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Neutral Citation Number: [2021] EWHC 3094 (Admin)

Case No: CO/2565/2021

IN THE HIGH COURT OF JUSTICE
QUEEN'S BENCH DIVISION
ADMINISTRATIVE COURT
PLANNING COURT

Royal Courts of Justice
Strand, London, WC2A 2LL

Date: 19/11/2021

Before :

MRS JUSTICE LIEVEN

- -

Between :

THE QUEEN
on the application of
MISBOURNE ENVIRONMENTAL PROTECTION LIMITED

Claimant

and

ENVIRONMENT AGENCY

Defendant

and

(1) HS2 LIMITED
(2) ALIGN JV

Interested Parties

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- -

Mr David Forsdick QC (instructed by **Leigh Day**) for the **Claimant**
Ms Lisa Busch QC and Ms Estelle Dehon (instructed by **Environment Agency**) for the **Defendant**
Mr Richard Kimblin QC and Ms Nina Pindham (instructed by **Government Legal Department**) for the **First Interested Party**
The Second Interested Party observed only and **was not represented**

Hearing dates: **28 October 2021**

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Approved Judgment

Mrs Justice Lieven DBE :

1. This is a renewed application for permission to bring a judicial review of the Environment Agency's ('EA') decision to grant consent to HS2 Limited ('HS2') for the below groundwater construction of a twin tunnel, and the groundwater abstraction associated with that construction. The tunnel is 16.04km and lies to the east of the M25 and to the west of South Heath in the Chilterns. The tunnel is to be constructed by use of a tunnel boring machine ('TBM'). The consent was granted under Schedule 33 para 52 of the High Speed Rail (London – West Midlands) Act 2017. The tunnel, when constructed, will be known as the Chiltern Tunnel ('the Tunnel').

2. The Claimant is a private company set up by various environmental groups with an interest in protecting the River Misbourne and the local chalk aquifer. The Interested Party, Align JV, is the joint venture company contracted by HS2 to construct this part of the route.

3. Lang J refused permission on all Grounds. The Claimant renews its application on Grounds 2 and 4, and a modified version of Ground 1.

4. I have found it a little difficult to pin down the precise errors of law which are being alleged. However, as I understand it:

    a. Ground 2 alleges that the EA erred in law in its approach to Article 4(1) of the Water Framework Directive ('WFD') because it wrongly directed itself in respect of temporary impacts;

    b. Ground 4 alleges that the EA wrongly failed to require a discharge permit in respect of the grout that was produced by the tunnelling process;

    c. Ground 1 alleges that the EA failed to take into account the cumulative effect of the works.

The Facts

5. The Scheduled works under the 2017 Act include within Work 2/1 the construction of the Tunnel. Schedule 33 para 52(1) of the Act provides for the nominated undertaker, HS2, to submit plans and particulars of the work to the drainage authority, here the EA. The works cannot be constructed without the EA's approval, subject to various provisions about delay.

6. The Act received Royal Assent on 23 February 2017 after an extensive period of Parliamentary scrutiny as a Hybrid Bill. During the Bill process, HS2 published a Water Framework Directive Compliance Assessment Review to assess the Bill's compliance with the WFD.

7. In June 2019 HS2, together with Align JV, issued the Section C1 (the part of the overall scheme including the Tunnel) Updated Water Framework Compliance Assessment. This included consideration of the impacts of construction on the River Misbourne and the groundwater body (i.e. the aquifer). The conclusion of this document was that the works were compliant with Article 4(1) of the WFD.

8. HS2 submitted its application for consent for the Tunnel to the EA on 25 February 2021. The EA granted the consent on 23 April 2021. In practice the EA accepted the analysis and approach undertaken by HS2 in the relevant documentation. Therefore, I refer below to various documents produced by HS2 rather than to any separate assessment by the EA. So long as HS2's approach was not arguably wrong in law, then there are no Grounds to judicially review the EA's decision.

The WFD Compliance Assessment

9. At para 1.3.8 the Compliance Assessment categorises assessed effects into colours. The section in relation to Yellow and Amber are as follows:

> *"Yellow: minor localised and/or temporary effect when balanced against likely embedded mitigation – insufficient to affect an element at a WFD water body scale (certain);*
>
> *Amber: an adverse effect is possible when balanced against likely embedded mitigation – the extent of effect is uncertain, and there remains a potential to affect WFD water body status (uncertain). There are two sub-categories within this group based on the level of uncertainty, with the low risk amber having more certainty regarding the efficacy of mitigation than the high-risk amber group."*

10. The 2019 Compliance Assessment considered the impact on the Mid-Chilterns Chalk Groundwater resource and concluded that the impacts were localised, limited and temporary. The risks were therefore categorised as Yellow with no Amber risks. As such, Article 4(1) was satisfied and there was no need for a derogation under Article 4(7) WFD.

