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# QUALIFYING THE PESTICIDES RESIDUES TESTING LABORATORY FOR ACCREDITATION

Post-Assessment Report

April 19, 2010

This publication was produced for review by the United States Agency for International Development. It was prepared Lina Qudah and Shereen Abbadi from Al Jidara.

# **QUALIFYING THE PESTICIDES RESIDUES TESTING LABORATORY FOR ACCREDITATION**

POST-ASSESSMENT REPORT

USAID JORDAN ECONOMIC DEVELOPMENT PROGRAM

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DELOITTE CONSULTING LLP

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OFFICE OF ECONOMIC GROWTH

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FROM AL JIDARA

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## EXECUTIVE SUMMARY

This report summarized the outcomes and findings of the post assessment activities conducted on 2<sup>nd</sup> December 2009 to assess the readiness of the Pesticides Residues Laboratory in the Ministry of Agriculture to apply for accreditation. This was done by evaluating the degree of system implementation and fulfilling other requirements conveyed to the laboratory earlier.

A previous report titled “Preparing Pesticides Residues Laboratory for Accreditation” was prepared by the consulting team to describe the consultation support that was provided to the laboratory. This report is a continuation of the assistance to evaluate the level of system implementation and define further corrective and improvement actions, as appropriate.

The previous consultation support that was provided to the laboratory included:

- A pre-assessment of the management practices and management system documentation and defined the gaps to fulfill the requirements of ISO/IEC 17025.
- Developing a quality management system for the laboratory that includes the Quality manual, Quality management system procedures and relevant work instructions, Forms, Guidance on the layout of testing Standard Operating Procedures (SoPs).
- Specialized training covering the developed system, internal audit and measurement uncertainty.

This assessment visit covered all actual activities currently running in the laboratory, following a three- month period that was given to the laboratory to implement the newly developed quality management system and fulfil other accreditation requirements that were conveyed to the laboratory’s management and Plant Laboratories Directorate in the Ministry of Agriculture.

## GENERAL INFORMATION

Assessed Organization:	PRTL – Ministry of Agriculture.
Assessment Type:	Assessment of implementation of the developed system
Lead assessor:	Lina Qudah
Quality assessor:	Shereen Abbadi
Technical assessors:	_____
Assessment criteria:	ISO/IEC 17025
Assessment Dates:	2 December 2009

## ASSESSMENT DETAILS

### SCOPE ASSESSED

#### Methods and Procedures Assessed and Witnessed

This assessment visit covered all actual activities currently running in the laboratory. However, no witnessing of any testing was covered during the visit. This assessment is following a three- month period that was given to the laboratory to implement the management system that was developed by the consulting team and fulfil other accreditation requirements that were conveyed to the laboratory's management and Plant Laboratories Directorate in the Ministry of Agriculture. The main objective of the visit was to assess the laboratory's readiness to apply for accreditation by evaluating the degree of system implementation and fulfilling other requirements conveyed to the laboratory earlier.

A representative sample of documents used and records generated by the laboratory were reviewed before the conclusions documented below were made.

#### Staff Interviewed

During the assessment, the following employees were interviewed:

- Lina Al-Hmoud, Head of Laboratory
- Mukaram Hamed, Technical Officer
- Ibtisam Hamad, Quality Officer

## ASSESSMENT FINDINGS

The followings are the main findings of the post-assessment documented under the sub-headings of the key requirements of the ISO/IEC 17025: 2005:

### Organization

- Legal status:  
The Pesticide Residue Testing Laboratory (PRTL) is part of the Plant Laboratories Directorate which is in turn part of the Ministry of Agriculture (MoA) by virtue of letter no. 8/1/7/1/12731 dated 17 June 2009 issued by the Minister of Agriculture according to article 6/b/3 of Administrative Organizational System for MoA no. 83/2004; its responsibilities are further defined in its quality manual.
- Resources:
  - **Equipment:** The procedure TO-04: Maintenance and Calibration of Equipment fulfils the requirements related to equipment. An equipment list is used to list all equipment affecting test results. All equipment are calibrated and relevant calibration certificates are available in equipment files.  
Equipment files were checked and found to include all required records and information. The following deviations from the standard were noticed and related Non-Conformities (NC) were raised.
    - Equipment is not uniquely identified and the laboratory still uses the old coding system and out of use equipment are not clearly identifies (NC. 17).
    - Equipment status is not filled for all the equipment on the equipment list. (NC 18).

