

Damage of components of Air Purification System at East Ventilation Building of Central – Wan Chai Bypass and Island Eastern Corridor Link

The Highways Department (HyD) said today (April 9) that some ventilation fan components of the Air Purification System (APS) at the East Ventilation Building (EVB) of the Central – Wan Chai Bypass and Island Eastern Corridor Link (CWB) were damaged. The operation of the APS at the EVB has been temporarily suspended. The HyD is actively following up on this incident and the remedial works are expected to be completed by the end of April in order to resume normal operation of the APS concerned.

There are three APS facilities for the CWB tunnel located in the EVB, the Middle Ventilation Building (MVB) and the West Ventilation Building (WVB) for purification of the tunnel exhaust before discharge via the ventilation buildings.

The consultant of the CWB project notified the HyD on March 5 that the contractor had found some loosened or damaged bolts and blades at several fans of the APS at the EVB when conducting an efficiency test on the APS system of the CWB at the end of February. For safety reasons, the operation of the APS at the EVB has been suspended since the end of February.

Upon notification, the HyD informed relevant parties, conducted investigation into the cause of the incident and arranged remedial works with a view to resuming the normal operation of the affected system. After inspection, it was revealed that seven out of the 15 fans in the EVB suffered from different degrees of damage including broken bolts and damaged blade edges. The HyD preliminarily suspected that the failure of the mounting bolts was due to problems in the re-installation of bolts when the contractor carried out adjustments to the fan blades. The edges of some fan blades were also damaged as a consequence of some loosened bolts.

Replacement parts of the fan components ordered by the contractor from overseas have arrived in Hong Kong in batches. The remedial works are scheduled for completion in the end of April for resumption of the operation of the APS at the EVB. Samples of the damaged bolts and blades were delivered to a local laboratory and the overseas fan manufacturer for testing and analysis.

Since the operation of the APS at the EVB is currently suspended, the HyD, in addition to the in-tunnel air quality monitoring, has requested its consultant to monitor the air quality outside the eastern portal and in the vicinity. The air quality monitoring results show no abnormalities in the

recent air quality within the tunnel and in the vicinity of the eastern portal.

The other two sets of APS facilities at the WVB and the MVB, as well as the tunnel smoke extraction and ventilation system, are operating normally. As such, the incident does not affect the air quality inside the CWB tunnel.

The HyD submitted a report on the incident to the Environmental Protection Department (EPD) yesterday (April 8) and will fully co-operate with the EPD in its investigation. Meanwhile, the HyD will continue to closely monitor the progress of the remedial works and conduct a detailed investigation into the cause of this incident as well as hold the relevant parties accountable.