



Office for
Nuclear Regulation

ONR Report

Proof of Evidence

Land Use Planning

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Appeal Details	
Application Reference No.	22/00244/FULEXT
Appeal Reference No.	APP/W0340/W/22/3312261
Local Planning Authority	West Berkshire Council
Location	Land to the rear of the Hollies, Burghfield
Proposal	The erection of 32 dwellings including affordable housing, parking and landscaping. Access via Regis Manor Road.

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Report Issue No: 1

Publication Date: May-23

List of Abbreviations

AWE(B)	Atomic Weapons Establishment Burghfield
DEPZ	Detailed Emergency Planning Zone
NPPF	National Planning Policy Framework
ONR	Office for Nuclear Regulation
OSEP	Off-Site Emergency Plan
REPPiR01	Radiation (Emergency Preparedness and Public Information) Regulations 2001
REPPiR19	Radiation (Emergency Preparedness and Public Information) Regulations 2019
2013 Act	Energy Act 2013
Appellant	T A Fisher and Sons Ltd
Application	22/00244/FULEXT
Council	West Berkshire District Council

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1. Introduction

1.1. Biography

1. I am Eamonn Guilfoyle. I am a member of the Office for Nuclear Regulation's ("ONR") Emergency Planning and Response team, where I am the workstream lead for Land Use Planning. I have held my current post since April 2021, but I have worked at ONR since 2016 in a variety of roles and topic areas.
2. My relevant qualifications are as follows:
 - a. BSc (Hons) Physics from Imperial College (2010);
 - b. MSc Physics and Technology of Nuclear Reactors from the University of Birmingham (2011); and
 - c. PgCert Nuclear Technology from the University of Manchester (2022).

1.2. Purpose of Evidence

3. In my evidence, I set out ONR's reasons for seeking Rule 6 status at this inquiry, provide a general overview of ONR, its statutory role, and its position on the proposed development.
4. My evidence also explains ONR's land use planning policy and the rationale for the advice that ONR has provided on planning application 22/00244/FULEXT ("Application"). The evidence I provide will show the following:
 - a. ONR has a well-established land use planning policy for the purposes of enabling it to provide advice to local authorities on proposed developments on and around nuclear sites;
 - b. ONR followed its land use planning arrangements in the making of its advice to refuse planning permission for the Application;
 - c. ONR was justified in its advice to refuse planning permission for the Application.
5. The scope of the evidence provided, and the advice given, relates only to the potential impact of the proposed development on the adequacy of the Off-Site Emergency Plan ("OSEP"). This is a relevant consideration for the first major issue identified by the Inspector: "the effect of the proposal on the safety and wellbeing of future residents of the proposed development, and the wider public, with regard to the proximity of the Atomic Weapons Establishment (AWE) site at Burghfield".

1.3. Purpose of ONR's Participation in Inquiry

6. ONR is participating in this inquiry in support of the Council's nuclear safety ground reason to refuse planning permission for the Application brought by T A Fisher and Sons Ltd ("Appellant").
7. The purpose of ONR's participation is to seek to assist the Inspector in their understanding of the following:
 - a. The regulatory framework for emergency preparedness and response;
 - b. The duties of the Local Authority ("LA") in setting a Detailed Emergency Planning Zone ("DEPZ") under the Radiation (Emergency Preparedness and Public Information) Regulations 2019 ("REPP19");
 - c. The legal requirement under REPP19 to establish and be able to implement an emergency plan that deals with foreseeable and unforeseen events;
 - d. ONR's regulatory expectations as to what constitutes compliance with the REPP19 regulations; and
 - e. The intersection of the LA's REPP19 duties and land use planning responsibilities from ONR's regulatory perspective.

2. Background and Definitions

2.1. REPP19

8. In May 2019, REPP19 came into force, replacing the Radiation (Emergency Preparedness and Public Information) Regulations 2001 (“REPP10”). REPP19 imposes duties on operators who work with ionising radiation and local authorities to plan for radiation emergencies.

