

# 1-hour TSP Monitoring Result for Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities – Phase 2 and Other Works

## AMS2 - Tung Chung Development Pier

Date	Weather Condition	Start Time	1-hour TSP ( $\mu\text{g}/\text{m}^3$ )			Action Level ( $\mu\text{g}/\text{m}^3$ )	Limit Level ( $\mu\text{g}/\text{m}^3$ )
			1st Measurement	2nd Measurement	3rd Measurement		
5-Jan-22	Fine	13:23	51	54	47	374	500
11-Jan-22	Fine	10:40	39	42	42		
17-Jan-22	Fine	13:09	57	62	62		
22-Jan-22	Fine	09:25	53	57	50		
28-Jan-22	Fine	13:12	48	56	62		
31-Jan-22	Fine	12:50	44	50	41		
		Min	39				
		Max	62				
		Average	51				

## AMS3C - Ying Tung Estate Market Rooftop

Date	Weather Condition	Start Time	1-hour TSP ( $\mu\text{g}/\text{m}^3$ )			Action Level ( $\mu\text{g}/\text{m}^3$ )	Limit Level ( $\mu\text{g}/\text{m}^3$ )
			1st Measurement	2nd Measurement	3rd Measurement		
5-Jan-22	Fine	13:30	67	70	79	368	500
11-Jan-22	Fine	11:00	77	67	70		
17-Jan-22	Fine	13:18	84	86	94		
22-Jan-22	Fine	09:15	70	77	72		
28-Jan-22	Fine	13:20	62	67	65		
31-Jan-22	Fine	13:04	67	79	82		
		Min	62				
		Max	94				
		Average	74				

## AMS7C - East Sea Rescue Berth – Airport Fire Contingent Third Runway Site Office

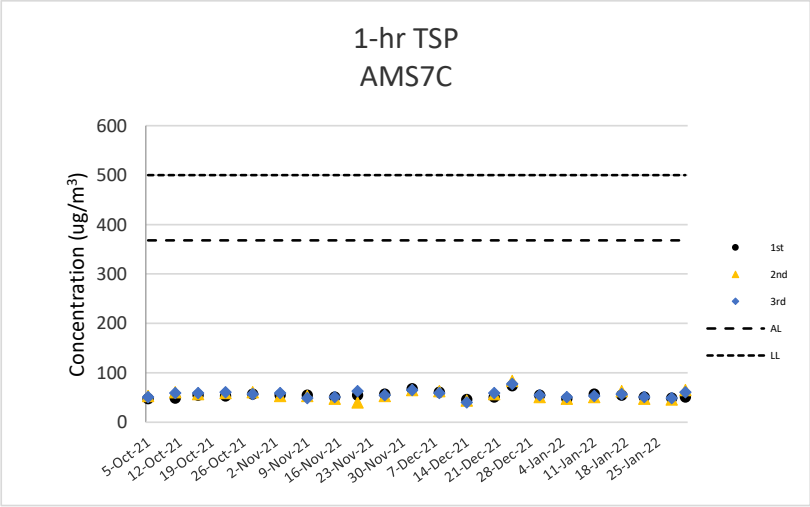
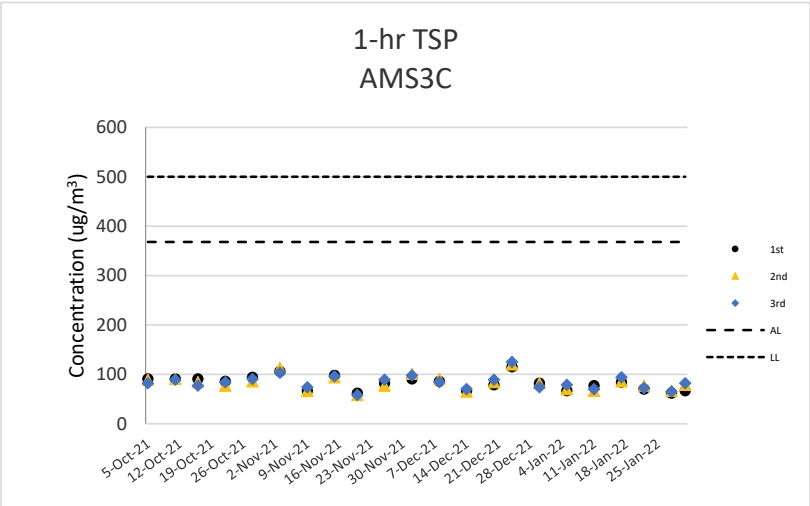
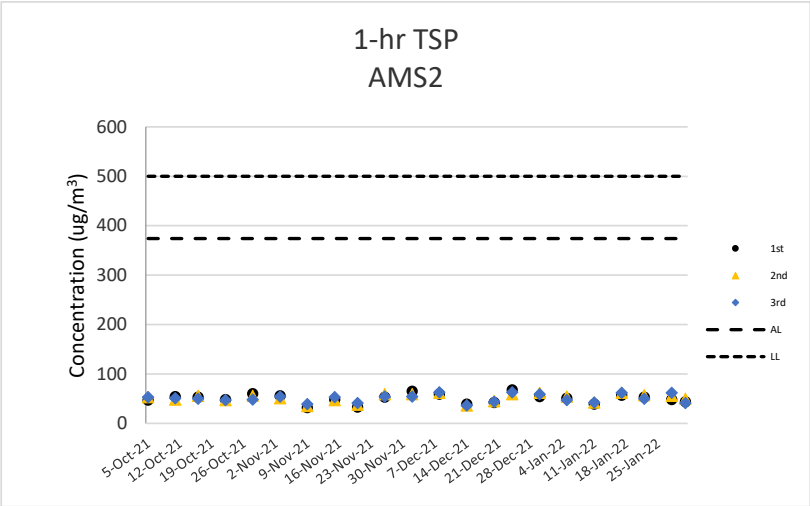
Date	Weather Condition	Start Time	1-hour TSP ( $\mu\text{g}/\text{m}^3$ )			Action Level ( $\mu\text{g}/\text{m}^3$ )	Limit Level ( $\mu\text{g}/\text{m}^3$ )
			1st Measurement	2nd Measurement	3rd Measurement		
5-Jan-22	Fine	13:12	48	48	51	370	500
11-Jan-22	Fine	11:20	57	51	53		
17-Jan-22	Fine	13:01	55	63	57		
22-Jan-22	Fine	09:34	51	48	51		
28-Jan-22	Fine	13:37	49	46	49		
31-Jan-22	Fine	13:21	51	65	61		
		Min	46				
		Max	65				
		Average	53				

