Cyfoeth Naturiol Cymru
Natural Resources Wales

Ein cyf/Our ref: CAS-291110-G0M2
Eich cyf/Your ref: P/2025/0645

Wrexham County Borough Council
The Guildhall
Wrexham
LL11 1AY

Dyddiad/Date: 18 December 2025

Annwyl Syr/Madam/Dear Sir/Madam,

BWRIAD/PROPOSAL: Rhyddhau amod 11 (seilbyst/sylfeini) caniatâd cynllunio p/2024/1601 / Discharge of condition 11 (piling/foundations) of planning permission P/2024/1601

LLEOLIAD/LOCATION: Land North East Of Maelor Works, Cross Lanes, Wrexham, LL13 0UW

Thank you for consulting Cyfoeth Naturiol Cymru (CNC)/Natural Resources Wales (NRW) about the additional information for the above, which we received on 28 November 2025.

Condition 11

We have reviewed the following additional information submitted in support of the application:

- Additional Phase II Site Investigation and Controlled Water Risk Assessment on Land at Wrexham Solar Farm Wrexham, reference: GSI 2006 IW P-II Report V2 ASI dated November 2025, GeoCon Site Investigations Ltd

The additional groundwater monitoring from October 2025 has demonstrated that the types of organic chemicals typically associated with a munitions site have not been detected either in the new monitoring well DS09, located within the northern area of the proposed development site, or across the wider area defined by wells DS01 through to DS08. Therefore we are satisfied this aspect has been adequately addressed.

Section 6.3.1 of the Additional Phase II report states that “The concentration of the compounds recorded above the detection limits are generally considered to be minor with the exception of lead which recorded higher concentrations for select locations in the groundwater on site”, Section 6.3.5 then states “… based on the above information, the results of the surface water and groundwater testing, the generally impermeable geology beneath the site, and considering that natural attenuation, dilution and dispersion will take place, the risks to groundwater and drinking waters are considered to be very low at this stage”.

Table 5.5 of the Additional Phase II report shows that detected lead levels in groundwater in all 8 samples exceeded both the Drinking Water Standard and World Health Organisation screening values; 7 of the 8 samples exceeded Environmental Quality Standards screening values.

Given that higher concentrations of lead have been detected across the site, we do not agree that the risks are very low.

The groundwater chemical analytical data from October 2025 have revealed dissolved metal impacts, notably for dissolved lead across the DS01-DS09 groundwater monitoring wells. In particular wells DS05, DS08 and DS09 have yielded significant exceedances of dissolved lead concentrations of 599 ug/L, 997ug/L and 93ug/L, respectively. Dissolved lead concentrations were lower in the x4 groundwater wells (DS03, DS05, DS07 and DS08) that were sampled in July 2025 (a drier period of the year). The concentrations are significantly elevated from the October 2025 sampling event (considered a wetter time of the year). The ubiquitous presence of the dissolved lead, indicates that the increased concentrations are likely as a result of elevated groundwater levels interacting with and remobilising residual lead contamination which is likely present within near surface ground materials and potentially across the site.

We note that DS05, is located in close proximity to the water course (the controlled waters) and the recorded dissolved lead concentration of 599ug/L would be the concentration of lead entering the water course. The same rationale applies to DS09 which is located close to the water course.

The elevated dissolved lead concentrations in groundwater (plus other elevated dissolved metal concentrations such as nickel) require further assessment, notably in regard to the controlled waters risk assessment.

We recommend that a controlled waters risk assessment which is part of Land Contamination Risk Management (LCRM) is carried out. We acknowledge that given a large portion of the site is delineated by the monitoring wells, this could be considered as ‘one source’ of dissolved lead. Such an assessment should include:

- Risks posed by piling works.
- Their potential to mobilise higher levels of contaminants
- Control measures to reduce and mitigate any impacts.
- The degree to which the most elevated lead concentrations (e.g. DS05, DS08 and DS09) are representative of ‘point sources’ for lead. The site characterisation data provided to date does not suggest that the concentrations are solely due to made ground, as made ground is only present in a few locations.
- Whether there is a need for certain areas of the proposed solar farm to be excluded from development (or areas that are already excluded such as around DS08) because of the presence of dissolved lead and potentially other metals/Polycyclic Aromatic Hydrocarbons (PAHs). We note that the land parcel to the northwest has no DS wells installed within it so the degree to which elevated dissolved lead concentrations exist in this area is not currently known.
- The degree to which a geophysical survey could identify any shallow buried point sources of lead across the development site (and the degree to which this could inform the above points).
- Monitoring of ground and surface waters in sensitive areas or close to specific higher risk work areas (including key trigger levels and actions to be taken if contaminants are shown to be mobilising).

We recognise that active ground remediation would likely not be practical in this instance such as mass soil excavation or installing a permeable reactive barrier.

Your Environmental Health team may wish to consider the degree to which a detailed unexploded ordnance (UXO) assessment has been performed at the site in the past, given that hundreds of short piles will be required for supporting the solar panels, to ensure that there are no potential risks arising from encountering old buried munitions.

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,

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

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Croesewir gohebiaeth yn Gymraeg a byddwn yn ymateb yn Gymraeg, heb i hynny arwain at oedi./Correspondence in Welsh is welcomed, and we will respond in Welsh without it leading to a delay.