

Permitting decisions

Radioactive Substances Regulation (nuclear sites)

We have decided to vary permit EPR/ZP3690SY for Hinkley Point C (HPC) operated by NNB Generation Company (HPC) Limited (the applicant). The decision is effective from 6 October 2022.

The variation number is EPR/ZP3690SY/V005.

Purpose of this document

This decision document provides a record of our decision-making process. It summarises the decision-making process to show how we have taken all relevant factors in to account in reaching our decision.

We have accepted the applicant's proposals. Our permitting decisions should be read in conjunction with the environmental permit and supporting Compilation of Environment Agency Requirements (CEAR) document. The introductory note of the permit summarises what the permit covers.

Key issues of the decision

Since the granting of the original permit, the applicant has decided to change the technology by which it will store spent nuclear fuel, from wet storage to dry storage. The applicant applied to remove and amend specific conditions of its permit that related to the previous wet storage technology that are no longer relevant. The applicant did not seek any changes to the site boundary, permitted activities or permit discharge limits. The applicant stated that there will be no change in the radiological impact to members of the public or the wider environment.

We carried out a consultation on the application and considered the comments as part of our determination.

We agree with the applicant's demonstration that the proposed change to spent nuclear fuel storage represents Best Available Technique (BAT) for HPC. We are satisfied that the change will not lead to an increase in radioactive discharges, and will not cause adverse radiological impact on people and the environment.

We do not believe that the proposed changes impact any of our decisions made in our original permit determination.

We are satisfied that the changes to the permit are appropriate and are to remove references that are no longer relevant. The changes will not impact our ability to effectively regulate the site and activities. We will continue to assess spent fuel storage and its impact at HPC to ensure that discharges are minimised and that BAT is applied.

We have therefore decided to vary the Radioactive Substances Regulation (RSR) permit EPR/ZP3690SY for Hinkley Point C (HPC). The changes are the removal of Disposal

Outlet A3, Pre-Operational Measure (POM) 1, and amendment of Information Condition (IC) 14.

We have also made minor changes to Table S3.2 'Disposals to water' and Table S3.4 'monitoring techniques' to ensure consistency in the "Other radionuclides" group. The previous version of the permit did not exclude cobalt-60 from the measurement of "Other radionuclides" in aqueous waste. As cobalt-60 is specified in the permit with its own limit, its activity should not be included in the measurement of "Other radionuclides". These changes were initiated by us and did not form part of the variation application submitted by the applicant.

Confidential information

A claim for commercial or industrial confidentiality has not been made.

Consultation

We carried out consultation on the application. The consultation requirements were identified in accordance with the Environmental Permitting Regulations and our statement on public participation, "[Environmental Permits: When and how we consult](#)".

The consultation was published on 18 July 2022 and ended on the 14 August 2022. The consultation was accessible to the public through our online consultation portal Citizen Space.

In the week commencing Monday 18 July 2022, we:

- publicised the application on the GOV.UK website;
- published details of the application and consultation in the Bridgwater Mercury and the Burnham & Highbridge Weekly newspapers;
- sent an ebulletin to all our HPC stakeholders including a translated ebulletin to Welsh stakeholders;
- issued a press release with accompanied social media posts.

We considered all the comments we received as part of our determination process. The comments and our responses are summarised in Annex 1.

Part 1: Variation for the disposal of radioactive waste

Introduction

Pressurised water reactors at Hinkley Point C (HPC) will use uranium fuel to create heat and generate electricity when operating. Once used within the reactor, nuclear fuel will undergo an initial period of cooling in the spent fuel pool within the fuel building. It will then be stored on-site before being sent off-site to a Geological Disposal Facility (GDF).

NNB Generation Company (HPC) Limited was originally issued a radioactive substances environmental permit in 2013. In the original design spent nuclear fuel was to be stored on-site in 'wet storage' - a method of submerging and storing in water.

