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Objection to MoD Planning Application: 08/02287/COMIND

1. Overview

The requirement for AWE to improve the safety of its warhead disassembly bunkers is not disputed. In 2007 NIS published 'How Safe is AWE Burghfield?' a report based on FoI disclosures documenting the safety failures of the existing 'Gravel Gertie' (GG) facilities and addressing the dilemma in which the MoD found itself. In 2006 and 2007 the HSE Nuclear Inspectorate (NI) pressed AWE to close the facility until essential safety improvements could be carried out. The MoD refused on 'national security' grounds. Eventually the NI secured an agreement that warhead work would only be carried out under a single-operation permissioning regime, which continues today. This emergency arrangement ensures that no work is done by AWE before the NI have inspected the buildings on each occasion permission is requested.

1.1 Flood Plain Application History

In August 2006, The Prudential Insurance Co. Ltd applied for planning consent to build much-needed 7,500 homes at Kennet Valley Park in another flood plain near Burghfield. The plan tried to address the flood problem by 'the creation of a development platform through infilling'. Around a 1,000 objections were received from local residents concerned that their property might suffer flooding if the new development encroached on the flood plain. Other statutory consultees also objected, and the application was withdrawn in November 2006.

1.2 AWE Planning Application History

The 2002 AWE Strategic Development Plan (SDP) identified the need for a warhead assembly facility to meet modern safety standards. Failure to design a safe facility for 7 years is the responsibility not only of AWE and the MoD but also of the Planning Authority (PA). Given that the PA had a whole site plan in 2002, it has failed to establish a safety priority for the many AWE site developments. Had the PA insisted on AWE planning applications being driven by public safety rather than prestigious projects, this current plan would

- (i) have been considered before the existing buildings reached the current poor state and
- (ii) have been rejected on flood-risk grounds, leaving time for a more suitable site to be found.

1.3 AWE prioritises its own reputation in 2007 Flood

On Friday 20th July 2007 severe flooding occurred on the AWE B GG site, inundating the already sub-standard assembly/disassembly buildings, putting them out of action for 10 days. From Friday to Sunday, AWE failed to disclose the impact of the flooding in order to protect its reputation. It failed to inform the regulators and local authorities because the company took the view that *"it was a prudent step to limit the disclosure of information surrounding the degree of impact suffered – particularly at Burghfield."*¹ This attitude, discovered under the FoI Act in the NIS Report, 'Swamped!' ² exposes the cavalier attitude of AWE to the professional bodies it relies upon.

¹. AWE Review, Learn, and Improve Assessment. Annex L, point 6.

². Swamped! NIS Report 2008 <http://www.nuclearinfo.org/>

1.4 Local Liaison Committee

The flooding was briefly mentioned at the September 2007 meeting of the AWE Local Liaison Committee as part of the routine report given by the AWE Director of Infrastructure, but committee members were merely told that a review, learn, and improve assessment would take place and assured that no injuries or releases or radioactive or noxious materials had occurred.³

“...we firmly believe that the public interest is best served by closer cooperation and a presumption that information will be shared, We must be open, honest and direct about risk, including with the public. We must move from a culture of ‘need to know’ to one of ‘need to share’.

Pitt Review 06/08 ES7

1.5 Emergency Planning for Serious Floods

At a recent Civil Contingencies Local Emergency Planning conference organised by the Public Policy Exchange, the Meteorology Office Chief Government, Advisor Phil Evans explained that weather forecasting gives only 1-12 hours warning of unpredicted events threatening sudden and overwhelming floods; Climate Change means that we don't know what we will be facing in future. The significant implication for AWE Aldermaston and Burghfield is that risk assessments may have to be re-drawn and could conclude that the risk will become too high to justify. Apart from flood risk, a lightning strike on nuclear materials or a weapon may become a more frequent possibility.

2. Planning Application 08/02287/COMIND Supporting Documents

All AWE's Flood reports show that there is extensive risk of flooding on the site chosen at AWE Burghfield for the warhead facility, with many of the flood risk factors remaining unresolved.

2.1 Flood Zones Exceptional Test

The proposed dis/assembly development contains all three Flood Risk Zones: low, medium and high, requiring the whole site to meet legal conditions for high risk areas. To overcome the conclusion that no building should be permitted on the site, a sequential Exceptional Test (ET) is used to demonstrate that no other suitable site is available. .i.e. in a low risk zone. AWE claims that the chosen site meets the ET on the following 3 grounds:

- i. it has wider sustainability benefits to the community

Objection: Sustainability refers to environmental benefit and does not include any political 'benefit' that the Government claims for nuclear weapons. There is no wider sustainable benefit.

- ii. it is a previously developed site

Objection: This is the only ET that the plan meets, but it is not sufficient on its own to prove the case.

- iii. it is safe, without increasing flood risk elsewhere or even reduces risk

Objection:

It is inconceivable that iii. can be achieved. The elaborate flood protection construction is *designed* to divert floodwater around the vulnerable bunkers, forcing it to flood other areas on and off the site. The 'SUDS' drainage system into the Burghfield Brook is *designed* to clear water from the site regardless of the effects

³ Minutes of AWE Local Liaison Committee meeting, 6th September 2007.

http://www.awe.co.uk/aboutus/Local_Liaison_Committee_b1478.aspx (accessed 16th August 2008). The minutes give considerably more detail about celebrations to mark the Committee's 50th meeting than on the consequences of the flooding.

downstream. It is not safe, it increases risk elsewhere and it does not reduce risk.

