergency media briefing centre, as required.
b. AWE Emergency Managers will issue pre-agreed press releases with basic information and advice based on the type of incident and the potential	Messages advising the public of the action to be taken may be broadcast in a number of ways, including radio, television and via the internet. Note: Further information on warning &
hazards until such time as the SCG at the TVP SCC is up and running.	informing is in <u>Section 5</u> .

3.7 Quick Guide to Local and National Actions

Level Actions National Actions			
LO	ocal Actions	National Actions	
•	Incident occurs (On-Site Emergency Plan and	AWE notify MOD, the nominated Lead Government Department (LGD).	
	Procedures activated).	AWE notify ONR	
•	Radiation emergency (on-site or off-site) declared (AWE).	Initiate call-out of key duty personnel:	
		 Government Liaison Officer (GLO). 	
•	Activate cascade call out of	ONR RCIS declared operational	
	responders (AWE)	Determine central government response	
•	Activate automated alert messaging – (AWE) - if appropriate		
•	Initial social media notifications issued		
•	Notification confirmed	MHCLG liaison team deployed to SCC.	
•	Major incident formally declared (Police control)		
•	Initiate call-out of local responders (Police Control)		
•	Provide urgent public protection advice to Police (initially AWE until STAC has formed)	 LGD - HQ DNEO declared operational Cabinet Office/LGD decision on activating Cabinet Office Briefing Room (COBR) and 	
•	Agree any immediate counter- measures (AWE/Police Gold)	Scientific Advisory Group for Emergencies (SAGE).	
•	Confirm agreed immediate public information requirements		
•	Receive initial radiation monitoring results at site perimeter/near site (AWE).	No national action	
•	Road Closures initiated	No national action	
•	Virtual meeting of core initial response SCG members (Emergency Services, Local Authorities & AWE).	Initial COBR meeting.	

Local Actions	National Actions
Media Advisory Cell (MAC) initial coordination meeting (Emergency Services, Local Authorities & AWE).	Initial SITREP & COP released.
Issue of additional core messages covering urgent protective actions (SCG).	LGD- HQ DNEO declared fully operationalSAGE mobilised.
Pre first SCG meeting, SCG Chair to confirm: Information received from operator Site emergency services in place TCG being activated Potential rest centre requirements Requirement for Media Briefing Centre (MBC) Urgent evacuation actions (if appropriate) Consider STAC if not already stood up Casualty information Security related or not?	Formal liaison established between national operations centres and deployed Liaison Officer (LO) teams.
Request virtual STAC teleconference (STAC Chair).	SAGE established and operational
First full SCG meeting. Confirm: Prediction of off-site hazard (reasonable or beyond reasonably foreseeable scenario) Protective actions Other command and control locations Recovery Coordinating Group (RCG) Chair and recovery process MBC Resource issues.	 SITREP update released Full formal COBR meeting COBR battle rhythm confirmed
SCC declared fully operational - all organisations present or have established effective communications.	Detailed central government briefing issued.

Local Actions	National Actions
Issue first public information/media release post SCG.	International informing completed.
First COP report to ECC/COBR (SCG Chair).	
STAC fully operational (STAC Chair).	
 National departmental and agency LOs including ONR, GLO (and team). 	
Before second SCG meeting, confirm:	
 Vulnerable groups at risk Actual off-site contamination area from survey activity Advice to schools Advice to child care Advice to care homes Transport availability for evacuation. 	
Second SCG meeting (SCG Chair).	
Issue second public information/media release.	
Media Briefing Centre established.	
Complete radiation monitoring within DEPZ and edge of OPZ (SCG Chair, STAC Chair, ONR, PHE CRCE, Operator)	
Complete radiation monitoring within OPZ, ONR, PHE CRCE, Operator)	
Establish public health monitoring facility (NHS England/NHS Improvement South East (HTV), PHE CRCE, Local Authority)	

3.8 Responders Safety Procedures for Radiation Hazards

Precautions to be taken at or near the incident site:

Plutonium & Uranium pose an internal contamination hazard. They can enter the body via the following routes:

- (a) Breathing in contaminated material from the cloud or re-suspended dust.
- (b) Absorption through wounds (cuts, grazes).
- (c) Ingestion of contaminated material e.g. by eating contaminated foods.

Tritium presents an immediate hazard in one of two ways:

- (a) Breathing in tritium or tritiated material as the cloud passes.
- (b) Absorption through the skin

To minimise the hazard the following precautions should be taken for all radiation emergencies:

- (a) Approach from upwind (where possible),
- (b) Stay upwind and out of any smoke or vapour from the incident:
 - i. Personnel off-site and in the downwind sheltering zone should minimise the time spent operating in the open
 - ii. Where possible shelter inside vehicles with cabin air intakes turned off and windows closed
- a. PPE Plutonium and Uranium Incidents:
 - (a) Protecting Inhalation:
 - i. On site Use respiratory protection to protect yourself from inhaling plutonium oxide dust, Self-Contained Breathing Apparatus provides the best protection in heavily contaminated areas.
 - ii. Off-site a simple dust mask will provide worthwhile protection for plutonium and uranium but NOT for tritium.
 - (b) Clothing Any clothing that will keep plutonium oxide off the skin and that after use can be removed and bagged so as to leave dust behind will do. Emergency Services uniforms, overalls, chemical suits etc. will provide protection against plutonium oxide dust and the feebly penetrating radiation emitted by plutonium

b. PPE Tritium Incidents

- (a) Protecting Inhalation:
 - i. On site Use Self Contained Breathing Apparatus at the scene to protect against the risk of inhaling tritium or tritium containing material.
 - ii. Off-site a simple dust mask will NOT provide worthwhile protection for tritium.

(b) Clothing - Cover exposed skin surfaces to reduce the risk of skin absorption. (Chemical suits or waterproof clothing and gloves will give good protection, can be washed down with water and bagged for later checking or disposal).

c. Used "protective clothing".

- i. Clothing once worn in the affected area should be treated as "contaminated" and should be monitored before reuse. To prevent dust or "contamination" being shaken loose from clothing it should be folded or rolled in on itself during undressing. Ideally personnel should be monitored after undressing but should in any case shower and don clean clothing when it is possible to do so.
- ii. Report any wounds or cuts at once (existing cuts should be covered)
- iii. Forbid eating, drinking or smoking whilst working in the forward area

d. Post Entry to the area

- Responders to the incident should have their uniforms monitored for contamination
- ii. Emergency service vehicles should be cleaned before leaving the area
- A urine sample taken after the event will indicate whether any intake of tritium has occurred.

3.9 Immediate Actions for AWE Staff & Public

3.9.1 Immediate Action for AWE Staff

(a) AWE Staff will be notified to shelter. Any staff evacuated from an area will be confined to other areas on the AWE site.

3.9.2 Immediate Actions for Public

- (a) The public within the DEPZ to be advised to shelter both sites
- (b) Not to eat anything that has been out in the open such as fruit and vegetables.
 Only food contained in removable and sealed wrappers will be safe to consume both sites
- (c) Breast feeding mothers should switch to uncontaminated milk substitutes as soon as possible (Aldermaston Site only).

3.9.3 Strategic Initial Guidance

- (a) Access: All access to the site should be limited as far as possible to reduce the risk to responders with any access routes being clearly identified.
- (b) **PPE:** All organisations with tasks in the affected area are responsible for ensuring that their staff are trained in using appropriate PPE including respiratory protection

(c) **Movement:** Limited movement within the affected area is essential in plutonium/ uranium events in order to reduce resuspension of radioactive contaminated material.

- (d) **Public Shelter:** The public who are sheltering or who have been evacuated are likely to be in that situation for at least 24-48 hours.
- (e) **Food Restrictions**: Downwind of the incident a temporarily ban on the consumption of fruit and vegetables grown in the affected area and out to 30km is likely to be put in place by the Food Standards Agency
- (f) Monitoring: Establishing and implementing a robust monitoring plan is critical. Noting that with the exception of the initial environmental monitoring the rest will take place when there is no further release. In addition if the release is of Tritium gas then it would be widely dispersed, combining with water vapour to form tritiated water. This and any tritiated water released would be deposited downwind of the incident. Due to the dilution effect of water already present in the environment significant off-site contamination is considered extremely unlikely.

The monitoring plan should include the monitoring of:

- The environment around the sites to establish the spread and level of radiation contamination
- ii. Food any crops and foodstuffs grown in the area for direct consumption or to be put into manufactured human or animal food products (fruit, vegetables, grain, grass, milk etc.)
- iii. Water- Contamination of the water supply is less likely the water authorities would have to take a decision regarding the use of water based on STAC advise
- iv. People setting up a radiation monitoring unit in order to reassure people who think they may have been contaminated and allow decontamination of those who have.
- (g) **Communications:** Ensure a robust communications plan is in place.

3.9.4 Consider and /or receive information for the SCGs

The table below sets out the information and issues to consider at SCGs:

Information or considerations	Source of information	Timescale
Information received from operator	AWE	1 st and subsequent SCGs
Site emergency services in place and where	AWE	1 st and subsequent SCG
Security related or not?	AWE /TVP with MDP	1 st & 2 nd SCG
Casualty information	AWE/SCAS	1 st and subsequent SCG
Prediction of off-site hazard (reasonable or beyond reasonably foreseeable scenario)	AWE	1 st and subsequent SCGs
What protective actions are in place or needed	AWE /PHE CRCE – then STAC	1 st and subsequent SCGs
Urgent evacuation undertaken or required (if appropriate)	AWE/PHE CRCE	1 st and subsequent SCG
 Plan activation status Has activation been completed Is any other agency required 	TVP	1 st and subsequent SCG
 Data in relation to the area affected: No. of properties (split residential, commercial and farms) No. of vulnerable sites – schools, nurseries, GPs, care homes etc. No. of individual vulnerable people Events going on in the area or due to take place in next 7 days 	Local authorities inc GIS specialists to map	1 st /2 nd /3 rd SCG
 Communications Initial public alert activation status Communications issued Media enquiries MAC status 	AWE, TVP/MAC lead	1 st and subsequent SCG

Information or considerations	Source of information	Timescale
MBC requirement and status		
Road and rail information: Roads closed (the plan) Rail network activity	Local authorities, Highways England and Network Rail	2 nd and subsequent
Vulnerable People – issues and actions required including ongoing advise to schools, care homes, nurseries etc.	Local authorities	2 nd and subsequent
Monitoring Plan – process to agree and results to be received. (inc RMU)	PHE CRCE/STAC	2 nd and subsequent
Command Structures in place and where: TCGs STAC MAC EMBC Logistics Recovery	MAIC	2 nd and subsequent
Locations of: RVPs in place Reception/Rest Centres Friend and Family Centres RMUs	MAIC	2 nd and subsequent
Decontamination	PHE CRCE/STAC	2 nd and subsequent
Resource Issues		

3.10 Issues to Consider

The table below sets out issues to be considered at all levels of Coordination including communications, along with outline answers and the sources for more information:

Issue	Specifics	Draft Information/advice to be used	Sources of further guidance for Press Officers: Plan section, Lead Organisation or coordinating groups
Shelter & Evacuation Protective Actions	Concerns in relation to whether to shelter or evacuate and specific actions to be taken.	Everyone is advised to go into the nearest building to where they are to shelter. Close all the windows and doors. Tune into the local radio, TV or internet. If outside at the time of the incident then if possible: Blow their nose, take off outer clothing – bagging it somewhere safe and wash their face and hands.	REPPIR booklet STAC/SCG
Personal Health	People will be concerned about their health or of friends/relatives who are in the affected area.	There is no risk of an immediate impact of any radiation contamination. In order to reduce any risk then people who were outside at the time should: Blow their nose, take off outer clothing – bagging it somewhere safe and wash their face and hands. If they are still concerned then they should contact NHS 111 or their GP.	REPPIR booklet STAC when in place or AWE/PHE CRCE in the initial phase.
Vulnerable People	What about the vulnerable in the community e.g. school children, elderly etc.?	There are plans in place to support the vulnerable in the community. Initially they should take shelter like everyone else in the affected area.	STAC/SCG TVLRF Identification of Vulnerable Persons Plan. There are also Site specific plans for schools etc. to help schools plan to

Issue	Specifics	Draft Information/advice to be used	Sources of further guidance for Press Officers: Plan section, Lead Organisation or coordinating groups
		Schools and care homes in the affected area will be getting contacted to check on the support they need and plans put in place to support them.	support the children, staff and parents.
		Individuals in their own home who get support should contact their carer to see what can be done to help them, if they have not contacted them. Support will be confirmed on an individual basis depending on their needs.	
Pet Health	People will be concerned about their pets – either if they were inside or outside at the time of the incident and if they are evacuated from their home.	Pets which were inside at the time of the incident should have no issues. Pets that were outside may be brought under cover — into kennels, chicken coop or if necessary into the house but not petted, and put in an area away from the household. This should be done ideally without going outside so as not to put the owner at risk. If you need to be evacuated then you will be given advice as to what to do with your pets. Based on the characteristics of the incident guidance will be issued at the time following consultation with experts.	STAC/SCG/RCG Veterinary assistance and guidance will be sought via the RSPCA, DEFRA and Animal Health in order to determine the best advice and actions in relation to pet health

Issue	Specifics	Draft Information/advice to be used	Sources of further guidance for Press Officers: Plan section, Lead Organisation or coordinating groups
Public Water	Concerns about	The public water supply is contained in pipes,	STAC/SCG
Supplies	water safety from contamination	however radiation monitoring will be undertaken as part of response and the wider radiation monitoring strategy.	Water suppliers, PHE and Environment Agency will be able to provide more information.
		If there is chemical contamination then water may be contaminated – however due to the water treatment processes it should not get into the water supply.	TVLRF Water Distribution Plan
		Monitoring will be undertaken to check this remains the case.	UK recovery handbooks for radiation incidents:
		Portable supplies would be put in place if this were not the case.	https://www.gov.uk/government/publications/uk-recovery-handbooks-for-radiation-incidents-2015
Private Water Supplies	Concerns about water safety from	There are some private water supplies in and around the respective DEPZ of both sites.	STAC/SCG The local authorities Environmental
	contamination	These are supplies that come from private wells, natural springs or other ground water sources.	Health services will be responsible for advising those with private
		The risk of this water being contaminated is very low since the radiation needs to enter the groundwater which would take time.	water supplies on their pot ability in conjunction from the advice from the STAC.
		Chemical contamination may be more of a risk which may result in restrictions on the use of water being considered.	The PHE CRCE will support the local authorities with respect to sampling, analysis of results and advise as to whether the water is safe to drink.

Issue	Specifics	Draft Information/advice to be used	Sources of further guidance for Press Officers: Plan section, Lead Organisation or coordinating groups
			Sampling may be necessary for some time after the event. This should be considered by the RCG.
			If water restrictions are necessary the local authorities along with the premises owner will review temporary alternative water supplies.
Waste	There are a number of	types of waste that may arise as a result of the incident	including:
Domestic Waste.	What do people do with household waste	It is likely that domestic waste collection for the area affected will be suspended mainly to allow responders to access the area and to protect the refuse collectors. All waste should be left in situ with further guidance provided when the collections will start again – this may be a few days since the priority is to make sure people are safe. If adding rubbish to the bins it would be recommended that gloves are worn and hands are washed afterwards. Most of the bins used by the local authorities are wheeled bins however there are approx. 23 dwellings in BDBC area who chose to continue to use bags.	STAC/RCG The resumption of waste collection will depend upon a risk assessment based upon the specifics of the incident and dialogue with the contractor – with info from the STAC/TCG being provided to the local authorities.
Clothing Waste	What to do with clothes that people have worn if outside at the time of the	Take off outer layer of clothing if outside at the time of the incident. Clothes should then be:	STAC/RCG Will provide guidance to the local authorities.

Issue	Specifics	Draft Information/advice to be used	Sources of further guidance for Press Officers: Plan section, Lead Organisation or coordinating groups
	incident and may therefore be contaminated (as per guidance in REPPIR booklet).	 Put inside a bag, and place the bag inside another bag (double bagging) The bagged clothing should be left outside the door More information will be provided on to do with the bagged clothes following more detailed assessment of the risks. The information may include guidance as to how to dispose of the bag or how to clean the clothes. 	
Drainage Waste	Are the sewerage works likely to be contaminated?	The waste water companies are working with all the other agencies and checking for the risk of radiation contamination. They will also be monitoring the effluent and the sludge material prior to discharge to check there is no contamination going into the environment.	Involving the Environment Agency and DEFRA along with the waste water companies who will advise on drainage and sewerage coming from the affected area. It is likely that the majority of any radioactive waste entering the sewage system will settle out in the sludge in the local sewage treatment works (depending on capacity); so disposal of the sludge will be managed by the water company. The Environment Agency can advise on appropriate disposal methods and routes.

Issue	Specifics	Draft Information/advice to be used	Sources of further guidance for Press Officers: Plan section, Lead Organisation or coordinating groups
Contaminated Land Waste	Is the land contaminated and if so what is happening with it.	A comprehensive monitoring regime would be put in place to check for any radiation contamination. Once the full scale of the situation is known a more detailed clean-up programme, if needed will be put into place.	STAC/RCG It is the Local Authorities responsibility to investigate and determine if land is to be designated as contaminated land under the Environmental Protection Act 1990. If the LA designate the land as a 'Special Site' under the legislation then the Environment Agency will be responsible for remediation. Public Health England will provide environmental assessments in conjunction with the Environment Agency and will give advice on remediation options and the associated cost of implementing these.
Gardens	What can I do in the garden? What can I do with the vegetables etc.?	It is recommended that directly after the incident then gardeners do not work in their garden. In particular no one should do things that may mean any contamination being resuspended and therefore potentially breathed in. Monitoring of the area will be taking place and as soon as the results are known more detailed advice will be given.	RCG. Public Health England CRCE will provide environmental assessments in conjunction with the Environment Agency and will give advice on remediation options. Part of the remediation plan will include gardens. This process will vary depending on the contamination and the

Issue	Specifics	Draft Information/advice to be used	Sources of further guidance for Press Officers: Plan section, Lead Organisation or coordinating groups
			concentration. Issues that will need to be considered include: Grass and hedge cutting Flower removal Vegetable removal Paths/Drives/Decking cleansing/disposal. Furniture and ancillary cleansing/disposal. Long Term use of land.
Food – General	Is my food safe to use?	Any food that was inside the home or offices when the incident happened will not be affected, in particular tins and packaged goods, so can be used. Any food that was outdoors at the time of the incident should not be used until further sampling and information is available.	Food Safety is the responsibility of Food Standards Agency (FSA), who will give advice to the public about the safety of food and milk in the event of an off-site emergency. FSA advice to the public is likely to cover both what foods are unaffected and safe to eat, together with advice on potentially contaminated foodstuffs. The area over which food is affected is likely to be much larger than the areas where people have been asked to shelter in or evacuate. Sheltering and evacuation are necessary to

Issue	Specifics	Draft Information/advice to be used	Sources of further guidance for Press Officers: Plan section, Lead Organisation or coordinating groups
			reduce the risk of people breathing in radioactivity or receiving direct radiation from the plume for the short time that it passes overhead. However, it is possible that some people may eat large quantities of contaminated foods from the affected areas (e.g. vegetables from allotments) over prolonged periods. It is therefore, necessary to limit radioactivity in food at a cautious level which, in turn, leads to a relatively large area being affected. The following are some of the issues the FSA will consider with a basic outline as to the likely advice subject to the actual event.
Livestock	What do I do with livestock?	All livestock should be left where they are in the short-term until the environmental monitoring results are known. If there are specific welfare issues such as feeding, milking, lambing/calving then contact should be made with the local authorities Animal Health team.	STAC/SCG Animal Welfare: The responsibility for animal welfare issues lies with DEFRA, Animal Health and Trading Standards Services. Food Safety: The Food Standards Agency will assess the potential for meat from livestock to be contaminated and, if necessary, the FSA can control the movement and slaughter of livestock using the

Issue	Specifics	Draft Information/advice to be used	Sources of further guidance for Press Officers: Plan section, Lead Organisation or coordinating groups
			powers invested by Food & Environmental Protection Act 1985 (FEPA 85).
Crops	Are the farm crops safe to use?	No crops or foodstuffs should be harvested in the affected area until more detailed environmental monitoring results are known.	The Food Standards Agency (FSA) will undertake the sampling and testing of foodstuffs produced
		Crops and foodstuffs exposed to a chemical or radiation release may become contaminated in the downwind sector from the incident. This can be either immediate contamination through direct deposition, or may occur over a longer time period due to uptake of contamination into growing plants. In the early stages of the response farmers (and gardeners) will be encouraged not to harvest crops or eat food that may be contaminated. Advice on the temporary closure of any outdoor markets etc. in the area may also be provided.	and/or stored in areas affected by the incident. Emergency measures necessary to control the consumption and distribution of agricultural products will be implemented as appropriate by the FSA, who would liaise with the STAC. If necessary, a statutory restriction on the harvesting, movement and sale of foodstuffs coming from the affected area will be imposed by the FSA under the Food & Environmental Protection Act 1985.
Fish	Is locally caught fish safe to use?	The Kennet & Avon Canal is within the DEPZ of both sites, along with a number of fishing lakes. Initial advice is that no fishing should take place and certainly no consumption of any fish caught when the release is ongoing until such time as sampling has been undertaken.	STAC/RCG The FSA leads on the assessment of the likelihood of contamination of fish, shellfish in watercourses or the marine environment, and may apply restrictions on fishing in the

Issue	Specifics	Draft Information/advice to be used	Sources of further guidance for Press Officers: Plan section, Lead Organisation or coordinating groups
			areas affected in order to protect human health.
Milk	Is locally produced milk safe to use?	Any milk purchased through shops will be safe to use. Any milk sold directly by the farmer from their farm should not be used until further monitoring results are known. Contamination of milk may occur in the downwind sector as a result of the animals ingesting contaminated pasture. Although contamination levels on pasture may be low, cows and goats are efficient grazers and can cover a considerable area of land each day. Contaminant taken in by animals can concentrate in the milk, which may exceed acceptable levels of the contaminant in milk. It takes at least 24hrs for the contaminant to appear in the milk and may take a few days for peak concentrations to be reached.	STAC/RCG. The FSA will take action, including introducing restrictions under FEPA 85 to prevent contaminated milk getting into the human food chain. The FSA will liaise with members of the RCG to ensure arrangements are put in place for milk unable to enter the food chain. Sampling of milk will be undertaken by the FSA and the local authorities Environmental Health Officers. This is likely to occur on a scale larger than the DEPZ. Consideration will also be given to ensure appropriate arrangements are made for collection and disposal of contaminated milk. The Environment Agency will provide advice and guidance in conjunction with other appropriate organisations.
			Trading Standards and Animal Health will consider the welfare of

Issue	Specifics	Draft Information/advice to be used	Sources of further guidance for Press Officers: Plan section, Lead Organisation or coordinating groups
			the animals in relation to continued milking.
Housing	If I have to move out of my home where can I go?	If residents are evacuated or cannot get home due to the incident or cordons in place then people are advised to try to stay with friends or relatives in the first instance If this is not possible then residents will be supported at a reception centre where they can get registered and be provided with basic provisions (sleeping bags, basic wash kit, some refreshments etc.) In the longer term options would be to stay with friends or family, check with insurance companies for alternative accommodation or be put into emergency housing. The latter may be some distance from the area.	SCG/RCG There are short term and longer term solutions to find. The lead for this will normally be the local authority.
Financial Implications	I have a business and lost money. I am a home owner and have had to move out. Who pays for this? Who pays for the clean-up?	Anyone who believes they are being financially penalised as a result of the incident should check with their insurance company in the first instance making notes of all the expenses caused by the incident.	RCG

3.11 Specific Immediate Response Information

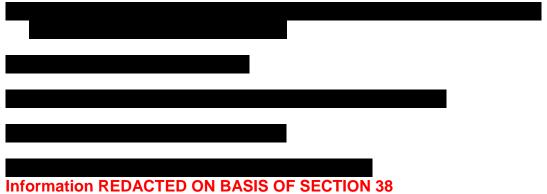
3.11.1 Identified Command and Control Locations

See Section 4.3.5

3.11.2 Rendezvous Points (RVPs)

There are a number of RVPs associated with this plan in relation to where responders could co-locate in advance of going forward. RVPs close to the site will be identified based on a risk assessment at the time having regard to the direction of any radiation contamination.

Other RVPs have been identified in relation to bringing in additional resources from outside the area and taking into account road closures. Set out below are some predetermined locations:



3.11.3 Road Closures

See AWE Transport Plan

3.11.4 Reception Centres and Rest Centres

See Section 7.4

3.11.5 Responders attending site

Emergency services/responders requested to attend an AWE Site will be directed to the appropriate gate where AWE will facilitate their requirement to gain access onto the premises.

Arrangements are in place to brief emergency services/responders arriving on site in line with Joint Emergency Services Interoperability Principles (JESIP). These briefings will be carried out by pre-identified AWE responders depending where on-site emergency services/responders are deployed to. For those responding to the incident scene, this will be carried out by AWE's Lead Emergency Service (AWE FRS/MDP). Those that are responding to the Emergency Operations Control Centre/Command Post will be briefed by AWE's Emergency Managers.

Tabards are worn by AWE emergency responders from the premises and the emergency services to ensure clear identification of individuals and roles. AWE emergency services/responders wear tabards with roles titled on them to assist responding agencies.

Emergency services/responders pre-identified as requiring to attend site during an incident should have undertaken training provided by their organisation and identified any specialist equipment to respond to an incident on-site. Each responding agency is responsible for their own equipment required to respond to carry out the duties of their service.

AWE's Emergency Services and emergency responders have equipment for their required capabilities. AWE has conventional and specialised fire fighting media and equipment which is monitored daily for availability.

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AWE monitors daily and captures the availability and function/capabilities of the on-site response teams via the AWE Site Status. For external response support, this would be reported by exception.

3.12 Notification of 'Steady State'

AWE personnel and other responders will continuously monitor the progress of the incident, and will be able to give the SCG up to date information on the affected area. A 'Steady State' declaration is the point at which it is decided that no further escalation of the emergency is foreseeable. This denotes the end of the on-site emergency phase of the response by AWE.

When the incident has been contained, based on the information provided from the AWE Emergency Manager, and after consultation with the STAC chair, then the SCG will be advised as to when it is safe to start the process of recovery with the aim of returning the public to normal living conditions.

When the SCG determines that conditions are safe for the public and the emergency phase has passed, the appropriate message will be released by the media briefing centre. If contamination problems exist, the public will be advised accordingly and a remedial/recovery phase invoked and coordinated by the relevant agencies.

Section Four

4 Multi-Agency Command and Coordination Arrangements

This section provides details on the command and coordination structures which would be put in place to facilitate the response to an off-site incident at either AWE site. Some of these could be virtually and/or physically located.

4.1 Overview

The structures put in place to coordinate the off-site response to an emergency at AWE Aldermaston or Burghfield, is the same agreed and tested multi-agency three-tier command structure which is used for any major incident i.e. "Operational", "Tactical" and "Strategic". The Joint Emergency Services Interoperability Principles (JESIP) will be used to support the response to ensure a common understanding and coordinated response to the incident.

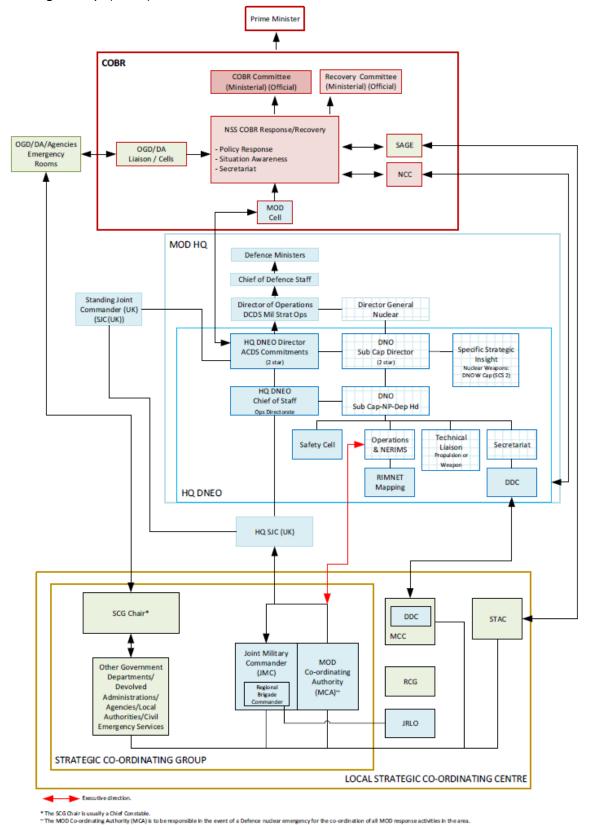
- (a) **Operational Coordinating Group (s)** will be at one or more Forward Control Point(s) (FCP) close to the incident site and the forward controls of other emergency responders. The senior officer for each responding agency present will deploy their agencies resources and liaise with the other senior officer present in order to ensure a coordinated response at or near the scene.
- (b) Tactical Coordinating Group (TCG) will be at the most suitable location depending on the site affected and community affected. The decision will be made by the Tactical Commander and will depend on the location and circumstances of the incident. Whichever location is selected the commanders must be satisfied that a robust communications system exists to support their function. The TCG will determine priorities in allocating resources; plan and coordinate when a task will be undertaken; and obtain other resources as required referring any issues which require strategic attention up to the SCG. Liaison Officers from AWE, Thames Valley Police, Hampshire Constabulary, MOD, Fire and Rescue Service (FRS), West Berkshire District Council, Wokingham Borough Council, Reading Borough Council, Basingstoke and Deane Council, Hampshire County Council, South Central Ambulance NHS Foundation Trust and Health organisations as appropriate will attend. In addition a Radiation Protection Advisor (RPA) to support the nonemergency services will normally be requested to attend – sourced via PHE CRCE. More information can be found HIOW & TVLRF Emergency Response Arrangements Handbook C: Tactical Coordinating Group
- (c) Strategic Coordinating Group (SCG) will be established drawing together representatives from all of the organisations in this plan as appropriate. They will assemble to formulate policy, make strategic decisions and authorise press statements. Each person must be able to make executive decisions in respect of resources within their agency and have the authority to seek the aid of other agencies in support of their role.

The SCG will be based at the Strategic Coordinating Centre, if not a remote SCG. The SCG is likely to have a number of subgroups working to it including the TCGs, MAC and RCG.

More information can be found HIOW & TVLRF Emergency Response Arrangements <u>Handbook D: Strategic Coordinating Group</u> or for strategic arrangements for an AWE incident in section 4.3.

4.2 Central Government Organisation and Interaction with the Local Strategic Coordination Centre

Below is a diagram of the Central Government and MOD Defence Crisis Management Organisation (DCMO)/Headquarters Defence Nuclear Emergency Organisation (HQ DNEO) interaction with the MOD Coordination Authority (MCA) and the Strategic Coordinating Group (SCG).



4.3 Strategic Coordinating Centre (SCC)

This section provides some guidance to those attending the SCC with respect to an incident at an AWE Site.

4.3.1 Staffing of the SCC

All responding agencies with staff attending the SCC should ensure their staff are trained and understand their roles.

All agencies should consider the number of staff required to support the SCC effectively which is likely to include:

- (a) Strategic Coordinating Group (SCG) Agency 'gold' rep
- (b) SCG supporting officer (support the agency 'gold' officer or deputise as necessary)
- (c) Appropriate subgroup reps to include STAC, MAC, RCG reps
- (d) Multi-Agency Information Cell (MAIC) rep
- (e) Loggists
- (f) Others as necessary

All agencies must put plans in place to resource the SCC for a number of days covering 24hrs since an AWE incident is unlikely to be resolved in a few hours.

All agencies should ensure the staff attending the SCC are equipped to operate independently of any other support by way of IT, telecoms, paperwork etc.

There are likely to be a large number of staff at the SCC, therefore with limited space only staff with a direct role should be in attendance.

4.3.2 Agency Attendance at SCC for AWE Incident

The attendance, ideally in person or via teleconferencing, at the SCC includes representatives from:

- (a) Thames Valley Police (& Hampshire Constabulary (depends on location of off-site incident))
- (b) West Berkshire District Council
- (c) Other Local Authorities as appropriate and depending on the location of the incident i.e.
 - i. Basingstoke and Deane Borough Council
 - ii. Hampshire County Council
 - iii. Reading Borough Council
 - iv. Wokingham Borough Council
- (d) Royal Berkshire Fire & Rescue Service (& Hampshire Fire & Rescue Service (depends on-site location))
- (e) MOD

- (f) Office for Nuclear Regulation (ONR)
- (g) Environment Agency (EA)
- (h) Public Health England South East (PHE SE)
- (i) Public Health England Centre for Radiation Chemical and Environmental Hazards (PHE CRCE)
- (j) NHS England South and NHS Improvement South East
- (k) South Central Ambulance NHS Foundation Trust
- (I) Food Standards Agency (FSA)
- (m)MHCLG Resilience and Emergency Division
- (n) AWE
- (o) Met Office
- (p) Thames Water
- (q) Highways England
- (r) Network Rail
- (s) British Transport Police
- (t) Other Utility companies as necessary

Along with other agencies as deemed necessary at the time.

4.3.3 SCC Internal Communications



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It is however expected that staff within the SCC will seek out information if they cannot find it on the system by talking to others within the SCC.

It is expected that all agencies maintain their own logbooks and notes following meetings and engagement with other agencies. These should be kept for audit/investigation purposes.

4.3.4 SCC External Communications

In order to ensure agencies outside the SCC are up to date with the current situation a number of options are available to agencies attending individually or in a coordinated manner as follows:

(a) Situation Report (SITREP) – this is a document created by all agencies in the SCC to allow a picture of current situation, actions and issues to be shared out to all agencies. This is coordinated by the Multi-Agency Information Cell (MAIC).

- (b) Common Operating Picture (COP) a more formal report which is shared with all agencies and government departments.
- (c) *Information Sharing* of Documents will normally be via email to respective agencies or via ResilienceDirect.
- (d) *Teleconferencing* in order to speed up the initial coordination meetings will be arranged using teleconferencing facilities. The dial in details will be sent out shortly after the initial notification process.
- (e) *Other communications* will depend on agencies but will normally include mobile phones and/or airwave radios.

4.3.5 SCC Locations

When being set up the management of the SCC is under the control of the Duty TVP Gold Officer who will decide on the virtual or physical location.



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If a significant population within Hampshire is affected by the incident, a similar approach may be taken by Hampshire Constabulary with representatives from both police forces in the other control and command locations to ensure consistency and clarity.

4.4 Strategic Coordinating Group (SCG) Sub Groups

In addition to the SCG there will normally be a number of sub groups working to support the SCG.

There will also be individual agency incident/emergency control rooms at their own locations.

Sub Groups	Role	More information
Scientific & Technical Advice Cell (STAC)	The multi-agency Scientific & Technical Advice Cell (STAC) will provide timely and effective technical and health advice to the SCG in order that key decisions can be made.	Public Health England South East Scientific & Technical Advice Cell (STAC) Plan STAC Action Card in Section 11
	This may include a Monitoring Cell as a sub cell.	
Media Advisory Cell (MAC) / Strategic Media Advisory Cell (SMAC)	The MAC include the main communication and media advisors to the SCG and may consist of a number of key Communication Officers from a limited number of agencies (primarily TVP, WBDC, AWE & MOD) who will provide advice to their communication officers at their own response locations and develop the media briefing centre details.	Thames Valley Local Resilience Forum Communications Plan Section 5.6 provides further details on Communications and the Media Briefing Centre plans.
Emergency Media Centre (EMC) / Media Briefing Centre (MBC)	A EMC / MBC will normally be set up in order to ensure the press is briefed accurately and in a timely fashion in a safe location. There are a number of potential sites, however, the choice will ultimately be made on the day depending on the site involved and the risks associated with the incident.	Section 5.6.2 provides further details on Communications and the Media Briefing Centre plans.
Multi-Agency Information Cell (MAIC)	The MAIC, often known as Information Cell, is made up of representatives from agencies that coordinate the situational details of the incident and coordinate the Common Operating Picture (COP). This information is provided to the SCG in order to facilitate the decision making process.	HIOW & TVLRF Emergency Response Arrangements Handbook B: Multi-Agency Information Cell (MAIC) provides information to support MAIC chair and participants
Radiation Monitoring Strategy Group / Radiation Monitoring Unit (RMU)	This cell could be set up to provide details to the STAC in relation to people and environmental monitoring. Their main aim would be to develop a robust monitoring strategy including sourcing equipment, and specialist officers. It is likely to be chaired by a representative from PHE CRCE.	HIOW & TVLRF RMU Plan More details in Section 7.2

Sub Groups	Role	More information
Logistics Cell	This cell would be set up to coordinate the sourcing of specific resources – e.g. transport etc.	
Evacuation/ Shelter Cell	This would be put in place should there be a need for an evacuation/relocation subsequent to the initial protective actions of shelter. Any urgent evacuation would be undertaken at operational level due to the risk.	TVLRF Evac and Shelter Framework HIOW Mass Evac and Shelter Guidance
Recovery Coordination Group (RCG)	This group would be put in place in order to coordinate the recovery from the radiation emergency.	TVLRF & HIOW Recovery Plans More information Section 9.3

4.5 Responding Agencies' Emergency Control Centres

In addition to the multi-agency coordination groups put in place normally each agency will put in place its own incident /emergency control centres in order to coordinate their own assets. The number of control rooms involved will depend on the scale of the incident and its location.

