

## About this consultation

### Hinkley Point C, TA5 1UD, NNB Generation Company (HPC) Limited: environmental permit consultation

**The aim of this consultation is to ask whether you have any comments relevant to the permit application.**

We want to make the best decision when permitting. Listening to the views of others helps us to take account of concerns, or local environmental factors, that we may not be otherwise aware of.

We've received an application to vary an existing permit from NNB Generation Company (HPC) Limited during the construction phase at Hinkley Point C nuclear power station. We are seeking comments on this application. Please use the reference number below when making comments. The details of the application are as follows:

- Permit Number: [EPR/JP3122GM/V009](#) & [EPR/JP3122GM/V010](#)
- Regulated facility type: Water Management Zones and effluent treatment units
- Regulated facility location: Construction site at Hinkley Point C power station, Near Bridgwater, Somerset, TA5 1UD
- Receiving environment: Severn Estuary
- Effluent type: New trade effluent comprising effluent from cold commissioning activities, including hydro-testing and demineralised water production; existing trade effluent consisting of pumped groundwater and existing trade effluent consisting of tunnelling effluent and muck bay drainage
- Volume: Maximum daily discharge of 1,500 cubic metres at a maximum rate of 70 litres per second (new);  
Maximum daily discharge of 1,728 cubic metres at a maximum rate of 20 litres per second (existing);  
Maximum daily discharge of 2,592 cubic metres at a maximum rate of 30 litres per second (existing).

#### What does the operator want to do?

This existing permit allows a number of discharges to be made to the Severn Estuary solely during the construction phase at HPC.

[Under reference number \[EPR/JP3122GM/V009\]\(#\)](#)

The Company wants to vary this existing construction phase permit to allow the discharge of another type of liquid waste – known as trade effluent. This will result from cold commissioning activities onsite and it will be discharged into the Severn Estuary via a pipe on HPC's temporary jetty. Cold commissioning simply means testing the performance of certain components and systems, such as pipes, tanks and other structures. The tests will check for leaks and blockages and how the water flows through them before the start of electricity generation.

The Company wants to be able to discharge up to 1,500 cubic metres daily of this trade effluent from their cold commissioning activities to the Severn Estuary at a maximum rate of 70 litres per second.

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In order to carry out these tests the Company wants to carry out the following activities:

- Hydro-testing - this involves filling components and systems with water up to a certain pressure to test for leaks. The company then want to discharge this used water to the Severn Estuary.
- Flushing – this involves filling and emptying the components and systems several times to check they are clean and flowing correctly. The company then want to discharge this used water to the Severn Estuary.
- Production of demineralised water - this involves purifying water to be used for the Hydro-testing and flushing described above. The production of this demineralised water results in a by-product which the company also wishes to discharge to the Severn Estuary.

In some cases chemicals will be used for these activities so they may be present in the water that will be discharged into the Severn Estuary. These chemicals are:

- Hydrazine
- Un-ionised ammonia
- Ethanolamine
- Trisodium Phosphate

#### Under reference number EPR/JP3122GM/V010

The Company also wants to vary the amount of Ammonia that is currently allowed to be discharged in two liquid waste types already covered by this existing construction phase permit. The two existing activities on this permit are:

- Activity E2 - Trade effluent (consisting of pumped groundwater) discharged via Outlet 12. The permit allows a maximum daily discharge of 1,728 cubic metres at a maximum rate of 20 litres per second.
- Activity H - Trade effluent (consisting of tunnelling effluent and muck bay drainage) also discharged via Outlet 12. The permit allows a maximum daily discharge of 2,592 cubic metres at a maximum rate of 30 litres per second.

Outlet 12 is the same discharge point to the Severn Estuary as that which will be used for the trade effluent from cold commissioning activities. It is located on HPC's temporary jetty.

#### **Will the discharge be radioactive?**

There will be no radioactivity associated with the components and systems being tested as part of this 'cold commissioning' or with any of the existing activities included in this construction phase permit.

At a later stage following the completion of testing and commissioning of the relevant systems, radioactive fuel loading will occur at the power station. At that stage any liquid discharges will be covered under the existing Radioactive Substance Regulation permit (Permit number: EPR/ZP3690SY).