The applicant has now decided to change the technology by which it will store spent nuclear fuel, from wet storage to 'dry storage'. Dry storage will see used nuclear fuel stored in sealed containers within a facility, before it is sent to the GDF. This means the applicant now seeks to change its radioactive substances environmental permit to remove or amend specific conditions related to the previous wet storage technology that are no longer relevant. The application requests the following changes.

- Removal of Disposal Outlet A3 – Interim Spent Fuel Store (ISFS) Stack.
- Removal of Pre-Operational Measure (POM) 1 – Install HEPA filtration to ISFS Stack.
- Amendment of Information Condition (IC) 14.

Justification

The practice is justified as No.3 Generation of Electricity by Nuclear Reactors – Operation of a PWR. 09/08. SI 2010 No. 2844.

Transboundary Radioactive Contamination Directive

No submission is required for this application.

Operator and operator competence

We have assessed the applicant's competence against our guidance on the definition of legal operator for environmental permits and against our guidance on management arrangements for nuclear site operators.

We are satisfied that the applicant is the person who will have control over the operation of the facility after the grant of the permit.

We have not identified any reasons indicating that the operator is unable to operate in accordance with the permit.

Disposal of radioactive waste

The strategy for spent fuel from HPC is unchanged and is to store on site until a disposal route becomes available for ultimate disposal. This is in accordance with the government's National Policy Statement (National Policy Statement for Geological Disposal

Infrastructure: a framework document for planning decisions on nationally significant infrastructure

(https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/814491/national-policy-statement-geological-disposal-infrastructure.pdf). The applicant must ensure proper management and future disposability of spent fuel. Nuclear Waste Services (NWS), a division of the Nuclear Decommissioning Authority (the public body responsible for the strategic management of radioactive waste), defines the acceptability of higher activity waste forms that are destined to be disposed in the future GDF. It provides confidence for the disposability of anticipated waste and spent fuel through the Letter of Compliance (LoC) disposability assessment process. NWS takes learning from international experience when defining the acceptability of waste packages for disposal to the GDF. NWS has recently published a report (<https://www.gov.uk/government/news/gdf-report-highlights-a-year-of-progress>) on progress in providing a future GDF.

The applicant plans to use Holtec™ dry storage technology which is implemented internationally and at Sizewell B in the UK. The technology utilises the Holtec International Storage Module (HI-STORM) system. Following an initial period of cooling in the spent fuel pool within the fuel building, spent fuel assemblies will be loaded into a Holtec Multi-Purpose Canister (MPC), drained of water, dried, and pressurized with helium. The loaded, sealed MPC will be placed within a Holtec International Transfer Cask (HI-TRAC) to be transported across site to the dry interim spent fuel storage facility (ISFS). The MPC is then transferred to a HI-STORM concrete storage cask to provide shielding and protection during interim storage. Technical information on the design and storage containers is available on the Holtec website. At the request of the applicant, work undertaken by the dry storage technology supplier has demonstrated that the design of the containers represent BAT. The applicant has produced BAT assessments associated with the adoption of the dry storage technology at HPC. We agree with the applicant's demonstration that the proposed change to spent nuclear fuel storage represents BAT for HPC.

The approach enables retrieval and re-packaging, should it be deemed appropriate. We will work with the Office for Nuclear Regulation (ONR) to ensure that an adequate Radioactive Waste Management Case supported by LoCs from the future GDF operator (NWS) is developed for spent fuel from HPC and that the level of confidence in disposal remains appropriate for the project phase.

We are satisfied that the applicant has demonstrated the suitability for disposal of any wastes for which there is no current available disposal route (including spent fuel). The applicant has also demonstrated that the wastes will be managed, in the interim, in a manner which will not prejudice their ultimate disposal. The applicant's proposals are consistent with government policy that higher activity wastes will be managed in the long term through geological disposal, with safe and secure interim storage.

