

Complying with North Carolina Rules and Regulations On the Practice of Professional Engineering

By

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A. POWERS AND DUTIES OF THE NORTH CAROLINA BOARD OF EXAMINERS FOR ENGINEERS AND SURVEYORS

The North Carolina General Assembly has declared that in order to safeguard life, health, and property, and to promote the public welfare, it is in the public interest to regulate the practice of professional engineering. The laws regulating the practice of professional engineering (and land surveying) are found in Chapter 89C of the North Carolina General Statutes (“The North Carolina Engineering and Land Surveying Act,” hereinafter also referred to as “the Act”). The Act was first enacted in 1921. There was a comprehensive revision of the Act in 1951. The Act was substantially amended in 1975. Other amendments have been made at various legislative sessions since then. The most recent substantive amendments were in 1998 and 2003.

The Act prohibits the practice of engineering or offering to practice engineering, as defined in Chapter 89C, without being duly licensed. Moreover, the Act makes it unlawful to use, advertise, or assume any title or description tending to convey the impression that the person is a professional engineer unless that person is duly licensed. G.S. § 89C-2. Violation of this statute is a misdemeanor criminal offense. G.S. § 89C-23. The Attorney General’s Office acts as legal advisor to the Engineering Board and may render legal assistance as necessary to enforce the prohibition against unlicensed practice. The Board may also employ private legal counsel at its expense to carry out its enforcement efforts.

The legislature created the North Carolina Board of Examiners for Engineers and Surveyors to administer the Act. The Board consists of four professional engineers, three professional land surveyors, and two public members who are not licensed. All of the members of the Board are appointed by the governor, preferably from a list of nominees submitted by the professional

societies for engineers and land surveyors. Members of the Board serve for staggered five-year terms, and no member may be appointed more than two full terms. Members serve until the expiration of their term and their respective successor is appointed. G.S. § 89C-4. Engineering members of the Board must be a resident of North Carolina and have been licensed in North Carolina for six years. G.S. § 89C-5. The governor may remove members of the Board for misconduct, incompetency, neglect of duty, or any sufficient cause as prescribe by law. G.S. § 89C-7. Current members of the Board are:

Nils W. Joyner, Jr., PLS (Chair)

Teresa H. Ratcliff, PE, PhD (Vice-Chair)

Doris M. Rodgers, Public (Secretary)

J. Glenn Haynes, PLS

Henry Liles, PE

David L. Pond, PE

Liz Riley, Public

Gary W. Thompson, PLS

John S. Tunstall, PE

The Board is required by statute to meet at least twice each year. The Board usually meets about every other month at its offices in Raleigh. The meetings are open to the public. The Board members annually elect from among themselves a chair, vice-chair, and secretary. G.S. § 89C-8. The Board employees a full-time executive director who is responsible for the routine operations of the Board. The current executive director is Andrew Ritter. He is authorized to hire other staff and consultants to carry out the Board's business. Other staff include board legal counsel as well as directors of licensing, investigations and continuing professional competency.

The Board is responsible for the administration and regulation of the professions of engineering and land surveying in North Carolina. The Board reviews applications, administers examinations, licenses qualified applicants and regulates the professional practice of the licensees throughout the State. The

Board investigates alleged violations of provisions of the licensure law. G.S. § 89C-10. The Board enforces the provisions of the Act through civil actions and can enjoin violations of the Act by obtaining injunctive relief from the courts.

The Board is authorized to adopt rules and regulations reasonably necessary for the proper performance of its duties. The Board's rules are found in Title 21, Chapter 56 of the North Carolina Administrative Code. In 2008, the Board proposed amendments to the rules. The amendments are scheduled to go before the North Carolina Rules Review Commission on April 22, 2009, for approval. The amendments updated and clarified various rules.

The Board is also authorized to conduct instructional programs for licensees and applicants. To that end, the Board is authorized to adopt rules for ensuring continuing professional competency and to approve sponsors of such educational programs.

