Republic of the Philippines
Department of Health
OFFICE OF THE SECRETARY

JUL 17 2020

ADMINISTRATIVE ORDER
No. ~~2019-~~ 2020-0031

SUBJECT: **Revised Rules and Regulations Governing the Accreditation of Laboratories for Drinking Water Analysis**

I. RATIONALE/BACKGROUND

Chapter II (Water Supply) of Presidential Decree No. 856 or Code on Sanitation of the Philippines requires the initial and periodic examination of drinking water to be done by a DOH-Accredited water testing laboratory. Further, Republic Act No. 9275 or the Philippine Clean Water Act of 2004 and Administrative Order No. 2006-0024 known as the "Rules and Regulations Governing the Accreditation of Laboratories for Drinking Water Analysis", reiterated the importance to safeguard the safety and potability of drinking water in the country, through the regulation of Laboratories for Drinking Water Analysis (LDWA).

The Department of Health (DOH) through the Health Facilities and Services Regulatory Bureau (HFSRB) and the Regulation Licensing Enforcement Division of Center for Health Development (CHD-RLED), in coordination with the National Reference Laboratory for Environmental and Occupational Health, Toxicology and Micronutrient Assay (NRL-EOHTM), are the agencies tasked to regulate LDWA.

A vital component on the regulation of LDWA is the precision and reliability of the results released by testing facilities, that results should be in accordance with the Philippine National Standards for Drinking Water (PNSDW), which was updated through Administrative Order No. 2017-0010 known as the "Philippine National Standards for Drinking Water of 2017". A review of the current accreditation standards was undertaken by HFSRB. Another development is the enactment of RA 10657 or the Chemistry Profession Act. It was deemed that a revision be done to synchronize with the latest PNSDW, to resolve compliance issues of the LDWA, and to align with other relevant laws.

Revision of Administrative Order No. 2006-0024 was carried out to harmonize with existing guidelines and established technical procedures. Likewise, this will ensure one of the main goals of the Universal Health Care Act which is to have a healthy living condition for all Filipinos. Moreover, this will guarantee access to quality and affordable health products, devices, facilities and services.

II. OBJECTIVE

This policy seeks to provide updated guidelines on the accreditation of laboratories for drinking water analysis to be able to generate accurate and reliable results.

III. SCOPE AND COVERAGE

This Order shall apply to all DOH offices, including its attached agencies, involved in the enforcement of drinking water quality standards and to all accredited LDWA nationwide. It shall cover various government, national and local agencies, private entities, persons and enterprises engaged in testing drinking water.

CERTIFIED TRUE COPY
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KMITS - RECORDS SECTION
Department of Health
JUL 29 2020

Drinking water laboratories for purely academic training and/or research and other laboratories performing solely for internal or in-house monitoring shall not be covered by this Order.

IV. DEFINITION OF TERMS:

A. **Applicant** – refers to an individual, partnership, corporation or association seeking a certificate of accreditation to maintain a laboratory for drinking water analysis.

B. **Certificate of Accreditation** (DOH-COA) – refers to a formal authorization issued by the DOH to an individual, partnership, corporation or association seeking to perform drinking water analysis in compliance with the requirements prescribed in this Order. In this Order, accreditation shall mean licensing.

C. **Laboratory for Drinking Water Analysis** (LDWA) – refers to a facility that performs any or combination of these analyses: microbiological, physical, and chemical analysis, to determine the potability and safety of drinking water.

D. **Maximum Allowable Level** (MAL) – refers to he highest level of a contaminant that is allowed in drinking-water..

E. **Mandatory Parameters** – refers to a list of minimum legally enforceable core parameters offered by a laboratory for drinking water analysis which are as follows: Lead, Nitrate, Arsenic, Cadmium, color, turbidity, thermotolerant coliform (E.coli), disinfectant residual, pH, Total Dissolved Solids (TDS).

F. **Philippine National Standards for Drinking Water** (PNSDW) – refers to the bases for the standards for drinking-water quality, water sampling, and examination and evaluation of results.

G. **Quality Manual** – refers to documents that state the quality policy, describe the quality system and quality procedures intended for the overall planning and administration of activities, which affect the quality of laboratory services.

H. **Quality Policy** – refers to statements of intentions or desires of the organization with respect to management of their quality system.

I. **Water Sample** – refers to the collected drinking water sample submitted for analysis.

J. **Water Analysis**– refers to a testing procedure/s performed for the determination of microbiological, physical, and chemical qualities of drinking water

V. GENERAL GUIDELINES

1. All LDWA shall secure a DOH-COA and must comply at all times with the set regulatory standards.
2. The HFSRB and CHD-RLED shall exercise its regulatory function for the initial and renewal issuance of the DOH-COA, respectively.
3. The testing for radiologic or radioactive contaminants in water shall be regulated by the Department of Science and Technology – Philippine Nuclear Research Institute (DOST-PNRI) in accord to its standard protocols.
4. The LDWA shall not perform any examinations or testing beyond the accredited category.
5. The LDWA shall comply with the prescribed standards and requirements listed in the assessment tool. (see Annex A)

6. At the DOH-Central Office, the Director IV, or in his/her absence or unavailability or when delegated, the Director III of HFSRB, shall approve the issuance of the DOH-COA of the LDWA.
7. At the Center for Health Development, the Director IV, or in his/her absence or unavailability or when delegated, the Assistant Regional Director (ARD), shall approve the issuance of the DOH-COA of the LDWA.

VI. SPECIFIC GUIDELINES

A. Classification of LDWA

1. Classification by Ownership:

a. Government – operated and maintained partially or wholly by the national, provincial, city or municipal government, or other political unit, or by any department, division, board or agency thereof.

b. Private – privately owned, established and operated with funds through donation, principal, investment or other means, by any individual, corporation, association or organization.

2. Classification by Institutional Character:

a. Institution based – a laboratory that is located within the premises and operates as part of a DOH licensed health facility.

b. Non-institution based – a laboratory that operates independently and is not attached to any DOH licensed health facility.

3. Classification by Service Capability:

Classfication	Service Capability	Minimum Parameters Tested
A	Microbiological	Detects and enumerate coliform organisms (Total coliform, thermotolerant coliforms/E.coli, and HPC) in the water samples.
B	Physico-Chemical	Detects and quantify physical and chemical characteristics of at least the nine (9) mandatory parameters as stated in the 2017 PNSDW namely: Lead, Nitrate, Arsenic, Cadmium, color, turbidity, disinfectant residual, pH, Total Dissolved Solids (TDS).
C	Microbiological-Physico-Chemical	Offers services both Category A and B

B. Technical Requirements

1. Physical Plant

a. The laboratory shall be located in a permanent building with adequate water and power supply, proper drainage and adequate ventilation. It must be dust-free and must not introduce contamination.

