

# Appendix M

## Investigation Report for Exceedances

Entrusted Portion of Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling Stage 2

**Investigation Report of Environmental Quality Exceedance(s)**

Ref. No.: A140902\_24TSP

<b>Date</b>	2 September 2014
<b>Time</b>	--
<b>Monitoring Location</b>	SR77
<b>Parameter</b>	24-Hr Total Suspended Particulate
<b>Action / Limit Levels</b>	Action Level: 170.3µg/m <sup>3</sup> Limit Level: 260µg/m <sup>3</sup>
<b>Measured Level</b>	237.9µg/m <sup>3</sup> (Action level being exceeded)
<b>Possible reason for the exceedance</b>	<p><u>Construction Works of Contract No. DC/2010/10</u></p> <p>The construction works being undertaken by another Contractor (under Contract No. DC/2010/10) have been observed within close proximity of the High Volume Sampler (HVS) of the air quality monitoring station at SR77 (refer to the attached photos).</p> <p>The observed construction works including handling of spoils (refer to the attached Photo 1) and some works conducted at the road opposite to the HVS (refer to the attached Photo 2).</p> <p>Also, dusty materials has been observed near the road (refer to the attached Photo 3) which may be disturbed by traffics (refer to the attached Photo 4) and release fugitive dust during the sunny weather and such emission would contribute to a higher TSP Level.</p> <p>Therefore, these construction works are anticipated to cause the elevated TSP levels as have been measured by our HVS.</p> <p><u>Construction Works of Entrusted Portion</u></p> <p>On the other hand, the construction works carried out for the Entrusted Portion during the monitoring period included backfilling works being carried out at northern side of the site and erection of noise barrier NB71, which were at a much farther distance from the air quality monitoring station at SR77 (refer to the attached location plan showing the works activities of the entrusted portion).</p> <p>In addition, proper mitigation measures for these construction works, including the use of water spraying and covering of exposed slopes where applicable, have been implemented and being monitored by an EM&amp;A programme. No significant dust emission has been observed.</p>

	<p><u>Conclusion</u></p> <p>As such, the exceedance was unlikely due to the construction works of the project.</p>
<p><b>Action taken / to be taken</b></p>	<p>As the exceedance was non-project related, no further investigation and specific remedial measure(s) would be recommended for the Entrusted Works. Nevertheless, the following mitigation measures had been implemented on-site for dust suppression:</p> <ol style="list-style-type: none"> <li>1. Exposed slopes near the river were covered with impervious sheets;</li> <li>2. Any open stockpile of construction materials were covered with impervious sheet; and</li> <li>3. Sufficient watering was applied along the haul road.</li> </ol>
<p><b>Remarks</b></p>	<p>-</p>

Photo 1: Handling of spoils observed within close proximity of SR77 (Date: 2 September 2014)



Photo 2: Construction works observed within close proximity of SR77 (Date: 2 September 2014)



Photo 3: Dusty materials observed unattended within close proximity of SR77 (Date: 2 September 2014)



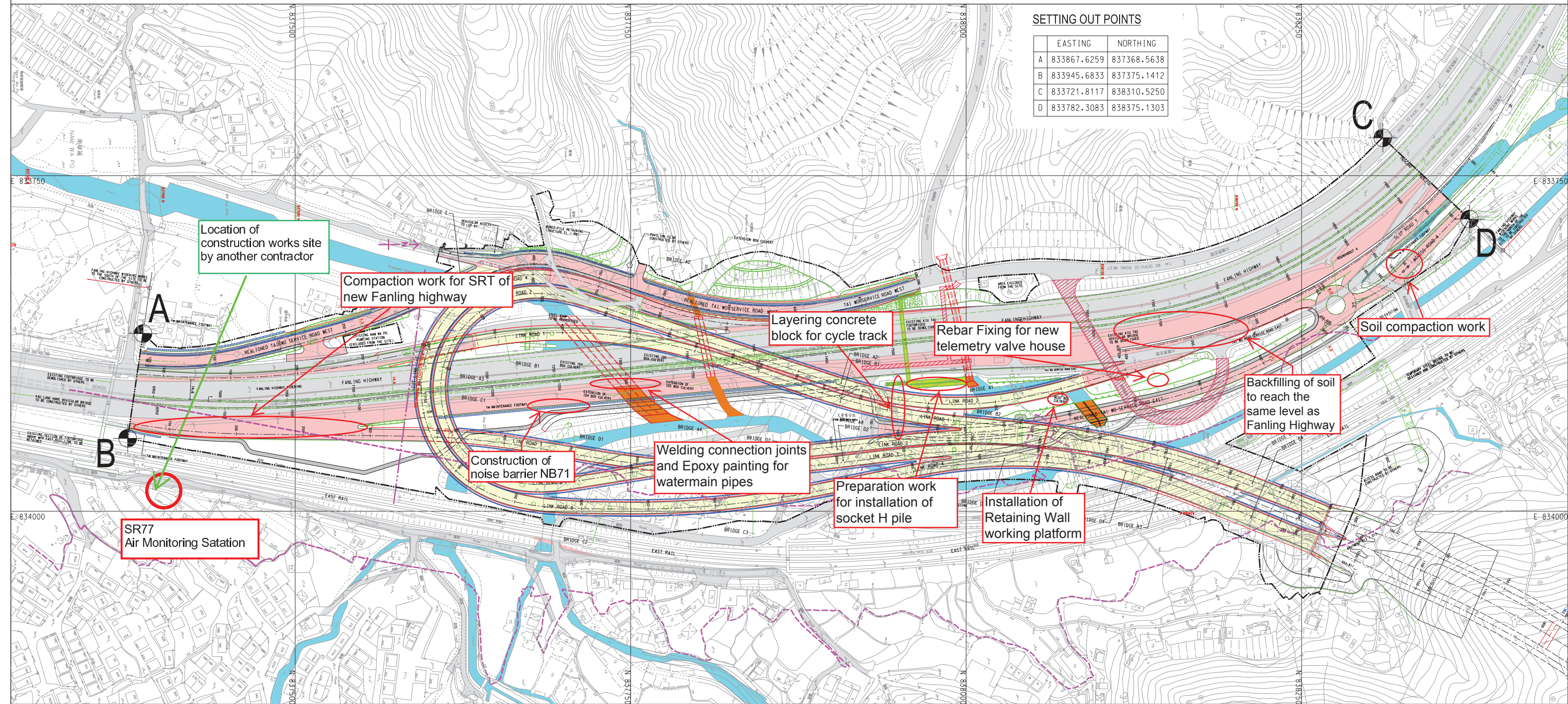
Photo 4: Traffic at road opposite to SR77 (Date: 2 September 2014)





