



**West Berkshire Council
Planning Application 09/02396/COMIND
Enriched Uranium Facility at AWE Aldermaston**



Comments from Nuclear Awareness Group (NAG)

Ground contamination

Safety and risk:
- Radioactive Fire
- Criticality

Radioactive waste
and lack of
sustainability

Construction
impacts



Visual intrusion

Absence of public
consultation

Lack of information

International issues

Summary diagram: The proposed Enriched Uranium Facility would cause a number of impacts posing potential risks to public safety and the environment. A lack of information about the facility and an absence of public consultation make it impossible to judge the scale of these risks.

Summary and key recommendations

The new Enriched Uranium Facility at AWE Aldermaston (also known as Project Pegasus) would be built to manufacture uranium components for nuclear weapons. The planning application for the new facility lacks information about risks posed to safety and the environment by the proposed development, and the proposed development does not appear to comply with saved policies OVS.5 and OVS.6 from the West Berkshire District Local Plan 2001-6 or policies OS1, LD1, LD5, and EN2 from the Berkshire Structure Plan 1991-2006. For these reasons NAG wishes to **object** to the planning application which has been submitted. We request that West Berkshire Council asks the Ministry of Defence for further information about risks associated with the development, and if this is not forthcoming, refers the planning application to the Secretary of State for determination.

- Although uranium is a radioactive, toxic, and pyrophoric metal, no information about potential hazards resulting from handling the material has been included with the planning application. An accident leading to a fire causing dispersion of enriched uranium could pose a threat to public safety, as could a criticality accident in the facility.

Before planning permission is granted the Ministry of Defence should provide information about the risks posed by operations at the new facility and countermeasures to address these risks.

- The new Enriched Uranium Facility will manufacture products made of uranium and generate wastes contaminated with uranium which would be classified as intermediate level radioactive waste. As yet the United Kingdom has no strategy for the disposal of radioactive wastes and the government has yet to identify a site or define a design option for any future repository for intermediate level radioactive waste. Such wastes would have to be stored on site at Aldermaston indefinitely pending a solution to this problem.

Generation of waste for which there is no known disposal route is inherently unsustainable. Planning permission should be withheld until the Ministry of Defence is able to give a satisfactory explanation of how radioactive wastes arising from the Enriched Uranium Facility will be dealt with.

- Soil and land at the project site have been chemically contaminated as a result of the industrial heritage of the AWE Aldermaston site and there are potential sources of landfill gas in the project area. The site also lies within an SPZ III Groundwater Protection Zone (Source Catchment).

Measures to remediate contaminated soil and protect groundwater will be necessary at the construction stage, and the Planning Committee should issue conditions requiring this as part of any planning consent which is granted.

- The proposed structure would be visible from premises on the A340 opposite the AWE Aldermaston perimeter fence and would also be visible as part of the complex of industrial buildings at the AWE site in long views across the Kennet Valley.

A set of photomontages for the development should be prepared to enable members of the public and the Planning Committee to judge the visual impact of this development and planned future developments.

- Construction work will have a number of impacts locally. Traffic and lorry movements on

the A340 will add to traffic nuisance in the area and pose a road safety hazard to cyclists and pedestrians on Paices Hill. Noise and disturbance caused by construction of Project Pegasus would continue throughout the proposed construction period of around two years. The working hours proposed by the developer would provide local residents with little respite from disturbance from construction during the daylight hours.

Planning permission should only be granted on condition that construction activities are limited to the period of 9 am to 5 pm (ie normal working hours) on Mondays to Fridays.

- AWE has requested that the normal three year time limit for planning consent be extended to five to seven years for the Project Pegasus development. However, during a recession the cost of construction labour and contract prices tend to be lower than during an economic upturn, to the advantage of a developer, and so AWE's request would appear to be unjustified.

The Planning Committee should grant planning permission for the usual period of three years and should not grant AWE the special privilege of an extension to the time limit for planning consent.

- This project is one of a number of substantial construction projects planned at AWE Aldermaston over the coming months. The combined impacts of these construction projects on local communities may be significant.

The Planning Committee should use planning conditions to ensure that construction projects at AWE proceed in sequence, rather than in parallel, in order to minimise the impact of construction work.

- Meaningful consultation with the general public over this planning application has not been undertaken according to any objective standard. AWE appears to have limited public engagement on the Project Pegasus planning application to informing a small and selected group of its stakeholders about its intentions. There appears to have been no effort to engage in dialogue on the application with AWE's neighbours, local communities, or the wider public.

