

Ref. 24-054.02L

Sam Buswell
Countryside Partnerships
Vistry Group (West Yorkshire)
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Paragon Business Village
Wakefield
WF1 2UL



Arc Environmental Ltd
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2nd July 2025

Dear Sam,

Re: Condition 16 (Validation Report Planning Ref. 2019/90527) - Land at Blue Hills Farm, Whitehall Road West, Birkenshaw, Bradford, Kirklees, BD11 2DU

At the request of Countryside Partnerships Arc Environmental Limited were asked to provide a response to the below queries / requests for further information received from Kirklees Council from 14th March 2025 (Ref. WK/202505309) in relation to items 3, 4 and 6 below.

Condition 16 – Validation Report

The following documents have been received in support of the application to discharge Condition 16:

- Topsoil Testing Letter (21st August 2023, 23-666.01L)
- Validation of Hotspot Removal Letter (8th November 2024, 22-110.01L)
- Ground Gas Protection Measures Verification Plan (23rd February 2024, 24-116)
- Supplementary Intrusive Ground Investigation Work Letter (22nd March 2024, 24-054.01L)
- Verification of Hazardous Ground Gas Protection Measures (18th November 2024, 24-116.03L, 1st October 2024, 24-116.02L and 5th March 2025, 24-116.04),

The reports include geotechnical information, which is outside the remit of Environmental Health, this consultation response therefore only relates to the land contamination aspect of the reports. We have read the reports provided and make the following observations:

- (1) Topsoil Testing Letter (21st August 2023, 23-666.01L) is accepted
- (2) Ground Gas Protection Measures Verification Plan (23rd February 2024, 24-116) is accepted.
- (3) [Supplementary Intrusive Ground Investigation Work Letter \(22nd March 2024, 24-054.01L\)](#): This is geotechnical in nature. However, we request a revised risk assessment and conceptual model to confirm whether there is any risk to human health considering the findings.
- (4) [Validation of Hotspot Removal Letter \(8th November 2024, 22-110.01L\)](#): Only four tests were undertaken on samples from four locations. We request additional commentary on the number of samples taken as this does not appear to be sufficient.
- (5) In relation to plots 13,22-24, and 41 onwards, we have not received evidence to confirm the installation of gas protection elements at all dwellings.
- (6) [We have not received evidence to confirm the replacement of clean and suitable material in the area of Area B.](#)

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(3) Supplementary Intrusive Ground Investigation Work Letter (22nd March 2024, 24-054.01L): This is geotechnical in nature. However, we request a revised risk assessment and conceptual model to confirm whether there is any risk to human health considering the findings.

From the results of the geotechnical legacy mining investigation works above, although reworked colliery spoil type materials were encountered as previously noted in the IFA Ground Investigation Report there was no evidence of significant deleterious materials, anthropogenic debris, staining or malodours to indicate a risk to human health.

As such a revised Conceptual Site Model is not considered necessary.

(4) Validation of Hotspot Removal Letter (8th November 2024, 22-110.01L): Only four tests were undertaken on samples from four locations. We request additional commentary on the number of samples taken as this does not appear to be sufficient.

The previous IFA Ground Investigation report stated: "Contamination in the form of slightly elevated concentrations of PAH was encountered in made ground beneath the western, car parking, area of the site (IFA WS01 & IFA WS04). To isolate these materials from end users and mitigate any potential risks it is recommended that they are removed and stockpiled separately either for re-use beneath areas of roadways and hardstanding or removed from site. All other contamination test results were below guidance values. On this basis it is considered that the risks to end users from soils, excluding car park construction layers, are negligible".

IFA WS01 and IFA WS04 were located within small car parking areas (labelled Area A and Area B) where they encroach on to western parts of the site. These boreholes encountered gravel at surface extending to depths of 0.60m and 0.30m respectively. This was underlain by clay to depths of 1.20m and 0.50m respectively. Anthropogenic ash, brick and asphalt were present within the made ground limited to the car park area.

WS01 was located within proposed public open space (POS) and where a Carlow tank is sited whilst WS04 was located below the proposed highway (permanent hardcover).

The whole of the made ground was subsequently stripped from the former car park area B where in encroached on to site.

Given the relatively small area 4 samples of the underlying exposed natural clay deposits and a visual inspection of these virgin clays at reduced levels was deemed appropriate for validation ensuring all the contaminated material was removed. Nevertheless, this area was subject to further excavation to create the sub-surface Carlow tank.

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(6) We have not received evidence to confirm the replacement of clean and suitable material in the area of Area B.

The excavated PAH impacted made ground identified by IFA at and around WS01 was stockpiled and then placed at significant depth i.e., c.5-6m below finished ground levels around the outside of the Carlow tank (sides and ends), within a large benched / battered excavation, generally in line with the IFA recommendations, albeit not below permanent hardcover but below $\geq 5\text{m}$ of clean cover nonetheless.

The tank excavation was inspected by Arc and advice was given on safe batter / benching angles. The base of the tank is c.6m bgl whilst the top of the tank is covered by c.2.50m to c.3.00m of site won natural clay deposits generation from the tank excavation and will be topped with a layer of site won topsoil in due course. Arc consider the site won natural clay and topsoil represents a suitable material for use in Area B.

We trust the contents of this letter are to your satisfaction, and if you require any further information or clarification, please do not hesitate to contact us.

Yours sincerely



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For and on behalf of Arc Environmental Ltd
John Ditchburn BEng (Hons) MIMMM CSci MIEnvSc MCIEH FGS
Director