

17 July 2025

63 Macrae Road
Eden Office Park
Ham Green
Bristol
BS20 0DD

For the attention of Chris Jarman,

Re: Afan Way, Port Talbot

Dear Chris,

We can confirm that we have received the recent NRW comments referenced P2024/0339, dated 17 July 2024 and Environmental Health Consultation response referenced P2024/0039.

Please see below our responses to the comments made from NRW and Environmental Health.

1. NRW Comments & Responses

“Further intrusive works have been undertaken on the site, which concentrate on the vicinity of the former petrol filling station however, we still have some concerns with the application. The former petrol filling station is a significant potential source of contamination, yet we have no documentary evidence of underground tank removal or the contents of the tanks. The report states that the intrusive investigation confirms no tanks remain present.”

To our knowledge, there are no records of the USTs being removed, we have not encountered the USTs in the phases of investigation undertaken in this area. If USTs are encountered during the construction works, they will be removed, remediated and validated. The groundwater testing results in the PFS area recorded residual concentrations of hydrocarbons, however at concentrations below Level 2 screening values. The work to date suggests the USTs have been removed and the soil testing results indicate that there is no significant impact, a risk is not considered to exist. Additional investigation has been undertaken in July 2025 to investigate the presence of tanks, no USTs or associated infrastructure such as fuel lines were discovered as discussed in GRO-21252-5916.

“However, it appears from the exploratory hole plan that only one trial pit (ATP06) has been located over the indicative former tank locations. The generic quantitative risk assessment concludes that there is an impermeable clay layer beneath made ground which is preventing the migration of contaminants into the sand and gravel aquifer. However, it is noted from the Phase II Geo-Environmental Report that this clay was not encountered in all the exploratory hole locations. Therefore, we do not know if the clay layer is protective of the aquifer across the entirety of the site. We have not been presented with the exploratory hole logs associated with the previous ground investigations from 2016 or 2017.”

WS105 was constrained due to the density of the Made Ground in this located. TP109 was excavated in close proximity and encountered clay at 1.9m begl to in excess of 3.0m begl. QTP11 was also excavated in close proximity and encountered clay at 1.5m to 3.1m begl, QWS17 was terminated in the inspection pit due to Made Ground obstructions. Where exploratory holes were progressed through the Made Ground, impermeable clay was recorded. An additional trial pit (TP201) was undertaken at QWS17 during the supplementary works in July 2025, the excavation was progressed through the Made Ground to prove a clay layer. The relevant information including photographs is provided in GRO-21252-5916.

“In the most recent investigation, particularly high concentrations of hydrocarbons were recorded within soils in WS105. In addition, hydrocarbons were recorded in the most recent groundwater sampling, which differs to the results of sampling carried out in 2021 (albeit in different wells). It is considered soil sources could exist on the site. It is considered more representative to have more than one round of groundwater sampling.”

The detectable hydrocarbons are associated with historic residual concentrations, none of the hydrocarbons are elevated at the possible source area, additional rounds of groundwater sampling and testing can be undertaken.

“As mentioned in our previous comments, there is reference to a former culvert on the site (within Section 3.1 of the Phase II Geo-Environmental Report) and we would ask for further information including confirmation of where this is and whether this could be a potential pathway for contamination. In addition, the report refers to the identification of a suspected former tar tank from the Quantum investigation, but no further details are provided.”

Possible evidence of a culvert was noted in the Quantum Investigation in TP02 as presented below, it is not definitive that it was a culvert or other substructure, and was clearly redundant/backfilled. The concern from NRW is the PFS in the eastern section of site which is indicated to be the source of any contamination, the supplementary investigation (GRO-21252-5257) focuses on this area and found no elevated contaminants of concern. Based on no contaminants of concern being present at the source, it is considered investigation of the culvert/substructure is best dealt with during the enabling works.

In terms of the Piling Methodology (required by proposed Condition 18), page 25 of the report states:

“Piling: although the application is supported by a piling risk assessment, a standard condition shall be applied to ensure that no development commences until details of piling or any other foundation designs using penetrative methods are submitted for review by the LPA, to demonstrate that there is no unacceptable risk to groundwater. Again, as with the other controls, this condition ensures that the development complies with the objectives of LDP Policies (SP16, EN8), including criterion 5 of LDP Policy BE1.”

2. Environmental Health Comments and Responses

“The report mentions in Section 3.1 of the Phase II Geoenvironmental Report that a culvert was encountered on the site. I would like further information about where the culvert is located, whether it could be a potential pathway for contamination and if further investigation is required.”

Possible evidence of a culvert was noted in the Quantum Investigation in TP02 as presented below. No further evidence of the culvert was encountered or if it actually was a culvert or other substructure. It is considered investigation of the culvert/substructure is best dealt with during the enabling works.



Possible Culvert identified in TP02 during the Quantum Investigation

“In Section 9.1 of the Phase II Geo-Environmental Report the Total Cyanide (in TP02) is noted as being 58mg/kg in the soil test results. There is no discussion in the risk assessment of this high result. This needs to be addressed.”

Although there are no available screening values for cyanide, a conservative value of 20mg/kg should be applied however the commercial screening value is indicated to be much higher, the cyanide concentration is highly localised. The development is mostly covered with hardsurfacing and the cover system recommended in Section 9.7 is considered to be suitable to mitigate against the above-mentioned cyanide concentration.

“In Section 9.3 of the Phase II GeoEnvironmental Report, the table summarising the groundwater testing results shows the Laboratory Limit of Detection above the EQS standard. This was noted with Hexavalent Chromium, Cyanide and PAH’s. Groundtech should’ve marked these instances as a potential exceedances and investigated further the potential risks.”

The EQS values are indicated to be highly stringent given the industrial nature of the surrounding area, particularly with respect to PAHs. The laboratory detection limit is a fair criteria given the circumstances. These COC are not the primary concern and have been reassessed in the Supplementary Appraisal.

“Only 1 round of ground gas monitoring results was provided in the Phase II report. If the ground gas monitoring has been completed, then the report and risk assessment needs to be updated.”

The gas assessment is provided in GRO-21252-3237 and attached for comment, part of the site (PFS) is CS2 and the remaining areas are CS1. A vapour resistant membrane was recommended in the PFS area as a precautionary measure.

“The development is adjacent to residential and commercial properties. As asbestos containing material (ACM) has been identified in the soil, during the development phase mitigation measures will need to be in place to monitor and limit dust emissions. Details of which will need to be included in the Construction Environmental Management Plan (CEMP).”

Understood, the precautions/mitigation measures and requirements are outlined in the Remediation Specification (GRO-21252-4313) for the enabling works contractor to review. This includes perimeter asbestos monitoring and dust suppression. Contractor to provide CEMP.

"I will give my final comments on the suitability of the piling once the ground gas monitoring has been completed and the piling risk assessment takes into consideration the conclusions of the ground gas risk assessment. I will also like to see how details of mitigation measures that will be implemented on site to prevent noise and nuisance to adjoining noise and vibration sensitive receptors."

The gas assessment is attached.

"I have not reviewed the remediation strategy as the Phase II ground investigation is still incomplete."

It is important to consider the supplementary investigation as well as well as the original investigation.

Please do not hesitate to contact the undersigned if you have any queries.

Yours Sincerely

For Groundtech Consulting Limited



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