- Acceptance for use template is not duly filled for the GC. (NC 19).
- **Personnel:** the personnel records were checked and found to be adequate. Individual employee's files are available for all employees in the laboratory. The files include education certificates, training records, and records of testing competence using the "Experience level of staff template" which is part of the laboratory's management system. Job descriptions are available for all key personnel. They include responsibilities, required experience and expertise, qualifications, training programs and management duties. One deviation was noticed in personnel files as follows:
  - Although the "experience level of staff" is filled in all employees' files, it is not duly signed by the responsible person. (NC 20).
- **Test methods:** the PRTL is using the instructions used in the equipment manual for performing the extraction test of pesticides residues in vegetables and fruits; the equipment used being the Gas Chromatography (GC)-Mass Spectrometry (MS) HP 5973 GC-ECD (HP 5890/ GC NPD (HP 5890)).
- The PRTL has documented its testing procedure in "TO-03: Test Method for the Analysis of Pesticide Residue in Food Items: determining Organophosphorus and Organochlorine Pesticide residues in fresh fruits and vegetables using Gas Chromatography (GC) with Nitrogen Phosphorus Detector (NPD) and Electron Capture Detector (ECD)". The laboratory is performing the tests according to this method and its relevant instructions; the necessary validation has started however validation data for the test method are still incomplete. Additionally, estimation of uncertainty of measurement for some pesticides when using the test method.
- **Other facilities in the lab:** there is a need for Air Conditioners (AC) and metal curtains in several rooms (e.g. cutting samples and standard rooms) in order to control the temperature and humidity in these rooms.

Refrigerators are attached to data-loggers, connected to computers, used to monitor the refrigerator temperature. The software used on these computers needs to be regularly updated and the technical support provided through the website of the software provider.

- Organization structure including responsibility & authority:

There is a clear description of the responsibilities and flow of work. The work is distributed among the staff according to a work program. PRTL has specified the responsibility, authority and interrelationships of all personnel who manage, perform, or verify work affecting the quality of the tests in the organizational structure and job descriptions on Annex 1 and 2 of the PRTL quality manual.

### **Impartiality, Independence, Integrity and Confidentiality**

The measures to ensure the protection of the confidentiality of customer's information are documented but need to be monitored as described in the laboratory quality manual.

There are no procedures established and implemented for protecting the data; such procedures shall include, but not be limited to, integrity and confidentiality of data entry or collection, data storage, data transmission and data processing.

There is no evidence that computers are maintained to ensure proper functioning and are provided with the environmental and operating conditions necessary to maintain the integrity of test data.

Additionally, there are no procedures defined, neither by the laboratory nor by the IT department of the Ministry, to protect and back-up records stored electronically and to prevent unauthorized access to or amendment of these records. The laboratory is making its own efforts to fulfil this requirements but the practice showed that no systematic approach is followed and personnel performing such activities are not authorised officially by the IT department.

## Management

- Management system including documented policies & procedures:

The laboratory has a readily full documented system designed by the consulting team which include a quality manual meeting the requirements of ISO/IEC 17025 and the following documented procedures:

- Document and Record Control,
- Purchasing Goods and Services,
- Handling Customer Feedback and Complaints,
- Control of Nonconformities, Corrective and Preventive Actions,
- Internal Audits and Management Reviews,
- Personnel Competence and Training,
- Measurement Uncertainty,
- Test Method for Analysis of Pesticides Residues of Food Items,
- Maintenance and Calibration of Equipment,
- Handling of Test Items,
- Quality Assurance,
- Handling Compressed Gas Cylinders (work instructions).

