



**PUBLIC HEALTH LABORATORY OF JOHOR BAHRU
MINISTRY OF HEALTH**

Doc No: A03-001(a)
Issue No: 03
Issue Date: 15th July 2009
Effective Date : 3rd May 2010
Issue By: Quality Manager
Rev. No: 01
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**STANDARD OPERATIONAL PROCEDURE
Handling of Test Items**

SOP A03-001 (a) Handling of Test Items

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| Reviewed by : | Approved by : |
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Handling of Test Items**

1.0 PURPOSE

This procedure provides proper handling of test items and effective communication with customer in order to ensure quality service to meet customer satisfaction.


2.0 SCOPE

This procedure is applied to Public Health Laboratory of Johor Bahru, Ministry of Health.

3.0 RECEIVING OF TEST ITEMS

3.1 PROCESS OF RECEIVING

- 3.1.1 Test items are received from the customers usually by Authority Officer according to the procedure in Food Act 1983 and Food Regulation 1985.
In some circumstances the test items are taken by the analyst itself or send by other agencies.
- 3.1.2 The request for analysis of foods samples shall be made using Form A (Refer to Food Act 1983 and Food Regulations 1985, Third Schedule) for all enforcement sample.
- 3.1.3 The test items shall be delivered to the laboratory with the least practicable delay.
- 3.1.4 All the test items are received at the "Sample Receiving Counter". The analyst is responsible to receive the test items.
- 3.1.5 The analyst will identify and label the test items with the laboratory number. Registration of samples can be made by individual sample or

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by batch of samples and to be recorded in the Samples Custodian Form; A06-001 (a) (APPENDIX 5)

- 3.1.6 The laboratory number, sample reference number and date received shall be recorded by the analyst in the logbook/ record/ computer system.
- 3.1.7 The test items together with the form will be sent to respective unit. The sample is then proceed to sub-sampling process as in 4.0 or temporary storage as in 5.0.
- 3.1.8 The receipt of acknowledgement of test items will be issued by the analyst.

3.2 CRITERIA FOR RECEIVING THE TEST ITEMS

The criteria and things to be checked in Form A and/or recorded in Sample Custodian Form (A06-001 (a)) before acceptance of the test items are:-

- 3.2.1 Date- test items taken and date received
- 3.2.2 Test items information- sample name, sample reference number, purpose of sample taken
- 3.2.3 Packaging- type of package used and package condition. Refer to APPENDIX 1
- 3.2.4 Test items amount- the amount / weight of test items. Refer to APPENDIX 1 - (exception for outbreak or food poisoning cases)
- 3.2.5 Test items condition- test items temperature, official seal and test items label.

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3.2.5.1 For microbiological analysis, samples of fresh, perishable, refrigerated or ready- to-eat food shall be transported in an icebox with melting ice at temperature between 1°C - 4°C.

3.2.5.2 The diagram for packing sample in icebox is stated in APPENDIX 2. Below is the procedure for packing sample in icebox:-

- a. Small ice cubes are used.
- b. The sample should be arranged separately in ice to enhance rapid cooling and easy flowing of melting ice.
- c. The arrangement of the samples should not overlap each other and do not touch the ice-box.

3.2.6 Purpose of sample taken is categorized into different group and the description can be referred in Appendix 4.

All the requirements regarding the above matter must be followed otherwise test items will be rejected (exception to be made on outbreak or crisis samples) The analyst must make sure that all information stated is parallel between label in test item, Form A and Sample Custodian Form (A06-001 (a)).

3.3 REJECTION OF THE TEST ITEMS

3.3.1 In case of rejected test items, the same receipt of



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acknowledgement as stated at 3.1.8 will be issued, stating the reason of rejecting samples.

3.3.2 Rejected sample should be labeled "REJECTED" as Appendix 3.

3.3.3 The rejected sample will then be discarded by sample receiving officer or return back to customer upon request.

3.3.4 Any action taken will be recorded in the Sample Custodian Form (A06-001(a)) by receiving officer.

3.4 CRITERIA OF REJECTION

3.4.1 For microbiological samples, additional criteria/reason for rejecting samples are:-

- a) Amount of ice not sufficient and size is too big and not enough to control the temperature inside the ice-box.
- b) Overlapping samples.
- c) Leakage of plastic covering/ packaging sample which can affect the integrity.
- d) Temperature is not within the specific range.

3.4.2 For chemical samples, additional criteria/ reason for rejecting samples are:-

- a) Leakage of plastic covering/ packaging sample which can affect the integrity.
- b) Under weight



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3.5 HANDLING OF NON-CONFORMING PRODUCT

- 3.5.1 In some circumstances, if acceptance criteria are not met, samples can still be received upon approval by respective head of unit. Head of unit needs to initial on related column in Sample Custodian Form (A06-001(a)) as an evidence of approval of acceptance.
- 3.5.2 If there are any changes in Form A (e.g. parameters required are not offered or change to a new parameter), sample receiving officer needs to confirm with respective head of unit and inform to customers. Customers need to strike through to make changes in Form A, initial, and write down the correct information.

4.0 SUB-SAMPLING

- 4.1 Analyst will do the sample sub-sampling of the test items and / or store the test items accordingly. Details of sub-sampling procedures need to be referred to Document No. A03-002:- Sub-sampling of Samples.
- 4.2 The test item's package/ container must be labeled before storage. The label consists of laboratory number, test items name, receiving date and storage identification. The label must be attached to the test items firmly.
- 4.3 The sub sampling items is then proceed to analysis process or temporary storage.



