



**Cyfoeth  
Naturiol  
Cymru  
Natural  
Resources  
Wales**

Ein cyf/Our ref: CAS-127272-N9Z2  
Eich cyf/Your ref: 20/0986/10

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25/11/2020

Annwyl Syr/Madam / Dear Sir/Madam,

**BWRIAD / PROPOSAL: CONSTRUCTION AND USE OF A STACK WITH ASSOCIATED PIPEWORK AND A CONTINUOUS EMISSIONS MONITORING SYSTEMS GANTRY WITH LADDER ACCESS.**

**LLEOLIAD / LOCATION: FIFTH AVENUE, HIRWAUN INDUSTRIAL ESTATE, HIRWAUN.**

Thank you for consulting Cyfoeth Naturiol Cymru / Natural Resources Wales about the above, which we received on 07/10/2020.

We have previously provided statutory pre-application advice to this application on the 29 July 2020 (our reference CAS-118210-W2N5) where we provided advice regarding Designated Sites and Flood Risk at this site. We have reviewed the updated submitted information and provide the following advice.

**We have significant concerns with the proposed development as submitted. We recommend you should only grant planning permission if you attach the following conditions from the February 2019 planning permissions, as detailed on the RCTCBC Decision Notice (ref 17/0249/10) and BBNPA Decision Notice (ref 17/14587/FUL) to the permission. Otherwise, we would object to this planning application.**

- Condition: Dust Management Plan
- Condition: Additional Technologies
- Conditions: Land Contamination

**Further to this, we recommend you should only grant planning permission if you include the following document within the condition identifying approved plans and documents on the decision notice:**

- 'Environmental Statement Addendum - Chapter Eight – Appendix 8.3' prepared by Enviroparks dated September 2020.

**In addition, a new or amended s106 will be required.**

We understand the application site has extant planning permission, known as the '2019 scheme', granted in February 2019, for a sustainable waste resources recovery and energy production park, including an emissions stack of 45m under planning references 17/0249/10 (RCT) and 17/14587/FUL (BBNPA). We further understand that the purpose of the current application is solely to amend to the location and height (from 45m to 90m) of the main emission chimney stack.

We are aware that a permit application under the Environmental Permitting (England and Wales) Regulations (EPR) 2016 has not yet been received for the current proposals. An EPR permit application was made in 2017, however, this was subsequently withdrawn. We understand that the applicant does not intend to twin-track their planning and EPR applications. However, we advise this is undertaken to try and ensure that there is no conflict between any planning permission granted and the permit requirements.

Based on the application as proposed, we have reviewed the submitted information and have the following comments:

**Designated Sites**

The application site is within screening distance of three Natura 2000 sites; Blaen Cynon SAC, Coedydd Nedd a Mellte SAC and Cwm Cadlan SAC and subsequent SSSI sites.

We have completed a high level review of the submitted air quality assessment and as a result of this review, we are satisfied that the dispersion modelling methodology is appropriate for the purposes of informing the planning application. However, it would only be when full details of modelling and technology is provided and considered as part of an EPR application, that NRW's permitting function would be in a position to properly verify the data.

The results of the latest modelling give Process Contributions (PCs) for both nutrient nitrogen deposition and acid which are lower than those for the 2019 scheme. Table 9A from Appendix A (Volume 2 EWL ES-addendum 2020 Technical Appendices) shows that the PCs for nutrient nitrogen deposition and acid deposition are predicted to be 0.056% and 0.40% respectively. An in-combination assessment demonstrates that the combined PCs for nutrient nitrogen is 0.78% and acid deposition is 1.03%.

As the in-combination PCs is above the 1% significance threshold for acid deposition at the Blaen Cynon SAC, we advise that an Appropriate Assessment should be undertaken by the Planning Authority.

Mitigation Measures



We note the proposed mitigation measures in Chapter 9 of the Shadow HRA. This includes provision for a dust management plan as outlined in section 9.2.1, an additional technologies condition as outlined in section 9.2.2 and provisions for conservation management via a Section 106 agreement.

