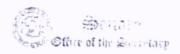
EIGHTEENTH CONGRESS OF THE
REPUBLIC OF THE PHILIPPINES
First Regular Session



SENATE

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S. No. 1184

19 NOV 20 P4:53

RECE OF A

#### Introduced by SENATOR RAMON BONG REVILLA, JR.

# AN ACT REGULATING THE PRACTICE OF ENVIRONMENTAL ENGINEERING IN THE PHILIPPINES, AND PROVIDING FUNDS THEREFOR

#### **EXPLANATORY NOTE**

The International Journal of Smart Grid and Clean Energy (2016) defines environmental engineering as that branch of engineering concerned with the application of scientific and engineering principles for the protection of human populations from the effects of adverse environmental factors; protection of environments, both local and global, from potentially deleterious effects of natural and human activities; and improvement of environmental quality.

Environmental Engineering indubitably plays a vital and indispensable role for a sustainable nation building. The diverse pressing concerns and challenges along environmental protection, preservation, mitigation, among others, demand a breed of professionals specifically and specially trained to address such concerns. Momentarily, engineers from varied disciplines are covering the needs; albeit approached in a scattered and piecemeal manner. The efforts done surely are highly commendable; yet, it is the present need of the times that the collective environmental engineering concerns be approached as a common and related type of issues.

According to Worrel and Vesilind (2012), environmental engineering developed during the last 60 years as a major engineering discipline and is now established as

an equal alongside such major engineering fields as civil, chemical, mechanical, and electrical engineering. The emergence of environmental engineering is driven in great part by societal need to control the pollution of the environment.

Hence, environmental engineers are needed to provide expediency and quality in professional treatment and response in addressing these concerns. Their concerted efforts will significantly push relevant researches, regulations, and professional practice in these unified environmental engineering fields.

A legislative measure is sought to gather and streamline the common areas under environmental engineering and have those given effective treatment and attention by environmental engineers who are with a more focused academic and professional preparations. Such measure is now much needed while the country is beset with myriad of environmental issues and concerns.

In light of the foregoing, the immediate passage of this bill is highly recommended.

RAMON BONG REVILLA, JR.

EIGHTEENTH CONGRESS OF THE
REPUBLIC OF THE PHILIPPINES
First Regular Session

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SENATE

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S. No. <u>11</u>84

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#### Introduced by SENATOR RAMON BONG REVILLA, JR.

#### AN ACT

### REGULATING THE PRACTICE OF ENVIRONMENTAL ENGINEERING IN THE PHILIPPINES, AND PROVIDING FUNDS THEREFOR

Be it enacted by the Senate and House of Representative of the Philippines in Congress assembled:

**ARTICLE I** 

## TITLE, DECLARATION OF STATE POLICY, COVERAGE, DEFINITION OF TERMS, AND SCOPE OF PRACTICE

Section 1. Short Title. – This Act shall be known as the "Environmental Engineering Law of the Philippines".

Sec. 2. *Declaration of Policy.* – The State recognizes the importance of environmental engineers, environmental engineering technologists, and environmental engineering technicians in nation building and development. As such, it is hereby declared the policy of the State to recognize, promote, strengthen, and regulate the practice of environmental engineering profession in the Philippines by instituting measures that will result in relevant environmental engineering education and enhanced roles and better career prospects for environmental engineering practitioners. The State shall develop and nurture competent, productive, and well-rounded environmental engineering practitioners whose standard of professional practice and service shall be excellent, world-class, and globally competitive through regulatory measures, programs and activities.

Sec. 3. *Coverage*. – This Act shall cover the following aspects of the practice of environmental engineering profession:

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- (a) Examination, registration, and licensure of environmental engineering practitioners;
- (b) Regulation, supervision, and control of the practice of environmental engineering;
- (c) Development, upgrading, and updating of the curriculum of environmental engineering, environmental engineering technology, and environmental engineering technician professions, in coordination with the Commission on Higher Education (CHED) and higher educational institutions (HEIs)and other stakeholders;
- (d) Development and improvement of the professional competence and practice of environmental engineering practitioners through, among others, continuing professional development (CPD); and,
- (e) Creation of relevant positions for environmental engineers, environmental engineering technologists and environmental engineering technicians and such other positions which require the knowledge and services of environmental engineering practitioners in all levels of local government units, relevant National Government Agencies and instrumentalities, including government-owned and -controlled corporations (GOCCs) as well as in industries, private establishments, firms, corporations, and institutions.

#### Sec. 4. Definition of Terms. – As used in this Act:

(a) Air Pollution Control Engineering refers to a branch of Environmental Engineering in which scientific and engineering concepts and principles are applied to control of air pollutant emissions, their generation and release from a source, their transport and transformation in and removal from the atmosphere, and their effects on human beings, materials, and ecosystems. It covers monitoring and correction of air pollution problems originating from relatively small areas, such as an industrial park impacted by one or more emission sources, to those from large areas, such as urban area impacted by a number of sources and a variety

of contaminants. The overall goal is to improve ambient air quality, to promote healthy environmental quality, and to protect property and public health;

