



Swansea City and County Council
Civic Centre, Oystermouth Road
Maritime Quarter
Swansea
SA13SN

Unit 2A 2B Bess Park Road
Trenant Industrial Estate
Wadebridge
Cornwall
PL27 DH

Tel: 07824074402

25 November 2021

Our Ref: CE5754 - OP9290

To whom it may concern,

Request for a formal EIA screening opinion for the erection of one wind turbine, up to 150m to tip, on land at Tirmynydd Farm, Birchgrove, Swansea, South Wales, SA7 9EA

Clean Earth (CE) are proposing to submit a planning application for the development of one wind turbine on land at Tirmynydd farm, Swansea, Wales SA79EA. CE seeks to gain a formal screening opinion and formal pre planning consultee comments for this site. The provisional turbine and site locations are shown in drawings CE5754-IFP-SA-A, CE5754-IFP-TLP-A, the ZTV for the proposed scheme is shown in CE5754-IFP-ZTV-A. CE have provided a detailed description of the project and evaluated this against Environmental Impact Assessment (EIA) regulations to support our screening request.

1. The Development

The proposal is to install a single turbine of maximum tip height 150m, with a 3-bladed rotor design. Due to constant industry developments, the turbine model has yet to be finalised.

Supplementary elements include two permanent switchgear housing units (approx. 4m x 4m x 3m), temporary access track, underground cabling, and temporary crane hard standing area (approx. 65m x 45m).

CE looks to develop sites that have reduced environmental impacts considering proximity, noise and visual amenity to 'sensitive receptors' (residential dwellings), ecological constraints, existing infrastructure, and locally designated areas and features.

1.1 Installation

The turbine and other components would be delivered to the site by an articulated lorry. The proposed route follows existing public and private highways, and access may need to be established within the land boundary to the turbine base.

A temporary crane hard standing area (approx. 65m x 45m) will be required for the tower, nacelle, and blade installation, this typically takes 2-3 days, after which the land will be returned to its original state.

1.2 Electrical Connection

The transformer and electrical switching system for connecting the wind turbine to the local grid will be contained within two small weatherproof housing units (approx. 4m x 4m x 3m), positioned adjacent to the tower. Local grid connection will be part of a separate application, undertaken by the local network operator (in this case, Western Power). Underground cabling will be used where practical.

1.3 Decommissioning

The operational lifespan of the turbine is 35 years, after which the turbine will be decommissioned. This site would then be reinstated to its former state, or a condition agreed with the Local Planning Authority (LPA).

2. Screening Opinion

Wind turbine installations are erected to harness wind power for energy production and are specified in Schedule II of the Town and Country Planning (EIA) Regulations 2017. This correspondence constitutes a formal request for a screening direction under the above

regulations. With the above regulations in mind, we have provided an assessment of the project against the criteria stated below.

2.1 Schedule II of the TCP Regulations

This regulation identifies the threshold criterion which, if exceeded, requires a formal assessment to be undertaken against Schedule 3 of the TCP Regulations to determine whether an EIA is required.

The applicable threshold criterion is stated in two points within Schedule 2 section 3(i):

"(i) the development involves the installation of more than 2 turbines.; or

"(ii) The hub height of any turbine or height of any structure exceeds 15 meters ... "

The proposed wind turbine exceeds the hub height threshold and therefore is a Schedule 2 development that requires a formal assessment against Schedule 3 as to whether an EIA is required.

2.2 Summary of Schedule 3 of the TCP Regulations Assessment

Schedule 3 of the TCP Regulations set out the selection criteria for screening a Schedule 2 development. This determines whether the project is likely to have significant effects on the environment, assessing factors such as nature, size, and location of the turbine. Our assessment is shown in Table 1 and summarised below.

