

Rt Hon Boris Johnson MP
MP for Uxbridge and South Ruislip
House of Commons
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23 September 2021

Dear Mr Johnson,

Thank you for contacting HS2 on behalf of your constituent regarding HS2 works and the loss of bentonite near Chalfont St Peter.

HS2 take our responsibilities to the quality and supply of water in the Chilterns and Colne Valley incredibly seriously and we have a world-leading team of engineers, hydrogeologists, and environmental scientists in place to ensure that the tunnelling operation affords the right protection for the environment, and is completed as safely and efficiently as possible. HS2's use of bentonite in our tunnelling operations has come after many years of intense scrutiny of the design and proposed construction methods.

Bentonite is a safe, naturally occurring form of clay that is widely used across the construction industry as well as in agriculture and cosmetics. On the HS2 project, bentonite mixed with water is mainly being used in the construction of the ventilation shafts and foundation piling work to reinforce the excavation before the concrete is pumped in. It is then removed, cleaned and reused. Bentonite is used in this way in building sites across the country every single day of the year.

Powdered bentonite would be damaging if released into surface waters as it can cause turbidity in the water, block sunlight and cover water-based flora. HS2 is not using powdered bentonite anywhere near surface watercourses where wildlife could be affected.

The material lost at this location was bentonite slurry, which is a mixture of 3% bentonite and 97% water. While we regret the loss, monitoring has not identified any adverse effects on the aquifer or on water supplies, and the Environment Agency and water company have raised no concerns.

We know this is a topic of interest for local communities and so we recently held a series of events for residents to find out more about the ways we are safeguarding the quality and supply of water during our works in the Chilterns and Colne Valley and directly ask our team of specialists about any questions they may have. The webinar is available to watch on our website

[here](#). Following these events, we also have produced an [FAQ](#) document to answer the most commonly asked questions we have had from members of the community.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'M Sutton'.

Maddelyn Sutton

Head of Engagement, Phase One - South

HS2 Ltd