April 2019



Air Quality and Dust Monitoring Monthly Report – April 2019

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.

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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 April 2019.
- 1.1.2 Figure 1 and Figure 2 in Appendix A indicate the current worksites together with dust monitoring locations for April 2019.
- 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 expected to be completed in May 2019. The current worksites, as presented in Appendix A, Figure 1, include:
 - Construction of a new entry slip onto the clockwise M25, from Shire Lane to include: associated drainage, utilities, lighting, signage and road markings to full motorway standards.
 - Construction of a new exit slip from the anti-clockwise M25, connecting to Chalfont Lane to include: associated drainage, utilities, lighting, signage and road markings to full motorway standards.
 - Construction of a Chalfont Lane diversion road between Shire Lane and Hornhill Road to include a temporary road to Local Authority Highway standards, a junction with Shire Lane and Hornhill Lane and associated signage on local roads.
 - Construction of a new junction for access to Orchards caravan park and footpath CSP/16/1.
 - Widening of Chalfont Lane between the M25 exit slip and Denham Way to include: a
 bell mouth access to a future Scottish and Southern Energy (SSE) sub-station, accesses
 to the future High Speed 2 (HS2) construction compound south of Chalfont Lane and
 construction of BT and City Fibre ducts and chamber diversions along Chalfont Lane.
 - Civil works undertaken for the grid substation have included excavation and earthworks
 as part of the construction of the power transformer structures, inclusive of the ongoing
 construction of the bases for the transformer structures. Base 1 and base 2 reinforced
 concrete construction works were completed.
- 1.1.5 One (1) dust monitor is installed around the worksite, where construction works are underway. This site was classified with a medium dust risk rating.
- 1.1.6 The dust monitoring location, line graph and results are presented in Appendix B, Table 1 and Figure 3.

- 1.1.7 Osborne's construction works remained focussed along Chalfont Lane in April, in the vicinity of the main receptors and the monitor location (near Sunnyhill Road). Due to the continued technical fault of the monitor alert feature, exceedances were not captured. As a lesson learned, HS2 contractors will be implementing more frequent equipment inspection checks to ensure the monitor is operating as intended.
- 1.1.8 There were no complaints received, relating to air quality and dust, during this monitoring period.

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Appendix A – Worksites and Monitoring Locations

Figure 1: Worksite locations during April 2019 in TRDC

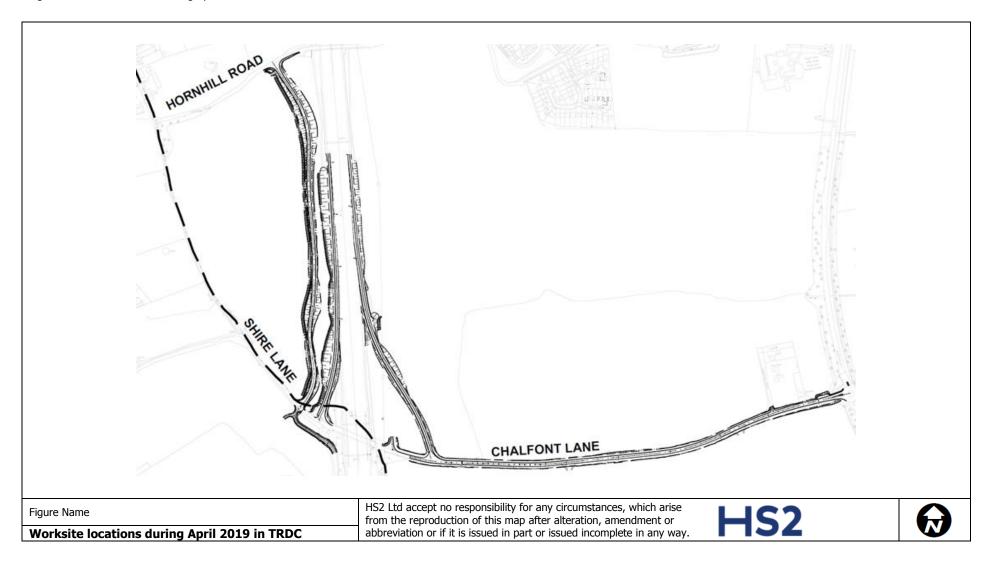
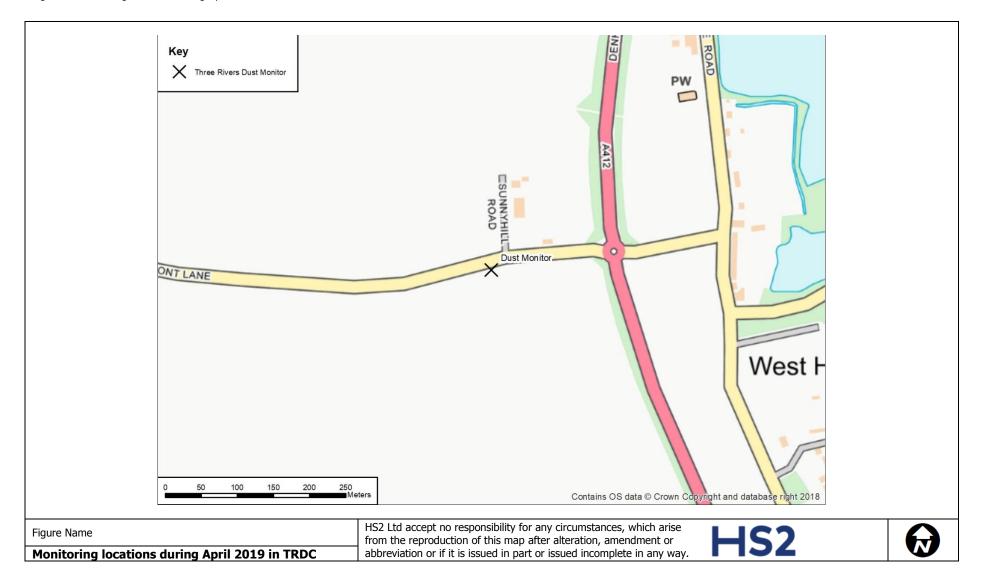