- The turbine is proposed in a sparsely settled hilltop location approximately 1.7km east of the town of Glais. The turbine location falls within a priority area for Solar and Wind Energy, as defined by the National Development Future Wales 2040 - The National Plan. These areas are pre-assessed strategic zones where there is a presumption in favour of large-scale wind energy development, subject to detailed policy assessments contained within the document.
- At local level the turbine falls within an area that is not subject to constraints for wind turbines as determined within The Swansea Local Development Plan Baseline: Renewable Energy Assessment 2018. The report considers a candidate 120m turbine

with a rotor diameter of 80m and rated output of 2MW and determined the site in question to be unaffected by the following: Environmental and Heritage constraints, transport, infrastructure and other physical constraints, aviation constraints and radar constraints.

- There are no Special Protection Areas (SPA) or Areas, National Parks or Areas of Outstanding Natural Beauty (AONB) within 10km of the site. The closest SPA is Burry Inlet (also designated as Special Area of Conservation, located 14.4km to the west. Due to the significant separation distance, no significant adverse are expected on this designation. The closest National Park is the Brecon Beacons National Park and similarly, at 13km from the proposed development, no significant impacts are expected on the designation due to the separation distance. It is likely that from the national park the proposed turbine will not be a prominent feature and that other, closer, and larger consented schemes will be more visible. For example, Mynydd Y Gwair (16 X 127m) is located 6.5km south of the National Park.
- The closest AONB is The Gower, located 14.5km southwest of the proposed development. At this distance, the turbine is unlikely to to impact many of the key characteristics that make this part of the AONB special and therefore won't cause any significant impacts on the AONB. The closest Site of Special Scientific Interest is 'Glais Moraine' located approx. 1.7km to the west of the proposed turbine location. Glais Moraine is a geological SSSI and therefore does not consist of an environment sensitive to impact from the proposed development. The next closest SSSI is Fforest Goch Bog - located 2.5km to the northeast of the proposed turbine. The site is designated as an open raised bog. None of the proposed development site falls within this designation therefore no significant impacts are expected.
- The closest National Nature Reserve is Crymlyn Bog located 4.1km south of the proposed turbine location, Crymlyn Bog is also designated as a SSSI and is the largest lowland fen in Wales. Its extensive reed and sedge beds are home to a wide variety of wetland plants, birds, and insects. It is one of the most important wetland sites in Europe however Natural Resources Wales have cited its survival as remarkable, due to its distance from the city of Swansea. The impact of the proposed turbine on Crymlyn bog is likely to be insignificant given the separation distance, and intermediate landform - with urban settlement and a large trunk road in-between turbine and receptor. The closest Local Nature Reserve (LNR) is Eaglebush Valley, which is located 4.7km southeast. Eaglebush Valley is a steep-sided wooded valley

located in the Melincryddan area of Neath. The 11-hectare site is protected as a result of its biodiversity, geological and historical interests. The valley is dominated by sessile oak, but other trees such as silver birch are present. Due to the separation distance and landform (urban settlement) between the receptor and proposed development, no significant impacts are expected. There are pockets of ancient woodland which surround the site in addition to areas that are designated as sites important for nature conservation (non-statutory). The location of the turbine footprint would not be within these areas, instead on arable farmland/pasture. The turbine would be sited at appropriate distances from any woodland and extensive ecological surveys would be conducted to manage and mitigate impacts therefore impacts are not expected to be significant.

