



Your Ref: Glenvernoch Wind Farm
Our Ref: 70119752 / SEPA Response
SEPA PCS-20003723
ECU00004892
24 March 2025
RESTRICTED

Dear Sir/Madam,

Response to SEPA Holding Objection

This document has been produced to address the 'Holding Objection' placed by SEPA, letter dated 14/01/2025, in relation to Glenvernoch Wind Farm (the Proposed Development).

The objection items have been raised in relation to 'peat management and potential impact on peat', as well as on 'groundwater dependent terrestrial ecosystems' (GWDTE). These matters are addressed in the respective sections below; including quotations from four specific SEPA paragraphs and associated responses on behalf of the Applicant (EnergieKontor) by WSP.

Peat Management and Potential Impact on Peat

SEPA Paragraph 1.1:

"We do not support the re-use of catotelmic peat on access tracks (especially amorphous catotelmic peat on access tracks, as suggested in Table 5-5 of Vol 3 Appendix 12.2 Stage 1 Soils and Peat Management Plan, SPMP). This type of peat is not suitable for many applications and should not be placed at the surface where it will oxidise and degrade. We require confirmation that the re-use of catotelmic peat on access tracks (or elsewhere on the surface) will not take place."

WSP Response on behalf of the Applicant:

The calculations provided for potential re-use of catotelmic peat on access tracks has taken into account two important factors:

- Underlying peat in the area of re-use must be at minimum of 1.0 m, in order for the re-use of catotelmic peat to be able to tie-in with existing *in-situ* peat;
- Re-use peat will be placed sequentially; amorphous catotelmic material at base, fibrous catotelmic material, then acrotelmic peat / turves providing 0.5 m depth of surface dressing.

Table 5-5 of the SPMP identifies that, applying the factors above, there is the potential capacity for 3,249 m³ fibrous catotelmic peat and 1,939 m³ amorphous catotelmic peat to be re-used in verge zones adjacent to access tracks.

To clarify, with reference to Table 5-5, the only amorphous catotelmic peat anticipated to be excavated from the Proposed Development arises from 'Temporary working and laydown areas at crane pads' (excavation volume of 492 m³). Any amorphous catotelmic peat excavated from such locations shall be appropriately identified and stored separately, then reinstated sequentially with layering of peat material to replicate natural stratification – with any amorphous material placed as a base layer, with a capping layer above of at least 0.5 m.

Although potential for re-use of amorphous catotelmic material was noted in the Table 5-5 calculations, there is no planned re-use of this material for access tracks at the Proposed Development. The potential capacity identified for amorphous catotelmic material re-use at track locations (1,939 m³) offers additional opportunity for re-use of less sensitive peat sub-categories (acrotelmic / fibrous catotelmic) or top soil, from track excavations or other nearby locations.

Fibrous catotelmic peat is planned for re-used on access track verges, seeking to re-use local to track excavation, this will be in areas where peat depths indicate the presence of existing catotelmic peat and will be capped with a 0.5 m surface layer of acrotelmic peat.

SEPA Paragraph 1.2:

"More information is also needed to justify the plans for peat re-use in depressions and hollows. The applicant must explain what the target habitats are and how this method of reuse will be ecologically beneficial, or maintain the peat in its current condition."

WSP Response on behalf of the Applicant:

Section 4.3 of the PMP includes best practice information on additional peat re-use in depressions and hollows, as a potential additional opportunity. However, the PMP does not prescribe the use of this method or estimate volumetric values at the Proposed Development.

Should this be determined as a viable activity at this site at any point in the design process, the objective would typically be to improve specific locations in Peatland Code¹ terms from 'drained' to 'modified' or 'modified' to 'near natural' conditions, ensuring hydrological connectivity to maintain high levels of soil moisture. Potential locations would be subject to ecological survey to confirm viability of potential methods to achieve improved condition (and avoid loss of valuable features). Successful infilling of hollows may include careful stripping of existing vegetation to a depth of 0.5 m and replacing this above infill materials on the new surface. Incoming peat would be sequentially built-up by sub-categories, as described in the Response to Objection 1.1. Seeding zones with appropriate *sphagnum* species may also aid realisation of target objectives.

