Cyfoeth Naturiol Cymru
Natural Resources Wales

Ein cyf/Our ref: CAS-297379-S9Q9
Eich cyf/Your ref: P/2024/1151

Wrexham County Borough Council
The Guildhall
Wrexham
LL11 1AY

Dyddiad/Date: 02 February 2026

Annwyl Syr/Madam/Dear Sir/Madam,

BWRIAD/PROPOSAL: RHYDDHAU AMOD 7 (HALOGIAD) CANIATÂD CYNLLUNIO P/2021/0676 / DISCHARGE OF CONDITION 7 (CONTAMINATION) OF PLANNING PERMISSION P/2021/0676

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 14 January 2026.

Condition 7

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

- GSI 2006 Letter Report 130126 V3

We advise that the information included in the most recent submission does not provide a sufficient detail in relation to the matters raised in our letter dated 12/12/2025. The following areas in particular have not been addressed adequately:

- There is an absence of acknowledgement that the proposed shallow piles will intersect the capillary fringe and groundwater.
- That site soils are releasing lead to groundwater likely as a result of chemical/redox conditions rather than the source of the lead being to the north of the water course, i.e. suggested as being offsite.
- That soil investigations have not provided sufficient vertical profiling chemical analytical data to assess the extent of lead in soils at different depths including through the capillary fringe and to the groundwater table.
- There is an absence of acknowledgement that significant concentrations of dissolved lead are currently fluxing directly into the water course.

We therefore advise that a proportionate site investigation be designed to assess the vertical soil profile for lead and relevant geochemical parameters, as the principal

uncertainty and associated risk relate to the extent to which piling activities could exacerbate lead flux to groundwater due to construction-related disturbance arising from the installation of numerous piles across the site.

This should also include a baseline and operational monitoring regime rather than remediation.

Although piling and trenching will not introduce new sources of lead, the proposed depth of installation coincides with the fluctuating groundwater zone where elevated dissolved lead is already present and discharging to surface water affecting shallow groundwater in hydraulic continuity with the adjacent watercourse. In the absence of deeper soil characterisation and construction-phase controls, there is an unquantified risk that subsurface disturbance could increase lead mobilisation and worsen controlled-waters impacts.

Where feasible remediation cannot be achieved, proportional risk management involves targeted investigation, construction controls, and monitoring to demonstrate that conditions are not deteriorating.

Site Investigation Advice:

The following is considered to be the minimum in relation to a proportionate site investigation and aligns with the construction risk:

- 3–5 targeted locations in total focused on:
    - The wells with highest dissolved lead (DS05, DS08, DS09)
    - Two locations hydraulically up-gradient (for contrast)
    - At least one location near the watercourse

- One borehole per location, sampled at:
    - ~0.5 m bgl (existing soil zone – control)
    - ~1.2–1.5 m bgl (upper fluctuation / trench interface)
    - ~1.8–2.2 m bgl (pile tip / redox transition)

- 3 samples per borehole
- 9–15 soil samples total

As a minimum, the assessment could consist of the following parameters:

- Lead (total and leachable)
- Iron, manganese
- Sulphur/sulphate
- pH
- Organic carbon (or LOI)
- Field pH, redox, dissolved oxygen
- Dissolved Fe/Mn
- Dissolved lead

In summary, the advised approach to the site investigation would not characterise the whole site, however it would test a specific risk mechanism and targets depth - location - receptor relevance.

In addition to the proportionate site investigation above, appropriate construction controls and monitoring of the site should be developed based on the findings of the site investigation. This is to ensure that the site is adequately monitored for non-deterioration compliance during the construction and operation of the site.

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

The advice in this letter relates to matters which are included on our consultation topics list. We do not rule out the potential for the proposed development to affect other environmental interests that are not included on this list.

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

E-bost/E-mail: northplanning@cyfoethnaturiolcymru.gov.uk

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.