Note:

Underline: Exceedance of Action Level

**Underline and Bold**: Exceedance of Limit Level

1. Air quality monitoring location AMS7B was temporary suspended, effective from 10 December 2020.
2. According to the email date 11 August 2021, EPD have no comment on the Proposal for Relocation of Monitoring Location AMS 7B, the monitoring location AMS 7B are proposed to be relocated by alternative monitoring location AMS 7C for air quality monitoring.



## 24-hour TSP Monitoring Result for Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities – Phase 2 and Other Works

### AMS2 - Tung Chung Development Pier

Start Date	Weather Condition	Air Temperature (K)	Atmospheric Pressure, Pa (mmHg)	Filter Weight (g)		Particulate weight (g)	Sampling Time(hrs)	Flow Rate (m <sup>3</sup> /min.)		Average flow (m <sup>3</sup> /min.)	Total volume (m <sup>3</sup> )	Conc. (ug/m <sup>3</sup> )	Action Level (ug/m <sup>3</sup> )	Limit Level (ug/m <sup>3</sup> )
				Initial	Final			Initial	Final					
5-Jan-22	Fine	287.8	766.4	2.7854	2.9719	0.1865	24	1.61	1.58	1.59	2296.2	81	176	260
11-Jan-22	Fine	293.3	766.8	2.7756	2.8364	0.0608	24	1.60	1.58	1.59	2287.1	27		
17-Jan-22	Fine	293.7	764.0	2.8074	2.9998	0.1924	24	1.59	1.58	1.59	2284.7	84		
22-Jan-22	Fine	290.4	763.3	2.7161	2.7870	0.0709	24	1.60	1.58	1.59	2289.7	31		
28-Jan-22	Fine	293.1	763.0	2.7820	2.8804	0.0984	24	1.59	1.58	1.59	2285.0	43		
31-Jan-22	Fine	291.3	768.5	2.7167	2.8059	0.0892	24	1.60	1.58	1.59	2291.6	39		
												Min	27	
												Max	84	
												Average	51	