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- (b) Air pollution engineering refers to a branch of environmental engineering concerned with the control of pollutants in; their generation and release from a source, their transport and transformation in and removal from the atmosphere, and their effects on human beings, materials, and ecosystems;
- (c) Climate Change Adaptation refers to the adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects , which moderates harm or exploits beneficial opportunities;
- (d) Disaster refers to a serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources;
- (e) Disaster Mitigation refers to the lessening or limitation of the adverse impacts of hazards and related disasters. Mitigation measures encompass engineering techniques and hazard-resistant construction as well as improved environmental policies and public awareness, land use planning, and climate change.
- (f) Disaster Risk Management refers to the systematic process of using administrative directives, organizations, and operational skills and capacities to implement strategies, policies and improved coping capacities in order to lessen the adverse impacts of hazards and possibility of disaster;
- (g) Disaster Risk Reduction refers to the concept and practice of reducing disaster risks through systematic efforts to analyze and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events;

(h) Environmental Engineer refers to an environmental engineering practitioner duly registered with the Board and the Commission to practice environmental engineering as defined in this Act;

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- (i) Environmental Engineering encompasses the application of science and engineering principles to protect and improve the environment, including the air, water, and land resources, to provide safe water, air, and land for human habitation and for other organisms and to rehabilitate polluted sites, solid waste management, environmental impact assessment. environmental risk assessment and management, pollution atmospheric pollution abatement: noise abatement: conservation and protection of water resources; classification of water; protection of watersheds; and management of toxic and hazardous substances and radiological pollution. The ultimate goal of environmental engineering is the protection of human populations from the effects of adverse environmental factors and the protection of environments, both local and global, from potentially deleterious effects of natural and human activities;
- engineering practitioner duly registered with the Board and the Commission whose competence lies in the application of environmental engineering technologies. Environmental engineering technologies technologies shall be graduates of Bachelor of Science in Environmental Engineering Technology or its equivalent conferred by a school, academy, college or university in the Philippines or abroad which is recognized by the CHED;
- (k) Environmental Engineering Management refers to an entire spectrum of engineering activities covering environmental impact assessment (EIA), water quality management, ambient air quality management, climate change adaptation and mitigation, disaster risk reduction and management, and other programs and strategies to maintain safe and healthy environment and protect public health;
- (I) Environmental Engineering Technician refers to an environmental engineering practitioner duly registered with the Board and the

Commission whose role is to apply established methods or techniques of environmental engineering. An environmental engineering technician shall be a graduate of associate or certificate programs for environmental engineering technicians offered by a school, academy, college, or university in the Philippines or abroad which is recognized by the Commission on Higher Education (CHED);

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- (m) Environmental Health and Safety Engineering refers to the branch of Environmental Engineering in which scientific and engineering concepts and principles are applied to the examination of indoor and outdoor environmental quality and condition to identify, monitor, evaluate and eliminate or control of hazards that expose people, environment or property to danger;
- (n) Environmental Impact Assessment refers to the process that involves predicting and evaluating the likely impacts of a project including cumulative impacts on the environment during construction, commissioning, operation, and abandonment. It also includes designing appropriate preventive, mitigating, and enhancement measures addressing these consequences to protect the environment and the community's welfare;
- (o) Hazardous Wastes refers to those wastes defined and designated as hazardous wastes by Republic Act No. 6969, otherwise known as the "Toxic Substances and Hazardous and Nuclear Waste Control Act of 1990";
- (p) Noise pollution control engineering refers to a branch of environmental engineering that is concerned with the control of the generation and propagation of environmental noise/sound that impact negatively on flora and fauna;
- (q) Radioactive and Nuclear Waste Management refers to the branch of Environmental Engineering in which the basic principles of science and engineering are applied to responsible mining, milling, processing, refining of radioactive materials, and disposal of any material that contains or is contaminated with radio nuclides at concentrations or

activities greater than the clearance levels as established by the Philippine Nuclear Research Institute (PNRI), and for which no use is foreseen;

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- (r) Site Remediation refers to a branch of Environmental Engineering in which scientific and engineering concepts and principles are applied to environmental quality investigation to characterize the concentrations and locations of contaminants in the soil and groundwater, conduct of risk assessment to estimate the health hazards of the contamination to humans and the ecosystem, and strategies to clean-up the site and return it to safe utilization;
- (s) Solid and Hazardous Waste Engineering and Management refers to a branch of Environmental Engineering in which scientific and engineering concepts and principles are applied to the management of municipal solid and hazardous wastes to protect human health and the environment and the conservation of limited resources through resource recovery and recycling of waste materials. It covers research, siting, design, operation, and maintenance, monitoring, evaluation, and upgrading of facilities and related support structures including the functional elements for the control of the generation, characterization, onsite storage, collection, segregation, transfer, transport, processing, and recovery, recycling, and ultimate disposal of waste materials in a manner that is in accord with the best principles of public health, economics, engineering, conservation, aesthetics, and other environmental considerations;
- (t) Hazardous Waste Management refers to the process which involves reducing the amount of hazardous substances produced, treating hazardous wastes to reduce their toxicity, and applying sound engineering controls to reduce or eliminate exposures to these wastes;
- (u) Water Supply Engineering refers to a branch of Environmental Engineering concerned with the scientific principles and analysis of water supply systems; development of sources of water supply; quality assessment, collection and treatment of water from sources to drinking

water, municipal water works, storm waters, groundwater, surface water, rain water, seawaters desalination, filtration systems and water re-use applications; Water quality criteria and standards and their relation to public health, environment and urban water cycle; Water quality concepts and their effect on treatment process selection; operation and maintenance of water supply systems; evaluation of project alternatives on basis of chosen selection criteria for drinking water;