An important agency command and control centre is the one set up on-site at AWE. The Emergency Operations and Control Centre (EOCC) Aldermaston (A) on-site is set up in order to coordinate the stabilisation of the incident and to provide information to responding agencies. The EOCC (A) will have an advisory team working to the Emergency Manager. The information and activity coordinated from the EOCC (A) include:

- (a) Actions to stabilise the incident on the affected site(s).
- (b) Hazard assessments, including computer dispersion modelling, of any release.
- (c) Initial Emergency environmental monitoring both on and off (outside) the incident site would be controlled from this complex.

The following external organisations would normally send representatives to the EOCC (A), ideally within an hour of notification:

- (a) MOD
- (b) Thames Valley Police
- (c) Royal Berkshire Fire & Rescue Service
- (d) South Central Ambulance NHS Foundation Trust
- (e) West Berkshire District Council Liaison Officers representing the Local Authorities.

4.6 Decision Making

Whilst there is a formal command structure it may take some time for it to be put in place. Therefore the principle of subsidiary should be followed with the decisions made at the lowest level or closest to where they can have an effect. This does not mean

issues should not be raised up but where there are decisions to be made in a timely fashion then they can be without higher authority however regard should be given to this plan and expert advice

4.7 Comprehensive Attendance.

At the start of the incident not all the agencies, nor all the subgroups will be in place, some will take some time to be fully functioning. Therefore the leads of the groups need to be flexible, and make best use of technology to ensure the correct people and groups are 'available'.

Section Five

5 Warning and Informing

The duty to provide information to the public prior to and during an off-site emergency is that of the local authority under REPPIR 19 (Reg 21 & Reg 22). This duty can only be carried out with the support and cooperation of all the agencies responding to the emergency.

In addition under the Civil Contingencies Act 2004 there is a requirement for Category 1 responders to warn & inform the community regarding emergencies.

Warning & Informing the community involves all stages of an emergency, before, during and after and involves all agencies.

Coordination can be via the Media Advisory Cell (MAC). However this does not stop individual agencies focusing on their areas of responsibility and getting messages out. In the recovery phase of the incident the coordination of information to the public will be transferred to the local authority.

5.1 AWE Warning & Informing the Community Process

This takes place before, during and after an event in a number of formats. Reference should also be made to TVLRF Communications Plan.

The key pillars of the requirements to warn and inform the public include:

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

5.2 Before a Radiation Emergency (Regulation 21)

(a) **REPPIR Booklet:** On a 3 yearly basis West Berkshire District Council supported by AWE and the partner agencies, produce a REPPIR booklet. The aim of the booklet is to provide information to the local community so they know what they should do should there be an incident at either of the AWE sites which may affect them. It also provides information on the size and extent of the DEPZ and OPZ for both sites.

The current version of the booklet can be found on <u>West Berkshire District Councils</u> <u>website</u>.

(b) **AWE Local Liaison Committee (AWE LLC)**: A committee involving elected members from the Town, Parish, County, District and Borough Councils which are in

the DEPZ areas. These representatives then communicate to their respective communities.

There are normally three meetings a year where AWE provides updates and the Members have the opportunity to challenge AWE. More information is on the AWE website Local Liaison Committee | AWE

(c) Connect Magazine. A <u>magazine</u> sent out quarterly to a large area of the community and covering all those communities in the DEPZ. This raises awareness of the site with messages being put in place in relation to what to do should there be an incident.

Websites: Information relating to the plan and the sites are held on <u>West Berkshire</u> District Councils website.

Specific Vulnerable Groups: Agencies from the AWE Off-Site Planning Group work with schools, early year settings, care homes and traveller sites in order to raise awareness and encourage on-site emergency plans so they can support those they are looking after.

5.3 During the Response to an Emergency

When this plan has been activated the following warning & informing of the affected areas would take place:

(a) **Immediate:** For a Radiation Emergency AWE will initiate the automatic telephone alerting system to the public round the affected site. The public will be advised to go inside, stay inside the nearest suitable building and to tune into the radio and television to hear public service broadcasts.

Information REDACTED ON BASIS OF SECTION 38

It should be noted that the automatic telephone alerting system to households around the site operates on an 'opt out' basis. Therefore, it is intended that the majority of people within the area will receive a call through their landline should they be in the area potentially affected. Limitations however are the reduction in landlines in properties.

- (b) Use of Media Outlets: Information and warnings about the emergency will be regularly reported via TV, local and national radio; social media including AWE Twitter account, and websites as appropriate. This will be managed by all agencies and coordinated by the Media Advisory Cell
- (c) **Other activities** such as loud hailers etc. may be employed to ensure messages are going out. All means necessary will be used to get the messages across.
- (d) **Emergency Media Briefing Centres** may also be put in place to coordinate and support the media get accurate information in relation to the incident. Each agency would therefore need to identify a media spokesperson to support this activity.

(e) **Emergency Help Lines**: The SCG will decide if there is a need for an emergency help line to be activated during the response phase.

5.4 During the Recovery from an Emergency

After the initial warnings and advice has been given to the public it is essential that more information is provided quickly in order to reassure the public and to ensure they know what to do if the incident is of a prolonged nature.

There are some generic answers to these points covered in the Recovery Section (Section 9) to this plan. However, for any incident prior to offering the advice a review of the information against the actual situation must be undertaken.

The RCG will coordinate the information dissemination for the recovery phase. The TVLRF Recovery Plan & HIOW Community Recovery Plan gives guidance as to how this may be done which may include:

- (a) Leaflets
- (b) Press releases
- (c) Information centres
- (d) Public meetings
- (e) Websites for responding agencies.

5.5 Notification of Steady State /All Clear

Just as important as notification of the incident is the notification of the 'Steady State' / all clear. As a result of the monitoring undertaken the 'Steady State' / all clear will be given as soon as possible. This will be given via the automatic telephone system in consultation with, as a minimum, AWE and the Police. The release of the information will be agreed and coordinated by the SCG/RCG as appropriate.

5.6 Working with the Media

It is anticipated that the media interest in an incident occurring at either of the AWE sites would be large and that the media would be on scene quickly after the incident. In the absence of a reliable source of information, the media will seek information from any source that they can find which will include responders, the local community, 'experts' and pressure groups. Given the public apprehension about radioactivity, it is important that a reliable source of information is established as soon as possible following an incident, and that it is seen to be independent and objective.

During an incident the media will be contacting all responding agencies in order to build their story. As a result a coordinated response is necessary in order to ensure consistency and accuracy of information.

It is also essential that all agencies develop an open relationship with the media in order to lessen the likelihood of the dissemination of inaccurate or misleading information that could lead to unnecessary public alarm.

Media communications are essential particularly in the early stages when the community affected are under shelter and the advice is to 'tune in'. Hence the media forms a key role in warning and informing the community.

5.6.1 Information Control

In order to support the information coordination there are a number of plans relating to the media response including:

- (a) TVLRF Communications Plan.
- (b) Joint AWE/MOD Emergency Communications Plan

Thames Valley Police Press Office is normally responsible for the coordination of the messages to the media during the response phase of the incident. This responsibility will be transferred to the Local Authority for the recovery phase.

Each agency has its own press officer(s) or communication teams who have responsibility for their agency's information. This does not mean that agencies cannot confirm what their own response measures and business continuity plans are, however, they should not speculate on others and the overall picture without the exact details being available.

Coordination is managed by setting up a multi-agency Media Advisory Cell (MAC) at the SCC or via teleconference.

Early actions for the MAC to put in place include:

- (a) Identifying a lead for the MAC and a Deputy
- (b) Set up a rolling comms officer email chain
- (c) Identifying the need for a Media Briefing Centre and therefore the location and resourcing
- (d) Identifying spokespersons for each agency

- (e) Identifying spokespersons for coordinating groups put in place
- (f) Identifying Media Officers to support the following:
 - The Emergency Media Briefing Centre (MBC) in support of their media spokesperson or to act as their agency spokesperson
 - ii. other response locations e.g. Reception Centre / Rest Centres.
 - iii. Coordinating groups, including sub groups set up.

This combined media cell will support the responses to press inquiries addressed to TVP and will maintain contact with other Media Briefing Centres and Press Cells set up elsewhere e.g. nearer the scene in order to maintain consistency of information.

The MAC will coordinate the information given to the media via the Media Briefing Centre.

It is not envisaged that the media will be attending TVP SCC; instead Press Conferences will be scheduled at the Media Briefing Centre.

5.6.2 Emergency Media Centre (EMC)/ Media Briefing Centre (MBC)

See TVLRF Communications Plan for information relating to the EMC / MBC. In addition to the normal media support to the MBC for an AWE incident then press officers from the following agencies should also be included: MOD, DEFRA, FSA, PHE, PHE CRCE, etc. and others as required.

This press cell will manage the queries received from the media, coordinate the response in line with the MAC Strategy and key lines to take including requesting information from the MAC if a response is not known.

In addition to the normal considerations for the location of a MBC (easy access, car parking, tables, chairs, toilets etc) for an AWE incident the location also needs to consider how close it is to the AWE sites and the areas of contamination. A number of sites will potentially suit most of the above requirements including:



The site chosen on the day will very much depend upon the AWE site affected, the wind direction, availability of the site and where the press are naturally attracted to, although safety and ensuring the response to the incident must be the priority.

The Emergency MBC does not need to be equipped with technology initially for the media attending to use – most come self-sufficient.

5.6.3 Press Statements

Press Statements will be sent from the MAC once it has convened.

It is important that all press releases sent out are copied to all agencies involved in order that everyone is aware of the reports going out should they be questioned on the release.

5.6.4. Information relating to AWE Incident Concerns

The table in <u>Section 3.9</u> covers some of the concerns likely to be asked by responders and the public following an AWE incident including outline points to be used in a response and where to find more information – in the plan, in other documents, coordinating groups or organisations.

Section Six

6 Protective Actions

There are a range of protective actions that may be implemented following an incident on an AWE site the purpose of which is to afford the greatest protection to the community affected as possible. Specific protective actions will be dependent upon the nature and scale of the incident. The decision as to what protective actions to put in place will be taken, at any command level, following advice from the site and/or the STAC.

6.1 Principles of Protective actions:

The three principles are:

- (a) **Avoid Deterministic Effects** use protective actions to keep doses to levels below thresholds for deterministic effects. It should also avoid serious health effects caused from non-radiological incidents
- (b) **Justification** the action should be used if it is expected to achieve more good than harm:
- (c) **Optimisation** the quantities criteria used for introducing and withdrawing protective actions optimizes public protection; and

6.2 Immediate Protective Actions

On activation of the off-site plan then the implementation of the automatic sheltering protective action will be put in place. This allows for the immediate initial protective action for all people in the affected area to go inside and stay inside.

6.3 Assessment of Appropriate Protective Actions

Subsequent protective action decisions about public protection measures will need to be made based on environmental monitoring and will normally be made by the SCG on the advice of the STAC and will be based on monitoring results which can take time to be provided.

6.4 Monitoring Strategy to support Protective actions

AWE has a capability to undertake initial monitoring of the local environment around the Aldermaston and Burghfield sites in the event of a release, or suspected release of radioactive material. The results from this will be shared with organisations represented at the SCC.

Once the SCG is operational, PHE CRCE will be responsible for co-ordination of environmental monitoring and guidance with respect to protective actions passes to the STAC.

6.5 Protective Action Options

The default protective action for the community outside the site is for shelter i.e. to go inside and stay inside. There may be situations however when an urgent evacuation followed by subsequent evacuation may be necessary. Protective actions will be based on monitoring and expert advice.

The protective actions that may be implemented in an emergency at AWE are summarised below.

6.5.1 Protective Action Options and Actions

Protective action	Description	Potential scenarios / areas for which this protective action may be implemented	Process	Limitations / Issues – including actions in place or to consider to over come
Sheltering	Going inside and staying inside buildings closing doors and windows and following advice given by the authorities via local and national media will substantially reduce the risk of contamination and risk to health of the population in the affected area. (Distance and shielding would be provided).	Automatic protective action in downwind sectors of Detailed Emergency Planning Zones once a radiation emergency has been declared. Exceptionally, sheltering may be advised across a wider area see Section 6.6 & Section 6.7.	 Automated public telephone altering system activated by AWE. The specific sectors that would be advised to shelter - the sectors alerted would be dependant primarily on the wind direction at the time of an emergency.(see monitoring) Advice provided would be to: go in or remain indoors, close all windows and doors and switch off all non-critical ventilation or air-conditioning systems Remove outer clothing, blow nose and have shower or wash face and hands if out in the open at time of incident (Further information on self-decontamination in Section 7.3.1) switch on a radio or television and listen for any information about the incident In particular the following local stations would be used. Heart Berkshire - 97, 102.9 & 103.4 MHz Heart Oxfordshire - 102.6 MHz BBC Radio Berkshire - 94.6, 95.4 104.1 & 104.4 MHz 	Not all premises in the DEPZ will have land lines to receive the alert – leading to additional resources needed in the area affected to ensure all inside. Reliant on businesses to inform people on-site and look after them for a period of time – booklet issued every 3 years, businesses encouraged to have an emergency plan. If outside at the time of the incident then if possible: Blow their nose, take off outer clothing – bagging it somewhere safe and wash their face and hands. A plan needs to be in place within 48hrs due to the decreasing effect of sheltering, as a result of natural air changes in buildings.

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Protective action	Description	Potential scenarios / areas for which this protective action may be implemented	Process	Limitations / Issues – including actions in place or to consider to over come
			 The Breeze Basingstoke and North Hampshire 107.6 MHz The Breeze Newbury 105.6 MHz and 107.4 MHz The Breeze Reading 107 MHz Local Independent TV Local BBC TV Plus others as appropriate Prevent others entering the area – AWE Transport Plan. 	
Urgent evacuation – leading to temporary or permanent relocation	Evacuation of people without any delay to remove them from an immediate threat to their safety. This may be necessary, particularly for those closer to the site depending on the levels of radiation contamination, types of premises and	Urgent evacuation (at the direction of emergency services at the scene) may be required: • For non-radiological scenarios - e.g. areas within cordons in incidents involving explosives or other materials posing an immediate risk to life (e.g. asphyxiate gases, conventional smoke) • For radiation emergencies where due to the properties and persons close proximity	Action will be based on information from Site or STAC which will be informed by initial monitoring results from on and off the site and associated Modelling; REF: TVLRF Evacuation and Shelter Framework & HIOW Mass Evacuation and Shelter Guidance Immediate door knocking and supported evacuation by emergency services (TVP/SCAS/FRS) Encouraged to get a grab bag in advance if time allows – Preferably making sure they have all relevant medication, clothing and personal effects to use over the time they may be out of their homes for Wash facilities and clothing may be needed. REF: LA Rest Centre Plans	 Emergency services approaching respective premises in PPE which may alarm those involved; Resourcing the evacuation by way of emergency services - mutual aid by other emergency services and other responders. This will depend on the numbers involved; Resourcing transport/drivers to enter into a contaminated area;

Protective action	Description	Potential scenarios / areas for which this protective action may be implemented	Process	Limitations / Issues – including actions in place or to consider to over come
	vulnerability of the occupants (those requiring extra support).	to the site boundary (e.g. incidents involving the transport of radioactive materials on the site, or severe accidents). Such evacuation would normally be subject to careful consideration by STAC taking into account the potential dose saving (or increase in public dose) that would result, but could perhaps be usefully classified as "Early Evacuation". • Care homes, schools, caravan sites, boats (liveaboard & pleasure), individual vulnerable clients may require extra support in areas affected — in order to get this support effectively the individuals may need to be evacuated.	 Support by way of an urgent reception centre; REF: LA Rest Centre Plans Transport needed to support some/all people – emergency services Management of pets TVLRF Identification of Vulnerable Persons Plan & TVLRF Information Sharing Protocol to identify and share vulnerable clients' details. Decisions made as to best way forward for supporting vulnerable people depends on the incident – stay where they are with support coming in or evacuation to a safe location for support to be provided. REF: TVLRF Identification of Vulnerable Persons Plan Monitoring of people evacuated prior to going to more formal rest centre; REF: HIOW & TVLRF Radiation Monitoring Unit Interim Operational Plan Longer term support in recovery to their property Ref: TVLRF Recovery Plan & HIOW Community Recovery Plan. 	 Evacuating large care homes – all have been given advice in developing their emergency plans to keep residents on-site and inform next of kin etc; A balance of continuing in shelter versus needs of vulnerable people in community settings (Schools/care homes) and managing their families.
Subsequent evacuation – leading to temporary or	Displacement of members of the public from their homes and businesses due	May be required in the days/weeks in relation to: • people taking cover in buildings such as	 Monitoring of the area for contamination Guidance received via STAC following the analysis of the monitoring requirements 	A plan to be in place within 24hrs for subsequent evacuation to start taking place and be completed

Protective action	Description	Potential scenarios / areas for which this protective action may be implemented	Process	Limitations / Issues – including actions in place or to consider to over come
permanent relocation	to the sheltering protective action no longer being valid and/ or to facilitate longer term recovery and remediation of affected areas. This may be necessary, some 12 to 48 hours later, depending on the levels of contamination determined. Beyond 48hrs it is considered that sheltering indoors is normally not adequate within the affected areas.	factories, offices and other work places Those sheltering areas may not be suitable in terms of providing support for the people there for any length of period due to lack of facilities, food and bedding This will need to be considered at an early stage depending on the zones affected Following monitoring of the area for levels of radiation (or other) contaminants Evacuation of the public from their homes may be necessary to facilitate the recovery process.	 A map recce and cross reference to the information in this plan needs to be undertaken to establish what is in each sector- this will vary according to time of day etc. A specific joint Evacuation Cell to agree the process and the notification routes for the community to be set up the process for temporary or permanent relocation will be communicated via the media to those affected REF: TVLRF Evacuation and Shelter Framework & HIOW Mass Evacuation and Shelter Guidance & LA Rest Centre Plans. 	within 48hrs of the incident starting. Once Individuals have been removed from the area, temporary or permanent relocation needs to be identified for those unable to return to their properties.
Self- Evacuation	When members of the public in the area remove themselves from the area rather than shelter or	Where people hear/see others leaving the area this may lead to self-evacuation.	 Ideally all self-evacuating should be encouraged to be processed at an agreed site (rest centre or RV point) If they do not go through a registration process or it would be too resource intense to manage then a helpline or website 	 Control will be less manageable Spread and resuspension of contaminants

Protective action	Description	Potential scenarios / areas for which this protective action may be implemented	Process	Limitations / Issues – including actions in place or to consider to over come
	evacuate under the support of emergency services		registering system should be put in place to allow people to register remotely their details.	Incident becomes a wider issue than limited to the local Berkshire/Hampshire areas.
Remaining away from the area.	People out of the area when an incident takes place.	Where people are at work or out of the area when an incident happens.	 Media messages to: Stay away from the area; Stay with friends and family; Register as in self-evacuation Provision of a drop in centre away from the area to get more information. Road closures put in place REF: LA Assistance Centre Plan. 	 People may wish to get back home to pick up or visit vulnerable people. People may have concerns for animals welfare of pets or livestock left unattended Reception / rest centres may be necessary to support those who are 'homeless'
Restrictions on water consumption	This is not likely to be required due to the way the water supplies are delivered.	This is unlikely to be needed as an immediate protective action by the nature of how water is abstracted in the area and the length of time any radiation may take to get into the supply network If may be slightly different for a chemical incident at the site however and therefore should not be discounted.	The STAC should be the main source of information for decisions. Thames Water will be lead for public water supplies information. For private water supplies the EHOs within Local Authorities will have details of such supplies in the affected area and will be able to support the decision making process via the STAC. REF: TVLRF Water Disruption Plan.	

Protective action	Description	Potential scenarios / areas for which this protective action may be implemented	Process	Limitations / Issues – including actions in place or to consider to over come
Restrictions on food production	Advice or specific restrictions on food producers not to consume food sourced from a potentially contaminated area to minimise the potential ingestion of radioactive materials following a radiation emergency incident.	May be required following a radiation emergency where areas are found to have been contaminated with radioactive or other hazardous materials. Intervention levels for implementing this protective actions are flexible and would be scenariodependent.	 The STAC should be the main source of information for decisions Trading Standards & Animal, Plant and Health Agency and the Food Standards Agency should be involved re animals welfare, crops/gardens and food safety etc. 	
Restrictions to transport movements Road Rail River & Canal	By restricting road, rail and other transport movements in and around the area allowing emergency vehicles access and reduce the risk of resuspension of radioactive particles.	May be required to facilitate the response and the recovery and reduce the resuspension of particles.	 There is an AWE Transport Plan in relation to the initial response and 'closing' down of the area to traffic to support access to site and allow emergency service access. Agencies involved: Highways England for M4, A34 and M3 LA Highways & Transport Team (West Berkshire, Hampshire, Reading and Wokingham). Network Rail- If AWE (Burghfield) site is affected including zones B, C, D, E, F, G & H then the Rail line between Reading and 	Traffic and trains are likely to have travelled through the area before being formally alerted and therefore concern to the companies, passengers and road users along with the incident being wider than Berkshire/Hampshire borders. Notification regarding PH advise to be shared with all LRFs.

Protective action	Description	Potential scenarios / areas for which this protective action may be implemented	Process	Limitations / Issues – including actions in place or to consider to over come
			Basingstoke should be requested to close as a precaution in the early stages of the incident. A plan is available for the initial closure phase.	
			Canal & River Trust.	
			Reopening would be on advice from the STAC.	
Public Rights of Way Restrictions	By restricting access to the public rights of way (PROW) then access to the public to the affected area is limited.	To prevent locals and others using the PROW in the area inadvertently, then the paths would need to be formally closed.	A number of footpath and other rights of ways exist within the DEPZ of both sites. Any decision to close footpaths should be referred to the relevant local authority's Rights of Way teams in order for them to identify what paths can be closed.	

6.6 SHELTER as a Protective Action Summary

Shelter is the default protective action for a radiation emergency at either of the AWE sites since distance and a barrier (a building) will afford protection.

On notification the community should go to the nearest building to take shelter. Some of the issues for responders relating to shelter include:

- (a) Vulnerable communities and individuals requiring support
- (b) Visitors to the area
- (c) People sheltering in businesses
- (d) People living in the area who were outside the area at the time
- (e) Friends and Family worried about those within the area
- (f) How long are people likely to be told to stay in shelter?

Most of these issues are addressed in other parts of this plan. The key element however will be the provision of information.

Sheltering effectiveness: any structure where doors and windows can be closed (so not tents or barns) offers some degree of protection from the inhalation of airborne radioactive material. The degree of protection offered by a structure will vary depending on how air permeable it is and how it manages air exchanges.

Sheltering in temporary structures such as caravans, boats (live aboard & pleasure) and mobile homes can therefore be appropriate for a short period of time but if there is the option of sheltering in a more substantial structure then this should be used.

When considering lifting sheltering and introducing relocation or introducing evacuation, consideration should be given to prioritising to those in less protective dwellings. The nature and extent of protective actions will be continuously reviewed by STAC. Advice on amending protective actions will be provided by STAC to SCG, based on the scientific and technical information available at the time

6.7 EVACUATION as a Protective Action

An evacuation is defined as the movement of people and, where appropriate, pets away from an actual or potential danger to a safer place for a length of time.

Type of evacuations considered:

Type of	Description
evacuation	
Urgent	Evacuation of people without any delay to remove them from an
evacuation	immediate threat to their safety
Subsequent	Displacement of members of the public from their homes and
evacuation	businesses due to the sheltering protective action no longer being valid and/ or to facilitate longer term recovery and remediation of

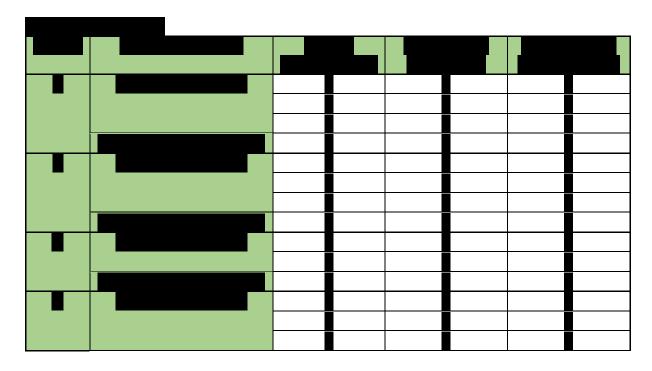
Type of evacuation	Description
	affected areas
Self- evacuation	When members of the public in the area remove themselves from the area rather than shelter or evacuate under the support of emergency services.

Evacuation as a protective action may be necessary in the early stages of an emergency particularly for premises closest to the site boundary due to the levels of radioactive contamination or additional hazards from the cause of the emergency. In order to support any evacuation the DEPZ is split into sectors and sector subdivisions, these sector subdivisions are closer together nearer the site boundary to allow for the minimum evacuation as possible. Due to the non-uniform polygonal shape of the sites, this also means that one sector (Sector A at Aldermaston for example) has the site boundary at a different sector subdivision than another sector (Sector M).

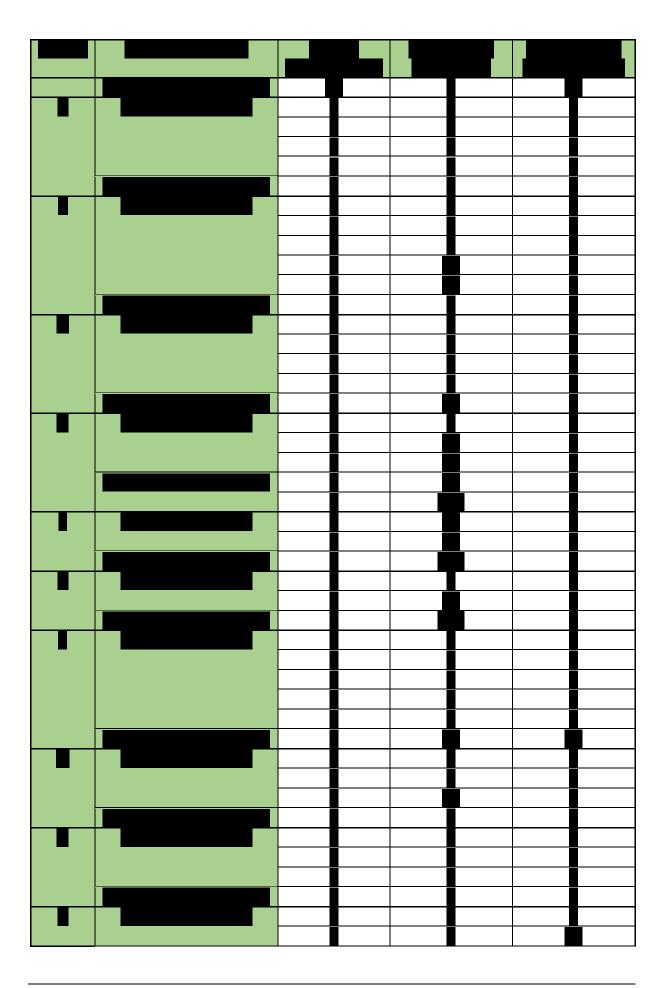
The table below identifies the sector subdivisions where urgent evacuation should be considered at an early stage based upon levels of projected contamination and the vulnerability of the community in the area. It should be noted that, due to differences in the operations of each site, their size and shape the sector subdivisions are not a direct read across as the same distance. For further information regarding information in the DEPZ please refer to Section 8.1

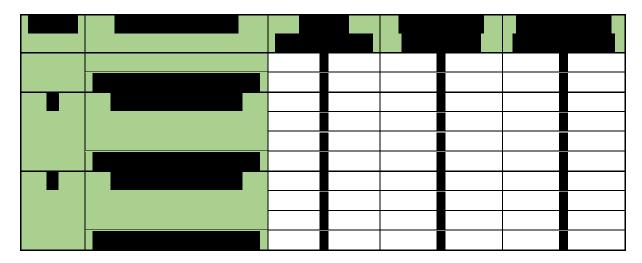
Consideration for those being evacuated will be to focus on whether they will require temporary or permanent relocation. The nature and extent of protective actions will be continuously reviewed by STAC. Advice on amending protective actions will be provided by STAC to SCG, based on the scientific and technical information available at the time.

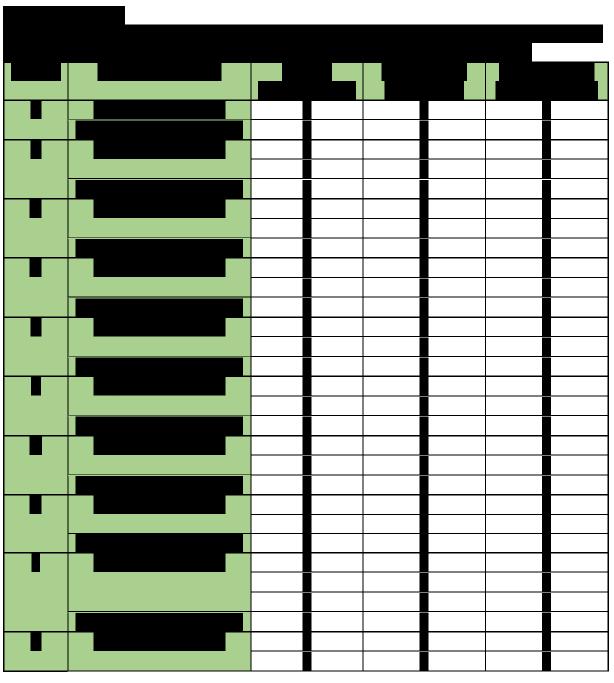
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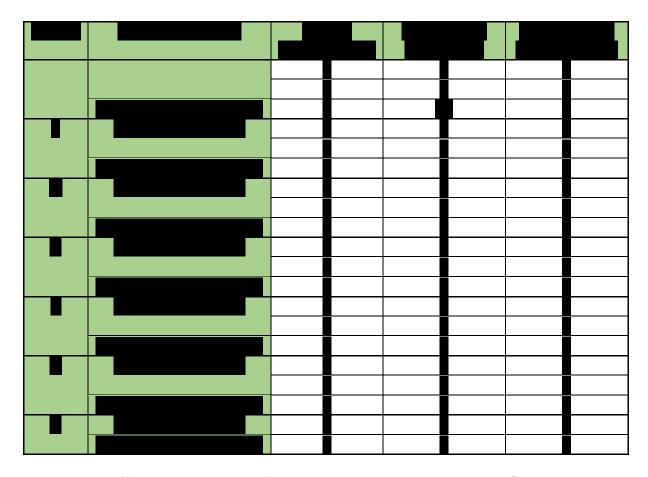


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The process of evacuation should follow the TVLRF Evacuation and Shelter Framework & HIOW Mass Evacuation and Shelter Guidance.

A summary some of the key points in relation to evacuation are set out below.

Action	Process for AWE sites
Decision	For urgent evacuation the decision would be made based on the modelling and/or monitoring data from AWE and therefore the level of radioactive contamination risk and/or based on additional risks as a result of the incident such as explosive risk, fire etc. The decision would be at operational or TCG level based on the information from AWE or STAC which will be informed by initial monitoring results from on and off the site and associated Modelling.
	For subsequent evacuation considerations AWE will, in conjunction with the MOD Coordinating Authority; make recommendations to Thames Valley Police (and Hampshire Constabulary) Strategic Coordinating Group(s) as to whether any evacuation of the general public is recommended in the early stages until such time as the STAC is in place to provide the advice to the SCG.
	Temporary or permanent relocation following evacuation should be considered early for both urgent evacuations and subsequent evacuations.

Action	Process for AWE sites
Notification to community	If evacuation is recommended, normally, the Police and other emergency services, will be responsible for advising residents in the affected area that they should evacuate the building they are in, how this will be done and where they can go to. The community would be advised as to what to take with them should they be evacuated.
	Media messages will also provide the information – this will need to be detailed with respect to the areas affected and why them and not other areas, as necessary
Transportation	Inside the contaminated area the transportation would normally be arranged by the Logistic Cell with support in sourcing the vehicles by the Local Authorities via their normal contractual arrangements.
	Outside the contaminated area the Local Authorities would arrange transport – arranged via an exchange rendezvous point (RVP).
Reception Centres/ Rest Centres	Arrangements are in place to shelter communities within the existing Detailed Emergency Planning Zone (DEPZ) for either site if considered necessary for public safety or for operational advantage.
	People leaving the affected area may initially be requested to report to a designated Reception Centre/ Rest Centre/ RVP set up by the appropriate Local Authorities. This will help the Police and Local Authority (LA) to maintain records of movement and records of vacated premises.
	All persons with homes in the area who wished to enter or re-enter before it was considered safe to do so would be advised to report to a Reception Centre outside the sheltering zone to await clearance.
	The Reception Centre would act as the central information point for persons excluded from their homes as well as the location to which any persons had been evacuated would be sent initially.
	Special arrangements exist for children at school. Where necessary the Police and Local Authorities would make appropriate arrangements for their care and for the notification of parents and guardians. Children at school outside the affected area, but who live inside the affected area, would be taken to nominated Receptions Centres where they will be looked after by their teachers and local authority staff until they were reunited with their families.
Radiation Monitoring Unit (RMU)	A Radiation Monitoring Unit, as appropriate, will be provided where the public can be monitored for possible radioactive contamination. Further information can be found: HIOW & TVLRF Radiation Monitoring Unit Interim Operational Plan

Action	Process for AWE sites
Information	Thames Valley Police (and, if appropriate, Hampshire Constabulary) will be responsible for the issue of authoritative information about evacuees and casualties.
	Specific telephone numbers to enable this information to be obtained will be announced by them, via the media, at the time of an emergency.

6.7.1 AWE Staff Evacuation

All personnel on the AWE site, except those directly involved in the response to the incident would be directed to take shelter inside the nearest suitable building. Later they would be evacuated from affected areas in a controlled manner as appropriate. This site exit strategy would be presented by the AWE duty team to consider and raise with the Tactical Coordinating Group (TCG) to be authorised and to ensure the coordinated site evacuation managed by AWE does not have an adverse impact on the resources engaged in responding outside the site.

6.7.2 Uncontrolled Community Self Evacuation from Area

The possibility of self-evacuation by members of the public at any time cannot be ignored. The impact of which may cause disruption to the response and may make the situation worse should radioactive particles be resuspended. Case studies show that there is greater risk of accidents during such self-evacuation than a situation of shelter and controlled evacuation if needed.

Public Information and local control will be needed to reduce the risk of this taking place.

6.8 Basis for Lifting (removing) Protective Actions

Protective actions will not be lifted until the Strategic Coordinating Group (SCG) and at a later stage by the Recovery Coordinating Group (RCG), advised by specialist agencies in the STAC are convinced that the risk to the public is the same, if not less than if the protective actions were to remain in force. The decision to lift the protective actions is made by the SCG, but the initial message must be delivered by the police.

Section Seven

7 Supporting Information

This section covers Monitoring Strategies, Rest Centres, Vulnerable People and PPE.

7.1 Monitoring Strategies

PHE CRCE is responsible for the development of the Monitoring Strategy. This strategy should include environmental monitoring to include food and water and people monitoring. The strategy will be agreed at STAC and subsequently approved at the SCG.

Information about PHE CRCE's national radiation monitoring co-ordination role can be found in the <u>National Nuclear Emergency Planning and Response Guidance</u> (section 5.6 on radiation monitoring and specifically section 5.6.10)

7.1.1 Responsibilities

- a) AWE plc is responsible for environmental monitoring out to approx. 15km in the first instance.
- b) PHE CRCE is responsible for the coordination of the monitoring as detailed in their website beyond and in addition to the operator. PHE CRCE maintain a 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, Leeds and Glasgow. Their deployment and tasking is controlled by the Monitoring Coordination team leader based in the Chilton Emergency Centre who reports directly to the PHE CRCE Operations Director.

In addition to deployment and management of PHE CRCE monitoring teams, PHE also has a national monitoring coordination role during radiation emergencies, which is managed by PHE CRCE. PHE CRCE will coordinate the monitoring resources made available to it in the event of an emergency and prepare a monitoring strategy for approval by the Strategic Coordinating Group (SCG). This responsibility covers the responsibility for monitoring people and the environment. It does not change or re-allocate any existing responsibilities that organisations might hold with regards to radiation monitoring. PHE CRCE has no power to commandeer resources and PHE CRCE would not expect to take direct tactical control of any resources made available.

- c) PHE CRCE will periodically provide organisations with information as the incident develops, this should include:
 - i. A summary of the incident situation
 - ii. PHE CRCE local rules for its own monitoring teams being deployed
 - iii. PHE CRCE radiological risk assessment for its own monitoring teams being deployed

Organisations' monitoring teams will however need to:

- a) Be self-sufficient in respect of their own accommodation, transport, meals, communications, etc.:
- b) Have appropriate health physics skills to competently carry out the agreed monitoring tasks;

- c) Work under the supervision of their own management structures; and
- d) Be self-sufficient in terms of PPE (including RPE where appropriate).

