

**Appendix 1-1**

**WBTC No. 4/98 and WBTC No. 5/99**

Ref. : WB(W) 209/32/96  
Group : 12

4 March 1998

Works Bureau Technical Circular No. 4/98

Use of Public Fill in Reclamation and Earth Filling Projects

Introduction

This Circular promulgates policy requiring reclamation or earth filling projects with imported fill requirements of 300,000 m<sup>3</sup> (three hundred thousand cubic metres) or more to consider using public fill (alternatively termed inert construction and demolition (C&D) material) for the Works. It amplifies and should be read in conjunction with WBTC No. 2/93 : Public Dumps. The terminology in current use for what used to be called public dumping but which is now called public filling is shown in the addendum to this circular.

Background

2. It is government policy to make beneficial use of C&D material generated by the construction industry in an efficient as well as an environmentally friendly way. From an economic benefit view point, the inert portion of C&D material (e.g. rock, concrete, etc.) can be used as fill material (termed public fill) for reclamation and earth filling projects through public filling, whilst the non-inert portion (e.g. timber, etc.) (termed C&D waste) shall be disposed of at landfills. A number of measures to encourage the use of inert C&D material at public filling areas have been implemented and these include:

- (i) relaxing the acceptance criteria of public fill to include oversized rocks and a small amount of timber;
- (ii) requiring the contractors managing public filling operations to accept wet soil;
- (iii) operating public fill barging points; and
- (iv) keeping a close liaison with the construction industry to encourage contractors to deliver the inert portion of C&D material to public filling areas.

3. It is noted that tight construction programmes have been used by some project proponents as a reason for not incorporating a requirement to use public fill in many reclamation and earth filling projects. This has resulted in a shortage of public filling areas to accommodate the public fill generated by the construction industry. The Director of Audit in his Report No. 28 issued in April 1997 regarding the beneficial use of inert C&D material recommended :

- (i) to identify more public filling areas from both the current and long-term development programmes to meet local demand; and
- (ii) to strengthen the procedures for assessing the use of public fill in government projects.

#### **Current Situation**

4. The Public Filling Sub-Committee (PFSC), previously known as the Public Dumping Sub-Committee, of the Fill Management Committee (FMC) is responsible for co-ordinating the provision and operation of public filling facilities. These facilities include public filling areas, public fill barging points and public fill stockpiling areas. The PFSC also aims at ensuring sufficient strategically located facilities are available at all times to accommodate all inert C&D material in Hong Kong.

#### **Notification and Review of Fill Requirements**

5. For proposed reclamation or earth filling projects with imported fill requirements of 300,000 m<sup>3</sup> or more, the project proponent shall, in the Preliminary Project Feasibility Study (PPFS) notify the Principal Government Civil Engineer (PGCE) who is the Chairman of the PFSC about incorporating public fill for the Works. The project proponent shall examine and implement measures to maximise the use of public fill and shall enter the requirement of public fill in the "Fill Requirements and Surplus Data Form" and submit it, together with an assessment and details of measures of the use of public fill made under Section 8(b)(iii) of the PPFS report [other Constraints to cost and progress - Borrow areas/disposal sites] directly to the PGCE through the Secretary of the PFSC (Port Works Division, CED). Such forms can be obtained from the Secretary of the FMC or PFSC and a sample copy is shown in Annex I. Within two months from the date of receipt of the notification, the Secretary of the PFSC will advise the project proponent whether the proposed use of public fill meets the requirement for optimum use of public fill for the project. The related information will also be copied to the FMC for reference and record. The Secretary of the PFSC is delegated to carry out the initial screening of such reclamation or earth filling projects, and report to the PFSC at its quarterly meetings. Proponents of projects designated to accept public fill shall report any subsequent amendments to the quantity, extent, programme, etc., advise the implications of these amendments and proposed measures to mitigate any adverse impact on its public filling programme to the Secretary of the PFSC for PFSC's endorsement.

6. Such projects with imported fill requirements exceeding 300,000m<sup>3</sup> may in certain circumstances be exempted from using public fill subject to approval by the PFSC, e.g. anticipated short fall in supply of public fill, projects with stringent programmes and comprising contracts associated with complicated interfacing issues, insurmountable environmental impact etc. The project proponent should submit the application for exemption to the PGCE through the Secretary of PFSC at least 8 weeks before the scheduled PFSC meetings. If deemed necessary, the PFSC will invite the project proponent to present its case. The PFSC meetings will be held on a quarterly basis and normally on the second last Thursday of January, April, July, and October of each year, unless otherwise notified.

7. The rate of supply of public fill may fluctuate and may have an impact on the implementation programme of some projects which have a committed land development programme, e.g. land production for the public housing development programme. For such reasons imported fill can be allowed as a contingency measure in the tender document. The quantity of imported fill to be allowed in the tender document as a supplement to public fill and the exact quantity to be ordered during the construction stage need to be endorsed by the PFSC.