Water supply engineering within a watershed context to evaluate the water balance within a watershed, management of watershed environment, determine the available water supply, the water needed for various needs in that watershed, the seasonal cycles of water movement through the watershed and development of the systems to store, treat, and convey water for various uses; Design and rehabilitate raw water abstraction, transport, treatment and distribution processes and systems; Water supply and treatment to secure water supplies for potable and domestic use; Provisions of potable water supply where water is treated to minimize risk of infectious disease transmittal, risk of non-infectious illness, and create a palatable water flavor that meet various end-user needs such as domestic use;

- (v): Water Quality Management refers to the protection and improvement of the physical, chemical, biological, microbiological, and radiological quality of water to maintain its most beneficial use; and,
- (w) Wastewater Engineering refers to a branch of Environmental Engineering in which the basic principles of science and engineering are applied to the problems of water pollution control. It covers wastewater characterization, analysis and determination of wastewater flow rates and constituent loadings, as well as physical, chemical, and biological treatment processes, and design, wastewater treatment plant residuals management, and other issues related to wastewater treatment plant performance and wastewater disposal.

1 Sec. 5. Scope of Practice. – The practice of environmental engineering practitioners shall include the following: 2 Water Supply and Wastewater Engineering; (a) 3 Solid and Hazardous Waste Engineering; (b) 4 (c) Air Quality and Noise Pollution Control Engineering; 5 (d) Site Remediation: 6 Environmental Health and Safety Engineering; and, (e) 7 Environmental Engineering Management which covers Environmental (f) 8 Impact Assessment (EIA), Water Quality Management, Ambient Air 9 Quality Management, Climate Change Adaptation and Mitigation, 10 Disaster Risk Reduction and Management, and other programs and 11 strategies to maintain safe and healthy environment and protect public 12 health. 13 1. Environmental Engineer shall perform the following: 14 Provide consultation services on environmental engineering; (a) 15 (b) Plan, design, approve, investigate, evaluate, supervise, and monitor 16 environmental engineering processes, facilities including sanitary utilities 17 in buildings, and other related projects; 18 (c) Develop, implement, and manage programs for waste minimization and 19 recycling, resource recovery, cleaner production, pollution abatement 20 and mitigation, polluted sites remediation, and other relevant 21 environmental strategies; 22 (d) Conduct research on environmental problems, including current and 23 emerging contaminants, pollutants, and public health issues, and create 24 and design innovative solutions; 25 Teach courses in the environmental engineering and allied programs and (e) 26 serve as resource person; and 27 (f) Prepare and certify technical and environmental reports for compliance 28 to environmental laws and regulation. 29 2. Environmental Engineering Technologist shall perform the following services 30

under the supervision of an environmental engineer:

(a) Conduct laboratory and field works pertaining to environmental engineering projects and undertakings;

- (b) Recommend the issuance of environmental and other related permits, clearances, or licenses, including discharge permits and permit to operate air pollution source and control installations; and
- (c) Assist environmental engineers in the practice of the profession.
- 3. *Environmental Engineering Technician* shall perform the following services under the supervision of an environmental engineer and environmental engineering technologist, or both:
  - (a) Conduct inspection, investigation, and sampling in pollution control facilities, sanitary utilities in buildings, public places and establishments, and ambient environment (ambient air, water bodies, land);
  - (b) Perform well-defined functions related to the practice of environmental engineering as directed by an environmental engineer and/or environmental engineering technologist; and
  - (c) Prepare reports and correspondence pertaining to their activities.

#### ARTICLE II

#### BOARD OF ENVIRONMENTAL ENGINEERING

- Sec. 6. *Creation and Composition of the Board.* There is hereby created a Professional Regulatory Board of Environmental Engineering, hereinafter referred to as the Board, under the administrative supervision and control of the Professional Regulation Commission (PRC), herein referred to as the Commission. The Board shall consist of a Chairperson and four (4) Members:
  - (a) The Chairperson and two (2) members shall be responsible for the environmental engineering licensure examinations, whereas, the Chairperson and the remaining fourth (4<sup>th</sup>) and fifth (5<sup>th</sup>) members shall be responsible for the environmental engineering technologists and environmental engineering technicians examinations.
  - (b) The Chairperson and members of the Board shall be appointed by the President of the Philippines upon the recommendation of the Commission, from a list of at least three (3) nominees for each position who shall be

endorsed by the duly accredited integrated professional organization (AIPO) of the environmental engineering practitioners in the Philippines.

Sec. 7. Terms of Office. — The Chairperson and members of the Board shall hold office for a term of three (3) years from the date of appointment, or until their successors shall have been appointed or qualified. They may, however, be reappointed for only a second term as may be recommended by the Commission and the AIPO of the environmental engineering practitioners. Each member shall qualify by taking an oath of office before entering the performance of the duties. Vacancies in the Board shall be filled by the President of the Philippines, from the list of candidates endorsed by the Commission, who were chosen and recommended from the list of nominees submitted by the AIPO of the environmental engineering practitioners, but for the unexpired term only. At the expiration of the term or removal of the Board Chairperson, the most senior of the Board member shall temporarily assume and perform the duties and functions of the Chairperson, until a permanent one is appointed by the President.