B. DEFINING THE PRACTICE OF PROFESSIONAL ENGINEERING

The Act defines the "practice of engineering" as follows:

a. Any service or creative work, the adequate performance of which requires engineering education, training, and experience, in the application of special knowledge of the mathematical, physical, and engineering sciences to such services or creative work as consultation, investigation, evaluation, planning, and design of engineering works and systems, planning the use of land and water, engineering surveys, and the observation of construction for the purposes of assuring compliance with drawings and specifications, including the consultation, investigation, evaluation, planning, and design for either private or public use, in connection with any utilities, structures, buildings, machines, equipment, processes, work systems, projects, and industrial or consumer products or equipment of a mechanical, electrical, hydraulic, pneumatic or thermal nature, insofar as they involve safeguarding life, health or property, and including such other professional services as may be necessary to the planning, progress and completion of any engineering services.

A person shall be construed to practice or offer to practice engineering, within the meaning and intent of this Chapter, who

practices any branch of the profession of engineering; or who, by verbal claim, sign, advertisement, letterhead, card, or in any other way represents the person to be a professional engineer, or through the use of some other title implies that the person is a professional engineer or that the person is licensed under this Chapter; or who holds the person out as able to perform, or who does perform any engineering service or work not exempted by this Chapter, or any other service designated by the practitioner which is recognized as engineering.

b. The term “practice of engineering” shall not be construed to permit the location, description, establishment or reestablishment of property lines or descriptions of land boundaries for conveyance. The term does not include the assessment of an underground storage tank required by applicable rules at closure or change in service unless there has been a discharge or release of the product from the tank.

G.S. § 89C-3(6).

In addition, the Act defines an “engineer” as:

A person who, by reason of special knowledge and use of the mathematical, physical and engineering sciences and the principles and methods of engineering analysis and design, acquired by engineering education and engineering experience, is qualified to practice engineering.

G.S. § 89C-3(2).

A “professional engineer” is a person who has been so licensed by the Board. G.S. § 89C-3(8).

In light of these statutory definitions, and viewing Chapter 89C as a whole, the North Carolina Court of Appeals has stated that the Legislature was not unmindful of the generic meaning of the term “engineer” and its widespread usage in job titles in our society to describe positions which require no professional training. *N.C. State Board of Registration for Professional Engineers and Land Surveyors v. International Business Machines Corp.*, 31 N.C. App. 599, 230 S.E. 552 (1976) (noting that garbage collectors are now called sanitation engineers and janitors are called custodial engineers). The Court said

that the Legislature's intent was to protect the public from misrepresentations of professional status or expertise. Therefore, the Court held that the statutes "authorize the Board to prohibit only those uses of the title engineer which imply or represent professional engineering status or expertise."

The practice of engineering is further defined by what it is not. Chapter 89C shall not be construed to prevent or affect the practice of other legally recognized professions or trades such as architecture, landscape architecture, or contracting. G.S. § 89C-25(1).

In 2000-2001, a dispute arose between the Engineering Board and the North Carolina Board of Landscape Architects over the legal qualifications of landscape architects to design street and storm water drainage systems. The issue arose when a municipality filed a complaint with the Engineering Board concerning subdivision plans prepared and sealed by a Registered Landscape Architect that included designs for storm water drainage and roadways. The Landscape Architects Board contended that this was an area where the professions overlap. The Engineering Board obtained a favorable opinion from the Attorney General's Office that "the detailed drawings and accompanying calculations of street design and storm drainage systems, including subsurface systems and component structures, is within the definition of the practice of engineering and not within the definition of landscape architecture." The Landscape Architects Board went to the Legislature and obtained an amendment to the statutory definition of landscape architecture and the practice of landscape architecture. S.L. 2001-496, § 12.1(a). The definition now specifically includes "the location, routing, and design of public and private streets, residential and commercial subdivision roads . . ." and "the design of surface or incidental subsurface drainage systems, soil conservation and erosion control measures necessary to an overall landscape plan and site design." G.S. § 89A-1(3).

Chapter 89C does not prevent the practice of engineering by a non-resident if the practice does not aggregate more than 90 days in any calendar year or involve more than one specific project. G.S. 89C-25(2). However, such person must apply for a temporary permit with the Board. Likewise, if a resident has not been in the state long enough to be licensed by the Board, such person must apply for a temporary permit. All plans prepared must be sealed with the person's out of state seal and notation made of the expiration date of the temporary permit.

The Act does not prevent engaging in engineering as an employee or assistant under the "responsible charge" of a professional engineer, provided that

the work does not include responsible charge of design or supervision. G.S. § 89C-25(4). Responsible charge is defined in the Act as “direct control and personal supervision” of engineering work. G.S. § 89C-3(10).