Given the unknown effects of climate change over the 60 year lifetime of this facility and the known effects of floodwater on nuclear materials, it is irresponsible to accept diluted legal safety limits by means of ET get-out clauses.

2.2 Future Flooding is Expected

AWE Reports show that the high flood risk to this site has not been solved. The Burghfield Brook and surface water are expected to continue to cause flooding now and in the future. When all else fails, AWE concludes: *“residual risk to the entire site remains to be managed by engineering and emergency staff.”*⁴

2.3 Exceptional Development

In order to avoid flood safety regulations, AWE claims exceptional development status for the plan as follows:

(a) it adjoins an existing development

Objection:

This is the only point that the plan meets, but it is not sufficient on its own to prove the case.

(b) it fulfils a nationally important job

Objection:

Regardless of its political content, this assertion does not overcome the physical problems of the site.

(c) it meets the Exceptional Test

Objection:

The plan does not meet the ET see 2.1 above

(d) it is not feasible to locate the facility close enough elsewhere

Objection:

The feasibility test is subjective and has to be challenged. As with many other AWE jobs, it can be done anywhere, for example in Derby, Coulport. Harwell or elsewhere in Berkshire.

2.4 Additional Buildings

- (a) 16 lighting protector towers,
- (b) associated plant building,
- (c) gate houses, vehicles inspection bays,
- (d) sub-station buildings,
- (e) security fence,
- (f) access roads,
- (g) hardstanding and
- (h) sustainable drainage system (SuDS) infrastructure

Additional buildings in the Application all add to the loss of land for surface rainwater absorption, apart from (e) fence and (h) SuDS.

2.5 Lightning

Lightening is the most serious threat to buildings or vehicles containing nuclear weapons. Lightening conductors could be toppled in a storm if sited on a flood plain where underground water is a known problem. The risk assessment of such an event must take into account the possible result of a tower collapsing and bringing down conductor wires onto a nuclear weapon.

2.6 Site Location

The original 2002 AWE SDP located the new warhead dis/assembly bunkers on the

⁴ DEEA 4.7 and 7.1

Aldermaston site. This was immediately resisted on safety grounds and the plan abandoned. Yet no sustainable alternative site was purchased or prepared. Nor was the AWE site at Blacknest or the nuclear licensed site at Harwell chosen. Nothing was done, leaving the default position to use AWE Burghfield. This wholly unsuitable site in the Burghfield flood plain is being squeezed to the limit to accommodate the most high-risk industrial nuclear operation in the UK. It is the wrong site for any construction.

2.7 Risk to existing facilities

In any event, it will be necessary to continue limited safety-related warhead disassembly in the existing GG bunkers at Burghfield while new facilities are built. If the current application is approved, the risk of flooding these facilities remains, and will be exacerbated by proximity to the construction site. The 1 metre raised ground level on the one-hectare site. This risk alone is sufficient safety grounds on which to refuse approval.

2.8 Lack of Safety Tests

There is absolutely no experimental data on how the facility will behave in any credible accident situation. Nobody has ever detonated a warhead-like assembly in a representative dis/assembly plant to see how it contains the debris. The NI do not demonstrate that they have thought of everything that can possibly go wrong and proved beyond reasonable doubt that there will be no airborne particulate problem off-site. If this cannot be done, what the basis is for NI approval of the new facility?

3. An Achievable Safe Solution

From the AWE Planning Documents it seems there is no prospect that this development can avoid flooding as the flood risk is acknowledged to be High. Floodwater has to go somewhere, and notwithstanding the efforts at flood control, it is possible that the new buildings will flood. It is more likely that the existing building will flood while still in service and highly likely that ground water will rise above ground in an uncontrolled manner. There is no safe solution on this site. The safe solution is to build the complex elsewhere. However, warhead disassembly can continue in the existing building as at present. If a new generation of warheads go ahead in future, it will require a new building on terra firma.

3.1 Planning Conditions

The Nuclear Inspectorate has a difficult role in giving AWE independent advice, challenging failures and supporting its nuclear operations to the limit of NI involvement. Where that involvement ends, the MoD Defence Nuclear Safety Regulator takes over. The NI and the DNSR are anxious that the sub-standard GGs are replaced with modern facilities, but now find that to achieve that end, they must support a proposal that is probably the worst option from a safety point of view. The Environment Agency has a different role in that it does not have a limit of regulation and also has a lead role in flood control and advice. This AWE project stretches both regulators and WBC to impose un-achievable Conditions that will not solve the real threat that flooding poses of a nuclear operational site.

3.2 Liability

Of all the AWE planning applications, this one tests West Berkshire Council's resolve to deal with applications on merit. Any other applicant owning this site would be refused approval for a development, whether industrial, dwellings, or social infrastructure project. An unwise decision by the PA at this stage would result in the constant risk of legal liability in future, despite reassurances by the MoD Applicant. It is this decision the council will be judged by, not by any misplaced confidence in MoD assurances that everything will be alright.