b. Space requirements shall be based on the activities done within the laboratory. Personnel, fixtures, equipments, sink, etc. shall be considered. Minimum area requirements for each are listed in **ANNEX B** (Planning and Desing Guidelines for Hospital and Other Health Facilities) of A.O. No. 2016-0042 dated December 12, 2016,

titled "Guidelines in the Application of Department of Health Permit to Construct". (downloadable from hfsrb@doh.gov.ph)

c. The laboratory workspace shall correlate with the volume and type of analysis to be undertaken including provisions for periods of peak workload. A non-institution based LDWA shall have the following ***MINIMUM WORK SPACE*** requirement per service capability, excluding support areas such as administrative office, storage area, records room, etc.:

c.1 Classification A – 20 sqm. for sterile room and media preparation area

c.2 Classification B – 50 sqm. for wet chemistry area, ICP/AAS room, Spectrophotometer room, and chemical storage room.

c.3 Classification C – 70 sqm. for sterile room and media preparation area, wet chemistry area, ICP/AAS room, Spectrophotometer room, and chemical storage room

d. The laboratory workspace shall have an adequate bench top area for sample processing; storage area for chemicals, glassware and supplies;an area for cleaning of glassware; an area for sterilizing of materials and fixed and portable equipment, and must be well lit.

e. There shall be separation between adjacent areas with unrelated activities.

f. The laboratory shall have an appropriate waste disposal system for solid, liquid, infectious, wastes, which is in accordance with the current DOH Health Care Waste Management Manual, and Department of Environment and Natural Resources – Environmental Management Bureau (DENR-EMB).

g. There shall be adequate physical provisions for effective safety procedures, both for personnel and the public.

2. Personnel

LDWA shall be composed of the following personnel with their corresponding qualifications and functions:

a. Headship

The head of the laboratory shall be a competent and experienced professional, with a specialized skill set related to and proportionate to the laboratory category. The laboratory head is essentially responsible for the operation of entire laboratory, its personnel, functions, and data, all of which shall meet the quality assurance criteria and regulatory requirements.

b. Analysts

The NRL-EOHTM trained analyst involved in the performance of laboratory procedures must have the appropriate degree and at least two (2) years experience in water testing procedures relevant to the service capability of the laboratory.

The following professionals shall be allowed to be an Analyst:

Microbiology	Physico-Chemical
Registered Medical Technologist Certified Microbiologist Registered Food Technologist	Registered Chemist Registered Chemical Technician under the supervision of a Registered Chemist

For microbiology, professionals contracted practice as analysts prior to the issuance of this Order shall still be allowed.

For water chemical analysis, only a Registered Chemist shall certify the result.

c. The laboratory aide must have at least 8 hours (1 day) appropriate training (may be in-house) in relevant laboratory procedures.

d. The Water Sampler, person who collects water sample, must be certified by the DOH.

3. Equipment, Instruments, Reagents and Supplies

a. The LDWA shall have all the necessary equipment, reagents and supplies to perform the the standard method of analysis based on the PNSDW of 2017.

b. The LDWA shall maintain a detailed record of each equipment/instruments such as but not limited to preventive and corrective maintenance, calibration, history of damage, malfunction and repair.

c. The LDWA shall maintain an inventory of reagents and supplies. Detailed description of the reagents, such as but not limited to lot number, manufacturing date, and expiration date, shall also be recorded.

4. Analytical Methods

a. The LDWA shall select appropriate analytical methods for the analyte and sample matrix based on the current PNSDW.

b. Modification of PNSDW analytical methods shall be allowed provided that these are validated and approved by the NRL-EOHTM prior to its use.

c. MAL for each parameter/analyte set forth by the PNSDW shall be strictly followed. Please refer to Annex A of PNSDW 2017 (A.O. no. 2017-0010).

5. Quality and Technical Manual

a. The LDWA shall develop and maintain a quality manual that is appropriate for the types of analysis done and the volume of samples tested. The quality manual shall include (a) systems and work instructions for document control; (b) sample handling and acceptance policies; (c) ethics policy statements, management processes and procedures; (d) essential quality control and assurance requirements for each section of the laboratory; and systems for preventive and corrective actions in cases of unforeseen events and/or deviation from standard operating procedures.

b. The LDWA shall have written administrative policies and procedures for the maintenance of its operation.

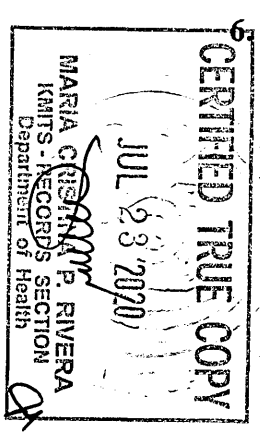
c. The LDWA shall develop and maintain a technical manual, which covers the scope of accreditation. Specific laboratory procedures, such as but not limited to test principle, interference, reagent/standard, preparation, calibration and quality control procedures, data evaluation and calculation, shall be reflected on the technical manual.

6. Laboratory Report

a. All laboratory reports must have accurate test results and shall bear the names of the head of the laboratory, analyst and testing facility.

b. The head of the laboratory and analyst must affix their signatures in all laboratory reports prior to issuance.

c. Laboratory reports for chemical analysis shall be certified by the registered chemist and shall bear the registered chemist's seal or the seal of the registered chemist.



d. All laboratory reports bearing electronic signatures of the head of the laboratory shall be considered valid, provided that the laboratory has procedures in place to guard against improper use of the electronic signature and is subject to the provisions and conditions of the "Electronic Commerce Act of 2000" (Republic Act No. 8972).

e. For outsourced tests, the issued results shall be that of the referral LDWA.

f. All LDWA reports shall include all the information prescribed by the DOH.

7. Laboratory Records

a. The LDWA shall maintain complete records of all laboratory activities done from laboratory requests, sampling records, analytical reports, to quality control records.

b. The LDWA shall also maintain personnel records, equipment maintenance records, computer programs and electronic data.

c. All LDWA records shall be kept and organized for easy retrieval.

d. All LDWA records shall be retained and disposed based on the policy of the National Archive of the Philippines.

e. All LDWA records are confidential in accordance with the "Data Privacy Law" (Republic Act No. 10173), and shall be kept in a secure area, protected from theft, tampering, and damaging.

f. The LDWA shall have a written plan on the maintenance and transfer of records in the event of change in ownership or termination of operation.

8. Quality Management

a. The LDWA shall prepare and adopt a quality assurance program to establish, maintain and improve the quality of data generated by the laboratory.

b. The LDWA shall analyze quality control samples for each batch of analysis run in order to ensure the proficiency of the analyst/s and equipment.

c. The LDWA shall conduct an internal quality audit at least once a year.

d. All quality control records and information shall be available in the LDWA at all times.

9. Proficiency Testing

a. All accredited LDWA must participate in annual proficiency testing for microbiological analysis and every three (3) years for chemical analysis conducted by the NRL-EOHTM.

10. Outsourcing

a. The referral laboratory shall be DOH-accredited LDWA with at least the same service capability as the referring laboratory. There shall be a Memorandum of Agreement (MOA) between two contracting parties.

b. Referral or outsourcing of examinations shall only be allowed in cases of machine breakdown, for a certain limited period of time only, which shall not last for more than 3 months. The laboratory test/s or analyte/s to be sent out shall be part of the service capability expected for the particular category of the referring laboratory.

c. For outsourced microbiological tests, the specimen collection site shall be located within a maximum of (100) kilometre radius from the address of the DOH accredited LDWA.

d. Equipment breakdown for one (1) year shall be a basis for suspension of DOH-COA.