SETTING OUT POINTS

	EASTING	NORTHING
A	833867.6259	837368.5638
B	833945.6833	837375.1412
C	833721.8117	838310.5250
D	833782.3083	838375.1303



Entrusted Portion of Widening of Tolo Highway / Fanling Highway between Island House Interchange and Fanling Stage 2

**Investigation Report of Environmental Quality Exceedance(s)**

Ref. No.: A140919\_24TSP

<b>Date</b>	19 September 2014
<b>Time</b>	--
<b>Monitoring Location</b>	SR77
<b>Parameter</b>	24-Hr Total Suspended Particulate
<b>Action / Limit Levels</b>	Action Level: 170.3µg/m <sup>3</sup> Limit Level: 260µg/m <sup>3</sup>
<b>Measured Level</b>	218.9µg/m <sup>3</sup> (Action level being exceeded)
<b>Possible reason for the exceedance</b>	<p><u>Construction Works of Contract No. DC/2010/10</u></p> <p>The construction works being undertaken by another Contractor (under Contract No. DC/2010/10) have been observed within proximity of the High Volume Sampler (HVS) of the air quality monitoring station at SR77 (refer to the attached photos).</p> <p>The construction site is located at about 20m from the SR77. Major construction works like excavations have not been observed within the area, but construction equipment including generator, air compressor and cement mixer have been observed within the site (refer to the attached Photo 1). Handling of spoils has also been observed at the road opposite to the HVS (refer to the attached Photo 1). The equipment may generate dust issues during operation and would contribute to a higher TSP Level during sampling.</p> <p>Also, dusty materials have been observed near the road (refer to the attached Photo 2) which may be disturbed by traffics and release fugitive dust during the sunny weather and such emission would contribute to a higher TSP Level.</p> <p>Therefore, these construction works are anticipated to cause the elevated TSP levels as have been measured by our HVS.</p> <p><u>Construction Works of Entrusted Portion</u></p> <p>On the other hand, the construction works carried out for the Entrusted Portion during the monitoring period included backfilling works being carried out at northern side of the site and erection of noise barrier NB71, which were at a much farther distance from the air quality monitoring station at SR77 (refer to the attached location plan showing the works activities of the entrusted portion).</p> <p>In addition, proper mitigation measures for these construction works, including the use of water spraying and covering of exposed slopes</p>

	<p>where applicable, have been implemented and being monitored by an EM&amp;A programme. No significant dust emission has been observed.</p> <p><u>Conclusion</u></p> <p>As such, the exceedance was unlikely due to the construction works of the project.</p>
<b>Action taken / to be taken</b>	<p>As the exceedance was non-project related, no further investigation and specific remedial measure(s) would be recommended for the Entrusted Works. Nevertheless, the following mitigation measures had been implemented on-site for dust suppression:</p> <ol style="list-style-type: none"> <li>1. Exposed slopes near the river were covered with impervious sheets;</li> <li>2. Any open stockpile of construction materials were covered with impervious sheet; and</li> <li>3. Sufficient watering was applied along the haul road.</li> </ol>
<b>Remarks</b>	-

Photo 1: Construction area observed within proximity of SR77 (Date: 19 September 2014)





Photo 2: Dusty materials observed near the monitoring station SR77 (Date: 19 September 2014)





SETTING OUT POINTS

	EASTING	NORTHING
A	833867.6259	837368.5638
B	833945.6833	837375.1412
C	833721.8117	838310.5250
D	833782.3083	838375.1303