#### **What are we consulting on?**

The Company has submitted a number of reports alongside the application to vary its existing permit. We need to consider all of these fully and independently before we can make any decision on whether the Company's proposals are acceptable or not. The reports submitted by the Company include:

- A summary report, which provides the detail of the application and the supporting information, including a non-technical summary.
- A report detailing the modelling assessment of the effluents that the Company want to discharge via the temporary jetty (TR428).
- A report detailing the modelling assessment for the discharge of hydrazine (one of the chemicals used for flushing) within the effluent (TR445). This includes an assessment of hydrazine levels expected both in the cold commissioning effluent and in the cooling water once the power station is operational (up and

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running). We are currently only consulting on, and assessing, the sections of this report relevant to the cold commissioning effluent.

- A report providing evidence to inform a Habitats Regulations Assessment (TR550). This considers whether the effluents that the Company want to discharge via the temporary jetty have the potential to affect the habitats and species designated as part of the Severn Estuary Special Area of Conservation (SAC), Special Protection Area (SPA) and Ramsar site, and also those forming part of the Bridgwater Bay Site of Special Scientific Interest (SSSI).
- A report that predicts the effect of the power plant on the water quality at Hinkley Point (TR186), which was produced in 2011 and includes an evaluation of the potential effect of discharging hydrazine at Hinkley Point.
- A report that details laboratory studies conducted on the decay of hydrazine in Hinkley Point seawater (TR390).

### Why are we consulting?

We are running a public consultation because Hinkley Point C is a major infrastructure project, important at the local, national and international scales. We understand that changes at the site are likely to be of public interest. We make decisions based on evidence and involve stakeholders, consultees and the public in order to improve the transparency of our decision-making.

We welcome feedback from everyone who has a view on the application, regardless of their age, sex, disability, marriage and civil partnership status, pregnancy or maternity status, race, religion or belief or their sexual orientation.

### How can I get further information?

Please address any questions about this permit application to [psc-waterquality@environment-agency.gov.uk](mailto:psc-waterquality@environment-agency.gov.uk)

For general information about our permitting process please see:

[www.gov.uk/topic/environmental-management/environmental-permits](http://www.gov.uk/topic/environmental-management/environmental-permits)

For further information about our role in regulating Hinkley Point please see:

<https://www.gov.uk/government/collections/hinkley-point>

### What will the response be used for?

We will take your consultation responses into consideration as part of our determination of the permit. If we decide to grant the permit we will explain how we made our decision and how we have addressed the concerns that you raised.

We will only issue a permit if we believe that harm to the environment, people and wildlife will be minimised and that the operator has the ability to meet the conditions of the permit. Providing a business can prove that the proposed activities meets all the legal requirements, including environmental, technological and health requirements, then we are legally obliged to issue a permit, even if some people do not approve of the decision.

### How to Respond:

**Online:** If you would like to comment online, please do so using this Citizen Space online consultation portal.

**Email:** Please send to [psc-waterquality@environment-agency.gov.uk](mailto:psc-waterquality@environment-agency.gov.uk)

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**By post:** Please send it to:

Environment Agency  
Permitting and Support Centre  
Water Quality Team  
Quadrant 2  
99 Parkway Avenue  
Sheffield  
S9 4WF

Please contact our Permitting and Support Centre on 03708 506 506 if you need printed versions of the documents.

**All comments need to be submitted by 14 September 2021.**

#### How we will use your information:

We will look to make comments received publicly available at our local Environment Agency office.

We do not include personal email addresses and telephone numbers in comments which are made publicly available. If you have requested confidentiality your comments will not appear on our public register.

In accordance with the Freedom of Information Act 2000, we may be required to publish your response to this consultation, but will not include any personal information. If you have requested your response to be kept confidential, we may still be required to provide a summary of it.

#### Consultation Principles:

We are running this consultation in accordance with the criteria set out in the government's [Consultation Principles](#).

If you have any queries or complaints about the way this consultation has been carried out, please contact:

Environment Agency  
Permitting and Support Centre  
Water Quality Team  
Quadrant 2  
99 Parkway Avenue  
Sheffield  
S9 4WF

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