C. Certificate of Accreditation

1. The DOH-COA shall reflect all the allowable parameters for each classification.
2. The DOH-COA is valid for three (3) years, effective from January 1 of the first year and shall expire on the last day of December on the third year.
3. The DOH-COA is non-transferrable.
4. The HFSRB shall be notified in writing of any change in management name, ownership, or headship or laboratory personnel. Failure to notify in writing within fifteen (15) days of any substantial change in the condition of the laboratory, i.e. changes in the physical plant, equipment, or personnel, may be a basis for the suspension or revocation of the accreditation.
5. In cases of transfer of location, new application for accreditation shall be required.
6. A separate accreditation shall be required for all LDWA or branches maintained in separate location but operated under the same management.
7. Under the One-Stop Shop Online Licensing System (OSSOLS), a laboratory that is a unit/section/division of a institutioned-based clinical laboratory shall no longer be required to secure a separate DOH-COA provided that accreditation standards and technical requirements to perform examination of drinking water had been met. Hence, the permission to perform examination of drinking water shall be included in the LTO of the clinical laboratory and shall be renewed annually.
8. The DOH-COA shall be placed in a conspicuous area which can be readily seen by the public.
9. A copy of the rules and regulations shall be made available at all times for guidance of all personnel of the LDWA.

D. Application Procedures

1. Any person, firm or corporation desiring to establish, operate and maintain LDWA shall submit an accomplished application form to HFSRB for initial or to CHD-RLED for renewal.
2. A complete application for DOH-COA of an LDWA shall consists of the following:
    a. Completely filled out application form;
    b. DTI or SEC Registration; and
    c. For renewal of DOH-COA for classification B and C, a Certificate of Authority to Operate from Professional Regulatory Commission – Board of Chemistry in pursuant to the "Chemistry Profession Act" (R.A. No. 10657).
    d. Copy of OR payment

    For institution based LDWA under the One-Stop Shop licensing system, Administrative Order No. 2018-0016 dated June 4, 2018, titled "Revised Guidelines in the Implementation of the One-Stop Shop Licensing System" shall be followed.
3. All applications, whether initial or renewal, for DOH-COA shall only be granted after the HFSRB/CHD-RLED has determined, by assessment that the laboratory has complied with the accreditation requirements. If, upon assessment, the laboratory was not able to comply with the accreditation requirements, the HFSRB/CHD-RLED shall provide a written report outlining the laboratory's deficiencies. The laboratory must comply with the deficiencies within thirty (30) days. Otherwise, the application shall automatically be denied.
4. The application fee is non-refundable and according to the DOH prescribed application.

5. Upon receipt of the complete application forms, the HFSRB/CHD-RLED representative reviews the application and conducts an on-site assessment of the laboratory to determine full compliance with the standards and technical requirements.
6. Renewal application for DOH-COA shall be submitted to HFSRB/CHD-RLED from October 1 to December 15 only, which is in accordance with A.O. no. 2019-0004 dated April 30, 2019, titled "Guidelines on the Annual Cut-off Dates for Receipt of Complete Applications for Regulatory Authorizations Issued by the Department of Health".
7. Failure to submit an application for DOH-COA within the prescribed period shall be given sanctions under A.O. no. 2019-0004.
8. Submitted complete applications that are not processed within twenty (20) days shall automatically be granted the Certificate of Accreditation.

E. Monitoring

1. Authorized representatives from the HFSRB/CHD-RLED shall conduct unannounced on site visits of accredited LDWA to monitor and document the continuous compliance of the LDWA to the set standards.

2. If upon monitoring visit, the LDWA is found to be violating any of the rules and regulations stated herein relative to its operation, the HFSRB/CHD-RLED may immediately impose preventive suspension, which shall not be more than sixty (60) days, to the said LDWA.

3. Findings during monitoring visits by the PRC Board of Chemist shall be reported to DOH-HFSRB for approriate action.

F. Violations and Sanctions

1. The accreditation of LDWA may be suspended or revoked by the HFSRB/CHD-RLED Director upon violation of any of these rules and regulations, or upon committal of any of the following acts by the persons owning or operating the LDWA, and/or the persons under their authority:
    a. Issuance of fraudulent water testing results;
    b. Transferring of laboratory results done by another laboratory to the result form of the referring laboratory;
    c. Reporting of test results which are not actually done;
    d. Performing laboratory procedures beyond their authorized service capability;
    e. Unauthorized use of the name and signature of the head of the laboratory and/or the analysts;
    f. Permitting unauthorized or unregistered persons to perform technical procedures;
    g. Change in the ownership, location, and head of the laboratory or laboratory personnel without informing the HFSRB/CHD-RLED;
    h. Refusal to allow monitoring visits of the LDWA by HFSRB/CHD-RLED authorized personnel at any appropriate time;
    i. Any material false statement in the application; and
    j. Other violations similar or analogous to the above.

2. Sanctions shall be imposed for the following violations:

Violation	Sanction
a. Non-participation to External Quality Assessment Program	**1st offense:** Stern warning **2nd offense:** Php 30,000.00 **3rd offense:** Php 50,000.00 **4th offense:** Revocation
b. Unsatisfactory rating to External Quality Assessment Program	**1st offense:** Stern warning provided there is a record of corrective action taken. Otherwise, DOH-COA shall be immediately revoked. **2nd offense:** Revocation of DOH-COA

3. In case of complaints, the LDWA, upon receipt of such by HFSRB, shall be given due process wherein an investigation shall be conducted and the appropriate sanctions for violation meted out. Sanctions may either be suspension or revocation of the COA.

Any LDWA or any of its personnel not amenable with the decision of the HFSRB/CHD-RLED may, within ten (10) days after the receipt of notice of decision, file a notice of appeal to the Head of the Health Regulations Team (HRT). All pertinent documents and records of the appellant shall then be elevated by HFSRB/CHD-RLED to the HRT. The decision of the Head of the HRT, if still contested maybe brought on a final appeal to the Secretary of Health, whose decision shall be final and executory.

VII. ROLES AND RESPONSIBILITIES

1. **Health Facilities and Services and Regulatory Bureau (as per A.O. No. 2014-0036)**
   a. Strictly enforce provisions of this order.
   b. To set standards for the regulation of health facilities including LDWA.
   c. To create/modify inspection and monitoring tools from time to time.
   d. To disseminate regulatory policies, standards and forms for information and guidelines of the Regional Offices.
   e. To provide consultation and technical assistance to stakeholder , including regulatory officers from thr DOH-CHDs in regulation of LDWA.
   f. To inspect and issue DOH-COA for initial application.
   g. To conduct unannounces monitoring visits to check for continuous compliance of LDWA.
   h. To promply respond to complaints relative to the operation of LDWA.