- Sec. 8. *Qualifications and Disqualifications of the Members of the Board.* A member of the Board at the time of the appointment, shall possess the following qualifications:
  - (a) Must be a Filipino citizen and a resident of the Philippines for at least five(5) years;
  - (b) At least thirty-five (35) years of age, of good moral character, and of proven integrity in the personal and professional conduct;
  - (c) Holds a degree of Bachelor of Science in Environmental Engineering from a university, school, college, academy or institute in the Philippines that is recognized by the Commission on Higher Education (CHED): *Provided*, That the Chairperson must preferably be a holder of a Master's or a doctorate degree in Environmental Engineering;
  - (d) A registered Environmental Engineer with a minimum of seven (7) years of relevant experience;
  - (e) Must neither be an official nor a faculty member, nor shall have pecuniary interest in any university, college, school or institution conferring bachelor's degree in environmental engineering for at least three (3) years

- prior to the appointment. A person must not be connected with a review 1 center, or with any group or association which offers or conducts review 2 classes or lectures in preparation for the licensure examinations, at the 3 time of the appointment and during the incumbency as chairperson or 4 member of the Board. 5 Must not be an incumbent officer of the AIPO of the environmental (f) 6 engineering practitioners within a period of three (3) years prior to 7 nomination; and 8 (g) Must not have been convicted of any offense involving moral turpitude. 9 Sec. 9. Compensation and Allowances. – The Chairperson and members of the 10 Board shall receive compensation and allowances comparable to those being received 11 by the chairpersons and members of existing Boards under the Commission as 12 provided for in the General Appropriations Act. 13 Sec. 10. Powers, Functions, and Responsibilities of the Board. – The Board 14 shall exercise the following powers, functions and responsibilities: 15 (a) To promulgate the implementing rules and regulations necessary in 16 carrying out the provisions of this Act; 17 (b) To regulate the registration, licensure and the practice of environmental 18 engineering, in accordance with the provisions of this Act; 19 To issue the certificate of registration and professional identification (c) 20
  - cards to successful registrants;

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- (d) To administer oaths in accordance with the provisions of this Act;
- To issue special temporary permit to qualified foreign environmental (e) engineering practitioners, who may be authorized by existing laws to practice environmental engineering in the Philippines for a specific project and duration of time only;
- (f) To monitor the conditions affecting the practice of the environmental engineering profession and, whenever necessary, adopt such measures deemed proper for the enhancement of the profession and the maintenance of high professional technical and ethical standards;
- (g) To hear and investigate cases arising from violations of this Act, its Implementing Rules and Regulations (IRR), Code of Ethics,

administrative policies, orders and issuances promulgated by the Board. For this purpose, the Board shall issue *subpoena ad testificandum* and/or *subpoena duces tecum* to secure the attendance of the respondents or witnesses and the production of documents relative to the investigation conducted by the Board;

- (h) To hear and investigate cases filed before the Board where the issue or question strictly concerns the practice of the professions, in which case, the hearing shall be presided over by at least one (1) member of the Board assisted by a Legal or Hearing Officer of the Commission;
- (i) To conduct, through the Legal Officers of the Commission, summary proceeding on minor violations of this Act, its IRR, including the general instructions to examinees, and render summary judgment thereon, which, unless appealed to the Commission, shall become final and executory after fifteen (15) days from the receipt of the decision;
- (j) To suspend, revoke, reissue, or reinstate the certificate of registration and professional identification card or special temporary permit for causes provided by this law;
- (k) To prepare, adopt, and issue the syllabi or Tables of Specifications (TOS) of the subjects for examination, in consultation with the academe; determine and prepare the questions for the licensure examinations which shall strictly be within the scope of the syllabus or table of specifications of the subjects for examination; score and rate the examination papers and submit the results in all subjects duly signed by the members of the Board to the Commission within thirty (30) days from the last day of examination, unless extended for justifiable cause, and subject to the approval of the Commission;
- (I) To prescribe and adopt a Code of Ethics for Environmental Engineers, Environmental Engineering Technologists and Environmental Engineering Technicians in consultation with the AIPO;
- (m) To prescribe guidelines in the Continuing Professional Development (CPD) program and to create the CPD Council with the objective of

