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DENR ADMINISTRATIVE ORDER

NO. 2013 - _____26____

SUBJECT: REVISED GUIDELINES FOR DENR ACCREDITATION OF THIRD PARTY SOURCE EMISSION TESTING FIRMS

Pursuant to Sections 8 and 38 of Republic Act No. 8749 (Philippine Clean Air Act of 1999) and Rule XLVII, Section 2(c) of DAO 2000-81 (Implementing Rules and Regulations of the Clean Air Act), the Department of Environment and Natural Resources (DENR), hereby promulgates the following revised guidelines. This Order harmonizes DAO 2006-03 and DAO 2007-25 for the accreditation of source emission testing firms.

Section 1. Basic Policy

The State shall pursue a policy of balancing development and environmental protection. To achieve this end, the framework for sustainable development shall be pursued. It shall be the policy of the State to:

- a) Formulate a holistic national program of air pollution management that shall be implemented by the government through proper delegation and effective coordination of functions and activities; and
- b) Focus primarily on pollution prevention rather than on control and provide for a comprehensive management program for air pollution.

Section 2. Objectives

This Administrative Order aims to achieve the following:

- a) Provide assurance to stakeholders, regulators and the public of the reliability of source emission test results; and
- b) Ensure that accredited firms are fully capable of conducting source emission tests in accordance with the procedures set in the National Emission Standards for Source Specific Air Pollutants (NESSAP) Table 2 of the Implementing Rules and Regulations (IRR) of R.A. 8749 (DAO 2000-81).

Section 3. Coverage

The accreditation of third party source emission testing firms shall cover the following:

- a) For firms that have applied for accreditation and waiting for final accreditation, the firm may continue to provide stack testing services; and
- b) All DENR-Environmental Management Bureau (EMB) recognized laboratories shall analyze the samples collected by an accredited source emission testing firm.

Section 4. Definition of Terms

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For purposes of this Order, the following terms shall be construed as follows:

- a) Accreditation a formal recognition through the issuance of a Certificate of Accreditation by the DENR-EMB to a third party source emission testing firm as competent to carry out sampling activities.
- b) Applicant A person/firm seeking formal accreditation under this Order.
- c) Certificate of Accreditation a certificate issued by DENR-EMB to an applicant as competent to carry out sampling activities.
- d) Extensive Experience at least five (5) years experience in the conduct of actual source emission testing of Particulate Matter (PM), Carbon Monoxide (CO), Nitrogen Oxides (NOx) and Sulfur Dioxide (SO₂) from at least one hundred (100) siacks.
- e) Firm any entity engaged in source emission testing and related activities registered under Philippine laws.
- f) Replacement Team a team wherein either of the Quality Assurance/Quality Control (QA/QC) Manager or Team Leader is replaced due to the resignation or termination of said accredited personnel within the accreditation period. The replacement shall serve the remaining accreditation period and shall acquire the same accreditation number.
- g) Source Emission Testing Team a team composed of a QA/QC Manager, Team Leader and Technical Aide to conduct a source emission test.
- h) Source Emission Test a test procedure for the determination of compliance with DENR Source Emission Standards. It is also a test program which includes sampling, measurement and preparation of a test report that shall contain all pertinent data concerning the test program.
- i) Succeeding Team Fee a fee to be paid by a firm for any subsequent accredited Source Emission Testing Team after its first accredited team.
- j) Test Plan A document to be submitted by an accredited Third Party Stack Testing Firm to the EMB Regional Office containing the following information: methods of sampling to be used, accomplished pre-test survey form, schedule, location and duration of the tests and other relevant information in the preparation of a particular stack testing.
- k) Third Party Source Emission Testing Firm a firm competent to carry out source emission testing or sampling activities

For other terms not defined in this DAO, refer to R.A. 8749 (the Philippine Clean Air Act of 1999).

Section 5. Requirements for Accreditation

Any applicant who has all the qualifications but none of the disqualification based on the existing laws can engage in the conduct of source emission testing and is qualified to apply for a Certificate of Accreditation, provided that the requirements set forth in this section are complied with. Accreditation will be on an air pollutant basis.