2. **Center for Heatlh Development – Regulatory, Licensing, and Enforcement Division**
   a. Strictly enforce the provsions of this Order.
   b. To inspect and issue DOH-COA for renewal application.
   c. To conduct unannounces monitoring visits to check for continuous compliance of LDWA.
   d. To submit quarterly report on Suspecion/Revocation/ Cease and Desist Order issued on LDWA not later than the 15th day of the following month.
   e. To promply respond to complaints relative to the operation of LDWA.

3. **National Reference Laboratory for Environmental, Occupational Health, Toxicology and Micronutrient Assay (NRL-EOHTM)** – a government agency attached to East Avenue Medical Center.
   a. Provide laboratory reference / referral services for confirmatory testing
   b. Train laboratory personnel, analysts and the drinking water sampler.
   c. Maintain quality assurance program for laboratory tests through proficiency testing
   d. Perform technical evaluation of reagents and diagnostic kits.

VIII. TRANSITORY PROVISIONS

All existing accredited laboratories shall be given two (2) years to fully comply with the new requirements including physical structures from the date of effectivity of this A.O.

For new laboratories, this A.O. shall be strictly followed.

IX. SEPARABILITY/REPEALING CLAUSE

In the event that any provision or part of this Order be declared unauthorized o rendered invalid by any court of law or competent authority, those provisions not affected by such declaration shall remain valid and effective. These rules and regulations shall rescind Administrative Order No. 2006-0024, all administrative orders and previous issuances inconsistent thereof.

X. EFFECTIVITY

This Order shall take effect fifteen (15) days after its publication in a newspaper of general circulation and upon filing with the University of the Philippines Law Center of three (3) copies of this Order.

FRANCISCO T. DUQUE III, MD, MSc
Secretary of Health

CERTIFIED TRUE COPY
JUL 23 2020
MARIA CRISTINA P. RIVERA
KMITS - RECORDS SECTION
Department of Health

Annex A
A.O. No. 2020-0031

Republic of the Philippines
Department of Health

ASSESSMENT TOOL FOR ACCREDITATION OF LABORATORY FOR DRINKING WATER ANALYSIS

I. HEALTH FACILITY INFORMATION

Name of Facility: _____

Address: _____

Geographic Coordinates of the Facility: Latitude: _____ Longitude: _____

Email Address: _____ Tel. / Fax Nos.: _____

Name of Owner: _____ Tel. / Fax Nos.: _____

Name of Head of Laboratory: _____

Accreditation No.: _____ Expiry Date : _____

Date Issued: _____

Type of application: ☐ New ☐ Renewal ☐ Others: (specify)

Classification:

Institutional Character: ☐ Institution-based ☐ Freestanding

Ownership: ☐ Government ☐ Private

☐ National ☐ Single Proprietorship

☐ Local ☐ Corporation

☐ Others: (specify) ☐ Others: (specify)

Service Capability:

☐ Category A. Microbiological

☐ Category B. Physical Chemical

☐ Category C. Microbiological-Physical-Chemical

PART 1 - SERVICES

***Notes:** In the appropriate box, place a check mark (√) if the LDWA is compliant or X-mark if not compliant.
Conduct document review of at least 10 sample documents.

CRITERIA	INDICATOR	EVIDENCE	AREAS	COMPLIED	REMARKS
I. LEADERSHIP AND MANAGEMENT **A. MANAGEMENT REVIEW** **Standard: The provider organization's management team provides leadership, acts according to the organization's policies and has overall responsibility for the organization's operation, and the quality of its services and its resources**					
1. Organizational Structure/Chart	Presence of organizational structure	**OBSERVE** Observe if the organizational structure / chart is posted in conspicuous area.	Lobby		
2. The organization and its services develop their vision, mission and corporate goals based on agreed-upon values	Presence of written vision, mission, and goals of the laboratory and all services	**DOCUMENT REVIEW** Written vision, mission and goals **OBSERVE** Posted vision and mission in a conspicuous area	Laboratory and Administrative Services		
3. The organization and its services develop their policies and procedures.	Written policies and procedures manual for all services	**DOCUMENT REVIEW** Written Policies Procedure manual	Laboratory and Administrative Services		
4. Administrative and technical monitoring and Evaluation activities to assess management and organizational performance	Presence of evaluation and monitoring activities to assess management and organizational performance	**DOCUMENT REVIEW** Accomplishment reports or other annual reports as applicable Supporting documents for evaluation and monitoring of activities such as records, logbooks, checklist of supplies, inspection report, purchasing or procurement and acceptance of supplies, etc.	Administrative Office		

II. HUMAN RESOURCE MANAGEMENT **A. HUMAN RESOURCES PLANNING** **Standard: Workload is monitored and appropriate guidelines consulted to ensure that appropriate staff numbers and skill mix are available to achieve desired customer and organizational outcomes.**					
1. The organization documents and follows policies and procedures for hiring, credentialing, and privileging of its staff.	Presence of policies and procedures for hiring, credentialing and privileging of staff	**DOCUMENT REVIEW** Policies and procedures for hiring, credentialing and privileging of staff **INTERVIEW** Human Resources Management Officer/Personnel Officer	Personnel/ Administrative office		
2. Staff numbers and skill mix are based on actual services offered.	Refer to Attachment of Assessment Tool for Personnel	**DOCUMENT REVIEW** List of laboratory personnel based on HR records Payroll Schedule of duties for the previous and current month 201 files of employees	Personnel/ Administrative office		
B. STAFF RECRUITMENT, SELECTION, APPOINTMENT AND RESPONSIBILITIES **Standard: There are relevant orientation, training and development programs to meet the educational needs of management and staff.**					
1. Professional qualifications are validated, including evidence of professional registration /license where applicable, prior to employment	Presence of Qualification Standards	**DOCUMENT REVIEW** Check Qualification Standards; procedures in hiring. **OBSERVE** Check valid PRC ID, PRC License, PAM Registration, Certificate, and valid ID	Personnel/ Administrative office		

2. The staff are provided with a documented job description outlining accountabilities and responsibilities	Proof that staff are provided with job description outlining their accountabilities and responsibilities	**DOCUMENT REVIEW** Written job descriptions with conforme	Personnel/ Administrative office		
C. STAFF TRAINING AND DEVELOPMENT **Standard: There are relevant orientation, training and development programs to meet the educational needs of management and staff.**					
1. New personnel , new graduates and external contractors are adequately supervised by qualified staff	Proof that new personnel are adequately oriented and supervised	**DOCUMENT REVIEW** Documentation of orientation conducted **INTERVIEW** Ask new personnel about the lines of authority and supervision and if the supervision is adequate	Personnel/ Administrative office		
2. Annual plan on training activities	Presence of annual plan on training activities	**DOCUMENT REVIEW** Annual plan (including resource/budgetary allocation) on training activities	Personnel/ Administrative office		
III. INFORMATION MANAGEMENT **A. DATA COLLECTION AND AGGREGATION** **Standard: Relevant, accurate, quantitative and qualitative data are collected and used in a timely and efficient manner for delivery of patient care and management of services**					
1. Records are stored, retained and disposed of in accordance with the guidelines set by National Archives of the Philippines (NAP)	Policies and procedures on record storage, retention and disposal.	**DOCUMENT REVIEW** Logbooks on record storage, retention and disposal **OBSERVE** Proper storage of records	Administrative Office		