The Board may not prohibit the practice of engineering by a non-resident “consulting associate” of a licensed professional engineer, provided the non-resident is qualified in his or her own state. G.S. § 89C-25(5).

The Board does not regulate the practice of engineering by members of the armed forces, county employees, employees of the Natural Resources Conservation Service, employees of the Soil and Water Conservation Districts, or the federal government while engaged solely on government-owned works or projects. G.S. § 89C-25-(6).

Also exempt from regulation is “internal engineering” activities of a person or firm engaged in a manufacturing a product, including public utilities, and state and local government agencies. G.S. § 89C-25(7). Fire sprinkler planning and design is exempt. G.S. 89C-25(8).

C. REQUIREMENTS FOR LICENSING AND RENEWAL

In order to be licensed to practice engineering in North Carolina, an individual must pay the required fees (\$100 for the application) as well as document and demonstrate appropriate qualifications as set forth in G.S. §89C-13(a). An applicant must be of good character and reputation. An applicant must submit evidence of education as well as a specific record of progressive engineering work of a nature and level acceptable to the Board. Finally, an applicant must satisfactorily pass the examinations administered by the Board. The sequence of examinations consists of two eight-hour national examinations, as provided by the National Council of Examiners for Engineering and Surveying (NCEES).

I. Good Character

The requirement of “good character and reputation” is not defined in the Board’s rules. Many professional licensing Board’s have similar requirements. The Board of Law Examiners has the most extensive description of the meaning of “good moral character.” It states that the term “good moral character,” includes but is not limited to the qualities of honesty, fairness, candor, trustworthiness, observance of fiduciary and personal responsibility and of the laws of North Carolina and of the United States and a respect for the rights of

other persons and things. The revelation or discovery of any of the following may be treated as cause for further inquiry by the Board of Law Examiners:

- (1) Unlawful conduct;
- (2) Academic misconduct;
- (3) Making or procuring any false or misleading statement or omission of relevant information including any false or misleading statement or omission on the application for admission to a college or university;
- (4) Misconduct in employment;
- (5) Acts involving dishonesty, fraud, deceit or misrepresentation;
- (6) Abuse of legal process;
- (7) Neglect of financial responsibilities;
- (8) Neglect of professional obligations;
- (9) Violation of an order of a Court, including failure to pay child support
- (10) Military Misconduct. A discharge other than honorable;
- (11) Evidence of mental or emotional instability;
- (12) Evidence of drug or alcohol misuse, abuse or dependency;
- (13) Denial of admission to the Bar in any other jurisdiction on character and fitness grounds;
- (14) Disciplinary action by a lawyer, disciplinary agency, or other professional disciplinary agency of any jurisdiction;
- (15) Any other conduct which reflects adversely upon the character or fitness of the applicant.

In evaluating this list, which is not exclusive, the Board of Law Examiners considers all surrounding factors to determine the what weight and significance to assign to prior misconduct. The Board also looks carefully at evidence of “rehabilitation.” The Engineering Board would likely follow a similar evaluative process.

II. Education and Experience

1. Education

The experience required is dependent upon the educational attainment of the applicant. The greater the engineering educational level, the less engineering experience required for approval for seating for examinations and eventual licensure. 21 NCAC 56.0501. The following levels of engineering education and

the experience requirements for each are those required by North Carolina Statutes and the Board:

(a) College Graduate, ABET Accredited Engineering Curriculum.

Those applicants with a degree from an engineering curriculum of four or more years, and which has been approved by the Accreditation Board for Engineering and Technology, may take the Engineering Fundamentals Examination (Exam I) at the time of graduation from their college or university.

After successful completion of the Fundamentals Examination, and upon completion of a minimum of four (4) years of progressive engineering experience, applicants are eligible to apply for the Engineering Principles and Practice Examination (Exam II).

(b) College Graduate, Non-ABET Accredited Engineering or Related Science Curriculum.

Those applicants with a degree from a Non-ABET approved engineering or related science curriculum of four (4) or more years may take the Fundamentals Examination (Exam I) upon completion of four (4) years of progressive engineering experience following graduation from the college or university awarding the degree.

After successful completion of the Fundamentals Examination, and upon completion of a minimum of eight (8) years of progressive engineering experience, applicants are eligible to apply for the Engineering Principles and Practice Examination (Exam II).