Disposal routes and limits

The applicant has not sought changes to any of the permitted discharge limits. As the dry storage casks are sealed, the applicant does not anticipate any liquid or gaseous discharges from the operation of the dry ISFS. Any discharges associated with fuel

handling and processing prior to storage will be managed through existing disposal routes and planned monitoring equipment and arrangements. The applicant has therefore applied to make the following changes to the permit:

- Removal of Disposal Outlet A3 – Interim Spent Fuel Store (ISFS) Stack. The applicant proposes that the dry ISFS will not have any gaseous discharges and therefore does not require a stack.
- Removal of Pre-Operational Measure (POM) 1 – Install HEPA filtration to ISFS Stack. The applicant proposes that the dry ISFS does not require a stack so installation of HEPA filtration is no longer relevant.

From the information provided and the operational experience from Sizewell B we are satisfied that there will be no discharges from the operation of the dry ISFS, and that removal of the disposal outlet and associated pre-operational measure is appropriate. We agree that the changes are required to ensure the permit is accurate and reflects the designed operational power station. We have updated the permit to reflect these changes.

Any discharges associated with fuel handling and processing prior to storage must be via an authorised discharge route, with appropriate abatement and sampling, and within existing permitted limits.

Operational management

In the original permit we included the following improvement and information requirement to ensure the operator demonstrated at an appropriate time that the operational management of the ISFS represents BAT:

- IC 14 – The operator shall provide the Environment Agency with its specification for the operational management of the Interim Spent Fuel Store (including temperature, ventilation and chemistry control), together with a demonstration of how this contributes to the use of BAT to minimise the activity in discharges (addressing, in particular, the maintenance of fuel integrity and the minimisation of the discharge of tritium to air).

The improvement and information requirement includes references to wet storage, such as chemistry control, which will not be relevant for a dry ISFS. The applicant has therefore applied to amend IC 14 to remove references to wet storage. We agree that IC 14 should be amended to the following:

- IC 14 – The operator shall provide the Environment Agency with its specification for the operational management of the Interim Spent Fuel Store, together with a demonstration of how this contributes to the use of BAT.

The requirement to provide a specification for the operational management of the ISFS will therefore remain. We will assess the submission, which must be provided six months before operational of the relevant plant. In this case relevant plant is taken to mean the ISFS. We have updated the permit to reflect these changes.

Monitoring

The applicant has stated there will be no liquid or gaseous discharges from the operation of the dry ISFS, therefore no discharge monitoring is required.

The site environmental monitoring programme is still being developed and as part of Improvement Condition 16 of the permit the operator shall provide the Environment Agency with a report setting out and justifying its proposed environmental monitoring programme 30 months before the start of radioactive commissioning.

Radiological assessment

The applicant provided information on a further assessment that had been completed to consider the external dose from the dry ISFS. The data provided demonstrated that a new assessment into the radiological impacts from the facility was not required.

As part of our original permit determination in 2013, we assessed the dose to the theoretical representative person who would be most exposed to discharges, including an allowance for direct radiation from site. For discharges at the permit limits, the annual dose for HPC would be 8.4 μSv , and the combined maximum impact of Hinkley Point A, B and C sites as 43 μSv . Both these doses are significantly less than the legal dose limit for the public of 1000 μSv a year and significantly less than UK dose constraints. As there is no proposed change to aqueous or gaseous discharge limits, there is no impact on the associated dose. Whilst the direct radiation (including sky-shine) may be higher from a dry ISFS, the applicant has assessed the external dose rate to be negligible, and not to impact on the dose to the theoretical representative person.

We are satisfied that the no additional radiological assessment is required and that the change does not impact our original dose assessment.

Non-radiological issues

Some legislation that applies to non-radioactive properties of waste does not apply when the waste is radioactive waste. We are required to achieve broadly the same level of environmental protection as would be achieved by controlling non-radioactive pollutants through other regulation. We are satisfied that the non-radioactive properties of waste have been considered and the environmental impact is acceptable. Under permit condition 2.3.7 operators shall carry on the activities in a manner so as to minimise the risk of pollution from any non-radioactive substances in, or any non-radiological properties of, the radioactive waste, except to the extent the risk is addressed in a separate environmental permit.

