

**Summary of issues discussed by the Environmental Impact Assessment  
Subcommittee at the meeting on 13 September 2013 –  
EIA report on “West Kowloon Cultural District”**

The Environmental Impact Assessment Subcommittee (EIASC) considered the EIA report on “West Kowloon Cultural District” (WKCD) submitted by the project proponent (i.e. the West Kowloon Cultural District Authority (WKCDA)) at the meeting on 13 September 2013. Issues discussed are summarized below.

**Planting and management plans for trees and turf grass**

2. WKCDA briefed Members on the landscape planning and visual design of the WKCD project which aimed to enhance the environmental setting and increase the amount of quality green spaces in the project site. They advised that a mix of native and not-too-common tree species would be planted, and tree nursery had been set up to test the adaptability of these tree species in the project environment.

3. Members were concerned that tree species not common for local environment had been proposed for planting in the project site. They also asked for the reasoning for planting trees instead of nursing seedlings in the area. Reference was made to the Development Bureau guidelines regarding a consultancy study on street tree planting and management plan in Hong Kong. The study had reviewed urban tree species that had blended well with the surrounding urban environment and would attract biodiversity in the area. They opined that the study findings would be useful for WKCDA in the planting/landscape design at the detailed design stage.

4. Members remarked that WKCDA should consider designing a green corridor that linked up WKCD with Kowloon Park as well as the podium of the Central Kowloon Route (CKR) under planning that would be connected to the West Kowloon Terminus (WKT) of the Express Rail Link (XRL). The proposed connectivity would attract native species to the project site which would serve good conservation purpose. An example was the Chinese Fan Palms in Kowloon Park where fruit bats roosted. That could help enrich the natural habitats of both WKCD and Kowloon Park and enhance the ecological habitats for urban flora and fauna species in the area. Members were also interested in the percentage area of WKCD to be covered by turf grass, grass species to be planted and the grass management plan. Having regard to the substantial amount of water required to maintain the grass patches, they suggested that appropriate rainwater harvesting method should be adopted for maintaining the greenery in the project site. They also proposed WKCDA to engage professionals to review species of trees and turf grass to be planted at early planning stages.

5. WKCDA thanked Members for their comments and shared that tree and landscape planting would give positive contribution to the local ecology. They informed that there would be an overall 30% greenery area in WKCD, with a minimum 60% within the Park in the project site. WKCDA advised that they were drawing up detailed tree management plan as well as evaluating grass species to be planted. They also assured that Members' views on the connectivity issue would be taken on board when they formulated the landscape conceptual plans at a later stage.

### **Odour impact**

6. Members noted that the WKCD project itself would not generate any odour impact, and that the EIA report had assessed the potential odour impact generated from the adjacent New Yau Ma Tei Typhoon Shelter on the project. WKCDA advised that they had conducted a review on potential marine sediment and confirmed that there was no sediment issue for the project site. Excavation works for the XRL WKT nearby had already been completed, and there would be very limited amount of sediment during deep excavation in the remaining part of the project site. WKCDA informed Members that they did not expect marine sediment issues for excavation for the WKCD basement.

### **Air quality standards**

7. WKCDA pointed out that the development within WKCD itself would not be an air pollution source, except for the proposed underpass road and flyover serving WKCD. The air sensitive receivers (ASRs) at WKCD, however, would potentially be exposed to emissions from nearby existing road and marine traffic. The EIA report predicted that the cumulative respirable suspended particulates (RSP), sulphur dioxide (SO<sub>2</sub>) and nitrogen dioxide (NO<sub>2</sub>) concentrations for all identified ASRs would comply with the prevailing Air Quality Objectives (AQOs). In answering Members' enquiry on compliance of the WKCD project with the new AQOs to be effective in January 2014, WKCDA advised that they were aware of the implications of the new standards on the project. They had conducted preliminary analysis on future compliance and the preliminary results showed that the emission levels of SO<sub>2</sub> and RSP/fine suspended particulates (FSP) would comply with the new AQOs by 2015 and 2020 respectively. These could be achieved in view that vehicular emissions were expected to drop by 75% from 2015 to 2030 due to retirement of older vehicle types as well as more stringent emission standards. Results of the "Pollutants in the Atmosphere and their Transport over Hong Kong" (PATH) air quality model showed

that the hourly NO<sub>2</sub> would be complied with by 2020 and the overall new AQOs standards by 2030. They would also deploy green buses plying within WKCD.

8. Members suggested that modern technology should be adopted on treating exhaust from the proposed underpass road, e.g. painting the tunnel with titanium dioxide. Research had shown that titanium dioxide could serve as the photocatalytic material that grabbed airborne nitrogen oxides (NO<sub>x</sub>) for conversion into harmless nitrates. Recent testing had demonstrated that concrete roadway/pavement laced with titanium dioxide could reduce NO<sub>x</sub> in the air. Suggestion was also made for channeling exhaust through soil mass which could serve as the filtering agent. Members proposed for WKCDA to take further steps to comply with the new AQOs, and that they should explore for more innovative and proactive measures to reduce emissions especially from the planned underpass road. WKCDA thanked Members for the comments. They would investigate into the use of titanium dioxide with their consultants at the detailed design stage in respect of the road tunneling works.

### **Waste management issues**

9. Members noted that the excavated materials from the project would be used in other construction works within the project site as far as practicable. This would help reduce materials to be disposed of arising from the WKCD project. They suggested that WKCDA should submit a detailed waste management plan to set out measures to minimize waste as well as the handling/treatment of surplus waste materials. Members were advised that 55% of the inert construction and demolition (C&D) materials would be re-used, and the remaining 45% would be delivered to the Public Fill Reception Facilities for use by other projects. They opined that the 55% re-use rate for inert C&D materials could be further enhanced. While noting WKCDA's information that there was no soil contamination issue for the WKCD project, Members considered it prudent not to re-use the materials as substrate for landscaping/planting to avert any possible chance of soil contamination impact.

10. Members also remarked that WKCDA should make reference to the benchmarks on re-use of existing materials as set out by "BEAM Plus" and the experience of using marine mud in-situ in the Kai Tak Development project. Members were also mindful of the WKCD master design plan which might not avail much room for WKCDA to improve the connectivity of WKCD with Kowloon Park and the CKR podium.

## **Recommendations to ACE**

11. Having regard to the findings and recommendations of the EIA report and the information provided by the project proponent WKCDA at the meeting, EIASC agreed to recommend to the full Council that the report could be endorsed with conditions. EIASC had also made a number of recommendations for WKCDA to consider.

**EIA Subcommittee Secretariat**

**October 2013**