

HAWKESWOOD ECOLOGY

Specialists in Ecological Survey and Assessment

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Alex Smith
Simply Planning
Cardiff Office
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01/11/2023

Our Ref: HE/33/2023

Dear Alex,

Statement re potential for impacts upon integrity of Crymlyn Bog SAC from development of a chicken house/biomass boiler barn installation at Gelli Bwch Farm.

Introduction

It is proposed to construct a new agricultural building on a small site at Gelli Bwch Farm. The building will house chickens and also a Biomass boiler installation. The development Site has been heavily modified with scrub removal having taken place and is considered to be of low biodiversity value in its current condition.

The Site is approximately 0.4 hectares and lies approximately 500 metres to the north of the Crymlyn Bog Special Area of Conservation (SAC) and Pant-Y-Sais Site of Special Scientific Interest (SSSI). Although there is no direct hydrological connection to the SAC the water drains to the north east and does eventually flow through it.

In the course of the application process, Neath Port Talbot Local Planning Authority (LPA) has asked for assurance that air quality is not affected by the biomass boilers and that the SAC integrity will not suffer as a result of increased emissions from the Site. They also wish to understand how drainage from the Site will be managed to ensure no increased run off from the development and that the SAC will not be negatively impacted by the results of any such run off.

Hawkeswood Ecology has therefore been asked to assess the outcomes of a report by Greenavon Air Quality Consultants in terms of potential impacts from emissions on the integrity of the SAC (and SSSI) and to assess design of features to prevent run off during rainfall from the barn and building platform.

Hawkeswood Ecology are not specialists in these fields and are not competent to address resultant technical detail but can comment on the outcomes of the investigations into these issues as reported in the technical notes Project ref: 0128 (*Proposed Biomass Boilers, Gelli Bwch, Llandarcy. Air Quality Technical Note, July 2023, Greenavon Air Quality Consultants*) produced in response to these concerns.

Outcomes:

Air Quality Concerns:

Using approved methodologies, Greenavon have modelled emissions from the plant for NOx, SO2, nutrient nitrogen and acid deposition. The modelling takes in receptor locations from five distances from the Site, based in Crymlyn Bog SAC, Crymlyn Burows SAC, Pant Y Sais SSSI and Earlswood Road Cutting and Ferryboat Inn Quarries.

The outcomes of the modelling exercise show that predicted deposition in all cases lies below a 1% threshold and this comfortably sits within Environmental permitting as being of no significance.

Greenavon therefore conclude that *‘air emissions associated with the proposed development do not have potential to significantly impact the integrity of the Crymlyn Bog SAC and other local designated receptors’*.

Drainage Concerns:

The barn is a site sitting in a small area of less than 0.5 hectares. To deal with run off from the Site a soakaway (technical specifications as per drawing number A05, revision G) show the size of the proposed soakaway. There is an outflow pipe to the adjacent ditch but this is not expected to be in use in normal circumstances.

The soakaway size is calculated on a 1:100 storm return period on the roof area of the barn with a 40% allowance for climate change. The overflow is only expected to run during extreme storm periods.

Concerns over chicken waste spillage are addressed by siting the barn in such a manner that the access doors are at least 10 metres from the adjacent ditches. It is intended to manage and store the chicken manure for use as a fertiliser. As chicken manure tends to be a dry waste no implications for pollution run off are foreseen. However, it is recommended in the Preliminary Ecological Appraisal *‘Preliminary Ecological Appraisal, Proposed Barn And Biomass Equipment, Gelli Bwch Farm, Llandarcy. Hawkeswood Ecology October 2023*, that measures are included within the Construction Environmental Management Plan to address any pollution incident as cover for a worst case scenario.

Conclusions

Hawkeswood Ecology interpret Greenavon Air Quality report to show that there will be no significant impact upon the integrity of the SAC or other designated sites locally as a result of emissions from the proposed biomass boiler. As the works have been carried out to current best practice Hawkeswood Ecology have confidence that the outcomes

accurately reflect the levels of emissions that will be released to air and that those emissions are of no significance.

In addition, it is our understanding that the run off from the barn and building platform can be adequately catered for by the proposed soakaway. Also that the chicken manure is to be handled, stored and treated with best practice to avoid contamination of adjacent watercourses. As such Hawkeswood Ecology are content that there will be no significant impacts upon water quality in Crymlyn Bog SAC or Pant Y Sais SSSI.

We would therefore conclude that there will be no significant negative impacts, in terms of contaminants or from airborne emissions or water borne contamination, upon the SAC or SSSI as a result of the proposed Biomass boiler/chicken barn development proceeding as currently planned.

Regards

A handwritten signature in blue ink, appearing to read 'Eric Hawkeswood', is written over a light blue rectangular background.

Eric Hawkeswood
Principal Ecologist