Sample Collection and Testing Services for Concrete and Steel Provided by PWL Contract Laboratories

 Project site staff shall follow the following procedures in requesting collection and testing services of concrete and steel samples from the Public Works Laboratories (PWL). (Note: The PWL comprise the Public Works Central Laboratory (PWCL) and the Public Works Regional Laboratories (PWRL)).

Sample Collection Procedures

- 2. The sample collection services are outsourced by the PWL to private laboratories (referred to as "contract laboratories" hereinafter). In making sample collection requests, the project site staff shall complete Part A of the **Sample Collection Request Form**⁽¹⁾ and fax/e-mail⁽²⁾ it to the PWL.
- 3. The PWL will confirm the receipt of the request form by filling in Part B of the **Sample Collection Request Form**⁽¹⁾ and instruct the contract laboratory to collect the samples for testing.
- 4 The contract laboratory will then contact the project site staff to confirm the place, date and time of sample collection. If the project site staff has not received any notification from the contract laboratory on the third working day from the date of submitting the **Sample Collection Request Form**⁽¹⁾, they shall contact the PWL for follow-up action.
- 5. Before the arrival of the sample collection personnel from the contract laboratory on site, the project site staff shall complete and sign a separate **Test Request Form**⁽¹⁾ and retrieve the samples concerned from the storage area in order to streamline the collection process. (Note: During sample collection, contract laboratory staff is not obliged to retrieve samples from the storage area on site.)
- 6. In order to enhance the reliability of the compliance testing services, all public works projects shall apply security labels to concrete cubes, steel bars and bituminous material samples prepared under their contracts. Guidance Notes on the Use of Security Labels for Concrete Cube/Steel Bar/Bituminous Samples (Form 2320) can be downloaded from the CEDD website: <u>http://www.cedd.gov.hk/eng/forms/doc/2320.pdf</u>
- 7. Upon arrival at the site, the contract laboratory staff shall contact the project site staff to collect the samples and the corresponding **Test Request Form**⁽¹⁾. The contract laboratory staff shall check and ensure that all the related information stated in the **Sample Collection Request Form**⁽¹⁾ and **Test Request Form**⁽¹⁾, and the markings on the surface of the samples are correct before collecting the samples. Any additional

related documents shall also be checked at the time of collection (e.g. relevant mill's test reports of steel samples).

- 8. The contract laboratory staff shall clarify immediately with the project site staff for any ambiguous information or discrepancies in the Request Forms. Upon agreement between the project site staff and the contract laboratory staff, they shall both sign on Part C of the **Sample Collection Request Form**⁽¹⁾ confirming completion of the collection procedures. The contract laboratory staff shall then fax/e-mail⁽²⁾ the completed **Sample Collection Request Form**⁽¹⁾ to the PWL for further action.
- 9. During the collection of samples on site, any additional requests made by the project site staff for immediate collection of samples (i.e. any request not submitted to PWL beforehand) will not be entertained unless:
 - a) The project site staff has obtained agreement from PWL⁽¹⁾ to collect the additional samples;
 - b) the contract laboratory's vehicles have spare capacity for the additional samples; and
 - c) the contract laboratory's schedule for sample collection for the day would not be seriously disrupted.
- 10. If collection of samples by contract laboratories is not required or collection services cannot be provided by the contract laboratories due to resources constraints, the project site staff shall escort and deliver the samples to the contract laboratories/PWL (as advised by the PWL) in accordance with the <u>Project Administration Handbook for Civil Engineering Works 2012 Edition</u>, Section 5.15 of Chapter 7. The handing-over of samples to the contract laboratories/PWL shall be in accordance with the procedures stated in Clauses 7 & 8 above.

Issue of Test Results

- 11. After completion of the tests, the contract laboratories shall fax preliminary test results and despatch test reports to the project site office within the specified time frame⁽³⁾. The project site staff shall inform the PWL in writing by fax/e-mail⁽²⁾ of any late receipt of preliminary test results or test reports for follow-up action.
- 12. If errors due to negligence of the contract laboratories are found in test reports and/or preliminary test results, the project site staff shall inform the PWL in writing together with a copy of the relevant documents and mark up the errors and the required amendments. A memo signed by the project engineer representative together with those related documents shall be faxed/e-mailed⁽²⁾ to the PWL for action. If the errors made are due to wrong information provided by the project site staff on the test request forms,

the project engineer concerned shall write to the PWL giving details of the mistakes with explanation and the amendments required. Replacement test reports and/or preliminary results may be re-issued subject to the agreement with the contract laboratory.

Remarks:

(1)

Type of the sample	Sample	Test Request	Collection Request Forms to	
	Collection	Form**	be faxed/e-mailed ⁽²⁾ to PWL in	
	Request Form*		office hours (Monday to	
			Friday)	
Concrete cube	C Eng D (GEO)	C Eng D (GEO)	At least 3 working days before	
	2315	2309	date of testing	
Concrete core	C Eng D (GEO)	C Eng D (GEO)	At least 9 working days before	
	2315	2313	date of testing	
Steel bar	C Eng D (GEO)	C Eng D (GEO)		
	2408	2403	At least 2 working days before	
Structural steel section	$C E_{n\alpha} D (CEO)$		At least 2 working days before date of collection of samples	
Reinforcement connector	C Eng D (GEO) 2407	2404 & 2413	uate of conection of samples	
Steel fabric	2407	2404 & 2413		

*Upon receipt of the Registration Form for Testing of Construction Materials (Form 2007) submitted by the project site staff, the PWL will fax/email the **Sample Collection Request** Form⁽¹⁾ containing the customer project information to the site staff as a template for making sample collection requests. Whenever there is a change in contract laboratory, a new **Sample Collection Request Form**⁽¹⁾ will be sent to the site staff for replacement of the old form.

** Download the blank Test Request Forms of the latest version from the CEDD website: <u>http://www.cedd.gov.hk/eng/forms/laboratory.html</u>

The project site staff shall assign the 'Customer Test Request Ref. No.' in the Sample Collection Request Form/Test Request Forms and it must be a unique number limited to 12 digits (with a combination of characters, numeric and space)

- (2) PWL telephone No.: 2305 1547PWL fax No.: 2759 2545PWL e-mail address: pwrl@cedd.gov.hk
- (3) After completion of tests, the contract laboratories shall fax the preliminary test results and despatch test reports to the project site office within the time frame (in terms of number of working days, excluding Saturday, Sunday and Public Holidays) stipulated in the following tables:

(a) Concrete testing

	Within the no. of working days from the date of test ⁺		
	Concrete cube/core		
Fax preliminary test			
results to the project site	2		
office			
Despatch HOKLAS			
endorsed test report to the	4		
project site office			

(b) Steel testing

	Within the no. of working days from the date of receipt of test samples ⁺				
	Steel bar	Structural steel section	Reinforcement connector	Steel fabric	
Fax preliminary test results to the project site office		8	4	6	
Despatch HOKLAS endorsed test report to the project site office		10	6	8	

⁺ The turnaround time for the contract laboratories to provide the test results may be longer depending on the testing demand and the workload of the contract laboratories at the time of the test request