Given the low in-combination percentage for acid deposition, we consider that the mitigation proposed is sufficient to ensure adverse effects to the Special Areas of Conservation can be avoided.

**In consideration of the above, we would therefore request that the following conditions from the February 2019 planning permission, as detailed on the RCTCBC Decision Notice (ref 17/0249/10) and BBNPA Decision Notice (ref 17/14587/FUL) are included on any permission the planning authority is minded to grant:**

- Condition 5 – Dust Management Plan
- Condition 6 – Additional Technologies

**In addition, a new or amended s106 will be required.** We note the proposal for a Deed of Variation for the existing s106. It will be a matter for the LPA to determine the appropriate form of the s106 (i.e. whether a variation or otherwise), however, please note, we would wish to be consulted on the draft and it should be approved by NRW prior to being finalised.

## **Landscape**

### Brecon Beacons National Park

We note that the proposal would result in an increased adverse visual effect on the adjacent landscape of the National Park. There would be an increase in the areas of the National Park from which the proposed stack is visible as a result of the increase in height from 45m to 90m. The proposed stack would include a metal gantry & ladder at approximately 18.5m and would be metal clad in a smooth finish with a graded colour scheme intended to be visually recessive.

The majority of views of the proposed stack from and towards the National Park are from high ground, with the exception of close views from Penderyn Reservoir and the immediate locality. In these views from high ground, the stack would be seen in the context of the industrial estate and against the backdrop of the landform, rather than against the sky in silhouette.

We have reviewed the updated 'Environmental Statement Addendum - Chapter Eight – Appendix 8.3 prepared by Enviroparks dated September 2020'. We agree the changed colour scheme (Option 3) is more sensitive to its context and would better integrate the stack in views from and towards the National Park.

**We would therefore recommend you include the document as outlined above, within the condition identifying approved plans and documents on the decision notice**

### Brecon Beacons International Dark Sky Reserve

We note infra-red aviation lights are proposed, which are invisible to the human eye, therefore we are satisfied there would be no additional light pollution on the Brecon Beacons International Dark Sky Reserve.

### **Land Contamination**

We understand that site investigation works have been undertaken for all phases of this development and that the work completed to date has identified contamination around the site. We understand that further investigation work is proposed within the Phase 2 area. We understand that in addition to the increase in height, the proposal includes adjustment to the location of the proposed stack. **Therefore, for completeness we would request that the following conditions from the February 2019 planning permission, as detailed on the RCTCBC Decision Notice (ref 17/0249/10) and BBNPA Decision Notice (ref 17/14587/FUL) are included on any permission the planning authority is minded to grant:**

- Condition 18 & 19 – Land Contamination

### **Further Advice - EPR**

#### Design

We note that the stack height selection has been explained but it has not been shown to be optimum. Similarly, optimisation of efflux velocity to maximise plume rise under all wind conditions is not discussed.

This may be particularly important if high terrain/high wind speed interactions were not modelled due to the localised use of terrain assessment. The source term derivation appears to be based upon the waste incineration Bref ELVs which are daily averages, however short-term air quality impacts may also need to consider emissions at the potentially higher 30 minute average ELV values required by Chapter IV and Annex VI of the Industrial Emissions Directive. Assessment of atypical activities during pre-commissioning and commissioning, such as refractory dry-out phases should be undertaken, to provide assurance that reduced plume momentum and buoyancy will not result in significant air quality impacts. As well as ensuring that local air quality impacts are minimised, consideration should also be given to ensuring that the development contribution to the UK emissions inventory under the National Emissions Ceiling Directive is minimised.

Both these aspects will need to be addressed as part of a future EPR application and as such, it is possible the stack height could be subject to change.