7.1.2 Other Agencies Monitoring Responsibilities.

Some agencies have specific monitoring responsibilities and capabilities including:

- (a) The **Environment Agency** organises targeted environmental sampling and analysis through its call off monitoring framework and adapts its routine monitoring programmes to an incident:
 - Monitoring of radioactivity in the environment near nuclear sites, including dose rate monitoring and sampling and radio-chemical analysis of environmental materials
 - 2. Radio-chemical analysis of raw water sources which are used for drinking water supplies
 - 3. Monitoring radioactivity in air and rainwater.
- (b) The **FSA** is responsible for monitoring food in order to establish areas where restrictions on food may or may not be required
- (c) The **water companies** are responsible for ensuring main supply water is monitored.

Radiation monitoring of public water supplies undertaken on behalf of the water companies will form part of the wider radiation monitoring strategy developed by PHE CRCE as part of its national radiation monitoring co-ordination role. The monitoring strategy will be agreed at STAC before being submitted to SCG for approval, prior to implementation. The monitoring strategy will develop during the response as more information becomes available regarding the nature and extent of the incident and more monitoring resources are 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.

7.1.3 Modelling Procedures

In order to support the monitoring strategy and to understand the impact of the radiation emergency then a number of modelling procedures are normally involved including:

- (a) Knowledge of meteorological conditions before monitoring data can be assessed is vital
- (b) PACRAM (Procedures and Communications in the event of a release of Radioactive Material) available from the Met Office (EMARC the Environment Monitoring and Response Centre)
- (c) Met Office NAME (Numerical Atmospheric Modelling Environment)
- (d) RIMNET (Radioactive Incident Monitoring Network)
- (e) PHE-CRCE has various other models available.

7.1.4 Limitations to Monitoring:

(a) PHE CRCE will active monitoring resources from all its sites, additional resources may also be available from other nuclear licensed sites and other organisations with monitoring resources. Additional monitoring resources from PHE CRCE and other organisations are provided on a best endeavours basis and depending on the resources available at the time.

- (b) There is no point in monitoring deposition until the release has stopped this prolongs the situation. Unless the objective is to obtain confirmation of a contamination hazard and where the wind direction has changed such that deposition is no longer occurring within an area being monitored
- (c) Initial monitoring resources will be few and so expect 1-2 readings per hour for the first few hours
- (d) Data will be 'raw' and so will need interpretation by experts
- (e) Some analysis can take 1-2 hours per sample and there are likely to be a great number of samples needed to confirm level of contamination and therefore there will be a time lag in providing advice to the responders and the public
- (f) The information provided to the SCG needs interpretation to prevent inappropriate decisions to be made. The STAC chair is advised to take a suitably qualified radiation expert.

7.2 Monitoring Strategies - People (Radiation Monitoring Unit)

7.2.1 What is a Radiation Monitoring Unit (RMU)?

In some circumstances, evacuated casualties, members of the public and emergency service personnel will require monitoring and, if necessary, decontamination. Monitoring of workers, casualties and members of the rescue services at a major nuclear site will be carried out by a mixture of the operator's staff and other health professionals. Apart from those individuals on-site and responders, there will be a need to monitor those individuals who may be contaminated (or who think they may be contaminated). This need may be fulfilled by the NHS through the setup of an RMU.

7.2.2 The need for an RMU

RMUs are needed in order to assess the need for decontamination or possible medical treatment for a large volume of people. They perform the function of reassurance for those who may be concerned about possible contamination. They serve to keep records of levels of any contamination observed. Early monitoring of uninjured people shall be carried out in suitable facilities away from A&E departments to ensure that these do not become overcrowded.

7.2.3 Activation of an RMU

NHS England is responsibility for people monitoring as a result of a radiation incident. The activation process would follow routine major incident command and control arrangements. Activation of the RMU response will be initiated by the SCG following recommendation from the Scientific &Technical Advisory Cell (STAC).

Communication of activation would be via organisational representatives at the SCG Further information on RMU planning may be obtained from the NHS emergency planning guidance and the draft HIOW & TVLRF Radiation Monitoring Unit Interim Operational Plan.

7.2.4 Location of RMUs

The RMU shall normally be located at, or adjacent to, a reception centre/ rest centre established by the Local Authority. However, suitable NHS or other premises nearby may need to be used. Police and the Local Authority should be consulted when selecting a site.

It may be necessary that following monitoring, people would need to go through the decontamination process. Therefore the site selected needs to account for enough real estate to be available for a RMU and a Decontamination Unit to be available prior to onward movement to the reception/rest centre.

7.2.5 Staffing

Staffing will be drawn from hospitals and facilities outside the areas affected by the incident. This way local staff will remain to ensure the smooth running of local hospitals and other functions.

Typical staffing might be:

- (a) Senior medical physicist to supervise the monitoring and decontamination function
- (b) Medical physicists/technicians (or similar grade staff from other organisations)
- (c) AWE staff (where possible)
- (d) Nurses
- (e) Administrator
- (f) Clerks.

Arrangements exist in many areas for the nuclear site operator to provide additional staff capable of carrying out monitoring measurements. Public Health England – CRCE may also be able to provide staff to assist with monitoring.

7.2.6 Links to other sections/plans

Any rest centre set up will accommodate people who have been evacuated following urgent countermeasures. These people are a priority with regard to monitoring.

7.2.7 Concerned public across the UK

An NHS direct hotline (Via 111) may be set up to deal with concerned persons. The algorithm to deal with calls would be provided by the Public Heath England – CRCE.

7.2.8 Decommissioning an RMU

The physicist in charge will be responsible for planning and carrying out decommissioning of the unit.

7.3 Decontamination of People

After an off-site emergency from an AWE site there are likely to be concerns regarding contamination. These concerns could be related to contamination of people, animals, pets and property including gardens, homes and businesses. The amount of any contamination will vary according to the amount released in the first place and the weather conditions as detailed in other areas of this document. This section relates to decontamination of people only.

The decontamination process, if needed, would take place sometime after the initial response phase and normally after the risk of any further contamination from the site had stopped.

The process for decontamination would be done in a number of ways and for a number of reasons as detailed below.

7.3.1 Self-Decontamination

Initial countermeasures it is very likely that the initial guidance to the community affected would be GO IN – STAY IN – TUNE IN.

PHE guidance for self-decontamination in a radiation emergency

STEP 1: Take off outer layer of clothing

- Taking off your outer layer of clothing can remove up to 90% of radioactive material.
- Once inside, limit your movement to prevent the spread of radioactive contamination.
- If a dust mask is available, place this over your nose and mouth before disrobing.
- Take care when removing clothing to prevent radioactive material from shaking loose.
- Where possible, avoid removing clothing over your head.
- Avoid touching your skin with the outside of your clothing.
- Put clothing in a plastic bag or other sealable container. Place the container outside or away from living areas.

STEP 2: Wash yourself off

In all situations, blow your nose and wipe your eyelids, eyelashes and ears.

If you can shower:

- Use mild soap and shampoo. Water should be tepid (i.e. not too hot or cold).
- Do not use conditioner as it may fix radioactive contamination to your hair.
- Keep your mouth and eyes closed when washing your hair and face.
- Do not scald, scrub, or scratch your skin. Only soft brushes or sponges should be used.
- Keep cuts and scrapes covered when washing to keep radioactive material away from open wounds.

If you cannot shower:

- Wash your hands, face, and other exposed body parts at a sink or tap.
- Use soap and plenty of water.
- Keep your mouth and eyes closed when washing your hair and face

If you cannot use a sink or tap:

- Use a moist wipe, clean wet cloth, or damp paper towel to wipe the parts of your body that were uncovered.
- Pay special attention to your hands and face.
- Place any waste materials in a plastic bag or other sealable container. Place this outside or away from living areas.

STEP 3: Put on clean clothes

- Put on clean clothes that have been stored indoors.
- Do not put contaminated clothes back on.

STEP 4: Helping others and pets

- Wear waterproof gloves and a dust mask if possible.
- Keep cuts and scrapes covered to keep radioactive material away from open wounds.
- Waste generated from cleaning other people or pets should be placed in a plastic bag or other sealable container. This should be placed outside or away from living areas.
- Rewash your hands, face, and parts of your body that were uncovered.

STEP 5: Stay tuned

- Stay tuned for updated information from public health officials.
- Communications may come from television, radio, or official social media channels.

7.3.2 Mass Decontamination Process

This process of people decontamination would be led by the Health services, supported by the Fire & Rescue Service (FRS).

There are two types of decontamination systems operated by Health and the Fire & Rescue Service as detailed below:

The **Fire & Rescue Services** undertake the mass decontamination using Mass Decontamination Units (MDU) which includes a large inflatable tent disrobe, showering and re-robe system. It includes areas for taking clothes off, shower facilities (for a period of 3 minutes in the shower) and an area to dress into robes provided.

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The actual size of the response would depend on the number of people in the sectors affected, the time intended to process everyone and the land available to undertake the work.

It is a basic system, however for large numbers it is quick and effective. There will always be modesty issues and people for a variety of reasons may be frightened or feel it is against their beliefs to remove all clothing, and in front of others. Explanations will be given and all efforts will be made to accommodate such issues however decontamination is the main effort in order to protect their own and other people's health.

The Fire and Rescue Service System is also used for decontamination of responders.

Ambulance Service System. This is a tented system where the contaminated people are assisted in the cleaning process if they are injured or ambulant.

There may also be the need for decontamination units at hospitals to be activated as well as lock down due to contaminated and worried people attending A&E at any hospital in the UK. This information would be activated via advice from the STAC and via the Health communication routes.

It is very likely that both systems would be set up as a matter of course.

7.3.3 Decontamination Process Location

The mass decontamination location(s) would be decided on the day following a multiagency meeting and would take into consideration the numbers, the weather and the extent of the contamination.

There would normally be one site but it may be that more would be needed.

Regardless, of the location, the actual structures would be upwind of the incident in a controlled location for security and privacy reasons. They would also be on the edge of the warm (likely to be contaminated due to movement etc. rather than the incident itself) and cold (non-contaminated area) zones.

7.3.4 Informing and Movement of People to Decontamination Locations

Following a period of time the community affected will be informed that they need to leave their initial place of safety in order for further remedial works to be undertaken.

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SECTION 38

The means of communicating this to the community would be via the media and/or via door to door knocking. This may be somewhat alarming for residents initially because depending on the scale of contamination and the period of time that responders may be in the contaminated area the people knocking on the door may be in protective equipment more than the residents will be requested to wear. This will have been considered by the STAC and the full health considerations taken into account.

The movement of the people may vary according to the situation, and will be coordinate by the Evacuation/ Shelter Cell, but may involve streets at a time being moved in a controlled manner to the decontamination locations. This movement would be the responsibility of responders who are equipped and trained to go into the contaminated and warm zones including police, fire, ambulance and military personnel.

The control of the residents within the decontamination area before the decontamination is undertaken will be by the police in the main with assistance from the other responders involved.

Once the decontamination has been completed then the responsibility for welfare and onward movement passes to the local authority.

7.3.5 Post Decontamination

Once the decontamination has been completed the Logistics Cell will arrange the onward movement and local authorities will be responsible for the welfare of individuals.

The evacuees post decontamination will be in modesty suits and are likely to have no other personnel effects with them. As a result they may need to be provided with:

- (a) Clothing
- (b) Medical care as necessary including prescription drugs

- (c) Money
- (d) Keys to get into homes if outside the area and keys left behind etc. Access to locksmiths/carpenters may be necessary to support this
- (e) Mobile phones for use by evacuees, chargers
- (f) Access to internet.

The people and agencies that should be considered to be present at the reception centre or on standby include:

- (a) GP's for medical advice
- (b) Pharmacy on standby
- (c) Locksmiths
- (d) Carpenters
- (e) Representatives from finance re cash etc.
- (f) LA phone officers with respect to extra mobile phones for use
- (g) ICT Officers re use of Laptop terminals.

More information regarding post decontamination reception centres / rest centres and recovery are in other sections to this plan.

7.3.6 Water and Waste

Water waste from the decontamination of people needs to be contained in order to prevent discharges to the environment, the Environment Agency will advise on how to dispose of the waste and water which has been collected.

7.4 Reception Centres and Rest Centres

During any major incident there is the possibility people will become displaced. It is the responsibility of the LA where the residents are affected to prepare reception centre and or rest centres for those displaced.

Type of centre	Description
Reception Centres	 A reception centre is a building that can provide: Safety – a place of safety/refuge. Registration – to identify who is in the rest centre and to enable details of casualties/evacuees to be passed to the Police Casualty Bureau Refreshments – for people evacuated Welfare – provision of basic support to those evacuated Assistance - practical and emotional support and assistance A reception centre will not provide emergency overnight accommodation.
Rest Centre	A rest centre is a building which offers:

	 Shelter – for people who have been evacuated from their homes or are in need of emergency overnight accommodation following an incident Welfare – provision of basic support to those evacuated Assistance - practical and emotional support and assistance
	Ideally Hotels will be used for overnight accommodation, to reduce safeguarding concerns associated with bedding evacuees down in shared halls, provides those affected with greater privacy and some ownership of their space.
Family and Friends Reception Centres (FFRC)	FFRC may be required to help reunite family and friends with those thought to be within the DEPZ/cordoned area as well as provide practical and emotional support and assistance.

For an incident at AWE the following factors may result in people being displaced:

- (a) Evacuation from their home as a result of the risks associated with staying in their home
 - i. There will normally be no need for the urgent evacuation of areas outside of the AWE sites in the event of a radiation emergency therefore there should be some time to plan the centres
 - ii. Urgent evacuation may be necessary however since the cause of the radiation release may be as a result of explosion/fire etc. which could have an impact on the community outside the site. The risks of urgent evacuation needs will be greatest to those premises closest to the site
 - iii. Subsequent evacuation of the public in some areas outside the incident site boundary might be necessary. This will depend on the results of ground monitoring and will normally be carried out to reduce contact with deposited material and to facilitate decontamination and restoration.
- (b) People who at the time of the incident are out of their homes and cannot return to them
- (c) Staff on the AWE site, including contractors' personnel will shelter initially until the release is over. Later they will be evacuated from affected areas as appropriate, this will be suggested by AWE and authorised by TCG. The coordinated site evacuation will be managed by AWE to ensure it does not have an adverse impact on the resources engaged in the response outside the site.

7.4.1 Information – for evacuees

In an AWE incident a number of reception centres and rest centres may be required depending on the scale, wind direction and therefore the number of households affected. Initially a reception centre would be set up as a registration area in order to allow safe evacuation from the affected area. The main aim at that point would be to allow onward movement to a more suitable rest centre or to other accommodation (at friends, family or possible hotels).

It may be necessary to set up a number of reception centres for the general public. It is also very likely that reception centres will be needed in more than one authority therefore communication links will be key in order to ensure as far as possible that families are united.

7.4.2 Reception Centre and Rest Centre Locations, Information and Contact Details

Each Council holds a Rest Centre Plan along with contact details for the responsible person/key holders.

The decision as to which centre(s) are to be used will depend on the incident, wind direction and areas affected. This will be made at TCG level, information and engagement from the LA's is essential in the decision.

7.4.3 Staffing & Equipping of Rest Centres

The respective LA's have the responsibility of staffing and equipping of rest centres. Authorities will follow their Rest Centre Plans with respect to staffing and equipping the centres.

7.4.4 Movement on from Reception Centre to Rest Centres and/or more permanent accommodation.

Once people have been registered (following evacuation or being restricted access to their own homes due to the incident) the LA will make preparations for their onward movement to a rest centre or more permanent accommodation, depending on the longer term options.

If the evacuation is only for a short period people will be encouraged and assisted to stay with friends and family in the area. Where this is not possible the LA would prepare a more suitable rest centre.

If it is likely that they are going to be out of their homes for a prolonged period of time then more permanent accommodation will be looked for in the local area in order to maintain cohesion of the community, allow for school and work to carry on as far as possible as normal. This may be difficult if large numbers are involved. Depending on the sectors affected, it may be that support from neighbouring LAs and MHCLG RED will be requested.

Should the evacuation from homes be for a prolonged period it may be that arrangements will need to be made for a return to the home with removal vans in order to retrieve valuables, furniture and clothing. The items removed from properties may need to be monitored.

All this movement of people may result in a number of vehicles coming to the area, therefore any rest centre used needs to have large parking capability and some control on vehicle movements.

7.4.5 Transport to and from Reception Centres / Rest Centres

In order to move people to and from reception centres/rest centres a number of considerations will need to be taken into account including:

(a) Communicating the message to the people involved as to why they are being asked to move to rest centres, when this will be happening and how it will happen. Reassuring what the reason for the move is and reassuring that everyone affected will be moved in due course so as to ensure people do not make unnecessary moves to get on the transport

- (b) Considering meeting points for people to move to or how the pick up from the houses directly is going to be arranged
- (c) How to prevent transport and people becoming contaminated as they move to the transport. This may involve the issuing of disposable shoe covers, damping down pavements and house paths etc.
- (d) Consideration of PPE and clothing for the responders assisting the evacuation and for the community as they move. This will very much depend on the contamination involved and the weather conditions but may involve the issuing of paper masks to residents as a precaution.

The Local Authority (LA) would be charged normally with the transportation of evacuees. However due to the nature of the incident and the fact that the LA are not equipped or trained to operate within the affected area the people in the affected area would be moved by other organisations onto the rest centres.

To move people from the site or the sheltering locations support may be requested from the Logistic Cell or responding agency via Military Aid to Civil Authorities (MACA) formal requests.

Onward movement may be via a Radiation Monitoring Unit and/or a decontamination unit. It will normally only be after this monitoring or decontamination that the LA will pick up the evacuees at an RV point for onward movement to reception and rest centres.

The PHE CRCE will give guidance as to the Personal Protective Equipment (PPE) needed for staff entering the area.

In order to prevent re-suspension of contaminants during the movement of people the vehicles will move slowly. In addition the roads may be misted with water in advance and following the vehicles movement out of the contaminated area they will be washed down in particular the wheels and tyres. This will be undertaken in a controlled manner with advice from the Environment Agency and PHE CRCE.

After the moves are completed the vehicles will then be checked for contamination inside and cleaned appropriately with guidance from PHE CRCE.

7.4.6 Clear up of Rest Centre Post Incident

Whilst the intention will be to ensure as far as practicable beforehand that all people entering the rest centre are not contaminated there may be a risk of this happening. As a result regardless of known contamination or not, there will be an expectation from the community and the owners of the building that the site will be effectively cleaned.

As a result due to the nature of the incident it will be essential to ensure that any rest centre used is cleaned satisfactorily afterwards in order that it is suitable for use thereafter.

Many of the proposed rest centres are schools and Community Centres and therefore the public must be reassured that the site is clean for future use. PHE CRCE in conjunction with the site owners and the recovery group should ensure that all are satisfied the site is clean and the public are assured of this fact.

7.5 Specific areas of concern regarding Rest Centres following an AWE Off-Site incident

7.5.1 Contaminated People

There may be a fear that people in the rest centre are contaminated. This may be reality or perception however as a result the reception should be as near to the door as possible, shall be readily cleansed and the reception desk should have a trained health professional in place in order to give on the spot advice or guidance on monitoring. If someone presents themselves at the rest centre that may be contaminated then they shall be directed to the decontamination unit.

7.5.2 Contaminated Pets

As above there may be a fear of pets being contaminated. Therefore at an early stage suitable pet accommodation shall be made available outside the centre and suitably trained veterinary staff should be available in order to give on the spot advice.

7.5.3 Media Intrusion

Due to the nature of the incident there will no doubt be media interest in those being evacuated be they residents, business people or staff from the site. The rule will be that no media shall be allowed in reception centres and rest centres due to the sensitive nature of the situation and the potential vulnerability of the people involved. Those using the reception centres and rest centres should be reminded not to use social media to protect themselves and others. As a result the involvement of the Police at the entrance will almost certainly be required. It may be that once the situation has settled down the media may be allowed to enter certain areas with the knowledge of the evacuees. Interviews will be strictly controlled in order not to intrude on the evacuees. Corporate Communications support will be recommended to be present from the LA.

7.5.4 Link to Radiation Monitoring Unit (RMU)

As part of the health monitoring programme agreed at SCG it may be that people evacuated from the affected area or people who have been in the area when the incident occurred will be screened at a RMU.

The RMU may be located at the same site or very close to a reception centre/rest centre and/or the decontamination unit. <u>Section 7.2</u> gives more details on these units.

7.6 Vulnerable People

Supporting the vulnerable throughout a major incident is always difficult due to the number of agencies involved, the different vulnerabilities of people and the ever

changing vulnerability of people due to the incident type. What constitutes a person as "vulnerable" cannot be completely determined as it will depend on the circumstance of the event. For example, someone who is agoraphobic would be vulnerable if they were expected to evacuate but not if sheltering in their own home or somewhere familiar.

For the purposes of this plan, vulnerable people are those 'that are less able to help themselves in the circumstances of an emergency' (para 5.99 Emergency Preparedness – Guidance in part 1 of the CCA 2004). This suggests that focus should be on those who are assessed as not being self-reliant and may need extra assistance to be safe.

The TVLRF Identification of Vulnerable Persons Plan and WBDC Vulnerable People Plan will be used to support this plan.

The main issues with respect to an incident at an AWE site and the vulnerable include:

- (a) Looking after vulnerable individuals and
- (b) Looking after groups of vulnerable people.

No single organisation has the need, ability or responsibility to maintain the entire dataset needed for the discharge of this task. As a result there is a need for the many varied organisations, particularly the local authorities Social Services and the Health organisations, to work together to create a list of all the known vulnerable in the area affected.

The local community leaders including Councillors and Parish Members are also an invaluable source of knowledge relating to people who may not be on any service database.

7.6.1 Vulnerable Groups Locations within DEPZ's

As well the vulnerable groups identified below, consideration should be given to the transient population within the DEPZ's at the time of an incident.

Vulnerable group locations within AWE Aldermaston DEPZ area.

Schools

There are a number of schools that are early years and nursery schools with after school and holiday care provisions as well. There are

also primary and secondary schools.

Name & Address	Type of premises	Additional Information	Telephone number	Responsible LA area	Sector
Impstone Pre-School Committee of Management Pamber Heath Memorial Hall, Pamber Heath Road G26 3TQ	Pre-School Play Group	REDACTED ON BASIS OF SECTION 38	07733 898914	Hampshire County Council	F11
Tadley Court School Common Road, Tadley, RG26 3TB	Private Boarding School	Student's aged 5 to 19, REDACTED ON BASIS OF SECTION 38	0808 2739573	Hampshire County Council	G8
Greenacre Pre-School Bishopwood Co Infant School, Barlows Road, RG26 3NA	Pre-School Play Group	REDACTED ON BASIS OF SECTION 38	0118 981 1010	Hampshire County Council	H11
Bishopswood Infant School Barlows Road, Tadley RG26 3NA	Infant School	REDACTED ON BASIS OF SECTION 38	0118 981 2836	Hampshire County Council	H11
	Afterschool and Breakfast Club	REDACTED ON BASIS OF SECTION 38	0118 981 2836		

Name & Address	Type of premises	Additional Information	Telephone number	Responsible LA area	Sector
	Junior School	REDACTED ON BASIS OF SECTION 38	0118 981 2836		
Tiny Town Kindergarten 1 Mount Pleasant, RG26 4JH	Day Nursery	REDACTED ON BASIS OF SECTION 38	0118 981 4325	Hampshire County Council	H7
Bo-Peeps Day Nursery The Old Coach House, Church Road, RG26 3AU	Day Nursery	REDACTED ON BASIS OF SECTION 38	0118 981 0805	Hampshire County Council	H11
Tadley Community Primary School The Green, Tadley, RG26 3PB	Primary School	Students aged 4-11	0118 981 3805	Hampshire County Council	H12
St Pauls Pre-School Church Hall, The Green, RG26 3PB	Pre-School Play Group	REDACTED ON BASIS OF SECTION 38	07879 645600	Hampshire County Council	H12
The Saplings Pre School Burnham Copse Infants School, New Church Rd RG26 4JH	Day Nursery	REDACTED ON BASIS OF SECTION 38	0118 981 2927	Hampshire County Council	J7
Burnham Copse Primary School New Church Road,	Primary School		0118 981 4498	Hampshire County Council	J7

Name & Address	Type of premises	Additional Information	Telephone number	Responsible LA area	Sector
Tadley RG26 4HN		REDACTED ON BASIS OF SECTION 38			
Tadley Under Fives Pre School Community Centre, New Church Road, RG26 4HN	Pre-School Play Group	REDACTED ON BASIS OF SECTION 38	07768 026189	Hampshire County Council	J7
The Hurst Community College (Specialist Science Status) Brimpton Road, Baughurst, Tadley RG26 5NL	Secondary School	REDACTED ON BASIS OF SECTION 38	0118 981 7474	Hampshire County Council	L11
Tall Trees Out of School Club Brimpton Road, Baughurst, Tadley. RG26 5NL	Out of School Day Care Holiday Scheme	After school club	0118 981 2918	Hampshire County Council	L11
Miss Polly's Kindergarten Brimpton Road, Baughurst, Tadley RG26 5NL	Day Nursery	REDACTED ON BASIS OF SECTION 38	0118 981 4325	Hampshire County Council	L11
Little Stars Pre School Heath End Village Hall, Baughurst, Tadley RG26 5LU	Pre School		0118 981 7732	Hampshire County Council	K11

Name & Address	Type of premises	Additional Information	Telephone number	Responsible LA area	Sector
Boot Farm Kindergarten Back Lane, Brimpton Common, RG7 4RG	Nursery	(ages 0-4) REDACTED ON BASIS OF SECTION 38	0118 981 6619	West Berkshire District Council	N12
Aldermaston Primary Wasing Lane, Aldermaston RG7 4LX	Primary School	(Primary) REDACTED ON BASIS OF SECTION 38		West Berkshire District Council	R10
The Cedars School Church Road, Aldermaston, Berkshire RG7 4LR	Private School			West Berkshire District Council	R8

Schools in close proximity to DEPZ in OPZ

In previous editions of the off-site plan a number of schools had been identified as part of the DEPZ, under this plan a greater granularity has been applied to sort them based on their location to allow for priority to be given to those within the DEPZ firstly, but their information is presented below to assist in commensurate planning that may require actions in the OPZ that are close proximity to the site.

Name & Address	Type of premises	Additional Information	Telephone number	Responsible LA area	Sector
Brimpton CE Primary School, Brimpton Lane, Brimpton, RG7 4TL	Primary School	No Kitchen	0118 971 2311	West Berkshire District Council	N14

Name & Address	Type of premises	Additional Information	Telephone number	Responsible LA area	Sector
Silchester Church of England Primary School School Lane, RG27 2NJ	Primary School	REDACTED ON BASIS OF SECTION 38	0118 970 0256	Hampshire County Council	E13
Grantham Farm Montessori School & The Children's House Grantham Farm, Baughurst, Tadley, RG26 5JS	Pre School		0118 981 5821	Hampshire County Council	K13
Alder Bridge School Bridge House, Mill Lane, Padworth, Berkshire, RG7 4JU	Primary School			West Berkshire District Council	A14
Jubilee Day Nursery Paddock Road, Padworth, Reading, RG7 4JD	Nursery	Monday – Friday 7:30am – 6:00pm REDACTED ON BASIS OF SECTION 38		West Berkshire District Council	C13
Jubilee Gems School Road, Lower Padworth, Reading, Berkshire RG7 4JA	Nursery			West Berkshire District Council	B14

Name & Address	Type of premises	Additional Information	Telephone number	Responsible LA area	Sector
Padworth College, Padworth, Berkshire RG7 4NR	Private School	REDACTED ON BASIS OF SECTION 38		West Berkshire District Council	B13

Care Homes

Name & Address	Type of premises	Additional Information	Responsible LA area	Sector
Bethany Residential Home 17a Pamber Road, Tadley, RG26 3TH	Care Home only (Residential Care)	Care home without nursing	Hampshire County Council	G11
Wakeford Court, Silcester Road, Pamber Health, Tadley, Hampshire, RG26 3XD	Retirement/sheltered housing	REDACTED ON BASIS OF SECTION 38 REDACTED ON BASIS OF SECTION 38	Hampshire County Council	F11
Dimensions 21 21 Searing Way	Care Home only (Residential Care)		Hampshire County Council	J7
Tadley, Basingstoke, RG26 4HT		REDACTED ON BASIS OF SECTION 38		

Name & Address	Type of premises	Additional Information	Responsible LA area	Sector
Fairview 2 Pinks Lane, Baughurst, Tadley	Care Home only (Residential Care)		Hampshire County Council	L7
RG26 5NG		REDACTED ON BASIS OF SECTION 38		
Seeability Heather House Nursing Home Heather House Heather Drive Tadley RG26 4QR	Care home only (Residential Care)	REDACTED ON BASIS OF SECTION 38	Hampshire County Council	K7
Seeability – Fir Tree Lodge Residential Home Heather Drive, Tadley, Basingstoke, RG26 4QR	Care Home only (Residential Care)	REDACTED ON BASIS OF SECTION 38	Hampshire County Council	K6
Red Roof Pinks Lane Baughurst Tadley RG26 5NG	Care home only (Residential Care)		Hampshire County Council	L7

Name & Address	Type of premises	Additional Information	Responsible LA area	Sector
Karibu Place 37-39 Mulfords Hill Tadley Hampshire RG26 3HY	Care home only (Residential Care)	REDACTED ON BASIS OF SECTION 38	Hampshire County Council	H7

Caravan/Mobile Home Locations within or directly on the border of DEPZ's

Address	No. of units	Responsible LA	Sector
Pinelands Mobile Home Park Padworth Common Padworth RG7 4QB	REDACTED ON BASIS OF SECTION 38	West Berkshire District Council	D11
Ravenswing Mobile Home Park Aldermaston RG7 4PY	REDACTED ON BASIS OF SECTION 38	West Berkshire District Council	E6/F6/F 5/G5
Cross Lanes Gully Paices Hill Aldermaston		West Berkshire District Council	M2/M3
Old Stocks Farm 7 Old Stocks Farm Paices Hill Aldermaston RG7 4PG	REDACTED ON BASIS OF SECTION 38	West Berkshire District Council	M2/M3

Sleepy Hollow,		Hampshire County Council	G12
Forest Lane, Tadley, RG26 3NU	REDACTED ON BASIS OF SECTION 38		

Private Water Borehole Supplies Locations REDACTED ON BASIS OF SECTION 38

Vulnerable group locations within AWE Burghfield DEPZ area Schools

Name & Address	Type of premises	Additional Information	Tel. No.	Responsible LA area	Sector
Green Park Day Nursery and Preschool 200 S Oak Way Reading RG2 6UQ	Early Years Establishment		0118 9313115	Reading Borough Council	C10
Busy Bees Childcare Basingstoke Road Behind the Verizone Building Reading RG2 6DA	Early Years Establishment		0118 9145560	Reading Borough Council	D10
Farm View Day Nursery Beech Hill Road Spencers Wood, Reading Wokingham RG7 1HR	Early Years Establishment		0118 988 2131	Wokingham Borough Council	F12
Lambs Lane Primary School 4333 Back Lane Spencers Wood Reading RG7 1PW	Primary School		0118 988 3820	Wokingham Borough Council	F13
Farm View Day Nursery Loddon Court Farm Park Homes Beech Hill Road Spencers Wood Wokingham	Early Years Establishment		0118 988 7889	Wokingham Borough Council	G13

Name & Address	Type of premises	Additional Information	Tel. No.	Responsible LA area	Sector
RG7 1HT					
Mrs Williams Pre School Burghfield Common Reading West Berkshire RG7 3HP	Early Years Establishment			West Berkshire Council	M11
Mrs Blands Infant School 6 Jordan's Ln Burghfield Common Reading RG7 3LP	Early Years Establishment		0118 983 2332	West Berkshire Council	M13
Garland Junior School 46 Clayhill Road Burghfield Common Reading RG7 3HG	Primary School		0118 983 2776	West Berkshire Council	M12
Burghfield St Mary's Church of England Primary School Theale Road Burghfield Reading RG30 3TX	Primary School		0118 983 2957	West Berkshire Council	N9
Oakbank School Hyde End Ln Reading RG7 1ER	Secondary School		0118 988 3616	Wokingham Borough Council	E13

Name & Address	Type of premises	Additional Information	Tel. No.	Responsible LA area	Sector
The Willink School School Ln Burghfield Common Reading RG7 3XJ	Secondary School		0118 983 2030	West Berkshire Council	M13
Grazeley Parochial Primary School Mereoak Lane Grazeley Berkshire RG7 1JY	Other Education/Primary School		0118 988 3340		F8

Care Homes

Name & Address	Type of premises	Additional Information	Responsible LA area	Sector
Nadam Care LTD Belamie Gables 210 Hyde End road Spencers Wood RG7 1DG	Care Home Only (Residential Care)	REDACTED ON BASIS OF SECTION 38	Wokingham Borough Council	E14
Dimensions - Loddon House Beech Hill Road Spencers Wood Wokingham RG7 1HT	Care Home Only (Residential Care)		Wokingham Borough Council	G13

Name & Address	Type of premises	Additional Information	Responsible LA area	Sector
Hollies Care Home Reading Road Burghfield Common West Berks RG7 3BH	Care Home Only (Residential Care)	REDACTED ON BASIS OF SECTION 38	West Berkshire Council	M9
Residential Community Care Ltd Glebe Garden Reading Road Burghfield Common West Berks RG7 3BH	Care Home Only (Residential Care)	REDACTED ON BASIS OF SECTION 38	West Berkshire Council	M9
Dimensions – 43 Clayhill Road Burghfield Common West Berks RG7 3HF	Care Home Only (Residential Care)	REDACTED ON BASIS OF SECTION 38	West Berkshire Council	M12
Rowan Cottage Sulhamstead Road Burghfield West Berks RG30 3SB	Care Home and Education	REDACTED ON BASIS OF SECTION 38	West Berkshire Council	N9

Caravan/Mobile Home Locations within or directly on the border of DEPZs

Address	Number of units	Responsible LA	Sector
Mere Oak Park Three Mile Cross Reading RG7 1NR	REDACTED ON BASIS OF SECTION 38	Wokingham Borough Council	D10/D11
Loddon Court Farm Park Beech Hill Road Spencers Wood Reading RG7 1 HL	REDACTED ON BASIS OF SECTION 38	Wokingham Borough Council	G12/G13
Four Houses Corner Reading Road Ufton Nervet Reading RG7 4QJ	REDACTED ON BASIS OF SECTION 38	West Berkshire District Council	L15
Roselawn Hotel Burghfield Hill Reading RG30 3RU	REDACTED ON BASIS OF SECTION 38	West Berkshire District Council	N8

Boats (liveaboard & pleasure)

Address	Number of units	Responsible LA	Sector
River Kennet/ Kennet & Avon Cana	Unknown due to transient community.	West Berkshire Council	P14/ P13/ Q13/ Q12/ R12/ R11/ R10/ A10/ A11
River Kennet/ Kennet & Avon Cana	Unknown due to transient community	Reading Borough Council	A11/ A12/ A13/ B13

Large/ significant facilities

Name & Address	Type of premises	Additional Information	Responsible LA area	Sector
Madejski Stadium, Junction 11, M4 Reading RG2 0FL	Sports stadium	Home to Reading Football Club REDACTED ON BASIS OF SECTION 38	Reading Borough Council	C10/ C11
		REDACTED ON BASIS OF SECTION 38		
Thames Water, Fobney Water Treatment Works RG2 0SF	Water Treatment Works	Serving Reading of fresh water	Reading Borough Council	B13/ B14
Thames Water, Reading Sewage Treatment Works, 18 Island Rd, Reading RG2 0RP	Sewage Treatment Works		Reading Borough Council	B12/ B13
Mereoak Park and Ride, Three Mile Cross, Reading, RG7 1WJ	Park and Ride	Capacity of 570	Wokingham Borough Council	D9/E9

Private Water Borehole Supplies Locations REDACTED ON BASIS OF SECTION 38

Location	GRID REF

7.7 Personal Protective Equipment (PPE)

Each agency has responsibilities under Health and Safety legislation with respect to supplying appropriate PPE for its own staff.

Under the Ionising Radiations Regulations 2017 (IRR17) employers with staff who are working/exposed to Ionising Radiation are required to ensure they have competent advice from a <u>Radiation Protective Adviser</u>.

A key element of the response regarding AWE involves understanding the risks to health and taking appropriate precautions.

The decision regarding the level of PPE required for each agency is based on the responding services own dynamic risk assessment and their radiation protection advisor. It is not the responsibility of the STAC to advise agencies on appropriate PPE.

7.7.1 Varying PPE Requirements

There are a number of situations which require the responder to enter potentially contaminated areas including:

- (a) On-site incident response
- (b) Off-site incident response
- (c) Undertaking normal business in the affected area.