### AMS3C - Ying Tung Estate Market Rooftop

Start Date	Weather Condition	Air Temperature (K)	Atmospheric Pressure, Pa (mmHg)	Filter Weight (g)		Particulate weight (g)	Sampling Time(hrs)	Flow Rate (m <sup>3</sup> /min.)		Average flow (m <sup>3</sup> /min.)	Total volume (m <sup>3</sup> )	Conc. (ug/m <sup>3</sup> )	Action Level (ug/m <sup>3</sup> )	Limit Level (ug/m <sup>3</sup> )
				Initial	Final			Initial	Final					
5-Jan-22	Fine	287.8	766.4	2.7844	2.9193	0.1349	24	1.58	1.55	1.56	2252.8	60	167	260
11-Jan-22	Fine	293.3	766.8	2.7674	2.8752	0.1078	24	1.57	1.55	1.56	2245.6	48		
17-Jan-22	Fine	293.7	764.0	2.7996	3.0347	0.2351	24	1.56	1.55	1.56	2243.6	105		
22-Jan-22	Fine	290.4	763.3	2.7169	2.7757	0.0588	24	1.57	1.55	1.56	2247.6	26		
28-Jan-22	Fine	293.1	763.0	2.7729	2.8417	0.0688	24	1.56	1.55	1.56	2243.9	31		
31-Jan-22	Fine	291.3	768.5	2.7703	2.8248	0.0545	24	1.57	1.55	1.56	2249.1	24		
												Min	24	
												Max	105	
												Average	49	

### AMS7C - East Sea Rescue Berth – Airport Fire Contingent Third Runway Site Office

Start Date	Weather Condition	Air Temperature (K)	Atmospheric Pressure, Pa (mmHg)	Filter Weight (g)		Particulate weight (g)	Sampling Time(hrs)	Flow Rate (m <sup>3</sup> /min.)		Average flow (m <sup>3</sup> /min.)	Total volume (m <sup>3</sup> )	Conc. (ug/m <sup>3</sup> )	Action Level (ug/m <sup>3</sup> )	Limit Level (ug/m <sup>3</sup> )
				Initial	Final			Initial	Final					
5-Jan-22	Fine	287.8	766.4	2.7834	2.9443	0.1609	24	1.54	1.51	1.52	2191.3	73	183	260
11-Jan-22	Fine	293.3	766.8	2.7683	2.8750	0.1067	24	1.52	1.51	1.52	2182.3	49		
17-Jan-22	Fine	293.7	764.0	2.8004	2.9090	0.1086	24	1.52	1.51	1.51	2179.9	50		
22-Jan-22	Fine	290.4	763.3	2.7058	2.7868	0.0810	24	1.53	1.51	1.52	2184.9	37		
28-Jan-22	Fine	293.1	763.0	2.7598	2.8298	0.0700	24	1.52	1.51	1.51	2180.2	32		
31-Jan-22	Fine	291.3	768.5	2.7625	2.8531	0.0906	24	1.53	1.51	1.52	2186.8	41		
												Min	32	
												Max	73	
												Average	47	