In order to improve standards of consultation over future planning matters involving AWE, the planning committee should state clearly when making its decision on the application that it considers public consultation important, and would wish to see evidence of meaningful public consultation on future planning applications at AWE sites.

West Berkshire Council: Planning Application 09/02396/COMIND
Enriched Uranium Facility at AWE Aldermaston
Comments objecting to the development from Nuclear Awareness Group

The Nuclear Awareness Group (NAG) would like to comment on the planning application which has been submitted by the Ministry of Defence for an Enriched Uranium Facility at the Atomic Weapons Establishment (AWE) Aldermaston. NAG is a local group which was set up with support from Reading Borough Council following the 1993 Community Inquiry into AWE Aldermaston to act as a stakeholder voice on behalf of local people on matters relating to AWE.

The new Enriched Uranium Facility at AWE Aldermaston (also known as Project Pegasus) would have the function of manufacturing uranium components for nuclear warheads. The purpose of the development raises a number of significant issues relating to safety, risk, and environmental sustainability. We discuss these issues below and make a number of proposals aimed at mitigating the impact of the proposed development. We are also concerned about the lack of information and public consultation about the proposed development. Because key information about safety issues and risks has not been disclosed by the applicant, we consider that the planning committee is unable to make an informed decision on the risks posed by the proposed development. For these reasons we wish to object to the planning application for the new Enriched Uranium Facility in its current form.

We consider that the planning committee should ask the Ministry of Defence to provide further information about the potential impacts of the proposed development, and if this information is not forthcoming, invite the Secretary of State to call in the application for determination at a public inquiry.

1. Safety and Risk

The planning application for Project Pegasus is accompanied by a 'Defence Exempt Environmental Appraisal' report, rather than a full environmental impact assessment study. The Defence Exempt Environmental Appraisal report does not include key information about processes, risks, and wastes associated with a proposed facility, and thus it is not possible to assess the scale of these impacts.

The Defence Exempt Environmental Appraisal report has been authorised by the Parliamentary Under Secretary of State for Communities and Local Government “because the development forms part of a project serving national defence purposes, and in his opinion, compliance with these regulations would have an adverse effect on those purposes.”¹ No further explanation is given as to how release of information on environmental impacts might affect defence purposes.

The approach adopted by the UK government is in dramatic contrast to the approach adopted by the US government. The US government is currently developing a similar uranium processing facility at its Y-12 National Security Complex at Oak Ridge, Tennessee, in parallel with the enriched uranium facility at AWE. The US authorities have published a comprehensive Environmental Impact Assessment for the Y-12 development, including information on the purpose, options considered, processes and wastes, risks, and potential accident scenarios for the facility. As defence and security concerns are no less important to the US government than to the UK government, it appears that more information could be released about the impacts of the proposed new development at AWE Aldermaston with minimal risk.

¹ Direction under regulation 4(4)a(ii) of the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999. Communities and Local Government, 6th October 2009.

This lack of information means that the Planning Committee and the public can make no informed judgment on whether the risks posed by the new Enriched Uranium Facility are acceptable or not, or whether any countermeasures proposed to reduce these risks are likely to be adequate.

The limited information which is available about the risks associated with the Enriched Uranium Facility indicates that it has the potential to pose threats to the public and the environment. Enriched uranium is a radioactive, toxic metal which is also pyrophoric – it rapidly oxidises and is able to ignite spontaneously in air, especially in a powdered form. An accident leading to a fire causing dispersion of enriched uranium is therefore a hazard at any facility handling the material. Such an event would result in a smoke plume containing radioactive microparticles of uranium oxide which can be inhaled or swallowed by bystanders. There is also the risk of a criticality accident, which can result if a nuclear chain reaction occurs accidentally in a fissile substance such as enriched uranium. This releases neutron radiation which is highly dangerous to humans.

Proposal to planning committee:

We recommend that before planning permission is granted the Ministry of Defence should provide sufficient information about the risks posed by operations at the new facility, and countermeasures to address these risks, to allow members of the planning committee and members of the public to assess the nature and scale of the threat it poses to local communities.

If the Ministry of Defence were to insist on refusing to provide this information, a route exists to allow the planning application to be dealt with at an appropriate level of confidentiality. A local planning authority is entitled to refuse to give its consent to development or ask for the matter to be called in if it considers that it lacks the information needed to make an informed decision on the application. The Secretary of State for Communities and Local Government then has the power under section 321(7) of the Town and Country Planning Act 1990 to give a direction restricting to appointed 'special advocates' the examination of the relevant evidence at the ensuing inquiry.²

The planning committee should therefore ask the Ministry of Defence to provide further information about the risks and impacts of the proposed development, and if the Ministry declines to do so, ask the Secretary of State to call the development in.