A curriculum not accredited by ABET, but which contains adequate course work in engineering and scientific principles, would be a curriculum of this nature. The Board will determine the acceptability of such curricula on a case-by-case basis.

(c) College Graduate, Engineering Technology.

Those applicants with a degree in engineering technology from a technology curriculum of four (4) or more years may take the Engineering Fundamentals Examination (Exam I) upon completion of four (4) years of

progressive engineering experience following graduation from the college or university awarding the degree.

After successful completion of the Fundamentals Examination, and upon completion of a minimum of eight (8) years of progressive engineering experience, applicants are eligible to apply for the Engineering Principles and Practice Examination (Exam II).

- (d) Technical Institute or Community College Graduate, Engineering Technology.

Those applicants with an Associates in Applied Science (AAS) degree in engineering technology from a technology curriculum of two (2) or more years may take the Engineering Fundamentals Examination (Exam I) upon completion of six (6) years of progressive engineering experience following graduation from the Technical Institute or Community College awarding the degree.

After successful completion of the Fundamentals Examination, and upon completion of a minimum of ten (10) years of progressive engineering experience, applicants are eligible to apply for the Engineering Principles and Practice Examination (Exam II).

- (e) High School Graduate.

Those applicants with a high school diploma may be approved to take the Engineering Fundamentals Examination (Exam I) upon adequate documentation indicating the completion of eight (8) years of progressive engineering experience following graduation from high school.

After successful completion of the Fundamentals Examination, and upon completion of a minimum of twelve (12) years of progressive engineering experience, applicants are eligible to apply for the Engineering Principles and Practice Examination (Exam II).

2. Progressive Engineering Experience

In evaluating the work experience required, the Board will consider the total experience record as well as the progressive nature of the record. 21 NCAC 56.0501(b).

Not less than one-half of the required engineering experience shall be of a professional grade and character. The work must be performed under the responsible charge of a licensed Professional Engineer. 21 NCAC 56.0501(b)(2).

The term “progressive engineering experience” means that, during the period of time in which an applicant has made a practical utilization of acquired knowledge, continuous improvement, growth and development in the utilization of that knowledge have been shown, as revealed in the complexity and technical detail of the work product or work record. The applicant must show that greater individual responsibility for the work product has been continuously assumed over that period of time. 21 NCAC 56.0501(b)(3).

Experience prior to graduation is not considered in the calculation of progressive engineering experience. ABET accredited engineering cooperative experience may be considered with a maximum allowable credit of one (1) year.

Experience obtained in a foreign country, unless performed under the direct supervision of a licensed Professional Engineer licensed with a member Board of NCEES, will not be considered in the calculation of progressive engineering experience.

In evaluating progressive engineering experience, the Board may give the following maximum credit for experience in the following areas of work:

- (1) Graduate schooling or research in an approved engineering curriculum resulting in award of an advanced engineering degree -- one year for each such degree, with a maximum of two (2) years total.
- (2) Progressive land surveying -- maximum two (2) years.
- (3) Teaching of engineering subjects at the university level in an approved engineering curriculum -- maximum two (2) years.

The North Carolina Board requires that every applicant for licensure as a Professional Engineer, as part of the total experience requirement, show a minimum of one (1) year experience of a progressive engineering nature in industry, or government, or under a licensed Professional Engineer offering services to the public. 21 NCAC 56.0501(b)(4).

Full-time engineering faculty members who teach in an approved engineering curriculum may request a waiver of the minimum one (1) year

experience in industry, government, or private practice. In order to obtain the waiver, the faculty applicant must demonstrate consulting or research work of at least one (1) year's duration, which was pursued to fruition, and which is of an acceptable progressive engineering nature. The faculty applicant will be required to document the work and demonstrate that the work meets the Board's requirement. 21 NCAC 56.0501(b)(4).

3. Long Established Practice

The Act requires that all applicants successfully complete each of the engineering examinations administered by the Board. The only exception to this requirement is a waiver of the Engineering Fundamentals Examination (Exam I) for an individual with "long established practice." G.S. § 89C-13(a)(1)(e). An individual with a specific record of twenty (20) years or more of progressive experience on engineering projects of a grade and character which indicates adequate engineering ability to the Board may be approved for waiver of Exam I by the Board. However, the requirement for successful completion of the Engineering Principles and Practice Examination (Exam II) can not be waived. The Board may in its discretion require an applicant to submit exhibits, drawings, designs, or other tangible evidence of engineering work which the applicant has personally accomplished.

