

Chiltern Society
FAO Simon Kearey
Via email at:
SimonKearey@chilternsociety.org.uk

Our ref: HNL10774-15362
Date: 24 December 2021

Dear Mr Kearey

Thank you for your further correspondence in response to our letter of 7 December.

Since your last letter, the legal issues relating to the Approval the Environment Agency granted for the construction of the Chiltern tunnel have been dealt with via the Judicial Review process. Mrs. Justice Lieven dismissed all claims Misbourne Environmental Protection Ltd put forward.

1) Risk of diversion of water away from the Public Water Supply (PWS)

We maintain that it was appropriate to provide you with 200504 - GW Assessment for Construction Tasks - Tunnel & Cross Passages 1MC05-ALJ-EV-NOT-CS02_CL04-400048_C04, as Section 7.1 considers potential effects at individual Affinity Water abstraction points of the PWS. The likely risk to the PWS (from turbidity or reduction in abstraction rates) has been assessed as low to moderate.

The scenario outlined in 6.3.7 is an assumed ‘worst case’. The more likely scenario is outlined in 6.3.11 and 6.3.12.

3 & 4) Tunnelling methodology

In our response of 7 December we stated “for our purposes, there is no minimum thickness of competent rock that is required to be present between the tunnel and weathered / structureless chalk”. This position has not changed and we have no further comment on this.

The selection of construction methodology, TBM type and mode of operation are the responsibility of Align JV working on behalf of HS2 Ltd. Their technical experts would therefore be best placed to respond to your question regarding this.

5) Management strategy

This is threefold;

- i) Detailed risk assessment and selection of the most suitable construction methodology before approval is issued (complete)
- ii) Regular monitoring before, during and after construction (ongoing)
- iii) Assessment of any impact that may occur and agreement as to the nature and implementation of appropriate mitigation measures (as required)

6&7) Cement and Grout

Yes. Our technical experts consider that a 50m zone around the tunnel is satisfactory.

Environment Agency

Alchemy, Bessemer Road, Welwyn Garden City, Hertfordshire, AL7 1HE
www.gov.uk/environment-agency

8) Bentonite

Align JV have confirmed that D-wall construction has been completed at all the vent shafts required for the Chiltern tunnel.

In her recent ruling Mrs. Justice Lieven stated that she was satisfied that HS2 and the Environment Agency had considered the risk of discharge of bentonite, and the risk of it getting into the groundwater, as being extremely low.

Activated bentonite does not meet the criteria for classification as hazardous according to EC Regulation 1272/2008. It is therefore not a hazardous substance or mixture. As environmental regulator for HS2 we have approved it for use on the project and have nothing further to add in this regard.

Statement 1) Flood Risk reassessment

Please may I refer to our response to Statement 4 in our correspondence of 7 December. We respectfully reiterate that Buckinghamshire County Council is the Lead Local Flood Authority (LLFA) for the area.

HS2 has given assurance to the LLFA (U&A ref 1001) that it will carry out groundwater monitoring for the purposes of assessing and identifying the risk from groundwater flooding and to put in place mitigation if monitoring and assessment indicate that the Proposed Scheme has resulted in a significant increase in groundwater flood risk.

You may wish to put your case for a reassessment of flood risk to the LLFA.

As environmental regulator, we work closely with HS2 Ltd and contractors' technical experts and engineers to understand their proposals in detail. Our own technical leads use their environmental expertise and professional judgement to scrutinise the formal proposals to ensure that all risks of pollution to the local water environment and water supplies have been considered and minimised. In our view the proposed construction methodology (including materials and chemicals to be used) represent a very low risk of pollution, which is why approval has been granted.

Yours sincerely



Sam Lumb

Area Director – Hertfordshire and North London

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Pronouns: she/her ([why is this here?](#))

**Creating a better place
for people and wildlife**