2.1.1. Radiation Emergency

9. Regulation 2(1) of REPP19 defines a Radiation Emergency as “... a non-routine situation or event arising from work with ionising radiation that necessitates prompt action to mitigate the serious consequences of – (a) of a hazard resulting from that situation or event; (b) of a perceived risk arising from such a hazard; or (c) to any one or more of (i) human life; (ii) health and safety; (iii) quality of life; (iv) property; (v) the environment”.

2.1.2. Detailed Emergency Planning Zone

10. REPP19 requires the relevant Local Authority (“LA”) to designate a Detailed Emergency Planning Zone (“DEPZ”). The DEPZ is the geographical zone in which it is proportionate to plan for protective action in the event of a radiation emergency. There are two stages to the process of determining a DEPZ.
11. The first stage puts duties on the operators of premises which hold quantities of radioactive materials above specified thresholds. Regulation 4 requires the operator to undertake a written evaluation identifying all hazards arising from the operator’s work which have the potential to cause a radiation emergency. The evaluation is referred to as a ‘Hazard Evaluation’ in REPP19.
12. Where the evaluation reveals the potential for a radiation emergency to occur, Regulation 5 requires the operator to assess a full range of possible consequences of the identified emergencies. The assessment is referred to in REPP19 as a “Consequence Assessment”.
13. Regulation 7(1) & 7(2) of REPP19 requires the operator to produce a report setting out the consequences identified by the assessment, called a Consequences Report, which must be sent to the LA. The Consequences Report must include a proposed minimum geographical area from the premises to be covered by the LA’s OSEP;
14. The second stage of the DEPZ determination process is the responsibility of the LA. Regulation 8(1) of REPP19 provides that the LA must determine the DEPZ based on the operator’s recommendation and may extend that area in consideration of certain factors specified in the regulations.

2.1.3. Off-Site Emergency Plan

15. Regulation 11(1) & (2) of REPP19 provides that, where premises require a DEPZ, the LA must make an adequate Off-Site Emergency Plan (OSEP) covering the zone. The plan must be designed to mitigate, so far as is reasonably practicable, the consequences of a radiation emergency outside the operator's premises.

2.1.4. Testing and Review

16. Regulation 12(1) of REPP19 requires the LA to do the following at suitable intervals not exceeding three years:
 - a. Review and where necessary revise the OSEP; and
 - b. Test the OSEP to the extent necessary to ensure that the plan is effective.
17. Regulation 12(8) of REPP19 requires the LA to produce a report on the outcome of the test, highlighting strengths and weaknesses of the OSEP. Regulation 12(4) of REPP19 requires any review of the OSEP to take into account the report of the outcome of the test.

2.2. AWE Burghfield – DEPZ and OSEP

18. West Berkshire Council ("Council") hosts the Atomic Weapons Establishment Burghfield ("AWE(B)") site in its jurisdiction. The Council has determined a DEPZ for AWE(B) and has produced an Off-Site Emergency Plan ("OSEP"). The Application is located in in the DEPZ of AWE(B).
19. The determination process for the DEPZ for AWE(B) included an independent review of the Consequences Report by Public Health England (the public body with statutory radiation protection functions) and regulatory oversight from ONR (as the statutory regulator).
20. An application for judicial review was brought to challenge the adequacy of the rationale for the AWE(B) DEPZ and regulatory oversight of the designation¹ process the AWE(B) DEPZ. This was dismissed on all grounds.
21. It follows that both the radiation emergencies that inform the DEPZ, the Consequences Report, and the DEPZ itself are settled matters. They should not be reopened and reconsidered as part of this appeal. In consequence, the appeal should not consider issues, such as severity and likelihood of a nuclear emergency, in circumstances where those issues have already been considered as part of the REPP19 process.

¹ REPP19 uses the terminology "determine" for process of setting a DEPZ, but the judgement used the terminology "designate". These should be regarded as equivalent in meaning.