2. The organization defines data sets, data generation, collection and aggregation methods and the qualified staff who are involved in each stage.	Presence of annual statistical reports and other additional laboratory statistics as determined by the management (Refer to National Archives of the Philippines (NAP) per DC No. 70 s. 1996)	**DOCUMENT REVIEW** Policies and procedures on record storage, safekeeping and maintenance, retention and disposal. Compilation of data used for administrative purpose from procurement, delivery, storage, including sample requests, analysis, reports, monitoring tools, QC data. **OBSERVE** Presence of Available raw data in accordance with the methods used and sample received	Administrative Office		
B. RECORDS MANAGEMENT **Standard: The laboratory shall maintain records in a manner that allows reconstruction of all activities, easy retrieval and minimum retention.**					
1. The laboratory has a control on all documents that form its quality system both internal and external	Presence of policies in the control of all documents that form its quality system both internal and external	**DOCUMENT REVIEW** Proof of designation of document control officer **OBSERVE** Policies and procedures on the following: 1. Availability of the authorized editions of documents 2. Periodic review and revision of the documents 3. Removal of invalid or obsolete documents 4. All handwritten amendments clearly marked, initialed and dated	Administrative Office / Section		

		5. Copies of the SOP Manual available at the bench or work area 6. Work instructions of the SOP match the SOP Manual			
2. The laboratory has policies and procedures, handling of quality of technical records and devotes resources, including infrastructure to protect records against loss, destruction, tampering and unauthorized access or use. Only authorized individuals can make entries in the logbooks.	Presence of policies and procedures on protection of laboratory records against loss, destruction, tampering and unauthorized access or use, and in maintaining confidentiality/ privacy.	**DOCUMENT REVIEW** Logbooks for borrowing and retrieval of laboratory files **OBSERVE** Access to laboratory records Audit trail	Administrative Office / Section		
SAFE PRACTICE AND ENVIRONMENT **A. CUSTOMER AND STAFF SAFETY** **Standard: The laboratory plans a safe and effective environment of care consistent with its mission, services, and with laws and regulations. When needed, the organization reports information about infections/chemical threat to personnel and public health agencies.**					
1. An incident reporting system identifies potential harms, evaluates causal and contributing factors for the necessary corrective and preventive action	Presence of incident reporting system/ sentinel event monitoring system (which may include health care associated infections, unexpected deaths, acid spills, falls, etc.)	**DOCUMENT REVIEW** Presence of safety manual Record of sentinel events Incident Report Corrective or Preventive Actions **OBSERVE** Presence of actual PPEs and other safety gadgets. Monitoring tools on safety	Administrative Office / Section		

V. IMPROVING PERFORMANCE **Standard: The laboratory has a planned systematic organization- wide approach to process design and performance measurement, assessment and improvement.**					
1. Continuous Quality Improvement Program	Presence of Quality Improvement Program	**DOCUMENT REVIEW** CQI plan and proof of implementation **a.** Monitoring tool **b.** Corrective actions for non-compliance **INTERVIEW** Ask about their activities on CQI.	Administrative Office		
Standard: The laboratory provides better care service as a result of continuous quality improvement activities					
2. Customer satisfaction survey	Presence of customer satisfaction survey	**DOCUMENT REVIEW** Domains of the survey form used. Survey results and how complaints / comments are acted upon. Logbook of corrective actions **OBSERVE**	Administrative Office		
3. Quality Assurance Program The laboratory shall prepare and adopt a quality assurance program to establish, maintain and improve the quality of data generated by the laboratory.	**Internal Quality Assurance** Presence of written procedures on quality control for monitoring of validity of tests and calibrations.	**DOCUMENT REVIEW** Documentation of the following: 1. Regular use of certified reference materials, use of QC samples. 2. Replication using the same or different methods 3. Re-testing or recalibration of samples 4. Correlation of results for different characteristics of a sample	Administrative Office		

		5. Recording of results so as trends are detectable and statistical techniques may be applied to the reviewing of the results where practicable 6. Conduct of internal quality audit at least once a year. 7. All quality control charts shall be available at all times 8. Corrective actions in case of failed IQC and/or for non-compliance on QC criteria			
	External Quality Assurance The laboratory shall participate in proficiency testing programs.	**DOCUMENT REVIEW** 1. Record of receipt of samples for EQAS from NRL. 2. Records of results submitted to NRL 3. Record of corrective action taken when evaluation of performance is below satisfactory. 4. Certificate of Proficiency in External Quality Assessment Scheme (EQAS) by NRL. 5. Corrective Actions in case of failed proficiency testing and/or for non-compliance on QC criteria.			
VI. EQUIPMENT, INSTRUMENTS, REAGENTS, AND SUPPLIES **Standard: Necessary equipment, instruments, reagents and supplies shall be in place for the safe and efficient operation of the laboratory.**					
1. Availability of functional and operational equipment /instruments.	Proof that the equipment /instruments are functional and operational.	**OBSERVE**			

2. Records of inventory of equipment/ instruments/ reagents	Presence of updated records of inventory of equipment/ instruments/ reagents.	**DOCUMENT REVIEW** Updated inventory records			
3. Program for preventive/ corrective maintenance of equipment/ instruments.	Presence of policies and procedure for preventive/ corrective maintenance of equipment/ instruments.	**DOCUMENT REVIEW** Records of preventive maintenance reports Proof of corrective actions			
4. Calibration of equipment designed and operated so that calibrations and measurements are traceable to the International System of Units (SI Units).	Presence of calibration reports of each equipment.	**DOCUMENT REVIEW** **Proof of calibration (reports/ certificates)**			
5. Calibration of volumetric laboratory wares designed and operated so that calibrations and measurements are traceable to the International System of Units (SI Units).	There shall be a written program for calibration of volumetric laboratory wares.	**DOCUMENT REVIEW** **Proof of calibration (reports/certificates)**			
6. There shall be appropriate reagents/ supplies to perform the water analysis.	The reagents/ supplies conforms to the requirements of NRL, PNSDW	**DOCUMENT REVIEW** Readily available inventory of reagents/ supplies			
VII. ANALYTICAL METHODS **Standards: The laboratory shall use appropriate methods and procedures for all tests.**					
Method Selection: Analytical methods that are appropriate for the analyte and	**Method Selection:** Analytical methods that are appropriate for the	**OBSERVE**			

sample matrix based on the current PNSDW.	analyte and sample matrix based on the current PNSDW.				
Uncertainty of Measurement	Uncertainty of Measurement	**DOCUMENT REVIEW** Updated inventory records			
Calculations and Data Transfers	The laboratory shall ensure calculations and data transfers are checked in a systematic manner.	**DOCUMENT REVIEW** Proof of signed documents			
Standard Method Verification	Standard Method Verification of analytical methods for trace analysis.	**DOCUMENT REVIEW** Proof of Method Verification			
Outsourcing of Tests: Outsourcing can be only allowed due to equipment failure or system failure; only for the accredited service	The laboratory shall conform to the guidelines for outsourcing of tests set by the NRL	**DOCUMENT REVIEW** Policies for Outsourcing of Tests List of sub contracted laboratories.			
Reporting of outsourced tests	The laboratory shall attach the results of the tests outsourced from other accredited laboratories to the principal test results/ reports.	**DOCUMENT REVIEW** Files of the copy of test results from referring laboratory			
VIII. SAMPLING **Standards: There shall be a system for receiving, accessioning, collection and disposal of sample.**					
Sample Collection:	There shall be written procedures for collection of sample at sampling location. Samples collected by certified sampler	**DOCUMENT REVIEW** Policies and procedures for collection of sample at sampling location. Certificate of samplers issued by NRL or DOH-CHD			

