## Redcar & Cleveland Borough Council Adults and Communities

## Memo

From:	Mr Mick Gent	To:	Development Department
Job Title:	Contaminated Land Officer		
Email:		Name:	Mr Pedlow
Our Ref:	163722		
Date:	10/03/2021	Your Ref:	R/2021/0100/CD
Tel Ext:	01287 612429	Response	Planning Consultation Con Land

## **Environmental Protection Planning Consultation Response**

Proposal:	al: DISCHARGE OF CONDITION 4 OF PLANNING PERMISSION R/2020/0270/FFM FOR ENGINEERING OPERATIONS	
	INCLUDING WIDENING OF ESTON ROAD, FORMATION OF	
	NEW ROUNDABOUT AND INTERNAL ACCESS ROADS,	
	WORKS TO ENHANCE HOLME BECK AND ASSOCIATED	
	HARD AND SOFT LANDSCAPING WORKS	
Premises:	Junction of A66 to, Middlesbrough Road East,	
	Middlesbrough	

## Comments:

With reference to the above planning application, I would confirm that I have assessed the following environmental impacts which are relevant to the development and would comment as follows:

I note that various reports have been submitted in support of the discharge of condition 4.

The reports include: -

Phase II Environmental Site Assessment – Addendum, Detailed Conceptual Site Model Review and Risk Assessment carried out by Arcadis and Eston Road Ground Investigation Report carried out by Atkins.

The general scheme is to remove subsurface material to be screened and treated appropriately in line with the remediation strategy (Remediation Options Appraisal and Enabling Earthworks and Remediation and Strategy Report) provided by Arcadis.

Remediation using capping insitu is proposed for the wider site area to include turnover of Made Ground up to 2.50 m in depth. This is to include removal of relic structures, contamination removal and treatment, and replacement with treated material to create a suitable development platform. However, this remediation has not been completed at this stage but will be overseen by Arcadis. The commencement of construction of the new highway will start on completion of the remediation works.

Condition 4 states. No development shall commence until a scheme to deal with any site contamination has been submitted to and approved in writing by the Local Planning Authority. The approved scheme shall include an investigation and assessment to identify the extent of contamination and the measures to be taken to avoid risk to human health. Development shall only proceed in accordance with the approved scheme.

REASON: To ensure that risks from land contamination to the future users of the land and neighbouring land are minimised, together with those to controlled waters, property and ecological systems, and to ensure that the development can be carried out safely without unacceptable risks to workers, neighbours and other offsite receptors.

In summary the Arcadis addendum report identified arsenic and total cyanide as well as chronic health effects from concentrations of volatile compounds such as naphthalene and free cyanide in soil, and for groundwater a number of contaminants of Concern measured in groundwater were identified above the Water Quality Standards, all requiring further consideration for Human Health risk.

Following on from addendum report the Detailed Conceptual Site Model Review and Risk Assessment report concludes that after further assessment concentrations of naphthalene measured in soil are still above the GAC and should not be reinstated due to being a primary source of Contamination until treated to below GAC and reinstatement or offsite disposal if not.

For free cyanide no GAC applicable in the UK is available. As such, in house assessment Criteria was derived and modelled.

Based on the results of the modelling, the risk to commercial workers from measured concentrations of free cyanide in soil and groundwater beneath the site is not significant.

In terms of groundwater and with the proposed industrial setting of the site not located with 1km of an Source Protection Zone and the potential for periodic saline intrusion makes it unlikely that abstraction of the identified aquifers, especially for drinking water, would be desirable. On this basis, groundwater underlying the site is considered to be of low resource potential and therefore is not been considered as a receptor of concern.

Further assessment of the surface water quality for Holme Beck and Knitting Wife Beck and Cross Connector is considered to be low provided that the culverts can be proven to be in good condition and that groundwater is not in continuity with the water in the culvert, the risk to Knitting Wife Beck and the Cross Connector from concentrations of Contaminants of Concern measured in groundwater is considered to be low. Atkins also provided scope for some additional ground investigation to be undertaken as part their ground investigation to support the stage 1 enabling works at Eston Road, which found exceedances for naphthalene and arsenic above GAC for a commercial and end use.

Atkins came to a similar conclusion assuming the use of robust risk assessment and method statements during construction, there is limited potential for exposure of construction workers to the underlying soils however they stated for surface water that in the current condition of the culvert there is a high risk of contamination from elevated concentrations of PAHs but due to the ongoing remediation works are complete this would be reduced to a low risk.

Therefore, due to information provide I can recommend the discharge of condition 4 of application R/2020/0270/FFM.

Unexpected contamination (condition 5) cannot be discharged until the development is complete.