Other

We initiated minor changes to Table S3.2 'Disposals to water' and Table S3.4 'monitoring techniques' to ensure consistency in the "Other radionuclides" group.

Table S3.2 details disposals to water. 'Outlets W4-W7 and Approved outlets' are limited to 5% of the relevant annual limit for all outlets, for each specified radionuclide. Previous versions of the permit have not specified cobalt-60 as a relevant radionuclide limit. We have updated the permit to ensure cobalt-60 is included.

Table S3.4 details monitoring techniques. In variation v004 we removed specifications from the table that were no longer available, or no longer represented BAT. In the updated wording for monitoring techniques for 'Table 3.2 Other radionuclides' we specified "...the

Operator shall measure the gross activity, excluding tritium and caesium-137...". As cobalt-60 and carbon-14 are specified aqueous radionuclides with their own annual limits, they should also be excluded from the gross activity measurement, along with tritium and caesium.

We have updated the permit to reflect these changes.

Growth duty

We have considered our duty to have regard to the desirability of promoting economic growth set out in section 108(1) of the Deregulation Act 2015 and the guidance issued under section 110 of that Act in deciding whether to grant this permit.

Paragraph 1.3 of the guidance says:

"The primary role of regulators, in delivering regulation, is to achieve the regulatory outcomes for which they are responsible. For a number of regulators, these regulatory outcomes include an explicit reference to development or growth. The growth duty establishes economic growth as a factor that all specified regulators should have regard to, alongside the delivery of the protections set out in the relevant legislation."

We have addressed the legislative requirements and environmental standards to be set for this operation in the body of the decision document above. The guidance is clear at paragraph 1.5 that the growth duty does not legitimise non-compliance and its purpose is not to achieve or pursue economic growth at the expense of necessary protections.

We consider the requirements and standards we have set in this permit are reasonable and necessary to avoid a risk of an unacceptable level of pollution. This also promotes growth amongst legitimate operators because the standards applied to the operator are consistent across businesses in this sector and have been set to achieve the required legislative standards.

Decision

We conclude that that the operator can operate in accordance with the permit conditions to meet statutory requirements and the requirements of Government policy. We therefore grant the application, subject to the conditions of the permit.

Annex 1: Consultation and advertising responses

The following summarises the responses to consultation with other organisations, our notice on GOV.UK for the public, newspaper advertising, and the way in which we have considered these in the determination process.

How we publicised the consultation

The consultation on the application was advertised by a notice on GOV.UK, by issuing a press release and social media posts, by newspaper advertisement in the Bridgwater Mercury and Burnham & Highbridge, and by ebulletin email to all our HPC stakeholders. We included information on the application, told people where they could see a copy of the application and how to make comments. Copies of the application were made available for public inspection using our e-consultation tool Citizen Space.

Who we consulted

We wrote to the following bodies informing them of the application and directing them to copies of the application online:

- Somerset County Council
- Office for Nuclear Regulation
- Department for Business, Energy and Industrial Strategy (BEIS)
- Somerset West and Taunton
- UK Health Security Agency
- Natural Resources Wales

Responses to the consultation on the application

We received 41 responses from organisations and individuals. These are summarised here, together with our consideration of them.

Topic: Packaging and disposability

Raised by: ANON-XJRG-XUNB-R, ANON-XJRG-XU1W-G, ANON-XJRG-XUNR-8, Stop Hinkley

Summary of issues raised

Several consultees asked for more information on the dry fuel storage packages (casks), and whether these could be used for transport or eventual disposal of the spent fuel. Questions were raised about the eventual disposal of the waste, and uncertainty over timing of the Geological Disposal Facility (GDF).