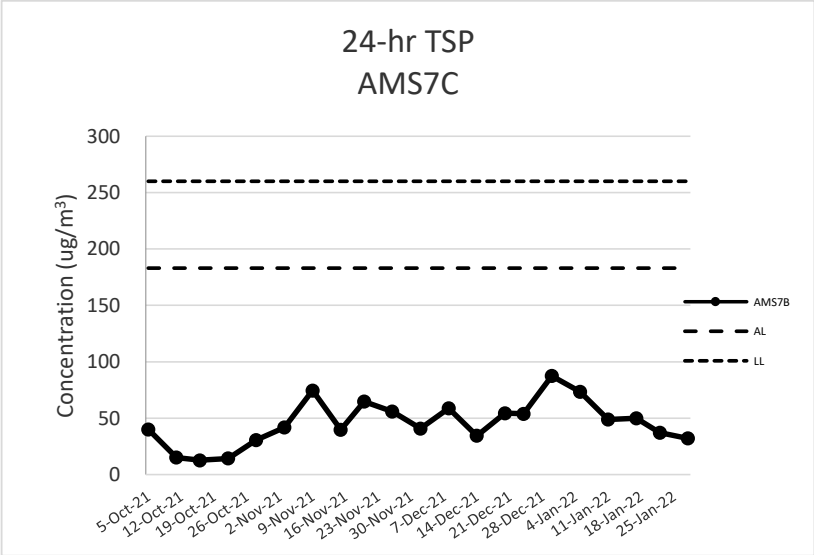
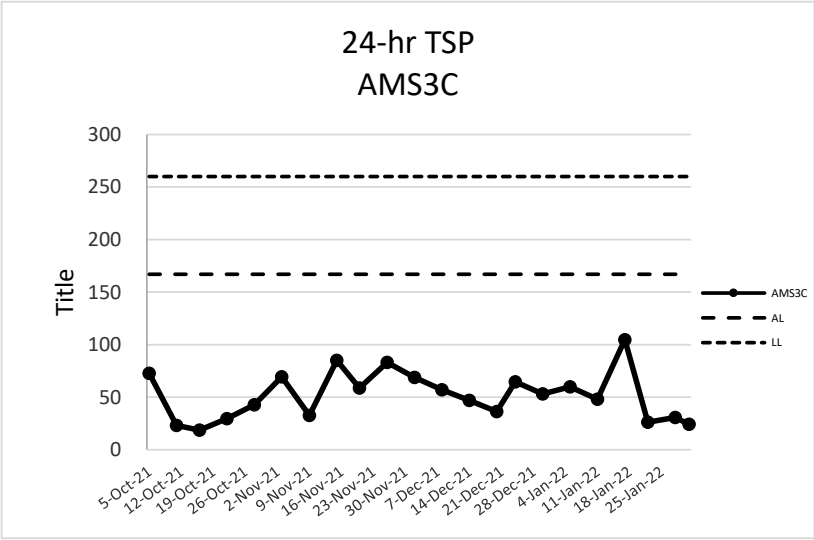
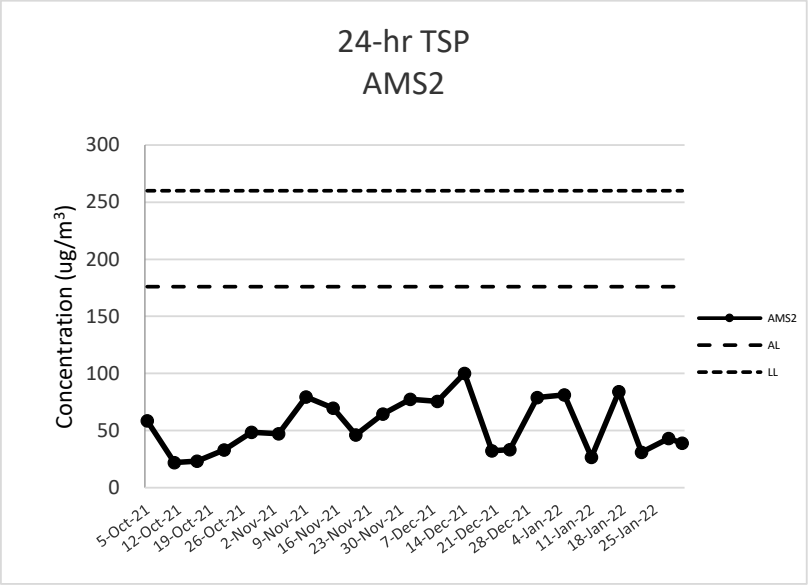
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**Noise Impact Monitoring Result for  
Hong Kong-Zhuhai-Macao Bridge  
Hong Kong Boundary Crossing Facilities – Phase 2 and Other Works**

**NMS2 - Seaview Crescent**

Date	Start Time	L <sub>eq</sub> 30min dB(A)	L <sub>10</sub> dB(A)	L <sub>90</sub> dB(A)	Wind Speed (m/s)	Weather	Limit Level dB(A)
5-Jan-22	14:15	62	65	59	0.6	Fine	75
11-Jan-22	11:15	64	69	61	1.2	Fine	75
17-Jan-22	14:05	64	67	62	0.7	Fine	75
28-Jan-22	13:59	57	61	55	0.4	Fine	75
31-Jan-22	13:36	58	61	56	1.0	Fine	75
	<b>Max</b>	64					
	<b>Min</b>	57					

**NMS3C - Ying Tung Estate Refuse Collection Point**

Date	Start Time	L <sub>eq</sub> 30min dB(A)	L <sub>10</sub> dB(A)	L <sub>90</sub> dB(A)	Wind Speed (m/s)	Weather	Limit Level dB(A)	Corrected Noise Level*
5-Jan-22	13:34	65	68	64	0.9	Fine	65	
11-Jan-22	12:22	65	68	63	0.8	Fine	65	
17-Jan-22	13:23	68	71	66	0.8	Fine	65	62.5
28-Jan-22	13:20	63	67	62	0.3	Fine	70	
31-Jan-22	13:04	64	67	61	1.0	Fine	70	
	<b>Max</b>	68						
	<b>Min</b>	63						

Note:

NMS2: Façade Measurement

NMS3C: Free-field measurement (+3dB(A) correction has been applied), reduction to 65dB(A) during school examination periods will be applied.

No raining or wind with speed over 5 m/s was observed during noise monitoring according to the onsite observation.

\*Corrected Noise Level =  $\text{LOG}(10^{(\text{Impact Noise Level}/10)} - 10^{(\text{Baseline Noise Level}/10)}) \times 10$

Baseline Noise Level = 66.3 dB(A)