Sample data and Operations	There shall be written procedures for recording sample data and operations.	**DOCUMENT REVIEW** Presence of records of the following: 1. Sampling procedure used 2. Identification of the sample 3.Environmental conditions 4. Diagrams (or equivalent) to identify sampling location			
Handling of Sample:	There shall be written procedures for the management of sample to ensure protection of integrity of the sample and the interests of the laboratory and customer.	**DOCUMENT REVIEW** Policies and procedures for the management of samples as to the following: 1. Receipt 2. Handling 3. Protection 4. Storage 5. Retention and/ or disposal 6. Criteria for sample rejection			
Sample Identification	There shall be a system for identifying sample for test.	**DOCUMENT REVIEW** **OBSERVE**			
Sample suitability, sample abnormalities or sample deficiencies	Policies and procedures on the received abnormal or deficient samples submitted for analysis.	**DOCUMENT REVIEW** Records of abnormal or deficient samples. Records of instructions given to clients **OBSERVE** Proof that the customer was informed.			

Sample integrity	There shall be appropriate facilities to maintain the integrity of the sample and the protection of the secured sample and records	**DOCUMENT REVIEW** Policies and procedure on the maintenance of sample integrity. **OBSERVE**			
IX. REPOTING OF RESULTS **Standards: Results shall be reported accurately, clearly, unambiguously and objectively, and in accordance with specific instructions in the methods.**					
Test Results/ Report	All observations, data and calculations shall be recorded.	**DOCUMENT REVIEW** Records of all observations, data and calculations Test reports shall include, but not limited to, the following information: 1. Date of the test 2. Client details (name, address, contact number) 3. Name and signature of analyst 4. Certifying Chemist seal for chemical analysis results 5. Name and signature of laboratory head/ certifying officer 6. Analyte 7. Sample details (source if available, date and time of sampling, sample code) 8. Method used 9. Test results 10. PNSDW values, if applicable 11. MDL/LOQ for trace analysis			

Logbooks and Worksheets	There shall be logbooks and/or worksheets	**DOCUMENT REVIEW** Presence of records of the following: 1. Sampling procedure used 2. Identification of the sample 3.Environmental conditions 4. Diagrams (or equivalent) to identify sampling location			
Handling of Sample:	There shall be written procedures for the management of sample to ensure protection of integrity of the sample and the interests of the laboratory and customer.	**DOCUMENT REVIEW** **Logbooks and worksheets shall have the following data:** 1. Date of the test 2. Name of analyst 3. Analyte 4. Sample details (source, date and time of sampling, sample code) 5. Test observations 6. All rough calculations 7. Relevant instrument traces 8. Relevant calibration data			
X. NATIONAL LAWS AND DOH ISSUANCES **Standards: The LDWA shall comply will all the relative laws and DOH issuances.**					
1. Anti-smoking – in compliance to RA 9211 EO No. 26 s. 2017, "Providing for the Establishment of Smoke-Free Environments in Public and Enclosed Places"	Proof of implementation of policies and procedures on anti-smoking	**DOCUMENT REVIEW** Policies and procedures on anti-smoking **OBSERVE** "No Smoking" signage posted in a conspicuous spaces	Hallways Toilets Offices Working area		

2. Hazardous waste management – in compliance to RA 6969 (Toxic and Hazardous Waste Act)	Proof of implementation of policies and procedures on waste management	**DOCUMENT REVIEW** • Policies and procedures on the implementation of RA 6969	Administrative Office		
3. Health Emergency Management Services (HEMS) – in compliance to AO 2004-0168 "National Policy on Health Emergencies and Disasters"	Proof of implementation of the Emergency Management Plan (e.g. fire drill, earthquake drill, etc.)	**DOCUMENT REVIEW** • Result of self-assessment and how gaps were resolved **OBSERVE** Exit plans posted in all hallways and rooms	Laboratory		
4. R.A. 10173: Data Privacy Act	Proof of implementation of R.A. 10173	**DOCUMENT REVIEW** Policies and procedures on the implementation of RA 10173	Administrative Office		

PART II – PERSONNEL

The laboratory shall ensure personnel performing specific tasks are qualified on the basis of education, training, experience and/ or demonstrated skills, and appropriate supervision is provided when staff is being trained. It shall ensure personnel are employed or contracted, and contracted personnel are supervised, competent and work in accordance with the quality system. It shall maintain current job descriptions for managerial, technical and key support staff.

POSITION	QUALIFICATION	EVIDENCE	NUMBER/ RATIO	COMPLIED	REMARKS
Head of the Laboratory	**Category A** 3-years administrative management, technical experience in water laboratory – theoretical and practical, training requirements, at least three (3) years in service. Sanitary Engineer, Clinical Pathologist, Registered Medical Technologist, or Certified Microbiologist. **Category B** Chemist with 3-years administrative management, technical experience in water laboratory, theoretical and practical, training requirements, at least three (3) years in service. **Category C** Any of the abovementioned expertise, with Masteral degree, 3-years administrative management, technical experience in water laboratory, theoretical and practical, training	**DOCUMENT REVIEW** • Updated PRC I.D • PSP Board Certificate for Clinical Pathologist • Certificate/Diploma as Microbiologist • Certificates of Trainings attended including Laboratory Management • Record of employment • Proof of employment/ Appointment (notarized)	1		

POSITION	QUALIFICATION	EVIDENCE	NUMBER/ RATIO	COMPLIED	REMARKS
	requirements, at least three (3) years in service.				
Analysts	Bachelor's Degree with at least two (2) years' experience **For Microbiological Analysis:** Registered Medical Technologist/Certified Microbiologist/ Registered Food Technologist **For Chemical / Physical Analysis:** Registered Chemist/ Registered Chemical Technician	**DOCUMENT REVIEW** • PRC License/ID • PRC Board Certificate • Certificate/Diploma as Microbiologist (for microbiological analysis) • Certificate of Proficiency for Microbiology analysts from NRL-EOHTM • Record of Work Experience (minimum of 2 years) in the theory and practice of water analysis • Certificates of Trainings attended • Proof of Employment/ Appointment (notarized) • Authorization and Competency approved by the head of the laboratory.	1analyst 1 analysts		
Laboratory Aide/ Technician	Finished at least 2 years in college with training in clerical and laboratory support for at least 6 months	**DOCUMENT REVIEW** • Certificates of Trainings attended • Proof of Employment/ Appointment (notarized)	1		
Administrative Staff (Designate)	Administrative staff shall have in-house training in relevant administrative procedures.	**DOCUMENT REVIEW** • Proof of Employment/ Appointment (notarized) • Certificates of Trainings attended • Proof of designation			

POSITION	QUALIFICATION	EVIDENCE	NUMBER/ RATIO	COMPLIED	REMARKS
Sampler	Water Sampler must be certified by DOH.	**DOCUMENT REVIEW** • Certificate of Trainings from NRL • Proof of Employment/ Appointment (notarized)	1		

PART III – PHYSICAL PLANT
Adequate facility shall be in place for the safe and efficient operation of the laboratory.