2. Waste and sustainability

The new Enriched Uranium Facility will manufacture products made of uranium and generate wastes contaminated with uranium. At the end of their life cycle, the enriched uranium warhead components manufactured in the facility would ultimately require treatment as waste.

The Defence Exempt Environmental Appraisal document gives no information about process wastes generated from the facility and how they would be dealt with. However, information is available from other sources³. Among the wastes which would be generated by the Facility are quantities of low level and intermediate level solid radioactive waste. Although enriched uranium itself is a high cost material which will be recovered and recycled from waste streams, secondary wastes, residues, and items which have been in contact with enriched uranium will remain and will qualify as radioactive wastes⁴.

² 'Crown Application of the Planning Acts.' Communities and Local Government Circular 02/2006, 7 June 2006. Paragraph 7, page 4.

³ Waste Management Plan for Enriched Uranium Project, AWE, October 2006.

⁴ Waste Management Plan for Enriched Uranium Project, AWE, October 2006. Section 2.1

As yet the United Kingdom has no strategy for the disposal of intermediate level radioactive wastes. No National Repository for intermediate level radioactive waste exists, and the government has yet to identify a site or define a design option for any such facility. Such wastes would therefore have to be stored on site at Aldermaston indefinitely until such time as a National Repository for intermediate and high level radioactive wastes is constructed.

Liquid radioactive wastes resulting from the manufacturing processes which take place in the facility include oils contaminated with enriched uranium. These wastes are not suitable for disposal by incineration or by landfill at the National Low Level Waste Repository in Cumbria, and as yet there is no known treatment and disposal route for them.

At the end of its life the Enriched Uranium Facility will require decommissioning and dismantling. Equipment and active areas contaminated with radioactive material will need to be treated as radioactive wastes. The facility will be a reasonably large building, with a 10500 square metre footprint, a significant part of which will be working areas for radioactive material. Decommissioning will thus be a substantial task likely to generate appreciable quantities of radioactive waste. The plans for Project Pegasus contain no strategy for decommissioning the facility, and give no indication that decommissioning issues were considered during design of the facility.

Generation of waste for which there is no known disposal route is inherently unsustainable. One of the principal conclusions from the Royal Commission on Environmental Pollution's major study into nuclear power and the environment, conducted in 1976 when the country was considering expansion of the nuclear power industry, was that it would be "irresponsible and morally wrong" to commit future generations to the consequences of dealing with nuclear legacies until a method exists to ensure the safe containment of radioactive waste for the indefinite future⁵. This principle was recently re-iterated by members of the government's Committee on Radioactive Waste Management⁶.

Policy OVS.5 from the 'West Berkshire District Local Plan 2001-2006: Saved Policies' document states that development proposals should not give rise to unacceptable pollution of the environment, and should have regard to the need to ensure the adequate storage and disposal of waste materials. The related policies OS1 and LD1 from the 'Berkshire Structure Plan 1991-2006' have a similar aim, seeking to ensure that development is sustainable and minimise the risk of pollution. In its current form the planning application for the Enriched Uranium Facility does not address the issue of radioactive waste management and thus does not comply with these policies.

Proposal to planning committee:

Planning permission should be withheld until the Ministry of Defence is able to give a satisfactory explanation of how radioactive wastes arising from the Enriched Uranium Facility will be dealt with.

In order to address waste and end-of-life legacy issues, we recommend that the planning committee asks the Ministry of Defence to prepare a waste management and decommissioning strategy for the facility before planning permission is granted.

⁵ Royal Commission on Environmental Pollution. Sixth Report: Nuclear Power and the Environment. September 1976. Paragraph 181, page 81

⁶ Letter to Secretary of State for Energy and Climate Change, 20 November 2009.
http://www.nuclearwasteadvisory.co.uk/uploads/5647CoRWM1_Letter_201109.pdf

3. Ground contamination

Soil and land at the project site have been chemically contaminated as a result of the industrial heritage of the AWE Aldermaston site. The Defence Exempt Environmental Appraisal report for Project Pegasus notes that top soil in the project area is contaminated with mineral oil, diesel range organics, and petroleum hydrocarbons⁷. Soil at a deeper depth is contaminated with mineral oil, diesel range organics, polycyclic aromatic hydrocarbons, and other aromatic hydrocarbons. In addition, there are potential sources of landfill gas in the project area. There is a risk that further, unidentified sources of contamination will be identified as construction work proceeds.

