



TOWN AND COUNTRY PLANNING ACT 1990 (AS AMENDED)

APPEAL BY RISELEY HERITAGE HOLDINGS LTD

Against the refusal of Full Planning Permission

by

Basingstoke and Deane Borough Council

ON

LAND REAR OF 1-9 SHYSHACK LANE, BAUGHURST, TADLEY,
HAMPSHIRE

For

The Erection of 3 no. detached dwellings with associated
access and parking

Application Reference no. REF:22/02905/FUL
Appeal Reference no. APP/H1705/W/23/3326959

Response by Dr Keith Pearce of Katmal Limited to the Quod document:

Land at 1-9 Shyshack Lane, Baughurst, RG26 (PINS REF: APP/H1705/W/23/3326959)

Objections on behalf for AWE plc and the Ministry of Defence, September 2023, (Q230344)

Executive Summary

In the Objections document from AWE (Ref. 1) it is stated that both AWE and MOD are concerned that the cumulative addition of housing in the area could have an adverse impact on national security by constraining current and future operation of the Aldermaston site (AWE(A)). This is not a REPPIR matter.

We are asked to believe that the current off-site plan is perfectly adequate to satisfy the current needs of REPPIR and the Regulator (ONR) but that the addition of three new homes outside the Urgent Protective Action Zone somehow threatens this.

The document explains the role of AWE(A) and gives some detail about the distribution of the riskier operations across the large site. This description suggests that the Appeal Site is on the safer side.

The document discusses REPPIR-19 and makes the irrelevant and questionable claim that REPPIR-19 takes a more precautionary approach to public safety matters. In fact, REPPIR-19 did not affect AWE(A)'s DEPZ or the Appeal Site's inclusion in the DEPZ and the ONR's Inner Consultation Zone. It has had no impact on planning (either Emergency or Town and Country) for the Appeal Site.

The document repeatedly cites a Judicial Review which is largely irrelevant since it questioned the AWE Burghfield's significantly increased DEPZ and made no mention of AWE(A).

The Document then reviews planning policy and makes some questionable interpretations of existing policy.

After providing some background information, this response discusses the AWE objections in the order they are presented.

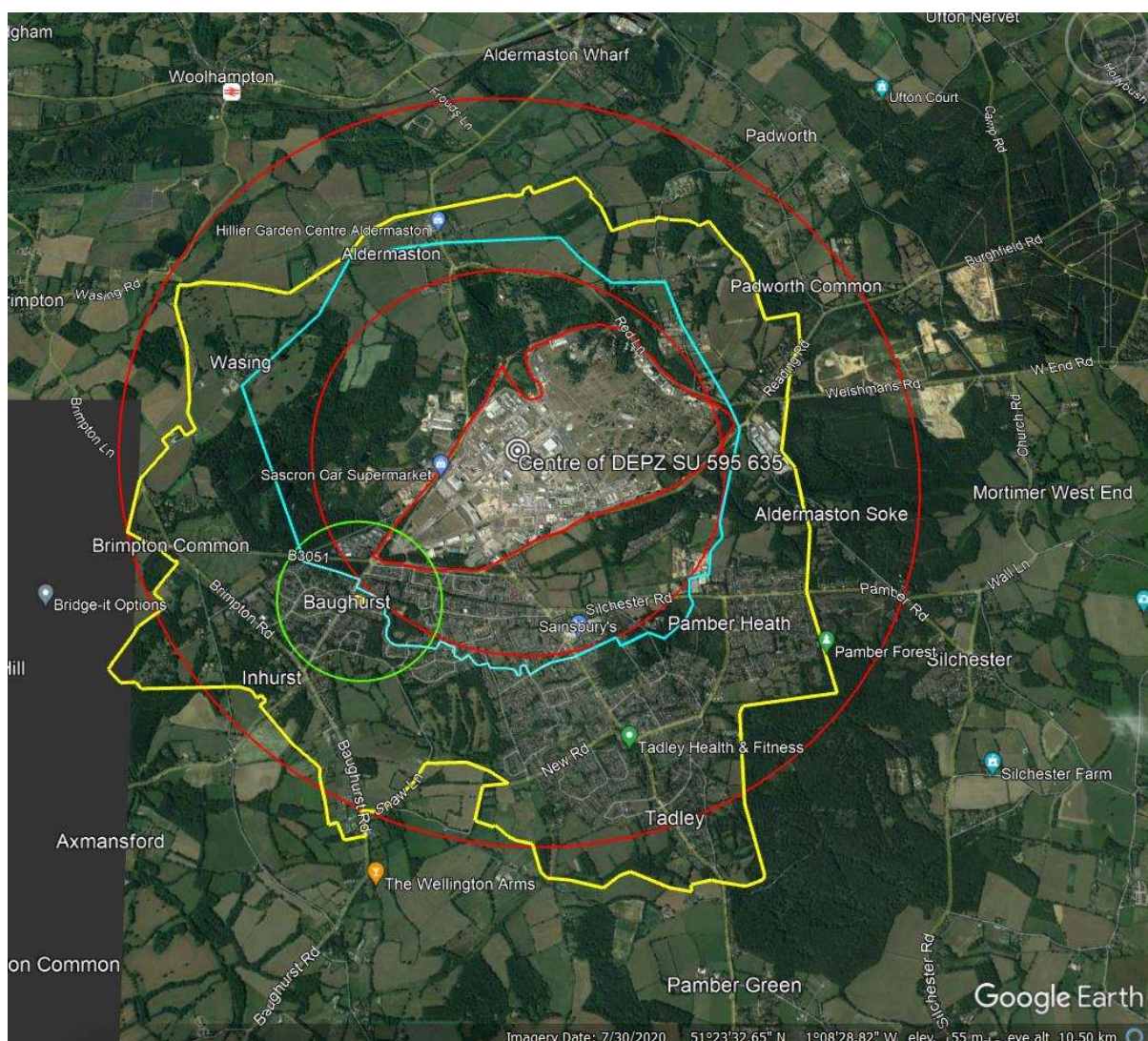
It is concluded that:

The AWE Objections to the proposed development (Ref. 1) ask us to believe that the addition of three new homes in a built-up area, beyond the distance at which the public would benefit from taking prompt protective actions in the event of a nuclear emergency at AWE(A), will somehow break the local authority's otherwise adequate off-site emergency provision and that this may lead to restrictions on the operations at AWE(A).

Neither contention is justified.

Background Information

Figure 1 - The Appeal site and areas around AWE(A)



1. The Appeal Site in Shyshack Lane is shown in Figure 1 in yellow to the Southwest of the AWE site. A 600 m green circle centred on the Appeal Site centre has been drawn to help locate the site since it is obscured by the “Baughurst” label. The AWE site fence is shown (approximately) by the red shape in the middle of the plot surrounded by the 1.54 km Urgent Protective Action Zone (UPAZ) and the 3 km circle that was once the Inner Consultation Zone, both in red. The jagged yellow shape is the current Detailed Emergency Planning Zone (DEPZ).

2. Any comments that REPPiR-19 has affected the Town and County planning environment for Shyshack Lane are misleading because;
 - REPPiR-19 makes no mention of Town and County Planning.
 - The site is and has been for a number of years in both the Detailed Emergency Planning Zone (unchanged by REPPiR-19)¹ and the Inner Consultation Zone (Changed from a 3 km circle to the DEPZ sometime in the past, maybe in line with the 2016 DEPZ change).
3. Importantly Shyshack Lane is outside the Urgent Protective Action Zone (UPAZ) which is the area in which AWE have assessed that the urgent protective action of Shelter² might benefit the public – if they can get into shelter quickly enough. This means that if the accident upon which the Consequence Assessment and Off-site Plan are based happens, the UK-HSA advice would be not to recommend shelter or any other protective actions at the Appeal site. This applies even in the worst case of the wind blowing directly towards Shyshack Lane, the weather conditions being F(2) (generally a cold winter night) which prevents vertical mixing of the plume and leads to higher downwind, plume centre doses and the using dose estimated for the age group with the highest dose³.
4. If shelter is not relevant for a location, you should not have to worry about the strains and stresses on people in that location sheltering nor on the additional overheads of supporting their medical and personal needs whilst they shelter. There is no need for protective actions or extra support (other than timely and clear information) and therefore no great weight can be put on the needs of the off-site emergency plan.
5. The local authority could choose to apply protective action advice only out to the boundary of the UPAZ⁴ at 1540 m or to use something like the light blue line for the DEPZ, solving at a stroke their resourcing issues and preventing many households and business from taking unwarranted and disruptive protective actions.