7.7.2 Radiation Protection Advisors (RPA)

The emergency services and site operators in the Thames Valley and Hampshire have appointed RPAs to provide advice to their staff as to what they should and should not do, including any PPE to be worn.

The main considerations of the RPAs as they develop their advice is:

- (a) What is the contaminant?
- (b) How much is there in the affected area?
- (c) What are the responders likely to be doing?
- (d) How long will they be doing it?

Whilst the information is known in outline for the above considerations a dynamic risk assessment is necessary to confirm the arrangements in advance of emergency services responders going to site.

7.7.3 Responders with no RPA contract

Several of the responding agencies do not have a contract in place with an RPA since 'normally' they would not need to go into a contaminated area and are not required to otherwise.

These responding agencies may have to go into the affected area to undertake normal, but lifesaving or life maintenance work, in order to support the vulnerable or support the response as a whole.

In order to support the response an RPA would be sourced – via advice from PHE CRCE or AWE in the first instance to attend a TCG.

7.7.4 Personal protection advice for the community

Normally PPE would not be needed for the community- not least since they will be under shelter.

If the community or elements of the community in the affected area are to be evacuated then it may be that PPE would need to be considered to protect people being evacuated.

The advice in relation to any protection necessary would be sought from the STAC (for the community) and a RPA (for responders). The advice should take into consideration:

- (a) What is the contaminant?
- (b) How much is there in the affected area?
- (c) What are those being evacuated likely to be doing walking/carried etc.?
- (d) How long will they be exposed to the contamination?
- (e) What will the responders be wearing?
- (f) How will it be provided?
- (g) How will it be disposed of?

7.7.5 Other Considerations

Other issues the STAC & Emergency Services RPAs should consider as part of the response include:

Following the authority for responders to enter the affected area:

- (a) Is there an entry RV point
- (b) Is there a different exit RV Point
- (c) What is the exit policy for these responders when they leave the area? Remove clothing? Full decontamination and if so by whom, where etc.?
- (d) Who is responsible on-site to ensure all are correctly wearing their PPE? If vehicles enter into the affected area:
 - (a) Do they go in and stay in affected area acting as shuttles to the cordon?
 - (b) Do they come out and get decontaminated
 - (c) If so by whom and how?

- (d) If not consider transfer of patients and what about the staff?
- (e) What are the differences in the PPE variation for responders?
- (f) What about the public perception regarding the differences for responders and what they may be asked to do?
- (g) What, if any, PPE should the public be advised to wear if evacuated?
- (h) What sources of suitable PPE are available for the tasks being asked of responders?
- (i) Is mutual aid provision of PPE between responders a possibility?
- (j) What about responding agency staff that were in the affected area at the time of an incident?
- (k) How can the PPE be safely disposed of and where?
- (I) What follow-up monitoring and dosimetry is required for responders?

7.7.6 Types of PPE

There are a large number of variations on PPE that could be worn ranging from full suits with breathing apparatus to ordinary face masks, goggles, disposable paper coveralls/scrubs and disposable footwear.

All the above could be used in differing locations as a result of the incident and at different times. e.g. in the initial stages when minimum is known about the levels of contamination and therefore the risk then full body suits with breathing apparatus may be used by certain responders performing specific tasks, however as time progresses then face masks (FFP3) may be all that is necessary.

It may however be necessary to provide some degree of protection to the members of the public that require evacuation from potentially contaminated areas at any point during an incident.

7.7.7 Emergency Workers

An 'emergency worker' is 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.

Therefore an emergency worker is someone who has a defined role within an emergency plan and could be exposed to radiation whilst undertaking their role in response to an emergency.

7.7.8 Emergency Exposure Levels (EELs)

The table below identifies the EELs adopted by AWE and the blue light emergency services responding under this plan.

Agency	Emergency Exposure Levels
	20 mSv annual limit for all fire fighters (as classified radiation workers).
	100 mSv dose limit of informed fire fighter volunteers to make safe plant or equipment that is likely to prevent or significantly mitigate a radiation emergency on an AWE site.
AWE Fire and Rescue Service	Deployment only after dis-application of the dose limits prescribed in the IRRs by the AWE Emergency Manager, guidance from Health Physics and authorisation by a senior AWE FRS Officer.
	500 mSv dose limit of informed fire fighter volunteers to safe life on an AWE site during a radiation emergency.
	Deployment only after dis-application of the dose limits prescribed in the IRRs by the AWE Emergency Manager, guidance from Health Physics and authorisation by a senior AWE FRS Officer.
AWE Medical First Responders	20 mSv total for all AWE Medical First Responders per year (as classified radiation workers.
Ministry of Defence Police	1mSv annual limit for operational MDP officers.
AWE Personnel	1 mSv limit for all AWE non-classified radiation workers per year
(non-emergency services)	20 mSv legal limit for all AWE classified radiation workers per year.
	1 mSv total for all staff per event. After such an event, a review will be held to examine exposures and identify any improvements in working practices to reduce potential exposures in future events;
South Central Ambulance NHS Foundation Trust	Annual Dose Limit (Whole Body) 20 mSv – Under normal circumstances this would only be applied to the Hazardous Area Response Team (HART). Reference levels 1 and 2 would apply to other ambulance staff.
	The maximum dose for life saving operations where the casualty cannot be immediately removed from the area of high dose rate or contamination is 100 mSv; all ambulance staff can volunteer to be exposed to this level provided that they have been fully briefed and understand the implications.
	5 mSv per incident. Wherever possible.
Fire and Rescue Service	Follow the principle: try to work to the dose constraint. Where not possible work to dose limit but ALARP (as low as reasonably practicable) still applies
(Royal Berkshire	20 mSv annual limit for all firefighters.
FRS & Hampshire FRS)	FRS policy permits deployment any female firefighters of reproductive capacity are additionally limited to 13mSv in any three month period. Public not likely to receive more than 5mSv in following year as a result of the incident.

Agency	Emergency Exposure Levels		
	100 mSv dose limit of informed fire fighter volunteers.		
	Deployment only after guidance from Hazardous Material Environmental Protection Advisor (HMEPA) and authorised by Brigade Manager. Emergency exposure to save life or maintain critical infrastructure.		
	Public likely to receive more than 5mSv in following year as a result of the incident.		
Home Office Police	1mSv annual limit for all police officers. Any entry into potentially contaminated environments must be clearly justified and advice from the Police Radiation Protection Adviser must be sought prior to entry.		

7.7.9 Reference Level (RL)

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.

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. 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.

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, and temporary relocation).

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.

7.7.10 Mutual Aid

Mutual aid may be required to support large scale, complex or extended-duration incident responses. The provision of equipment and staff to support any emergency can become stretched for individual agencies. This plan uses existing arrangements for requesting additional support as outlined in the HIOW-TVLRF Emergency Response Arrangements.

In addition to these the Local Authority Nuclear Working Group (LANWG) should be considered as a resources of knowledge. LANWG is a forum which brings together the Local Authorities across the UK and other responding agencies with interests in off-site planning for an emergency at nuclear licensed sites. The group identifies, discusses and finds solutions to common problems and agrees improvements in planning, procedure and organisation, which would form a framework of advice to emergency planners.

Section Eight

8 Detailed Emergency Planning Zone (DEPZ) and Outline Planning Zones (OPZ)

8.1 Local Authorities in the DEPZ and OPZ

The table below illustrates which Local Authorities fall within the DEPZ and OPZ

Site	AWE A		AWE B	
Zone	DEPZ	OPZ	DEPZ	OPZ
West Berkshire District Council (WBDC)	✓	√	✓	✓
Basingstoke and Deane Borough Council (BDBC)	✓	✓	×	✓
Hampshire County Council (HCC)	>	>	√	✓
Reading Borough Council (RBC)	×	\	\	✓
Wokingham Borough Council (WBC)	×	>	✓	✓
Hart District Council (HDC)	×	>	×	✓
Oxfordshire County Council (OCC)	×	>	×	✓
South Oxfordshire District Council (SODC)	×	✓	×	✓

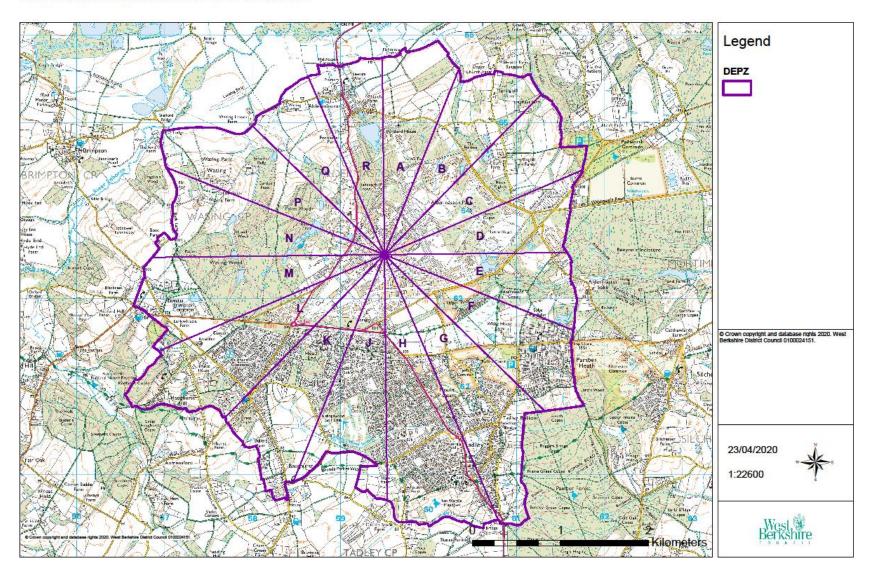
8.2 Detailed Emergency Planning Zone (DEPZ)

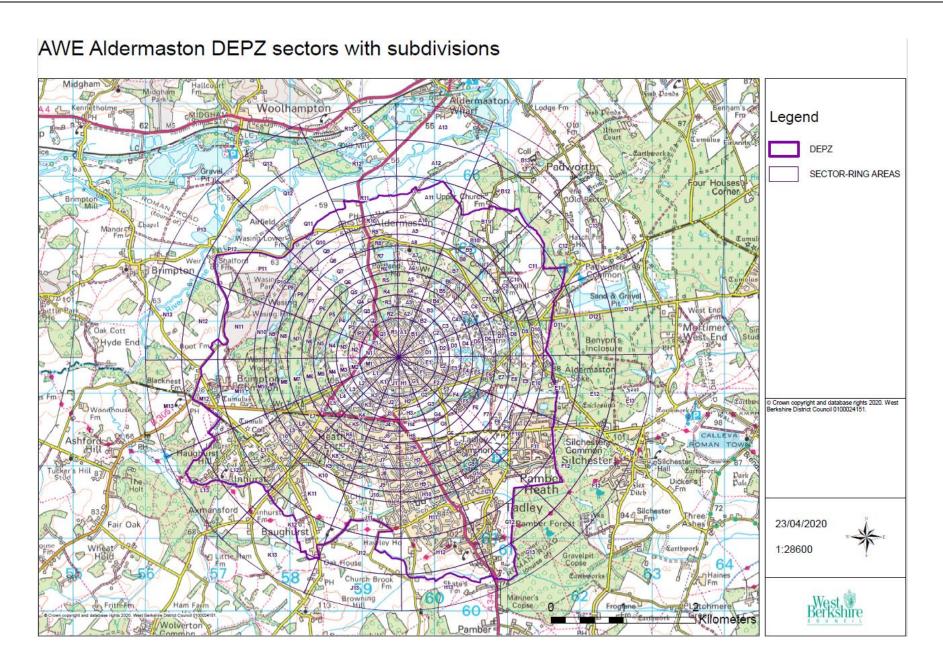
The emergency arrangements in this plan focus on the areas around each AWE site known as Detailed Emergency Planning Zone (DEPZ). These zones are based on the Hazard Evaluation & Consequence Assessment (HECA) process completed by AWE with the outcome being a minimum Urgent Protective Action (UPA) distance around each site. This information is provided to the lead local authority in a Consequences Report. The lead local authority then determines the DEPZ based on the minimum UPA distance, information provided in REPPIR 19, the Approved Code of Practice and related guidance. The Consequences Reports also provides the lead local authority with the area known as the OPZ which was dictated to AWE by the Secretary of State for Defence.

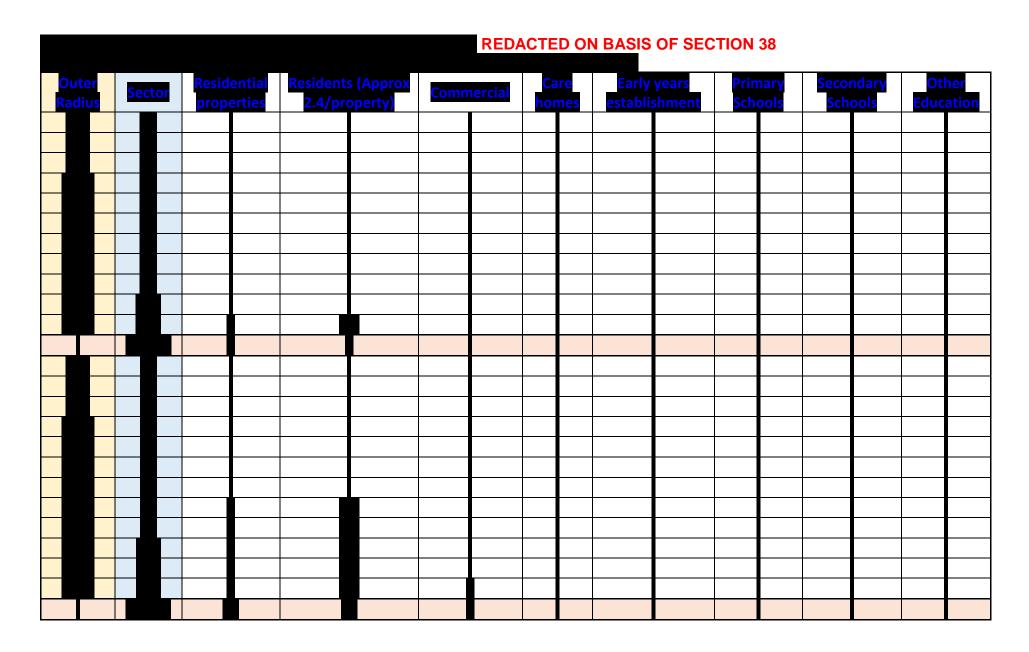
The minimum UPA distance for the AWE sites as provided in the Consequences Reports are:

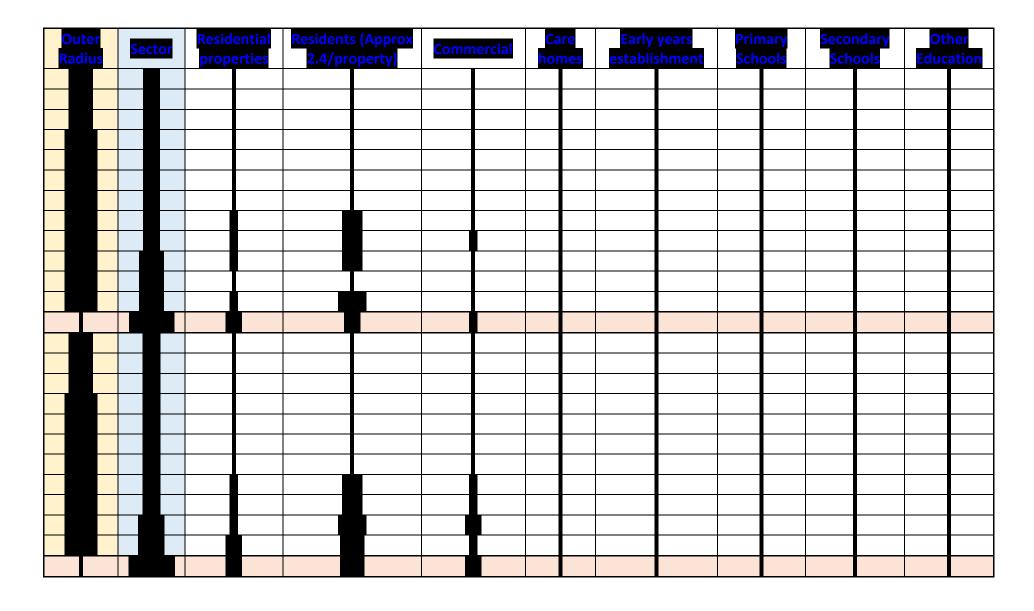
a) AWE Aldermaston: 1.54 kmb) AWE Burghfield: 3.16 km

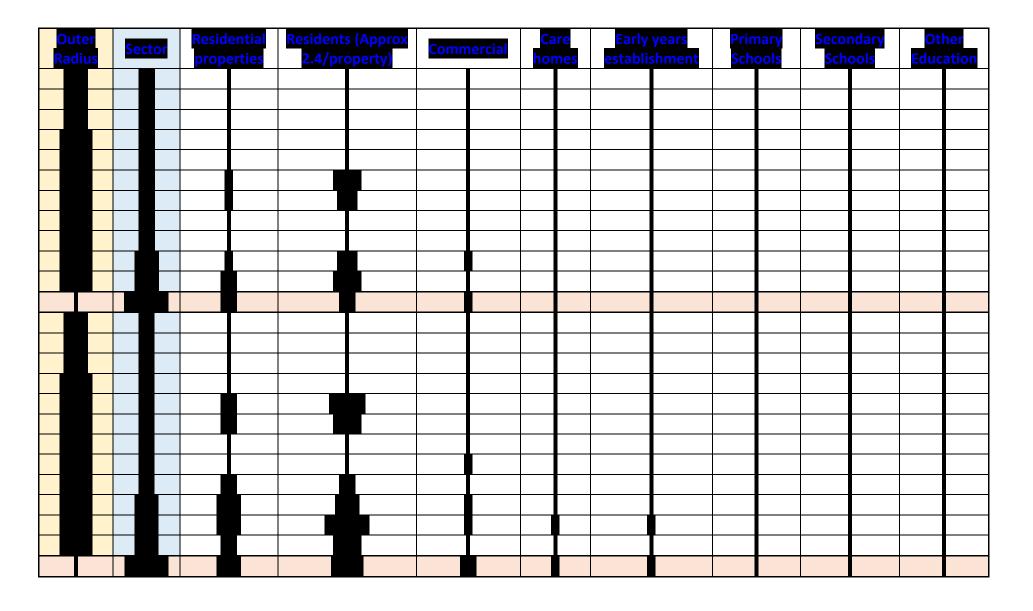
AWE Aldermaston DEPZ sectors

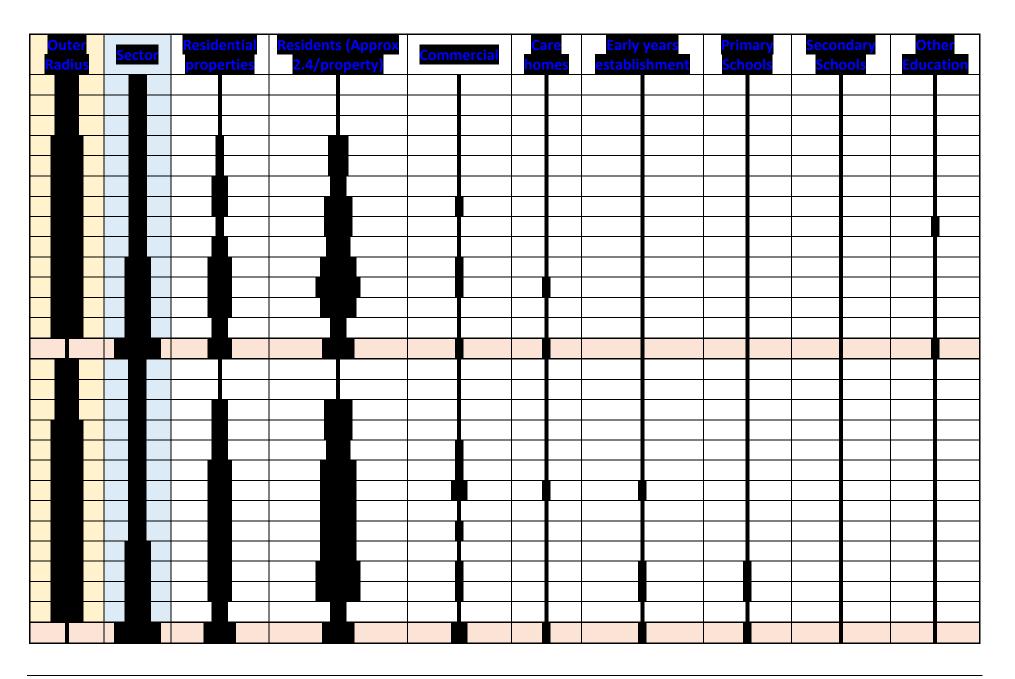


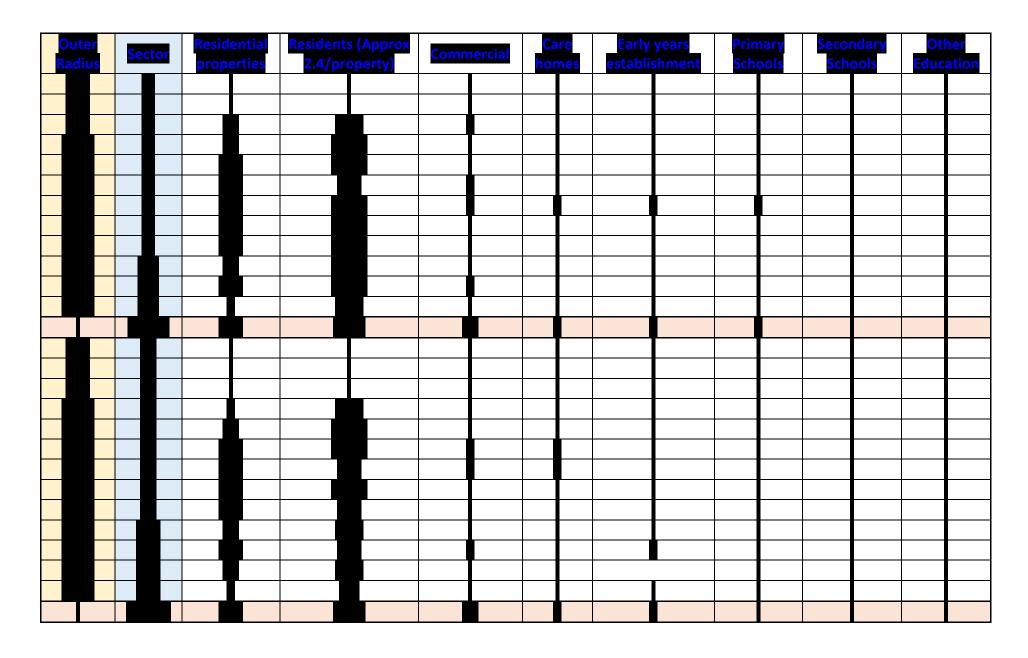


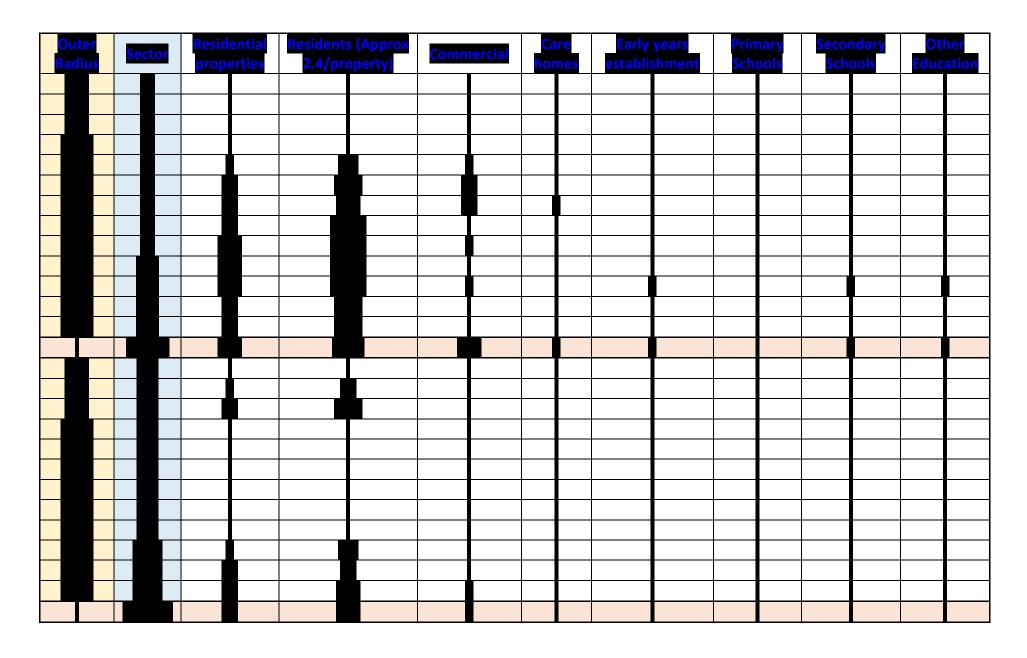


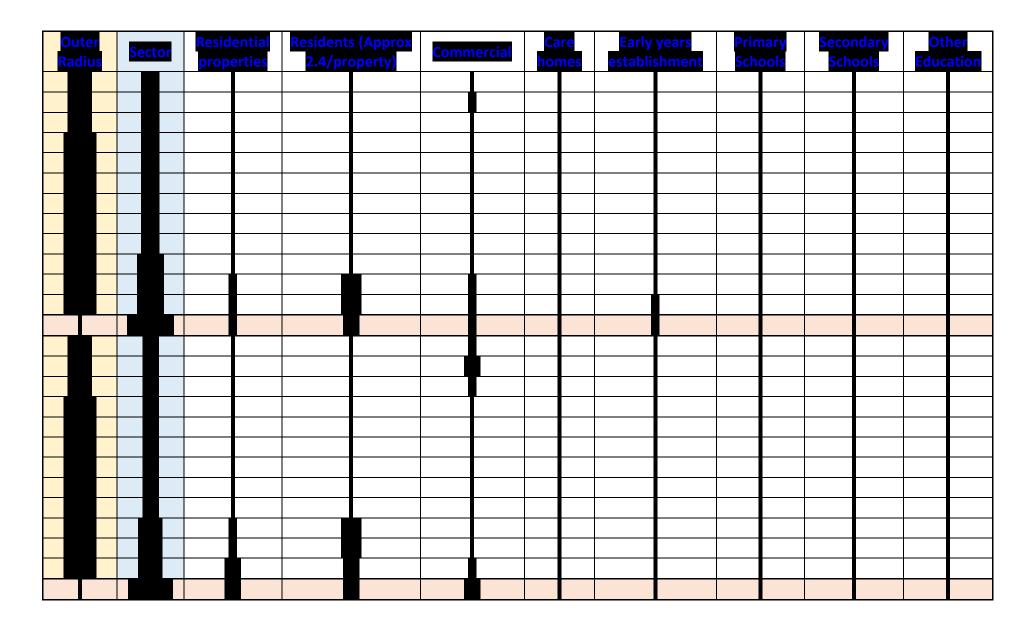


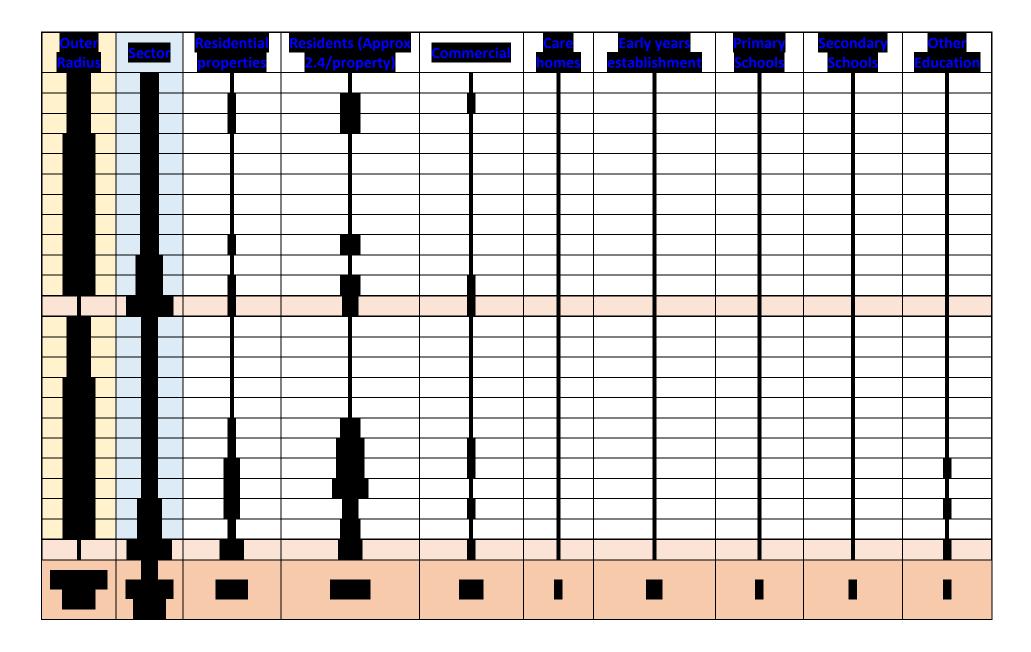




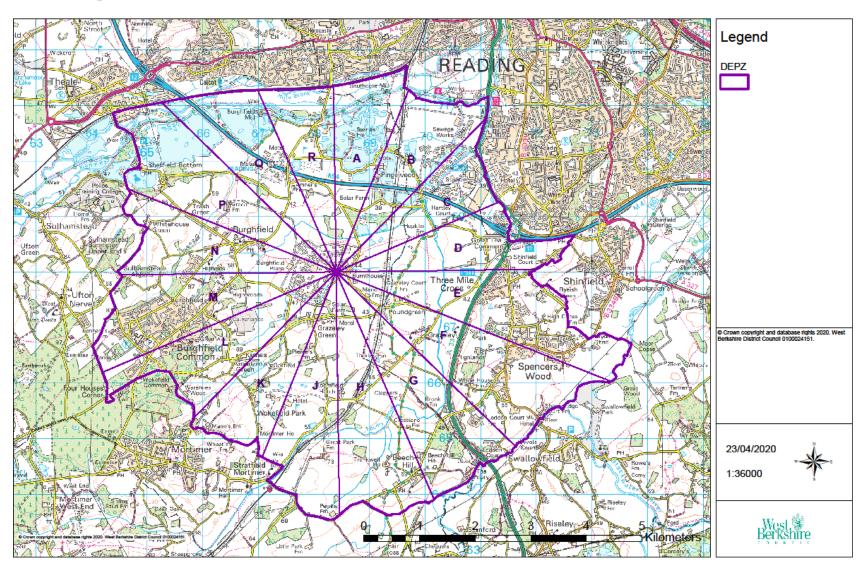




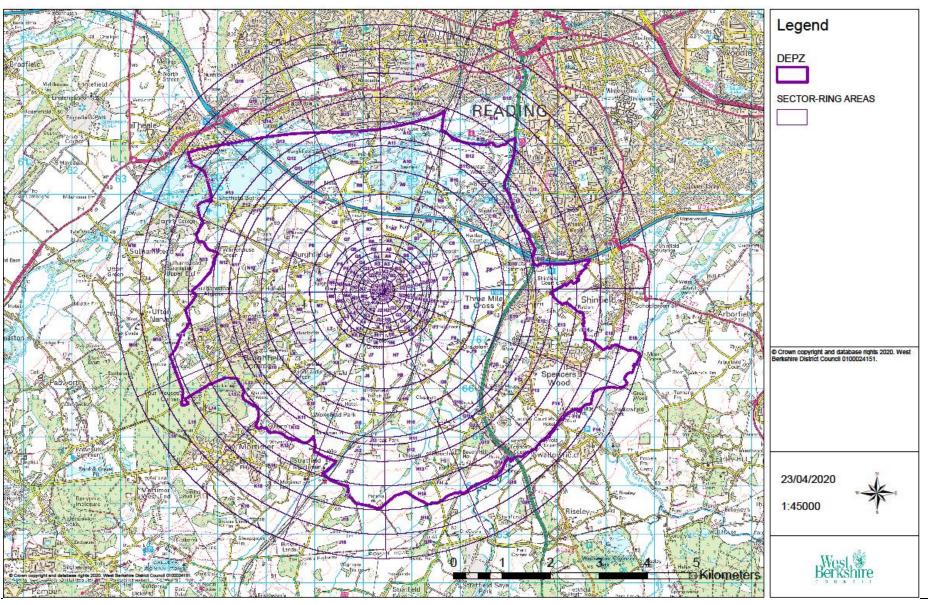


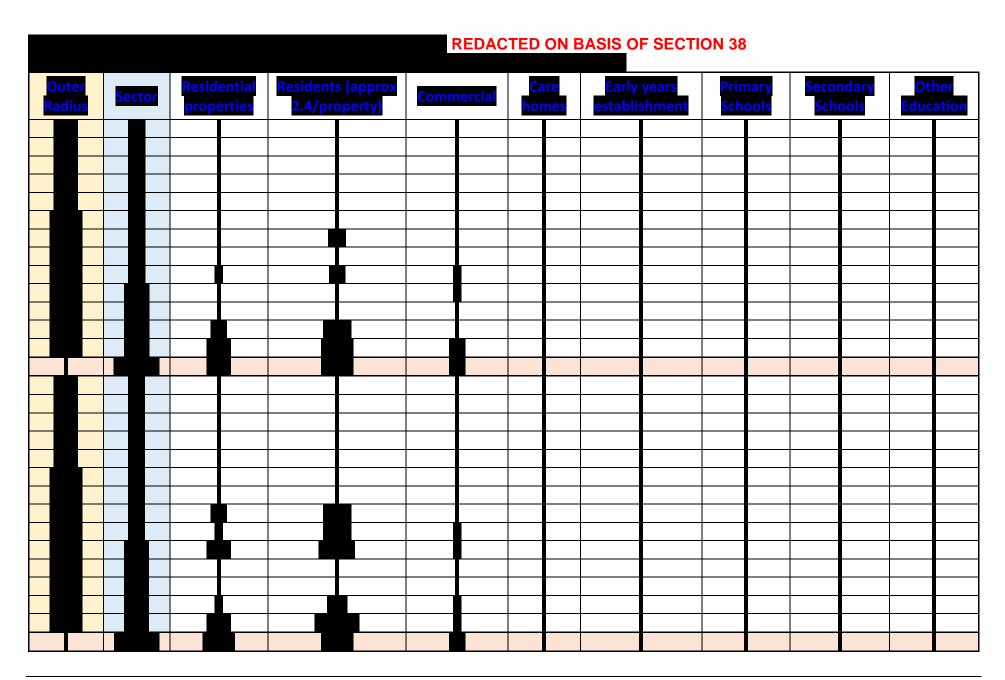


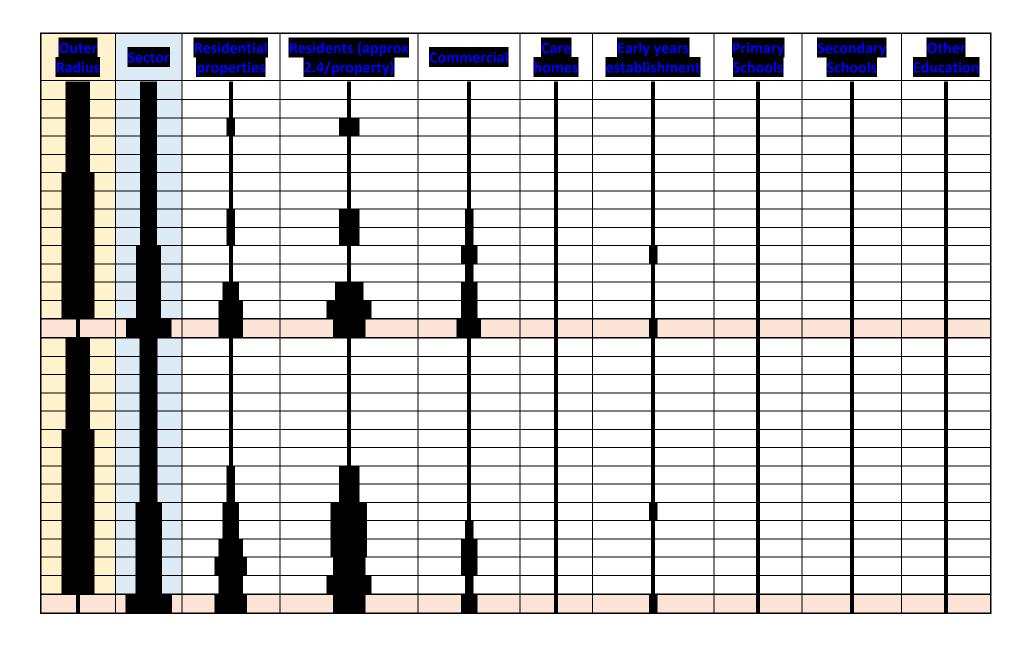
AWE Burghfield DEPZ sectors



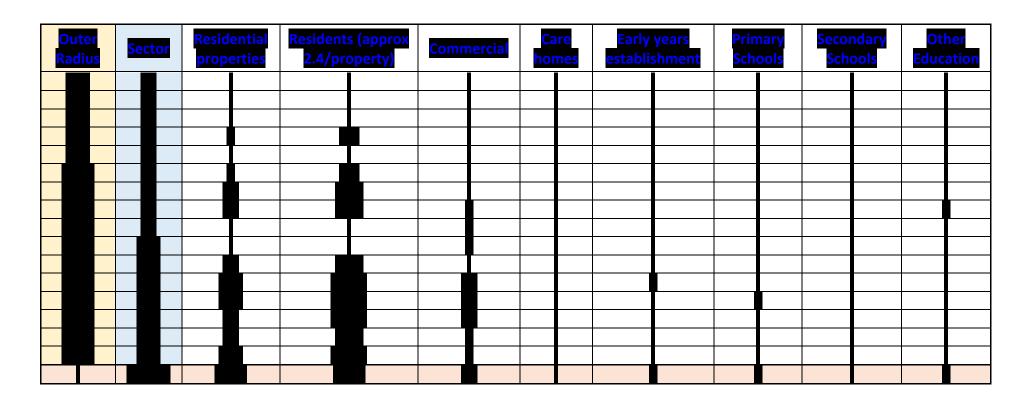
AWE Burghfield DEPZ sectors with subdivisions