11. The Claimant argues that there are a number of features of the geology and of the proposed construction methodology that mean this categorisation is wrong as a matter of law under the WFD. The factual matters in terms of geology and tunnelling methodology that the Claimant refers to are not in dispute.

12. The aquifer runs through chalk. The river flows predominantly above the aquifer through what is described as "structureless chalk" above the aquifer. The Tunnel will be constructed by two TBMs working at approximately 18m below ground level. The chalk in the area is heavily fissured resulting in high groundwater flows. There is reference in the Assessment to "extremely fast flowrates" in the groundwater, particularly in the river valley.

13. The TBMs progress at the rate of approximately 18m per day. In order to maintain the integrity of the Tunnel as it is constructed, the TBMs spray grout behind them to seal the Tunnel and any fissures.

14. The Claimant's concern is that the TBM will further fracture the chalk creating a risk of direct loss of water from the river and the lowering of the water in the aquifer or its redirection by the Tunnel, and thus a reduction of the flow in the aquifer. The Claimant is also concerned about the risk of potential contamination of the water in the aquifer.

15. Mr Forsdick in oral argument focused on one particular aspect of the work as an example of HS2 not properly assessing the risk. He argued that the nature of the fast flow rates means that grout may not gel quickly (as it would in normal conditions) and as such may be spread through the chalk, and thus pollute the aquifer. The grout contains bentonite, which is itself a substance capable of polluting the groundwater. This risk is exacerbated by the existence of the fissures, and the risk of them being widened by the TBM process, and therefore that the grout will flow into the fissures.

16. Mr Forsdick also relied on various other risks, including the river levels being affected, the evidence as to springs downstream of the Tunnel, and risk from bentonite slurry, which he says HS2 has failed to give the Claimant an adequate answer to. For the reasons I set out below, I do not consider these matters are ones that are appropriate to raise in a judicial review.

17. I should make clear this is not an attempt to set out what is highly technical material, but merely a lay summary for any reader to understand the nature of the risks which the Claimant raises and which it says HS2 has not properly assessed.

The Water Framework Directive

18. Regulation 3(1) of the Water Framework Directive (England and Wales) Regulations 2017 requires the EA to exercise its relevant functions so as to secure compliance with the WFD. This is retained EU law under s.2 of the European Union (Withdrawal) Act 2018. Article 4(1) of the WFD states:

> *"4(1) In making operational the programmes of measures specified in the river basin management plans:*
>
> *(a) for surface waters*
>
> *(i) Member States shall implement the necessary measures to prevent deterioration of the status of all bodies of surface water, subject to the application of paragraphs 6 and 7 and without prejudice to paragraph 8;"*

19. In *Bund Naturshatz v Bundesrepublik Deutschland* C-461/13 at Question 2 [52] the CJEU was considering the meaning of "deterioration of the status" within Article 4(1)(a)(i) of the WFD and the criteria for concluding that there is such a deterioration.

20. The most relevant paragraphs are as follows:

> *"55 The wording of Article 4(1)(a)(i) of Directive 2000/60 supports an interpretation according to which the concept of "deterioration of the status" of a body of surface water also covers deterioration which does not result in classification of that body of water in a lower class. That provision expressly states that deterioration of the status of all bodies of surface water should be prevented. According to the definition in Article 2(17) of the directive, surface water status is the general expression of the status of a body of surface water, deter-mined by the poorer of its ecological status and its chemical status. Thus, Article 4(1)(a)(i) of Directive 2000/60 imposes in a general manner the obligation to prevent*