¹ From 2002 – 2016 the DEPZ was a circle of radius 3 km. In 2016 the ONR (Ref. 2) concluded that a 2 km radius circle would satisfy the REPPiR-01 requirements and added a number of peripheral communities giving a DEPZ very like the current one.

² Go indoors and shut windows and doors. During plume transit the outdoor air concentration is greater than that indoor, so the dose uptake is reduced. The standard assumption is by 40%.

³ Inhalation dose depends on various factors including breathing rate and how the radioactive material behaves in the body. These are age dependent and it is therefore usual to consider a range of different representative ages and to select the most affected.

⁴ Paragraph 234 of the REPPiR-19 ACOP states that “*Protective actions do not need to be applied equally across the detailed emergency planning zone. It may be appropriate for some protective actions to be applied closer to the premises that are not necessary at greater distances.*”

Detailed Rebuttal

6. In paragraph 1.1 (Ref. 1) the MOD state a concern that *“cumulatively additional housing could have an adverse impact upon the nation’s security by constraining both the current and future operation of the AWE site at Aldermaston (referred to as ‘AWE A’)”*. This seems to be the heart of the matter. While we might have sympathy for these concerns it should be clearly noted that if AWE(A) merits a no-build zone around it for whatever reason then it should be appropriately defined by HM Government through a due process rather than hijacking regulation with other purposes. It is very unlikely that any zone properly justified for a no-build security zone would be identical to that identified for off-site planning purposes.
7. The statement of common ground (Ref. 3) has *“the only reason for refusal relates to the effect of the proposal on the Aldermaston off-site emergency planning arrangements.”*
8. It is stated (Paragraph 1.1) that the introduction of housing in this area is directly contrary to public safety and emergency planning advice but it is relatively easy to show that members of the public living at the Appeal Site would have a very low risk of their health being damaged as the result of a nuclear accident at AWE(A)⁵ and that it is very unlikely that the few additional residents of the Appeal Site will make a great difference to the operation of the existing emergency plan. Any such public safety and emergency planning advice would seem to be unfounded.
9. AWE, the local authority and ONR have consistently stated that development will have a detrimental impact on off-site emergency planning but have failed to explain the mechanism and limits involved.
10. The description of the site given in Paragraph 2.3 is helpful. The eastern part is *“principally devoted to activity associated with conventional explosives, which includes, at the northern edge, hydrodynamics capabilities handling limited nuclear material. The northern central area is the Nuclear Storage and Processing Area (NSPA) devoted to nuclear aspects of the site activities. The residual area is principally characterised by business support activities, which includes low hazard research and development”*. The Appeal Site at Shyshack Lane is to the southwest of the site, nearer to the offices and low hazard activities.

⁵ Assume that the probability of the accident is 1×10^{-4} per year (we would hope it is considerably less than this) and assume the probability of the wind blowing in the appropriate direction is 1/10. People at the Appeal site would be exposed to radiation as the consequences of an accident less than once in 100,000 years. Now assume that 7.5 mSv dose (the defining dose for the edge of the UPAZ) is received at the Appeal Site in any weather conditions (very pessimistic) and use the IAEA probability of harm factor of 0.05 per Sv. Each exposure would then lead to a less than 1 in 2500 probability of harm.

