

Enhancement of Housekeeping for Building Sites

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Abstract

Hong Kong is an international city with a beautiful harbour and prestigious high-rise buildings. Are our building sites looking nice? We have risks of SARS and Dengue Fever that affect our daily life and economic. Housekeeping is considered the fundamental key for all these issues. We need to enhance it.

1. Introduction

Hong Kong is a dynamic international city named the Pearl of the Orient. It has a beautiful harbour with a lot of prestigious buildings along the waterfront. Tourists from overseas and Mainland like to visit Hong Kong and enjoy the cruise within our harbour.

Every day, we have our building works underway to improve our living, education, health services and quality of life in Hong Kong. Are our building sites looking nice in comparison with the prestigious buildings along the waterfront? Why? Our construction sites have been complained as the source of muddy waters, dust, noise and mosquitoes, or with untidy scaffolding works etc. Can we do something to enhance the housekeeping to change the appearance of our building sites and to provide a better working environment for the site personnel, including you and me that have to work on site?

2. Improvement Targets in Arch SD

To enhance the housekeeping for the building sites, we have 3 improvement targets in Arch SD: -

- a) Promoting site safety cycle and welfare facilities on site;

- b) Implementing measures on mosquito breeding control on site; and
- c) Review on Scaffolding

3. Site Safety Cycle and Welfare Facilities

Site safety cycle is also called safe working cycle. As far as good housekeeping is concerned, it relates to morning briefing, tidying up of the site after each day's work and each week's work, and checking of works site after work.

As an analogy, we consider the site as a school. The Project Manager (and above) represents 'the member of the Director Board of the school'. The Site Agent represents 'the Principal'. The Safety Officer represents 'the disciplinary officer'. The foremen represent 'the teachers'. The workers represent 'the students'. In the morning briefing, the general and site-specific safety and health issues on site can be effectively disseminated among the site personnel including the workers. The site personnel can be continuously educated about what to do to safeguard themselves. The site personnel can be inculcated on safety and health culture that they should establish on site. It will inspire team spirit on site to enhance quality of works and environmental protection as well as good housekeeping.

Furthermore, the waste materials are arranged to sort out on site for recycling or re-use. With the wheel wash facilities, the vehicles can be effectively cleaned prior to leaving the site. With the wastewater treatment plant, the wastewater can be properly treated and used again on site.

By the end of the working day, each worker has to tidy up his/her working area. Besides cleaning up the working area, every worker has to keep the materials and tools in their right place, maintain the public area in the vicinity of the site and turn off the construction plant. The foremen have to check the site in order before leaving the site. On a selected day of a week, the project manager or his designate will take a lead to tidy up the site with particular emphasis on the common areas and accesses. It shows the involvement and concern of the top management of the site in housekeeping. It is everybody's business to maintain the housekeeping on site.

Adequate number of washing basins, toilets, and showers are also provided at various locations on site for the convenience of the site personnel to upkeep their own hygiene.

4. Measures on Mosquito Breeding Control

Mosquitoes are considered as vehicles to spread dengue fever (and Japanese encephalitis). They attract all site personnel irrespective of his/her rank, and anti-mosquito control on site is everybody's business. Clearance of stagnant water is the most effective way to control the mosquito breeding on site.

To increase the awareness on mosquito breeding control on site, Arch SD has prepared a sample tool-box talk in Chinese for reference of the Contractors. The sample tool-box talk mainly covers: -

- a) Regulations, contractual provisions and in-house safety rules;
- b) Life cycle of mosquito together with its prevention strategy and measures;
- c) Personal protection arrangements; and
- d) Dengue fever case.

Examples of short questions and answers are also provided to facilitate discussions in the morning briefing of the site safety cycle to increase the awareness of anti-mosquito control among the site personnel.

Our Safety and Environmental Advisory Unit has the support from the top management and independent audit teams are set up with supports from site staff. We have conducted monthly independent audit on mosquito breeding control on site. The independent audit allows independent view on mosquito breeding control on site. It has to be conducted effectively and efficiently. Its result should be reliable. In addition, the independent audit teams have also discussed with the Contractor about the updated information on the mosquito breeding control in Hong Kong during the auditing check on site.

A checklist has been prepared to allow a systematic approach to conduct the independent audit. The checklist is open to our Contractors. We find that our Contractors have used the checklist as a template to implement anti-mosquito control on site.

The checklist mainly covers three main areas, i.e. site management issues, site conditions, and enhanced measures, wherever considered necessary. For site management issues, it addresses display of posters, tool-box talks, morning briefing in site safety cycle, weekly cleaning programme, monthly safety report, inspection

checklist on specific places, records of inspection, monthly site safety management committee and site safety committee meetings, inspection by supervisory staff, and promotion scheme for reporting/suggestion. For site conditions, it addresses checks on stagnant water, wet areas, coverage to containers, disposal of refuse (in particular the domestic waste), vicinity of site, and office area. For enhanced measures, where considered necessary, it addresses personal protective equipment, larvicides, mosquito killing device, external specialist, coordination with FEHD, and system to report case of dengue fever on site.

The Contractors are anticipated to develop their own system of works after specific risk assessment with respect to the prevailing site condition to combat the mosquito breeding and the spread of dengue fever. We consider that the campaign on anti-mosquito measures is not limited to the site but everywhere in Hong Kong. We in collaboration with the Contractors take the lead to educate the site personnel and request them to disseminate the message to their families.

Furthermore, we have distributed the reports on independent audit to the project teams and the Contractors for follow-up on site. We have also timely disseminated the monthly ovitrap indices, details of the local case, other initiatives taken by our Contractors that we have identified on site, and further directives from the ETWB and FEHD for immediate reference of our project teams and the Contractors for continuous upkeep of the anti-mosquito control on site.

5. Scaffolding

Scaffolding is the external clothing of the building during the construction stage. It should be durable, reliable, stable, orderly, safe and tidy. Its appearance bears a heavy weighing in the public image of the site with respect to good housekeeping as well as site safety.

Bamboo scaffolding has commonly been used at the building site in Hong Kong. Does it provide the above quality from the beginning of its use on site until the end of its service? Is it necessary to step up the monitoring control measures on bamboo scaffolding in order to maintain the above quality of bamboo scaffolding during its life cycle on site? Our Safety and Environmental Advisory Unit has been requested by the ETWB to consider the above questions. Similar to the monitoring arrangement of the metal scaffolding, appropriate engineering staff is suggested to be assigned as the temporary work coordinator on site to enhance the monitoring control of the bamboo

scaffolding on site, in addition to the provision of a competent person as per the existing Construction Site (Safety) Regulations. We hope that it would induce some constructive change on site safety related to the bamboo scaffolding as well as its appearance before the public.

6. Conclusion

In 2003, we have risks of SARS and dengue fever in Hong Kong. These risks relate to the life of individuals, the health of their family, the productivity of the work site, regulating action by ETWB upon the Contractors who have encountered repeated convictions from FEHD, the image of Hong Kong and its economic. Good housekeeping is an effective way to prevent the spread of SARS and dengue fever. Good housekeeping also promotes effective site safety and good image. Now, let us work together to enhance housekeeping in our building sites in order to protect our income, safeguard ourselves, provide a better working environment, and maintain the sustainable development of Hong Kong. We will have a better Hong Kong.