

Cerys Jones

From: North Planning <NorthPlanning@cyfoethnaturiolcymru.gov.uk>
Sent: 04 April 2016 16:11
To: Philip Forster; planning_admin
Subject: P/2016/0142 - Land to the North and West of Maelor Gas Works, Parkey Lane
P/2016/0142 v3 - NRW Response NRW:00960573
Attachments: Land to the North and West of Maelor Gas Works, Parkey Lane v3.pdf

Dear Mr Forster,

Please advise how you wish to proceed with the email response below?

Kind regards,

Gareth Thomas
Natural Resources Wales
0300 065 3786

----- Original Message -----

From: Peter McCann-Downes
Received: 04/04/2016 15:57
To: North planning; North Planning Mailbox Queue
Cc: Glenn Crocker; Philip Forster; Philip.Forster@wrexham.gov.uk; Planning wrexham; Wrexham Planning; Wrexham Planning
Subject: Re: P/2016/0142 - Land to the North and West of Maelor Gas Works, Parkey Lane P/2016/0142 v3 - NRW Response NRW:00960573

We acknowledge that a non-targeted grid of 30 soil samples has been taken as part of the Site investigation reported in the submitted 'PH2' report. However, no trial pit logs have been provided.

The sample pits were all 0.15m BGL in topsoil. We can supply trial pit logs and photographs of the 5 soak away pits which encountered natural ground. The WSI approved was for surface sampling. Photographs and logs will be forwarded within 24 hours for consideration.

This is a requirement of the checklists presented in the WLGA (2006) guidance document 'Land Contamination: A guide for developers'. Without this information it is difficult to provide comment on whether the soil sample locations are sufficient to adequately characterise the site.

Reference is made to historical maps within the 'PH2' report but it is not clear whether any potential contamination sources identified in these maps influenced the sampling strategy/design.

An entire chapter of the report was dedicated to this subject and was also subjected to peer reviewed methodologies for the calculation of sample numbers and locations based on the actual shape factors that would result from the site history. This was presented both in the WSI and in the final report.

Additionally, we note that BS10175:2011(British Standards: Investigation of potentially contaminated sites – code of practice) is referenced within PH2. BS10175 states that soil samples

should be taken at surface, every 50cm in depth and at every change of strata.

We sought approval of an alternative scheme based on risk to the end user, in this case site workers as the area is now fenced off for 25 years. This was approved. We always seek approval for any deviation from BS10175, which is a guide and not a substitute for professional judgement.

The Chemtest data provided to us suggests that only one sample per trial pit was taken at 15cm bgl despite trial pits

extending to ~2m bgl.

This is untrue. 30 pits were approved as surface sampled pits to 0.15m BGL. Only 5 soak away pits were dug to 2m BGL and samples retained in case of any exceedences within the upper surface samples.

Whilst there may be justification for this, without trial pit logs/observations or discussion of sample depth within the 'PH2' report it is not possible to comment on adequacy of the Site investigation.

There was a detailed discussion of the rationale of the SI and approval for the approach was gained from the LPA. We can provide logs for the 5 pits, but as they encountered nothing but natural ground, there is nothing much to be said.

Furthermore, the 'PH1' report identified "fuel oils"/"hydrocarbon" compounds as

a potential contaminant of concern at the site yet the Chemtest data supplied (carried out as part of the Site Investigation) does not show that hydrocarbons were ever analysed for. The justification for this is unclear.

This is incorrect. Not only were there testing for PAH, these were ordered as 16 species to enable precise identification of the sources of HC - for example pyrene from incomplete combustion, fuel oil or petroleum spirit could also be finger printed from the results. This was done for all 30 samples. There were no significant exceedences.

In relation to the following statements made within the letter dated 22nd March from 'The Magnificent Science Company' to Wrexham CBC:

- "As there is no plausible source with a significant soluble component...."

We would agree that no source of significant concern has been identified (based on the sample locations tested), however, for the aforementioned reasons we cannot comment on whether the site has been adequately characterised.

Additionally, it is not clear on what basis comments in

relation to a 'soluble component' are made since there does not appear to be any leachate analysis/testing or perched/groundwater analysis. The chemtest data we have received relates only to solid soil analysis.

This is basic chemistry - there have been no exceedences in commonly water soluble compounds and if there were then further testing would have been undertaken.

- “While compliance point solute transport modelling can be conducted, it is obvious that with the small exceedences on the site, this would conclude that natural attenuation over 80m in soils with a very low permeability and porosity with no obvious subsurface pathway to the underlying groundwater, there is no significant residual risk.”

The point in relation to attenuation over the 80m (to the surface water receptor) is acknowledged.

However, the site overlies a Principal aquifer and is situated within a source protection zone 2.

Therefore the groundwater is sensitive and should really be considered a receptor in its own right.

The risk model and conceptual model always considers groundwater as a receptor. The comment about the assessment for the 80m compliance point was in response to NRW comment asking for that to be taken into account. No mention was made then of groundwater, which is a new request. We have already considered the ground water and, again, there are no exceedences and further testing would not be proportionate for the site use or the level of risk.

In summary, we would concur that a source has not been identified by the sampling that has been carried out.

However, as outlined there is insufficient information in order to comment on whether that sampling is adequate and has fully characterised the site in terms of potential for historic contamination (other than for <15cm bgl).

The site has been fully characterised and this was based on an approved WSI. Justification was made for the sampling plan and the depth of sampling. Had the trial pits revealed significant volumes of made ground, then of course these would have been sampled, but there was no evidence of this. Had there been any significant exceedences of determinands, then of course water testing would have been carried out, but there were none.

Detailed PAH testing was carried out for all 30 samples.

Further, the development represents a minimal disturbance or potential for mobilisation of contaminants should they have been present in any significant volumes with only shallow driven piles into clay and shallow sum 0.5m trenching operations. The LPA agree that the site investigation is adequate and we can see no further reason to delay the sign off of the site.

However, as requested, we have issued the logs along with photos of the pits to help NRW with their assessment.

I trust this is acceptable and clears up any misunderstandings arising of the SI.

If you require any further information, we will do our best to provide this within 24 hours.

Kind regards

Peter

Peter McCann-Downes
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On 4 April 2016 at 15:14, North Planning <NorthPlanning@cyfoethnaturiolcymru.gov.uk> wrote:
Dear Mr Forster,

Please find attached our response to the above application.

We kindly request that any further correspondence be made through the Local Planning Authority to avoid any confusion/misunderstanding.

Kind Regards,

Gareth Thomas
Tîm Cynllunio Datblygu / Development Planning Team
Cyfoeth Naturiol Cymru / Natural Resources Wales
Ffôn / Tel: 0300 065 3786
Gwefan / Website: www.cyfoethnaturiolcymru.gov.uk / www.naturalresourceswales.gov.uk

Ein diben yw sicrhau bod adnoddau naturiol Cymru yn cael eu cynnal, eu defnyddio a'u gwella mewn modd cynaliadwy, yn awr ac yn y dyfodol.

Our purpose is to ensure that the natural resources of Wales are sustainably maintained, enhanced and used, now and in the future.