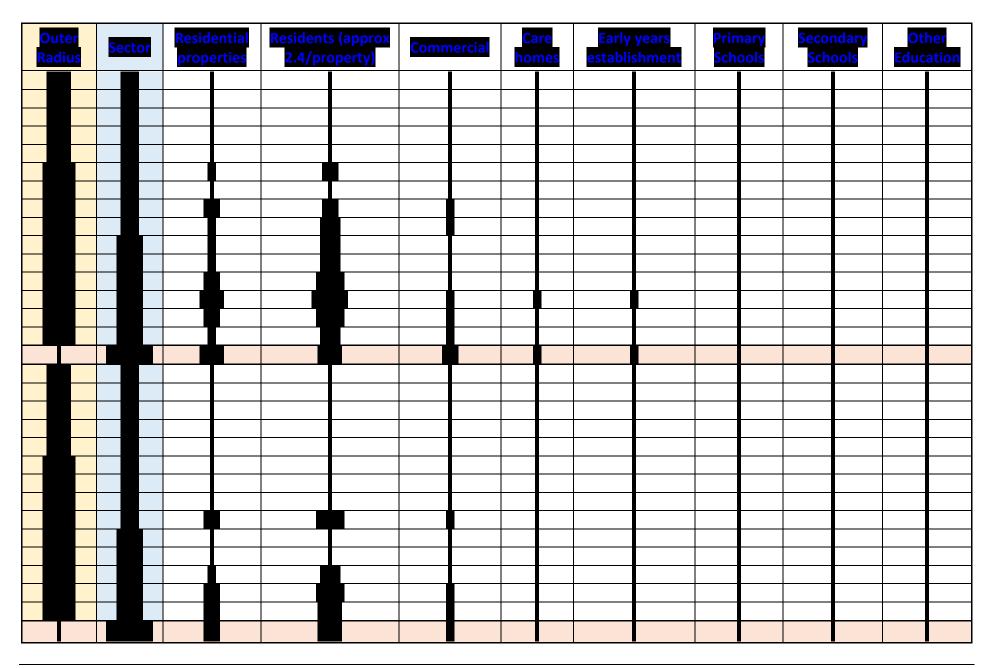


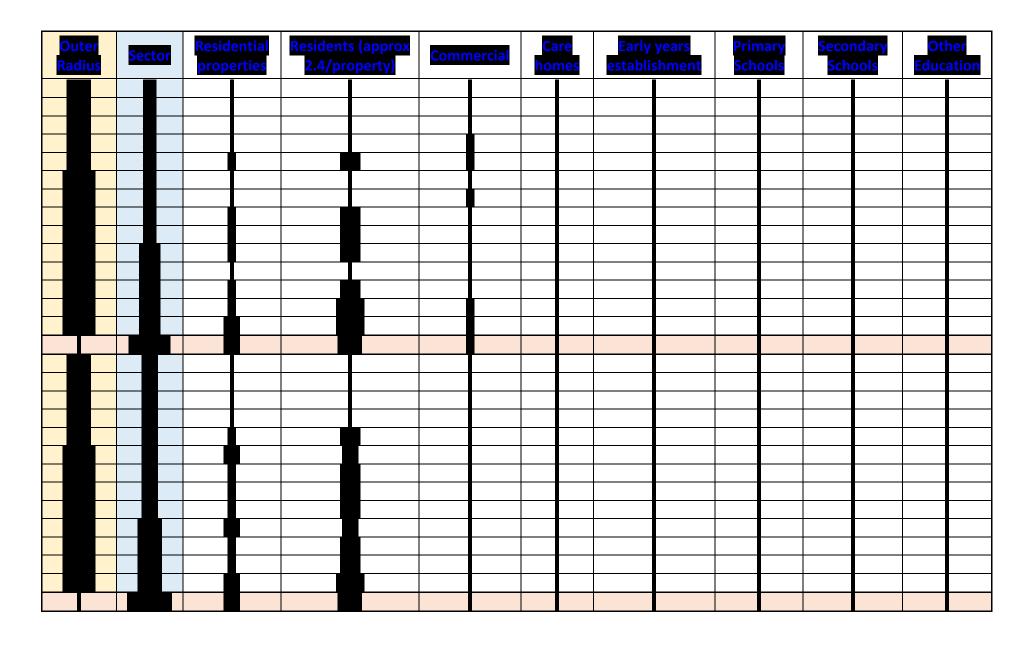




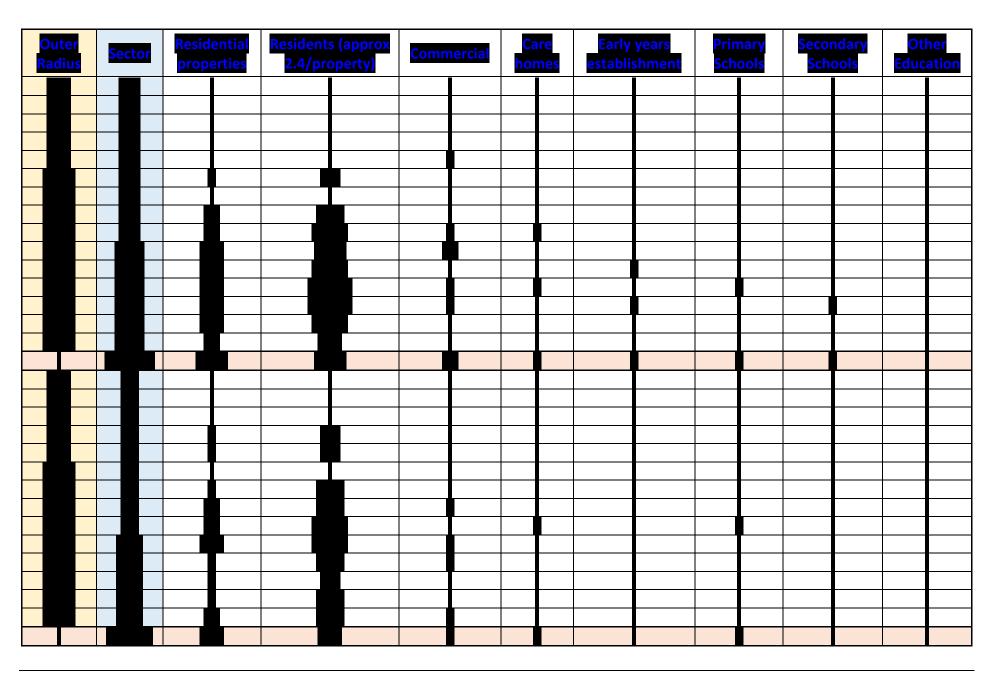
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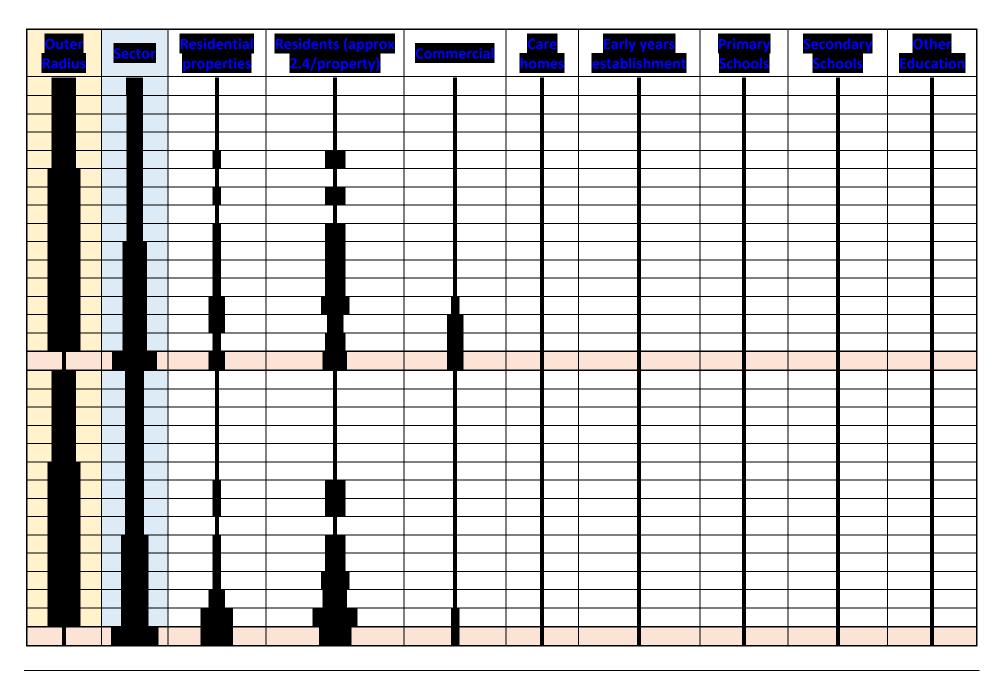


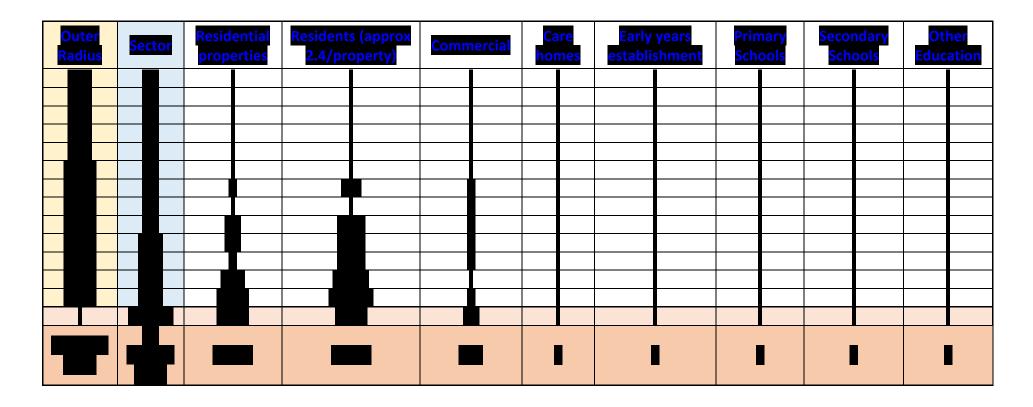




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8.3 Outline Planning Zone (OPZ)

This plan provides detailed information in relation to the area defined by the DEPZ which is based on the HECA process and the consequences reports which provide a minimum UPA distance. In AWE's case, the immediate protective action is to shelter in place. Where the DEPZ is determined by the lead local authority, outline planning distance for defence sites is determined by the Secretary of State for Defence and provided to the council within the consequences reports.

Outline planning builds on the arrangements and capabilities in existing emergency plans to provide commensurate planning for low probability events. The OPZ operates at distances beyond the DEPZ, but can also be undertaken in the DEPZ.

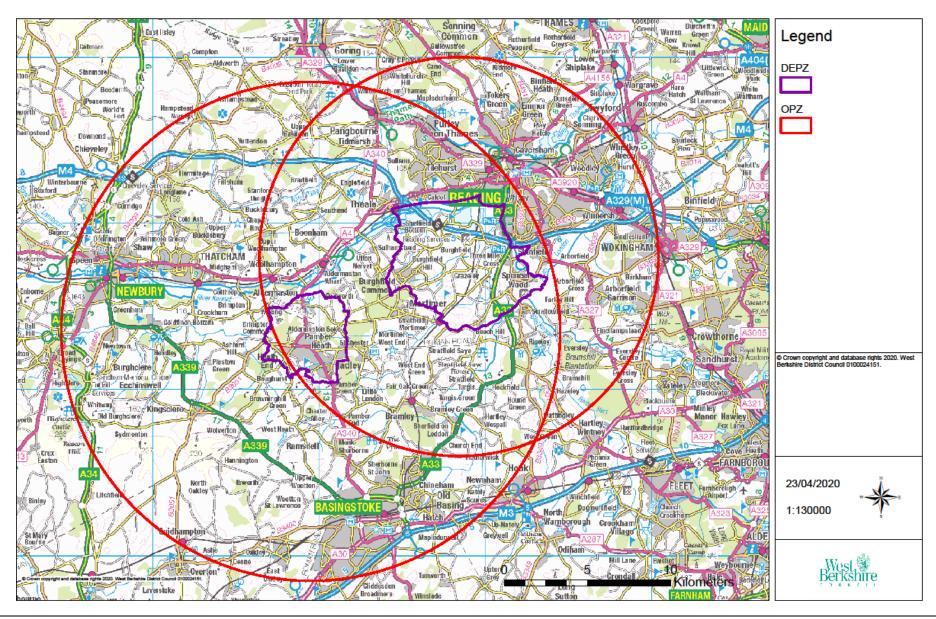
The presence of an OPZ should assist the Council in planning for extremely unlikely but more severe events. The central aim of the OPZ is to support the decision making of emergency responders in the event that detailed or generic arrangements are not sufficient.

The areas of outline planning have been zoned on maps to allow ready consideration of the areas affected. The mapping below details the both OPZs for both AWE sites. The OPZ distances are:

- AWE(A) 15 km
- AWE(B) − 12 km

These distances are the same as the distances that were used under the previous extendibility criteria for REPPIR 01. The data provided in these OPZ distances are reviewed on each revision of this plan to allow for changes in population density and sites of interest such as vulnerable people locations in relation to the capability of the responding agencies to respond. This will include changes due to Development Control with respect to large scale, sites of interest development and increases by 'creep' (one or two small scale developments but many of them).

Outline Planning Zones around AWE Aldermaston and AWE Burghfield



Importantly the OPZ for both AWE sites would have a significant impact on the community affected and the responders in that, unlike many other nuclear sites, there are large urban areas which could be affected including Reading, Basingstoke and Newbury. Therefore there will be significant challenges.

It is important to note that there is not a requirement to prepare a detailed plan due to the improbability of such a radiation emergency that would extend into the OPZ. The information below provides guidance and considerations to responders should there be a radiation emergency that is of sufficient magnitude to extend into the region of outline planning.

Should there be a radiation emergency which is assessed to be affecting an area greater than the DEPZ then the following actions and considerations would be put in place:

Responder Actions: The responders detailed in this plan will continue as described in relation to their normal responsibilities, unless otherwise directed via the normal command and control structure.

The Strategic Coordinating Group will continually assess the requirements for all the emergency and precautionary countermeasures. This may require consideration of an extension of the area to ensure maximum protection and reassurance.

Contingency Plans: A wide number of contingency plans are maintained in a wide range of organisations to deal with various civil emergencies from the industrial accident to natural disasters such as flooding. This plan along with these other 'supporting' plans should be used in an extendibility emergency.

Protective Actions: Key to the safety of the communities affected in the OPZ is the fact that the best protective action for the vast majority will be to take shelter. As a result a means of communicating and providing assurance is critical at an early stage.

Considerations: Consider the implications and issues relating to the area affected. These considerations may include the following:

- (a) Means of warning the public
- (b) Public information
- (c) Population sizes
- (d) Vulnerable people including 'closed communities'
- (e) Businesses/factories etc.
- (f) Transport hubs
- (g) Transport diversions these will need to be extensive and some distance from the site
- (h) Information points, reception and rest centres
- (i) Resources staff a larger area will have a larger impact

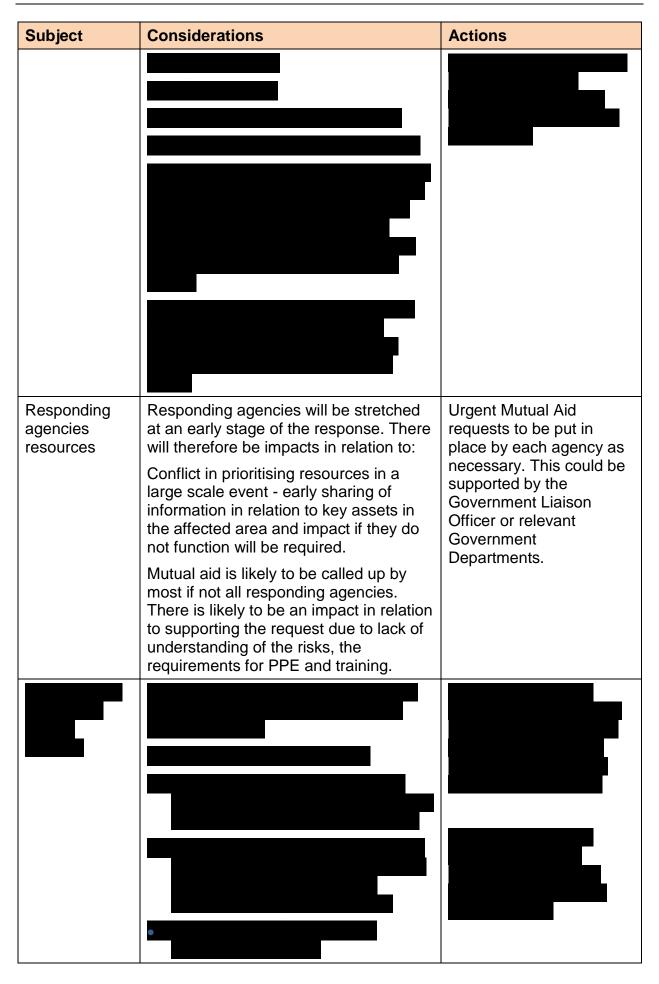
- (j) Resources equipment
- (k) Mutual aid.

These above considerations are already in place for the DEPZ but need to be considered for the wider area. Other considerations are set out in the table below; **Areas REDACTED ON BASIS OF SECTION 38**

Subject	Considerations	Actions			
Time of day /day of week impacts	A day time emergency would have a greater impact on response than night time.	Activate LRF Communications Plan to ensure quick, effective,			
	With the exception of between the hours of 0100-0500hrs any other time of day would have greater impact since the area is busy at all times.	accurate, joined up communications to allow those in the wider area to take shelter quickly.			
	There would be an equal impact if the emergency was at weekends since less people working generally in the community however the locations involved are high density in relation to leisure activities.				
Size & Type of Community	The larger the area and the greater the population involved then the more challenges there will be due to sheer scale.	Urgent Mutual Aid requests to be put in place by each agency as necessary. This could be			
	Different communities will have different challenges see below.	supported by the Government Liaison Officer or relevant Government Departments to allow additional resources to be sourced to support.			
Variations in Local Communities by way of	Communities will vary in their ability to understand and work together therefore to treat them all the same would be wrong.	Assess the potential community impacts by understanding the communities by:			
Culture	Reading is an urban setting as is Newbury & Basingstoke however they	Engaging local responders.			
	are very different by way of the multi- cultural challenges.	Assessing the community by reviewing community information for the area affected:			
		West Berkshire click here			
		BDBC click <u>here</u>			
		RBC click <u>here</u>			
		WBC click here			

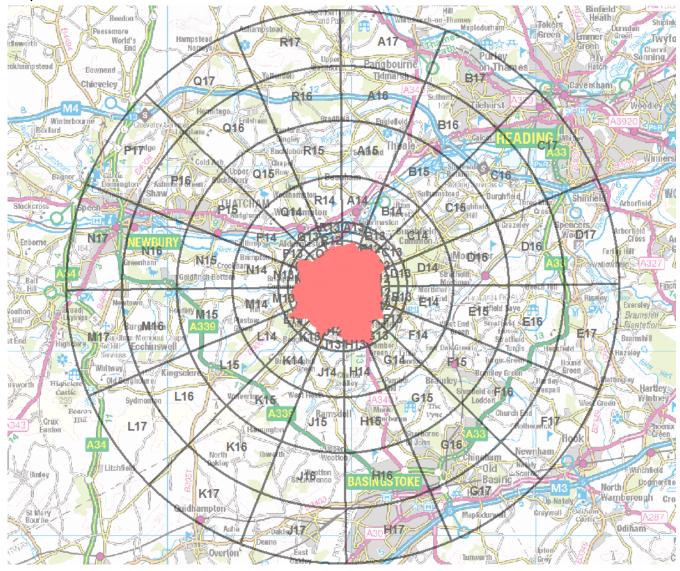
Subject	Considerations	Actions
Vulnerable communities	Within any community there will be vulnerable people. These people can be in closed communities (schools, care homes, hospitals etc.); individuals in their own homes who are known to the social care/health care environment, those in their own homes who do not have support but are still vulnerable. The impacts of an extendibility event setting in relation to vulnerable people include: Identifying where the people are (using Vulnerable People Plans and Information Sharing Protocols) RAG rating the support needed in short, medium terms; Deciding on the support needed and how to provide it – which could be resource intensive, have issues with staff and equipment going into contaminated areas	 Activate relevant Vulnerable People Plan - TVLRF Identification of Vulnerable Persons Plan / WBDC Vulnerable People Plan Activate relevant
Communities response actions	The response of the communities cannot be guaranteed. Whilst the aim would be for people to respond as requested there is a risk that: People would not listen to the advice – or don't trust it so do not act as requested. People are less knowledgeable about the site the further away they are and believe the worst – and try to leave the area. There is an assumption that people are in or near home or a suitable building to shelter in. People may not understand due to learning difficulties, language barriers or are visiting the area and don't realise they are affected. As time goes on people will become more anxious and the risk of not staying in shelter increases – creating more issues.	 Activate LRF Communications Plan to ensure quick, effective, accurate, joined up communications. Activate Vulnerable People plan to support those with difficulties in receiving information via media. Activate Supporting People and Rest Centre plans to consider options in relation to self- evacuation.

Subject	Considerations	Actions
	The impacts would be additional requirement for rest centres, impact on health services away for the area.	
Impact on tourism, events and local community attractions	The area has a significant number if tourism attractions including: Significant event locations within the area of extendibility include:	Review events in the area taking place or due to take place by: Checking with the local responders and/or checking online events information for the areas: West Berkshire here. RBC click here RBC click here Hampshire click here Checking mapping of locations, historical areas etc. online: West Berkshire here.
Impact on utility outages resulting in Public Health issues	The knock on consequences of utility failures could be significant not only for lack of availability but the impacts: Waste / sewage issues resulting in public health issues Power resulting in not being able to use media so readily for messages BT lines out – no communications within the DEPZ.	Activate utility companies as part of the notification process.



Subject	Considerations	Actions
Military Involvement	Due to the scale of the event then there is likely to be request for Military Aid to Civil Authorities (MACA) support. In such a response then it would be expected that a request for support for the military should be a default action.	Joint Regional Liaison Officer (JRLO) to alert via his Chain of Command potential request for MACA request.

8.3.1 OPZ around AWE Aldermaston: Outer rings equivalent to 3km, smaller rings around DEPZ/OPZ boundary in 500m increments. DEPZ in pink.

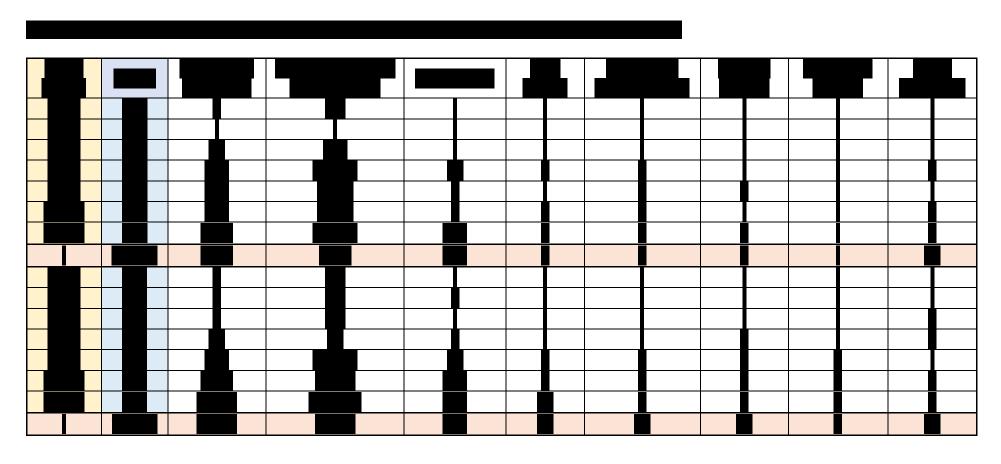


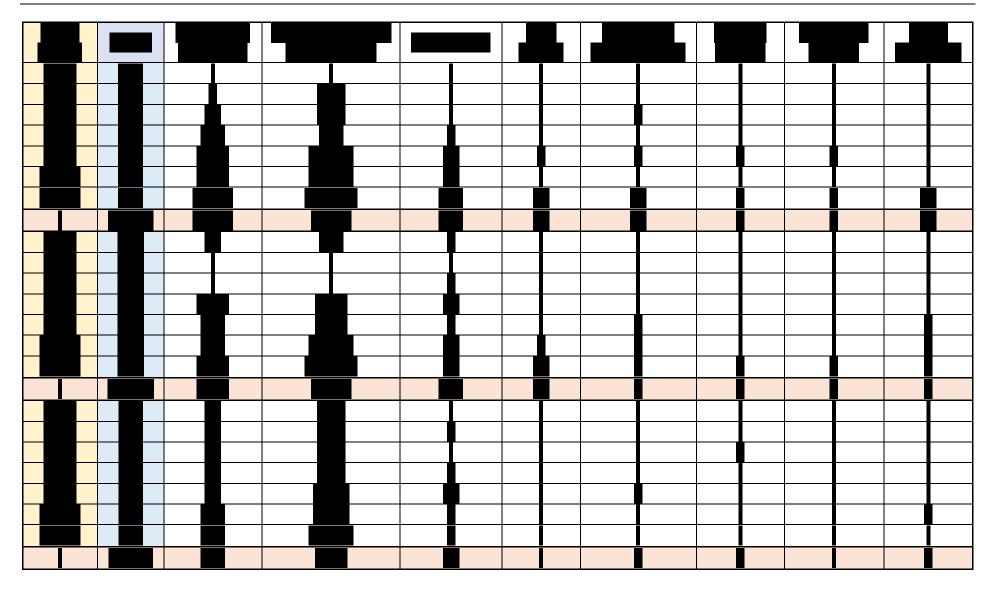
8.3.2 OPZ Sectors around AWE Aldermaston

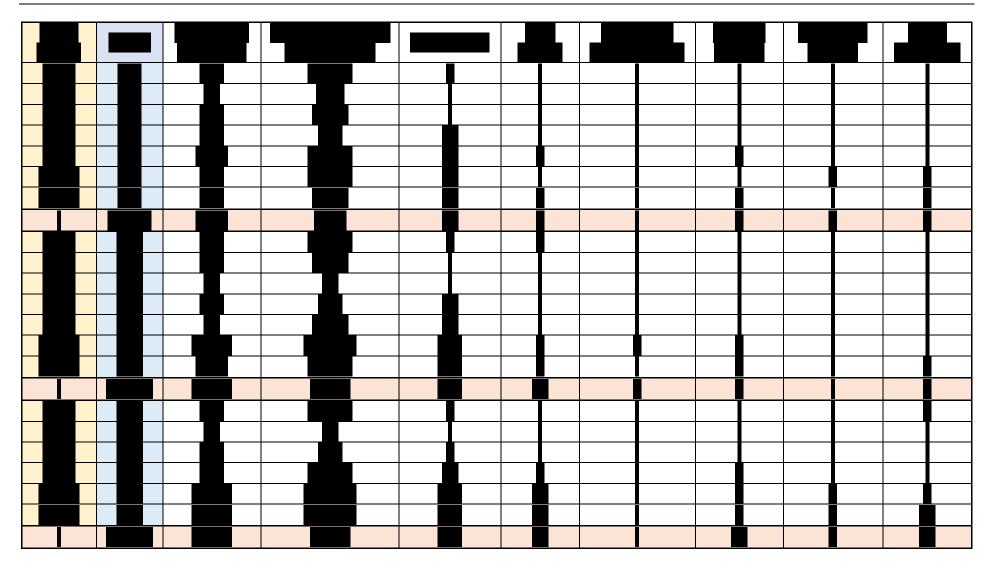
As stated above, the OPZ distances for the sites are 15 km and 12 km for Aldermaston and Burghfield respectively. Due to the polygonal nature of the DEPZ, the interfaces between the DEPZ and OPZ are not uniform across the sectors.

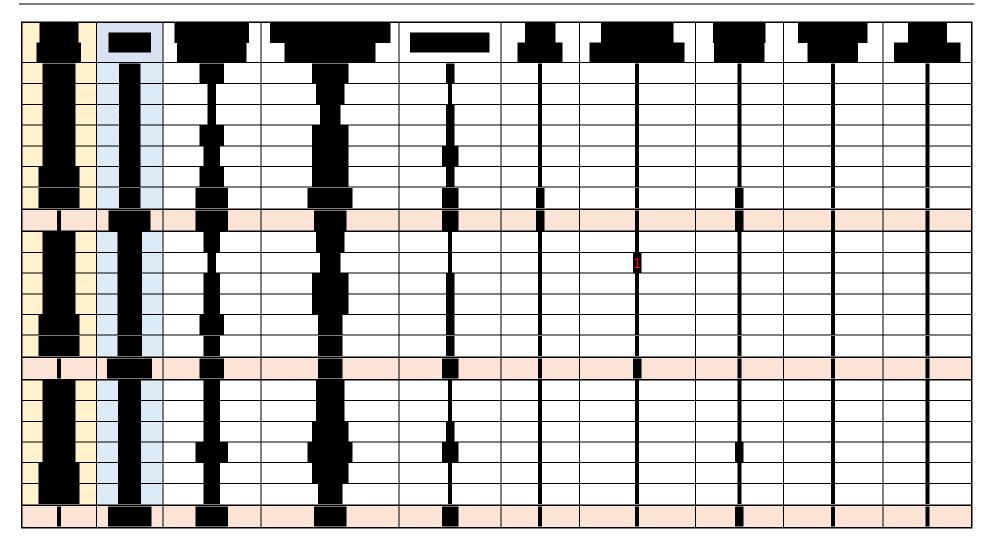
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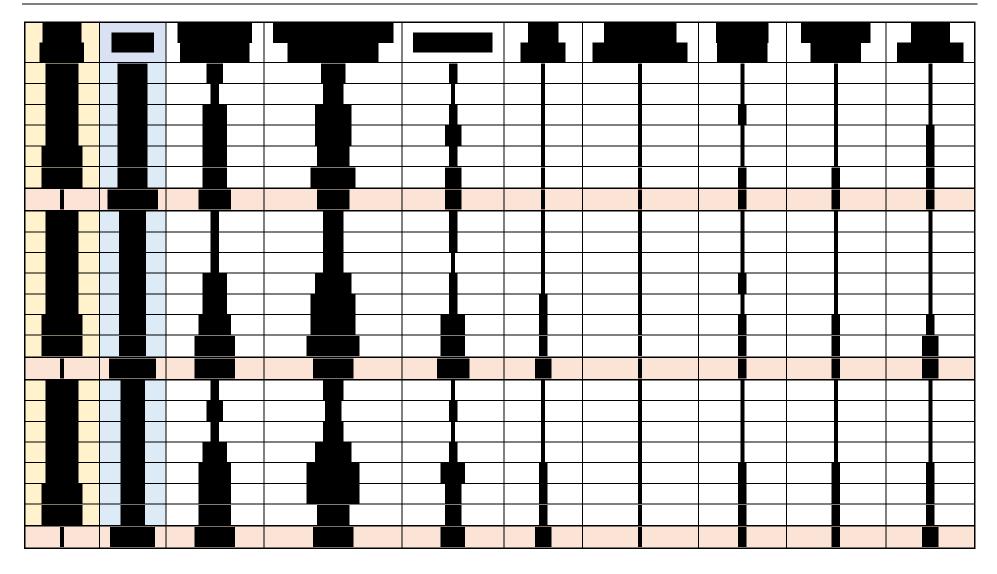
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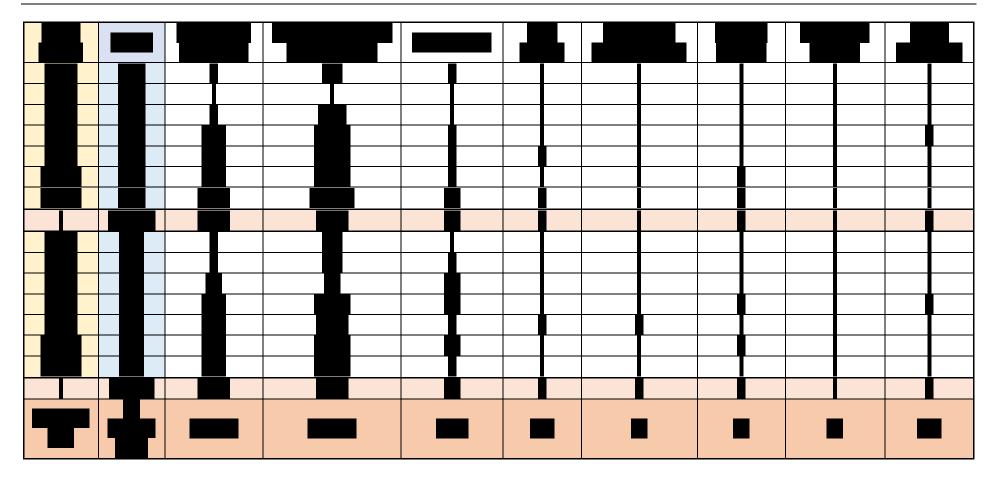






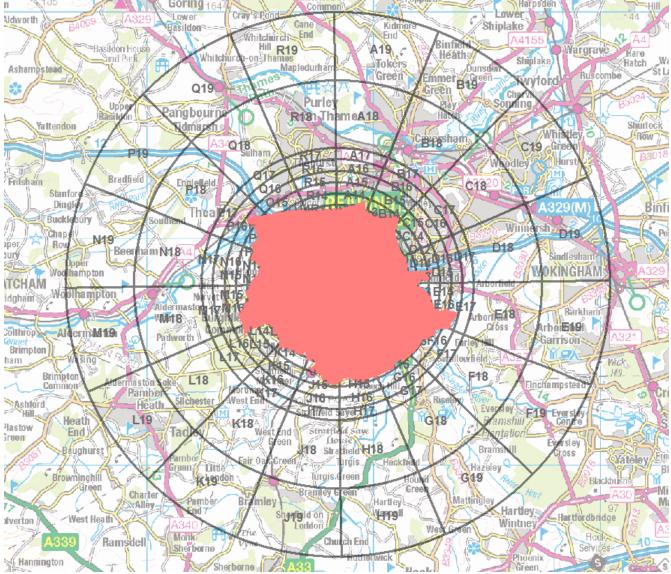






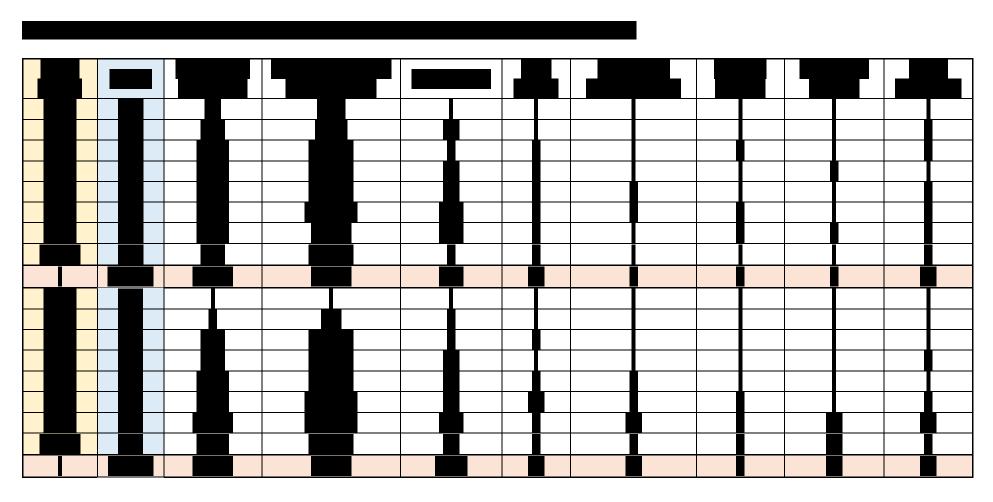
8.3.3 OPZ around AWE Burghfield: Outer rings equivalent to 3km, smaller rings around DEPZ/OPZ boundary in 500m