- 5.1 Documentary Requirements The following documents shall be submitted with a fully accomplished and notarized application form:
 - a) A certified copy of the following:
 - 1) For sole proprietorship: Certificate of Business Name Registration; and
 - 2) For corporation/partnership: Securities and Exchange Commission (SEC) Certificate of Registration; Articles of Incorporation / Partnership; and Board Resolution under oath specifying the name of its authorized representative
 - b) Location map of the firm's office and premises;
 - c) List of personnel involved in the sampling operation including their job descriptions, qualifications, responsibilities, trainings and seminars attended and with supporting documents;
 - d) List of equipment in accordance with the prescribed method of the National Emission Standards for Source Specific Air Pollutants (DAO 2000-81 Rule XXV, Section 1, Table 2);
 - e) List of calibration and maintenance procedures, including reference materials;
 - f) QA and QC Procedures Quality Assurance Procedures shall include provisions for routine and consistent checks, including documentation points which verify data integrity, correctness and completeness. Quality Control Procedures, on the other hand, shall include, but are not limited to, equipment preparation and calibration, emission sampling, sample recovery, laboratory data, data reduction, and report preparation;
 - g) Copies of all field sampling data sheets previously conducted whenever applicable, to include listing of sources tested in the previous three (3) years and the test methods used. The test reports with field data sheets shall be available for inspection during the site assessment;
 - h) Procedures for performance of source emission testing;
 - i) Safety procedures/health and safety program that includes a list of protective personnel equipment; and
 - j) Waste Management Practices The organization shall have adequate provisions for the collection, storage, treatment and disposal of wastes.
- 5.2 Composition and Duties and Responsibilities of Source Emission Testing Team (Personnel Requirements)
 - 5.2.1 The source emission testing team shall be composed of at least one (1) Quality Assurance/Quality Control (QA/QC) Manager, one (1) Team Leader and one (1) Technical Aide.
 - 5.2.2 The following are the qualifications for the QA/QC Manager and Team Leader:
 - a) <u>QA/QC Manager</u>
 - 1) A licensed engineer, limited to the following courses:

BS Engineering (Ch E, ME, EE)

- 2) Conducted at least 20 source emission tests and prepared and evaluated 20 source emission test reports;
- 3) Has undergone 40 hours industrial safety training from a recognized safety organization;
- 4) Has undergone QA/QC training for source emission testing; and
- 5) However, an accredited *Team Leader* with at least 5 years experience, and has conducted a minimum of 500 source emission tests, is qualified to apply as a *QA/QC Manager*.
- b) <u>Team Leader</u>

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- 1) BS Degree holder such as: BS Engineering (Ch E, ME, EE, CE, ENSE, IE, ECE, EM, GE, MET E) and BS related courses (Chemistry, Physics, Mathematics and Environmental Science);
- 2) Conducted at least 20 source emission tests;
- 3) Has undergone at least 40 hours industrial safety training from a recognized safety organization;
- 4) Has undergone quality assurance training for source emission testing; and
- 5) Any individual who graduated from any two-year course with extensive experience in source emission testing or experience in EMB stack emission testing projects may be qualified to apply as Team Leader.
- 5.2.3 The duties and responsibilities of the source emission testing team shall be as follows:
 - a) <u>QA/QC Manager</u>
 - 1) Ensures that the source emission testing team employs QA/QC procedures during the actual source emission sampling and the results of the test meet the appropriate QA/QC criteria for the test methods used;
 - 2) Verifies calibration or certification of equipment;
 - 3) Verifies that laboratory data meets method QA/QC criteria; and
 - 4) Ensures that the test report is complete and the data is accurate and meets the test method(s) QA/QC requirements.
 - b) <u>Team Leader</u>
 - 1) Prepares the equipment, accessories and glassware for sampling;
 - 2) Ensures that the testing employs the proper test methods;
 - 3) Conducts the source emission test; and
 - 4) Ensures the safety of the source emission test team.
 - c) Technical Aide Assists the Team Leader.
- 5.2.4 The following shall be accomplished for the certification of the QA/QC Manager and Team Leader:
 - a) <u>QA/QC Manager</u>
 - 1) Take written and oral tests on emission testing procedures and methods; and
 - 2) Take a QA/QC proficiency test.

b) <u>Team Leader</u>

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- 1) Take written and oral tests on emission testing procedures and methods; and
- 2) Take emission testing proficiency/performance test.
- 5.2.5 The firm automatically becomes accredited upon accreditation of its Team Leader and QA/QC Manager.
- 5.2.6 Requirements for Renewal
 - a) <u>OA/OC Manager</u>
 - 1) Proof of an additional minimum of 50 source emission test reports with approved test plans for certified parameters prepared and evaluated since the last accreditation certificate was issued; and
 - 2) Proof of continuing education/trainings on air quality management and monitoring, safety and health program and other related subjects.

b) Team Leader

- 1) Proof of an additional minimum of 50 stack tests with approved test plans for certified parameters conducted; and
- 2) Proof of continuing education/trainings on air quality management and monitoring, safety and health program and other related subjects.
- 5.2.7 Resignation or termination of either QA/QC Manager or Team Leader during the accreditation period
 - a) Firms shall inform the EMB and secure the replacement of the sampling team within 30 days.
 - b) Accreditation certificate is automatically void; and
 - c) Transfer to any firm requires proficiency test only.
- 5.3 Workspace Requirements There shall be adequate working and storage areas. Working space requirement shall include areas for preparation of reagents, calibration of equipment, storage space for chemicals, glassware and equipment, and areas for cleaning activities.
- 5.4 Sampling Methods Sampling methods shall conform to the DENR-EMB approved methods and parameters included in DAO 2000-81, Rule XXV, Section 1, Table 2.

