May 2020



Air Quality and Dust Monitoring Monthly Report - May 2020

Three Rivers District Council



High Speed Two (HS2) Limited has been tasked by the Department for Transport (DfT) with managing the delivery of a new national high speed rail network. It is a non-departmental public body wholly owned by the DfT.

High Speed Two (HS2) Limited, Two Snowhill Snow Hill Queensway Birmingham B4 6GA

Telephone: 08081 434 434

General email enquiries: HS2enquiries@hs2.org.uk

Website: www.gov.uk/hs2

A report prepared by Align JV on behalf of HS2 Ltd.

High Speed Two (HS2) Limited has actively considered the needs of blind and partially sighted people in accessing this document. The text will be made available in full on the HS2 website. The text may be freely downloaded and translated by individuals or organisations for conversion into other accessible formats. If you have other needs in this regard please contact High Speed Two (HS2) Limited.

© High Speed Two (HS2) Limited, 2020, except where otherwise stated.

Copyright in the typographical arrangement rests with High Speed Two (HS2) Limited.

This information is licensed under the Open Government Licence v2.0. To view this licence, visit www.nationalarchives.gov.uk/doc/open-governmentlicence/version/2 **OGL** or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or e-mail: psi@nationalarchives.gsi.gov.uk. Where we have identified any third-party copyright information you will need to obtain permission from the copyright holders concerned.



Printed in Great Britain on paper containing at least 75% recycled fibre.

Monthly Summary

- 1.1.1 This Summary Report is published in fulfilment of commitments detailed in the High Speed Rail (London-West Midlands) Environmental Minimum Requirements, Annex 1: Code of Construction Practice, for the nominated undertaker to present the results of dust monitoring undertaken in the Three Rivers District Council (TRDC) during May 2020.
- 1.1.2 Figure 1 in Appendix A indicates the current worksite together with the dust monitoring locations for May 2020.
- 1.1.3 This summary should be read in conjunction with the overview monitoring report available from www.gov.uk/government/collections/monitoring-the-environmental-effects-of-hs2, which highlights: the applicable standards and guidance, as well as the air quality and dust monitoring methodologies to be implemented by nominated undertakers throughout construction.
- 1.1.4 The current phase of works commenced within TRDC during July 2017 and is currently ongoing. The current worksite at the Chiltern Tunnel South Portal Compound is presented in Appendix A, Figure 1. Due to COVID-19 the Southern Portal worksite has operated with a reduced workforce during May where the following activities took place:
 - Ongoing works at the South Cutting, which include: soil nailing, drilling and grouting, canopy installation from 12/05 onward, cutting and detailed excavation for the 7th and 8th lifts of soil nails;
 - Ongoing works at the West Hyde Embankment, which include: filling and compaction grouting, drilling and grouting; and
 - Other ongoing works include grout block: drilling and grouting; stripping works at the STP Platform and stockpile areas; cutting at the Tunnel Precast Yard, Bp2-3 Platform, Viaduct Segment Storage Platform, Water Treatment Pond 3 and STP Platform; filling at the Tunnel Precast Yard, Viaduct Storage Yard, Water Treatment Plant Platform and STP Platform; and grass cutting in Tilehouse Lane Field.
- 1.1.5 Two (2) dust monitors are installed around the worksite, where earthworks, construction and trackout activities are underway. These sites returned a medium dust risk rating (for works currently active on site).
- 1.1.6 Dust monitoring locations and results are presented in Appendix B, Table 2, together with a line chart of monthly data from each dust monitor presented in Figures 2 and 3. All continuous dust monitoring is undertaken using indicative monitors. Despite being Environment Agency (MCERTS) certified, indicative monitors carry a higher level of uncertainty than reference monitors, and therefore cannot be strictly compared with Air Quality Standards for human health and the environment. The purpose of the monitoring undertaken is to ensure the effectiveness of the on-site mitigations.

Page 1

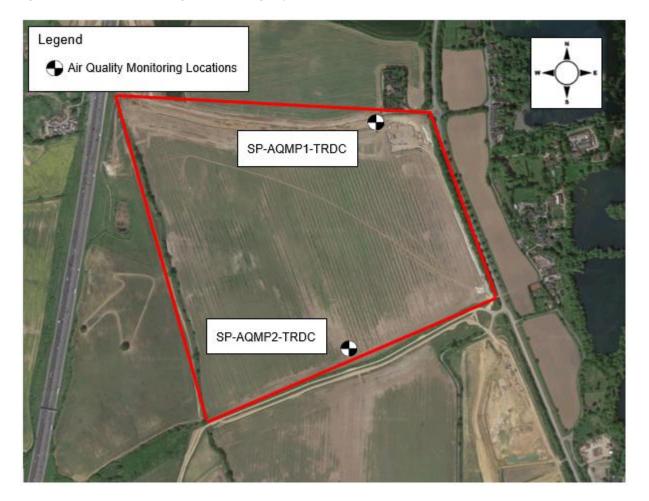
- 1.1.7 The trigger level for PM_{10} concentrations of 190 μ g/m³, over a 1-hour period, in accordance with the updated guidance document 'Guidance on Monitoring in the Vicinity of Demolition and Construction Sites (October 2018)' has been applied.
- 1.1.8 There were no (0) dust trigger alerts recorded during the May 2020 monitoring period.
- 1.1.9 Table 1 provides a summary of the complaint information related to dust or air quality received during the reporting period (June 2020), together with the findings of any related investigations.

