## MTR Corporation Limited

# West Island Line Project

# Proposal for Alternative Air Monitoring Station of AM1 (Rev A)

Verified b	y:
Position:	Independent Environmental Checke
Date:	17 August 2010

### MTR Corporation Limited

### West Island Line Project

Proposal for Alternative Air Monitoring Station of AM1 (Rev A)

Certified b	y: Glenn frommer
Position:	Environmental Team Leader
Date:	17 Avgust 2010

### **Monitoring Requirements**

Based on the approved WIL EM&A Manual, impact monitoring should be carried out during construction phase for noise and air as specified in EM&A Manual Section 2.1 and 9.1.

Table 1 below shows the original air monitoring locations where monitoring equipment was installed.

Table 1 Air Monitoring Station

Identification No.	Air Monitoring Location	
AM1	ASR K5 – Pokfield Garden	

Subsequent discussions were conducted with the premise owner for the installation of monitoring equipment at the premise for the regular air impact monitoring during the construction phase of WIL Project in Works Areas C and D. However, the premise owner refused the installation of air monitoring equipment for the regular impact monitoring at the above captioned premise.

The installation of air monitoring equipment for air baseline monitoring cannot be extended for the future 5 years time for the regular air impact monitoring due to refusal by premise owner and safety consideration in order not to affect the residents of the premise.

Based on the above reason, an alternative location for the installation of the air monitoring equipment for AM1 was identified as shown below.

#### Alternative Monitoring Location

In accordance with EM&A Manual clause 9.13, alternative air monitoring location is proposed based on the following criteria:-

- Monitoring at sensitive receivers close to the major site activities which are likely to have air quality impacts
- Monitoring at the air sensitive receivers as defined in the Technical Memorandum
- Assurance of minimal disturbance to the occupants during monitoring

#### Pokfield Garden (AM1)

For the Air Monitoring Location at Pokfield Garden, because of the reasons as mentioned above, an alternative location is identified at ground level of Kwun Lung Lau Block 1 as shown in Figure 3 which satisfies the criteria mentioned above. The air sampler is proposed to be installed at ground level adjacent to the captioned building.

The alternative location for AM 1 - Pokfield Garden is therefore proposed as AM1a Kwun Lung Lau Block 1.

The proposed alternative air monitoring station AM1a installed at Kwun Lung Lau Block 1 is situated at the boundary of Works Areas C and D similar to the original monitoring station AM1 at Pokfield Garden which is likely to have similar air quality impacts during the construction phase of the Kennedy Town Station due to the major site activities such as cut and cover excavation for the station box and the station construction. The Kennedy Town station works area is about 200m long located between AM1 and AM1a. As such the baseline data for AM1 is considered to be applicable to AM1a as the potential dust impacts resulting from construction activities at the two monitoring locations are the same. As construction work at Works Areas C commenced in April 2010, a further 2 weeks air baseline monitoring at the proposed alternative monitoring station AM1a is not feasible at the moment.

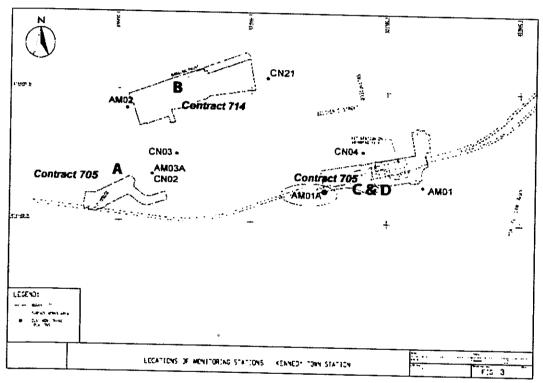
Baseline checking of ambient TSP levels shall be carried every six months at each monitoring location, when no dusty works activities are in operation in accordance with the WIL EM&A Manual clause 9.18. This would allow updating the baseline data for the monitoring station AM1a if necessary when compared with the original air baseline data at the monitoring station AM1. The first baseline checking for AM1a will be carried out in August 2010.

Baseline monitoring results conducted on 3 consecutive Sundays at the proposed alternative monitoring station AM1a at Kwun Lung Lau Block 1 when there were no construction or dust generating activities in the vicinity of the monitoring station as follows:-

Date	Baseline Value (ug/m3)
23/05/2010	69.7
30/05/2010	79.1
06/06/2010	70.6

The average baseline value is 73.1 ug/m3 and there is no significant difference from the 24-hour TSP value of 62 ug/m3 for the original monitoring station AM1 at Pokfield Garden as detailed in the Baseline Monitoring Report Part 7 submitted under the letter dated 11 June 2010. From the above result, it can be demonstrated that the baseline conditions at the original and the proposed alternative monitoring stations are similar.

Figure 3 Alternative Monitoring Location (AMla)



### **Revised Impact Monitoring Location**

Based on the criteria as stated in the WIL EM&A Manual clause 9.13, the revised air monitoring location as shown in Table 2 is considered appropriate for the environmental monitoring and audit of air quality impacts during the construction phase of the WIL Project in Works Areas C and D. As the proposed alternative monitoring location is close to the original monitoring location and adjacent to Works Areas C and D, it is proposed that air baseline data for AMIa adopts the same baseline data as obtained for AMI.

Table 2 Revised Air Monitoring Location

Identification No.	Air Monitoring Location	Photograph
AM1a	Kwun Lung Lau Block 1	