The AWE Aldermaston Site lies within an SPZ III Groundwater Protection Zone (Source Catchment). Appropriate measures will be required to satisfy the Environment Agency that construction of the Enriched Uranium Facility and operations in the Facility pose no threat to groundwater quality.

Proposal to planning committee:

Measures to remediate contaminated soil and protect groundwater will be necessary at the construction stage, and the Planning Committee should issue conditions requiring this as part of any planning consent which is granted. A detailed land remediation scheme for the site should be prepared by the applicant and approved by the planning authority. A verification report should be prepared after completion and submitted to local authority.

4. Visual intrusion

The proposed structure would be visible from the caravan site and business premises on the A340 opposite the AWE Aldermaston perimeter fence, and also to passers-by travelling along the road. It would also be visible as part of the complex of industrial buildings at the AWE site in long views across the Kennet Valley. With a height of 16 metres and a chimney stack of 19.5 metres, the building represents a sizeable structure.

The Enriched Uranium Facility is one of a number of forthcoming developments at the Aldermaston site which may, in combination, have a considerable visual impact. AWE will be submitting planning applications for the following new buildings at Aldermaston in 2010 and beyond⁸:

- Hydrodynamics facility and support building.
- Small scale formulations facility.
- High performance computer building.

Planning permission has also been given for a High Explosives Fabrication Facility in the northern part of the AWE Aldermaston site, with construction work yet to commence. The cumulative effect of these developments in terms of their visual impact, combined with that of the Pegasus facility, may be considerable.

Proposal to planning committee:

Photomontage mock-ups are often prepared by developers to aid in assessing the visual impact of a proposed development, and have on previous occasions been prepared for developments at AWE

⁷ Volume 2, Appendix A5

⁸ House of Commons Written Answer, Hansard, 11 Nov 2009, Column 403W

sites. A set of photomontages for the development should be prepared to enable members of the public and the Planning Committee to judge the visual impact of this development and planned future developments.

5. Construction impacts

Construction work will have a number of impacts locally. Traffic and lorry movements on the A340 road through Aldermaston village and Aldermaston Wharf will increase. As well as adding to traffic nuisance in the area, this will pose particular risks to cyclists and pedestrians on Paices Hill. There is already a poor accident record on this hill, and recent road improvements outside the AWE site are too far away from the hill to help in addressing this issue.

Even the most well planned construction work generates noise and disturbance, and disturbance caused by construction of Project Pegasus would continue throughout the proposed construction period of around two years. The Defence Exempt Environmental Appraisal report (Volume 1, Chapter 11) indicates that ambient noise measurements have not been recorded residences in the vicinity of the development, and that assessment of the noise resulting from construction activities is based on a number of general assumptions, so it is not clear how much local residents will be affected by this noise.

The working hours proposed by the developer, from 7 am to 7 pm on Mondays to Fridays and 7 am to 4 pm on Saturdays would provide local residents with little respite from disturbance from construction during the daylight hours. As discussed above, a number of further construction projects are planned at AWE Aldermaston, and the combined impact of these projects could be significant.

AWE is requesting that the normal three year time limit for planning consent is extended to five to seven years for the Project Pegasus development. The reasons given for this are to reflect the current economic situation and the particular operational constraints within which AWE has to function. Any extension to the period of planning consent would, of course, extend the construction period and the disturbance associated with it.

During a recession the cost of construction labour and contract prices tend to be lower than during an economic upturn, and this is to the advantage of a developer. AWE's request would seem therefore to be unjustified. In any case, the general economic situation is a factor which any developer would have to contend with, and AWE should not be given special privileges which would not be granted to others. The Planning Committee should grant planning permission only for the usual period of three years.

West Berkshire Council has introduced planning policies to protect the public from noise, traffic, and disturbance caused by development. A Saved Policy from the West Berkshire District Local Plan 2001-2006 seeks to control noise generated as a result of development. Policy OVS.6 states that the Council will require measures to be taken to minimise adverse impact resulting from noise generated. In the 'Berkshire Structure Plan 1991-2006', Policy LD5 states that development should take into account the needs of all road users and should not be permitted where it is likely to give rise to serious problems of road safety or traffic generation. Policy EN2 states that development should not give rise to unacceptable levels of noise and other disturbance.