DOCUMENTS	COMPLIED	REMARKS
1. Work Area The work area shall correlate with the volume and type of analysis to be undertaken including provision for periods of peak workload. It shall the following minimum areas: 1. Counter top for sample processing 2. Storage cabinet for equipment, instruments, reagents and supplies 3. Sink with strong water supply for cleaning and sterilizing 4. Fume hoods for handling of acids and organic chemicals 5. Containment facility for bacteriological analysis		
2. Utilities The laboratory shall be housed in a permanent building with adequate power supply, water supply, and ventilation. There shall be adequate running water in the work area. Air conditioning unit may be used for improved ventilation.		
3. Waste Facility There shall be a written policy for laboratory waste management (which includes handling, storage, and disposal) following universal guidelines. There shall be a waste management plan. There shall be an inventory of waste chemicals including estimate concentration, means of disposal or containment, and frequency of disposal. For Classification B and C, there shall be a Memorandum of Agreement (MOA) with DENR accredited hazardous waste treatment facility		

4. Housekeeping There shall be a written policy for laboratory housekeeping following universal guidelines. The laboratory shall be kept clean, dust-free, odor-free, safe and secured. There shall be a written program for vermin control		
5. Personnel Safety There shall be a written policy for safety of personnel following universal guidelines. Provision of Personal Protective Equipment, personnel safety devices such as safety gloves, safety glasses, laboratory gowns, and face masks, shall be available when appropriate.		

OBSERVATIONS/FINDINGS (may use separate additional sheets if needed):

PART IV – EQUIPMENT/INSTRUMENT

FUNCTIONAL EQUIPMENT	QUANTITY	AREA	COMPLIED	REMARKS
ADMINISTRATIVE SERVICE				
Computer with Internet Access	1	Administrative Office		
Emergency Light		Lobby, hallway, office/unit and/or stairways		
Fire Extinguishers	1 per unit or area	Lobby, hallway, office/unit and/or stairways		
Generator set	1	Generator set house		
LABORATORY FOR DRINKING WATER ANALYSIS				

MANDATORY PARAMETERS

☐ Color (Apparent)	☐ Arsenic	☐ Nitrate
☐ Turbidity	☐ Cadmium	☐ Total Dissolved Solids
☐ Thermotolerant Coliform (E.coli)	☐ Lead	☐ Disinfectant Residual

For other parameters not included in the mandatory tests, please fill out the provided form.

Test/ Method	Equipment	Reagent/ Media	Laboratory Materials	Remarks
☐ Microbiological General Requirement	☐ Autoclave ☐ Balances, top – loading ☐ Hot plate with magnetic stirrer ☐ Oven sterilizer ☐ Water bath maintained at $44.5 \pm 0.5^{o}C$ ☐ Incubator maintained at $35 \pm 0.5^{o}C$ ☐ Distilling Apparatus / Water Purifier	(Refer to specific microbiological test methods below)	☐ Erlenmeyer flasks, 250mL, 500mL, 1000mL ☐ Graduated cylinders, 100mL, 500mL, 1000mL ☐ Petri dishes, 15 x 100 mm ☐ Pipets, 10mL, 1 mL ☐ Reagent bottles, brown and clear ☐ Stainless spatulae and spoons	

	☐ Bacticinerator / Similar Flame Sterilization Device ☐ Isolation Hood: Laminar or biological Safety Cabinet ☐ pH Meter ☐ Refrigerator ☐ Stove ☐ Thermometer		☐ Test tube baskets and racks ☐ Inoculating loops ☐ Sterile applicator sticks ☐ Sampling bottles: 100mL, 200mL, 500 mL	
☐ Total Coliform Test: Multiple Tube Fermentation Technique (MTFT)		☐ Lauryl Tryptose Broth(LTB) ☐ Brilliant Green Lactose Bile Broth (BGLB)	☐ Test tubes: ☐ 25 x 150 mm; 16 x 150 mm w/caps ☐ Durnham tubes: ☐ 10 x 75 mm; 5 x 50 mm	
☐ Thermotolerant Coliform Tests: MTFT		☐ EC Medium (EC)		
☐ Total Coliform Test: Membrane Filtration Technique (MF)	☐ Membrane filtration apparatus, manifold and vacuum pump ☐ Microscope, binocular, wide-field dissecting microscope	☐ LES Endo Agar (Endo) ☐ M-Endo Medium	☐ Membrane filters, 0.45µm pore size ☐ Forceps, smooth blunt ☐ Absorbent pads, 48 mm ☐ Culture dish, 15x60mm; 9x50mm	
☐ Coliform Test: MF	☐ Membrane filtration apparatus, manifold and vacuum pump ☐ Microscope, binocular, wide field dissecting microscope	☐ M-FC Medium	☐ Membrane filters, 0.45µm pore size ☐ Forceps, smooth blunt ☐ Absorbent pads, 48 mm ☐ Culture dish, 15x60mm; 9x50mm	
☐ Presence-Absence (P-A) Coliform Test		☐ LTB ☐ P-A Broth	☐ 200 mL sterile bottle	
☐ Colilert (Enzyme Substrate)	☐ Comparator (from the manufacturer) ☐ Ultraviolet light,366nm	☐ Enzyme substrate water test kits, validated by NRL-EOHTM	☐ Sampling bottle	