**( W S Chan )**  
**Deputy Secretary (Works Policy)**

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1999  
**Group** : 5, 7, 12

**Works Bureau Technical Circular No. 5/99**

**Trip-ticket System for  
Disposal of Construction and Demolition Material**

**Scope**

This Circular promulgates the policy to implement a trip-ticket system in PWP contracts for the proper disposal of construction and demolition (C&D) material at public filling facilities or landfills. Maintenance term contracts are not covered by this Circular.

**Effective Date**

2. This Circular shall take effect on 1 July 1999.

**Effect on Existing Circulars**

3. This Circular has no effect on existing Circulars. However, it shall be read in conjunction with WBTC No. 4/98, which sets out the policy on the use of public fill in reclamation and earth filling projects. The terminology related to public filling is also defined in the addendum to WBTC No. 4/98.

**Policy**

4. The problem of illegal dumping has attracted extensive adverse publicity and some illegally dumped materials have been generated from construction activities. In parallel with the review of the various items of legislation with a view to introducing more effective control and enforcement provisions, administrative measures on public works contracts are necessary.

5. The policy is that all public fill, being the inert portion of C&D material, shall be disposed of at designated public filling facilities and all C&D waste at designated landfills. A trip-ticket system shall also be implemented for the disposal of all C&D material using the Particular Specification clauses set out in Appendix A. These requirements, subject to the exemption in paragraphs 13 to 16, shall apply to all PWP contracts invited on or after 1 July 1999.

6. It is not a mandatory requirement under this Circular to have on-site sorting of C&D material. Where a mixture of public fill and C&D waste shall be disposed of depends on the criteria laid down by the operators of the public filling facilities and landfills.

### **Trip-ticket System**

7. At the planning stage of a contract, the project officer shall seek confirmation from the Public Filling Sub-Committee (PFSC) through the Secretary of PFSC (Port Works Division, CED) as to whether public filling facilities will be available for the disposal of public fill generated. The PFSC would designate the public filling facilities, if available, for the contract. The PFSC would also advise of the acceptance criteria of the public filling facilities. The project officer shall specify such criteria in the tender documents. Public filling facilities include public filling areas, public filling barging points and public fill stockpiling areas. Unless otherwise agreed by the PFSC, the project officer shall specify in the tender documents the use of the designated facilities throughout the construction period. If there are any major changes after the confirmation is given, project officers shall inform the PFSC accordingly and vice versa.

8. The project officer shall also seek confirmation from the Director of Environmental Protection (DEP) (for the attention of PEPO(FM)) as to whether landfills will be available for the disposal of C&D waste generated. The DEP would designate landfills, if available, for the contract. The DEP would also advise of the acceptance criteria of the landfills. The project officers shall specify such criteria in the tender documents. Unless otherwise agreed by the DEP, the project officer shall specify in the tender documents the use of the designated landfills throughout the construction period. If there are any major changes after the confirmation is given, project officers shall inform the DEP accordingly and vice versa.

9. The project officer when preparing tender documents shall include in the Particular Specification the clauses set out in Appendix A and the Form set out in Appendix B. The clauses in Appendix A represent the minimum standard and additional requirements shall be imposed as necessary. The project officer

shall also include in the Particular Specification of the tender documents the definition of the terminology related to public filling as defined in WBTC No. 4/98 and specify the individual public filling facilities and landfills for the disposal of the corresponding C&D material.

10. The contractor shall be required to complete the relevant details on the standard form in Appendix B, present the form for stamping and collection by the site supervisory staff, and submit to the Engineer /Architect Representative the receipt issued by the operator of the public filling facility/landfill after the disposal of the C&D material. The receipt referred to in clause 3 of the Particular Specification in Appendix A shall contain the following information:

- (a) a unique receipt number;
- (b) the name of the public filling facility/landfill;
- (c) the date and time of the dumping activity;
- (d) the vehicle registration number;
- (e) an indication of truckload (public filling facility only);
- (f) gross and tare weight of the vehicle (landfill only);
- (g) weight of the material dumped at the landfill (landfill only); and
- (h) contract number of the source of the public fill (public filling facility only).

11. The Engineer/Architect shall check the contractor compliance with the requirements by carrying out random checks on the forms and receipts submitted by the contractor. The PFSC and DEP have agreed to produce monthly summary reports to facilitate checking by the Engineer/Architect. For monthly reports from the PFSC, the Engineer/Architect shall specify in his monthly request the contract number and the date on which the monthly report is required. For monthly reports from the DEP, the Engineer/Architect shall specify the period within which monthly reports are required. The DEP will provide the Engineer/Architect at the end of each month a report showing all the information of all relevant transactions of their landfills within that month grouped by landfills in a sequential order of the receipt numbers.

12. The contractor compliance shall be a consideration in the assessment of the contractor performance. If the Engineer/Architect considers that there is major non-compliance without any acceptable reason, the Engineer/Architect shall consider giving the contractor an overall rating of "poor" in Section 4 of the Report on Contractors' Performance, ultimately leading to the possibility of taking regulating actions. For tender documents prepared by consultants, the duties of the project officer referred to in this Circular shall be performed by the respective consultants' staff.