Our consideration of the issues

The strategy for spent fuel from HPC is unchanged and is to store on-site until a disposal route becomes available for ultimate disposal. This is in accordance with the government's

National Policy Statement (National Policy Statement for Geological Disposal Infrastructure: a framework document for planning decisions on nationally significant infrastructure

(https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/814491/national-policy-statement-geological-disposal-infrastructure.pdf). The applicant must ensure proper management and future disposability of spent fuel. Nuclear Waste Services (NWS), a division of the Nuclear Decommissioning Authority (the public body responsible for the strategic management of radioactive waste), defines the acceptability of higher activity waste forms that are destined to be disposed in the future GDF. It provides confidence for the disposability of anticipated waste and spent fuel through the Letter of Compliance (LoC) disposability assessment process. NWS takes learning from international experience when defining the acceptability of waste packages for disposal to the GDF. NWS has recently published a report (<https://www.gov.uk/government/news/gdf-report-highlights-a-year-of-progress>) on progress in providing a future GDF.

The applicant plans to use Holtec™ dry storage technology which is implemented internationally and at Sizewell B in the UK. The technology utilises the Holtec International Storage Module (HI-STORM) system. Following an initial period of cooling in the spent fuel pool within the fuel building, spent fuel assemblies will be loaded into a Holtec Multi-Purpose Canister (MPC), drained of water, dried, and pressurized with helium. The loaded, sealed MPC will be placed within a Holtec International Transfer Cask (HI-TRAC) to be transported across site to the dry ISFS. The MPC is then transferred to a HI-STORM concrete storage cask to provide shielding and protection during interim storage. Technical information on the design and storage containers is available on the Holtec website.

The approach enables retrieval and re-packaging, should it be deemed appropriate. We will work with the Office for Nuclear Regulation (ONR) to ensure that an adequate Radioactive Waste Management Case supported by LoCs from the future GDF operator (NWS) is developed for spent fuel from Hinkley Point C and that the level of confidence in disposal remains appropriate for the project phase. Requirements for transport of nuclear material are addressed by the ONR as the competent authority. Whilst we would support the use of casks for disposal on the grounds of reduced volumes of waste produced, they would need to meet safety, transport and environmental protection requirements.

We are satisfied that the applicant has demonstrated the suitability for disposal of any wastes for which there is no current available disposal route (including spent fuel). The applicant has also demonstrated that the wastes will be managed, in the interim, in a manner which will not prejudice their ultimate disposal. The applicant's proposals are consistent with government policy that higher activity wastes will be managed in the long term through geological disposal, with safe and secure interim storage.

Topic: Safety and security

Raised by: ANON-XJRG-XUNB-R, ANON-XJRG-XUN2-8, ANON-XJRG-XUN9-F, ANON-XJRG-XUN3-9, ANON-XJRG-XU1W-G, ANON-XJRG-XUNP-6, Stop Hinkley, Bisley with Lypiatt Parish Council,

Summary of issues raised

Consultees highlighted that a robust case for safety and security would be required, including against accidental or deliberate harmful acts. Concerns were raised over the potential for leaks from the casks, and their resilience against either internal or external fires.

Our consideration of the issues

On a nuclear licensed site, safety and security are regulated by the ONR, along with the keeping and use of radioactive materials. The ONR were consulted on the application and responded with the following:

“We have been aware, for some time, of NNB GenCo (HPC)’s proposal to change from a wet to a dry on-site storage solution for spent nuclear fuel. Fuel storage for HPC has been and will continue to be subject to extensive regulatory oversight. In 2018, we undertook an assessment of the category 1 modification and safety case associated with design changes necessitated by the change to dry spent fuel storage, where we accepted the principal of dry storage and the changes required to facilitate it. The Project Assessment Report ONR-NR-PAR-18-004 summarises our findings in respect of the proposed design changes.

We found that the modification was subject to appropriate rigorous due process in accordance with the licensee’s Licence Condition 20 arrangements and our assessments concluded that the proposed modified design will ultimately reduce the level of risk as low as reasonably practicable, and concludes that it should be permitted to go ahead. Licence Instrument LI515 formally sets out our agreement to these changes.

Having considered the variation that the Environment Agency is consulting on, I am satisfied that there are no matters relating to that variation that are relevant to our regulatory interests. We, therefore, provide a nil response to the consultation.”

