

About this consultation

TA5 1UD, NNB Generation Company (HPC) Limited: environmental permit variation consultation

The aim of this consultation is to ask whether you have any comments relevant to the permit variation 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 are seeking comments on the application for NNB Generation Company (HPC) Limited. Please use the reference number below when making comments on this application.

- Permit Number: EPR/JP3122GM/V013
- Regulated facility type: Water management zones and effluent treatment units serving the Hinkley Point C (HPC) construction site
- Regulated facility location: Hinkley Point C construction site, Hinkley Point C power station, Wick Moor Drove, Near Bridgwater, Somerset, TA5 1UD

Additional details provided to aid your review of the application and supporting information documents

For information, we have included details below to aid the review of the applicant's 43 page main support document (document reference: 101327610 revision 03), which can be used to locate relevant sections which may be of interest to the reader/reviewer. It also provides an indication of each section's length by specifying the number of pages within each section of the HPC main variation application support document. This may help indicate how much time resources will be required to review each section of the document if it is of interest to you.

Quick breakdown of HPC's main permit variation supporting information report (HPC ref: 101327610 revision 03)

Listed on the Citizen Space consultation for this consultation as document:

- 3. HPC CWDA variation 13 - 101327610 revision 03 - HPCs technical summary report - EPR-JP3122GM-V013

The above supporting information report (101327610 revision 03) is 43 pages in total and is broken down into the following sections (with page numbers provided within the PDF report):

Document cover sheet: Pages 1 and 2 (2 pages in total)

Non-technical summary: Pages 3 to 5 (3 pages in total)

Contents list: Pages 6 and 7 (2 pages in total)

Tables and figures list: Page 7 (1 page in total)

Section 1: Introduction – Pages 8 to 10 (3 pages in total)

- **1.1:** Purpose – Pages 8 and 9
- **1.2:** Scope – Page 9

- **1.3:** Summarised description of the proposed variation – Pages 9 and 10
- **1.4:** Definitions – Page 10

Section 2: Proposed variation - Pages 11 to 13 (3 pages in total)

- **2.1:** Description of current operations – Page 11
- **2.2:** Effluent characterisation – Page 12
 - **2.2.1:** Activity A – Page 12
 - **2.2.2:** Activity I – Page 12
- **2.3:** Effluent development – Pages 12 to 13
 - **2.3.1:** Activity A – Page 12
 - **2.3.2:** Activity I – Pages 12 and 13
 - **2.3.3:** Activity J – Page 13

Section 3: Environmental assessment - Page 13 to 29 (17 pages in total)

- **3.1:** Methodology - Pages 13 and 14
- **3.2:** Re-Assessment - Activity I - Pages 14 to 18
 - **3.2.1:** Justifications - Free chlorine, Copper (page 15), Ammonia (pages 16 and 17), Hydrazine (pages 17 and 18)
- **3.3:** Assessment – Activity J(i) - Page 19
- **3.4:** Assessment – Activity J(ii) - Pages 19 to 25
 - **3.4.1:** H1 Assessment - Copper, Zinc and Free Chlorine - Page 19
 - **3.4.2:** H1 Assessment - Demineralised Water Plant Maintenance Chemicals - Pages 20 to 25
- **3.5:** Assessment – Activity A - Pages 25 to 26
 - **3.5.1:** Justifications - Ammoniacal nitrogen and Ethanolamine - Page 26
- **3.6:** In-Combination Assessment - Pages 26 to 28
- **3.7:** Treatment Approach - Pages 28 to 29

Section 4: Conclusions - Page 30 (1 page in total)

Section 5: References – Pages 31 and 32 (2 pages in total)

Appendix A: Permitted activities, discharges and waste streams under activity I – Pages 33 and 34 (2 pages in total)

Appendix B: Copper, Zinc and Chlorine data and calculations – Pages 35 to 39 (4 pages in total)

Appendix C: Chemicals for use in demineralisation plant data and calculations – Pages 40 to 43 (4 pages in total)

List and location of figures and tables:

- **Figure 1:** Location of temporary jetty, Outlet 12 and Outlet 1 – The blue Xs mark the approximate location of Outlet 12 and Outlet 1 (Page 11)
- **Table 1:** Test 5 process for H1 Assessment (Page 14)
- **Table 2:** Copper, Ammonia, Hydrazine and Chlorine analysis summary (Page 15)
- **Table 3:** Area of exceedance for total Ammonia with a constant discharge (Page 16)
- **Table 4:** Area of exceedance for un-ionised Ammonia with a constant discharge (Page 16)
- **Table 5:** Area of exceedance by discharge type for total Ammonia (Page 16)
- **Table 6:** Area of exceedance by discharge type for un-ionised Ammonia (Page 17)
- **Table 7:** Comparison of areas of exceedance for Hydrazine for a 15µg/l continuous and pulsed discharge (Page 18)
- **Table 8:** Summary of Copper, Zinc and Chlorine concentrations in Activity J effluent stream (Page 19)
- **Table 9:** Test 5 for Copper, Zinc and Chlorine in the demin reject water (Page 19)
- **Table 10:** Summary of H1 assessment for plant maintenance chemicals and CIP products used in the demineralisation plant (pages 21 to 24)

- **Table 11:** Ecotoxicity data for substances without registered PNEC (Page 25)
- **Table 12:** Summary of ammonia and ETA concentrations in WMZ3 (Page 26)
- **Table 13:** In-combination assessment: Final mix Copper, Ammonia and Zinc concentrations (Page 27)
- **Table 14:** In-combination assessment: Copper, Ammonia and Zinc EVF values (Page 27)
- **Table B1:** Potable water samples and analysis (Pages 35 to 39)
- **Table C1:** Annual consumption of substance and percentage of total effluent (Page 40)
- **Table C2:** Substance chemical composition analysis for maximum discharge concentration (Pages 41 and 42)
- **Table C3:** Test 5 for substance with a maximum discharge concentration above their PNEC (predicted no effect concentration) (Page 43)

The applicant has completed the required Environment Agency WDA permit variation application forms (Part A, Part F, Part C2 and Part C6), which are provided within the following HPC permit variation application document (as listed on the Citizen Space page for this consultation):

- 2. HPC CWDA variation 13 - 101561501 - Variation application forms - EPR-JP3122GM- V013

For awareness, the permit application forms are available on GOV.uk at the following web-link:

<https://www.gov.uk/government/collections/environmental-permit-application-forms-to-change-vary-an-existing-permit>

What the response will 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 were 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

If you would like to comment online, please use the online consultation tool in Citizen Space.

If you'd prefer to submit your response by email, contact psc-waterquality@environment-agency.gov.uk

How we will use your information

We will look to make comments received publicly available at our Environment Agency public register.

All comments which are made publicly available will exclude email addresses and telephone numbers. Any comments where confidentiality has been claimed will not appear on the 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 email: psc-waterquality@environment-agency.gov.uk

END OF DOCUMENT

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