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5.0 TEMPORARY STORAGE

- 5.1 Chemical test items will be stored in the sample storage area. Perishable test items are kept either in the chiller (2°C to 8°C) or freezer while non-perishable items are kept at room temperature.
- 5.2 For microbiological test items, perishable test items are kept in the chiller (1-4°C) or freezer while Non-Perishables Sample/Shelf Stable Packaged Products/Dry Food/ canned Food and Processed food will be kept at room temperature.
- 5.3 Prepared sample for microbiological analysis can be temporarily stored in refrigerator at 1-4°C for not more than 18 hours and cannot be exposed to room temperature for more than 15 minutes.
- 5.4 All movement of test items must be recorded in custodian form and traceable. Analyst shall record new storage location, date and time of transfer and analyst name.
- 5.5 Only authorized personnel are allowed to enter the storage area. The storage area will be locked all the time.

6.0 ANALYSIS

- 6.1 Analysis will be done according to parameter/analysis requested by customers.
- 6.2 Extraction and instrumentation for test items are carried out according to the method specified in the documented test method in each unit, by authorized personnel.



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- 6.3 For contravene test items, the analysis needs to be repeated up to 3 replicates (minimum 2 replicates) using remaining of test items (except for microbiological testing).
- 6.4 All the data, e.g. instrument performance check, calibration curve, worksheet and result generated from this analysis are attached together and will be compiled for verification of result.

7.0 RESULT VERIFICATION


- 7.1 All result must be verified and approved by officer in respective unit before being printed and sent to client
- 7.2 Details can be referred to Doc No A03-003 Result Verification.

8.0 RESULT GENERATION

- 8.1 All verified test results will be send for data entry in Labinfo system.
- 8.2 The Labinfo system is protected by a password to prevent unauthorized access and unauthorized amendment of the computer records. The system can only be accessed by authorized personnel.
- 8.3 The data in the Labinfo system is back-up monthly and will be recorded in a Logbook. The back up data is kept by authorized personnel in locked cabinet.
- 8.4 The printed result will be double checked by analyst before approval and distributed to the client.

9.0 DISTRIBUTION OF RESULT

- 9.1 Result of the analysis will be sent to the respective customers by hand/post.

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9.2 In some circumstances such as outbreak or hold test release samples, the result will be released through fax/ phone

10.0 DISPOSAL OF ITEMS

10.1 Non-contravene test items for chemical analysis, will be disposed after issuance of test report.

10.2 Contravene test items for chemical analysis, samples will be disposed after 150 days from the date of sample received or return back to customer upon request.


10.3 Perishable test items for Microbiological analysis will be disposed after analysis and to be autoclaved before being disposed. Details can be referred to Doc. No. A03-022a (Handling of Microbiological Environment and Apparatus).

10.4 Non perishable test items for microbiological will be disposed after issuance of test report for non contravene sample while contravene sample will be disposed after 150 days from the date of sample received or return back to customer upon request.

10.5 All disposal work must be recorded in the sample custodian form.

11.0 COMPILATION OF RESULTS

11.1 All the data, e.g. instrument performance check, calibration curve, worksheet and result generated from this analysis are attached together and will be compiled and kept according to Document No. A03-004:-
 Compilation of Test Results.

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12.0 POST-DELIVERY ACTIVITIES

12.1 After result distribution, for any post delivery services, the analyst will liaise with customer. Example of post delivery activities includes giving expert opinion in court, giving explanation to customer inquiry and etc.

13.0 EFFECTIVE COMMUNICATION WITH CUSTOMER

The effective communication with customer is done to ensure the customer have better understanding on handling of test item and to minimize rejecting of samples.

13.1 If any customer property is lost, damaged or otherwise found to be unsuitable for use, the customer will be informed and recorded.

13.2 The following documents will be uploaded at MKAJB Portal (http://jknjohor.moh.gov.my/modules/xt_conteudo/index.php?id=28)

13.2.1 SOP of Handling of Test Items

13.2.1.1 List of parameters offered by food section, Public Health Laboratory of Johor Bahru (refer Appendix 6).


13.2.2 'Jadual Tugas Penerimaan Sampel'.

13.2.3 'Jadual Penghantaran Sampel Mikrobiologi'

13.2.4 'Interpretasi Keputusan Mikrobiologi'.

13.2.5 Any reviews to the above documents will be updated at the portal.

A letter of acknowledgement will be sent to the customers. Acknowledgement receipt form (Borang Pengesahan Penerimaan Dokumen, A06-001(b), refer Appendix 7) will be attached with the

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letter posted/faxed. The receiver has to sign the acknowledgement of receipt form and return it by post/fax as an evidence of receipt.

- 13.3 An annual program (Hari Bersama Pelanggan) will be held to discuss issues related to handling of test items. Problems and questions by customers will be listened and tried to be solved.
- 13.4 Upon request by customers, officers from Public Health Laboratory of Johor Bahru will give a talk at customer's place regarding handling of test items.
- 13.5 Criteria for Acceptance of Samples by every unit (Appendix 1) will be displayed at notice board in front of sample receiving counter.
- 13.6 If there is any update on new parameters being offered or parameters being stopped service, information will be sent by letter.

14.0 REFERENCES

- 14.1 Manual for Microbiological Examination of Foods Vol. 1 & Vol. 2, Ministry of Health, 2000.
- 14.2 Manual for Microbiological Examination of Food, Australian Standard.