The consulting team has also designed 21 forms that help the laboratory in implementing the system consistently. The laboratory has started using the documented system and already amended some documents the thing that led to citing a nonconformity against the control of documents process; as there were two copies of PRTL quality manual available for use by the laboratory with different contents but holding the same issue number. The laboratory has to ensure that the control of documents procedure is properly implemented.

So far the laboratory has not conducted a full system audit according to ISO/IEC 17025 requirements in order to prepare for the accreditation. The internal audit number TO/200901, which was conducted on 15/11 on the analysts Maram and Atta for the implementation of extraction method, is not considered as a full system audit to ISO/IEC 17025. The numbering of the audit was not done according to the QM-05 procedure. Additionally, the recording of the nonconformity raised in that audit was not made according to the procedure; neither resolved according to the corrective and preventive actions procedures.

The laboratory is not maintaining records of purchasing (purchasing documents such as purchase requests, purchase orders, and tendering documents); neither have access to the centralised purchasing documents maintained by the ministry's



purchasing department. No evidence of evaluation of approved suppliers is also maintained.

- Roles & responsibilities for quality:

PRTL have appointed Ms. Ebtisam Hamad as the Quality Officer who, irrespective of other duties and responsibilities, have defined responsibility and authority for ensuring that the management system related to quality is implemented and followed at all times; Ms. Ebtisam Hamad has direct access to the highest level of management at which decisions are made on laboratory policy or resources.

PRTL have appointed Ms. Mukaram Hamed as the Technical Supervisor who is responsible for the overall technical operations of the laboratory. She is also responsible to ensure that all testing activities are performed in accordance with standard test procedure, PRTL documented management system and the customer requirements.

It was stated during the assessment that the technical supervisor is not authorized to sign the test reports. This is reported as a nonconformity and she has to be given authorities to sign these reports as a confirmation of accuracy of technical data in reports.

- Supervision & monitoring of staff:

From an administrative point of view, the type of supervision and monitoring made is through the leaves-control. From technical point view, the type of supervision and monitoring made is through cross-checking of the information entered on the computer by the administrative staff such checking is made by the analysts. The cross-checking of the final report is made by the laboratory supervisor only before releasing the final report to signing by the lab manager.

## Evaluation Processes

- Enquiries, tenders & contracts:

There is no contract review taking place; any samples arrived are considered. The consulting team has designed test requests forms for the laboratory to use and help in performing the proper contract review. The laboratory needs to use these forms and keep records thereof.

The laboratory is using two systems for logging the received samples; the Laboratory Information Management System (LIMS) software and an excel sheet. The LIMS software needs maintenance and upgrade however none of the laboratory staff can make such maintenance and upgrade therefore the support of the Ministry of Agriculture IT dept. was sought but no support is provided until now.

Samples are registered using a wrong template "sample disposal form" and then registered again on two different excel sheets: one for imported samples and the other for exported samples. The current samples registration practice does not ensure that all samples are logged in one location to avoid confusion. The same excel sheet is used to report results (for internal clients), samples' records are removed and stored on another sheet if residues were detected. This may result in confusion of sample records and risks of data loss. (NC. 22).

- **Planning & resource allocation:**  
There is no clear system of how the planning and allocation of resources are done. The laboratory did not define its capabilities from human and other resources; therefore this part could not be verified.
- **Testing/ calibration process:**  
The laboratory is performing the tests according to the method defined in TO-03; the necessary validation has started however validation data for the test method are still incomplete. Additionally, estimation of uncertainty of measurement for some pesticides when using the test method is still incomplete.

Handling of test items was evaluated; all samples are uniquely identified in a manner that prevents physical confusion of samples. Some issues were observed at samples reception and data management of test results as follows:

Samples are registered using a wrong template "sample disposal form" and then registered again on two different excel sheets: one for imported samples and the other for exported samples. The current samples registration practice does not ensure that all samples are logged in one location to avoid confusion. The same excel sheet is used to report results (for internal clients), samples' records are removed and stored on another sheet if residues were detected. This may result in confusion of sample records and risks of data loss. (NC. 22).

