

Air Quality and Dust Monitoring Monthly Report – April 2020

Three Rivers District Council



Department for Transport

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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 2020.
- 1.1.2 Figure 1 in Appendix A indicates the current worksite together with the dust monitoring locations for April 2020.
- 1.1.3 This summary should be read in conjunction with the overview monitoring report monthly 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 by May 2020. 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 was closed between 1st- 2nd April. The site partially opened from the 3rd of April with a reduced workforce where the following activities took place:
- Soil nailing and associated support activities;
 - Earthworks and drainage; and
 - Filling and compaction grouting activities at the West Hyde Embankment.
- 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.
- 1.1.7 The trigger level for PM₁₀ concentrations of 190 µg/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 was one (1) dust trigger alert recorded at SP-AQMP2_TRDC during the April 2020 monitoring period. The exceedance, presented in Appendix B, Table 3, occurred outside of

working hours, therefore no works were being undertaken in the vicinity of the monitor. Good housekeeping measures to be continued on site, in line with the Code of Construction Practice. All other results were in line with expected ranges.

1.1.9 Data capture for SP-AQMP1_TRDC was below 90% for the month of April 2020. This was due to a failure of the monitor, which could not be repaired due to COVID-19 access restrictions. As a result, the monitor was offline and no data was captured between Thursday 16th and Wednesday 29th of April. The dust monitor was replaced at position SP-AQMP1_TRDC on Wednesday 29th April and monitoring resumed.

1.1.10 Table 1 provides a summary of the complaint information related to dust or air quality received during the reporting period, together with the findings of any related investigations.

Table 1: Summary of complaints received during April 2020 in LBE

Complaint Reference No.	Worksite Reference	Description of complaint	Results of investigation
HS2-20-20108-	-	On 15/04/20 dust was reported to be carried in the air, having a marked effect on breathing.	The concerns were raised with the site team and a response was provided highlighting out the mitigation measures HS2 has committed to across sites.

Appendix A –Monitoring Locations

Figure 1: Worksites and Monitoring locations during April 2020



Appendix B – Dust Monitoring Results

Table 2: Dust monitoring locations and April 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/m ³)	Minimum 1-hour PM ₁₀ concentration (µg/m ³)	Maximum 1-hour PM ₁₀ concentration (µg/m ³)	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	M	Yes	Yes	18.6	2.9	63.0	0	55
SP-AQMP2_TRDC	502872, 190833	On the southern boundary of the site with Denham Way	M	Yes	Yes	14.2	1.6	220.5	1	100

Table 3: Summary of exceedances during period (April 2020)

Monitoring Site ID	Period of trigger alert & Concentration recorded	Investigation	Outcomes / Resolution / Remedial measures implemented
SP-AQMP2_TRDC	26/04/2020: 06:00 - 07:00: 220.5 µg/m ³	The trigger alert occurred outside of working hours. No works were being undertaken during this period. At the start of shift an investigation was undertaken, it is unclear what may have resulted in the trigger alert. The alert is not believed to be attributed to the site activities.	Good housekeeping measures to be continued on site, in line with the Code of Construction Practice.

Figure 2: Continuous dust 1-hour mean indicative PM₁₀ concentration for SP-AQMP1_TRDC for April 2020

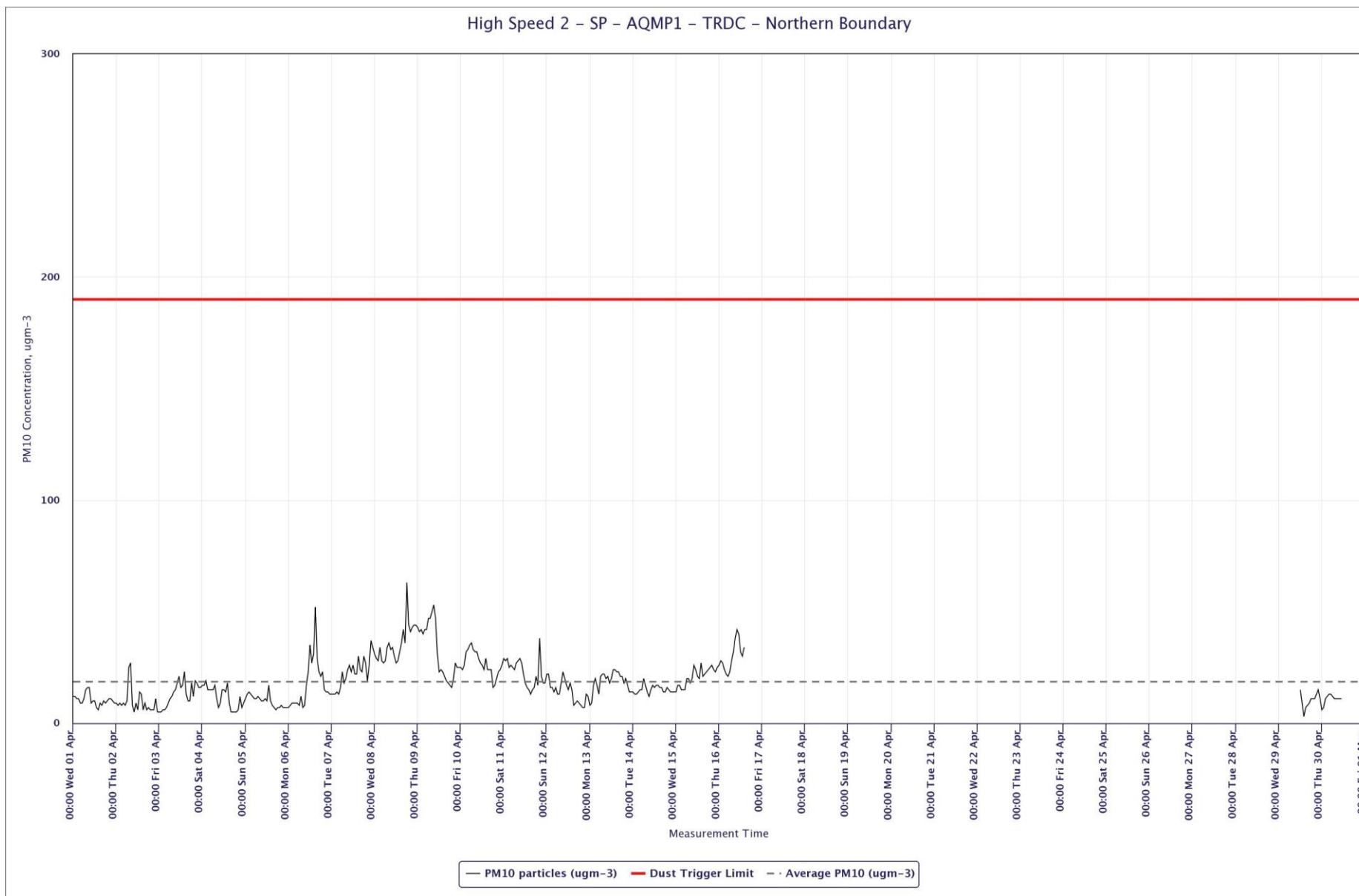


Figure 3: Continuous dust 1-hour mean indicative PM₁₀ concentration for SP-AQMP2_TRDC for April 2020