- The turbine footprint does not physically impact any listed assets and there are no listed buildings within the immediate area. The closest listed asset is located 1.5km to the east of the proposed turbine location and is the 'Former Icehouse to Dyffryn house'. It is designated as a grade II asset, located in an overgrown site at the edge of a field some 200m SW of the site of Dyffryn House. As a result of the assets location within an overgrown area, it is highly likely that the turbine will be screened. The next closest listed building is 'The Grange, former stables and coach house to Dyffryn House', located 1.7km east of the proposed turbine location. This asset is also likely to be screened by the abundant vegetation evident on satellite imagery during the desk study. The next closest listed building is 'Pensianel Pigsty' which is a grade II listed asset classified as 'Agriculture and Subsistence'. The asset as described as being located within an overgrown site and is located 1.85km southeast of the proposed development. The desk study shows the asset to be located in a densely vegetated area and therefore is highly likely to be screened from the turbine. The next closest scheduled asset is the church of St Matthew which is a grade II listed church located in a prominent position on the west side of the minor road through Dyffryn. The church is located 1.9km to the east of the proposed development at an elevation of 75m, which is 160m less than the proposed turbines elevation of 235m. The large topographical variation between the two points over a relatively short distance ensure that the turbine tip is likely to only be partially visible from the church. This can be seen on CE5754-IFP-ZTV-A. There are no listed buildings to the north of the proposed development that are in the immediate area and likely to be impacted by the proposed development. The closest asset to the south is 'Capel Saron' which is a grade II listed building in the class of 'Religious, ritual and

funerary'. There is vegetation between the building and proposed development which is likely to provide a level of screening. The designated asset is also somewhat hidden from the proposed turbine due to the elevated position of the turbine area compared with the surrounding landscape.

- The closest scheduled monuments to the proposed development are found in agricultural land approximately 800m to the east. The assets are a series of 3 'House platforms West of Dyffryn wood'. These assets are medieval building platforms and are described to be of national importance due to their potential to enhance knowledge of medieval settlement. The proposed turbine would not impact on the physical structure of these assets due to the significant separation distance. Although the turbine would likely be visible from the assets it can be assumed that the assets are designated for their relevance to history and not for their setting, or view across the plateau to the west - toward the proposed development. The next closest Scheduled monument is Neath Abbey which is located 3.3km to the southeast of the proposed development. Neath Abbey is in the centre of Neath and comprises of some of the most important and impressive monastic remains in south-east Wales. The Abbey was founded in 1130 by Norman Knight Sir Richard De Granville and by the late 13th century it became one of the wealthiest abbeys in Wales. The ZTV shows that the proposed development may be partially visible from the Abbey, however the 'real-world' visibility of the turbine is likely to be significantly less due to the presence of woodland to the southeast of the proposed development and due to the screening effects of buildings within the urban zone of Neath. Any visibility of the turbine from the asset would be investigated via a Heritage and Visual Impact Assessment (HVIA). This would consider the value of the views to the northwest of the asset towards the proposed turbine.
- The nearest residential properties to the proposed turbine are: 450m southwest, 510m southeast, 768m southwest, 707m northwest, 864m west. All other residential properties are more than 1km from the proposed turbine.
- The site was chosen due to its location within a pre-assessed priority area for wind and solar as detailed within Future Wales 2040: The National Plan and for its location within an area not deemed to be constrained to wind turbine development by Swansea Council - outlined within The Swansea Local Development Plan Baseline: Renewable Energy Assessment 2018. The proposed scheme would make crucial contributions towards the reduction of Welsh greenhouse gas emissions and would

effectively contribute towards meeting ambitious decarbonisation and renewable energy targets.

- The development will have no hazardous effects. The turbine development will have a positive environmental impact by providing clean energy and associated carbon savings and would make a crucial contribution towards the achievement of regional and national renewable energy targets.
- The proposed development is for a 35-year period, at the end of which it will be removed, and the land returned to its current state.
- The assessment of the turbine development against Schedule 3 shows that a significant environmental impact is not likely to arise and therefore an EIA should not be required.

3. General Considerations

Additional (non-statutory) guidance to aid planning authorities in determining requests is provided by Planning Circular 02/1999. Paragraph 33 of the circular states that:

" The Secretary of state's view is that, in general, EIA will be needed for Schedule 2 developments in three main types of case:

- a. For major developments, which are of more than local importance.*
- b. For developments, which are proposed for particularly environmentally sensitive locations; and*
- c. For developments with unusually complex and potentially hazardous environmental effects "*

We do not consider the development to fall within any of the above criteria, therefore not requiring an EIA.