- **Reports & certificates:**  
The laboratory has developed different templates of reports based on the sample source (i.e. local samples, imported samples, etc). All of these report templates are not complying with the requirements of ISO/IEC 17025; they all need to be re-designed.

## Technical Competence

- **Personnel:**  
Personnel competence was not evaluated during this assessment visit. However, it was demonstrated that the staff is trained and personnel records are available. The "Experience level of staff" form is filled for all key staff with dates and experience level but it is not duly signed by the authorized person. Training records for the training courses attended by the laboratory staff on 14-15, 21-22 and 28-29 June 2009 covering Quality Management System implementation, Measurement Uncertainty and Internal Audit were not maintained by the laboratory.

- **Test Methods:**  
The technical capability of the test method was not evaluated during this assessment visit.
- **Facilities / equipment:**  
All equipments used in the laboratory are calibrated. Some findings related to equipment are referred to in several places of this report.
- **Quality Assurance:**  
The laboratory's quality assurance procedure TO-06 covers all the requirements of clause 5.9 of the standard. The laboratory did not succeed in implementing the standards fully and correctly. The following deviation was raised:  
  
The quality assurance plan template is used to log completed quality assurance activities and not to plan them. No reporting and analysis of results took place as per the quality assurance procedure. Quality assurance samples were logged at the sample receipt disk with a special code that differentiates them from regular samples and without using the proper test request template, which made the samples easily identifiable as quality assurance samples by the analysts. (NC. 21)

## **CONCLUSIONS AND DECISIONS OF THE LEAD ASSESSOR**

The laboratory is still not ready for accreditation. Although the quality management system of the laboratory meets the requirements of accreditation and guides the laboratory on how to effectively implement it, the degree of implementation is not sufficient to fulfill accreditation requirements. The non-conforming points referred to within the body of this report have to be cleared before applying for accreditation.

The following points shall be resolved before applying for accreditation:

- Clearance of all Mandatory nonconformities that are raised by the consulting team and documented in the Summary of Findings Excel sheet.
- The Ministry of Agriculture should take a decision regarding the number of samples transferred to the laboratory as they are still beyond the resources of the laboratory.
- Whether to continue using the current LIMS system or not. If not, the laboratory must establish an appropriate systematic substitute for controlling the data of the laboratory.
- The internal audit schedule for 2010 to be prepared in sufficient details highlighting all the elements of the QMS to be audited by the laboratory. A comprehensive full internal audit shall be conducted covering all the requirements of the ISO/IEC 17025 and records of findings maintained.
- Carrying out of a proper management review meeting; the meeting which took place on 10/11 did not cover all items described on QM-05. No action points were defined in the minutes and no evidence on follow up of these actions was available. These are essential component of the management review meeting that need to be considered.