4. Foreign degrees

Applicants with foreign degrees may request an evaluation of their education through the National Council of Examiners for Engineering and Surveying (NCEES) or the American Association of Collegiate Registrars and Admission Officers (AACRAO). 21 NCAC 56.0501(a)(3)(E). The Board will equate the degree with the foregoing education equivalencies.

III. Examinations

The Board administers two separate examinations of eight (8) hours duration, both of which must be successfully completed and passed prior to licensure as a Professional Engineer. 21 NCAC 56.0503. The examinations are the Engineering Fundamentals Examination (known as Exam I in North Carolina), and the Engineering Principles and Practice Examination (known as Exam II in North Carolina). Both of these examinations are prepared by the National Council of Examiners for Engineering and Surveying (NCEES), and are administered throughout the United States and its territories. While each jurisdiction has its own statutes regulating engineering within each jurisdiction,

generally a passing grade on the nationally recognized examinations in one jurisdiction will be accepted in other jurisdictions as fulfillment of their examination requirements.

1. Engineering Fundamentals Examination (Exam I)

Successful completion of this examination results in certification of the applicant as an “Engineering Intern” by the North Carolina Board. This certification signifies that the first step in licensure has been completed.

The Fundamentals Examination (closed book) is designed to determine if the applicant has an adequate understanding of the basic engineering sciences. The subject matter covered in the examination is that which is fundamental to all phases of engineering, and applicable to all engineering disciplines. Thus, the examination is designed primarily for college graduates of an engineering curriculum. However, others with a demonstrated aptitude for engineering, or a graduate in another curriculum who has qualified through a record of the required progressive experience, with adequate study, should also be able to attain a passing score on the examination. The Fundamentals Examination measures an individual applicant's proficiency and knowledge of engineering fundamentals, which would reflect graduate-level study, thought, and mastery.

2. Engineering Principles and Practice Examination (Exam II)

Successful completion of this examination culminates in licensure of the applicant as a “Professional Engineer” by the North Carolina Board. This examination is sometimes referred to as the Professional Exam, or PE Exam, referring to the Professional Engineer licensure resulting from the successful completion of the examination. Passing of the Fundamentals Examination (Exam I) is a prerequisite for Board approval of an applicant's seating for the Principles and Practice Examination (Exam II) in North Carolina.

The Principles and Practice Examination is designed to determine if the training and experience of the applicant have provided an adequate capacity and ability in applying the basic and engineering sciences to the solution of engineering problems. It is anticipated that the required experience, of a progressive nature and level, will assist the applicant in applying knowledge of engineering fundamentals to the solution of the advanced engineering problems.

The Principles and Practice Examination is an eight (8) hour examination (open book) requiring the solution of eight (8) problems in the engineering discipline designated for examination. Each applicant must designate on the application form the discipline to be examined.

3. Reexamination

An applicant who fails to pass the examination may be readmitted to the same examination at a later administration, upon written request for readmission and the submission of the applicable reexamination fee. 21 NCAC 56.0503(i).

An applicant who has accumulated a combination of three (3) or more failures or unexcused absences on an examination shall only be eligible after submitting a new application with appropriate application fee, and be considered by the Board for reexamination at the end of twelve (12) months. After the end of the twelve (12) month period, the applicant may take the examination no more than once every calendar year.

The Board will make a determination as to the applicant's qualifications for further examination, and so inform the applicant.

IV. Licensure by Comity

Applicants for licensure who have obtained licensure in another jurisdiction having equivalent requirements for licensure as North Carolina, including 16 hours of written examination, and who are currently licensed in good standing in that jurisdiction, may be granted licensure North Carolina upon verification of the record, and approval by the Board. G.S. § 89C-13(1)(a).

The National Council of Examiners for Engineering and Surveying (NCEES) offers a service of maintaining and verifying certain records of Professional Engineers, to include the record of qualification and licensure in various jurisdictions. The Board will accept the verified NCEES Council Record, if current, in lieu of completion of certain portions of the North Carolina application form. 21 NCAC 56.0502(e).