Additionally, Annex A, paragraph A15 of the Circular states that:

"EIA is more likely to be required for commercial developments of five or more turbines, or more than 5 MW of new generating capacity."

In this case, the proposed development is for a single wind turbine with a generating capacity of 3.8MW. An EIA is therefore not considered necessary under this guidance.

Circular 02/1999 details guidance that encourages each project screening request to be judged on its own merits. The fundamental analysis is to be based on whether development and its specific impacts are likely to have a significant effect on the environment, and those that are particularly environmentally sensitive locations.

Planning Application

Following the response to this screening request, CE intends to submit a planning application for the installation of a single wind turbine. The planning application will be accompanied by an analysis of potential impacts of this development including:

- Planning context
- Landscape and visual impacts
- Ecological impact
- Cultural heritage including archaeological study
- Noise
- Shadow flicker
- Civil aviation and MoD
- Telecommunications
- Transportation impact
- Hydrology
- Community benefit

The full context and detail of these analyses will be discussed and agreed upon with Carmarthenshire Council consultees and all other stakeholders.

4. Conclusion

CE requests a screening opinion along with pre-application consultee comments.

I trust the above information has provided you with the necessary facts to help assess the requirement of an EIA for this turbine proposal. CE has considered this proposed

development against the EIA regulations and has concluded that the proposed development is unlikely to result in significant effects on the environment. We, therefore, believe an EIA is not required. CE would be grateful if Carmarthenshire Council could confirm this to be the case. If you require any further information, please do not hesitate to contact me.

Following this request, assuming an EIA is not required, a full planning application will be submitted to Carmarthenshire Council. This will detail all the assessments stated in Section 4 as agreed with Carmarthenshire Council Consultees.

Yours faithfully,

James Sharman

CleanEarth

Table 1. Schedule 3 selection criteria for screening a Schedule 2 development.

Characteristics of the development	
(a) The size of development	The development is to be a single turbine with a maximum tip height of 150m.
(b) The accumulation with other development	The area in which the turbine is proposed is not a turbine rich landscape and there are no significant developments located within 10km. The closest large-scale windfarm within Swansea Council administrative area is Mynydd Y Gwair 16 x 127m (2012/1221) which is located 10.1km northwest of the proposed development. The absence of extensive developments in the area removes the risk of negative cumulative effects associated with the development of turbines in turbine rich landscapes and highlights the potential for opportunity in an area not extensively developed but earmarked for wind development at both national and local level.
(c) The use of natural resources	The turbine development will utilise the abundant natural wind resource on-site.
(d) The production of waste	The production of waste during the turbine's operational lifetime will be negligible. During installation, the foundation will require soil to be excavated; this will be reused on site. Additional construction waste will be appropriately disposed of offsite.
(e) Pollution and nuisances	Pollution and nuisances will be kept to minimal amount during construction phase. Transportation will be during low flow traffic periods and high noise pollution works would be during standard working hours and typically last 2-3 days.
(f) The risk of accidents, having regard in particular to substances or technologies used	Wind turbine developments do not include the use of hazardous substances. Turbine technology is safety checked and regulated, with a good safety record.
Location of the development	

