

Contractor



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Project

FORTH REPLACEMENT CROSSING

Document title

AIR QUALITY MONITORING REPORT SEPTEMBER 2018

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1. INTRODUCTION

- 1.1. Air quality monitoring is being undertaken by FCBC during the construction of the Forth Replacement Crossing and the associated road network. This report details the air quality monitoring that is currently being undertaken across the site and presents the monitoring results for September 2018.
- 1.2. Air quality monitoring during this period has been undertaken in accordance with the Code of Construction Practice (CoCP) and the Dust and Air Quality Management Plan (DAQMP) contained within the Environmental Management Plan (EMP).
- 1.3. The Queensferry Crossing opened to traffic at the end of August 2017. Therefore, the monitoring regime was reduced and a number of monitors removed.



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2. MONITORING EQUIPMENT AND LOCATIONS

- 2.1. Air quality is being monitored on site using Frisbee gauge dust deposition monitoring. Four Frisbee gauges are currently set up at sensitive locations across the site to measure dust deposition rates (Figure 1). Table 1 lists the air quality monitoring equipment present at each monitoring location, including the date it was installed.
- **2.2.** Frequent environmental site inspections are also undertaken by members of the FCBC Environmental Department. These inspections include a dust check to assess the following:
 - dust levels on site;
 - suppression/dampening down; and
 - transportation of materials.



Figure 1: Example of an Installed Frisbee Gauge Meter



Table 1: Air Quality Monitoring Locations

Ref:	Monitoring Location	Monitoring Equipment	Installation Date	Activities in September 2018	
M10	Inchgarvie Lodge	Frisbee	22/08/11	South abutment worksInternal Bridge finishing Works	
M11	Linn Mill	Frisbee	22/08/11	South abutment worksInternal Bridge finishing Works	
M12	Clufflat Frisbee		29/08/11	South abutment works	
M13	Clufflat Brae	Frisbee	21/09/11	Internal Bridge finishing Works	

3. AIR QUALITY MONITORING RESULTS

3.1. Frisbee Dust Deposition Results

- 3.1.1. The Frisbee dust deposition results for September 2018 have been presented in a chart and can be found in Appendix A. Two collections were made in September; these occurred on the 5th and 21st September.
- **3.1.2.** The site action level for the dust deposition rate has been set at 250 mg/m²/day. Exceedances of this level are treated as a potential incident and a review of the works in the vicinity of the site is instigated. A lower site review level has been set at 140 mg/m²/day. Where concentrations exceed the lower review threshold the site works are reviewed to ensure good practice is implemented; it is essentially a warning that additional controls may be required.



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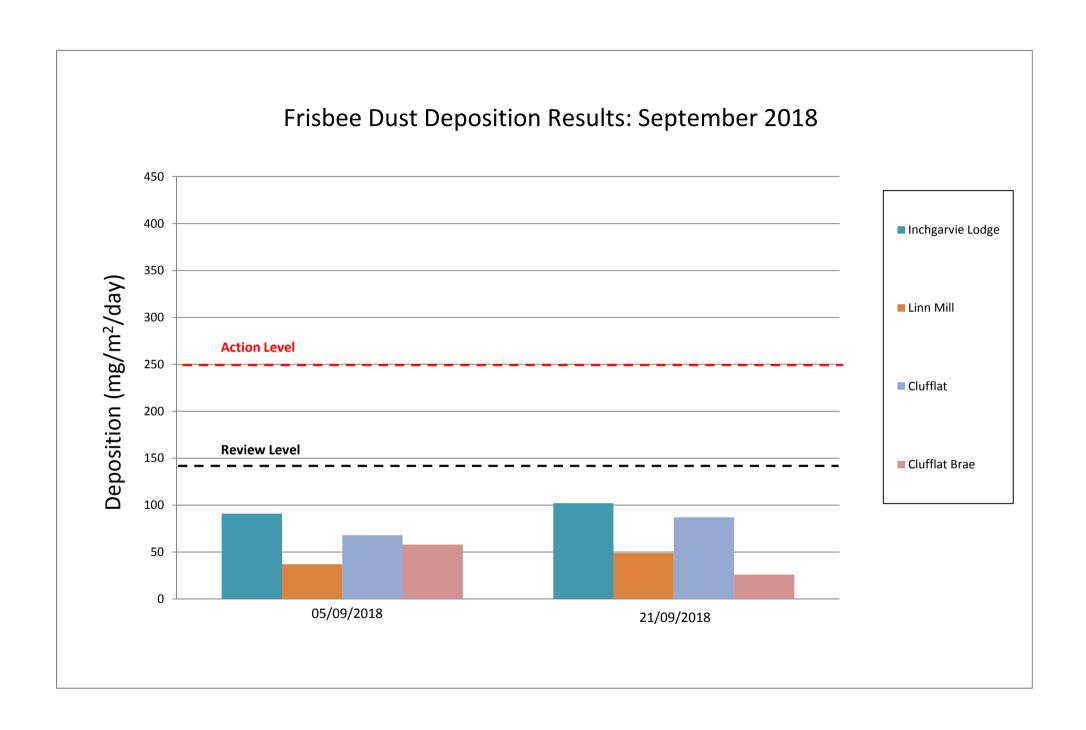
3.1.3. During September there were no exceedances of either the site review or action levels.

3.2. Daily Dust Log and Environmental Inspections

- **3.2.1.** A summary of the daily dust log for September can be found in Appendix B.
- **3.2.2.** During this period, full environmental inspections were also undertaken across the site and covered areas where works were being carried out.