V. Temporary Permits

The Board is authorized to grant a ninety (90) day Temporary Permit for the practice of engineering in North Carolina to those who request a permit, and

who are currently licensed in another jurisdiction and are qualified for comity licensure in North Carolina. G.S. 89C-25(2).

Temporary Permits are limited to a maximum of ninety (90) consecutive days in a calendar year and must be site specific. 21 NCAC 56.1002. Therefore, Temporary Permits may not be approved for periods beyond December 31st in any calendar year. Since verification of applicant qualifications with the home jurisdictions may take 30 days or longer, the applicant should submit application in time to allow for verification prior to desired effective date. Applicants may be issued only one Temporary Permit in any calendar year.

VI. Renewals

The Board requires payment of an annual fee of \$60 (as of 2009) for renewal of certificates for professional engineers. An engineering intern certificate does not expire and therefore does not have to be renewed. 21 NCAC 56.0505(a) and (b).

The Board is authorized to require evidence of continuing professional competence as a condition of renewal. G.S. 89C-17. Failure to pay timely pay the annual renewal fee deprives the licensee of the right to practice until reinstatement. The license may be reinstated at any time during the first 12 months of lapse by payment of an additional \$100 fee. Thereafter, a licensee will be required to submit at new application. The Board is authorized to make exceptions for hardship such as for military service, prolonged illness, or prolonged absence from the state. A licensee may also request and be granted inactive status. Demonstration of continuing professional competence may be required as a condition of reinstatement to active status.

D. DISCIPLINARY ACTION

In addition to granting licensure to professional engineers, the Board has the statutory power to impose discipline upon licensees. G.S. § 89C-21.

1. Types of disciplinary action:

Discipline includes reprimand, suspension, revocation of licensure, and/or imposition of a civil penalty up to \$5,000. The Board can also refuse to renew a license or require reexamination. G.S. § 89C-22(c).

Before imposing a civil penalty and fixing the amount, the Board must take into consideration (1) the nature, gravity, and persistence of the particular violations, (2) the appropriateness of the imposition of a civil penalty when considered alone or in combination with other punishment, (3) whether the violation was done willfully or maliciously, and (4) any other factors which would tend to mitigate or aggravate the violation(s) found to exist. G.S. § 89C-21(d).

The Board does not have guidelines per se for disciplinary actions, but it does look to its past actions for consistency. The facts vary with each case, so the Board is not held to a rigid rule. A reprimand is a public statement that a violation occurred. Civil penalties are set a level to obtain compliance and serve as deterrent. Suspensions are generally for not less than three months or more than two years. Revocation is reserved for the most serious offenses and to protect the public from any further practice by the licensee.

2. Grounds for disciplinary action:

The statutory grounds for disciplinary action include

- (1) fraud or deceit in obtaining a certificate of licensure;
- (2) gross negligence or misconduct in the practice of the profession;
- (3) commission of a felony or any crime involving “moral turpitude;”
- (4) a violation of the Rules of Professional Conduct;
- (5) being declared legally insane or incompetent;
- (6) professional incompetence.

G.S. § 89C-21(a)

Discipline in another state or jurisdiction is also grounds for discipline. 21 NCAC 56.0701(h). [Case No. V06-081 resulted in refusal to renew North Carolina licensure until reinstated in Tennessee].

Failure to meet the continuing professional competency requirements for professional development is a condition for licensure renewal. Failure to meet the requirements may also result in disciplinary action. [Case No. V05-098 resulted in a voluntary permanent surrender; Case No. V06-101 resulted in a reprimand and suspension continuing for three months until hours obtained, and auditing of CPC hours for the three years; Case No. V06-103 resulted in revocation, Case No. V06-125 resulted in a reprimand and civil penalty of \$500]. The Board monitors CPC compliance through a random audit process (or a result of information

furnished to the Board). Licensees selected for auditing must provide the Board with documentation of CPC activities claimed for the renewal period (attendance records, etc. must be kept for three years). 21 NCAC 56.1712.

The majority of the Board's enforcement actions involve the prevention of unlicensed practice in violation of G.S. §§ 89C-23 and 24. This typically involves persons or firms holding themselves out as an "engineer" or "professional engineer" or providing "engineering services" or "professional engineering services" or any modification or derivative of those words. It also includes engineers licensed in other states offering their services in this state. The Board, either directly or through the Attorney General's Office, issues a "cease and desist" letter to the individual or firm. The person or firm is ordered not to provide engineering services in this state until licensed by the Board. The person is informed that violation of the statute is a Class 2 misdemeanor criminal offense.