Section 6. Technical Committee / Secretariat

In order to facilitate the accreditation procedures and processes there is hereby created a technical committee, Sampling Assessment Team (SAT) and secretariat to operate under the DENR-EMB Central Office.

- 6.1 Technical Committee for the Accreditation of Sampling Firm (TCASF) the TCASF shall be composed of the Director of EMB and the Chiefs of the Air Quality Management Section (AQMS) and the Environmental Quality Division (EQD). It shall review the SAT report and endorse the same to the DENR Secretary for the issuance of the Certificate of Accreditation.
- 6.2 Sampling Assessment Team (SAT) This group shall be composed of technical staff from EMB Central and Regional Offices (CO/ROs) that evaluates the application for

accreditation. The SAT shall prepare a report on the activities required for a facility to obtain Third Party Emission Testing to be signed by the Chairman/Vice Chairman and the report shall be forwarded to the Technical Committee for Accreditation of Sampling Firm for consolidation and review.

6.3 Secretariat - This shall consist of the AQMS staff of the EMB. The Secretariat shall coordinate and support activities related to the accreditation of the firm. It shall assist the SAT in the discharge of its functions.

Section 7. Accreditation Procedures (see Annex 1 "Flow Chart of TPSETF Accreditation Process")

- 7.1. Where to file Applications for accreditation and payment of the applicable fees shall be filed with the EMB Central Office.
- 7.2 Review of documentary requirements The Secretariat shall make a preliminary assessment of the completeness of the application documents. Only applications with complete supporting documents will be accepted. The application shall be forwarded to the members of the SAT. If there are findings of deficiencies, the applicant shall be required to rectify the same.
- 7.3 Facility Inspection
 - 7.3.1 An on-site facility inspection shall be conducted by the SAT to validate the information contained in the submitted documents in accordance with the requirements herein provided and with other applicable laws, rules and regulations. The facility inspection shall be conducted within thirty (30) days upon receipt of the complete application.
 - 7.3.2 Calibration and maintenance procedures shall be made available during the inspection of the firm's facility. The organization shall adopt the DENR-EMB approved system for calibration and maintenance of its sampling equipment. Certificates of equipment calibration and the maintenance logbook shall be compiled and made available anytime upon request by the DENR-EMB including the initial site assessment.
 - 7.3.3 The Facility Inspection Report, in a prescribed form, shall be prepared and submitted by the SAT to the TCASF. Once the TCASF has reviewed the endorsement and found that the same is satisfactory, it shall direct the SAT to conduct the proficiency testing.
- 7.4 Performance Test
 - 7.4.1 The SAT shall administer the performance tests consisting of three (3) stages, namely: written, oral and on-site source emission testing. The applicant must pass the written and oral examination prior to the conduct of on-site emission testing.
 - 7.4.2 On-site emission test run(s) for each parameter applied for accreditation shall be completed under the observation and assessment of the SAT. The firm shall prepare and submit an emission test report for evaluation of the SAT.
 - 7.4.3 The results of the performance test shall be prepared by the SAT and submitted to the TCASF.

- 7.5 Final Assessment Report and Evaluation Report The TCASF shall review the SAT report and shall endorse to the DENR Secretary for the issuance of the Certificate of Accreditation.
- 7.6 Issuance of Certificate of Accreditation The Certificate of Accreditation shall be approved, signed and issued by the Secretary of the DENR or his/her duly authorized signatory based upon the evaluation result and recommendation of the TCASF. The Certificate shall, among others, contain the following information: name and address of the sampling organization, code number, scope of accreditation, parameters, list of personnel (owner/proprietor or President/General Manager, QA/QC Manager and Team Leader), effectivity and expiration dates, signature of the Secretary, and dry seal of the DENR. The accreditation shall be valid for three (3) years upon issuance unless revoked pursuant to Section 13.

Section 8. Renewal of Accreditation

The Certificate of Accreditation shall be valid for three (3) years and shall be renewed by the accredited firm thirty (30) days before its expiration.

Section 9. Requirements for Renewal

- 9.1 Payment of Accreditation Renewal Fee
- 9.2 The renewal of accreditation will be based on the following criteria:
 - a) Any change in the firm operations, personnel, equipment, QA/QC procedures, and safety procedures that might influence the conduct of stack testing according to IRR testing requirements;
 - b) Evaluation of the results of periodic monitoring of stack testing activities:
 - a) Observations of compliance testing activities by EMB personnel;
 - d) Inspection report for the inventory of facility and equipment;
 - e) Good standing record, which will be based on the requirements in Sections 12 through 14; and
 - f) Continuing education, which includes, but is not limited, to the following:
 - Seminars attended related to stack testing, industrial process operations, air pollution control, air sample analyses, facility inspection procedures and other appropriate stack testing related topics; and
 - 2) Internal and external training on performing stack testing (the test firm will be asked to provide module and list of training materials).