Table 1: Summary of complaints received during June 2020 in TRDC

| Complaint Reference No. | Worksite Reference | Description of complaint | Results of investigation | | | |
|-------------------------|-----------------------|--|--|--|--|--|
| Comp1 | - | A complaint around dust from the south portal was received on 28 th May 2020. | A response was provided highlight the mitigation measures applied across HS2 sites to control dust. In particular the south portal site has 4 water bowsers working constantly to suppress dust on haul roads. Furthermore, the Chalfort Lane bund is now constructed and top soiled with seeding set to commence in September. Operatives on site are continually reminded around the importance of effective dust suppression and will continue to remain vigilant during the warmer, drier months ahead. | | | |

Appendix A – Monitoring Locations

Figure 1: Worksites and Monitoring locations during May 2020



Appendix B – Dust Monitoring Results

Table 2: Dust monitoring locations and May 2020 Results

| Monitoring site ID | Coordinates (X,Y) | Location description | Dust risk rating for site | Monitoring site active during period | Change to site since previous period report | Mean 1-hour PM ₁₀ concentration (μg/m³) | Minimum 1- hour PM ₁₀ concentration (μg/m³) | Maximum 1- hour PM ₁₀ concentration (μg/m³) | Number of 1- hour periods exceeding trigger level of 190 µg/m ³ | Data capture (%) |
|--------------------|----------------------|---|------------------------------------|---|---|---|---|---|--|---------------------|
| SP-AQMP1-TRDC | 502885, 191488 | On the northern boundary of the site with Chalfont Lane | М | Yes | Yes | 10.2 | 1.4 | 137.7 | 0 | 100 |
| SP-AQMP2-TRDC | 502872, 190833 | On the southern boundary of the site with Denham Way | М | Yes | Yes | 12.0 | 2.1 | 121.9 | 0 | 100 |

Figure 2: Continuous dust 1-hour mean indicative PM₁₀ concentration for SP-AQMP1-TRDC for May 2020

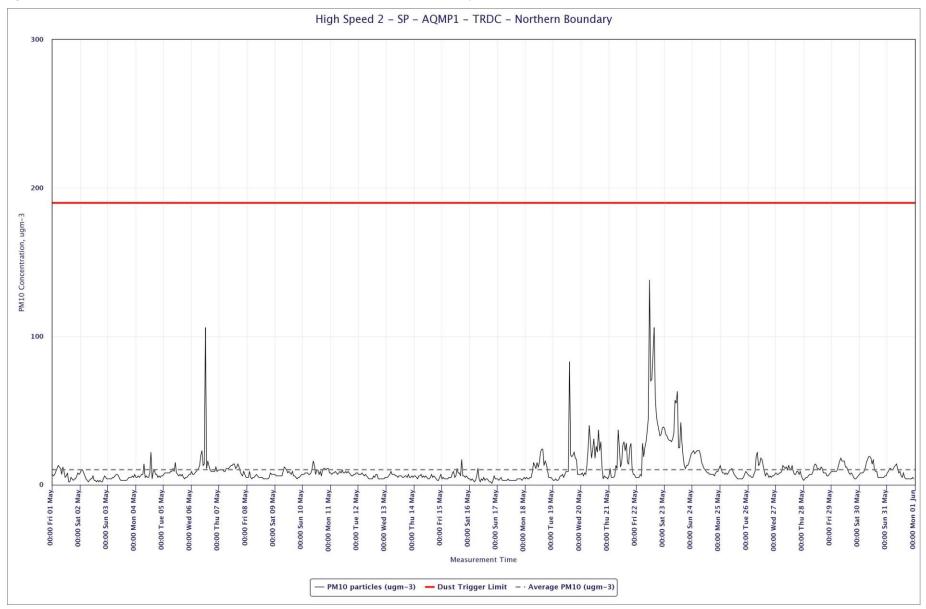


Figure 3: Continuous dust 1-hour mean indicative PM₁₀ concentration for SP-AQMP2-TRDC for May 2020