11. Paragraph 2.6 claims that changes to the REPIR regulations between the 2001 (Ref. 4) and 2019 (Ref. 5) versions has led to a more precautionary approach to public safety matters. This is both debatable and irrelevant. Irrelevant because the revision of the REPIR regulations has not led the local authority to increase the size of the DEPZ or make significant changes to their off-site emergency plan for AWE(A) and, while it has indirectly changed the shape of the ONR consultation zone⁶, it has not increased its area. **The Appeal Site is in both the DEPZ and the ONR Inner Consultation Zone but not in the Urgent Protective Action Zone and was so before the revision of REPIR.**

12. Paragraph 2.7 discusses the determination of the Urgent Protective Action Zone, notes that the appellant's Statement of Case points out the absence of any advice to evacuate and then states that, nonetheless the off-site emergency plan "*sets out the steps to be taken immediately (i.e. the urgent actions) and then over time as an incident develops, which may well include evacuation as explained in the OSEP*". The latest version of the OSEP available (Ref. 13) does suggest that evacuation may be needed under several different circumstances and states that "*The closer to the site boundary the greater the risk for the need for urgent evacuation particularly out to approximately 150 m with subsequent evacuation needed out to 600 m*"⁷. The green circle in Figure 1 is 600 m in radius around the Appeal Site. It shows that this site is within 600 m of the very tip of the low hazard southwestern side of the site. **There is no prospect of evacuation of the Appeal Site given the risk assessments in the Consequence Report and the Off-site Emergency Plan.**

13. Paragraph 2.9 states just one of the principles to which emergency plans must have regard. The full list can be found in Schedule 7, Part 1 (1)(a)(d) (Ref. 5).

"(1) The person with responsibility for preparing an emergency plan under these Regulations must consider the following principles when preparing that plan—

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

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

⁶ At some time in the recent past REPIR have changed their inner consultation zones from a set radius of 3 km to match the local DEPZ.

⁷ Page 235

(i) the health risks arising from exposure to ionising radiation as a result of the radiation emergency, in both the long and the short term;

(ii) the economic consequences of the radiation emergency;

(iii) the effects of the disruption, both on the premises and the area immediately surrounding it, and on the public perception of the effects of the radiation emergency;

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

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

14. Principle (a) requires the emergency responders to be aware of the way the event is developing. This principle is met by having a process to collect, collate and interpret any information such as radiation levels, contamination levels, events on the site, events off the site that might be relevant to the protection of the public and the environment.
15. Principles (b) and (d) require an optimised and proportionate response that balances the potential benefits of taking actions against the full costs, in terms of disruption and health risks, of those actions. This is important in situations where a local authority has chosen to extend the Detailed Emergency Planning Zone significantly beyond the Urgent Protective Action Zone identified by the operator.
16. Principle (c), the one identified by AWE(A), is important but not particularly relevant in this context since the doses estimated this far from the site are significantly below those that might cause significant injury.
- 17. The concern with the DEPZ being significantly larger than the UPAZ is that people may be harmed while taking unnecessary protective actions. Principle (d) is important.**
18. The Judicial review mentioned in paragraph 2.10 is irrelevant as that challenged the AWE(B) DEPZ and not the AWE(A) one.
19. Paragraph 2.12 makes the claim that *“In line with REPPiR 2019, new development should where possible be located outside of the DEPZ”*. Nowhere in REPPiR-19 is Town and Country Planning mentioned and no where in REPPiR-19 is it advised not to build in the DEPZ.

20. “Precautionary Principle” & “Defence in Depth” as mentioned in paragraph 2.12 are specialist terms that are used inappropriately.

The Interdepartmental Liaison Group on Risk Assessment’s (ILGRA) guidance report to HM Parliament (Ref. 6) notes that *“the precautionary principle should be applied only when:*

- *there is good reason to believe that harmful effects may occur to human, animal or plant health, or to the environment; and*
- *the level of scientific uncertainty about the consequences or likelihoods is such that risk cannot be assessed with sufficient confidence to inform decision-making*

The precautionary principle should be distinguished from other drivers that require caution such as society's view on the extent of protection afforded to children or others considered to be vulnerable, or the wish to ensure that conventional risk assessment techniques deliberately over rather than under-estimate risk.

21. Reading the explanation of these statements strongly suggests that the precautionary principle is not applicable to the existence of three new homes at some distance from the AWE(A) site because of the minimal risk and because we have sufficient scientific understanding to support decision making.

