

HAWKESWOOD ECOLOGY

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Our Ref: HE/34/2022
(issue 2)

Dear Alex,

Statement re potential run off issues from a proposed solar farm at Dream Fields, Gelli Bwch Farm.

Introduction

It is proposed to develop an area at Gelli Bwch Farm known as Dream Fields as a Solar Farm. The Site is generally agriculturally modified and is ecologically species poor. The fields are assessed as being of low agricultural value.

The Site is 4.195 hectares and lies approximately 300 metres to the north of the Crymlyn Bog Special Area of Conservation (SAC) and Pant-Y-Sais Site of Special Scientific Interest (SSSI).

In the course of the application process, Neath Port Talbot Local Planning Authority (LPA) has asked for assurance that there will be no increased run off from the fields following the erection of the solar panels and that the SAC will not be negatively impacted by the results of any such run off. The main concern of the LPA was that there may be increased run off from the Site as a result of concentration of run off from the panels creating erosion channels possibly carrying contaminants to the SAC.

They have also expressed concern that air quality is not affected and that the SAC will not suffer from emissions from the Site. This will particularly concern the periods of construction and decommissioning.

Hawkeswood Ecology has therefore been asked to assess the outcomes of report by CB3 Consult and Greenavon Air Quality Consultants in terms of potential impacts on the SAC (and SSSI) from run off during rainfall from the panels and from emissions caused directly as a result of the Solar Farm.

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 produced in the technical notes Job No C1853 (CB3 Consult) and Project ref: 0128 (Greenavon Air Quality Consultants) produced in response to these concerns.

Outcomes:

Drainage Concerns:

The Technical Note produced by CB3 Consult describes the configuration of the solar panels and gives details of their fixing and spacing. It also comments that the erection and fixing will be arranged so as not to interfere with existing drainage channels. In addition three Glass Reinforced Plastic (GRP) enclosures housing the switchgear will be constructed off concrete plinths.

Currently drainage of the Site is by infiltrating the top soil and being distributed through the top and sub soil into the existing ground water system and the Site drains from west to east and south to north.

CB3 Consult state that the drainage strategy for the Site of maintaining the existing drainage strategy of allowing water from the solar panels to fall onto the surrounding areas and infiltrate in to the top soil leading to it being distributed into the top soil and existing ground water system will not alter the existing surface water drainage regime or the volume of water entering the ground water system.

They conclude that *‘Any exceedance flows or excess run off will drain to the existing field drainage system with no change to the volume of run off generated post development compared to the current arrangement’*.

Air Quality Concerns:

Greenavon state that the development will generate around 20 vehicle trips per day during construction and decommissioning, with neither process expected to last that long. As such they state that *annual average daily traffic* generated by the proposal will be far less than 20.

Criteria provided in the Design Manual for Roads and Bridges (referenced in documentation) to screen out the impact of traffic upon designated ecological sites include AADT flows of 1000 vehicles or 200 heavy duty vehicles, this Greenavon conclude that the proposed development will have no impact upon the integrity of the SAC.

Greenavon also state that there are no projects in the proximity of the Site that would lead to cumulative impacts that could reach the threshold numbers of journeys above. They also conclude the proposed development will have no measurable impact upon the integrity of the SAC.

Conclusions

Hawkeswood Ecology interpret both reports to mean that there will be no change in the amount or rate of run off from the Site when compared to the current Site drainage in similar weather circumstances and neither will there be air quality impacts from emissions associated with the Site, either on it's own or in a cumulative context with other projects.

We would therefore conclude that there will be no negative impacts, in terms of excessive water flows or contaminants or from airborne emissions, upon the SAC or SSSI as a result of the proposed Solar Farm 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