# [ DENR ADMINISTRATIVE ORDER NO. 98-63, October 05, 1998 ]

# GUIDELINES FOR THE DESIGNATION OF DENR RECOGNIZED ENVIRONMENTAL LABORATORIES

Pursuant to the provisions of Presidential Decree No. 984 otherwise known as the "Pollution Control Decree of 1976", PD No. 1586 establishing the Environmental Impact Statement (EIS) System in the Philippines, and by virtue of Executive Order No. 192, Series of 1987 and Executive Order No. 292 otherwise known as the "Administrative Code of 1987", the Department of Environment and Natural Resources (DENR), hereby adopts and promulgates the following guidelines for the designation of DENR recognized laboratories.

- 01. "DENR recognized environmental laboratories" are laboratories that are authorized to generate environmental data in connection with the Environmental Impact Assessment (EIA) System, environmental monitoring, and research activities in support of the formulation and implementation of policies, criteria, guidelines, rules, and regulations, and other activities of the Environmental Management and Protected Areas Sector (EMPAS) of the DENR;
- 02. DENR "recognition" shall cover the following components:

#### a. Laboratories

Laboratories, whether owned and/or operated by local or foreign nationals, that generate environmental data in connection with the EIA System, environmental monitoring, and research activities in support of the formulation and implementation of policies, criteria, guidelines, rules, and regulations, and other activities of the Environmental Management and Protected Areas Sector (EMPAS) of the DENR shall obtain a Certificate of Recognition from the DENR;

#### b. Activities

The analysis of environmental samples for specific parameters like physical-chemical, organics, metals, and bacteriological parameters or for a combination of parameters and sample type conducted by environmental laboratories which may be granted recognition. Specific activities under this scheme are the following:

- (1) Analysis of water (freshwater, ground water, water for various uses) and waste water. Parameters and methods are given in Annex A;
- (2) Analysis of ambient air and stack emissions. Parameters and methods are given in Annex B; and

(3) Analysis of sediments and biota. Parameters and methods are given in Annex C.

#### c. Duration

The Certificate of Recognition shall have an effectivity of three (3) years,

# 03. Requirements for recognition

#### a. Application document

Any person, firm or corporation desiring to establish or operate and maintain an environmental laboratory shall submit to the DENR, through the Environmental Management Bureau (EMB), an application document containing the following data and information:

- (01) Name of establishment;
- (02) Address of establishment;
- (03) Name, citizenship, and domicile of owner of establishment;
- (04) Name of laboratory;
- (05) Address of laboratory;
- (06) Name, citizenship, and domicile of the head of the laboratory;
- (07) Statement that the applicant has complied with all business requirements under existing laws;
- (08) Tax clearance for the preceding year;
- (09) Scope of the desired recognition;
- (10) Mission statement or overview of the mandate of the establishment and the laboratory;
- (11) Accreditation record of the laboratory;
- (12) Technical and support personnel of the laboratory;
- (13) Scope and nature of work of the laboratory;
- (14) Laboratory test report forms;
- (15) Reference literature available in the laboratory;
- (16) Equipment calibration and maintenance program of the laboratory;
- (17) Quality assurance program of the laboratory;
- (18) Track record of the laboratory;
- (19) Pollution control and waste management practices adopted by the laboratory;
- (20) Floor plan of the laboratory and related facilities (scale = 1:100); and
- (21) Duly accomplished official application form.

## b. Personnel

The operation of environmental laboratories shall be under the direction and supervision of a licensed chemist, chemical engineer or professional in allied fields with at least 5 years experience in laboratory analysis and management.

The minimum staff of the environmental laboratory shall be composed of one licensed professional, one laboratory assistant, and one laboratory aide.

The licensed professional shall have at least 2 years experience and must have analyzed a minimum of 300 relevant environmental samples.

The laboratory assistant shall have at least a baccalaureate degree in natural and applied sciences, undergone 120 hours of training in the analysis of environmental samples, and analyzed a minimum of 100 relevant environmental samples under the supervision of a licensed professional.

The laboratory aide shall have obtained a high school diploma or have completed a laboratory-oriented vocational course.

#### c. Track record of the laboratory

The laboratory applying for recognition shall have analyzed a minimum of 300 relevant environmental samples.