### **Exemption**

13. If the PFSC confirms in writing that no public filling facility will be available for the contract, the requirements in paragraph 5 shall not cover the public fill, i.e. no designated public filling facilities shall be specified in the tender documents and the trip-ticket system in Appendix A shall not be included in the tender documents to cover the public fill. If the DEP confirms in writing that no landfill will be available for the contract, the requirements in paragraph 5 shall not cover the C&D waste, i.e. no landfills shall be specified in the tender documents and the trip-ticket system in Appendix A shall not be included in the tender documents to cover the C&D waste.

14. Some construction contracts rely on the use of "imported fill" as the filling material, which is generated from other construction sites. In order to ensure that such practice will not be totally eliminated, the requirements in paragraph 5 shall not cover the public fill generated by a contract from which not more than 100,000 m<sup>3</sup> of public fill will be disposed of off Site. The C&D waste shall still be subject to the requirements in paragraph 5.

15. An officer at D2 level or above may give approval to exempt a contract from the requirements in paragraph 5 in one of the following circumstances:

- (α) the officer is satisfied that a confirmed alternative arrangement will be incorporated in the contract for the proper disposal of C&D material at an equivalent or higher standard, e.g. it is confirmed that a government site will accept all the public fill with proper controls. In this example, the requirements in paragraph 5 still apply for C&D waste.
- (β) the officer is satisfied that no appreciable amount of C&D waste will be generated. In general, the threshold for the whole contract for C&D waste is 50 m<sup>3</sup>.

16. Should there be circumstances other than those described in paragraphs 13, 14 and 15, under which there is a genuine need for a contract to be exempted from the requirements in paragraph 5, an application with full details and justifications shall be submitted to the Secretary for Works via an officer at D2 level or above. Each case will be considered individually.

17. For all PWP contracts wholly or partly exempted from the requirements in paragraph 5, the project officers shall include in the Particular Specification of the tender documents a requirement that the contractor shall submit at the construction stage a disposal plan for the corresponding C&D material for the Engineer /Architect's approval. The submission of and compliance with such disposal plan shall be the contractor's obligation under the



contract. Depending on the reasons for exemption, different situations may demand different requirements and the disposal plans shall include, but shall not be limited to, the following:

- (α) an identification of the disposal site;
- (β) a written confirmation from the owner/operator of the disposal site demonstrating his consent on the use of the disposal site for that purpose;
- (γ) submission of records; and
- (δ) a system enabling the Engineer's/Architect's Representative to check compliance.

18. The Engineer/Architect shall check the contractor compliance with the disposal plan and his compliance shall be a consideration in the assessment of the contractors' performance as stated in paragraph 12.

### **Definition of Site**

19. Legal advice has been obtained that the definition of "site" in the General Conditions of Contract Clause 1(1) does not generally include the public filling facilities and landfills where the Contract directs their use. However, care should be taken in the preparation of tender documentation to clearly state whether it is or is not intended that a public facility or landfill forms part of the Site. Such statement can be made in the Particular Specification or similar document.

**(W S Chan)**  
**Deputy Secretary (Works Policy)**

**Particular Specifications for Trip-ticket System**

1. The Contractor shall produce a Construction and Demolition Material Disposal Delivery Form (the Form) for each and every vehicular trip transporting construction and demolition (C&D) material, i.e. public fill or C&D waste, off Site. The Contractor shall complete the Form in duplicate except for the Time of Departure.
2. Prior to the vehicle leaving the Site, the Contractor shall present to the site supervisory staff the completed Form. The site supervisory staff shall insert the Time of Departure and stamp the Form. The site supervisory staff shall retain a copy of the Form and return the original to the Contractor. The Form shall be carried on board the vehicle at all times throughout the vehicular trip.
3. For each vehicular trip, the Contractor shall obtain a receipt from the operator of the public filling facility or the landfill. The Contractor shall submit the original receipt to the Engineer's/ Architect's\* Representative within 5 working days<sup>#</sup> of the vehicular trip. Late return without any acceptable reason might be regarded as non-compliance by the Engineer's/Architect's\* Representative.
4. The Contractor acknowledges and shall permit the Engineer /Architect \* Representative to request and obtain information from the operator of the Designated Disposal Tip verifying the receipt and the accuracy of the information on that receipt.
5. All C&D material shall become the property of the Contractor when it is removed from the Site.

\* Delete whichever inappropriate

# The period can be shortened as considered necessary.

**Construction and Demolition Material  
Disposal Delivery Form**

Department : \_\_\_\_\_ Contract No. : \_\_\_\_\_

Contractor : \_\_\_\_\_

Contract Title : \_\_\_\_\_

Location of Site : \_\_\_\_\_

Location of Public Filling Facility/Landfill \* : \_\_\_\_\_

Vehicle Registration No. : \_\_\_\_\_ Date : \_\_\_\_\_

Approximate Load : Full / three quarter / half / one quarter \*

Remark : \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Time of Departure : \_\_\_\_\_

\_\_\_\_\_  
Authorised Chop of  
Engineer's Representative/  
Architect's Representative \*

\* Delete whichever inappropriate