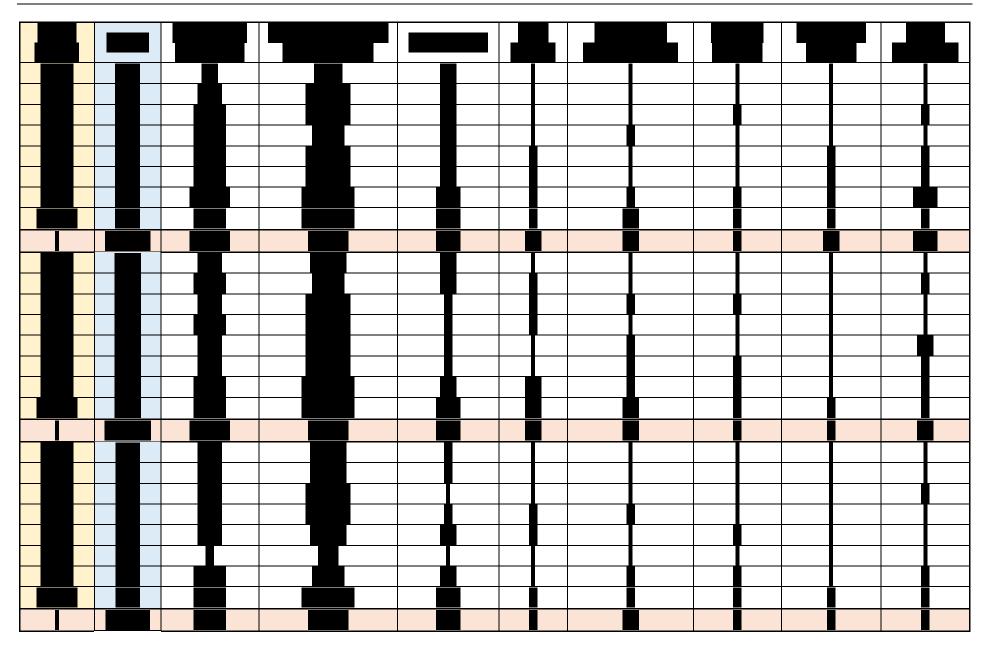
increments. DEPZ in pink

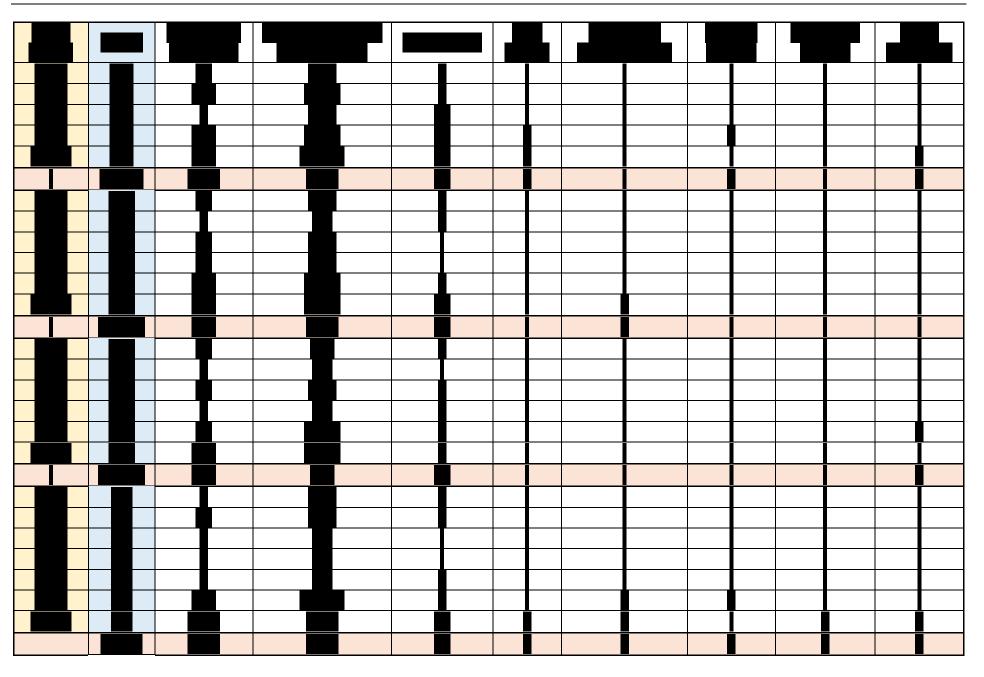


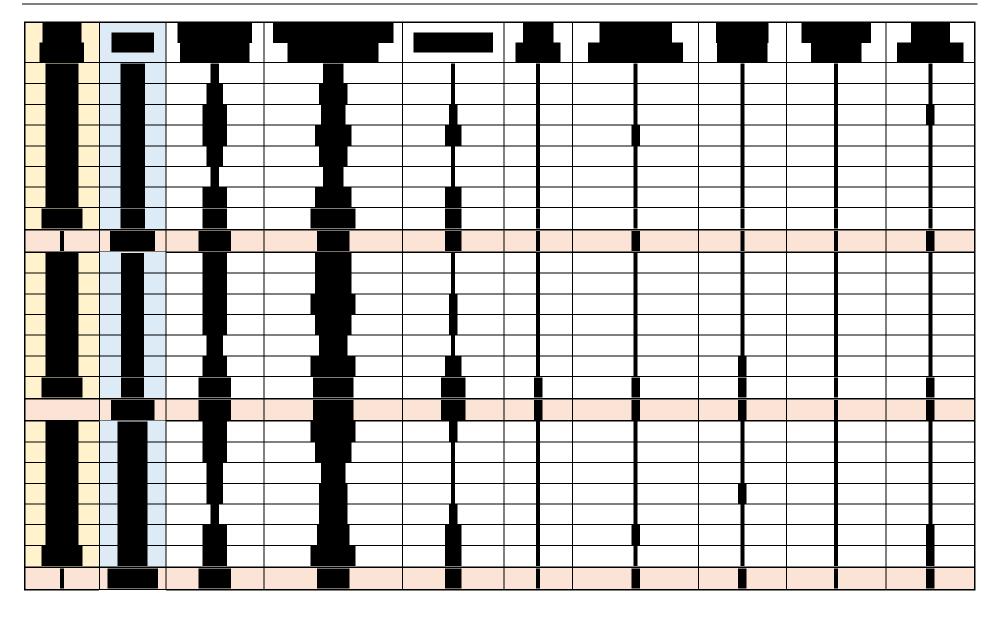
8.3.4 Sectors around AWE Burghfield

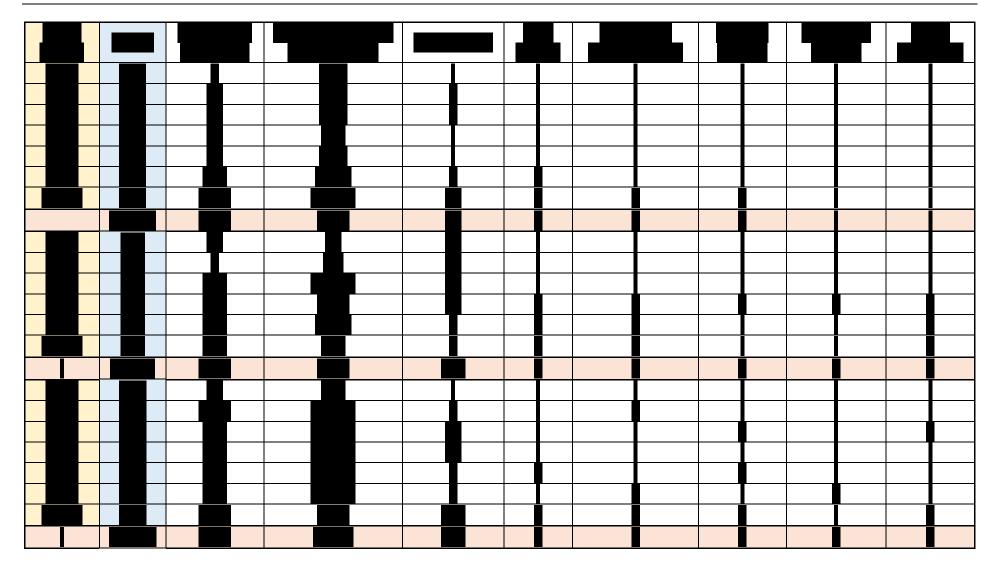
As with AWE Aldermaston, AWE Burghfield has a polygonal DEPZ where the interfaces between the DEPZ and OPZ are not uniform across the sectors. In the data below, the sector subdivisions start at the earliest distance that there is a crossover between the DEPZ and OPZ. **REDACTED ON BASIS OF SECTION 38**

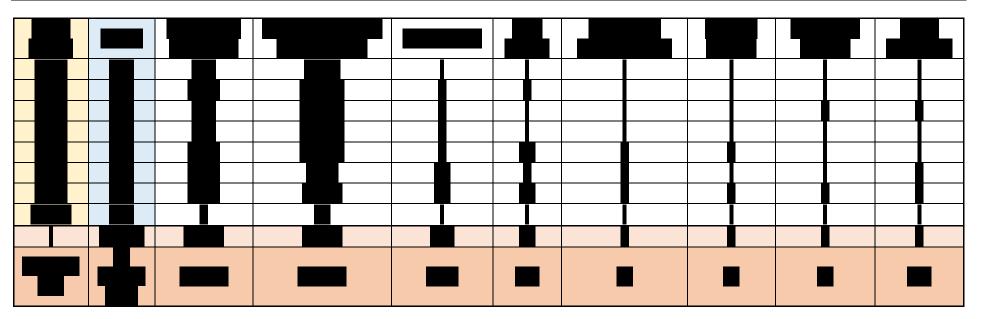












Section Nine

9 Recovery

Whilst the timely response to an incident is essential in order to prevent additional consequences from the initial incident, the recovery phase has as much if not more importance in order to bring the community back to normality as soon as possible after the event.

More information on recovery can be obtained in the TVLRF Recovery Plan and Hampshire & Isle of Wight LRF Recovery Plans.

9.1 Role of Recovery

The overall aim of any recovery process is to consider what is required in order to bring the area and the community back to 'normality' as quickly as possible. In so doing there is support provided to assist the affected community towards management of its own recovery. It is recognised that where a community experiences a significant emergency, there is a need to supplement the personal, family and community structures which have been disrupted.

The Recovery Coordinating Group (RCG) should support strategic planning at the SCC.

9.2 Thames Valley LRF Recovery Plan

The TVLRF Recovery Plan (and where appropriate Hampshire & Isle of Wight LRF Recovery Plans) shall be used at an early stage in providing guidance to the Recovery Coordinating Group (RCG). This group will automatically be set up should an off-site incident occur at an AWE site.

The plan provides details of who would be part of the group, the role of the group, suggested terms of reference and strategies, potential subgroups plus a draft agenda.

9.2.1 Other Radiation Recovery Guidance

- (a) Guidance on decontamination of buildings, infrastructure and open environment
- (b) PHE Radiation Recovery Guidance

9.3 Recovery Coordinating Group Activation & Location

A Recovery Coordinating Group (RCG) shall normally be put in place as soon as possible after an Off-Site Emergency or Off-Site Radiation Emergency has been declared in order to start looking at the recovery requirements at an early stage.

All agencies as per the agreed membership will be invited to confirm representation and attend meetings or teleconferences in the early stages to start scoping the requirements.

Initially the RCG will normally convene at the SCC or via teleconferencing. After the emergency response phase is over the group would move to a suitable agreed location nearer to the affected area to manage longer term recovery.

It may be possible to establish a RCG outside of the SCC, if the main area of concern lies outside of the TVP area. However, this will only be acceptable, if the RCG are able to keep close communication links between the SCG and STAC.

9.4 RCG Membership & Chair

The group will normally be chaired by a Director, or senior manager from West Berkshire District Council. However depending on the area affected this may transfer, with agreement, to another affected local authority.

The Recovery Coordinating Group membership will vary however as a minimum the membership will include:

- (a) Local authority (lead) (Chair, Vice chair and minute taker) plus a number of service representation including the following either at the meeting or as a subgroup to the main group:
 - 1. Highways & Transportation Service
 - 2. Environmental Health
 - 3. Rights of Ways
 - 4. Waste Service
 - 5. Community Care
 - 6. Public Health & Wellbeing
 - 7. Education
- (b) Neighbouring LA's as necessary plus service representatives as necessary
- (c) Thames Valley Police
- (d) Hampshire Constabulary
- (e) Berkshire West and Hampshire CCGs
- (f) PHE CRCE
- (g) Royal Berkshire FRS & Hampshire FRS
- (h) South Central Ambulance NHS Foundation Trust
- (i) Environment Agency
- (j) Food Standards Agency
- (k) Highways England
- (I) Network Rail
- (m) MHCLG RED
- (n) ONR
- (o) AWE staff
- (p) MOD staff
- (q) Defra CBRN Emergencies Team
- (r) Met Office
- (s) Thames Water
- (t) Canal & River Trust
- (u) British Transport Police
- (v) Relevant Utilities companies

9.5 Specific AWE Recovery Considerations

Whilst the Thames Valley LRF Recovery Plan gives a good generic guide for members of recovery groups in general, an incident at an AWE site will provide additional challenges due to the nature of the sites and the potential contamination issues. Some considerations for the first meeting are detailed below:

	iderations for the first meeting are detailed below:			
#	Issues	Considerations		
(a)	A common aim of the RCG would be to recover all affected areas to an agreed standard so that they are 'suitable for use' for their defined future purposes. The difficulty in this case would be initially determining how clean is clean? This can be difficult due to expectations of the population and	There has been a great deal of environmental sampling in this area over many years therefore there is known data which will be of assistance in guiding the recovery group to the background levels. Independence of information may be necessary for public reassurance. The annual Radioactivity in Food and the		
	the fact that there are always some background natural levels of radioactive substances in the environment.	Environment (RIFE) reports provide an indication of the level of radioactivity in the environment around nuclear sites. This information can be used as one component of recovery discussions on "how clean is clean", using the framework set out in the UK recovery handbooks for radiation incidents.		
(b)	Agreement of environmental management systems to make the best use of technical and manpower resources and sharing information to avoid unnecessary duplication of effort.	There are a number of agencies that can get involved including AWE, PHE, EA, Local Authority, Utilities etc. therefore determining who is doing what and ensuring consistency of approach is essential to determine at the first meeting of the RCG.		
(c)	Determining the priority areas for tie-down and decontamination; identification of environmental	Essential here is to get accurate sample results to assess the spread of any contaminants and to what levels.		
	contamination containment and remediation options and propose/initiate action.	Thereafter due to the location of the contaminants the priority for decontamination etc. can be prepared		
(d)	Implementing a systematic and balanced remediation plan, using best practical environmental options, that is rapid and economical and produces minimal amounts of controllable wastes and disruption.	Contributors to this plan would include the Defra CBRN Emergencies Team for appropriate contractors and the Environment Agency with respect to disposal.		
(e)	Liaising with higher authorities, through each agency's management chain, to ensure that early containment and remediation is not impeded or delayed by	Clarity on who is doing what and when is to be set out at the first meeting and then communicated up the chains of command. This is important to ensure a swift		

#	Issues	Considerations
	conflicts of interest between departments.	response. Minutes are therefore essential to assist in this process.
(f)	Identifying the statutory responsibilities and regulatory powers of participating organisations and agreement of management responsibilities and inter-relationships during the initial phases of remediation	As with (e) above this needs to be clearly set out to prevent issues further down the recovery process.
(g)	Limiting the spread and resuspension of contamination and protection of public health. This will be important not only in terms of preventing the spread of any contamination and therefore making the recovery process longer but having regard to public reassurance and prevention of public health concerns over a wider area than	Methods of operations need to be considered Speed of controlling the spread/resuspension is important.
(h)	would be necessary. Determining, as necessary, a health monitoring programme of the local community and advice for other health services should there be concern from people who were in	A Radiation Monitoring Unit (RMU) may already be set up as part of the response by the Health agencies. If not it may be considered as part of the recovery. Guidance should be prepared for health
	the area at the time of the incident.	agencies across the UK and abroad in order that self-presenters get consistent accurate support and advice.
(i)	The practicalities of the recovery	Who does the work?
	also need to be considered including:	What equipment would be used?
		Where does any contaminated waste go to?
		What equipment is needed to prevent contamination of clean areas?
		Is health monitoring of personnel required?

9.6 Remediation Phases & Considerations

The early phase (days) involves prompt tie-down or containment of contamination and the recovery of items. The intermediate phase (weeks) involves the treatment of the heaviest or most significant contamination. The late phase (months) involves reduction of environmental contamination to acceptable levels.

Immediate term actions include:

(a) Identification of the significant environmental effects of the incident and preparation of a register of environmental effects.

- (b) Identification of human health effects.
- (c) Determination of 'interim' responsibilities for operational control in respect of tiedown, containment and initial remediation.
- (d) Consideration of shelter/evacuation issues when remediation produces shortterm re-suspension.
- (e) Advice on containment and tie-down measures undertaken and assessment of their implications for long term radioactive and conventional remediation.

Medium term actions include:

- (a) Identification of remediation options for all the affected areas and proposal of a remediation plan (with priorities, objectives, end-points and timescales) to higher authorities.
- (b) Identification of waste management, assay, transport and storage issues.
- (c) Identification of relocation issues.
- (d) Coordination of environmental reviews, audits and reports undertaken at the request of higher authorities.
- (e) Consideration of wider issues of public confidence and regeneration and the measures necessary to convince the public that it is safe to return to the area.

Longer term actions include:

- (a) Preparation of a long-term plan to outline the resources and support needed by the local authority for the management of the longer-term remediation issues and public consultation.
- (b) Modification of plan to suit changes in requirements.
- (c) Confirmations that appropriate radiological end-points have been chosen.
- (d) Obtaining certification for reuse of remediated areas.

9.6.1 Remediation Options

There are a number of remediation options available. However, each option needs to be considered in connection with the release, location and potential other impacts by using that form of remediation. It will be the responsibility of the group to move through this decision making process with the evidence available to them at the time.

A common strategy is to divide up the contaminated area into zones according to land use and contamination level. Then a range of alternative options is detailed for each zone. The performance of each option is assessed using indicators such as: the percentage of contamination removed and dose reduction, the volume of waste

produced, the resources required, the rate of working and cost. In addition, the advantages and limitations of each option are also considered. Hence, a recommended option is selected for each zone.

Some of the options are detailed below

Various tie-down reagents (e.g. water, bitumen emulsion, strippable paints etc.) may be applied to reduce the spread of contamination and reduce re-suspension risks. Selection of the appropriate material and application technique is dependent on many factors (e.g. surface type, weather conditions, coverage required etc.).

Non-aggressive decontamination techniques (e.g. vacuum, brushing, hosing etc.) are relatively quick and cheap and generally produce small amounts of controllable waste. These are more applicable in areas where contamination is low level and loosely bound to the surface.

Aggressive decontamination techniques (e.g. road planning, high-pressure water, grit blasting etc.) may be required in areas where contamination is higher level and fixed to the surface. These are much slower and expensive and can generate large volumes of waste.

9.6.2 Recovery Communications

An essential part of recovery will be engagement and information to the local community quickly after the event. This process must continue thereafter on a regular basis in order to ensure everyone is aware of what is happening, why, how and when.

If during the response people have been evacuated the communications must also be made to those displaced residents and businesses in order to ensure they are kept engaged and understand the process.

Due to the nature of the site there will no doubt be a great deal of media interest and therefore it will be important to ensure the correct information is distributed in order to maintain reality on the recovery process and to prevent unnecessary panic.

Regular communications to the staff of responding organisations, town and parish councils and members is also essential to maintain during the recovery process in order to ensure everyone is accurately informed

9.6.3 Link to Scientific & Technical Advice Cell (STAC)

During the response phase the STAC would be in place to support the SCG, as well as the RCG. The RCG will work closely with the STAC to share scientific and technical information and expertise. Agencies with a remit in both cells need to consider their number of attendants at the SCG.

Once the response phase has been completed and hand over from the police to the local authority to lead on the recovery has been achieved, it may be necessary for the STAC in full or elements of it to continue to exist in order to support the RCG. If this is the case the RCG chair should raise this with the STAC chair to agree a way forward. It may be that elements of the STAC become part of the RCG main group.

9.6.4 Recovery Coordinating Group (RCG) Closure

At an early stage the group should ensure that the aims and objectives clearly define a point at which the group would no longer be necessary and the work is business as usual, or near usual, for the majority of agencies involved. This may have a proviso that the group may be reconvened should a group action or decision be necessary.

Section Ten

10 Stand Down, Debrief & Administration

10.1 Stand Down

Involvement in an emergency or Major Incident may finish at different times for different agencies. For the emergency services their direct involvement will finish when the immediate situation has been resolved. For local authorities, the longer-term issues around restoration of the community or the area affected means that they may have an active involvement for many years.

Once the decision has been taken by an agency to stand down, it is imperative that they inform partner agencies and all those stakeholders that they have been dealing with as part of the response. This can be done by sending a closing Situation Report (SitRep). The TVLRF Recovery Plan & HIOW LRF Community Recovery Plan have further information regarding the stand down and debrief process.

10.2 Debrief

After an incident and each exercise a formal debrief process will take place over seen by West Berkshire District Council and/or TVLRF. Lessons learnt from the incident or exercise debrief will be captured and assist to shape the review of plans, procedures, training and future exercises.

10.3 Record Keeping

It is important to log and retain a record of all events during an incident. This will assist if liability, compensation or reimbursement issues arise as a result of an incident. Records should include details of all actions taken, communications with outside agencies, a summary of all key decisions made and details of all expenditure incurred. This information will also be useful to record lessons learnt during the post incident debrief and to inform the review of this plan following an incident.

In order to assist with the briefing and updating of key response staff, it may prove useful to establish display, logging and incident update boards within relevant control centres. All personnel active in the response will be expected to detail their decisions and responses throughout the incident in a log. Logs should include all messages, emails, photos, handwritten notes, minutes of meetings, briefings, recordings ect. Logs once completed must not be amended, parts removed or destroyed, as they may form part of a legal investigation.

10.4 Training

All agencies identified within this plan are required to ensure their employees who are identified to implement any aspect of this plan, including those identified as emergency workers under REPPIR, are suitably and sufficiently briefed and trained in order to carry out their required role.

This plan sets out the multi-agency response arrangements and requires that each agency ensures that individual operational plans or procedures cover agency specific responsibilities. All staff who are liable to respond to an AWE radiation emergency, and thus support the implementation of this plan must be aware of its content and of the agency specific operational plans and procedures to enable them to undertake their role safely and effectively.

10.5 Exercising the plan

REPPIR Regulation 12 requires this plan to be tested though exercise at least every 3 years. The purpose of the tests are to demonstrate to the Office for Nuclear Regulation (ONR) the adequacy of the off-site emergency arrangements. There are 3 levels, the scenario of each requiring approval of the ONR:

- Level 1: Concentrates on the operator's on-site procedures and communication. It may involve limited participation by the emergency services and other response organisations.
- Level 2: Tests the off-site emergency arrangements. It involves participation by the emergency services, emergency response organisations, government departments and agencies, and the operator.
- Level 3: A national exercise extending Level 2 by requiring involvement of Government Departments to exercise their procedures at their respective headquarters for Central Government, in order to test the interaction within and between national as well as local agencies.

In accordance with REPPIR 2019 West Berkshire District Council will agree with the regulator, the operator and emergency services the best method to test this plan.

The following table lists the level and dates of exercises held:

Date of Exercise	Notes
11 November 1998	Level 2
15 November 2001	Level 2
2 March 2005	Level 2
11 November 2007	Level 2
10 November 2010	Level 2
Caldex 10 March 2010 (Office hours)	Communications Exercise
Caldex 17 May 2011 (Office hours)	Communications Exercise
Caldex 12/1/12 (Out of office hours)	Communications Exercise
Caldex 13/12/12 (Office hours)	Communications Exercise
Caldex 10/6/13 (Office hours)	Communications Exercise
Caldex 16/9/13 (Out of office hours)	Communications Exercise
Caldex 11/12/14 (Office hours)	Communications Exercise
Aldex 13 16 Nov 2013	Level 2
Ex Recuperate 13 9 Dec 13	Recovery Exercise
Caldex 14/12/14 (Office hours)	Communications Exercise
Caldex 02/09/15	Communications Exercise
Caldex 26/07/16	Communications Exercise
Caldex 26/10/16	Communications Exercise

Aldex 16: 07 Nov 2016	Level 3
Caldex 23/07/2019 (Office hours)	Communications Exercise
Caldex 06/08/2019 (Out of office hours)	Communications Exercise

10.6 Financial Arrangements

Financial costs are incurred by responders before, during and after a major incident and this section sets out the principles.

10.6.1 Before a Major incident

In the planning, reviewing and exercising of the plan the costs of such activity by agencies is recovered from the Operator on an annual basis via the lead local authority.

10.6.2 During a Major Incident

The cost of response and recovery whilst important is not the highest priority or consideration as to how to respond. The main issue is having regard to the best way to respond, saving and protecting human life and further environmental damage. However, all costs are collected and monitored at the time for future re-charge, either under the "polluter pays" system, or under government schemes such as the Bellwin Scheme.

10.6.3 After a Major Incident

There are various issues which need to be considered via the recovery process. There is more guidance on this in the TVLRF Recovery Plan. Some of the issues include:

- (a) The Department of Social Security (Supplementary Benefits commission) is empowered to make various loans to persons who find themselves in urgent financial need as a result of a major accident or natural disaster.
- (b) Authorities or Services placing demands on outside agencies for assistance, services or materials would be responsible for the settlement of any charges which may arise
- (c) Local Authorities may be able to invoke Bellwin Scheme arrangements for the recovery of a proportion of essential costs.
- (d) Recovery of costs will, normally, be directed at the site owners.

Section Eleven

11 Roles and Responsibilities / Action Cards

It is essential in any response to a major incident that the roles and the responsibilities of responding agencies are clear and understood by the other agencies.

It is also essential that the different services within an agency know what their roles are in order to keep focused on the response and thereafter the recovery.

The following section give details as to the responding agencies and their roles, alerting procedures and responsibilities, as well as responding groups roles alerting procedures and responsibilities.

AGENCIES

- 11A AWE
- 11B Thames Valley Police
- 11C Fire: AWE Fire & Royal Berkshire Fire & Rescue Service
- 11D South Central Ambulance NHS Foundation Trust
- 11E Health Services (Other than SCAS & PHE)
- 11F Public Health England (CRCE & SE)
- 11G West Berkshire District Council (WBDC)
- 11H Reading Borough Council (RBC)
- 11I Blank
- 11J Wokingham Borough Council (WBC)
- 11K Basingstoke and Deane Borough Council (BDBC)
- 11L Hampshire County Council (HCC)
- 11M Office for Nuclear Regulation (ONR)
- 11N MHCLG Resilience & Emergency Division
- 110 Department for Business, Energy and Industrial Strategy (BEIS)
- 11P Other Government Departments and Agencies
- 11Q MOD Coordinating Authority (MCA)
- 11R Environment Agency (EA)
- 11S Food Standards Agency (FSA)
- 11T Radioactive Incident Monitoring Network (RIMNET)
- 11U Met Office
- 11V Defra CBRN Emergencies Team
- 11W Action by Utilities
- 11X Network Rail
- 11Y Highways England
- 11Z Other Organisations

The Military

Voluntary Agencies

Road Transport Organisations

Passenger Transport Organisations

Other Local Authorities

GROUPS

11AA Scientific & Technical Advice Cell (STAC)

11A AWE

Role

As the site(s) operator, AWE has three primary roles in an Off-Site Emergency:

(a) To take such action as is necessary to stabilise the emergency on the affected site. This might include saving and protecting life, preventing or mitigating the release of hazardous materials, and monitoring to establish the extent of any contamination resulting from an emergency.

- (b) Initiate the cascade call out to responders and the alerting system to those in the community.
- (c) To provide information and advice to other responders on AWE's hazards and the status of the on-site emergency to enable other responders to discharge their own responsibilities under this plan.

REDACTED ON BASIS OF SECTION 38







11B THAMES VALLEY POLICE

Role

The Thames Valley Police (TVP), with the support of the Hampshire Constabulary as necessary, will control and coordinate the off-site response for dealing with an incident at AWE Aldermaston (AWE(A)) or AWE Burghfield (AWE(B)) with actual or potential off-site consequences with other agencies having legislative responsibilities. Other services and agencies will provide resources and technical advice so as to offer a combined and structured response to the incident

Other roles for the police include:

- (a) In conjunction with other agencies protect and preserve the scene as necessary and thereafter lead or assist in any post incident investigation.
- (b) Support, with other agencies, the collation and dissemination of casualty information.
- (c) Support, with other agencies, the identification of casualties and coordination of the management of casualties including the remains of any deceased.
- (d) Coordination of the media response
- (e) Coordination of the public information during the response phase
- (f) Coordination and implementation of public safety measures
- (g) To assist, with other agencies, the return to normality.

Alerting Procedure

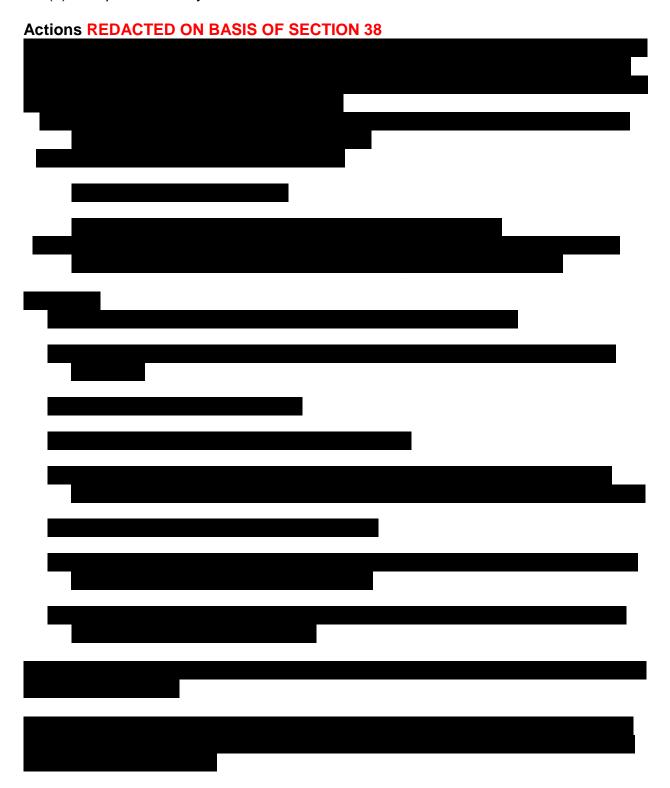
Thames Valley Police Control Room will be notified by the AWE (A) MOD Police, acting on behalf of the Aldermaston Emergency Manager, when an actual or potential off-site emergency has occurred. The AWE (A) Emergency Manager will subsequently confirm the alert and establish contact with TVP.

Thames Valley Police will notify:

- (a) RBFRS
- (b) South Central Ambulance Service NHS Foundation Trust
- (c) West Berkshire District Council
- (d) Hampshire Constabulary and other police forces as necessary
- (e) MHCLG RED
- (f) Civil Aviation Authority (CAA) if No Fly Zone required.
- (g) SCG Activation Procedure including activation of:
 - i. Highways England
 - ii. British Transport Police and Network Rail (if the rail network is affected)
- (h) Public Information Services such as relevant radio and television stations, also relevant cable company service providers

On receipt of information from TVP, Hampshire Constabulary will notify:

- (a) Hampshire Fire & Rescue Service
- (b) Hampshire County Council



11C FIRE: AWE FIRE, ROYAL BERKSHIRE FIRE & RESCUE SERVICE (& HAMPSHIRE FRS)

Role

The Fire & Rescue Service core remit includes:

- (a) Saving of life in conjunction with other emergency services
- (b) Assuming control of the incident when a major fire is involved
- (c) Rescue trapped casualties
- (d) Prevention of further escalation of the incident by tackling the fires, dealing with released chemicals, other hazardous situations and public decontamination, where required
- (e) Gathering of information and hazard assessment to give to the police on the need to evacuate members of the public
- (f) Liaison with the police regarding the establishment of an inner cordon and subsequent control of the inner cordon
- (g) Sectoring of the incident and to effectively define and relay this information to the Police, Ambulance Service and other agencies attending
- (h) The safety of all the personnel involved in rescue work. This includes ensuring that all non-fire service personnel entering the inner cordon are aware of and conform to the Fire and Rescue Service safety procedures and, in particular the use of the evacuation system and nominal roll procedures
- (i) Consider the effect and actions to minimise any dangers to the environment
- Body recovery, in conjunction with the police as required. Participation in investigations and preparation of reports with supporting evidence for subsequent inquiries
- (k) Standing by during the non-emergency/recovery phase as appropriate

AWE has its own full-time Fire & Rescue Service and appliances at Aldermaston and Burghfield, with staff trained to deal with AWE special materials, including radioactive materials and explosives, as well as conventional fire hazards. If required, additional assistance would be sought from the Royal Berkshire Fire & Rescue Service and/or Hampshire Fire & Rescue Service as appropriate to deal with an incident on an AWE site. AWE Fire & Rescue Service trains regularly with external Fire & Rescue Services.

The Royal Berkshire Fire and Rescue Service would coordinate assistance from other County Fire and Rescue Services, should they be called upon to assist with a fire onsite, and operate within the site as agreed with the AWE Fire and Rescue Service. The senior RBFRS Officer would assume control with advice from the AWE Senior Fire Officer.

The Fire & Rescue Service also has the role of decontamination of people. In such circumstances then the deployment of specialist equipment to enable people affected or

potentially affected to be decontaminated immediately on-site, reducing any adverse effects on their health. They can then be transported safely to hospitals or shelter for further treatment or support without the risk of contaminating others. There are such resources available to local services but additional equipment and trained fire fighters would be called upon as necessary to support.

Alerting Procedure

The Royal Berks Fire & Rescue Service will be notified by Thames Valley Police in the formal channels. However through their own standing operating procedures they should also be notified by the AWE Fire and Rescue Service and/or MOD Police of an incident on or off the site.

If it is an off-site incident then the RBFRS will notify:

- (a) West Berkshire District Council
- (b) Environment Agency
- (c) Health and Safety Executive
- (d) Hampshire Fire & Rescue Service
- (e) Met Office.

Actions

The RBFRS will attend any incident to which it is requested to respond in accordance with agreed attendance protocols. Detailed arrangements exist for the Service to attend and to effectively deal with incidents in collaboration with the AWE Fire and Rescue Service and personnel. These arrangements provide for a tailored response to incidents and make provision for reinforcement and attendance at the site by appliances and personnel from other Services.

It is anticipated that any incident with off-site consequences requiring the activation of this plan will have resulted from an on-site incident to which the Fire Service will have been alerted.

In the event of the activation the following additional resources of the Royal Berkshire Fire and Rescue Service will be deployed: **REDACTED ON BASIS OF SECTION 38**

FRS activity at the incident will be directed by the Senior Fire Service Officer present. The effective control of an incident will best be achieved by the effective utilisation of personnel, equipment and information. Detailed information, equipment, including monitoring equipment and knowledge of the site is available from on-site personnel.

Suitably trained personnel should be incorporated into the Incident Command Support structure adopted for the incident.

The FRS may also request for a PACRAM or information relating to the weather via the Met Office.

The FRS has the role of decontamination of people. This will take some consideration including:

- (a) There may be a role for decontamination from conventional chemical contamination or radiation contamination. Therefore at an early stage of activation the Fire and Rescue MDU decontamination process will be considered by the service and by STAC and SCG.
- (b) Any decontamination process will normally be set up at the edge of the contaminated area in order that once people are decontaminated they can quickly move to a clean area and onwards to a suitable rest centre or a radiation monitoring unit (as set up by the Health Agencies).

The exact location of the decontamination unit will be decided by the SCG on consultation with the STAC and the LA.

A large area will be required in order to allow for the equipment, potentially large numbers of people from the affected area and potentially people who were in the area at the time of the incident who may be worried that they are contaminated returning. A strict access route and flow of people will have to be administered in order to ensure 'dirty' and 'clean' are kept separate.

11D SOUTH CENTRAL AMBULANCE NHS FOUNDATION TRUST

Role

NHS England/NHS Improvement South East (Hampshire and Thames Valley (HTV)) have the responsibility for the NHS Services to the population around the AWE sites but this responsibility has been delegated to West Berkshire Clinical Commissioning Group and Ambulance Trust. These bodies are responsible for ensuring the satisfactory Heath Service arrangements are in place for dealing with major incidents. In the event of such an incident at AWE they would work in conjunction with the AWE Medical Adviser or their representative and would fulfil the following functions:

On-site treatment and evacuation of casualties, including those who might be contaminated by radioactive material.