Whilst issues relating to safety are regulated primarily by the ONR, the applicant must ensure fuel handling operations remain compliant with any conditions of its permit and represent BAT. We will assess proposals for the operation of the Interim Spent Fuel Store through permit information condition (IC) 14. We will further assess spent fuel management and handling operations through normal regulatory engagements as information becomes available.

The spent fuel will be stored in welded casks, with leak-tight containment that is justified to maintain containment of the helium atmosphere inside the cask for a 120-year storage life. The casks are designed to allow passive cooling of the fuel, with additional safety systems in place to mitigate external hazards.

Spent fuel will be dried within the cask, effectively replacing the cask water with helium and drying it. Whilst this is a different processing step when compared to wet storage, it does not significantly increase the amount of fuel handling required.

Topic: Technological readiness and Best Available Technique (BAT)

Raised by: ANON-XJRG-XUNC-S, ANON-XJRG-XUN4-A, ANON-XJRG-XUN9-F, ANON-XJRG-XUN3-9, ANON-XJRG-XUN5-B, ANON-XJRG-XUNS-9, ANON-XJRG-XUNF-V, Oldbury on Severn Parish Council

Summary of issues raised

We were asked why BAT had changed, and how wet storage can continue to represent BAT at other sites, including Sellafield. Questions were raised over whether dry storage was a tested and proven-safe technology.

Our consideration of the issues

While wastes are stored on site they will be kept in safe, secure storage and regulated by the ONR. The strategy for HPC does not involve sending spent fuel to Sellafield, which receives spent fuel from the Advanced Gas-cooled Reactor (AGR) fleet for storage prior to final disposal. Operators must demonstrate the use of BAT, which will depend on numerous considerations including the site and the type of waste. Sellafield has determined that for the spent fuel type sent from the AGRs, wet fuel storage represents BAT. At Hinkley Point C, for the on-site interim storage of its Pressurized Water Reactor (PWR) spent fuel, dry storage has been demonstrated as representing BAT.

It was recognised in the original permit application that there was negligible difference in environmental protection and performance between wet and dry storage, and the applicant considered both technologies could represent BAT. The applicant has considered both national and international operational experience of spent fuel storage when determining BAT. Dry storage has been implemented internationally for several decades, for a range of radioactive waste applications. It has also been implemented nationally at Sizewell B, which uses the same technology and has a similar fuel type. The first cask was emplaced at Sizewell B fuel store in 2017. Regardless of the technology used, the applicant must comply with the conditions and limits set out in its environmental permits, which remain the same.

Topic: Discharges and dose

Raised by: ANON-XJRG-XUND-T, ANON-XJRG-XUNK-1, ANON-XJRG-XU1M-6, Stop Hinkley

Summary of issues raised

Consultees asked about the operational discharges from the facility and whether changes to fuel handling and drying would increase discharges. Were the monitoring requirements for the new facility reduced, and if a contribution of gaseous discharges is removed, why aren't the permit limits being reduced?

Our consideration of the issues

The proposed permit change does not lead to an increase in radioactive discharges, and there will be no gaseous or liquid discharges from the operation of the proposed dry ISFS. The applicant has indicated that there will be no fugitive emissions of radioactive gases from the dry ISFS. From the information provided and the operational experience from Sizewell B we are satisfied that this will be the case.

We expect operators to minimise the volume and activity of waste produced and discharged. This applies throughout the permitted lifecycle of a site. Whilst dry storage removes a contribution of gaseous radioactive discharge compared with wet storage, there may be an increase in discharges associated with fuel handling and processing prior to

storage. Fuel handling and processing is expected to take place in campaigns with activities concentrated in short periods. We are therefore not seeking any changes to the existing annual discharge limits. Any discharges must be via an authorised discharge route, with appropriate abatement and sampling, and within existing permitted limits. We will undergo periodic review of the permit once the station is operational to ensure that the permit limits and conditions continue to be appropriate.