☐ Gram Stain	☐ Microscope, binocular, wide-field dissecting microscope	☐ Nutrient Agar ☐ Crystal Violet ☐ Gram's Iodine ☐ 95% Ethyl Alcohol ☐ Safranin O ☐ Immersion Oil ☐ Sterile water	☐ Forceps ☐ Microscope glass slides ☐ Staining rack ☐ Wash bottle ☐ Inoculating loop ☐ Dropper ☐ Test Tube (50x5 mm)	
☐ IMViC tests		☐ Nutrient Agar ☐ Tryptone Broth (TB) ☐ MR-VP medium (MRVP) ☐ Simmon's Citrate Agar(SCA) ☐ Kovac's reagent ☐ Methyl red solution ☐ Barritt's reagent (a naphthol solution) ☐ O'Meara's reagent (KOH solution)	☐ Inoculating loops ☐ Pasteur pipets ☐ Droppers	
☐ Heterotrophic Plate Count (HPC)	☐ Colony counter, dark field ☐ Vortex mixer	☐ Phosphate Buffer Solution (PBS) ☐ 0.1% Peptone water ☐ Plate Count Agar (PCA) ☐ Tryptic Soy Agar (TSA) ☐ Nutrient Agar	☐ Petri dishes ☐ Pipets (10ml, 1.1ml,1.0ml) ☐ Bent-glass rod (spreader), if spread plated technique is used.	
☐ Chemical Laboratory General Requirement	☐ Refrigerator ☐ Thermometer/ Thermohygrometer ☐ Analytical Balance ☐ Distilling or Water Purification System to produce Type I water ☐ Fume Hood		☐ Volumetric Flask (5mL, 100mL, 250mL, 500mL, 1000mL) ☐ Beakers (50mL, 100mL, 250, 500,1000mL) ☐ Pipettes (graduated and volumetric: 1mL, 5mL, 10mL, 25mL, 50mL) ☐ Graduated Cylinder (50mL, 100mL) ☐ Erlenmeyer flasks	

			(250mL) ☐ Funnels ☐ Reagent Bottles: ☐ Amber and Clear (100ml, 250ml, 500ml 1000mL)	
☐ **Arsenic** ☐ ICP ☐ Hydride Generation AAS ☐ EAAS	☐ ICP ☐ Hydride Generation AAS ☐ EAAS	**For Hydride Generation AAS/ EAAS:** ☐ Nitric Acid ☐ Hydrochloric Acid ☐ Standard As ☐ Calibration standards ☐ QC standards ☐ Sodium Borohydride ☐ Sodium Iodide ☐ Potassium Persulfate ☐ Perchloric Acid	**For ICP/EAAS:** ☐ Argon **For ICP/ AAS/EAAS:** ☐ Reaction Cell	
☐ **Cadmium** ☐ FAAS ☐ EAAS ☐ ICP	☐ FAAS ☐ EAAS ☐ ICP	**For FAAS/EAAS/ICP/ASV:** ☐ Nitric Acid ☐ Hydrochloric Acid ☐ Standard Cd ☐ Calibration standards ☐ QC standards	**For FAAS:** ☐ Acetylene Gas **For EAAS/ICP:** ☐ Argon ☐ Hot plate ☐ Fumehood	
☐ **Lead** ☐ FAAS ☐ EAAS ☐ ICP	☐ FAAS ☐ EAAS ☐ ICP	☐ Standard Lead ☐ Calibration standards ☐ QC standards	**For FAAS:** ☐ Acetylene Gas	

		For FAAS/EAAS/ICP/ASV: ☐ Nitric Acid ☐ Hydrochloric Acid	**For EAAS/ICP:** ☐ Argon ☐ Hotplate ☐ Fumehood	
☐ **Nitrate** ☐Nitrate Electrode Method (NEM)	**For NEM:** ☐ pH meter, expanded-scale	☐ Standard Nitrate **For NEM:** ☐ Aluminum Sulfate ☐ Silver Sulfate ☐ Boric Acid ☐ Sulfamic Acid ☐ Sodium Hydroxide	**For NEM:** ☐ Double-junction reference electrode ☐ Nitrate Ion electrode	
☐Cd Reduction Method (CRM)	**For CRM:** ☐ Spectrophotometer	**For CRM:** ☐ Cd granules ☐ Hydrochloric Acid ☐ Copper Sulfate ☐ Color reagent: phosphoric acid, sulfanilamide, N-(1-naphthyl)-ethylene diamine dihydrochloride ☐ Ammonium Chloride ☐ EDTA	**For CRM:** ☐ Reduction column	
☐ Ion Chromatograph	**For IC** ☐ Ion Chromatograph	**For IC:** ☐ Eluent solution (Sodium carbonate, sodium bicarbonate) ☐ Regenerant solution (Sulfuric acid)		
☐ Color (Apparent) Visual comparison Method		☐ Potassium Hexachloroplatinate ☐ Cobaltous Chloride	☐ Nessler tubes, 100 mL,	

		☐ Sodium Hydroxide ☐ Sulfuric Acid	short form	
☐ Turbidity Nephelometric Method	☐ Nephelometer ☐ Turbidimeter	☐ Turbidity standards		
☐ pH	☐ pH meter	☐ KCl filling solution ☐ Buffer solutions (pH4, 7, 10) ☐ QC- buffer (KH_2PO_4 or Na_2HPO_4)	☐ Magnetic stirrer	
☐ Total Dissolved Solids	☐ Gravimetric	☐ Drying Oven	☐ Evaporating Dish ☐ Dessicator ☐ Glass fiber filter ☐ Silica gel/desiccant ☐ Filtration apparatus	
☐ Disinfectant Residual – Chlorine DPD colorimetric		☐ Chlorine meter or kit	☐ DPD for total chlorine and DPD for free chorine ☐ $KMnO_4$	

***Acronyms:**

- FAAS–Flame Atomic Absorption Spectrometry
- EAAS–Electrothermal Atomic Absorption Spectrometry
- GC–Gas Chromatography
- ECD–Electron Capture Detector
- MS–Mass Spectrophotometer
- PID–Photoionization Detector
- HPLC–High-performance Liquid Chromatography
- ICP–Inductively Coupled Plasma
- IC–Ion Chromatography
- PFBHA–Pentafluorobenzyl-hydroxylamine
- PNSDW–Philippine National Standards for Drinking Water (2017)

Test/ Method	Equipment	Reagent/ Media	Laboratory Materials	Remarks
OTHERS:				

Annex A
A.O. No. 2020-0031

Republic of the Philippines
Department of Health

ASSESSMENT TOOL FOR ACCREDITATION OF LABORATORY FOR DRINKING WATER ANALYSIS

Name of Health Facility: _____

Date of Inspection: _____

RECOMMENDATIONS:

A. **For Accreditation Process**

[ ] For Issuance of Certificate of Accreditation as

Validity from _____ **to** _____

[ ] Issuance depends upon compliance to the recommendations given and submission of the following within _____ days from the date of inspection

_____

_____

_____

_____

[ ] Non-issuance. Specify reason/s: _____

_____

_____

_____

_____

Inspected by:

Printed name	Signature	Position/Designation

Received by:

Signature: _____

Printed Name: _____

Position/Designation: _____

Date: _____

Republic of the Philippines
Department of Health

Annex A
A.O. No. 2020-0031

ASSESSMENT TOOL FOR ACCREDITATION OF LABORATORY FOR DRINKING WATER ANALYSIS

Name of Health Facility: _____

Date of Monitoring: _____

RECOMMENDATIONS:

A. For Monitoring Process

[ ] Issuance of Notice of Violation

_____

_____

_____

[ ] Non-issuance of Notice of Violation

_____

_____

_____

_____

[ ] Others. Specify _____

_____

_____

_____

Monitored by:

Printed name	Signature	Position/Designation

Received by:

Signature: _____

Printed Name: _____

Position/Designation: _____

Date: _____