providing and ensuring the continuous development of all environmental 1 engineering practitioners; 2 (n) To adopt an official seal of the Board; and 3 (0)To perform other functions and duties as may be necessary to implement 4 this Act. 5 The policies, resolutions, rules and regulations issued or promulgated by the 6 Board shall be subject to review and approval of the Commission. However, the 7 Board's decisions, resolutions and orders rendered in administrative cases shall be 8 subject to review only if on appeal. 9 Sec. 11. Annual Report. - The Board shall, at the end of each calendar year, 10 submit to the Commission a detailed report of its activities and proceedings during the 11 year embodying also such recommendations as it may deem proper to promote the 12 policies and objectives of this Act. 13 Sec. 12. Removal of Board Members. – The President, upon recommendation 14 of the Commission, may remove any member of the Board on the following grounds: 15 neglect of duty, incompetence, malpractice, tolerance of irregularities in the 16 examinations, or for unprofessional, unethical, or dishonorable conduct, after having 17 been given the opportunity to defend oneself in a proper administrative investigation. 18 ARTICLE III 19 LICENSURE, REGISTRATION AND PRACTICE 20 OF ENVIRONMENTAL ENGINEERING 21 Sec. 13. Examination Requirement. – Except as otherwise specifically provided 22 in this Act, all applicants for registration for the practice of environmental engineering 23 shall be required to pass a written technical examination which shall be given at such 24 times and places as may be determined by the Commission. 25 Sec. 14. Qualifications of Applicants for the Environmental Engineers Licensure 26 Examinations. – An applicant for the licensure examination for environmental engineer 27 28 shall establish to the satisfaction of the Board that the following qualifications are met: A citizen of the Philippines or of a foreign country which has a policy on 29 reciprocity for the practice of environmental engineering with the 30 Philippines; 31 (b) Has a good reputation and good moral values; 32

- Has not been convicted by the court of any offense involving moral (c) 1 turpitude; and 2 Holds a Bachelor's degree in Science of Environmental Engineering from (d) 3 a university, college, academy or institute, duly constituted and 4 recognized by the CHED. 5 Subject to the evaluation of the Board, the following may be allowed to take the 6 Environmental Engineering Board Examinations within seven (7) years upon the 7 effectivity of this Act: 8 (a) A holder of a degree in ecological and environmental engineering or 9 environmental engineering, from a recognized and legally constituted 10 school, college, or university in the Philippines; 11 (b) A holder of a degree in any field of engineering plus a Master's Degree in 12 Environmental Engineering from a recognized and legally constituted 13 school, college or university in the Philippines; and, 14 (c) A holder of a degree in any field of engineering from a recognized and 15 legally constituted school, college or university in the Philippines, with at 16 least two (2) years of environmental engineering experience. 17 Sec. 15. Qualifications of Applicants for the Environmental Engineering 18 Technologists Licensure Examination. – An applicant for the licensure examination for 19 environmental engineering technologists shall establish to the satisfaction of the Board 20 that the following qualifications are met: 21 A citizen of the Philippines or of a foreign country which has a policy on (a) 22 reciprocity for the practice of environmental engineering with the 23 Philippines; 24 Has a good reputation and good moral values; (b) 25 A graduate of Bachelor of Science in Environmental Engineering (c) 26 Technology; 27 (d) Has not been convicted by the court of any offense involving moral 28 turpitude; and, 29
  - Sec. 16. Qualifications of Applicants for the Environmental Engineering Technicians Licensure Examination. An applicant for the licensure examination for

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Is in good health.

- environmental engineering technicians shall establish to the satisfaction of the Board that the following qualifications are met:
  - (a) A citizen of the Philippines or of a foreign country which has a policy on reciprocity for the practice of environmental engineering with the Philippines;
    - (b) Has a good reputation and good moral values;
- 7 (c) Is an Associate of or holds a Certificate in Environmental Engineering, or 8 finished two years of the prescribed curriculum for BSEnE;
  - (d) Has not been convicted by the court of an offense involving moral turpitude; and,
- 11 (e) Is in good health.

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- Sec. 17. Subjects of the Environmental Engineering Licensure Examination. –
  Unless modified by the Board and the Commission, the Environmental Engineering,
  Environmental Engineering Technologists and Environmental Engineering Technicians
- 16 (a) Water Supply and Wastewater Engineering;
  - (b) Solid and Hazardous Waste Engineering;

Licensure Examination shall cover the following subjects:

- (c) Air Quality and Noise Pollution Control Engineering;
- 19 (d) Site Remediation;
- 20 (e) Environmental Health and Safety Engineering; and,
  - (f) Environmental Engineering Management covers Environmental Impact
    Assessment, Water Quality Management, Ambient Air Quality
    Management, Climate Change Adaptation and Mitigation, Disaster Risk
    Reduction and Management, and other programs and strategies to
    maintain safe and healthy environment, and to protect public health.

The Board, subject to the approval of the Commission, may amend or revise the subjects, the syllabi, and the system and procedure in the Environmental Engineering, Environmental Engineering Technologists and Environmental Engineering Technicians Licensure Examination

Sec. 18. Rating in the Licensure Examination. — To be qualified as having passed the Environmental Engineering, Environmental Engineering Technologists and Environmental Engineering Technicians Licensure Examination, a candidate must

obtain a weighted general average of at least seventy percent (70%), with no grade lower than fifty percent (50%) in any given subject. However, an examinee who obtains a weighted general average rating of seventy percent (70%) or higher, but obtains a rating below fifty percent (50%) in any given subject, must retake the examination in the subject or subjects where the grade obtained is below fifty percent (50%).

An examinee who fails to pass the examination for the third (3<sup>rd</sup>) time shall be allowed to take another examination only after the lapse of one (1) year from the last examination taken and after having completed a refresher course in a government-recognized institution.

Sec. 19. *Oath of Environmental Engineering Practitioner.* – All successful registrants, with or without examination, shall take the prescribed professional oath before any member of the Board or any other authorized official of the Commission prior to entering the practice of the profession.