Responsibilities

The Ambulance Service responsibilities are:

- (a) the saving of life, in conjunction with other emergency services,
- (b) the treatment and care of those injured at the scene, either directly or in conjunction with medical personnel,
- (c) to provide Tactical Commander, Tactical Advisor/NILO and Medical Incident Advisor,
- (d) the determination of the priority evacuation needs of those injured, either directly or in conjunction with medical personnel,
- (e) to determine the main designated "Receiving" and "Supporting" hospitals for the receipt of those injured,
- (f) to arrange the most appropriate means of transporting those injured to the main "Receiving" and "Supporting" hospitals,
- (g) to ensure that adequate medical personnel and support equipment resources are available at the scene,
- (h) the provision of communications facilities for NHS resources at the scene and the ability to communicate with the other emergency services present.
- (i) initial alerting of appropriate NHS Agencies and Trusts following notification by Thames Valley Police,
- (j) to lead and co-ordinate on all decontamination of people on and off site and will request support from the Fire and Rescue Service as required.
- (k) to deploy an appropriately trained and qualified Commander to lead the Decontamination process.

ALERTING PROCEDURES

In the event of an off-site emergency being declared at AWE Aldermaston or AWE Burghfield, The South Central Ambulance Service (SCAS) will be notified by the Thames Valley Police, and will in turn notify:

- (a) Public Health England South East
- (b) NHS England/NHS Improvement South East (HTV)
- (c) Designated Receiving Hospitals
- (d) Royal Berkshire Hospital
- (e) Hampshire Hospitals NHS Foundation Trust on call

Actions

Detailed arrangements exist for the SCAS to attend and assist the onsite services to deal with incidents involving casualties as required. These arrangements provide for a tailored response to incidents and make provision for reinforcements and attendance at the site by Ambulances and personnel from other NHS Ambulance Trusts.

It is anticipated that any incident with off-site consequences requiring the activation of this plan will result from an onsite incident. Where casualties have been sustained onsite, SCAS resources will already have been deployed.

In the event of a decision by the SCG to evacuate any residents in the affected area, to assist with those who are ill or disabled at home, calling on the support of the Voluntary Agencies as required.

Where on-site casualties have been sustained, dispatch if required: **REDACTED ON BASIS OF SECTION 38**



11E HEALTH SERVICES OTHER THAN AMBULANCE SERVICE

NHS England and NHS Improvement

Role

The aim of NHS England/NHS Improvement South East (NHSE/I) (Hampshire/IOW and Thames Valley (HTV)) in an incident involving AWE would be to lead and coordinate the response of all health organisations in liaison with the South East NHSE/I Regional Team including the SE Regional Communications Team.

Responsibilities

In the event of an incident at AWE NHS, England/NHS Improvement South East (HTV) team would:

- (a) Establish, maintain and disseminate the best possible understanding of the incident and its impact on the health sector;
- (b) Ensure that all necessary and available support is provided to local health responders;
- (c) Establish command, control, coordination and communications arrangements in accordance with its Incident Response Plan (IRP)/On Call Pack and supporting Action Cards and those reciprocal arrangements of its providers and commissioners;
- (d) Establish and maintain a reporting mechanism and daily cycle of command across all health organisations in line with any regional/national timelines/sitrep deadlines:
- (e) Liaise with the HTV EPRR Team initially leading the incident and agree whether and how to conduct a handover with NHS England/NHS Improvement South East (HTV) if a regional response/lead is required;
- (f) Analyse reports received to identify strategic priorities and support required;
- (g) Implement mutual aid arrangements to identify strategic priorities and support required;
- (h) Link NHS organisations across the South East area if resources and capacity are required from out of the area;
- (i) Liaise with NHS England/NHS Improvement South East Regional Team on the identification of and access to national resources, if they are required;
- (j) Set up and maintain an Incident Coordination Centre and an Incident Management Team;
- (k) Attend SCG meetings in coordination with the Integrated Care Systems (ICSs) across HTV. The ICSs across HTV will represent the NHS at the TCG, the Media Advisory Cell and any other tactical group that may be set up;

- (I) Provide a SE Regional media / comms response;
- (m) Take part in any debrief processes set up and take forward any learning identified.

Alerting Procedure

NHS England/NHS Improvement South East (HTV) would be alerted to an incident by South Central Ambulance Service Foundation Trust.

ACUTE HOSPITAL ARRANGEMENTS Role

The Chief Executive in conjunction with the Accountable Emergency Officer (AEO) of a "Receiving Hospital" is responsible for ensuring that the resources of the hospital are fully mobilised to manage casualties. This shall include:

- (a) alerting/ calling in all necessary and additional staff and managing volunteer helpers;
- (b) establishing a Major Incident Control Team and an effective Control Centre;
- (c) organising essential facilities for the reception, treatment and admission of casualties, including (as necessary) the relocation of patients to provide sufficient accommodation including contaminated casualties;
- (d) making comprehensive arrangements for the reception and care of relatives and friends, religious and voluntary services support;
- (e) providing the media with controlled access, authoritative information and necessary administrative support in close liaison with the Police;
- (f) ensuring that tight security arrangements are in place, particularly to protect victims and relatives from unauthorised media intrusion:
- (g) activating the hospital's casualty documentation system and ensuring an effective link with the Police documentation team at the hospital;
- (h) providing the Police with appropriate office, communication and welfare support arrangements;
- (i) briefing other patients (as necessary) regarding changes in procedure due to the major incident response;
- (j) activating arrangements to preserve property and evidence;

Alerting System

The Major Incident Plans of Receiving Hospitals will be triggered by an appropriate call from Ambulance Control;

Actions REDACTED ON BASIS OF SECTION 38



Each hospital will:

- (a) Maintain site security ensuring that sites can be locked down to ensure the security of the site
- (b) Establish local command control and coordination arrangements
- (c) Provide NHS England/NHS Improvement South East (HTV) local regional office with situation reports
- (d) Monitor capacity and manage local resources appropriately
- (e) Provide a clinical response to all casualties
- (f) Ensure recovery is addressed in organisational strategic incident management meetings.

CLINCAL COMMISSIONING GROUP/ INTEGRATED CARE SYSTEM Role

Support NHS England/NHS Improvement South East (HTV) to manage the local impacts of the incident;

Actions REDACTED ON BASIS OF SECTION 38

- (a) Lead on escalation aspects of the incident
- (b) Ensuring that critical functions are maintained
- (c) Establishing internal command and control structures in conjunction with NHS England/NHS Improvement South East (HTV)
- (d) Attending local multi-agency meetings as required by NHS England/NHS Improvement South East (HTV)
- (e) Identifying and releasing clinical and administrative staff to support the response subject to availability and service impact

11F PUBLIC HEALTH ENGLAND (PHE)

PHE CENTRE FOR RADIATION CHEMICAL AND ENVIRONMENTAL HAZARDS (CRCE)

Role

PHE-CRCE is responsible for the provision of expert advice and information relating to the public health radiological protection aspects of an emergency to government and any strategic group set up to manage the response. PHE publishes guidance on Emergency Reference Level (ERLs) to protect the public. This guidance is accepted as a basis for the current nuclear emergency arrangements.

Alerting Procedure

PHE CRCE will be notified of an incident with off-site consequences at AWE by PHE SE

Actions REDACTED ON BASIS OF SECTION 38

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

- (a) Deployment of senior staff to a number of key locations. These would include:
- (b) The SCC (to provide advice on the Strategic Coordinating Group (SCG), the Scientific & Technical Advice Cell (STAC)) and the Recovery Coordinating Group (RCG) on radiological protection aspects of the emergency
- (c) The Media Briefing Centre (MBC)
- (d) Scientific Advisory Group for Emergencies (SAGE)
- (e) Set up an emergency operations centre at ______. REDACTED ON BASIS OF SECTION 38 The key functions of this centre will be to gather relevant information (particular radiation monitoring information), to assess this information and to provide expert advice on the basis of this information.
- (f) Recommend and support sourcing an RPA for the TCG to support the nonemergency services with safety advice
- (g) 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
- (h) Undertake the role of national radiation monitoring coordination
- (i) Provide expert advice on radiological issues for the recovery phase
- (j) Liaise effectively with, but not confined to, the key stakeholders in the response at a local, regional and national level including the Food Standards Agency (FSA), the Environment Agency (EA), Local Authority, Environmental Health Departments and water companies.

PUBLIC HEALTH ENGLAND (PHE) SOUTH EAST Role

PHE SE is responsible for the provision of expert advice and information relating to the public health aspects arising from an incident at AWE and the establishment of STAC.

Alerting Procedure

PHE SE will be notified of an incident with off-site consequences at AWE by SCAS.

Actions

On receipt of an alert from SCAS, PHE SE will:

- (a) Determine the appropriate level of its response to the emergency
- (b) Alert PHE-CRCE in line with the notification process
- (c) Deploy senior staff to key response cells, either in person or virtually. These may include:
 - SCG
 - STAC
 - RCG
 - MBC
- (d) Establish and Chair STAC as outlined in the PHE SE STAC Plan (see Section 11AA)
- (e) Consider the establishment of an Incident Coordination Centre virtually, or physically at REDACTED ON BASIS OF SECTION 38 dependent on the area impacted
- (f) Provide expert advice on health protection issues for the recovery phase
- (g) Liaise effectively with key stakeholders in the response at a local, regional and national level

11G WEST BERKSHIRE DISTRICT COUNCIL

Role

The main role of West Berkshire District Council includes:

- (a) Support to the emergency services
- (b) Alerting other agencies as detailed in the activation section (Section 3.2) and set out below
- (c) Coordination and management of reception and rest centres
- (d) Coordinating the recovery process

Alerting Procedure

AWE and TVP control will, on receipt of an appropriate alert, notify West Berkshire District Councils Emergency Planning or if Out of Hours they will inform the West Berkshire District Council's Emergency Duty Officer via the Emergency Contact Operators

Actions REDACTED ON BASIS OF SECTION 38

WBDC will:

- (a) Record full details of the incident, immediately open a log and call back to AWE and TVP Control to verify the message.
- (b) Initiate the alerting process as detailed in the WBDC Major Incident Plan.

Activate the external alerting processes as follows:

Agency	Notes
Internal Services	who start the internal actions for the services
Hampshire County Council as appropriate	For AWE (A) Incident (or B if wind direction appropriate) request rep to go to SCC/TCG as appropriate.
Basingstoke & Deane Borough Council as appropriate	For AWE (A) Incident (or B if wind direction appropriate) request rep to go to SCC/TCG as appropriate.
Reading Borough Council as appropriate	For AWE (B) Incident (or A if wind direction appropriate) request rep to go to SCC/TCG as appropriate.
Wokingham Borough Council as appropriate	For AWE (B) Incident (or A if wind direction appropriate) request rep to go to SCC/TCG as appropriate.
All Schools and nurseries in WBDC area	Normally by Education Services
Any Residential Care Homes in WBDC affected area	Normally by Adult Social Care Service

Agency	Notes
Resilience & Emergency Division	As per contact list
Food Standards Agency	As per contact list
Highways England	As per contact list
Network Rail	As per contact list
Thames Water	As per contact list
Canal & Rivers Trust	As per contact list
Town & Parish Councils in area including local ward members	As per contact list
Other LA's in Berkshire	To be prepared to support with mutual aid
Voluntary Sector	as necessary

Arrange for the following command and control arrangements to be supported:

Location	Whom	Roles
ECC	As per MIP	As per MIP
TVP SCC - SCG	Local Authority Liaison Officer (LALO) to SCC to be the SCG representative. This person is normally a Director or other	To inform the WBDC EOC Controller of requests made to the local authorities for support or action
	senior officer as nominated by the Chief Executive	To provide local authority support and information to the Emergency Services.
		To authorise expenditure on behalf of the LA as necessary
TVP SCC	Senior Officer	To support the Local Authority Liaison Officer (LALO). This is a competent officer who understands emergencies, in particular AWE and the role of the LA. They shall be able to stand in for the LALO as necessary. Their main role is to support and to link in with the LALO at TCG Location and WBDC EOC.
TVP SCC – Media Team	Public Relations (PR) Officer	To work with the SCG media team
TVP SCC – STAC	Principal Environmental Health Officer	To attend the STAC
TVP SCC – RCG	Head of Service(HoS)/Senior Officer	Chair Recovery Coordinating Group

Location	Whom	Roles
TVP SCC – RCG	Snr Officer	Deputises for chair of RCG
TVP SCC- RCG	Loggist	To record RCG key decisions
EOCC (A) at	Emergency Duty Officer	LALO at the AWE EOCC (A)
AWE (A)		To inform the WBDC ECC Controller of requests made to the local authorities for support or action
		To update the LALOs and WBDC ECC of up to date info regarding the incident.
TCG	Emergency Duty Officer (EDO)/HoS/Third Tier Manager	LALO at the TCG
		To inform the WBDC EOC Controller of requests made to the local authorities for support or action
		To provide local authority support and information to the Emergency Services.
Emergency Media Briefing Centre (MBC)	PR Officer	LALO at MBC
Other LALO Locations		
Hampshire TCG	WBDC LALO	To inform the WBDC EOC Controller of requests made to the local authorities for support or action
		To ensure cross border consistency.

Initial WBDC considerations include:

Staff Deployment:	Deploy staff to the relevant command locations as necessary
Open Emergency Operations Centre (EOC): In accordance with the WBDC Major Incident Plan	Establish the EOC and open all necessary communication links, including links to Basingstoke and Deane Borough Council, Reading and Wokingham Councils as appropriate.
Road Closures:	Initiate relevant Road Closures, as indicated in within the AWE Transport Plan on RD in conjunction with the police in Thames Valley and Hampshire. These road closures may move closer or further out from the incident as necessary.

Assist Establishment of Media Briefing Centre:		
Place Services on Stand-by: including:	EHOs with respect to water pollution to drinking supplies, contaminated land, food supply chain etc.	
	Trading Standards with respect to animal health and welfare matters	
	Countryside Rangers and Rights of ways staff with respect to closure of footpaths etc.	
	LA Highways officers with respect to road closures and diversions	
	Rest Centre Staff	
	Voluntary agencies to assist with rest centres.	
	Adult Social Care for vulnerable adults	
	Education Services in relation to vulnerable children and schools	
Consider the need for one or more Rest Centres	On basis of need and guidance from SCG rep open suitable rest centres	
Consider the support required for a Radiation Monitoring Unit	The provision of a Radiation Monitoring Unit (RMU) may be requested at the SCG level, perhaps as a result of a number of worried well presenting themselves at hospitals or as a result of genuine concern regarding contaminants	
	The provision of the RMU is the responsibility of health agencies however it is likely that there will be a request for a suitable location/building to be used. As a result a number of locations have been identified and considered suitable.	
	Section 7.2 details the locations and the key information relating to this plan and the radiation monitoring unit plan.	
Consider the need for Mutual Aid.	Due to the nature of the incident, the potential scale and as a result press and Government interest plus the potential for a long term response and recovery consideration at an early stage should be given to mutual aid support from other LA's (including LANWG) and Voluntary Agencies.	
Consider the Initial, Medium and Long Term	Recovery is led by the Local Authorities but it is still a Multi-agency process.	
Recovery Process	More details on recovery are in <u>Section 9</u> .	

11H READING BOROUGH COUNCIL

Role

Reading Borough Council (with assistance from neighbouring local authorities if necessary) would be responsible, in conjunction with West Berkshire District Council, for providing assistance to the Emergency Services in the event of an incident at AWE Burghfield with actual or potential off-site consequences.

Alerting Procedure

In the event of an off-site incident at AWE Burghfield, Reading Borough Council would be informed by West Berkshire District Council.

Actions

The Council Resilience Team or Duty Emergency Manager will:

- (a) Record full details of the incident, immediately open a log and call back to West Berkshire District Council in order to verify the message
- (b) Activate as necessary the Council emergency response in accordance with the MIP.

Reading Borough Council will provide for an incident at AWE Burghfield:

Location	Whom	Roles
ECC	As per MIP	As per MIP
TVP SCC - SCG	Local Authority Liaison Officer (LALO) to SCC to be the SCG representative. The SCG rep will normally be the SCG rep for West Berkshire District Council	To inform the EOC Controller of requests made to the local authorities for support or action
		To provide local authority support and information to the Emergency Services.
		To authorise expenditure on behalf of the LA as necessary
TVP SCC	Senior Officer	To support the LALO this is a competent officer who understands emergencies, in particular AWE and the role of the LA. They shall be able to stand in for the LALO as necessary. Their main role is to support and to link in with the LALO at TCG Location and the RBC EOC.
TVP SCC – Media Team	PR Officer	To work with the SCG media team
TVP SCC – RCG	Senior Officer	Rep on RCG

Location	Whom	Roles
TCG	Duty Officer/HoS/Third Tier	LALO at the TCG
	Manager	To inform RBC EOC of requests made to the local authorities for support or action
		To provide local authority support and information to the Emergency Services.
Emergency Media Briefing Centre (MBC)	PR Officer	LALO at MBC.

Initial Reading Borough Council considerations include:

Staff Deployment:	Deploy staff to the relevant command locations as necessary.	
Open EOC: In accordance with the RBC Major Incident Plan	Establish the Emergency Operations Centre the REDACTED ON BASIS OF SECTION 38 and open all necessary communication links, including links to West Berkshire District Council, Wokingham Borough Council, Hampshire County Council and Basingstoke and Deane Borough Council, as appropriate.	
Assist Establishment of Media Briefing Centre:		
Place Services on Stand-by: including:	EHOs with respect to water pollution to drinking supplies, contaminated land, food supply chain etc.	
	Trading Standards with respect to animal health and welfare matters	
	Countryside Rangers and Rights of ways staff with respect to closure of footpaths etc.	
	LA Highways officers with respect to road closures and diversions	
	Rest Centre Staff	
	Voluntary agencies to assist with rest centres.	
	Adult Social Care for vulnerable adults	
	Education Services in relation to vulnerable children and schools	
Consider the need for one or more Rest Centres	On basis of need and guidance from SCG rep open suitable rest centres	

Consider the support required for a Radiation Monitoring Unit	The provision of a Radiation Monitoring Unit (RMU) may be requested at the SCG level, perhaps as a result of a number of worried well presenting themselves at hospitals or as a result of genuine concern regarding contaminants
	The provision of the RMU is the responsibility of health agencies however it is likely that there will be a request for a suitable location/building to be used. As a result a number of locations have been identified and considered suitable.
	Section 7.2 details the locations and the key information relating to this plan and the radiation monitoring unit plan.
Consider the need for Mutual Aid.	Due to the nature of the incident, the potential scale and as a result press and Government interest plus the potential for a long term response and recovery consideration at an early stage should be given to mutual aid support from other LA's and Voluntary Agencies.
Consider the Initial, Medium and Long Term Recovery Process	Recovery is led by the local authorities but it is still a multi-agency process.
	More details on recovery are in <u>Section 9</u> .

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11J WOKINGHAM BOROUGH COUNCIL

Role

Wokingham Borough Councils (with assistance from neighbouring local authorities if necessary) would be responsible, in conjunction with West Berkshire District Council, for providing assistance to the Emergency Services in the event of an incident at AWE Burghfield with actual or potential off-site consequences.

Alerting Procedure

In the event of an offsite incident at AWE Burghfield, Wokingham Borough Council would be informed by West Berkshire District Council.

Actions

The Council Resilience Team or Duty Emergency Manager will:

- (c) Record full details of the incident, immediately open a log and call back to West Berkshire District Council in order to verify the message
- (d) Activate as necessary the Council emergency response in accordance with the MIP.

Wokingham Borough Council will provide for an incident at AWE Burghfield:

Location	Whom	Roles
ECC	As per MIP	As per MIP
TVP SCC - SCG	Local Authority Liaison Officer (LALO) to SCC to be the SCG representative.	To inform the EOC Controller of requests made to the local authorities for support or action
	The SCG rep will normally be the SCG rep for West Berkshire District Council	To provide local authority support and information to the Emergency Services.
		To authorise expenditure on behalf of the LA as necessary
TVP SCC	Senior Officer	To support the LALO This is a competent officer who understands emergencies, in particular AWE and the role of the LA. They shall be able to stand in for the LALO as necessary. Their main role is to support and to link in with the LALO at TCG Location and the WBC EOC.
TVP SCC – Media Team	PR Officer	To work with the SCG media team
TVP SCC – RCG	Senior Officer	Rep on RCG
TCG	Duty Officer/HoS/Third Tier Manager	LALO at the TCG

Location	Whom	Roles
		To inform the WBC EOC of requests made to the local authorities for support or action
		To provide local authority support and information to the Emergency Services.
Emergency Media Briefing Centre (MBC)	PR Officer	LALO at MBC.

Initial Wokingham Borough Council considerations include:

Staff Deployment:	Deploy staff to the relevant command locations as necessary.
Open EOC: In accordance with the WBC Major Incident Plan	Establish the Emergency Operations Centre at the REDACTED ON BASIS OF SECTION 38and open all necessary communication links, including links to West Berkshire District Council, Reading Borough Council, Hampshire County Council and Basingstoke and Deane Borough Council, as appropriate.
Assist Establishment of Media Briefing Centre:	
Place Services on Stand-by: including:	EHOs with respect to water pollution to drinking supplies, contaminated land, food supply chain etc.
	Trading Standards with respect to animal health and welfare matters
	Countryside Rangers and Rights of ways staff with respect to closure of footpaths etc.
	LA Highways officers with respect to road closures and diversions
	Rest Centre Staff
	Voluntary agencies to assist with rest centres.
	Adult Social Care for vulnerable adults
	Education Services in relation to vulnerable children and schools
Consider the need for one or more Rest Centres	On basis of need and guidance from SCG rep open suitable rest centres
Consider the support required for a Radiation Monitoring Unit	The provision of a Radiation Monitoring Unit (RMU) may be requested at the SCG level, perhaps as a result of a number of worried well

	presenting themselves at hospitals or as a result of genuine concern regarding contaminants
	The provision of the RMU is the responsibility of health agencies however it is likely that there will be a request for a suitable location/building to be used. As a result a number of locations have been identified and considered suitable.
	Section 7.2 details the locations and the key information relating to this plan and the radiation monitoring unit plan.
Consider the need for Mutual Aid.	Due to the nature of the incident, the potential scale and as a result press and Government interest plus the potential for a long term response and recovery consideration at an early stage should be given to mutual aid support from other LA's and Voluntary Agencies.
Consider the Initial, Medium and Long Term Recovery Process	Recovery is led by the local authorities but it is still a multi-agency process.
	More details on recovery are in <u>Section 9.</u>

11K BASINGSTOKE AND DEANE BOROUGH COUNCIL

Role

Basingstoke & Deane Borough Council (BDBC) (with assistance from neighbouring local authorities if necessary) would be responsible, in conjunction with West Berkshire District Council, for providing assistance to the Emergency Services in the event of an incident at AWE Aldermaston with actual or potential off-site consequences.

Alerting Procedure

In the event of an offsite incident at AWE Aldermaston, BDBC would be informed by West Berkshire District Council, the Emergency Services or the HCC Duty Officer in accordance with the procedure in the Emergency Plan.

Actions

The local authority's Duty Emergency Manager will:

- (a) Record full details of the incident, immediately open a log and call back to West Berkshire District Council in order to verify the message.
- (b) Activate as necessary BDBC emergency response in accordance with the Borough Emergency Plan.

In the event of an incident at AWE Aldermaston Basingstoke & Deane BC will consider deploying officers to the following locations:

Location	Whom	Roles
ECC	As per MIP	AS per MIP
TVP SCC - SCG	Local Authority Liaison Officer (LALO) to SCC to be the SCG representative.	To inform the ECC Controller of requests made to the local authorities for support or action
	The SCG rep will normally be the SCG rep for West Berkshire District Council but when an	To provide local authority support and information to the Emergency Services.
	incident at AWE is affecting communities in BDBC area then a rep will be sent to the SCG. Liaison between HCC and BDBC will take place to establish which authority will deploy personnel to the locations below to avoid over-representation	To authorise expenditure on behalf of the LA as necessary
TVP SCC	Senior Officer	To support the LALO This is a competent officer who understands emergencies, in particular AWE and the role of the LA. They shall be able to stand in for the LALO as necessary. Their main role is to support and to link in with the LALO at TCG Location and the BDBC ECC.

Location	Whom	Roles
TVPSCC – Media Team	PR Officer	To work with the SCG media team
TVP SCC – RCG	Snr Officer	Rep on RCG
TCG	DEM/HoS/Third Tier Manager	LALO at the TCG
		To inform the BDBC ECC of requests made to the local authorities for support or action
		To provide local authority support and information to the Emergency Services.
Emergency Media Briefing Centre (MBC)	PR Officer	LALO at MBC

Initial Basingstoke & Deane BC considerations include:

Staff Deployment:	Deploy staff to the relevant command locations as necessary
Open ECC: In accordance with the WBC Major Incident Plan	Establish the Emergency Operations Centre and open all necessary communication links, including links to Basingstoke and Deane Borough Council, Reading/Wokingham and West Berkshire District Councils as appropriate.
Assist Establishment of Media Briefing Centre:	
Place Services on Stand-by: including:	EHOs with respect to water pollution to drinking supplies, contaminated land, food supply chain etc.
Consider the support required for a Radiation Monitoring Unit	The provision of the RMU is the responsibility of health agencies however it is likely that there will be a request for a suitable location/building to be used. As a result a number of locations have been identified and considered suitable.
	Section 7.2 details the locations and the key information relating to this plan and the radiation monitoring unit plan.
Consider the need for Mutual Aid.	Due to the nature of the incident, the potential scale and as a result press and Government interest plus the potential for a long term response and recovery consideration at an early stage should be given to mutual aid support from other LA's and Voluntary Agencies.
Consider the Initial, Medium and Long	Recovery is led by the Local Authorities but it is still a Multiagency process.
Term Recovery Process	More details on recovery are in <u>Section 9</u> .

11L HAMPSHIRE COUNTY COUNCIL (HCC)

Role

Hampshire County Council (with assistance from neighbouring local authorities if necessary) would be responsible, in conjunction with West Berkshire District Council, for providing assistance to the Emergency Services in the event of an incident at AWE Aldermaston with actual or potential off-site consequences.

Alerting Procedure

In the event of an offsite incident at AWE Aldermaston Hampshire County Council may be informed by West Berkshire District Council, the Emergency Services or BDBC, in accordance with the procedure in the County Emergency Plan.

Hampshire County Council will notify Basingstoke and Deane Borough Council.

Actions

The HCC Emergency Planning & Resilience Team or Duty Emergency Planning Officer will:

- (a) Record full details of the incident, immediately open a log
- (b) Activate as necessary the Council emergency response

(c) Provide support and assistance to Basingstoke and Deane BC as required Provide for an incident at AWE Aldermaston including:

Location	Whom	Roles
ECC activated	As per MIP	AS per MIP
TVP SCC - SCG	Local Authority Liaison Officer (LALO) to SCC to be the SCG representative. This	To inform the HCC & BDBC ECC of requests made to the local authorities for support or action
	person is normally a Director or other senior officer as nominated by the Chief Executive	To provide local authority support and information to the Emergency Services.
		To authorise expenditure on behalf of the LA as necessary
TVP SCC	Senior Officer	To support the LALO. This is a competent officer who understands emergencies, in particular AWE and the role of the LA. They shall be able to stand in for the LALO as necessary. Their main role is to support and to link in with the LALO at TCG Location and HCC ECC.
TVPSCC – Media Team	Corporate Communications Officer to	To work with the SCG media team.

Location	Whom	Roles
	liaise with HCC on all public information issues.	
TVPSCC - STAC	Public Health Consultant	To attend the STAC
TVP SCC – RCG	Snr Officer	
TCG	DEM/HoS/Third Tier	LALO at the TCG
	Manager	To inform the HCC ECC Controller of requests made to the local authorities for support or action
		To provide local authority support and information to the Emergency Services.
Emergency Media Briefing Centre (MBC)	Corporate Communications Officer	LALO at MBC.
Other LALO Locations		
West Berkshire ECC	LALO	To inform the HCC ECC of requests made to the local authorities for support or action
		To ensure cross border consistency.

Initial HCC considerations include:

Staff Deployment	Deploy staff to the relevant command locations as necessary
Open ECC: In accordance with the HCC Major Incident Plan	Establish the Emergency Operations Centre and open all necessary communication links, including links to WBDC, BDBC, RBC and WBC as appropriate.
Road Closures	Initiate relevant Road Closures, as indicated in AWE Transport Plan in conjunction with the police in Thames Valley and Hampshire. These road closures may move closer or further out from the incident as necessary.
Assist Establishment of Media Briefing Centre	
Place Services on Stand-by: including	Trading Standards with respect to animal health and welfare matters.
	LA Highways officers with respect to road closures and diversions.

	Countryside Rangers and Rights of ways staff with respect to closure of footpaths etc.
	Rest Centre Staff
	Voluntary agencies to assist with rest centres.
	Adult Social Care for vulnerable adults
	Education Services in relation to vulnerable children and schools.
Consider the need for one or more Rest Centres	On basis of need and guidance from SCG rep open suitable rest centres.
Consider the support required for a Radiation Monitoring Unit	The provision of a Radiation Monitoring Unit (RMU) may be requested at the SCG level, perhaps as a result of a number of worried well presenting themselves at hospitals or as a result of genuine concern regarding contaminants.
	The provision of the RMU is the responsibility of health agencies however it is likely that there will be a request for a suitable location/building to be used. As a result a number of locations have been identified and considered suitable.
	Section 7.2 details the locations and the key information relating to this plan and the radiation monitoring unit plan.
Consider the need for Mutual Aid	Due to the nature of the incident, the potential scale and as a result press and Government interest plus the potential for a long term response and recovery consideration at an early stage should be given to mutual aid support from other LA's and Voluntary Agencies.
Consider the Initial, Medium and Long Term Recovery Process	Recovery is led by the Local Authorities but it is still a Multi-agency process.
	More details on recovery are in <u>Section 9</u> .

11M Office for Nuclear Regulation (ONR)

Role

To provide advice to Central Government, the PHE CRCE, and the Government Technical Advisor at the SCG.

Alerting Procedure

ONR will be alerted via AWE Plc.

Actions

In order to fulfil its role and function following confirmation that the site has been involved in an off-site emergency then the ONRs approved emergency plan will be activated this will include the ONR initiating the following actions:



REDACTED ON BASIS OF

- (b) Attending the EOCC (A) at AWE (A)
- (c) Attend Strategic Coordinating Centre
- (d) Monitoring events on-site and the actions taken to restore the site to a safe condition

11N MHCLG RESILIENCE & EMERGENCY DIVISION (RED) Role

The role of MHCLG RED is to:

- (a) Provide accurate and timely information on the incident and response to central government departments and COBR if activated
- (b) Provide a single point of contact to central government for local responders
- (c) Represent the interests of central government departments to local responders
- (d) Provide appropriate information, advice and support as required by local responders or central government departments
- (e) Provide a point of contact for neighbouring areas
- (f) Arrange visits to affected areas by Ministers and other government officials.

Alerting Procedure

RED will be formally alerted by TVP and West Berkshire District Council that an Off-Site Emergency has been declared at an AWE site and that the "Off-Site Plan" is being implemented.

Actions

Once an off-site incident has been confirmed, RED will activate its own Emergency Response Plan. The Regional Resilience Team (RRT) will always lead the RED response, but it may be necessary to call upon staff from other teams to support the response. RED will send a Government Liaison Officer to the Strategic Coordinating Group (SCG) to support the MOD Coodinating Authority (MCA) and Government Liaison Team (GLT). Their main duties are:

- 1. In the Emergency Phase:
 - a) To support the MCA and GLT in the delivery of their duties.
 - b) To assist in the co-ordination and provision of information on local consequence management to Central Government, ensuring MHCLG and Cabinet Office are fully briefed.
 - c) To assist in recovery planning from the outset of preparation; this might be expected to start in the emergency phase. For this, the MHCLG Representative will attend meetings of the Recovery Co-ordinating Group in a supporting and continuity role with other representatives of the MCA/GLT.
 - d) Where necessary, MHCLG will activate an operations centre to facilitate national co-ordination and assurance for situation reporting on national consequence management; support MHCLG staff in discharging their role; engage other necessary bodies; and communicate Top Line Briefs to Local Resilience Forums.
 - e) Where local responders are overwhelmed, or cross boundary or border coordination is necessary, the MHCLG Representative will facilitate preparation for and implementation of a response.
- 2. In the Recovery Phase:

a) To support the MCA/GLT and ensure the handover of the GLT function to recovery at an appropriate stage as agreed with MOD.

b) MHCLG RED will undertake the transition from response to recovery by ensuring an effective handover from the MHCLG RED Government Liaison Officers (GLOs) to LGD Officers (GLOs) to LGD Officials taking up responsibility for support local responders and the Recovery Coordinating Group

110 THE DEPARTMENT FOR BUSINESS, ENERGY AND INDUSTRIAL STRATEGY (BEIS)

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

BEIS

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

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

- Act as the Lead Government Department (LGD) for a civil nuclear emergency in England, Scotland or Wales.
- Activate its Emergency Operations Centre (EOC) in London.
- Provide accurate, timely briefing and situational awareness for UK Government Ministers and manage UK parliamentary interest.
- · Coordinate national public messaging.
- Mange the Radiological Response Emergency Management System (RREMS)¹ and monitor the delivery of the Joint Agency Modelling (JAM)² process and products.
- Send BEIS personnel to the Strategic Co-ordination Centre (England and Wales)
 as part of the MHCLG led Government Liaison Team (GLT) to provide a
 communications link between central government and the local response,
 including requests for national support. The GLT, along with the MOD Joint
 Regional Liaison Officer if military assistance is required, will act as an escalation
 route for additional assistance needed to support the local response.
- Liaise with international organisations (International Atomic Energy Agency, the European Commission and countries with bilateral arrangements) on notification, information sharing and any offers of aid.
- Coordinate the deployment of national-level assets.

¹ When this system goes live

² Planned to be operationally live on 1 September

11P OTHER GOVERNMENT DEPARTMENTS AND AGENCIES

Overview

This Annex should be read in conjunction with Annex N referring to MHCLG RED. There are a number of Government Departments other than the MOD that would be involved in the response to a nuclear emergency at AWE. The Departments most likely to be involved include:

Cabinet Office

Home Office

Department of Health and Social Care

Department for Transport

Department for Education

Department for Business, Emergency and Industrial Strategy

Department for Work and Pensions

Ministry of Housing, Communities and Local Government

Department for Environment, Food & Rural Affairs

11Q MOD including MOD Coordinating Authority (MCA)

The Ministry of Defence (MOD) owns the Atomic Weapon Establishment (AWE) sites and facilities at Aldermaston & Burghfield. The day-to-day management operations and maintenance of Britain's nuclear stockpile are the responsibility of AWE Management Limited's wholly owned subsidiary, AWE plc. AWE work under contract and in close collaboration with the MOD's Defence Nuclear Organisation (DNO). In addition to its statutory and operational responsibilities, MOD is appointed as the Lead Government Department (LGD) in the event of Defence nuclear incident or emergency.

The MOD maintains a Defence Nuclear Emergency Organisation (DNEO) to respond to an incident or emergency, involving Defence nuclear assets. The MOD's Joint Service Publication (JSP 471) – Defence Nuclear Emergency Response (available on the Gov.uk website sets MOD policy and context for planning and response requirements in the event of nuclear incidents and emergencies arising from Defence Nuclear Enterprise activities and sites.

In the event of an emergency with potential off-site consequences at AWE Aldermaston or Burghfield, the DNO will arrange for a MOD Senior Civil Servant, or suitably delegated person known as the MOD Coordinating Authority (MCA) to go to the Strategic Co-ordinating Centre (SCC) at the Strategic Coordinating Group (SCG). The MCA will be supported by a team of MOD personnel. REDACTED ON BASIS OF SECTION 38

The MCA is the appointed Nuclear Suitably Qualified and Experienced Personnel (NSQEP) Executive Director of the MOD's operational response in the incident area.

In the event of a nuclear Emergency, the MCA is responsible for:

- (a) Providing authoritative and timely advice concerning the progress or development of the emergency and the potential implications, including mitigation, of operations to make safe and recover the asset.
- (b) Providing the Department's LGD input to the SCG, liaising with the Joint Military Commander (JMC) as required;
- (c) Liaising with MOD HQ Defence Nuclear Emergency Organisation (HQ DNEO), London, to ensure they are kept informed on the status of the emergency and the operational response.
- (d) Acting on strategic direction from MOD HQ DNEO and seek any additional Military Force Elements (FE) required through the MOD Security, Policy and Operations Directorate (SPO), through the MOD Joint Regional Liaison Officer (JRLO), Regional Point of Command (JRLO/RPoC Brigade Commander) and the MOD's HQ Standing Joint Commander (UK (SJC UK).

Alerting Procedure

The AWE Duty Site Manager or Emergency Manager are responsible for alerting MOD in the event of a Defence nuclear incident or emergency at AWE Aldermaston or Burghfield. They will contact the MOD First Point of Contact (FPOC), who will alert the MOD Co-ordinating Authority and Chief of Defence Staff Duty Officer (CDSDO).