#### Air quality impact assessment

We have undertaken a high-level review of the submitted air quality assessment; 'Atmospheric dispersion modelling assessment of proposed emissions' from Enviroparks (Wales) Limited, Hirwaun Industrial Estate. Environmental Visage Ltd Dated May 2020.' As



a result of this review, we are satisfied that the dispersion modelling methodology is appropriate for the purposes of informing the planning application. Notwithstanding this, further advice has been provided to assist the applicant when considered as part of an Environmental Permitting (England and Wales) Regulations 2016 (EPR) application. Our high level comments are provided below in Annex 1 for your convenience.

### **Other Matters**

Our comments above only relate specifically to matters included on our checklist, *Development Planning Advisory Service: Consultation Topics* (September 2018), which is published on our [website](#). We have not considered potential effects on other matters and do not rule out the potential for the proposed development to affect other interests.

We advise the applicant that, in addition to planning permission, it is their responsibility to ensure they secure all other permits/consents/licences relevant to their development. Please refer to our [website](#) for further details.

If you have any queries on the above, please do not hesitate to contact us.

Yn gywir / Yours faithfully

### **Lindy Marshall**

Cynghorydd - Cynllunio Datblygu / Advisor - Development Planning  
Cyfoeth Naturiol Cymru / Natural Resources Wales

## **Annex 1 - High level review of 'Atmospheric dispersion modelling assessment of proposed emissions' from Enviroparks (Wales) Limited, Hirwaun Industrial Estate. Environmental Visage Ltd Dated May 2020.'**

As a result of this high-level review, we are satisfied that the dispersion modelling methodology is appropriate for the purposes of informing the planning application.

### Environmental Permitting (England and Wales) Regulations 2016

Notwithstanding the above, and our consideration of the modelling methodology, please be aware that it would only be when full details are provided and considered as part of an Environmental Permitting (England and Wales) Regulations 2016 (EPR) application, that NRW's permitting function would be in a position to verify the modelled outputs themselves. In anticipation of a future permit application, we provide some comments below for consideration. These comments relate to matters that have come to light as a result of our high-level review and we advise they should be addressed in order to support a permit application.

- Sensitivity Analysis

We note that modelling was carried out using CERC's ADMS version 5.2 and included effects of terrain obtained from OS Terrain 50 DTM data, a digital terrain model with a horizontal resolution of 50m. The modelling was carried out using meteorological data from the Met Offices Sennybridge observation station over five years (2015 to 2019 inclusive) as required by the Environment Agency's "Environmental permitting: air dispersion modelling reports" guidance document.

The nearest observed meteorological data is located approximately 35km to the north at Sennybridge (289405, 241779). The distance between the Sennybridge measurement site and the location of the proposed plant, along with differences in local topography, may result in the Sennybridge data not being representative of regional meteorology at the Hirwaun site. Therefore, we recommend the applicant consider a sensitivity analysis of the Sennybridge observed meteorological data against modelled data, i.e., numerical weather prediction met data extracted at the proposed Hirwaun site which is available from the met office.

- Receptor Locations

For each meteorological year, maximum predictions over a 6km x 6km grid with a 30m horizontal resolution were reported along with predictions at a number of additional receptor locations.

Additional receptor locations included designated sites (e.g. SSSI & SAC) and ancient woodland (AW) sites as required by NRW and Environment Agency [guidance](#) along with a number of human receptors. However, receptor coordinates for sensitive habitats in the submitted risk assessment are not representative of the closest point for the majority of identified sites with differences between 1m to 348m (average of 68m) and 21m to 647m

(average of 115m) from the habitat coordinates closest to the stack for designated sites and ancient woodland sites respectively. It is not expected that this will result in significant impacts on the final predictions.

We have identified nine local wildlife sites of importance for nature conservation within 2km of the proposed stack location, which do not appear to have been considered. No rationale for their exclusion from consideration has been included in the submitted risk assessment. We advise that potential impacts at local wildlife sites within 2km of the facility should be included.

We continue to advise that the applicant twin-track the proposals, to try to ensure that there is no conflict between any planning permission granted and the permit requirements.