Sec. 20. Issuance of Certificates of Registration and Professional Identification Card. — The Board and the Commission shall issue a certificate of registration to a registrant who has met all the requirements for registration under this Act. The certificate of registration shall bear the full name of the registrant, the signatures of the Chairperson of the Commission and all members of the Board, and the official seals of the Board and the Commission. The certificate of registration shall be the evidence that the person named therein is entitled to practice the environmental engineering, environmental engineering technology or environmental engineering technician profession, as the case may be, with all the privileges appurtenant thereto.

A professional identification card indicating the registration number, and dates of its issuance and expiry, duly signed by the Commission Chairperson, shall likewise be issued to a successful registrant. The professional identification card shall be renewed every three (3) years, subject to compliance with the requirements as may be prescribed by the Board and the Commission.

Sec. 21. *Registration without Examination.* – Within the periods specified below, the Board shall issue certificates of registration and professional identification cards to the following qualified persons without examination: *Provided,* That the persons possess the following qualifications as validated by the Board: –

1. Environmental Engineers must satisfy the following requirements:

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- (a) Hold a degree in ecological and environmental engineering or environmental engineering, with at least five (5) years of environmental engineering experience; or a degree in any field of engineering plus a masters degree in environmental engineering from a recognized and legally constituted school, college or university in the Philippines, with at least three (3) years of environmental engineering experience; or a degree in engineering and a doctorate degree in environmental engineering from a recognized and legally constituted school, college or university in the Philippines; or
- (b) A Filipino citizen who has a baccalaureate degree in any field of engineering from a school, college, academy, or university in the Philippines or abroad which is recognized by the CHED, and with at least seven (7) years of environmental engineering experience and a registered engineer prior to the effectivity of this Act shall file his/her application for registration without examination not later than two (2) years from the effectivity of this Act.

This provision may be exercised within seven (7) years after the effectivity of this Act.

- 2. Environmental Engineering Technologists must satisfy the following requirements:
  - (a) Employed as pollution control officers or environmental management specialists;
  - (b) With ten (10) years experience; and,
  - (c) Baccalaureate degree
  - 3. Environmental Engineering Technicians must satisfy the following requirements:
    - (a) Employed as pollution control officers or environmental management specialists; and,
    - (b) With ten (10) years experience;
- Provided further, That qualified Environmental Engineering Practitioners shall register within two (2) years after the effectivity of this Act.

Sec. 22. Foreign Reciprocity. – No foreigner shall be admitted to the licensure examination, or be given a certificate of registration and professional identification card, or be entitled to any of the rights and privileges under this Act, unless the requirements for the registration or licensing in said foreign country or state are substantially the same as those required and contemplated by the laws of the Philippines, and that the laws of such foreign country or state specifically permits Filipino environmental engineering practitioners to practice within its territorial limits on the same basis as the subjects or citizens of such foreign country or State.

- Sec. 23. *Special Temporary Permits.* The following are required to secure a special temporary permit from the Board, subject to the approval of the Commission:
  - (a) Environmental engineering practitioners from other countries called in by the government for consultation and for a specific project; or both, Provided, That such foreign environmental engineering practitioners are legally qualified to practice environmental engineering in their country or State.
  - (b) Foreign consultants specializing in the field of environmental engineering, who, in the judgment of the Board, may benefit the local practitioners through the transfer of technology: *Provided,* That such registrants shall satisfy the following conditions:
    - (1) That, at the time of engagement, no Filipino environmental engineering practitioner in the country is competent, available and willing to perform the services for which the foreigner has been hired; and,
    - Any particular or specific engagement shall not be in excess of one
       year, renewable at the discretion of the Board and the Commission.
- Sec. 24. *Refusal to Register.* The Board shall not register any applicant for registration with or without licensure examination, who suffers from any of the following disqualifications:
  - (a) Conviction by final judgment by a court of competent jurisdiction of any offense involving moral turpitude;

- (b) Conviction by final judgment in any administrative case involving immorality or notoriously undesirable conduct;
  - (c) Adjudged guilty for violation of the General Instructions to Examinees by the Board;
  - (d) Declared to be of unsound mind by a court of competent jurisdiction; or,
  - (e) Proven to be afflicted with addiction to substance/s impairing the ability to practice the profession through a finding to this effect by a medical or drug testing facility accredited by the government.

In case of refusal to register, the Board shall issue to the applicant a written statement setting forth the reasons for such refusal and shall file a copy thereof in its records.

Sec. 25. Suspension and Revocation of the Certificate of Registration and Professional Identification Card or Special Temporary Permit. – The Board shall have the power, after due notice and hearing, to suspend a member for a period of six (6) to twelve (12) months, depending on the gravity of the offense or revoke the certificate of registration and professional identification card or special temporary permit on any of the following grounds:

#### For Suspension:

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- (a) Unjustified refusal to join or to remain a member in good standing of the AIPO;
- (b) Unjustified or unexplained neglect or failure to pay the annual registration fees for five (5) consecutive years; and
- (c) Unjustified or unexplained non-renewal of the professional identification card for more than five (5) consecutive years.