## Summary of Findings

Division / Section / Unit Name		Section/Unit Head	Date		Assessor		
PRTL Laboratory		Auditee Quality Supervisor Ebtisam Hamad	2-Dec-09		Lina Qudah		
Finding no.	Description of Non Conformities / non compliance	Proposed / Implemented Corrective Action (to be proposed by the Lab)	Action Mandatory (M) / Recommended (R)	Proposed Completion Date	Verification of implementation		
					Details of Evidence /(s) Verified	By Lab	By Auditor
1	<u>Clause 4.1.5 a) of ISO/IEC 17025:</u> The laboratory did not define its capabilities from human and other resources; therefore this clause could not be verified.	the laboratory should define its testing capacity per day/month, needed number of personnel and equipment and other additional resources.	R	30-Dec-09			
2	<u>Clause 4.2.1 of ISO/IEC 17025:</u> There was no clear evidence that the quality policy and objectives are communicated to or understood by some of the laboratory personnel.	the laboratory management shall ensure that the quality policy and objectives are communicated and understood by all staff by holding appropriate discussion sessions and maintaining sufficient evidences.	M	15-Dec-09			
3	<u>Clause 4.3 of ISO/IEC 17025; 1.4.1.12 of QM-01:</u> Two documents of the PRTL QMS were available for use by the laboratory with different identification method as "controlled copies" i.e. one of the documents is identified by stamping it as controlled copy, while the other one is identified as such by typing in its footer. Part of the QMS documents were holding the name of the Ministry of Agriculture in its header while others do not.	the lab should use one method for identifying controlled copies. All documents headers should be consistent; i.e. when placing the name of the Ministry of Agriculture in their headers.	R	with immediate effect.			
4	<u>Clause 4.3.2.2 a) &amp; c) of ISO/IEC 17025; 1.4.1.14 of QM-01:</u> Two copies of PRTL Quality manual were available for use by the laboratory with different contents but holding the same issue number.	the laboratory shall ensure that when documents are changed the QM-01 procedure is followed and when changing the document the obsolete copy of the that document shall be "clearly marked as Obsolete Copy"	M	with immediate effect.			
5	<u>Clause 4.14 of ISO/IEC 17025; 1.4.1 of QM-05:</u> The internal audit schedule for 2010 is not detailed enough to indicate all the elements of the QMS to be audited by the laboratory.	the laboratory should revise the schedule and provide more elaborations of the QMS elements undergoing audit.	R	15-Dec-09			

## Summary of Findings

Division / Section / Unit Name		Section/Unit Head	Date		Assessor		
PRTL Laboratory		Auditee Quality Supervisor Ebtisam Hamad	2-Dec-09		Lina Qudah		
Finding no.	Description of Non Conformities / non compliance	Proposed / Implemented Corrective Action (to be proposed by the Lab)	Action Mandatory (M) / Recommended (R)	Proposed Completion Date	Verification of implementation		
					Details of Evidence /(s) Verified	By Lab	By Auditor
6	<u>Clause 4.6.3 of ISO/IEC 17025; 1.4.19-20 of QM-02:</u> the laboratory is not maintaining records of purchasing (purchasing documents such as purchase requests, purchase orders, and tendering documents); neither have access to the centralised purchasing documents maintained by the ministry's purchasing dept.	The lab shall maintain such records or have access (electronically or as hardcopies) to purchasing documents related to its purchases.	M	with immediate effect.			
7	<u>Clause 4.14 of ISO/IEC 17025; 1.4.1-5 of QM-05:</u> the internal audit TO/200901 which was conducted on 15/11 on the analysts Maram and Atta for the implementation of extraction method is not considered as a full system audit to ISO/IEC 17025. The numbering of the audit was not done according to the QM-05 procedure. Additionally, the recording of the nonconformity raised in that audit was not made according to the procedure; neither resolved according to the corrective and preventive actions procedures.	the laboratory shall perform a full system audit prior to accreditation covering all QMS elements. The reporting and actions taken on the audit findings shall follow the relevant procedures of the laboratory.	M	31-Dec-09			
8	<u>Clause 4.15 of ISO/IEC 17025; 1.4.2 of QM-05:</u> The management review meeting which took place on 10/11 did not cover all items described on QM-05. No action points were defined in the minutes and no evidence on follow up of these actions was available.	the laboratory shall conduct a management review meeting covering all the items described under 1.4.2 of QM-05 following the internal audit and prior to accreditation. The minutes of the meeting shall contain findings from management review and the actions that arise from it. The lab management shall ensure that those actions are carried out within an appropriate and agreed timescale.	M	25-Feb-10			
9	<u>Clause 5.4.5 of ISO/IEC 17025:</u> Validation data for the test method "determining Organophosphorus and Organochlorine Pesticide residues in fresh fruits and vegetables using Gas Chromatography (GC) with Nitrogen Phosphorus Detector (NPD) and Electron Capture Detector (ECD)" are still incomplete.	the laboratory shall finalize the data prior to the internal audit.	M	30-Dec-09			