3. Office for Nuclear Regulation

3.1. ONR's Role

22. The ONR was established as a statutory Public Corporation on 1 April 2014 under the Energy Act 2013 ("2013 Act"). It is the UK's independent nuclear regulator for safety, security, and safeguards. ONR's mission is to protect society by securing safe nuclear operations.
23. ONR's principal function under Section 78 of the 2013 Act is that "ONR must do whatever it considers appropriate for the ONR's purposes". Both nuclear safety and nuclear site health and safety are ONR purposes under Section 67 of the 2013 Act. ONR has further responsibilities under Section 82 of the 2013 Act to "make adequate arrangements for the enforcement of the relevant statutory provisions".
24. Relevant statutory provisions include regulations made under the Health and Safety at Work Act 1974, which includes REPP19. Furthermore, Regulation 2(1) of REPP19 explicitly establishes ONR as the regulator for the provisions of REPP19 when they relate to a licensed nuclear site.
25. Regulation 11(1) & (2) of REPP19 provides that, where a licensed nuclear site requires a DEPZ, the LA must make an adequate Off-Site Emergency Plan (OSEP) covering the zone. The plan must be designed to mitigate, so far as is reasonably practicable, the consequences of a radiation emergency outside the operator's premises.
26. Land use planning decisions on planning applications located in the DEPZ of a nuclear site may impact on the adequacy of the Off-Site Emergency Plan. Deficiencies in the OSEP may affect the compliance of the LA with REPP19. Consequently, ONR has made arrangements to provide land use planning advice.
27. It is both important for public safety and a material planning consideration that an LA complies with REPP19, and development proposed in a DEPZ does not compromise the adequacy of the OSEP. Emergency planning and response is a fundamental part of the safety regime for nuclear sites.

3.2. Regulation

28. Atomic Weapon Establishment Burghfield ("AWE(B)") is a licensed nuclear site. AWE, which operates AWE(B), and the Council, which is the host LA, have duties under REPP19 for which ONR is the regulator. ONR enforces the compliance of both LAs and Operators with the provisions of REPP19.
29. Additionally, ONR is also the regulator for AWE at AWE(B) for the wider purposes of nuclear safety and nuclear site health and safety and has similar responsibility for enforcement of compliance with relevant statutory provisions.

30. ONR's regulation of nuclear licensed sites and LAs involves considerable interaction. There are separate regulatory teams in ONR for REPP19/Off-Site Emergency Planning and Site Operations on the AWE(B) site, which will be further discussed in the evidence of Mr Ingham and Mr Rogers who provide specific technical and regulatory data in their Proofs of Evidence.

4. Land Use Planning Policy

4.1. Purpose

31. ONR is empowered to provide advice under Section 78 of the 2013 Act, which states that “The ONR must do whatever it considers appropriate for the ONR’s purposes” and “That includes, so far as it considers appropriate, assisting and encouraging others to further those purposes”. Its land use planning policy should be seen in this context.
32. ONR provides land use planning advice for the following reasons:
 - a. ONR is the regulator of REPP19, some land-use planning decisions can have potential effects on REPP19 emergency planning, and so ONR has a direct regulatory interest in these decisions;
 - b. NPPF Paragraph 45 states that ““Local planning authorities should consult the appropriate bodies when considering applications for the siting of, or changes to, major hazard sites...”, the NPPF glossary defines ONR as an appropriate body for nuclear sites; and
 - c. Under the Planning Act 2008, the EN-6 National Policy Statement for Nuclear Power Generation (Page 266-267) (“Nuclear NPS”) states that “ONR administers the Government’s policy on the control of population around licensed nuclear sites”.

4.2. Process

33. ONR requests consultation from local planning authorities regarding any application for planning permission within one of ONR’s land use planning consultation zones that meets the consultation criteria relevant to that consultation zone. This is described on our website² and has been communicated to all affected local planning authorities.
34. ONR has made the DEPZ one such consultation zone, and any proposed development that has the potential to increase the population in the DEPZ meets our consultation criteria.
35. As the Application is located in the AWE(B) DEPZ and may lead to increase in the population in the DEPZ, it is in the scope of ONR’s land use planning policy. The Council’s planning function consulted ONR on the Application on the 22 February 2022. In support of forming a response to the consultation, ONR, asked the

² <https://www.onr.org.uk/land-use-planning.htm>

emergency planning function at the Council to provide assurance that the proposed development could be accommodated in the OSEP.