11R ENVIRONMENT AGENCY

Role

The Environment Agency (EA) has a broad role to protect and enhance the environment in England. In the case of an emergency at a nuclear site, these responsibilities comprise some that are statutory, where there may be a breach of a law which the EA is responsible for enforcing, and others that are operational, where the EA effectively acts on behalf of or in support of DEFRA in providing a response and advice to multi-agency partners.

Alerting Procedure

EA will be alerted by RBFRS and AWE via the Radiation Incident Hotline number. The EA Radiation Duty Officer (RDO) will then be informed for immediate assessment and response.

Actions

The EA's roles and responsibilities, in the event of an emergency at a nuclear site, include the following:

- (a) Ensure health, safety and wellbeing of Environment Agency staff who may be involved
- (b) Provide advice to internal and external colleagues on the impact of the incident on:
 - i. water in the environment;
 - ii. radioactive and conventional waste:
 - iii. the natural and built environment;
- (c) Provide advice to multi-agency partners on the protective and remedial measures which can be taken to reduce the impact on the environment
- (d) Provide Environment Agency representatives with specialist knowledge of radioactive substances at relevant multi-agency centres, such as the Strategic Coordination Centre (SCC), DEFRA Emergency Operations Centre (EOC), BEIS EOC or MOD HQ Defence Nuclear Emergency Organisation (HQ DNEO);
- (e) Activate internal incident management structures to support the response, such as the Radiation Assessment Cell (RAC), Area Incident Room (AIR), National Incident Room (NIR) and Strategic Support Team (SST)
- (f) Advise DEFRA on technical and regulatory aspects of the response and recovery;
- (g) Provide information to the public and the media, in consultation with the Lead Government Department and the SCG associated with the affected site;
- (h) Manage flows of regulated waters if appropriate, to minimise impact;
- (i) Check for breach of site operator's environmental permit, where relevant;
- (j) Pursue relevant regulatory investigations in accordance with the Environment Agency's statutory duties;

(k) Arrange for contractors to carry out environmental monitoring and sampling as part of the multi-agency monitoring strategy

The Agency's broader responsibilities, including fisheries, conservation, water resources, waste regulation and water quality, could come into play at some stage during the early response or during the short to long-term remediation. More extensive statutory powers could be involved if an incident also involved significant chemical contamination.

The EA does not have a specific statutory duty to monitor controlled waters for radioactive contamination. But in the event of an environmental incident involving a release of radioactive substances to controlled waters, the EA would arrange sampling and radiochemical analysis with a view to protecting the environment and advising downstream users and abstractors.

During the Recovery Phase, the Environment Agency will specifically:

- a) Ensure health, safety and wellbeing of Environment Agency staff who may be involved
- b) Provide advice to internal and external colleagues on the impact of the incident on:
 - water in the environment
 - ii. radioactive and conventional waste
 - iii. the natural and built environment
- c) Provide advice to multi-agency partners on the protective and remedial measures which can be taken to reduce the impact on the environment
- d) Provide Environment Agency representatives with specialist knowledge of radioactive substances at relevant multi-agency centres, such as the Strategic Coordination Centre (SCC), DEFRA Emergency Operations Centre (EOC), BEIS EOC or MOD HQ Defence Nuclear Emergency Organisation (HQ DNEO)
- e) Activate internal incident management structures to support the response, such as the Radiation Assessment Cell (RAC), Area Incident Room (AIR), National Incident Room (NIR) and Strategic Support Team (SST)
- f) Advise DEFRA on technical and regulatory aspects of the response and recovery
- g) Provide information to the public and the media, in consultation with the Lead Government Department and the SCG associated with the affected site
- h) Manage flows of regulated waters if appropriate, to minimise impact1
- i) Check for breach of site operator's environmental permit, where relevant
- j) Pursue relevant regulatory investigations in accordance with the Environment Agency's statutory duties.

11S FOOD STANDARDS AGENCY

Roles

The Food Standards Agency (FSA) is responsible for ensuring food and animal feed safety in the event of a radiation emergency or chemical incident and does this through providing precautionary food safety advice and by implementing food restriction orders if necessary. This advice may cover different geographical areas and different time periods to other countermeasures

Specific responsibilities are:

- (a) Food Standards Agency HQ, London to provide point of contact with the SCG
- (b) To determine the level of any contamination of the food chain. Thereafter, as necessary, take legal measures to prevent unacceptably contaminated food entering the food chain by the implementation of emergency restriction orders under the Food and Environment Protection Act 1985. Such orders are commonly referred to as FEPA Orders and restrict the supply, movement or sale of produce from an affected area
- (c) To take action to ensure that food contaminated to unacceptable levels does not enter the food or feed chain
- (d) To provide advice and information to the public
- (e) To ensure, in conjunction with the Environment Agency, the safe disposal of contaminated food
- (f) To ensure that subsequent remediation takes account of food safety issues.
- (g) To assist with the enforcement of emergency restriction orders
- (h) To disseminate food safety advice, as requested

The FSA Incidents Team coordinates the Agency's response to all incidents with potential to affect the food or feed chain. This includes environmental contamination incidents (such as fires, toxic discharges, waterways contamination and accidents at industrial sites) and food contamination incidents (physical, chemical, microbiological or malicious tampering) where the food is in the distribution chain or available for sale.

Alerting System

The FSA Incidents Team will be alerted by West Berkshire District Council. The FSA Incidents Team if applicable, will invoke the FSA Non-Routine Incident Management Plan.

During such an emergency, in the first instance the FSA will always attend relevant meetings remotely via video/teleconference. If deemed necessary and safe to do so staff would be deployed to the following locations.

REDACTED ON BASIS OF SECTION 38

Location Food Standards Agency		Food Standards Agency
		The Incident Management Co-Ordination Group will set the operational response to the incident this will include

Location	Food Standards Agency
	formulating risk assessments, issuing food/feed safety advice and statutory food orders as appropriate
	Radiological expert to inform Strategic Commander on food/feed safety issues and Agency actions via STAC.
Media Briefing Centre	Spokesperson to issue advice and information on FSA's response
	Representative to liaise with other Government Departments

11T RADIOACTIVE INCIDENT MONITORING NETWORK

A key component of the Government's response arrangements to the occurrence of an overseas nuclear accident with consequences for the UK is a national Radioactive Incident Monitoring Network and information management system (RIMNET).

The Met Office is responsible for maintaining, on behalf of Business, Energy and Industrial Strategy (BEIS) the operational capability of the RIMNET system. RIMNET facilities including:

- (a) Maintaining the operational capability of the RIMNET system
- (b) Ensuring the RIMNET facilities in emergency centres are properly maintained;
- (c) Providing briefing and training on the use of the system
- (d) Planning exercises to test the UK response systems, facilities and procedures
- (e) RIMNET is a UK-wide emergency management system, which was first established in 1988 following a review of the UK response to the Chernobyl accident. It consists of:
 - i. A network of 96 fixed gamma dose rate monitoring stations across the UK
 - ii.

 REDACTED ON BASIS OF SECTION 23 & 24
 - iii. A central database accessible by all Government Departments, Agencies and Devolved Administrations
 - iv. A Geographic Information System
 - v. Statistical and analysis tools
 - vi. A robust network of links to other emergency response systems operated by Government Departments, the UK nuclear industry and international organisations
 - vii. Document management and desktop publishing facilities; and
 - viii. Diverse communications systems.

11U MET OFFICE

Role

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

The 24 hour EMARC (Environment Monitoring and Response Centre) at Exeter will provide weather forecasts following the release of radioactive materials into the environment. On notification of an accident the EMARC staff will run the NAME (Numerical Atmospheric Modelling Environment) simulation having input all given information about the release. Output from the Model is in a graphical map based form, as an animation to show plume behaviour.

There is a 24 hour emergency contact point for the EMARC desk at Exeter. In addition, the Met Office Advisor (Civil Contingencies) (MOACC) for SE England can provide additional help with interpretation of the data provided by Exeter. The MOACC can also attend Strategic Coordinating Centre meetings either in person or remotely. Contact details for the MOACC: via Met Office Advisor – see AWE MA Activation Plan

Alerting Procedure

The Met Office will normally be activated by TVP and Royal Berkshire Fire and Rescue Service as required.

Actions

Provide advice, if required, through the MOACC or Met Office Exeter on the plume direction during any release and post a release in order to support response requirements.

11V DEFRA CBRN EMERGENCIES TEAM

Role

The CBRN Emergencies Team, is part of the Department for Environment, Food and Rural Affairs (DEFRA), and can provide advice and guidance on decontamination processes and providers to support those responsible for decontamination and/or remediation following an incident which can involve Chemical, Biological, Radioactive or Nuclear materials (CBRN) and from major accidental releases of hazardous materials (HAZMAT).

The CBRN Emergencies Team services are available on request (can be requested by Central Government, Emergency Services or Responsible Authorities who may be specified by statute or, in the case of a private body or company, may be the owner/agent of a building, location or asset).

Specifically the CBRN Emergencies Team can provide advice on:

- (a) Remediation options (including whether or not to decontaminate and what alternative options are available)
- (b) Capability, capacity and availability of specialist CBRN decontamination contractors in terms of decontamination of buildings, infrastructure and open environment, and transport. They may, if invited to do so, be able to offer other resources to assist in the site clearance process e.g. monitoring and sampling
- (c) Support (and facilitate where necessary) the contractual relationship between the Responsible Authority (or Agent) and specialist CBRN decontamination contractor(s) through a Framework where agreed terms, conditions and pricing schedules are already in place.

Alerting Procedure

Via DEFRA as detailed in figure below.

Actions

The actions of the CBRN Emergencies Team include:

- (a) Attend SCG with at least one representative in the STAC and the RCG
- (b) Advise the STAC and RCG of decontamination options, issues and costs
- (c) Liaise with private companies to prepare for a possible deployment for decontamination
- (d) Provide options to the RCG for clear up/decontamination
- (e) Support the decontamination process
- (f) Work with the specialist companies on specific aspects of decontamination as they might impact on their operations
- (g) Work with the RCG to develop strategies

In order for the CBRN Emergencies Team to provide the advice etc. then the following information would be requested:

- (a) The specifics and extent of contamination (What, where, how much, fixed or mobile?)
- (b) Site plans (both street and buildings with services where possible) and rendezvous/strategic holding areas for Framework Suppliers to bring kit/staff forward to
- (c) Details of who is responsible for managing the remediation process will they accept responsibility for the cost of a specialist CBRN decontamination contractor if not, who will?
- (d) Details as to whether the contamination been contained to prevent further spread?
- (e) Have forensic investigations been completed by the police and specialist teams (CBRN Emergencies Team specialist suppliers can assist in this process if requested) and the site handed over for remediation?

Details of the Recovery Coordination Group (RCG) and whether a decision to decontaminate has been taken? – Prioritisation of work and resources may be required. (CBRN Emergencies Team Science Team may assist with technical remediation options and can feed information into the remediation / decontamination strategy / Science and Technical Advice Cell (STAC) / Strategic Coordination Group)

In order that the decontamination process can continue then the following would be considered in the Decontamination Process:

- (a) Specific sampling and monitoring would be carried out to inform the decontamination strategy
- (b) RCG and STAC agree decontamination and waste strategy (includes agreed end point, planning to prioritise workloads, cost estimation, decisions on decontamination technology, disposal routes and monitoring processes)
- (c) Once engaged, the specialist Defra CBRN Emergencies Team contractor(s) will, in accordance with decontamination strategy, provide a plan which will include method statements and risk assessments
- (d) Decontamination carried out (various methods may apply)
- (e) Post decontamination (clearance) sampling carried out
- (f) Final clearance given by RCG / Clearance Committee
- (g) Completion report provided.

11W UTILITIES

During any major incident the utilities have a role to play in order to support the emergency response make sure the situation does not get worse for the community in the long term. The following details the main responsibilities of the utilities.

WATER COMPANIES

Role

Thames Water and South East Water are the main water utility companies covering both areas around the sites. Their main responsibilities are to ensure that the public water supply meets the legal requirements and as a result is fit for human consumption.

Alerting Procedure

The Environment Agency will alert the Water Company (ies) in the affected area. The Water Companies will then alert through their own internal systems.

Actions REDACTED ON BASIS OF SECTION 38

The main responsibilities of the water company would be to:

- a. Assess the risk of contamination of the public water supply
- b. Sample surface and, in certain cases, underground water sources used for public supply in an area extending up to or beyond 40km from the site. The samples would be sent for analysis for radioactive materials. This would be in conjunction with the EA and PHE CRCE
- c. Consider the results obtained and any advice received from the Environment Agency in determining appropriate action
- d. Provide advice to customers on public water supplies in accordance with the Public Health guidelines
- e. Support the delivery of alternative drinking water to the affected areas as necessary
- f. Attend the SCG, STAC and/or the RCG at SCC as necessary
- g. Consider water water impacts and provide guidance to customers if alternative actions are required.

COMMUNICATION COMPANIES

Role

The main communications provider, British Telecom, operates a monitoring system for 999 calls and may be alerted to an AWE Off-Site Radiation Emergency in its early stages.

Other communication providers will also monitor their networks to ensure communications are maintained.

Alerting Procedure

Any alert to the communications company would normally be via the SCG or via the responding agencies directly.

Actions

The main actions of all the communications companies are to monitor their networks to ensure communications is maintained

- They may be invited to attend the SCG if there is a particular issue to be resolved.
- b) Mobile Communications network operators may be requested to activate the Mobile Telephone Preferential Access Service (MTPAS)
- c) BT on notification of an incident will specifically:
 - i. Maintain a log of all incoming and outgoing messages and a diary of events, times, dates etc.
 - ii. Establish their Emergency Control Group and nominate a BT incident control manager.
 - iii. Establish their Emergency Communications Centre and appropriate local emergency Control Point.

ELECTRICITY COMPANIES

Role

The role and actions of the electricity companies are to:

- (a) To maintain /restore the supply of electricity
- (b) To isolate and make safe electrical apparatus as necessary.
- (c) Liaison with local authorities and other organisations as appropriate
- (d) To manage and operate electricity distribution to the conditions prevailing throughout the emergency
- (e) To respond to requests to connect and disconnect
- (f) To attend SCG as requested.

Alerting Procedure

Any alert to the electricity companies would normally be via the SCG or via the responding agencies directly.

GAS COMPANIES

Role

The role and actions of the gas companies are to:

(a) To maintain as necessary the gas supply

- (b) To connect or disconnect gas supplies as requested
- (c) To attend SCG as requested.
- (d) Alerting Procedure
- (e) Any alert to the gas companies would normally be via the SCG or via the responding agencies directly.

Alerting Procedure

Any alert to the gas companies would normally be via the SCG or via the responding agencies directly.

11X NETWORK RAIL

Role

Network Rail's role is to control the rail network in an emergency. As a result within the DEPZs of the AWE sites there may be a requirement for Network Rail to be involved should the wind direction etc. result in the plume affecting or likely to affect the main London-Newbury or Reading-Basingstoke rail lines.

Alerting Procedure

Depending on the sectors affected and the distances involved of potential contamination then Network Rail will be notified by the British Transport Police or West Berkshire District Council.

Actions

Network Rail will:

- (a) Ensure that the users of the lines affected are informed of the incident, including Train Operating Companies (GWR, South West Trains etc.) and Freight Operating Companies.
- (b) Inform their National Operations Centre, other affected Routes, and controlling signal boxes for the area.
- (c) Work with other agencies at the most appropriate command level to ensure the most appropriate action is taken to secure the safety of all staff, passengers, freight and trains on the affected lines.
- (d) Ensure that any affected trains are properly identified and cleaned in conjunction with advice and guidance provided by STAC and the SCG/RCG.

Follow advice from STAC and the SCG/RCG in terms of closing and re-opening lines.

11Y HIGHWAYS ENGLAND

Role

Highways England manages the strategic road network in England, comprising motorways and some A roads. This is performed by the TOS (Traffic Officer Service) and Service Provider contracted to maintain.

Highways England Traffic Officers and their Service Provider would be responsible, for providing assistance to the Emergency Services in the event of an incident at AWE Aldermaston with actual or potential off-site consequences where the need for closures on the SRN would be required.

Alerting Procedure

In the event of an offsite incident at AWE, Highways England East Regional Operations Centre (ROC) would be informed by West Berkshire District Council, the Emergency Services (Police for AWE Burghfield only) in accordance with the procedure in the Emergency Plan.

Actions

The East Duty Regional Control Centre (RCC) Manager will:

- (a) Record full details of the incident, immediately open a log and call back to West Berkshire District Council in order to verify the message.
- (b) Inform the Duty Operations Manager
- (c) Inform the South-East Emergency Planning Team
- (d) Inform Service Provider and place on standby in case any closures are to be implemented on the SRN

11Z OTHER ORGANISATIONS

Other individual organisations may be involved as and when required. It may be none or only one or two are involved. However it may be that in a significantly large incident then more organisations will be called upon to assist.

Other organisations that may be asked to assist include:

The Military - Military Aid to the Civil Authorities (MACA)

Joint Doctrine Publication (JDP) 02 (Third edition) 2017 – Operations in the UK – The Defence Contribution to Resilience (available on GOV.uk) defines the policy for operations in the UK in support of civil authorities. Following a Defence nuclear emergency, in addition to the pre-planned military support required by the MCA to deal with their tasks, the civil authorities may also require additional military aid which would be requested under MACA arrangements.

Voluntary Agencies

Would assist with Rest Centres etc. and would be coordinated by the relevant Local Authority

Road Transport organisations

To provide transport required of essential plan and machinery.

Passenger Transport Organisations

To provide transport for people in the event of any necessary temporary re-location of affected people

Other Local Authorities

To provide manpower and specialist equipment etc. under MOU agreements.

11AA SCIENTIFIC & TECHNICAL ADVICE CELL (STAC)

Role

STAC will provide timely and effective technical and health advice to the SCG in order key decisions can be made. Its remit is to:

- (a) Take advice on the scientific and health aspects of the incident from a range of experts;
- (b) Provide advice to the SCG on the health consequences of the incident including the consequences of any evacuation or sheltering polices;
- (c) Confirm with the SCG the advice to be given to the public on the health aspects of the incident;

If necessary, the STAC will:

- (a) Liaise with Department of Health and Social Care, DEFRA and other governmental bodies
- (b) Formulate advice to health professionals involved in the incident, such as hospitals, ambulance services, general practices and NHS Direct formulate advice on strategic management of the health service response to the incident.

For an AWE incident with off-site radiological consequences, a STAC should be set up automatically. In non-radiological incidents, a STAC may be requested by the Police Incident Commander but may be recommended by a senior public health professional due to the potential impact on health and the local population from an actual or evolving incident.

The composition and function of the STAC will be incident specific and tailored to local requirements and to provide the best advice to the SCG for decisions to be made.

Alerting Procedure

In the event of an off-site incident at AWE, STAC would be established by PHE SE in accordance with the procedure in the STAC Plan.

STAC Membership

The likely membership of the group for an AWE incident will include:

- (a) Public Health England
- (b) Public Health England CRCE
- (c) West Berkshire District Council Environmental Health
- (d) Berks LA Shared DPH Consultant
- (e) Other LA Environmental Health dependant on area affected.
- (f) MOD
- (g) Environment Agency
- (h) Food Standards Agency
- (i) Thames Water
- (i) AWE
- (k) ONR
- (I) Met Office
- (m) and others as deemed necessary at the time.
- (n) STAC Chair and Support

The STAC if called will be chaired by PHE as per the PHE South East STAC Plan. In order to support the STAC chair often a non STAC member is included to support the coordination. A TVP member of staff will support the STAC at the SCC

STAC Considerations re: AWE Incident

Due to the nature of the site some of the initial considerations will be:

- (a) What agents are we are dealing with? Radiation? Chemical? Both?
- (b) How much is there of it?
- (c) Where is it?
- (d) What are the likely health effects?
- (e) What is the monitoring strategy?

STAC Quick Guide to AWE Incident Considerations

In considering items in the DEPZ the following table provides some guidance:

- (a) The main types of radioactive materials used at AWE are:
 - Plutonium
 - Uranium
 - Tritium.

There are other sources of radioactivity used for safety checks and normal industrial purposes (e.g. sources for radiography). These are well controlled, pose no threat to the public and have no potential for any off-site emergency response action

See Section 2.5 & Section 2.6

(b)	A release of radioactive material off-site from either the Aldermaston or Burghfield licensed sites is unlikely to lead to a significant dose to a member of the public. A release of radioactive material would not lead to acute (deterministic) radiation effects.
(c)	Atmospheric releases may be accompanied by a visible plume of smoke. However, given the properties of the radioactive material, the association of any visible smoke plume with the deposition of radioactive material may not be accurate.
(d)	In the event of a major release of radioactive material, the dose to the general public would be minimised by the appropriate imposition of off-site protective actions, as implemented by Local Authorities and their support services. These include the issue of instructions for the public:
	 to shelter, which reduces the inhalation and irradiation doses, and to evacuate (short term relocation may be a better term), which prevents further exposure by moving the public from the affected area.
	The closer to the site boundary the greater the risk for the need for urgent evacuation particularly out to approx 150m with subsequent evacuation needed out to 600m.
	Vulnerable sites are more likely to need evacuation.
(e)	There will be no acute effects amongst the public outside the site boundary as a result of exposure to radioactive material.
(f)	Contaminants may be detectable outside the Detailed Emergency Planning Zone (DEPZ) for each site following an incident.
(g)	Key to the decisions is monitoring data and a monitoring strategy. Section 7.1

Link to other Groups

During the response phase the STAC would be in place in order to support the SCG. The STAC would also share information with SAGE (Scientific Advisory Group for Emergencies), which is the national advisory group advising the Cabinet Office Briefing Room (COBR) in an emergency. More information in relation to the procedures is found on ResilienceDirect.

The STAC would also provide advice to support the Recovery Coordinating Group (RCG).

Once the response phase had been completed and hand over from the Police to the Local Authority to lead on the recovery has been achieved it may be necessary for the STAC in full or elements of it to continue to exist in order to support the RCG. If this is the case the chair of the RCG should raise this with the chair of the STAC and agree a way forward.

It may be that elements of the STAC become part of the RCG main group or as part of a sub group as necessary.

Annexes REDACTED ON BASIS OF SECTION 38

Annex A: Communications Directory

This is stored on RD

Annex B: AWE Warning and Informing Plan

This is stored on RD

Annex C: AWE Transport Plan

This is stored on RD

Sources of Supporting Information

There are a number of sources of information which provides other background information relation the legislation and the sites including:

AWE

www.westberks.gov.uk

HSE

Office for Nuclear Regulation

National Nuclear Emergency Planning and Response Guidance

Public Health Protection in Radiation Emergencies

Glossary of Terms

This document uses the terms and acronyms described in the UK Civil Protection Lexicon issued by the Civil Contingencies Secretariat:

 $\underline{\text{https://www.gov.uk/government/publications/emergency-responder-interoperability-lexicon}}$

Acronym/ Meaning	
Term	
ALARP	As Low As Reasonably Practicable
AWE	Atomic Weapons Establishment
AWE(A)	AWE Aldermaston
AWE(B) AWE Burghfield	
BC	Borough Council
BDBC	Basingstoke & Deane Borough Council
BEIS	Department for Business, Energy and Industrial Strategy
CAA	Civil Aviation Authority
CBRN	Chemical Biological Radiation and Nuclear
CCG	Clinical Commissioning Group
CCS	Civil Contingencies Secretariat
CMC	Crisis Management Centre
COBR	Cabinet Office Briefing Room
COI	Central Office of Information
COMAH	Control of Major Accident Hazards Regulations 2015
COP	Common Operating Picture
CRIP	Commonly Recognised Information Picture
DEFRA	Department of Environment, Food and Rural Affairs
DEM	Duty Emergency Manager
DEPZ	Detailed Emergency Planning Zone – a defined area set by WBDC
	where detailed and immediate off-site emergency arrangements are
	required to protect the public from the effects of a radiation
	emergency.
DERP	Defence Environmental Restoration Program
'dose'	The amount of radiation energy imparted to the human body
DNO	Defence Nuclear Organisation
DPH	Director of Public Health
EA	Environment Agency
ECC	Emergency Control Centre
EELs	Emergency Exposure Levels
EHO	Environmental Health Officer
ERL	Emergency Reference Levels - used to plan which protective actions
	would be most suitable in particular circumstances by means of an
	upper and lower level of avertable dose
EM (A) Emergency Manager (Aldermaston)	
EM (B) Emergency Manager (Burghfield)	
EMARC	Environmental Monitoring and Response Centre
'emergency	An exposure of an employee engaged in an activity of or associated
exposure'	with the response to a radiation emergency or potential radiation
	emergency in order to bring help to endangered persons, prevent
	exposure of other persons or save a valuable installation or goods,

Acronym/	Meaning
Term	
	whereby one of the individual dose limits referred to in paragraphs 1
	and 2 of Part 1 of Schedule 3 to the 2017 Regulations could be exceeded
'omorgonov	Any person who has a defined responding role in this plan, and who
'emergency	
worker' might be exposed to radiation as a result of a potential or a radiation emergency	
EOC	Emergency Operations Centre
EOCC (A)	Emergency Operations and Control Centre (Aldermaston)
EOCC (B)	Emergency Operations and Control Centre (Burghfield)
EP	Emergency Planning
EPO	Emergency Planning Officer
FCP	Forward Control Point
FEPA	Food & Environmental Protection Act 1985
FPOC	Team First Point of Contact (MOD)
FRS	Fire and Rescue Service
FSA	Food Standards Agency
GLO	Government Liaison Officer
GLT	Government Liaison Team
HART	Hazardous Area Response Team
HCC	Hampshire County Council
HECA	Hazard Evaluation & Consequence Assessment
HMEPA	Hazardous Material Environmental Protection Advisor
HoS Head of Service	
HQ Headquarters	
HQ DNEO	Headquarters Defence Nuclear Emergency Organisation (MOD London)
IAEA	International Atomic Energy Agency
INES	International Nuclear Events Scale
IRR	Ionising Radiation Regulations 2017
JRLO	Joint Regional Liaison Officer
LA	Local Authority
LALO	Local Authority Liaison Officer
'lead local	Where more than one local authority is involved the 'lead local
authority'	authority' are the local authority in which the premises are situated
LGD	Lead Government Department
LLC	Local Liaison Committee
LO	Liaison Officer
LRF	Local Resilience Forum
MAC	Media Advisory Centre
MACA	Military Aid to the Civil Authorities
MAIC	Multi-Agency Information Cell
MBC Media Briefing Centre	
MCA MOD Coordinating Authority	
MDP Ministry of Defence Police	
MHCLG	Ministry of Housing, Communities and Local Government
MHCLG RED	MHCLG Resilience & Emergency Division
MICR	Major Incident Control Room
MIP	Major Incident Plan

Acronym/	Meaning			
Term				
MOACC	Met Office Advisor Civil Contingencies			
MOD	Ministry of Defence			
mSv	milliSieverts			
NAME	Numerical Atmospheric Modelling Environment			
NERO	Nuclear Emergency Response Organisation			
NHS	National Health Service			
ООН	Out of Hours			
OiC	Officer in Charge			
ONR	Office for Nuclear Regulation			
ONR RCIS	Office for Nuclear Regulation Redgrave Court Incident Suite			
OPZ	Outline Planning Zone - A zone beyond the DEPZ building on the existing arrangements and capabilities to provide commensurate planning for low probability events of extremely unlikely but more severe			
PACRAM	Procedures and Communications in the event of a Release of Radioactive Material			
PHE	Public Health England			
PHE CRCE	Public Health England Centre for Radiation, Chemical and Environmental Hazards			
PIC	Public Information Centre			
PIO	Press and Information Officer			
PPE	Personal Protective Equipment			
PR	Public Relations			
'protective action'	An action or actions taken in order to prevent or reduce the exposure of emergency workers, members of the public, the environment or the contamination of property from ionising radiation in the event of a radiation emergency			
PROW	Public Rights of Way			
'radiation	A non-routine situation or event arising from work with ionising			
emergency'	radiation that necessitates prompt action to mitigate the serious consequences.			
RBC	Reading Borough Council			
RBFRS	Royal Berkshire Fire & Rescue Service			
RCC	Regional Control Centre			
RCG	Recovery Coordinating Group			
	Tread very decramating droup			
RED	Resilience & Emergency Division (MHCLG)			
REL	Rear Echelon Link			
REPPIR	Radiation Emergency Preparedness and Public Information			
	Regulations 2019			
RF BDE CDR	Regional Force Brigade Commander			
RIMNET Radiological Incident Monitoring Network				
RMU	Radiation Monitoring Unit			
RPA	Radiation Protection Advisor			
RRT	Regional Resilience Team			
RVP	Rendezvous Point			
SAGE	Scientific Advisory Group for Emergencies			
J/ (UL	Colonial / Avisory Cloup for Emergencies			

Acronym/	Meaning	
Term		
SBC	Slough Borough Council	
SCAS	South Central Ambulance Service	
SCC	Strategic Coordinating Centre	
SCG	Strategic Coordinating Group	
SITREP	Situation Report	
SSA	Senior Scientific Adviser	
STAC	Scientific & Technical Advice Cell	
TVP	Thames Valley Police	
UPA	Urgent Protective Action	
WBC	Wokingham Borough Council	
WBDC	West Berkshire District Council	

Appendix 5

AWE Planning Consultation Considerations

Consideration	AVVE Flamming Consultation Considerations						
	Details						
Planning Application No	22/00244/FULEXT reviewed for PREAPP Land Rear Of The Hollies, Reading Road, Burghfield Common, Reading						
Site Location:							
Description of development:			including af	fordable housing,	parking, and lar	ndscaping. Acc	ess via Regis
	Manor R	load					
Is the proposed development within the relevant site	DEPZ						
Detailed Emergency Planning Zone (DEPZ) or area of							
Outline Planning Zone (OPZ)?							
If yes, within which sites DEPZ or area of extendibility does	AWE Bu	rghfield					
the application fall within (Aldermaston/Burghfield):							
If yes which Sector is the proposal within?	M						
Current Demographic Information within Sector the sector		Residential	Residents	Numbers of	No of Res	Commercial	Vulnerable
and 2 adjacent sectors.		Units in	In DEPZ	residential	units to UPA		(care
		DEPZ by	by sector	units out UPA			homes
		Sector					/schools)
	L	77	185	41	98	23	9
	М	2566	6158	397	953	42	3
	N	250	600	166	398	31	0
	Totals	2893	6943	604	1449	122	11
Is the proposal for:							
Residential	Yes						
What is the increase in Population Density within the	32 reside	ential dwellings	$= 32 \times 2.4 =$	increase average	e of 76.8 (77) pe	ople within the	area.
Sector (Based on the average household size to be							
2.4 persons per household and details in application		Sector M in DI					
relating to employees for business developments)	Total for	Sector M in U	PA: with incre	ease: 1030			
					<u> </u>		
				mes in sector M (
			^o Z in 2020 ar	nd is still valid – th	erefore an incre	ease of 240 res	idents to add
	to both t	otals.					
	Error and the						at a ser Conservation
	Everything out to 3160m from the centre point at AWE must be taken account of, and not judistance to the development, since this is the area where Urgent Protective Actions are re						
as per the AWE Consequence Report of 2019.			nere Orgent Pro	nective Actions	are required		
Commoroial	No No	ie Avve Conse	quence Repo	וו טו 2019.			
Commercial Mixed:	No						
		ooifia alaaad : "	ulnoroblo con	amunitu a a cara	homo/oohoo! st	•	
Are there any vulnerable developments proposed?	i ivot a sp	ecinc ciosed Vl	iinerabie con	nmunity e.g. care	nome/school et	U.	

Off-Site Plan Considerations

	Consideration	Impact on AWE Off-site Emergency Plan
1	Within DEPZ area or OPZ	DEPZ and within area requiring Urgent Protective Actions (UPA) as per Consequence Report
2	Proximity to Site Boundary	1337m
3		The proposal is at a distance which should not require immediate evacuation and therefore shelter is the recommended mitigation. With the proviso that everyone does as requested i.e. go in, stay in and tune in then no specific issues in relation to this proposal in that both should have accommodation and suitable amenities to shelter for 24-48hrs
	Impact on short term Sheltering – 24 – 48hrs	However the site is within the UPA (see AWE Consequence Report) therefore taking into account the residential units alone to the edge of the UPA alone there are 397 +100 (Pondhouse Farm) = 497 in sector M alone, totalling 704 when the adjacent too sectors are included. Therefore a total of approximately 1449 + 100 (Pondhouse Farm) + 77 (from this development) a total of 1626 people. Within that population there will be people who need support since they were not in the area at the time and those within the area who are vulnerable and may need support.
4	Impact if requirement for Medium/Long term Sheltering 48hrs+	It is not recommended for shelter beyond 48hrs as a result regardless of the usage – either current or proposed the occupants would need to be 'evacuated'. The longer people are advised to be under shelter, the greater the potential impact with residents requiring support. If they were not in at the time of the event, then support in alternative accommodation would be necessary which would have an impact on the Local Authority and responders.
5	Requirement for Immediate Evacuation & Impact –including reception and rest centre	This is unlikely although not impossible, due to the distance from the AWE B site and therefore impact on responders to provide support for those within a reception / reset centre would be increased. Those that were not home and outside the DEPZ at the time of an incident would also require support when unable to return home due to cordons, where as those within a hotel could return home.
6	Impact if requirement for subsequent	The effect on responders to support an additional 32 dwellings (average increase of 76.8 people) either through shelter or accommodation (reception and rest centres or alike) would have a bearing impact on responders in an already densely populated area, and as a result would have an impact on the off-site emergency plan.
	Evacuation–including reception and rest centre	This is based on: Some residents will move to friends and family but it is expected based on other evacuations that a. this is not a long term option and b. a significant number of the population may not have that option. Therefore the impact on rest centres and staffing would be significant. It is also a planning assumption that all will need support, a

	Consideration	Impact on AWE Off-site Emergency Plan
		worst case scenario which would mean in the order of 4 emergency rest centres of approx. 450 people. This would need in the order of 40 staff for 2 x 8hr day shifts, and 20 at each 8hr night shift. Therefore for all the rest centres a total of 160 staff per 8hr day shift and 80 for overnight which is a significant number of staff. In addition the resources to support this number of people would also need to be found.
		Should the development not go ahead the rest centre numbers could be reduced by 1 and the staffing accordingly.
		It should also be noted this does not account for the vulnerable sites and the commercial units.
		Therefore this development in an already densely populated area would place the plan at significant risk of failure.
7	Impact on Warning & Informing processes	With the proviso that all homes have a live landline then there should be no adverse issues and/or Cell Broadcasting is in place then the impact would be limited.
8	Day time or night time impact	No difference between day or night time impact.
9	Vulnerable People considerations	Any increase in population normally results in an increase in vulnerable people requiring support in their homes. This development adding 77 new people will be no different. It should not the vulnerabilities can vary from long term physical to mental health issues, to broken legs, pregnancies etc which will vary more over time.
10	Impact on plan from External issues e.g. parents wanting access to children etc.	None specifically – however those not in the area at the time and not allowed into the area will therefore require support in relation to family and friends in the area at the time. As a result another 77 people will add to this issue.
11	Access and Egress Routes	The development site is on one of the main arterial routes through Burghfield and therefore one of the main routes for emergency services too. As a result should they decide to self-evacuate then there may be an impact.
12	Recovery implications	This proposal will provide recovery issues in that they are residential and as a result should they would not be able to remain in their homes or have to move out for the clean up to take place would result in an additional 32 homes to find homes for a period of time – the timescale of which cannot be specified. These homes would only add to the impact which would cause additional strain on the recovery facilities of the Local Authority This would be an additional 32 homes on top of all those already in the area and who would potentially need support. It is clear from flooding events in the area that many had to go out of the district area to get private rental whilst their homes were recovered, in addition other emergencies such as Grenfell resulted in many living in temporary accommodation for over 2 years.

Consideration	Impact on AWE Off-site Emergency Plan
	It should also be noted that no insurance policies cover for radiation emergencies therefore the home owners options are limited.
	All of which mean that recovery would be slow and very disruptive to the residents affected which has been shown from other emergencies to result in negative health and wellbeing affects.

Summary of Considerations:

Whilst it is recognised that the likelihood of a Radiation Emergency from an AWE site is low the risk is there. There are therefore legal requirements including having an adequate Off-Site Emergency Plan. Significantly we cannot assume the contamination will stop before it gets to the proposed development, we cannot also assume the wind would take the contamination in a different direction and we also cannot assume it will be a short emergency and contamination negligible. If we could then the requirements would not be necessary.

It is noted that the site was an allocated site under the West Berkshire Councils Local Plan of 2017. However, a planning application did not come forward until after the redetermination of the DEPZ in March 2020 therefore the data associated with it, unlike the Pond House Farm site have not been included in the annual monitoring. Therefore this would be seen as an additional 32 dwellings, 77 people potentially being placed in harms way in the Urgent Protective Actions area of the Detailed Emergency Planning Zone of AWE Burghfield.

As a result having consulted again with the AWE Off-Site Planning Group the recommendation is to ADVISE AGAINST this application being approved.