> *deterioration of the status of bodies of sur-face water and does not mention any change of class; only Article 4(1)(a)(ii) and (iii) of the directive refers to Annex V thereto, in respect of the obligation to enhance the status of bodies of surface water.*
>
> *…*
>
> *67 As regards the criteria for concluding that there is a deterioration of the status of a body of water, it is clear from the scheme of Article 4 of Directive 2000/60, in particular Article 4(6) and (7), that a deterioration of the status of a body of water, even if transitory, is authorised only subject to strict conditions. It follows that the threshold beyond which breach of the obligation to prevent deterioration of the status of a body of water is found must be low.*
>
> *68 Contrary to the submissions of Bundesrepublik Deutschland, an interpretation that only "serious impairment" constitutes a deterioration of the status of a body of water, an interpretation which is founded, in essence, upon the weighing up of, on the one hand, the adverse effects on waters and, on the other, water-related economic interests, cannot be inferred from the wording of Article 4(1)(a)(i) of Directive 2000/60. Furthermore, as the applicant in the main proceedings observes, such an interpretation does not respect the difference established by the directive between the obligation to prevent deterioration of the status of a body of water and the grounds of derogation laid down in Article 4(7) of the directive, since only the latter involve some weighing up of interests.*
>
> *69 That said, the view should be taken, as the Commission has done, that there is "deterioration of the status" of a body of surface water, within the meaning of Article 4(1)(a)(i) of Directive 2000/60, as soon as the status of at least one of the quality elements, within the meaning of Annex V to the directive, falls by one class, even if that fall does not result in a fall in classification of the body of surface water as a whole. How-ever, if the quality element concerned, within the meaning of that annex, is already in the lowest class, any deterioration of that element constitutes a "deterioration of the status" of a body of surface water, within the meaning of Article 4(1)(a)(i).”*

21. The conclusion of the Court therefore was that Article 4(1) applies to any deterioration of the “status” of a body of water. However, it does not follow that any deterioration in the quality of the water body falls within Article 4(1) and therefore requires a derogation within Article 4(7). The focus has to be on what could amount to a deterioration of status.

22. As is clear from ***Bund***, the term “status” is not itself defined. However, some assistance emerges from Article 1 of the WFD which makes frequent reference to various elements of “status”. Annex V sets out the detail of how the status of a relevant element is arrived at. It does appear to follow from these provisions that the “status” of the relevant water element is a matter that is not merely transitory but must have some temporal length.

Ground Two

23. The Claimant's Ground focuses on paragraphs 1.3.10 - 11 of the 2019 Compliance Assessment and the categorisation of effects which were likely to be "temporary", as falling within the Yellow category, and thus not triggering Article 4(1). The Claimant argues that this approach was irreconcilable with the analysis in *Bund*. The Claimant argues that HS2 (and thus the EA) have focused only on permanent effects and have not considered temporary but significant effects.

24. The Claimant points to the factual evidence in the HS2 assessments that show some risk of material impacts on the water quality. The Claimant raises a number of points about the nature of the risk to the water body and how HS2 may have understated those risks. It also refers to the word "certain" in the Yellow category and says that shows HS2 were not applying a precautionary approach in accordance with the well-known case of *Waddenzee (Landelijke Vereniging tot Behoud van de Waddenzee and Nederlandse Vereniging tot Bescherming van Vogels v Staatssecretaris van Landbouw, Natuurbeheer en Visserij* C-127/02).

25. I accept HS2's and the EA's arguments that the Claimant's Ground is not arguable. *Bund* did not find that any deterioration of water quality triggered Article 4(1), there had to be a change in the "status" of the water body. The concept of "status" must involve more than some purely transitory effect, however significant it might be. If there is a significant impact but it has passed within a short period of time, then that would not amount to a change in the status of the water body. It may have other important consequences and may trigger other environmental regulations as a significant event, but that does not mean that it amounts to a risk of change of status. There is therefore a judgement to be made over what period of time the effect must last for it to amount to a risk to the deterioration of the status of the water body.

26. The approach of HS2 in the Compliance Assessment reflects the technical guidance set out in Common Implementation Strategy of the WFD and the Floods Directive (Guidance Document No36: Exemptions to the Environmental Objectives according to Article 4(7)) at section 3.3.1.

27. There is an issue about how "temporary" is to be defined as it is a concept which necessarily varies enormously depending on the context. The approach of HS2 is to define "temporary" as less than 3 years, on the basis that this is half the lifespan of a River Basin Management Plan. This time frame was agreed with the EA and set out in the Environmental Statement which had been laid before Parliament during the Hybrid Bill process, as is explained in the witness statement of Peter Miller, HS2's Environment Director.

28. Firstly, I accept that for a deterioration to amount to a change in "status" it must incorporate some temporal element. Once one gets to this stage, it follows that how "temporary" is defined is a matter of expert judgement. Many qualitative effects on a water body will in some sense be transitory. The natural environment will ultimately dilute the effect (though this would frequently not be the case with a quantitative effect such as a reduction in water flow). A judge in the Administrative Court is not in a good position to decide whether 3 years is the right period or not for an effect to be considered sufficiently transitory as not to change the status. However, the relationship to the timespan of the River Basin Management Plan gives a rational temporal relationship to

the normal review of the river or aquifer's status. Therefore, the judgement that if an effect is assessed as likely to last 3 years it should be considered transitory and not give a risk of deterioration of the status of the water body, is a rational one based on an objectively justifiable matter. In my view therefore, this is a lawful approach.