APPENDIX A: FRISBEE GAUGE RESULTS





APPENDIX B: DAILY DUST LOG

Daily Dust Log - North - September 2018

DATE	LOCATION	WIND	WIND DIRECTION	GROUND SURFACE	VISIBLE DUST	DUST DUE TO WORKS (if applicable)	CAUSES OF DUST (if applicable)	COMMENTS AND ACTIONS
01/09/2018								
02/09/2018								
03/09/2018	N	LIGHT	S	WET	N			
04/09/2018	N	LIGHT	S	DRY	N			
05/09/2018	N	LIGHT	S	DRY	N			
06/09/2018	N	LIGHT	SW	DAMP	N			
07/09/2018	N	LIGHT	SW	DRY	N			
08/09/2018								
09/09/2018								
10/09/2018	N	LIGHT	SW	WET	N			
11/09/2018	N	LIGHT	W	WET	N			
12/09/2018	N	LIGHT	SW	WET	N			
13/09/2018	N	LIGHT	S	WET	N			
14/09/2018	N	LIGHT	S	DRY	N			
15/09/2018								
16/09/2018								
17/09/2018	N	LIGHT	SW	DRY	N			
18/09/2018	N	LIGHT	W	WET	N			
19/09/2018	N	MEDIUM	S	WET	N			
20/09/2018	N	LIGHT	SW	DAMP	N			
21/09/2018	N	LIGHT	SW	DRY	N			
22/09/2018								
23/09/2018								
24/09/2018	N	LIGHT	W	DRY	N			
25/09/2018	N	LIGHT	W	DAMP	N			
26/09/2018	N	LIGHT	SW	DAMP	N			
27/09/2018	N	LIGHT	SW	DRY	N			
28/09/2018	N	LIGHT	SW	DRY	N			
29/09/2018								
30/09/2018								

Daily Dust Log - South - September 2018

DATE LOCATION WIND DIRECTION SURFACE DUST WORKS (if applicable)							DUST DUE TO		
Direction Surface Dist applicable (if applicable) (if ap	DATE	LOCATION	WIND	WIND					COMMENTS AND ACTIONS
02/09/2018	DATE	LOCATION	VVIIVD	DIRECTION	SURFACE	DUST		(if applicable)	COMMENTS AND ACTIONS
03/09/2018	01/09/2018						аррпсавіс)		
03/09/2018 S LIGHT S WET N S 03/09/2018 S LIGHT S DRY N S 05/09/2018 S LIGHT S DRY N S 06/09/2018 S LIGHT SW DAMP N S 08/09/2018 S LIGHT SW DRY N S 08/09/2018 S LIGHT SW DRY N S 08/09/2018 S LIGHT SW WET N S 09/09/2018 S LIGHT SW WET N S 09/09/2018 S LIGHT W WET N S 09/09/2018 S LIGHT W WET N S 09/09/2018 S LIGHT SW WET N S 09/09/2018 S LIGHT S WET N S 09/09/2018 S LIGHT S WET N S 09/09/2018 S LIGHT S WET N S 09/09/2018 S LIGHT SW DRY N S 09/09/2018 S LIGHT SW DAMP N S 09/09/2018 S LIGHT W DAMP N DAMP N S 09/09/2018 S LIGHT W DAMP N DAMP N S 09/09/2018 S LIGHT W DAMP N DAMP N S 09/09/2018 S LIGHT S 09/09/2018									
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05/09/2018 S									
07/09/2018 S LIGHT SW DRY N 08/09/2018 09/09/2018 S LIGHT SW WET N 11/09/2018 S LIGHT SW WET N 12/09/2018 S LIGHT SW WET N 13/09/2018 S LIGHT SW WET N 13/09/2018 S LIGHT S WET N 14/09/2018 S LIGHT S WET N 14/09/2018 S LIGHT S DRY N 15/09/2018 S LIGHT S DRY N 15/09/2018 S LIGHT S DRY N 15/09/2018 S LIGHT SW DRY N 18/09/2018 S LIGHT SW DRY N 18/09/2018 S LIGHT SW DRY N 19/09/2018 S LIGHT W WET N 19/09/2018 S LIGHT SW DAMP N 20/09/2018 S LIGHT SW DAMP N 21/09/2018 S LIGHT SW DAMP N 22/09/2018 S LIGHT SW DAMP N 22/09/2018 S LIGHT W DRY N 22/09/2018 S LIGHT SW DAMP N 22/09/2018 S LIGHT W DRY N 22/09/2018 S LIGHT W DRY N 25/09/2018 S LIGHT W DRY N			LIGHT	SW	DAMP	N			
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15/09/2018 Internal control of the	13/09/2018	S	LIGHT	S	WET	N			
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21/09/2018 S LIGHT SW DRY N 22/09/2018 S LIGHT W DRY N 24/09/2018 S LIGHT W DRY N 25/09/2018 S LIGHT W DAMP N	19/09/2018	S	MEDIUM	S	WET	N			
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23/09/2018 S LIGHT W DRY N 25/09/2018 S LIGHT W DAMP N	21/09/2018	S	LIGHT	SW	DRY	N			
24/09/2018 S LIGHT W DRY N 25/09/2018 S LIGHT W DAMP N	22/09/2018								
25/09/2018 S LIGHT W DAMP N	23/09/2018								
	24/09/2018	S	LIGHT	W	DRY	N			
26/09/2018 S LIGHT SW DAMP N	25/09/2018	S	LIGHT	W	DAMP	N			
	26/09/2018	S	LIGHT	SW	DAMP	N			
27/09/2018 S LIGHT SW DRY N	27/09/2018	S	LIGHT	SW	DRY	N			
28/09/2018 S LIGHT SW DRY N	28/09/2018	S	LIGHT	SW	DRY	N			
29/09/2018	29/09/2018								
30/09/2018	30/09/2018								