Any use of depressions and hollows for peat re-use will be detailed in the Stage 2 SPMP post-consent.

¹ IUCN Peatland Code. Available at: <https://www.iucn-uk-peatlandprogramme.org/peatland-code/how-it-works> [accessed March 2025]

SEPA Paragraph 1.3:

“The peat and carbon map indicates little overlap of development with Class 1 or 2 peatland. However, we require confirmation that new tracks will be floated in locations where there is overlap with such peatland, or justification where this is not possible. Table 5-6 of the forementioned SPMP suggests that more floating of tracks is being considered but we require a firmer commitment and more information in this respect.”

WSP Response on behalf of the Applicant:

Where access tracks at the Proposed Development overlap with Class 1 or Class 2 peat as identified in the SPMP, there is a firm commitment from the Applicant that these tracks will be constructed using the floated track technique, to reduce excavation and better enable sub-surface hydrological connectivity below these linear features.

Groundwater Dependent Terrestrial Ecosystems (GWDTE)**SEPA Paragraph 2.1:**

“In Chapter 12 (Hydrology, Geology and Hydrogeology), it is stated that the majority of the GWDTE on site are considered ombrotrophic or surface-water fed. This suggests that there are some GWDTEs on the application site. If there are GWDTEs on site, a bespoke risk assessment should be provided, demonstrating hydrological pathways and flow routes in relation to them and the proposed infrastructure.”

WSP Response on behalf of the Applicant:

Potential GWDTE communities that could be dependent on groundwater were reviewed in Chapter 12 in relation to topography, hydrology and hydrogeology context. Following this review, it was considered that surface water and hill runoff are likely to be the dominant soil water sources and therefore the groundwater dependency of all of these habitats is considered Low. Thus, all potential GWDTE are considered to be ombrotrophic features and not reliant on groundwater supply.

There are two National Vegetation Classification (NVC) communities at the Proposed Development that are considered in SEPA LUPS-31 (2017) to potentially have a high dependence on groundwater, as noted in Chapter 12; M6 and M23. These are discussed below and also displayed on Figure 12.4 - GWDTE:

- NVC M6 (*Carex echinate* – *Sphagnum fallax/denticulatum mire*) is confined to the riparian corridors of site watercourses, indicating a likely local dependence upon surface water input.
 - This plant community is generally associated with surface ponding locations, such as depressions and on floodplain.
 - Where track infrastructure crosses these watercourses, appropriate crossings structures will be installed as proposed in the Schedule of Watercourse Crossings in order to maintain local hydro-connectivity.

- NVC M23 (*Juncus effusus/acutiflorus* – *Galium palustre* rush-pasture) is present at the north of the site, with crane pads and sections of access track in these habitats in the vicinity of turbines T1, T10 and T13.
 - This plant community often occurs on poorly-drained slopes, including flush zones.
 - Where GI indicates suitable conditions, crane pad drainage shall encourage infiltration to groundwater to maintain pre-construction groundwater conditions locally.

Should pre-construction GI indicate cut track corridors with localised spring emergence or potential interaction with shallow groundwater level or flowpaths, that could interrupt or block supply to or within M6 or M23 communities, the Applicant commits to installing sub-surface drainage to maintain local hydro-connectivity (floating tracks will provide this connectivity inherently).

It is intended that these clarifications shall provide sufficient additional information for SEPA to be satisfied and withdraw their current 'Holding Objection', on the basis that good practice has been applied within the design to date, to be followed-through during detailed design and subsequent construction activities, to minimise the potential for adverse effects upon both peat and GWDTE receptors.

Yours faithfully



Stuart Bone
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Sustainable Water Management
WSP