Section 10. Responsibilities of Accredited 3rd Party Source Emission Testing Firm (A3PSETF)

10.1 Third Party Source Emission Testing Firm shall have the following duties and responsibilities:

- a) Conduct source emission tests for private companies and individuals, other government agencies/instrumentalities, NGOs and local government units;
- b) Submit on a quarterly basis the list of firms tested to the EMB CO within fifteen (15) days after the end of each quarter; and
- c) Within two (2) weeks prior to the scheduled test, submit a test plan to EMB RO for every source emission test, with endorsement from the Pollution Control Officer (PCO) of the industry having the emission test conducted.
- 10.2 The A3PSETF shall submit annual reports with the following information:
 - a) *Facility*

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- 1) Any change in operations, personnel, equipment, QA/QC procedures, and safety procedures;
- Any ongoing activity pertaining to Third Party Accreditation (certification of additional personnel, additional parameters such as metals, schedule for proficiency testing, etc.);
- 3) Any suspension, warning, data error, sample error documented by EMB; and
- 4) Corrective actions being undertaken or completed.
- b) <u>QA/QC Manager</u>
 - 1) Number of source emission test reports prepared and evaluated since accreditation or last yearly report (list facility, test dates, EMB Region source, parameters, number of runs, whether the test was observed by EMB, etc.);
 - 2) Safety training updates; and
 - 3) List and documentation of continuing education modules, seminars attended, internal training (provide agenda and list of training materials).
- c) Team Leaders
 - 1) Number of source emission tests conducted since accreditation or last yearly report (list facility, test dates, EMB Region source, parameters, number of runs, whether test was observed by EMB, etc.);
 - 2) Safety training updates; and
 - 3) List and documentation of continuing education modules. seminars attended, internal training (provide agenda and list of training materials)
- 10.3 The A3PSETF shall notify DENR within five (5) working days of changes in any aspect of its operation, personnel, etc.

Section 11. Monitoring of Firms

The SAT, in coordination with the concerned EMB ROs, shall conduct periodic monitoring within six (6) months after the Certificate of Accreditation has been granted, and at least once a year, thereafter. Monitoring shall include, but not limited, to the following:

- a) Facility inspection of the sampling firm;
- b) On-site observations of emission sampling activities;

c) Provision of QA/QC activities;

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- d Health and safety requirements;
- e) Emission test report review; and
- f) Personnel accredited for source emission testing.

Section 12. Grounds for Issuance of Notice of Violation

The EMB Director has the authority to issue notice of violation on the following grounds:

- a) Improper sampling techniques/procedures including calibration, maintenance, etc., and incorrect/incomplete test reports;
- b) Non-submission of the test plans and annual reports; and
- c) Non-notification of changes on DENR requirements such as aspects of its operation, personnel, etc.

Section 13. Grounds for Revocation of Certificate of Accreditation

The DENR Secretary shall have the authority to revoke a firm's accreditation, based on the following grounds:

- a) Violation of DENR requirements on health and safety procedures, waste management, and hazard and risks assessment;
- b) Refusal to allow the SAT and EMB RO to monitor Third Party activities relating to accreditation and periodic monitoring;
- b) Falsification of documents and test results; and
- d) After three (3) Notices of Violation on offenses incurred within the validity of the Certificate of Accreditation.

Section 14. Disqualification

Firms whose Certificate of Accreditation are revoked are automatically disqualified and no longer qualified for reinstatement.

Section 15. Schedule of Fees

Application fee (per applicant)	Php 300.00
Assessment fee (per sampling team)	4,000.00
Accreditation fee	30,000.00
Succeeding Team Fee (payable upon issuance of Certificate)	25,000.00
Accreditation Renewal Fee	15,000.00
Replacement Fee	10,000.00

Section 16. Transitory Period. Existing source emission testing firms may still conduct sampling within six (6) months from the issuance of this Order. After this date, no firm and source emission testing team shall be allowed to conduct source emission testing for compliance purposes unless it has accredited Team Leader and QA/QC Manager.

Section 17. Separability Clause. If any provision of these guidelines is declared void or unconstitutional, the remaining provisions hereof is not affected thereby shall remain in full force and effect.

Section 18. Repealing Clause. This Order repeals DAO 2007-25, and all other issuances inconsistent herewith.

Section 19. Effectivity. This order shall take effect fifteen (15) days from its date of publication in a newspaper of general circulation and submission to the Office of the National Administrative Registry.

J.P. PAJE Secretar

Recommending Approval:

JAN MIGUEL T. CUNA ATT

Director Environmental Management Bureau

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