Practicing on an expired or inactive certificate will also result in disciplinary action. A review of the Board's actions for this violation shows a range of penalties from reprimand, to reprimand with a civil penalty, to revocation. Offering to practice engineering prior to being licensed has also resulted in a reprimand, a civil penalty of \$3,000, and passing the Ethics Course PDH-40 offered through the Murdough Center for Professional Engineering at Texas Tech University. [Case No. V04-045].

Many professional licensing boards make the commission of a felony or a crime involving "moral turpitude" grounds for discipline.¹ A felony is easily enough identified in the criminal statutes. However, what constitutes "moral turpitude" is not so easily determined and is often the subject of debate by the appellate courts. These crimes evolve from the ecclesiastical laws of England and involve some human flaw. The North Carolina Supreme Court has defined crimes involving "moral turpitude" as "acts of baseness, vileness, or depravity in the private social duties that man owes to his fellow man or to society in general." *Jones v. Brinkley*, 174 N.C. 23, 93 S.E.2d 372 (1917). This definition was affirmed in *State v. Mann*, 317 N.C. 164, 345 S.E.2d 365 (1986). Some of the offenses that the appellate courts have said constitute crimes involving moral turpitude are: conspiracy to possess with intent to deliver marijuana; solicitation to common law robbery; attempted burglary; passing or attempted passing of a worthless check; murder; kidnapping; slander per se; bribery; false pretense, larceny, forgery or extortion; child abuse; attempt to commit crimes against

¹ Jeff Gray, "What Constitutes Moral Turpitude?" Administrative Lawyer, Vol. 20, No. 3 (May 2008).

nature. “Moral turpitude” is a broad term, but not all crimes involve moral turpitude. One must extrapolate from the elements of the crime whether it meets the court’s definition.

The Board has suspended the license of land surveyor who pleaded guilty to misdemeanor assault on a female on the grounds that it involved a crime of moral turpitude. The suspension was stayed as long as the probationary conditions in the criminal case were satisfied.

3. Rules of Professional Conduct

The Legislature has authorized the Board to promulgate Rules of Professional Conduct for the practice of engineering in the interest of protecting the safety, health, and welfare of the public. All licensees are required to subscribe to and observe the rules adopted by the Board and must cooperate with the Board in its investigations. G.S. § 89C-20. The Rules are found in 21 NCAC 56.0701. The Rules require that a licensee:

- (a) be familiar with the Rules and understand them;
- (b) conduct his or her practice in order to protect the public health, safety, and welfare;
- (c) perform services only in areas of the licensee’s competence;
- (d) issue public statements only in an objective and truthful manner;
- (e) avoid conflicts of interest;
- (f) solicit or accept work only on the basis of qualifications;
- (g) perform services in an ethical and lawful manner;

Each of the foregoing rules include several subparts.

A review of the Board’s recent actions reveals discipline for violation of the Rules of Professional Conduct. Typical violations are providing inadequate design documents or providing a deficient or substandard or inaccurate report. Another more frequent violation is making exaggerated, misleading, deceptive or false statements of qualifications or experience. Also, practicing outside one’s area of competence is a common area for investigation and discipline. In addition to reprimand and civil penalty, the Board may require passing the Ethics Course PDH-40 offered through the Murdough Center for Professional Engineering at Texas Tech University.

Another typical violation is affixing seal to work not done under the licensee’s direct supervisory control or “responsible charge.” The rule requires a

licensee to carry out all client contacts, provide internal and external financial control, oversee employee training, and exercise control and supervision over all job requirements to include research, planning design, field supervision and work product review. These professional services may not be contracted to a non-licensed individual. 21 NCAC 56.0701(c)(3). This year's amendment to the rule adds specifically that "direct supervisory control may be accomplished face to face or by other means of communication."

Avoiding conflicts of interest includes not attempting to supplant another engineer after becoming aware that the other has been selected for employment. 21 NCAC 56.0701(e)(7). In one such case, the Board issued a reprimand and imposed a civil penalty of \$2,000. [Case No. V02-041].