Figure 2: Monitoring locations during April 2019 in TRDC

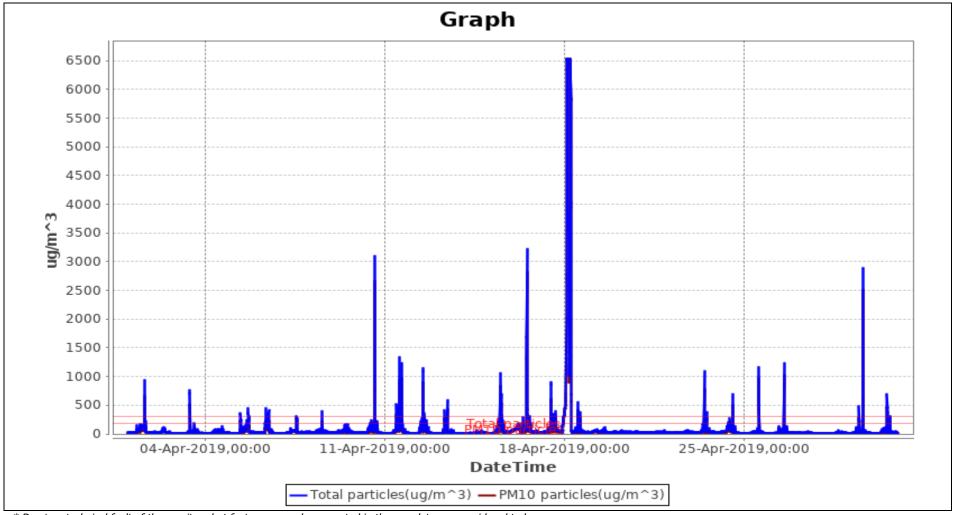


Appendix B – Dust Monitoring Results

Table 1: Dust monitoring locations and April 2019 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 $(\mu g/m^3)$	Maximum 1 Hour PM ₁₀ concentration (μg/m³)	Number of 1 Hour periods exceeding trigger level of 190 µg/m³	1 Hour data capture (%)
M25 Slip Roads	502882.700, 191476.600	Chalfont Lane	М	Yes	No	Monitor Fault				

Figure 3: Construction dust 1-hour mean indicative PM₁₀ concentration for dust monitors*



^{*} Due to a technical fault of the monitor alert feature, exceedances noted in the raw data are considered to be erroneous.