(a) The existing land use	The site is located within a field predominantly used for agriculture approximately 2.5km northwest of Neath. Access will utilise the existing road networks in the area and private land where necessary. Once the turbine is erected and commissioned the land use of the site will remain as pre-installation excluding the small area occupied by the foundation and electrical housings.
(b) The relative abundance, quality, and regenerative capacity of the natural resources in the area	The turbine will utilise the abundant natural wind resource on-site. As the development takes a small area (<0.1 hectare per turbine) of land the impact on abundance, quality, and regenerative capacity of the natural resources in the area will be negligible.
(c) The absorption capacity of the natural environment	There are no Special Protection Areas (SPA) or Areas, National Parks or Areas of Outstanding Natural Beauty (AONB) within 10km of the site. The closest SPA is Burry Inlet (also designated as Special Area of Conservation, located 14.4km to the west. Due to the significant separation distance, no significant adverse are expected on this designation. The closest National Park is the Brecon Beacons National Park and similarly, at 13km from the proposed development, no significant impacts are expected on the designation due to the separation distance. It is likely that from the national park the proposed turbine will not be a prominent feature and that other, closer, and larger consented schemes will be more visible. For example, Mynydd Y Gwair (16 X 127m) is located 6.5km south of the National Park. The closest AONB is The Gower, located 14.5km southwest of the proposed development. At this distance, the turbine is unlikely to to impact many of the key characteristics that make this part of the AONB special and therefore won't cause any significant impacts on the AONB. The closest Site of Special Scientific Interest is 'Glais Moraine' located approx. 1.7km to the west of the proposed turbine location. Glais Moraine is a geological SSSI and therefore does not consist of an environment sensitive to impact from the proposed development. The next closest SSSI is Fforest Goch Bog - located 2.5km to the northeast of the proposed turbine. The site is designated as an open raised bog. None

	of the proposed development site falls within this designation therefore no significant impacts are expected. The closest National Nature Reserve is Crymlyn Bog located 4.1km south of the proposed turbine location, Crymlyn Bog is also designated as a SSSI and is the largest lowland fen in Wales. Its extensive reed and sedge beds are home to a wide variety of wetland plants, birds, and insects. It is one of the most important wetland sites in Europe however Natural Resources Wales have cited its survival as remarkable, due to its distance from the city of Swansea. The impact of the proposed turbine on Crymlyn bog is likely to be insignificant given the separation distance, and intermediate landform - with urban settlement and a large trunk road in-between turbine and receptor. The closest Local Nature Reserve (LNR) is Eaglebush Valley, which is located 4.7km southeast. Eaglebush Valley is a steep-sided wooded valley located in the Melincryddan area of Neath. The 11-hectare site is protected as a result of its biodiversity, geological and historical interests. The valley is dominated by sessile oak, but other trees such as silver birch are present. Due to the separation distance and landform (urban settlement) between the receptor and proposed development, no significant impacts are expected. There are pockets of ancient woodland which surround the site in addition to areas that are designated as sites important for nature conservation (non-statutory). The location of the turbine footprint would not be within these areas, instead on arable farmland/pasture. The turbine would be sited at appropriate distances from any woodland and extensive ecological surveys would be conducted to manage and mitigate impacts therefore impacts are not expected to be significant.
Characteristics of potential impact	
(a) Extent of the impact	The turbine footprint does not physically impact any listed assets and there are no listed buildings within the immediate area. The closest listed asset is located 1.5km to the east of the proposed turbine location and is the 'Former Icehouse to Dyffryn house'. It is designated as a grade II asset, located in an overgrown site at the edge of a field some 200m SW of the site of Dyffryn House. As a result of the assets location within an overgrown area, it is highly likely that the turbine will be screened. The next closest listed building is 'The Grange, former stables and coach house to Dyffryn House', located 1.7km east of the proposed turbine location. This asset is also likely to be screened by