22. The IAEA explanation of Defence in Depth (Ref. 7) has at level 5 *“Mitigation of the radiological consequences of significant external releases of radioactive materials”*. This describes the requirement for off-site emergency plans but makes no reference to the control of the population within emergency planning zones. There is a separate topic that includes discussions about the population distribution around sites (see, for example Ref. 8)⁸ but that is usually referred to when the building of a new site is being considered.

23. It seems a non-sequitur to claim that the judicial review of the AWE(B) DEPZ underlines that AWE *“along with ONR as the safety regulator of that work, best placed to comment on public safety”*. Although ONR should indeed be well placed to make such comments.

24. The diagram in paragraph 3.2 is not particularly successful at indicating that the Appeal Site sits within the inner consultation zone, but that fact is not in dispute.

25. AWE(A) (Paragraph 3.4) refers to the Inspector’s report of April 2016 on the examination of the local plan (Ref. 10) (which confusingly places Tadley in the “Inner Detailed Emergency Planning Zone”). This report refers to a Position Statement which was written by the Council

⁸ but note that this frequently refers to power station sites and its applicability to AWE(A) is not clear.

with the involvement of the ONR and the Civil Contingencies and Planning Departments of West Berkshire Council in which there was *“an all-party agreement that further development within the Detailed Inner Emergency Planning Zone should not be supported”*. No rationale is offered for this conclusion.

26. The Inspector’s review of the local plan also states that: ***“The policy provides for some flexibility in Tadley for minor applications, but the view of West Berkshire Council, who co-ordinate the Off-site Emergency Plan, is that the Tadley area is now ‘full’ with an already significant impact on the responders to any incident, but particularly a radiation emergency. Even with the excellent management of the AWEs and the associated low probability of nuclear related incidents, the need to apply the precautionary principle is clearly a significant material consideration”***.
27. That document was written in 2016 and quotes Tadley having a population of 11,650. ONS suggests that the population of the Tadley built up area was 14,800 on the 2021 census⁹. We must assume that the resources available to the planning and executing of the off-site plan have kept pace with the developing population and can continue to do so.
28. An infill of three new homes might be considered a *minor application* for which the Inspector saw some flexibility in Tadley.
29. Paragraph 3.5 states that the “equivalent” of the Inner Consultation Zone was enlarged because of REPPiR-19 but this is blatantly untrue. REPPiR-19 did not result in any change to the DEPZ. The term “Inner Consultation Zone” does not appear in REPPiR or its ACOP. The only change to the Consultation Zone was the change from a circle to the uneven shape of the DEPZ (a change that appears to predate REPPiR-19) which does not greatly affect the zone’s size (if anything it reduces it) nor the appeal site’s inclusion within it.
30. It is not clear if the all-party agreement that development should be resisted still applies, applies to the whole DEPZ as it now is, the UPAZ or to some historic zone.
31. Paragraph 3.8 refers to paragraph 97a of the NPPF which states that *“Planning policies and decisions should promote public safety and take into account wider security and defence requirements by:*
- a) *“anticipating and addressing possible malicious threats and natural hazards, especially in locations where large numbers of people are expected to congregate*

⁹ These statistics may not be comparing like with like areas.

b) *recognising and supporting development required for operational defence and security purposes, and ensuring that operational sites are not affected adversely by the impact of other development proposed in the area.*"

32. Footnote 43 tells us that this applies to *"transport hubs, night-time economy venues, cinemas and theatres, sports stadia and arenas, shopping centres, health and education establishments, places of worship, hotels and restaurants, visitor attractions and commercial centres"* (Ref. 11). It does not apply to AWE(A) or three new houses in a residential area.

33. It seems obvious that three new homes in an area with about 9000 properties¹⁰ will not adversely affect operation of AWE(A) so Paragraph 3.9 of the AWE statement can be set aside.

34. For the same reason, citing Section 15 of the NPPF which seeks to prevent existing businesses having unreasonable restrictions on them (AWE paragraphs 3.10 and 3.11) is equally far-fetched. What possible suitable mitigation might AWE request to ameliorate the potential impact of three new homes in a built-up area outside their Urgent Protective Action Zone?

