# THB(T)239

#### CONTROLLING OFFICER'S REPLY

# (Question Serial No. 6008)

<u>Head</u>: (60) Highways Department

Subhead (No. & title): (-) Not Specified

<u>Programme</u>: (3) Railway Development

<u>Controlling Officer</u>: Director of Highways (K K LAU)

<u>Director of Bureau</u>: Secretary for Transport and Housing

## Question:

Regarding the railway projects under construction, please provide a breakdown or information of the following over the past five years by year and project:

- (a) levels of various air pollutants at construction sites;
- (b) measures to improve air quality and reduce air pollutants, and the expenses and manpower involved;
- (c) noise in decibel;
- (d) noise mitigation measures and the expenses and manpower involved;
- (e) number of industrial accidents and related injuries and deaths;
- (f) measures to reduce industrial accidents and the expenses and manpower involved;
- (g) amount of waste water produced;
- (h) waste water reduction measures and the expenses and manpower involved;
- (i) amount of waste produced; and
- (i) measures to reduce waste production and the expenses and manpower involved.

Asked by: Hon CHAN Ka-lok, Kenneth (Member Question No. 178)

## Reply:

The major air pollutant arising from the general construction sites of the railway projects is dust. Mitigating measures employed include watering construction sites every day, using wheel washing facilities at site entrances, using low carbon fuel for construction plants, covering filling materials, and ensuring works are carried out in compliance with the Air Pollution Control Ordinance.

The noise level at sensitive receivers is controlled within the statutory limit. Noise mitigating measures employed include adopting good site practices and construction methods to mitigate noise at source, using low noise plant and equipment, installing noise barriers at fixed machinery, avoiding noisy works during school examination periods, maintaining plant and equipment properly, and reducing the number of noise emitting plant and equipment operating simultaneously.

At some construction sites, blasting method is adopted for excavation of railway stations and tunnels in rock. Nearby residents are notified of the blasting works at least one week in advance, as well as on the day of and just before blasting. Only transient minor vibrations and occasional noise may be noticed. Blast cages and blast screens are installed to cover the blasting zone to further minimise the generation of noise and dust.

The main potential water quality impact that could arise from the railway projects include site runoff and drainage, wastewater discharge from tunneling, and sewage effluent from the workforce. Mitigating measures employed include the provision of channels, bunds or sand bag barriers to re-direct stormwater to silt removal facilities, the collection and treatment of wastewater prior to discharge, and to ensure that works are carried out in compliance with the Water Pollution Control Ordinance.

At some construction sites, dredging / excavation, minor seawall modification and piling works may result in the release of suspended sediment into the surrounding water body. Mitigating measures employed include the provision of watertight cofferdams to isolate the dredging / excavation works, and the deployment of silt curtains to enclose the areas where seawall modification and piling works are carried out.

The major wastes generated from the construction activities of the railway projects include inert Construction and Demolition (C&D) materials, general refuse from the workforce, and chemical waste from the maintenance of construction plant and equipment.

Opportunities to re-use the inert C&D materials are considered. Parts of the materials are re-used as backfilling materials on site. Surplus materials would be transported off-site for use in other possible outlets, such as the reuse of rock materials in local reclamation and earth filling projects, and the disposal of fill materials at the Public Fill Reception Facilities provided by the Government for use by other projects locally or in the Mainland. General refuse from the construction workforce is effectively controlled and disposed of by implementation of waste management practices on site. Chemical waste generated from the use of cleaning fluids, lubricants and fuel is handled, stored and disposed of in accordance with the Waste Disposal (Chemical Waste) (General) Regulations.

The expenditure and staff for implementing the above mitigating measures are absorbed in the project costs of the railway works.

The Highways Department is responsible for overseeing the construction of the railway projects. The MTR Corporation Limited (MTRCL) is required to oversee the construction works carried out by its contractors in accordance with relevant laws, rules and guidelines issued by the Government. The MTRCL has also set up a safety supervision team for each of the railway projects to closely monitor the implementation of site safety measures.

The information on industrial accidents on sites and casualties involved for the Hong Kong section of Guangzhou-Shenzhen-Hong Kong Express Rail Link (XRL), the West Island Line (WIL), the South Island Line (East) (SIL(E)), the Kwun Tong Line Extension (KTE) and the Shatin to Central Link (SCL) for the past five financial years are tabulated below:

Railway Project	2010-11 to 2014-15 (up to end December 2014)		
	Number of industrial accidents	Number of deaths	Number of injuries
XRL	481	3	478
WIL	178	1	177
SIL(E)	202	0	205
KTE	45	0	45
SCL	115	1	114