Proposals to planning committee:

Planning permission should only be granted on condition that construction activities are limited to

the period of 9 am to 5 pm (ie normal working hours) on Mondays to Fridays.

The Planning Committee should use planning conditions to ensure that construction projects at AWE proceed in sequence, rather than in parallel, in order to minimise the impact of construction work on local communities.

The Planning Committee should grant planning permission for this development only for the usual period of three years.

6. Public consultation

Despite a claim by AWE that “Public consultation has been a key aspect in the preparation of this planning application and is an important element of the planning process”⁹, meaningful consultation with the general public has not been undertaken according to any objective standard.

AWE states that consultation on the proposed development took place at the time of publication of the AWE Site Development Strategy Plan and its subsequent updates. However, none of the Site Development Strategy Plan documents mention an Enriched Uranium Facility, and the plan documents were published for public information only, with no mechanism to allow the public to give the feedback and comment which is an intrinsic part of any consultation process. No information about the planning application is shown on the AWE company website.

AWE also states that pre-application discussions have been held with the AWE Local Liaison Committee (LLC) and local Parish Councils. The LLC and Parish Councils were only informed of the proposed development shortly before the planning application was submitted, and were given no opportunity to suggest amendments or improvements to the proposal. The LLC's meetings take place in private and members of the public, press, and non-government organisations are refused access to meetings, meaning that the committee has little legitimacy or representative value. No effort appears to have been made by Parish Councils or LLC members to provide any feedback about the Project Pegasus planning application to members of the public they represent.

AWE appears to have limited public engagement on the Project Pegasus planning application to informing a small and selected group of its stakeholders about its intentions. There appears to have been no effort to engage in dialogue on the application with AWE's neighbours, local communities, or the wider public. AWE has not presented a Consultation Statement summarising any feedback received on the proposed development, so it is not possible to establish whether any concerns about the proposed development were raised by the LLC or Parish Councils or how such concerns have been addressed by AWE.

Proposal to planning committee:

In order to improve standards of consultation over future planning matters involving AWE, the planning committee should state clearly when making its decision on the application that it considers public consultation important, and would wish to see evidence of meaningful public consultation on future planning applications at AWE sites.

7. International issues

Senior Counsel in the UK writing academically have recently pointed out that administrative

⁹ Planning Support Statement for Project Pegasus, AWE plc. Paragraph 2.15.

decision-makers may elect to treat the UK's international obligations as relevant considerations in interpreting the discretion conferred upon them by statute¹⁰.

Accordingly, West Berkshire Council may elect to treat the UK's obligations under the international Non Proliferation Treaty (NPT) as a relevant consideration when making a decision on the planning application for Project Pegasus.

Article VI of the NPT obligates the parties “to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control”¹¹. Legal opinions on the UK government's plans to replace the Trident nuclear weapons system suggest that the replacement of Trident is likely to constitute a breach of Article VI of the NPT¹². As the new Enriched Uranium Facility at AWE Aldermaston would be used to build and maintain warhead components for the replacement to Trident, it is thus of questionable legality.

8. Conclusions

The planning application submitted to West Berkshire Council for a new Enriched Uranium Facility at AWE Aldermaston is for a major development with the potential for considerable impact upon local communities. A number of concerns about these impacts have yet to be resolved.

- Much of the information which is needed to assess the impact of the development has not been released into the public domain, making it impossible to understand the true consequences of the development for local communities. While some of this information will understandably be withheld from scrutiny for security reasons, there is no reason why further information on issues such as waste management and alternative options should not be released to justify the choice of this location for the development.
- The new facility would generate radioactive waste for which there is as yet no disposal route, which is inherently unsustainable. This is contrary to saved policies from West Berkshire's Local Plan.
- This project is one of a number of substantial construction projects planned at AWE Aldermaston over the coming months. The cumulative impacts of these construction projects may be significant, and so they should be scheduled to proceed in sequence, rather than in parallel, in order to minimise the impact of construction work on local communities.

We consider that the planning committee should ask the Ministry of Defence to provide further information about the potential impacts of the proposed development, and if this information is not forthcoming, invite the Secretary of State to call in the application for determination at a public inquiry.

Nuclear Awareness Group
7 January 2010

¹⁰ Philip Sales and Joanne Clement (2008) LQ 388 at 404.

¹¹ http://www.un.org/disarmament/WMD/Nuclear/pdf/NPTEnglish_text.pdf

¹² See account on the implications of Article VI in 'Report to Scottish Ministers': Working Group on Scotland Without Nuclear Weapons, August 2009. Pages - 23-27.