Direct radiation from the interim storage facilities for spent fuel will potentially result in members of public receiving some very low-level exposures. The applicant has stated that the spent fuel dry storage casks will be designed to reduce doses as far as reasonably practicable.

Topic: Process for spent fuel

Raised by: MAIL220718_01, ANON-XJRG-XU1W-G, ANON-XJRG-XU1M-7, Oldbury on Severn Parish Council, Stop Hinkley

Summary of issues raised

Consultees asked for clarification on whether spent fuel would go through an initial period of cooling before being placed into casks. If a cooling pool were to be used, how would pool chemistry and evaporative losses be managed. We were asked how local site waste storage would be minimised, and where more technical detail on the process and waste packages could be found.

Our consideration of the issues

The fuel will initially be stored in the spent fuel pool, within the fuel building until sufficiently cooled to be safely transferred to dry storage. Permit requirement IC 13 in table S1.2 of Schedule 1 of the permit required the applicant to provide the specification for controlling the temperature, ventilation and chemistry of this fuel pool before operations commence. In 2020 we assessed information provided by the applicant to meet the IC. We were satisfied with the specification and demonstration of BAT, and consider IC 13 to be closed. Details of our assessment are included in Radioactive Substances Regulation Compliance Assessment Report (RASCAR) reference REV/200925/ZP3690SY, which is available on the public register.

We will also require the applicant to provide an assessment of the operational management of the dry ISFS to demonstrate the application of BAT, under permit requirement IC 14. We will carry out a regulatory assessment of the submission and detail our assessment within a RASCAR, which will also be placed on the public register.

It is an ongoing permit requirement for operators to use BAT to minimise the volume and activity of radioactive waste. Operators must also demonstrate the application of BAT to dispose of radioactive waste at a time, in a form, and in a manner to minimise the radiological effects on the environment and members of the public.

Topic: Permit requirements

Raised by: ANON-XJRG-XUNF-V, ANON-XJRG-XU1M-6, ANON-XJRG-XU1M-7

Summary of issues raised

As there are proposed changes to the wording of IC 14 and removal of POM-1, we were asked what the equivalent requirements were for dry storage and the facility. Consultees asked whether there would be pre-operational measures to install forced ventilation in the new facility. We were asked why the existing permit allows the applicant to receive radioactive waste for the purpose of disposal. We were also asked why we issued the original permit if security measures such as aircraft protection were not technically feasible for the wet storage facility.

Our consideration of the issues

The proposed changes to the permit relate to removal of references to the specific type of storage. As the proposed dry ISFS design does not include a gaseous discharge outlet, there is no requirement for gaseous filtration. Amendment of IC 14 will ensure that the operational management of the ISFS will be assessed, regardless of the technology. We will review the operational management of the dry ISFS as part of our regulatory assessment of the IC 14 submission. This will include whether ventilation will be required or included in the ISFS.

We issue permits based on the information provided at application. Operators must comply with all conditions, which relate primarily to radioactive waste and discharges and the application of BAT. Should an operator be unable to build and operate a facility within the conditions of the permit, it will need to apply to vary its permit. Aspects relating to safety and security are regulated by the ONR through the nuclear site licence.

Whilst the permit authorises the receipt of radioactive waste, it is restricted to waste that is associated with the operation of the UK EPR™ reactors. The applicant has not applied to be able to receive radioactive waste from other sites. The applicant has stated only spent fuel from HPC will be stored in the dry ISFS facility. In the original permit application, the applicant did not include any information on the receipt of waste because it only expects to receive returned samples that have been set off-site to environmental monitoring laboratories, waste returned to the site that originated from site in accordance with permit condition 3.1.7 or waste collected as a result of any future participation in the National Arrangements for Incidents involving Radioactivity (NAIR) or the RADSAFE scheme. The permit contains standard conditions requiring the operator to provide information to potential consignors about waste that can be accepted under this permit to ensure that consignors only send waste that the operator can receive.