## d. Physical layout

- (1) The laboratory shall be housed in a permanent building constructed of strong materials, preferably, concrete or semi-concrete;
- (2) The laboratory shall have adequate running water supply and regular electric power supply and provision for emergency power source;
- (3) The laboratory shall have adequate drainage, preferably with separate waste lines for domestic sewage and laboratory waste water;
- (4) Work rooms shall be well ventilated with adequate provisions for either natural or artificial lighting;
- (5) The working space of the laboratory shall correlate with the volume and type of analysis to be undertaken, including provisions for periods of peak work load;
- (6) Working space requirement shall include sufficient bench top area for processing samples, storage space for chemicals, glassware, and portable and fixed equipment, and an adequate appropriate area for cleaning glassware and sterilizing materials;
- (7) There shall be effective separation between neighboring units when the activities therein are incompatible;
- (8) There shall be adequate physical provisions for the safety of laboratory personnel considering exposure to chemicals, inflammable reagents, fires, and similar substances. Safety provisions shall include emergency exit and egress, emergency shower and eyewash, fire extinguishers, first aid kits, fume hoods, and protective personnel equipment.

#### e. Laboratory procedures

All laboratory procedures adopted by the laboratory shall conform to the DENR approved methods of analysis or other procedures that may be recommended or adopted by the DENR.

#### f. Reagents

All reagents to be used in the analysis of environmental samples shall be of the highest grade to obtain reliable results, unless otherwise stated in the procedure.

#### q. Equipment and instruments

All equipment, instruments, and consumables shall conform to the requirements of the analytical methods approved, recommended or adopted by the DENR.

# h. Quality control

The laboratory shall prepare and adopt a quality assurance program to enhance the quality of the data generated by the laboratory.

The laboratory shall analyze quality control samples to check on the proficiency of its analysts and equipment on a regular basis.

Quality control charts shall be displayed in a conspicuous place in the laboratory.

#### i. Instrument calibration

The laboratory shall formulate and adopt a system for calibration and maintenance of its laboratory facilities. Certificates of equipment calibration shall be compiled and made available upon request by the DENR.

#### j. Laboratory waste management

The laboratory shall have adequate provisions for the collection, storage, treatment, and disposal of domestic and laboratory wastes. Laboratory effluent and emissions shall conform with relevant environmental quality standards.

The laboratory shall formulate and adopt proper management practices for expired chemicals, toxic chemicals and laboratory wastes.

#### 04. Procedure in the recognition process

### a. Submission of application document

The laboratory seeking to obtain a Certificate of Recognition by the DENR shall prepare and submit the application document, the contents of which

are given in Section 3.a of this Administrative Order.

The Secretariat consisting of EMB staff shall be created to coordinate and support activities related to the recognition of environmental laboratories by the DENR. It shall make a preliminary assessment of the completeness of the application document. After the document has been assessed and the relevant data/information has been found to be included in the document, the same shall be forwarded to the members of the Laboratory Inspection and Assessment Team (LIAT).

#### b. Laboratory inspection and assessment

Within 30 working days upon receipt of the complete application document, the Laboratory Inspection and Assessment Team (LIAT) shall inspect the applicant laboratory and validate the data and information contained in the said document.

The LIAT shall be composed of the following:

Two (2) External Assessors;

Two (2) EMB Assessors, and

One (1) DENR/EMPAS Assessor.

The External Assessors shall be designated by the EMB Director in consultation with relevant professional groups. The applicant-laboratory shall be given the right to accept or reject the External Assessors.

The Laboratory Assessment Report, to be prepared by the LIAT in accordance with the format prescribed by the EMB, shall be consolidated by the Chairperson of the LIAT and subsequently endorsed to the Technical Advisory Group for Laboratory Recognition (TAG-LR).

The Secretariat shall assist the LIAT in the discharge of its functions.

#### c. Proficiency testing

The laboratory shall be required to participate in interlaboratory exercises organized by the EMB.

The laboratory shall be required to participate in interlaboratory exercises recommended by the EMB.

The Secretariat shall prepare the report for the proficiency test. Said report shall be forwarded to the TAG-LR for consolidation and review.

#### d. Consolidation and review of data and information

The Technical Advisory Group for Laboratory Recognition (TAG-LR) shall be created by the DENR Secretary to consist of the following:

Chairperson of the LIAT; Representative of professional chemical associations; Technical representative of environmental NGOs;