	the abundant vegetation evident on satellite imagery during the desk study. The next closest listed building is ‘Pensianel Pigsty’ which is a grade II listed asset classified as ‘Agriculture and Subsistence’. The asset as described as being located within an overgrown site and is located 1.85km southeast of the proposed development. The desk study shows the asset to be located in a densely vegetated area and therefore is highly likely to be screened from the turbine. The next closest scheduled asset is the church of St Matthew which is a grade II listed church located in a prominent position on the west side of the minor road through Dyffryn. The church is located 1.9km to the east of the proposed development at an elevation of 75m, which is 160m less than the proposed turbines elevation of 235m. The large topographical variation between the two points over a relatively short distance ensure that the turbine tip is likely to only be partially visible from the church. This can be seen on the CE5754-IFP-ZTV. There are no listed buildings to the north of the proposed development that are in the immediate area and likely to be impacted by the proposed development. The closest asset to the south is ‘Capel Saron’ which is a grade II listed building in the class of ‘Religious, ritual and funerary’. There is vegetation between the building and proposed development which is likely to provide a level of screening. The designated asset is also somewhat hidden from the proposed turbine due to the elevated position of the turbine area compared with the surrounding landscape. The closest scheduled monuments to the proposed development are found in agricultural land approximately 800m to the east. The assets are a series of 3 ‘House platforms West of Dyffryn wood’. These assets are medieval building platforms and are described to be of national importance due to their potential to enhance knowledge of medieval settlement. The proposed turbine would not impact on the physical structure of these assets due to the significant separation distance. Although the turbine would likely be visible from the assets it can be assumed that the assets are designated for their relevance to history and not for their setting, or view across the plateau to the west - toward the proposed development. The next closest Scheduled monument is Neath Abbey which is located 3.3km to the southeast of the proposed development. Neath Abbey is in the centre of Neath and comprises of some of the most important and impressive monastic remains in south-east Wales. The Abbey was founded in 1130 by Norman Knight Sir
--	--

	Richard De Granville and by the late 13th century it became one of the wealthiest abbeys in Wales. The ZTV shows that the proposed development may be partially visible from the Abbey, however the ‘real-world’ visibility of the turbine is likely to be significantly less due to the presence of woodland to the southeast of the proposed development and due to the screening effects of buildings within the urban zone of Neath. Any visibility of the turbine from the asset would be investigated via a Heritage and Visual Impact Assessment (HVIA). This would consider the value of the views to the northwest of the asset towards the proposed turbine. The nearest residential properties to the proposed turbine are: 450m southwest, 510m southeast, 768m southwest, 707m northwest, 864m west. All other residential properties are more than 1km from the proposed turbine. The site was chosen due to its location within a pre-assessed priority area for wind and solar as detailed within Future Wales 2040: The National Plan and for its location within an area not deemed to be constrained to wind turbine development by Swansea Council - outlined within The Swansea Local Development Plan Baseline: Renewable Energy Assessment 2018. The proposed scheme would make crucial contributions towards the reduction of Welsh greenhouse gas emissions and would effectively contribute towards meeting ambitious decarbonisation and renewable energy targets. The development will have no hazardous effects. The turbine development will have a positive environmental impact by providing clean energy and associated carbon savings and would make a crucial contribution towards the achievement of regional and national renewable energy targets.
(b) The trans frontier nature of the impact	Impacts will be local; there will be no potential for trans-boundary impact.
(c) The magnitude and complexity of the impact	All impacts will be confined to the local area. These impacts are not complex and will be assessed singularly, based on their own merits, using proven methods and regulations.

(d) The probability of the impact	Other possible impacts are radar, shadow flicker, and telecommunications. Initial consultation shows that it is unlikely to cause significant impacts, due to separation distances from relevant aviation infrastructures and residences. In line with this screening request, we will be initiating a pre-planning consultation with the Ministry of Defence regarding any potential impact on aviation/radar. From this assessment, it can be determined that the ecological effects of this development are likely to be minimal. Similarly, the landscape visual impacts are local with acceptable distances to neighbouring properties within a sparsely settled landscape. The scattered properties and farmsteads with limited development in the vicinity would prevent cumulative effects on the residential properties in the area. The separation distances to the nearest properties will ensure that noise impacts are kept within the standard limits. Transport impacts are expected to be negligible due to the utilisation of existing transport networks in the area.
(e) The duration, frequency, and reversibility of the impact	The turbines will have an operational life period of 35 years after which the turbine will be decommissioned, and the land reinstated to its former use.