

Memo

Project	Distribution Park, Island Road, Reading	Ref	L15-5034
To	Damian Holdstock	Date	11/07/17
From	Jim Gott		
Copy			

Re: Application Reference – 152052 – Land North of Island Road, Reading, RG2 0RP

Condition 34 – Planning Approval 141789/FUL

Nova submitted a monitoring memo dated 21/10/15 (See Appendix A) detailing the ‘remedial’ works proposed at Distribution Park, Island Road, Reading (“the Site”) and the monitoring that was to be undertaken. This was approved by RBC on 5 February 2016 (Appendix B).

This memo details the results of the monitoring and applies for discharge of Condition 34.

Site Background

The 7.5 hectare Site is located off Island Road and is bounded to the north by large mature trees and the River Kennet, to the east by the A33 road, to the south by Island Road and to the west by further disused land. Prior to the development the Site had been vacant and subject to fly-tipping, before that the Site was used as a go-kart racing track. The land is known to have been used as a landfill historically. Historic maps show landfilling occurring between 1973 and 1979. The Environment Agency states inert waste was buried at the Site from 1977 to 1985. The surrounding land was also reported to be historical landfills.

Ground investigations have been undertaken at the Site. These have shown that the Site is gassing, that discontinuous bands of leachate were present, that a significant thickness of non-engineered cap material was present and that soil contaminant concentrations were generally below human health guideline criteria levels.

Site Development

The development consists of three industrial/warehouse units with office space and loading bays.

The following points are considered pertinent to the development scenario –

- The Site is surfaced with impermeable surfacing (80-90% est) with the remainder being planted areas. Surface water does not discharge to ground, it is captured, stored and discharged to the River;
- Gas protection systems have been designed in accordance with CIRIA guidance and have been installed on all buildings;

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- The ground has been dynamically compacted to remove placement voids in the waste and the building frame and slab has piled foundations. As part of the works around 800mm of granular material was placed on top of the soil capping at the Site.

Monitoring Requirements

Ground Gas

The Ground Gas had been monitored and it was determined that a Characteristic Situation CS3 / CS4 was identified, no further gas monitoring was proposed.

It was initially proposed that a positive pressure gas system would be used, however, the contractor amended this to a passive system as this did not have a requirement for on-going maintenance or the risk of any mechanical / electrical equipment failure. As can be seen in Appendix B of the Spilman Associates Report (Appendix C of this document), the system complies with Characteristic Situation 4 as specified in CIRIA C665 and BS8485.

Appendix C contains the gas monitoring data, the contractors system design calculations and the validation / as built description of the system.

Deep Groundwater

Three groundwater-monitoring boreholes were installed into the chalk strata, to allow monitoring of the groundwater quality during construction works. This was to confirm that the piling and groundworks did not adversely affect the groundwater regime.

The groundwater monitoring was undertaken pre-construction (one round), during construction (one round) and post-construction (three rounds). The monitoring report is included in Appendix D.

The monitoring has shown that the groundwater conditions in the chalk beneath the Site are comparable with pre-construction conditions and that the concentrations of any contaminants within the groundwater are below the UK Drinking Water Quality Standard guideline values (please note that this criteria is applied at the consumers tap).

Shallow Groundwater

It is understood that during the works the contractor maintained a watching brief for the presence of contamination and for run off towards the River Kennet. A letter detailing this is included as Appendix E. No evidence of contamination or run-off was noted. As part of the works the capping on the Site was increased by approximately 800mm, in addition, as described above, the Site has been capped with development and surface water is captured, retained and discharged to the river. As the Site is a land-raise, the potential for leachate generation is now negligible.

Summary

The Site redevelopment has been completed.

No unexpected contamination was encountered during the works and no pollution was allowed to enter the River Kennett.

A gas protection system has been installed that is line with Characteristic Situation 4 as specified in CIRIA .

The groundwater quality has not been impacted by the development and remains compliant with UK Drinking Water Quality Standards.