## Summary of Findings

Division / Section / Unit Name		Section/Unit Head	Date		Assessor		
PRTL Laboratory		Auditee Quality Supervisor Ebtisam Hamad	2-Dec-09		Lina Qudah		
Finding no.	Description of Non Conformities / non compliance	Proposed / Implemented Corrective Action (to be proposed by the Lab)	Action Mandatory (M) / Recommended (R)	Proposed Completion Date	Verification of implementation		
					Details of Evidence /(s) Verified	By Lab	By Auditor
10	<u>Clause 5.4.6 of ISO/IEC 17025:</u> Estimation of uncertainty of measurement for for some pesticides when using the test method " <i>determining Organophosphorus and Organochlorine Pesticide residues in fresh fruits and vegetables using Gas Chromatography (GC) with Nitrogen Phosphorus Detector (NPD) and Electron Capture Detector (ECD)</i> " is still incomplete .	the laboratory shall finalize the calculations prior to the internal audit.	M	30-Dec-09			
11	<u>Clause 4.13.1.4 of ISO/IEC 17025:</u> No procedures are defined, neither by the lab nor by the IT dept. from the ministry, to protect and back-up records stored electronically and to prevent unauthorized access to or amendment of these records. The laboratory is making its own efforts to fulfil this requirements but the practice showed that no systematic approach is followed and personnel performing such activities are not authorised officially by the IT dept.	the laboratory shall coordinate with the IT dept. at the Ministry to establish such procedure and get necessary authorisation for the lab personnel who are responsible for applying such activities. Competence, authorization and training records for personnel responsible for applying the procedures shall be maintained.	M	30-Dec-09			
12	<u>Clause 5.4.7 b) and c) of ISO/IEC 17025:</u> No procedures are established and implemented for protecting the data; such procedures shall include, but not be limited to, integrity and confidentiality of data entry or collection, data storage, data transmission and data processing.No evidence is maintained that computers are maintained to ensure proper functioning and are provided with the environmental and operating conditions necessary to maintain the integrity of test data.	the laboratory shall coordinate with the IT dept. at the Ministry to establish such procedure and get necessary authorisation for the lab personnel who are responsible for applying such activities; this shall include mechanisms for maintenance of computers. Competence, authorization and training records for personnel responsible for applying the procedures shall be maintained.	M	30-Dec-09			



## Summary of Findings

Division / Section / Unit Name		Section/Unit Head	Date		Assessor		
PRTL Laboratory		Auditee Quality Supervisor Ebtisam Hamad	2-Dec-09		Lina Qudah		
Finding no.	Description of Non Conformities / non compliance	Proposed / Implemented Corrective Action (to be proposed by the Lab)	Action Mandatory (M) / Recommended (R)	Proposed Completion Date	Verification of implementation		
					Details of Evidence /(s) Verified	By Lab	By Auditor
13	<u>Clause 5.10 of ISO/IEC 17025:</u> Reports issued by the laboratory to external customers are not meeting the relevant requirements of clause 5.10 of ISO/IEC 17025. The technical supervisor is not authorised to sign the test reports.	<b>Reports templates for all types of samples shall be developed by the laboratory according to the requirements of clause 5.10 of the ISO/IEC 17025. The technical supervisor shall be authorised to sign all test reports.</b>	M	with immediate effect.			
14	<u>Clause 4.6 of ISO/IEC 17025:</u> No evidence of evaluation of approved suppliers is maintained.	<b>the laboratory shall maintain records for the basis of including the existing suppliers in the Approved Suppliers List, i.e. based on past good experience in delivering the required purchases according to specification. For new suppliers to be entered on the list, the questionnaire QM 2.2 can be used as evidence for evaluation.</b>	M	with immediate effect.			
15	<u>Clause 4.8 and 4.10 of ISO/IEC 17025:</u> The procedure for handling customer feedback QM-03 is not yet applied.	<b>the laboratory should establish the system for collecting customer feedback based on the QM-03 procedure.</b>	R	30-Dec-09			
16	<u>Clause 5.2 of ISO/IEC 17025:</u> Training records for the training courses attended by the lab staff on 14-15, 21-22 and 28-29 June 2009 covering QMS implementation, MU and IAs were not maintained by the laboratory.	<b>The laboratory shall maintain copies of training agendas, materials, training participants lists and certificates for all those who attended these training sessions.</b>	M	with immediate effect.			