35. Paragraph 3.12 draws attention to National Planning Practice Guidance which states that *"When considering development proposals around hazardous installations the local planning authority is expected to seek technical advice on the risks presented by major accident hazards affecting people in the surrounding area and the environment ... This allows those making planning decisions to give due weight to those risks, when balanced against other relevant planning considerations"*. The local authority has the Consequence Report from AWE and can seek further information and clarification from AWE¹¹. These requirements have been met in full.

36. I am not clear what, if any point, paragraph 3.13 is trying to make.

Unacceptable Pressure on offsite Emergency Plan

37. Paragraph 4.1 refers to policy SS7 which states that *"Development will only be permitted where the Off-Site Nuclear Emergency Plan can accommodate the needs of the population in the event of an emergency"* and that consultation with ONR will be required.

38. The ONR guidance on consultation (Ref. 12) has:

¹⁰ Taken from the Council committee report from 2020 (Ref. 9) which states 8973 properties for AWE(A)

¹¹ REPPiR regulation 7(5) *"The operator must comply with any reasonable request for information made by a local authority, following receipt of the consequences report, required by the local authority to enable it to prepare the off-site emergency plan which it is required to prepare under regulation 11, within 28 days of the date on which that information was requested"*.

“ONR will state that it does not advise against the proposed development on planning grounds if, in its opinion, the following statements apply:

- the local authority emergency planners, if consulted, have provided adequate assurance that the proposed development can be accommodated within their existing off-site emergency planning arrangements (or an amended version); and*
- the development does not represent an external hazard to a nuclear site or the planning function for the site that may be affected by the development has demonstrated that it would not constitute a significant hazard with regard to safety on their site”.*

39. Neither the local authority nor ONR have articulated why they believe that the current plan is both adequate for present needs and at or near a breaking point, so we see no reason why the proposed three houses beyond the Urgent Protective Action Zone cannot be accommodated within their existing off-site emergency planning arrangements (or an amended version).

40. It is clear that the development does not present an external hazard to AWE(A).

41. (Paragraph 4.2) The Appeal Site is said to be “approximately” 468 m from the AWE Site boundary “As a result, the site is more likely to be subject to urgent evacuation in the event of an emergency as well as having an increased requirement for short, medium and potentially long-term accommodation, which could also include meeting the needs of vulnerable people”. But the Urgent evacuation range mentioned in the latest version of the off-site plan available to us (Ref. 13) are 150 m with later evacuation out to 600 m. The Appeal Site would only need to be evacuated if a hazardous shipment suffered a significant accident in the southwest tip of the site or near the site’s West Gate. This must be considered a very low probability event.

42. We have responded to the WBC objections in Ref. 14.

43. Paragraphs 4.4 – 4.7 review recent Planning Appeals. It is notable that the two most recent listed which both went to a Hearing where the evidence was carefully examined were allowed (albeit one is now subject to a JR).

44. Paragraph 4.8 is maybe a bit misleading with the statement that ONR and AWE did not participate in the Kingfisher Appeal. While neither AWE nor ONR attended the hearing, ONR did put in a written objection which stated that *“Due to the scale and location of the proposed development ONR advise against this application unless the emergency planners at Wokingham which is responsible for the preparation of the Burghfield off-site emergency plan required by the Radiation Emergency Preparedness and Public Information Regulations (REPPPIR) 2019 are consulted with regard to this application and that they subsequently provide written*

confirmation that, in their opinion, the proposed development can be accommodated within their existing off-site emergency planning arrangements (or an amended version of it)".

45. The local emergency planner emphatically failed to provide such confirmation writing instead *"The current off-site emergency plan for AWE would not be able to accommodate the increase in population in situations where an evacuation centre would need to be set up. We believe this could also put a strain on emergency services in the event of an incident. Based on the reasons stated, the Emergency Planning team object to this application"*.

46. Nonetheless the Inspector concluded (Ref. 15) that *"I therefore conclude that the proposal would not present a barrier to the ability of blue light services to safely carry out their duties, and nor would it affect the Council's ability to execute and manage its obligations under the REPPIR plan. Furthermore, people living in or using the appeal site could be safely accommodated. Together, these considerations form the thrust of MDD Policy TB04 and, as such, I find no conflict with this policy. Additionally, the development would not adversely affect the continued operation of the AWE site, and there would be no conflict with the NPPF"*.

