

URGENT

Objection to LBH Council Ref: Ref:74320/APP/2019/3187 and 76182/APP/2021/399

March 2021

To Hillingdon Council Major Infrastructure Applications Committee,

You are being asked to provide consent for 2 major HS2 applications in our drinking water protected areas (DWPAs) which provide daily drinking water to 1.3 million local people. Without being sure there will be no lasting damage to Hillingdon's DWPAs or without knowing who is liable if things go wrong, the Council should delay their decision.

Ref:74320/APP/2019/3187 for the earthworks for the viaduct

HS2 Ltd ground investigations in 2017 increased chalk pollution at the Blackford pumping station on Moorhall Road. HS2 are expecting chalk turbidity from the major works, to cause water purification treatments to fail and so there is an agreement that Blackford pumping station will close during construction. What happens if things go wrong and there is lasting damage? There are unassessed long term water quality risks for Blackford. These include (unassessed risk) increased pollution from the Newyears Green landfill site, which lies within the groundwater source protection zone for both Blackford and Ickenham public water supply. See map **Fig 1**.

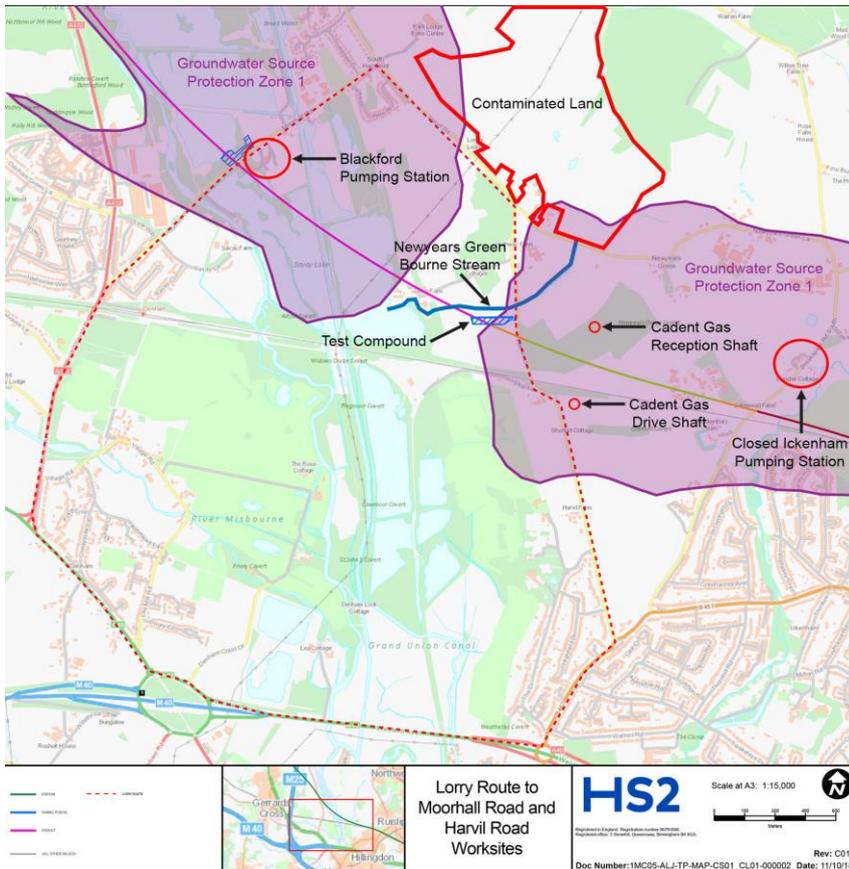


Fig 1. Is a map showing the locations of both the Ickenham and Blackford inner source protection zones. The DWPAs are marked in purple and it is noticeable that the contaminated land at Newyears Green landfill overlaps both DWPAs for Blackford to the west and Ickenham to the east.

The viaduct maximises the length within the protected areas. It is essential that an assessment of the risk of pollutant transit into the good water at the Blackford source is made before planning consent and water license changes are agreed.

There are two main risk assessment documents which HS2 Ltd is relying on. A groundwater risk assessment and a mitigation options assessment have been completed for Colne Valley Viaduct. Neither of these includes assessment of pollutant transit from Newyears Green Land fill Site. Groundwater Assessment for Construction Tasks – Piling at the Colne Valley Viaduct: 1MC05-ALJ-EV NOT-CS01_CL01- 100069 Revision C03 and Options for mitigation of the effects of piling on groundwater: 1MC05-ALJ-EV NOT-CS01_CL01- 000001 Revision C03. All other risk assessments use the methodology and baseline assessments contained in these two documents.

Align on behalf of HS2 have produced the Options for mitigation of the effects of piling on groundwater. The methodology for assessing creation of preferential pathways (vertical) and corrosion rate prediction is on pages 21 to 23 in section: 7.2.7. This methodology has been assessed by an independent water quality expert who has observed that these assessments are not safe. They are based entirely on studies in clean, fresh water and not in leachate contaminated soils. They are based on the unjustifiable position of extrapolating studies to 1000 years which are based on calculations which themselves are extrapolated to 100 years from a 10 year study period (7.2.13 page 23). The long term coexistence of the landfill pollution and the Colne Valley Viaduct piers sunk deep within the Principal aquifer need to be assessed, in synergy. This has not been done and presents a long term unmitigated risk to the DWPA's.