#### For Revocation:

- (a) Violation of any provision of this Act, its IRR, Code of Ethics, and other policies and regulatory measures of the Board and the Commission, or both;
- (b) Perpetration or use of fraud in obtaining the certificate of registration, professional identification card or special temporary permit;

 Gross incompetence, negligence or ignorance in the practice or exercise of the profession resulting to death, injury of persons and damage to property;

- (d) Aiding or abetting the illegal practice of a person who is not an environmental engineering practitioner by allowing oneself to use the certificate of registration, professional identification card or special temporary permit, among others;
- (e) Practice of the profession during the suspension from the practice thereof; and,
- (f) Addiction to a drug or alcohol abuse impairing oneself ability to practice the profession or being declared of unsound mind by a court of competent jurisdiction.

The Board shall periodically evaluate the aforementioned grounds and revise or add new ones as the need arises, subject to approval by the Commission.

Sec. 26. *Filing of Charges.* — The rules on administrative investigation of the Commission shall govern the filing of charges and the conduct of hearing and investigation, or both subject to applicable provisions of this Act, RA No. 8981 and the Rules of Court.

Sec. 27. Reissuance of Revoked Certificate of Registration, Replacement of Lost or Damaged Certificate of Registration, Professional Identification Card or Special Temporary Permit. — Suspensions imposed against a member shall be automatically lifted upon expiration of the period indicated in the suspension order. The Board may, upon petition, reinstate or reissue a revoked certificate of registration after two (2) years from the effectivity of the revocation, which is reckoned from the date of surrender of the said certificate of registration and professional identification card, or both to the Board and the Commission. The Board may not require the holder thereof to take another licensure examination. The petitioner shall prove to the Board that one has a valid reason to resume the practice of the profession. For the grant of one's petition, the Board shall issue a Board Resolution, subject to approval by the Commission.

A duplicate copy of a lost certificate of registration, professional identification card or special temporary permit may be reissued in accordance with rules thereon and upon payment of the prescribed fee therefor.

Sec. 28. *Use of Seal.* — All environmental engineering practitioners shall obtain a seal of such design as the Board shall authorize and direct: *Provided, however,* That the certificate of registration number issued by the Board shall be included in the design of the seal. Plans and specifications prepared by, and under the direct supervision of an environmental engineer shall be stamped with such seal during the validity of the latter's certificate of registration. It shall be unlawful to affix the seal on any document after the environmental engineer's certificate of registration has expired or has been revoked, unless such certificate of registration shall have been renewed or re-issued.

Sec. 29. Display of Certificate of Registration in the Place of Practice. – The proprietor or manager of a firm, partnership or association which employs an environmental engineer shall post or cause to be posted in a conspicuous place within the place of business of the firm, partnership or association, the certificate of registration of the environmental engineer.

Sec. 30. Roster of Environmental Engineering Practitioners. – The Commission shall keep a roster of all duly licensed and registered environmental engineers, environmental engineering technologists and environmental engineering technicians, with their names; registration numbers and places of business. The Commission shall regularly update such roster and make it available to all interested parties, upon request.

Sec. 31. Comprehensive Environmental Engineering Specialty Program. — Within ninety (90) days from the effectivity of this Act, the Board, in coordination with the AIPO for environmental engineering practitioners and recognized specialty organizations, is hereby mandated to formulate and develop a comprehensive environmental engineering specialty program that would upgrade the level of skills and competence of environmental engineering specialists in the country, such as the areas of Water Supply and Wastewater Engineering, Solid and Hazardous Waste Engineering, Air Quality and Noise Pollution Control Engineering, Sanitary Engineering,

Site Remediation, Environmental Health & Safety Engineering, Environmental Engineering Management and such other areas as maybe determined by the Board.

Sec. 32. Environmental Engineering Code for Environmental Engineering Practitioners. – The Board shall adopt and promulgate the Code of Ethics and Standards of Practice for environmental engineers, environmental technologists, and environmental technicians prescribed and issued by the AIPO of environmental engineers.

**ARTICLE IV** 

#### PENAL AND OTHER MISCELLANEOUS PROVISIONS

Sec. 33. *Practice of Firms.* – The practice of environmental engineering is a professional service based on individual and personal qualifications. A firm, association or partnership may practice this profession: *Provided,* That the principals of the firm, association or partnership are environmental engineers.

Sec. 34. Integration of the Environmental Engineering Professions. – The environmental engineering profession shall be integrated into one (1) national organization which shall be recognized by the Board as the one and only Accredited Integrated Professional Organization (AIPO) of the environmental engineering practitioners. Every environmental engineering practitioner shall, upon registration with the Board, ipso facto become a member of the AIPO and shall receive all the benefits and privileges appurtenant to their membership in the AIPO, upon payment of the required membership fees and dues.

Sec. 35. Appointment of Environmental Engineers to Relevant Positions in the Provincial, City and Municipal Governments and Establishments with Environmental Engineering Functions. – Within two (2) years after the approval of this Act, all provinces, cities and municipalities may appoint an environmental engineer in their respective Provincial, City and Municipal Engineering Offices.