36. The response provided by the Council's emergency planning function stated that:

“Emergency Planning have reviewed this application and recommend refusal, due to the number of properties within a dense populated area of the Detailed Emergency Planning Zone (DEPZ) and the close proximity to the AWE Burghfield site”
37. ONR responded to the Council's consultation, advising against the Application. It did so for two overarching reasons, which are set out below.
 - a. ONR considers that further development may have the potential to impact upon the adequate implementation of the OSEP. It has formed this view from evidence collected via its regulatory oversight under REPP19 and its wider engagements with the Council;
 - b. The emergency planning function at the Council recommended refusal of the planning application and ONR has satisfied itself, through its wider engagements with the Council, that the emergency planning function has suitable arrangements for making such judgements (see sub-section 2.4.2).
38. This process followed aligns with ONR's land use planning policy as set out in paragraph 24 and sub-section 1.4.1 of the ONR statement of case.

5. Evidence

5.1. REPPIR01 to REPPIR19 Changes

39. REPPIR19 replaced the Radiation (Emergency Preparedness and Public Information) Regulations 2001 (“REPPIR01”) on 22 May 2019. However, REPPIR19 Regulation 28 established a statutory 12-month transitional period for existing REPPIR01 duty holders, which meant that the Council could continue to comply with REPPIR01 until 21 May 2020
40. During the transition period the following occurred:
 - a. The AWE(B) Consequences Report, issued in November 2019, recommended an increase in the minimum radius of the DEPZ from 1600 m to 3160 m, due to changes to assessment methodology;
 - b. The Council determined a new, larger, DEPZ on the 12 March 2020 (REPPIR19 had shifted the responsibility for determining the DEPZ from ONR to LAs); and
 - c. Following the determination of the new DEPZ it immediately became encompassed by ONR’s land use planning arrangements.

5.2. REPPIR19

41. 31. The AWE(B) Consequences Report describes the nature of radiation emergency that the OSEP must address. The nature of the radiation emergency identified at AWE(B) poses intrinsic challenges:
 - a. The radiation emergency provides short notice (no more than 10 minutes) for the public to shelter to realise any substantive benefit from the sheltering; and
 - b. The principal radionuclide which might be released in the event of a radiation emergency at AWE(B) is of a type that is particularly difficult to monitor (and so requires greater effort and resource from responding organisations).
42. The increase in the minimum radius of the DEPZ from 1600 m to 3160 m led to a step change in the complexity of the OSEP and the associated level of challenge in its implementation. This also reduced the evidential weight of historical testing.
43. The output of statutory tests is important evidence for understanding the margin of safety in land use planning decisions in the DEPZ. This is consistent with Cabinet Office guidance that states that “Planning for emergencies cannot be considered

reliable until it is exercised and has proved to be workable, especially since false confidence may be placed in the integrity of a written plan”³.