47. In their objection to this proposal (Ref. 16) the ONR state that they *"consider that the nature of the radiation emergency itself poses the following challenges:*

- The public may be exposed to material before they can be informed to take urgent protective active; and*
- The principal material released is of a type that is difficult to monitor (and so requires greater effort and resource from responding organisations)".*

These challenges apply equally to the existing population in the DEPZ. It is not that the ONR are concerned that a few more people cannot be accommodated within the current resources of the off-site plan but that the plan itself is extremely challenging. Which is not at all the same thing.

48. The ONR admit that these concerns are not new, citing a letter written in 2021 but make no mention of any improvement plan to identify the problem and rectify it.

49. The ONR objection rests almost entirely on advice from WBC that the current proposal cannot be accommodated in the OSEP while stating that it is WBC's responsibility to explain that advice. (Paragraphs 56 and 57 of ONR's Statement in support of Council's case – Ref. 16). So far as we are aware no such explanation is forthcoming from WBC.

50. Paragraph 4.9 again makes inappropriate mention of the Precautionary Principle. This principle can be applied to prevent a development when there are concerns of significant harm and poor scientific understanding. Neither condition apply here. Instead, this is a situation

where a cautionary approach is appropriate where estimates of harm and probability err on the side of overestimation – which they do.

51. Paragraph 4.10. Reference to NPPF repeats material used in Paragraphs 3.6 onwards of the AWE document.
52. Paragraph 4.12 refers to Appendix 4 which presents evidence presented to an Appeal against a refusal to permit a development in Burghfield Common. This evidence was discussed in detail in that Appeal proceedings and the decision (now subject to a judicial Review) was made to grant planning permission. There is nothing to be gained from repeating the rebuttals used in that Appeal.
53. Paragraphs 4.14 – 4.18 refers to Appendix 5 which presents further evidence provided to a previous Hearing. Again, there is nothing to be gained from repeating the rebuttals used in that Appeal.
54. Section 5 provides AWE's conclusion and summary. They ask that significant weight should be given to the objections of the ONR but ONR's objections are largely based on the Local Authority failing to give confidence that the off-site plan can cope with the addition of three new homes in the area. ONR accept this somewhat alarming judgment on off-site plan while accepting that it is otherwise fully adequate to meet the needs of REPP19-19.
55. AWE ask for significant weight to be given to their fears that the additional housing may lead to "unreasonable restrictions" on their operations even though this may be a small risk. However, they have failed to outline any scenarios which lead to significant restrictions being unavoidable nor have we seen any suggestions from them about the extra resources they might be able to provide to augment the off-site emergency plan¹².
56. Nor have they taken account of REPP19 regulation 25 which would allow the Secretary of Defence to set aside the requirements of REPP19 in extremis.

Conclusions

57. The Statement of common grounds (section 4) tells us that the Appellant and the LPA are in agreement on the following matters:
 - The site is within the Detailed Emergency Planning Zone of AWE(A).

¹² Note that regulation 16(1) of REPP19 allows the local authority to pass reasonable costs on to the operator. "A local authority may charge the operator a fee for the performance of the local authority's functions in relation to the off-site emergency plan relating to the operator's premises under regulations 8, 11, 12 and 21".

- The site is outside the Urgent Protective Action Zone of AWE(A).
- The local authority has an adequate off-site emergency plan.
- The only reason for refusal relates to the effect of the proposal on the Aldermaston off-site emergency planning arrangements.

58. The AWE Objections to the proposed development (Ref. 1) ask us to believe that the addition of three new homes in a built-up area, beyond the distance at which the public would benefit from taking prompt protective actions in the event of a nuclear emergency at AWE(A), will somehow break the local authority's otherwise adequate off-site emergency provision and that this may lead to restrictions on the operations at AWE(A).