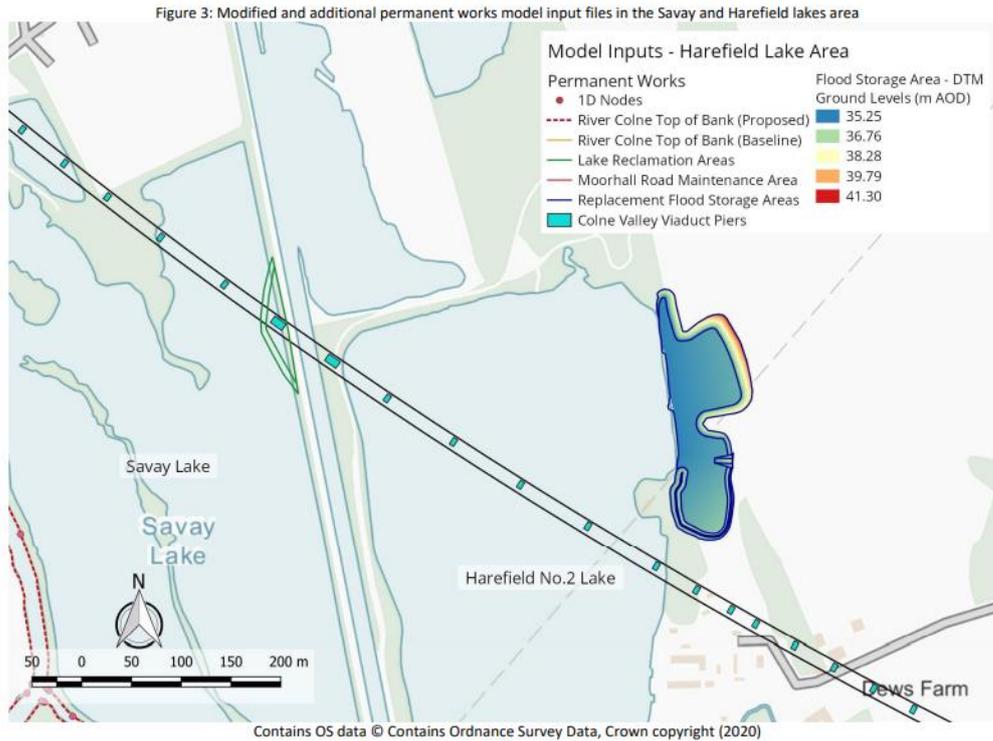
A third Align assessment document: Piling along the Colne Valley Viaduct using bentonite Groundwater Environment Assessment – on pages 63 and 64 confirms pollution is in the ground at Harvil Road:

In June 2020 as part of baseline monitoring at the Load Test Pile 2 site which is on the northern side of the alignment, ammonical nitrogen was measured in all five monitoring boreholes at concentrations between 8 and 23 mg/l. Several other substances were elevated including major ions and iron.

The Special Site of Contamination is on the hill to the eastern side of Colne Valley. Pollution has already spread to the area of the south embankment and pier one and yet current and future pollution is not considered in the water risk assessments. This pollution can spread further into the centre of Colne Valley due to piling and earthworks for CVV ref:74320/APP/2019/3187 Colne Valley Viaduct earthworks; therefore this application must not be passed in its current state.

Ref: 76182/APP/2021/399 for the river diversions and landscape changes for flood risk.

There is also an unassessed risk of drawing polluted water directly down gradient into the HOAC Lake eastern extension which is planned for increased flood risk alleviation ref:76182/APP/2021/399 River Colne and Newyears Green river diversions. **See Fig 2, below**



The HOAC lake extension has the unassessed potential consequence of drawing additional pollution into the lake. The HOAC lake forms part of the inner source protection area for Blackford. Roughly 30% of lake water is found in the water abstracted at Blackford and therefore this is a potential risk to potable water which needs to be assessed before consent is granted.

LBH need to consider that HS2 Ltd contractors are already doing the works with potential to deteriorate our drinking water before consents have been given.



Fig 3. Above photo taken (16 January 2021) diversion of Newyears Green Bourne – concreting of river bed.

This river diversion of the Newyears Green Bourne, overlies the polluted part of the aquifer where ammonical nitrogen was measured by HS2 contractors in all five monitoring boreholes, Load Test Pile Site at Harvil Road 2020. The Newyears Green Bourne is also a significant pollution pathway from the landfill site, named in LBH determination of Contaminated Land. Who is liable if increased levels of pollution spread into the clean drinking water protected areas down gradient in the HOAC Lake? The Council owns the Site of Contamination at Newyears Green and therefore under the polluter pays principal LBH would be the liable party. Affinity Water have a contingent liability to cover costs for short term damage to the aquifer and have applied for changes in their water abstraction licenses which if passed, would end 31 March 2025. If the Blackford source could not reopen with current water quantity and quality due to increased long term pollution, then who would be liable and who would pay in the long term?

Conclusion

When considering these applications LBH must be sure that the lasting legacy of HS2 in Colne Valley will not be long term pollution of the daily drinking water of 1.3 million people in and around Uxbridge. It is unsafe to pass planning consent for plans with unassessed risks of pollutant transit from Council sources of contamination in the vicinity. Contamination of the Blackford source could lead to unpotable water which may take a long time to remediate. The Council and (Authorising Authority) could be held liable.