## Summary of Findings

Division / Section / Unit Name		Section/Unit Head	Date		Assessor		
PRTL Laboratory		Auditee Quality Supervisor Ebtisam Hamad	2-Dec-09		Lina Qudah		
Finding no.	Description of Non Conformities / non compliance	Proposed / Implemented Corrective Action (to be proposed by the Lab)	Action Mandatory (M) / Recommended (R)	Proposed Completion Date	Verification of implementation		
					Details of Evidence /(s) Verified	By Lab	By Auditor
17	<u>Clauses 5.5.4 and 5.5.8 of ISO/IEC 17025:</u> Equipment are not uniquely identified. Obsolete coding is used on equipment labels, and out of use equipment are not clearly labeled.	<b>Removal of obsolete labels and coding. Labels will be used to uniquely identify equipment. "out of use" label will be used.</b>	<b>M</b>	30-Dec-09			
18	<u>Clauses 5.5.4 and 5.5.8 of ISO/IEC 17025 and TO-04:</u> Equipment status is not filled for all of the equipment included in the equipment list.	<b>The lab will review the equipment list and update the status for all the equipment.</b>	<b>M</b>	30-Dec-09			
19	<u>Clauses 5.5.2 and 5.5.5 c) of ISO/IEC 17025 and TO-04:</u> "Acceptance for use template" which is part of the lab's equipment maintenance and calibration procedure is not duly filled for the GC.	<b>The lab will review all equipment files and ensure that the acceptance for use template is duly filled.</b>	<b>M</b>	30-Dec-09			
20	<u>Clauses 5.2.1 and 5.2.5 of ISO/IEC 17025 and QM-01:</u> In personnel files the "Experience level of staff" -which is part of the lab's management system- is filled with dates and experience level but it is not duly signed by the authorized person.	<b>The lab will review all personnel files and ensure that the experience level of staff is duly signed.</b>	<b>M</b>	30-Dec-09			
21	<u>Clauses 5.9.1 and 5.9.2 of ISO/IEC 17025 and TO-06:</u> The quality assurance plan template is used to log completed quality assurance activities and not to plan them. No reporting and analysis of results took place as per the quality assurance procedure. Quality assurance samples were logged at the sample receipt disk with a special code that differentiates them from regular samples and without using the proper test request template, which made the samples easily identifiable as quality assurance samples by the analysts.	<b>The lab will prepare a quality assurance plan for 2010. Quality assurance samples will be logged as regular samples using the proper templates.</b>	<b>M</b>	30-Dec-09			



## Summary of Findings

Division / Section / Unit Name		Section/Unit Head	Date		Assessor		
PRTL Laboratory		Auditee Quality Supervisor Ebtisam Hamad	2-Dec-09		Lina Qudah		
Finding no.	Description of Non Conformities / non compliance	Proposed / Implemented Corrective Action (to be proposed by the Lab)	Action Mandatory (M) / Recommended (R)	Proposed Completion Date	Verification of implementation		
					Details of Evidence /(s) Verified	By Lab	By Auditor
22	<p><u>Clauses 5.8.1 and 5.8.2 of ISO/IEC 17025 and TO-05:</u>  Samples are registered using a wrong template "sample disposal form" and then registered again on two different excel sheets: one for imported samples and the other for exported samples. The current samples registration practice does not ensure that all sample are logged in one location to avoid confusion. The same excel sheet is used to report results (for internal clients), samples' records are removed and stored on another sheet if residues were detected. This may result in confusion of sample records and risks of data loss.</p>	<p><b>The lab will revise the handling of test items procedure and update it to ensure that samples are logged in a manner that avoids confusion and data loss. The lab will ensure that the updated procedure is impliminted using orientation, follow-up and internal audit.</b></p>	M	30-Dec-09			

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