4. Procedure for investigations and hearing

Any person may submit a sworn complaint in writing to the Board alleging that a violation of the rules of professional conduct by a licensee or "fraud, deceit, gross negligence, incompetence, or misconduct." G.S. § 89C-22(a). A complaint form is available on the Board's website. Trivial or unfounded charges may be dismissed by the Board. G.S. § 89C-22(b).

In Fiscal Year 2008, the Engineering Board opened 151 case investigations (both PE and PLS).

If determined to be necessary by the executive director, a field investigation may be performed. 21 NCAC 56.1301(c). The Board's investigators are not licensed engineers, but are trained in law enforcement and investigations. They interview the complainant and others who may have knowledge of the matter. Other professionals who can give expert opinions may be consulted. The licensee may also be interviewed. The investigation process usually takes six to nine months.

If the executive director determines that the charges are corroborated, a written notice and explanation of the charge will be forwarded to the licensee and a response requested. This preliminary evidence is then referred to the Board's review committee (the executive director, legal counsel, and one professional board member). The review committee presents a written recommendation to the Board (which may be dismissal as unfounded or untrue, to issue a cease and desist order, or to proceed to a full contested case hearing).

A licensee may request a settlement conference to pursue resolution of the issues through informal procedures. 21 NCAC 56.1301(f). The settlement committee consists of the executive director, legal counsel, professional board member, and public board member. The settlement committee makes a written recommendation to the full Board. The settlement and/or hearing process can take six to 12 months.

If the matter is not settled, notice is given to the applicant or licensee of the Board's proposed denial of licensure or other disciplinary action. 21 NCAC 56.1403. The respondent has 20 days to request a hearing. A contested case hearing is an evidentiary hearing conducted pursuant to the Administrative Procedure Act (Chapter 150B of the North Carolina General Statutes). Subpoenas may be issued by the executive in the Board's name requiring the attendance of witnesses and/or the production of documents. Depositions may also be taken. 21 NCAC 56.1409. The Board has 90 days after the hearing to issue a written decision.

The final decision of the Board is subject to judicial review pursuant to G.S. § 150B-43. The licensee must timely petition for judicial review by a superior court judge in either Wake County or the county in which the licensee resides. The superior court judge reviews the official record. The Board's decision may be affirmed or reversed if the judge determines that the Board's decision was in violation of constitutional provisions, in excess of its statutory authority, made upon unlawful procedure, affected by error of law, unsupported by the substantial admissible evidence in view of the entire record, or otherwise arbitrary, capricious, or an abuse of discretion. G.S. § 150B-51(b). Administrative agencies are given wide discretion by the courts in the exercise of their official duties and it is presumed that they act properly. Depending on the error alleged to have been made by the Board, the court applies either a "whole record" review or "de novo" review. The decision of the superior court judge may be appealed to the North Carolina Court of Appeals. Some limited decisions of the Court of Appeals may be appealed to the North Carolina Supreme Court.

E. COMPLYING WITH REGULATIONS FOR DESIGN FIRMS

Corporations or other business entities may not engage in the practice of engineering unless licensed by the Board. G.S. § 89C-24. A business firm is subject to the same duties and responsibilities as an individual licensee. The firm's work must be performed under the "responsible charge" of the individual a licensee.

The Board has adopted rules and procedures pertaining to firm licensure. 21 NCAC 56.0802. The application fee is \$100. The Board will issue a certificate of compliance which the firm submits to the North Carolina Secretary of State along with its articles of incorporation or organization. 21 NCAC 56.0802(a)(3). The Secretary of State provides certified copies of the articles and the Board issues a certificate of licensure.

Any firm which performs or offers to perform engineering services in North Carolina must have a resident Professional Engineer in “responsible charge in each separate office in which professional engineering services are performed or offered to be performed.” 21 NCAC 56.901. A resident Professional Engineer means a licensee who spends a majority of the licensee’s normal working time in the designate place of business. Such time may not be less than a majority of the operating hours of the business. The PE shall be the resident licensee at only one place of business at one time.

Advertisements, signs, letterheads, business cards, directories or other forms of representation must avoid any reference to any service that cannot be provided under the “responsible charge” of a properly qualified resident professional. 21 NCAC 56.0901(d).

The name under which a engineering firm practices may not be misleading. The name cannot include the name of an individual not licensed to provide professional services offered or eligible for licensure. 21 NCAC 56.0902. Name changes must be submitted and approved by the Board.