

Information Sheet (7)

Handling of Public Fill

1. What is Public Fill?

Public fill is construction and demolition (C&D) materials comprising rocks, concrete, asphalt, rubbles, bricks, stones and earth, which can be used in either reclamation or site formation works. Besides, composite materials such as concrete and asphalt can be recycled as construction material after proper breakup and sorting procedures.



Asphalt



Stones and earth



Concrete and bricks



Rocks

2. How is Public Fill generated?

C&D materials are generated from such activities as building, excavation, renovation, demolition and road works. Some are inert while others are not.

The inert C&D materials, collectively known as “public fill”, consist of rock, concrete, asphalt, rubble, bricks, stones and earth. Since these materials would not decay or decompose, they are suitable for reuse in reclamation or site formation works.

The non-inert C&D materials (or known as “C&D waste”), including plastic pipes, paper and timber scaffold, would be disposed of at landfills as other domestic wastes.



Public fill



C&D waste

3. Reduce, Reuse and Recycle

There are different on-going construction activities such as demolition and redevelopment, tunneling, and maintenance and renovation works of varying scales in large cities like Hong Kong. These activities would inevitably generate C&D materials.

To adhere to the 3R principles – “reduce, reuse and recycle”, the Government has implemented the “Waste Management Plans” in major government works projects since 2000. Contractors are required to formulate and implement “Waste Management Plans” to minimize the generation of C&D materials during construction and carry out on-site sorting of the materials to facilitate future reuse. In addition, the Government implemented the “Construction Waste Disposal Charging Scheme” in 2006 to provide economic incentives for developers and contractors to minimize the generation and disposal of various types of C&D materials.



Construction & Demolition Materials Management Plans

4. Sorting of C&D Materials

The Government has set up two temporary sorting facilities for C&D materials in Tseung Kwan O Area 137 and Tuen Mun Area 38. The public fill separated from other wastes will be stored up for future reuse while the C&D waste will be disposed of at landfills.



5. Reusing Public Fill in Reclamation

More often than not, the public fill cannot be put into immediate reuse upon its generation. The Government therefore has set up temporary fill banks in Tseung Kwan O Area 137 and Tuen Mun Area 38 in a bid to stockpile the surplus public fill for future use.



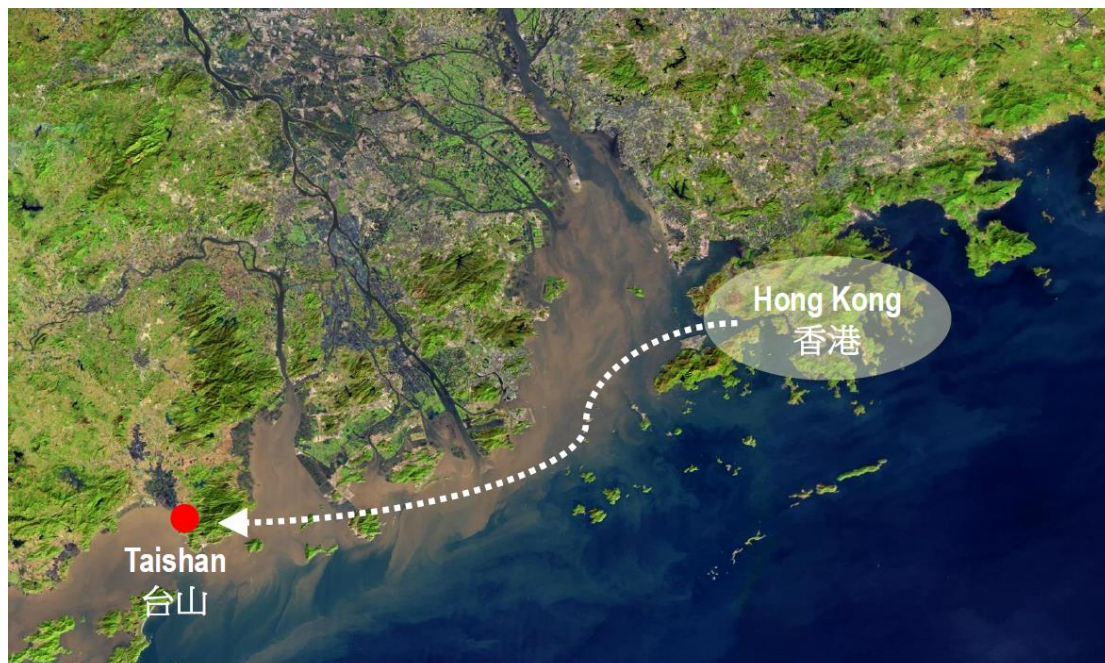
Tseung Kwan O Fill Bank



Tuen Mun Fill bank

Since the amount of public fill generated is significantly greater than those in demand, there is a large amount of surplus public fill requiring storage, which would ultimately fill up the two fill banks.

As such, since 2007, surplus public fill has been delivered to Taishan on Mainland China for reclamation as well. As at May 2016, about 640 hectares of land, equivalent to 33 times the size of Victoria Park, had been formed in Taishan. However, transporting the public fill to Taishan requires a large fleet of vessels and takes long journey of about 22 hours for a round-trip. Given the enormous costs and high carbon emissions involved in this arrangement, its sustainability is debatable.



In the long run, we should proactively minimize the generation of C&D materials and maximize the reuse of public fill in implementing redevelopment projects, infrastructure projects, and other construction activities.

Reclamation on an appropriate scale at suitable locations outside Victoria Harbour not only increases land supply, but also helps handle the surplus public fill. Reusing surplus public fill in local reclamation projects would be less costly and more environmentally friendly as compared with shipping them to Taishan for reclamation.