59. Neither contention is justified.

References

1. Quod, Land at 1-9 Shyshack Lane, Baughurst, RG26 (PINS REF: APP/H1705/W/23/3326959) Objections on behalf for AWE plc and the Ministry of Defence, September 2023, (Q230344)
2. ONR, Project Assessment Report ONR-COP-PAR-16-008, Revision 0, August 2016
3. Town & Country Planning Act 1990, Riseley Heritage Holdings Ltd and Basingstoke and Deane Borough Council Statement of Common Ground. LPA Ref.22/0905/FUL.
4. A guide to the Radiation (Emergency Preparedness and Public Information) Regulations 2001 (available at https://www.westberks.gov.uk/media/55104/CD5-38-Document-I-REPPIR-2001-Guidance-on-Regulations/pdf/CD5.38_Document_I_-_REPPIR_2001_Guidance_on_Regulations.pdf)
5. The Radiation (Emergency Preparedness and Public Information) Regulations 2019 Approved Code of Practice and guidance <https://www.onr.org.uk/documents/2020/reppir-2019-acop.pdf>
6. HM Government. Select Committee on Science and Technology Written Evidence, The Precautionary Principle: Policy and Application <https://publications.parliament.uk/pa/ld200304/ldselect/ldsctech/110/110we29.htm>
7. IAEA, Defence in Depth in Nuclear Safety INSAG-10, 1996 https://www-pub.iaea.org/MTCD/publications/PDF/Pub1013e_web.pdf
8. ONR Land Use Planning and the Siting of Nuclear Installations <https://www.onr.org.uk/documents/2018/ns-lup-gd-001-land-use-planning-and-the-siting-of-nuclear-installations.pdf>
9. Carolyn Richardson & Paul Anstey, AWE Detailed Emergency Planning Zone, Date of Committee: 12th March 2020,
10. Mike Fox, Report to Basingstoke & Deane Borough Council, Report on the Examination into Basingstoke And Deane Local Plan 2011-2029, PINS/H1705/429/4. <https://www.basingstoke.gov.uk/content/page/44160/Inspectors%20Report%20April%20202016.pdf>
11. NPPF, Promoting healthy and safe communities, Paragraphs 92 to 103 <https://www.gov.uk/guidance/national-planning-policy-framework/8-promoting-healthy-and-safe-communities#footnote43>
12. ONR, Land use planning, <https://www.onr.org.uk/land-use-planning.htm>
13. Joint Emergency Planning Unit, AWE Off-Site Emergency Plan (FOI Version) August 2022 (from Plan in place in June 2022)
14. Keith Pearce, Appeal Statement, Application Reference no. REF:22/02905/FUL, Appeal Reference no. APP/H1705/W/23/3326959.
15. G Rollings, Appeal Decision, Appeal Ref: APP/X0360/W/22/3304042, Land west of Kingfisher Grove, Three Mile Cross, Reading, Berkshire, RG7 1LZ, Inquiry held on 15-18, 22 and 24 November 2022
16. LPA Statement of Case Appeal Reference: APP/H1705/W/23/3326959, Local Authority Reference: 22/02905/FUL, Appendix 5 – Office for Nuclear Regulation (ONR) Statement in support of Council’s case, ONR Assessment Report, Land rear of 1-9 Shyshack Lane, Baughurst, Tadley – Appeal ONR Statement.

Acronyms

ACOP	Approved Code of Practice	
AWE(A)	AWE Aldermaston site	
AWE(B)	AWE Burghfield site	
DEPZ	Detailed Emergency Planning Zone	Area set by Local Authority for detailed emergency planning and public information
IAEA	International Atomic Energy Agency	
ILGRA	Interdepartmental Liaison Group on Risk Assessment	A UK Government scientific group
JR	Judicial review	
MDD	Managing Development Delivery Local Plan	
NPPF	National Planning Policy Framework	
NPSA	<i>Nuclear Storage and Processing Area</i>	
ONR	Office for Nuclear Regulation	
ONS	Office for National Statistics	
OSEP	Off-site Emergency Plan	Local authority Off-site emergency plan
REPIR	Radiation (Emergency Preparedness and Public Information) Regulations	
UK-HAS	UK - Health Security Agency (was PHE)	
UPAZ	Urgent Protective Action Zone	Area determined by Operator over which Prompt Protective Actions may be appropriate
WBC	West Berkshire Council	