No person shall be appointed to the position of environmental engineer or those vested with environmental engineering functions unless the person is a citizen of the Philippines, a resident of the local government unit concerned, of good moral character, and a licensed environmental engineer. The appointee must have acquired experience in the practice of the profession of environmental engineering for at least five (5) years in the case of the provincial or city environmental engineer, and three

(3) years in the case of municipal environmental engineer. The appointment of an environmental engineer shall be mandatory for the provincial, city and municipal governments. The environmental engineer shall:

- (a) Initiate, review and recommend changes in policies and objectives, plans and programs, techniques, procedures and practices in environmental engineering works in general of the local government unit concerned;
- (b) Advise the governor or mayor, as the case may be, on environmental engineering matters and concerns;
- (c) Administer, coordinate, supervise, and control the implementation of projects relevant to environmental engineering;
- (d) Provide engineering services to the local government unit concerned, including investigation and survey, engineering designs, feasibility studies and project management;
- (e) In the case of provincial environmental engineers, exercise technical supervision over all environmental engineering offices of component cities and municipalities; and,
- (f) Exercise such other powers and perform such other duties and functions as may be prescribed by law or ordinance.

Firms, companies, partnerships or associations which are engaged in the installation, construction, manufacture, operation, or sale of environmental equipment, facilities and other environmental engineering processes, or hold environmental permits such as Environment Compliance Certificate (ECC), Water Permit, Discharge Permit, shall hire or engage the services of at least one (1) environmental engineer. Industries, establishments, institutions, waterworks, and facilities which generate, treat, discharge or dispose waste shall also be required to hire or engage the services of at least one (1) environmental engineer who shall, at the same time, perform functions of a Pollution Control/Environmental Officer.

Sec. 36. Ratio of Environmental Engineers, Environmental Engineering Technologists and Environmental Engineering Technicians per population of Local Government Units. —The IRR of this Act shall set the standard ratio of environmental engineers, environmental engineering technologists and environmental engineering technicians per unit of population served in every province, city or municipality.

Sec. 37. *Penal Provision.* – In addition to the administrative sanctions imposed under this Act, upon conviction, the penalty of imprisonment of not less than one (1) year but not more than five (5) years, or a fine of not less than One hundred thousand Pesos (PhP 100,000.00) but not more than Five hundred thousand Pesos (PhP 500,000.00) or both, at the discretion of the Courts, shall upon conviction be imposed on a person who commits any of the following acts:

- Engaging in the practice of environmental engineering in the Philippines without having been registered or without having conformed with the provisions of this Act;
- Presenting or attempting to use as one's own the certificate of registration or professional identification card of another environmental engineer, environmental engineering technologists or environmental engineering technician, or special temporary permit of a foreign environmental engineering practitioner;
- c. Submitting any false or forged evidence to the Board for the purpose of securing a certificate of registration, professional identification card or special temporary permit, or impersonating any environmental engineering practitioner;
- d. Attempting to use or using a revoked or suspended certificate of registration, professional identification card or special temporary permit;
- Using or advertising any title or description tending to convey the impression that a person is an environmental engineering practitioner even without a valid certificate of registration, professional identification card or special temporary permit; or,
- f. Violating any of the provisions of this Act.

In case the offender is a corporation, partnership or juridical person, the penalty of imprisonment shall be imposed on the environmental engineer jointly and solidarily with the responsible professionals, as well the officer or officers responsible for permitting or causing the violation.

Sec. 38. *Enforcement of the Act by Officers of the Law.* – The Board and the Commission shall implement and enforce the provisions of this Act, its IRR, and whenever warranted, investigate complaints for violations of this Act, its IRR and the

Code of Ethics and Standards for Environmental Engineers, Environmental Engineering
 Technologists and Environmental Engineering Technicians.

The National Government, any of its provincial, city or municipal government or political subdivisions, shall assist in the enforcement of the provisions of this Act. The Department of Justice shall act as legal adviser of the Board and render such legal assistance as may be necessary in carrying out the provisions of this Act.

- Sec. 39. *Transitory Provision.* The Board of Environmental Engineering created under Section 6 of this Act shall be constituted not later than six (6) months from the effectivity of this Act. The Board shall administer the Environmental Engineers Licensure Examination and register environmental engineering practitioners prior to the full implementation of the qualifications prescribed for environmental engineers, environmental engineering technologists and environmental engineering technicians in Sections 14, 15 and 16 of this Act.
- Sec. 40. *Implementing Rules and Regulations.* The Board shall, within ninety (90) days upon effectivity of this Act, formulate and issue the implementing rules and regulations (IRR) to carry out the provision of this Act.
- Sec. 41. *Appropriations.* The Chairperson of the Commission shall immediately include in the Commission's programs the implementation of this Act, the funding of which shall be included in the annual General Appropriations Act (GAA). The amount necessary to carry out the initial implementation of this Act shall be charged against the current year's appropriations of the Commission. Thereafter, such sums as may be necessary for the continued implementation of this Act shall be included in the succeeding GAA.
- Sec. 42. *Separability Clause*. If any provision of this Act or the application thereof is declared unconstitutional or invalid for any reason, the same shall not affect the validity of the other provisions.
- Sec. 43. *Act not Affecting other Professions.* Nothing in this Act shall be construed as to affect or prevent existing rights of other professions as provided law.
- Sec. 44. *Repealing Clause.* All laws, parts of laws, decrees, orders, letters of instructions and ordinances, or regulations in conflict with the provisions hereof, are hereby repealed or modified accordingly.

- Sec. 45. *Effectivity.* This Act shall take effect fifteen (15) days after its
- 2 publication in the Official Gazette or in a newspaper of general circulation.
- 3 Approved,