29. Secondly, the assessment as to the level and extent of the risk is a matter of environmental expertise and judgement which the Court should be very slow to interfere with. The Claimant points to HS2's assessment that the risks in the Yellow category are uncertain, and that HS2 has itself assessed a route, or pathway, of harm to the water bodies. However, HS2 have carried out a detailed assessment and taken into account the relevant pathways. A precautionary approach does not mean that if there is any possible risk then there is a risk to the status sufficient to trigger Article 4(1). HS2 appropriately also took into account the pathways and the various mitigation measures which are in place, most obviously the speed, monitoring and use of the TBM.

30. In my view this Ground strays into a challenge to HS2/the EA's professional judgment as to the extent of the risk, and how long it might last, which are not matters for judicial review.

Ground Four

31. Ground Four essentially relies on the same issues as Ground Two, namely that HS2 has not properly assessed the risks of discharge on the water bodies. The Claimant argues that the EA should have required HS2 to apply for an environmental permit under the Environmental Permitting (England and Wales) Regulations 2016 ('EPR') and without such a permit HS2 is in breach of Regulation 12 and Schedule 22 of the EPR. The basis of this argument is that there is a risk of a discharge of a pollutant into the groundwater by reason of the tunnelling, and in particular the risk of grout not gelling and therefore polluting the water.

32. Regulation 12 prohibits a person from causing or knowingly permitting a groundwater activity except under, and to the extent authorised by, an environmental permit.

33. Pursuant to Regulation 2 of the EPR, groundwater activity has the meaning given in para 3 of Schedule 22. Para 3 of Schedule 22 defines a groundwater activity as meaning any of "(a) the discharge of a pollutant that results in the direct input of that pollutant to groundwater; (b) the discharge of a pollutant in circumstances that might lead to an indirect input of that pollutant to groundwater; (c) any other discharge that might lead to the direct or indirect input of a pollutant to groundwater; (d) an activity in respect of which a notice under para 10 has been served and taken effect; (e) an activity that might lead to a discharge mentioned in (a), (b) or (c), where that activity is carried on as part of the operation of a regulated facility of another class."

34. Pollution in relation to a groundwater activity is defined as meaning "the direct or indirect introduction, as a result of human activity, of substance or heat into the air, water or land which may: (a) be harmful to human health or the quality of aquatic ecosystems or terrestrial ecosystems directly depending on aquatic ecosystems, (b) result in damage to material property, or (c) impair or interfere with amenities or other legitimate uses of the environment."

35. Ms Busch argues that there is no requirement for an environmental permit in this case, given the lack of express saving for such in the HS2 Act in respect of para 52 of Schedule 33 of the Act (that being the relevant provision for the discharge in issue here). This argument raises broader issues which may impact on other cases. Given that I consider the Ground is not arguable in any event, I do not intend to deal with Ms Busch's wider argument.

36. The decision whether a discharge permit is required for the discharge of the grout through the tunnelling process is, par excellence, a technical one for the regulator, here the EA. The documentation, including but not limited to the Compliance Assessments, show that HS2 has fully considered all the relevant matters in reaching its conclusion. It was fully aware of the various factors that the Claimant has pointed to and, having assessed them, concluded that no permit was required.

37. I am satisfied that HS2 and the EA considered the risk of discharge of bentonite and the risk of it getting into the groundwater. They took into account both the nature of the grout and the water environment and concluded that the risk of grout migration (with mitigation) was extremely low. I do not think any arguable point of law arises.

Ground One

38. The Claimant accepts that there is no provision which requires HS2 to submit proposals for the entirety of any work in Schedule 1. However, it argues that the EA failed to properly consider cumulative impacts. In particular, the Claimant argues that the assessment should have been updated to take into account the loss of bentonite slurry in an incident at the new shaft at Chalfont St Peter.

39. Given that there is no legal requirement to carry out an assessment of all the work together, this is again an issue where there is a considerable measure of professional judgement to be exercised. I accept HS2's argument that the shaft event was not legally connected to the decision under challenge. It was thoroughly investigated by experts who reported to HS2 upon it. Most importantly, the works in respect of the shafts are different in nature to those used in tunnelling.

40. HS2 raises an issue of delay on this Ground. However, given that I have found there is no arguable Ground for judicial review, I do not need to consider delay.

41. For all these reasons I refuse permission to bring judicial review proceedings.