44. In August 2021, ONR wrote to the Chief Executive Officer at the Council (and three neighbouring local authorities) expressing concern about the absence of testing evidence to determine whether further development in the DEPZ would have the potential to impact upon the adequate implementation of the OSEP. This letter stated the following:
- a. The REPP19 OSEP was “... due to be tested for the first time in 2021 and therefore the safety claims within the plans have yet to be adequately demonstrated”;
 - b. That, from the 1st September 2021, ONR was “... likely to advise against any proposed development in [the DEPZ] where the proposed development meets our consultation criteria and ONR has not received adequate assurance from the emergency planners that the development can be accommodated in the off-site emergency plan”; and
 - c. That “ONR will, both through data collected through its continued oversight and its routine regulatory interventions, seek to satisfy itself that off-site emergency plans for the AWE nuclear sites remain valid and tolerant of further development in the DEPZs and OCZs”.
45. Between 11 May 2021 and 15 February 2022, the Council conducted a series of modular exercises which, collectively, formed the first statutory test of the new OSEP. This test included the participation of approximately 30 agencies, both local and national.
46. The workshops and exercises conducted as part of the test highlighted several areas that required improvement, which included areas had a clear dependency on the population in the DEPZ.
47. Other regulatory engagements have also provided the ONR with evidence that supports the view that there are significant challenges and risks to accommodating new development and population increases in the OSEP.
48. Consequently, the ONR’s position is that there is insufficient evidence from testing and regulatory engagements to demonstrate that the AWE(B) OSEP can tolerate further development in the DEPZ. Accordingly, the position remains the same as ONR expressed in the letter of August 2021. Unsurprisingly, given the regulatory burden imposed on ONR by statute and regulations, ONR continues to require a high level of assurance from the Council’s emergency planning function that a given proposed development can be accommodated in the OSEP.

³ [Emergency planning and preparedness: exercises and training - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/101444/emergency_planning_and_preparedness_exercises_and_training.pdf)

5.3. Council Arrangements

49. The emergency planning function at the Council recommended refusal of the planning application. This fact is a central consideration in the ONR's advice against the development. In the case of the present appeal, the absence of this assurance meant that ONR was obliged to recommend refusal of the Application.
50. It is the responsibility of the Council to explain why it made the specific recommendation in relation the Application. ONR gives due weight to the recommendation of the Council's emergency planning function because it recognises the subject matter expertise, and statutory duties, of the Council in matters of local emergency planning and response.
51. ONR has sampled that the Council's arrangements for making these recommendations and judged them to be suitable through the following:
- a. It has conducted a series of capability and capacity inspections of the Council;
 - b. It has observed the Council's use of the AWE Off-Site Planning Group to discuss significant planning applications, demonstrating that it is continually seeking the input and expertise of responding organisations; and
 - c. The Council has shared its draft AWE Development Control Process Guidance with ONR and this document demonstrates that the Council has internal guidance that directs it to consider reasonable and relevant factors in arriving at its judgements.

5.4. Precedent

52. The Appellant's Appendix Q refers to advice ONR gave for a development in the DEPZ of the Devonport Royal Dockyard⁴.
53. ONR highlights the circumstances of that application were materially different from this Application:
- a. The proposed development was in the DEPZ of another nuclear site with a potential radiation emergency of a different nature that would pose different challenges; and
 - b. The emergency planning function at the relevant LA provided ONR with adequate assurance that the developments could be accommodated in the OSEP.
54. The Appellant's Statement of Case refers to the advice ONR gave for developments at Tadley Hill, 42-46 New Road Tadley, Boundary Place⁵. ONR

⁴ Plymouth City Council Planning Application Ref. 22/00878/FUL

⁵ Basingstoke and Deane Borough Council Planning Application Ref 21/00893/FUL

conditionally advised against⁶ this development on the 20 May 2021. That application predates ONR's letter of the August 2021 in which ONR notified the Council that it would discontinue the use of conditional responses and so is not relevant to this inquiry.

⁶ "ONR advises against this application unless the emergency planners at West Berkshire Council (which is responsible for the preparation of the Aldermaston off-site emergency plan required by the Radiation (Emergency Preparedness and Public Information) Regulations (REPPiR) 2019 are consulted with regard to this application and 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)."

6. Conclusions

6.1. Conclusions

55. ONR is satisfied that it has played its part in the due process required in such planning matters, and in discharging its wider regulatory role and responsibilities, in good faith.
56. ONR has considered the following:
 - a. Evidence supplied by the statutory test of the OSEP made in accordance with REPP19;
 - b. Evidence supplied from ONR's extensive engagements with the Council and responding organisations; and
 - c. The refusal recommendation made by the emergency planning function of the Council (noting that ONR has satisfied itself that the emergency planning functions arrangements for producing such recommendations are suitable).
57. Consequently, ONR advises against this development, in accordance with our Land Use Planning Policy