POLICY 1.0

ENGINEERING PRACTICE IN AREAS OF COMPETENCY

26 V.S.A. § 1181 (a) LICENSE AND SPECIALTY CERTIFICATES reads as follows: "Upon determining that an applicant is qualified for initial licensure under section 1182 of this title in one or more specialties, the board shall issue a license certificate and a specialty certificate to the applicant. Upon determining that an existing licensee is qualified under section 1182 in an additional specialty, the board shall issue a revised specialty certificate to the licensee." The license and specialty certificate issued by the Board indicates the primary area of competence of that license-holder in the practice of professional engineering.

The specialty certificates are issued by the Board in accordance with the procedures contained in Section 1182, Licensing Standards. In addition to the educational and experience requirements, most candidates will have passed an examination offered by the National Council of Examiners for Engineering and Surveying (NCEES), which typically dictates his or her specialty. The current list of professional engineering specialties offered by the Board is referenced in Board Rule 1.7. Professional engineers licensed prior to the creation of a particular specialty, may possess sufficient training and experience to practice professional engineering competently in closely related fields or specialties. This is often the case where licensed professional engineers have expanded their areas of expertise through years of practice, usually under the umbrella of the original specialty field. In this case, the professional engineer may continue to practice this related discipline or request an additional specialty certificate through application and a successful defense, to the Board (26 V.S.A. § 1182 (e)).

As a licensed professional, the engineer has a duty to practice within his or her specialty and/or area of competence as licensed in Vermont. Licensed Professional Engineers suspected of practicing outside their specialty and area of competence (§ 1162 & § 1191) will be investigated by the Board upon receipt of a written complaint.

Adopted: 5/96
Revised: 12/99
Revised: 12/02

POLICY 2.0

THE INDUSTRIAL EXEMPTION

Under 26 V.S.A. §1163(c)(1), the statute does not prohibit any person from performing acts constituting the practice of engineering for the purpose of "Designing or fabricating a manufactured product." This is the so-called "industrial exemption". The following is a guide to assist the Board, the public and the professional in making a reasonable interpretation of the industrial exemption.

DESIGNING or FABRICATING a MANUFACTURED product:

DESIGN: According to Black's Law Dictionary, to "design" is to form a plan or scheme of, conceive and arrange in the mind, originate mentally, plan out, contrive....In patent law, the drawing or depiction of an original plan or conception of a novel pattern, model, shape, or configuration, to be used in the manufacturing or textile arts...

FABRICATE: According to Webster's, to "fabricate" is to construct from diverse and usually standardized parts.

MANUFACTURED: Webster's: the process of making wares by hand or machinery, especially when carried on systematically with division of labor. Black's: the process of making products by hand, machinery, or other automated means.

Given these standard definitions of design, fabricate, and manufacture, it is clear that "assembly line" industrial activity is exempt under the statute. Those who participate in the creation, planning, development, and actual assembly of goods which are routinely and systematically produced are not engaging in the practice of professional engineering as it is defined by the statute.

However, this exemption should not be carried beyond the actual manufacture of the product and certain engineering tasks directly related to producing the product. The exemption is limited to the engineering services which are vital to the manufactured product. For example, the design and construction of the assembly line utility support systems are exempt at the point of use of the manufactured product.

This exemption should not include non-vital engineering services tenuously related to the manufactured product such as the design and construction of the building in which the product is made. §1163(c)(2) specifically includes "public buildings" under the engineering statutes. "Public buildings" include places "in which persons are employed". It follows that a building in which a product is fabricated and designed would still be subject to regulation, as would adjoining offices.

Adopted: 5/96; Revised: 12/99
Revisited: 12/02 (no changes)

POLICY 3.0

EXEMPTIONS AND SEALING REQUIREMENTS

26 V.S.A. §1188 states that plans, specifications, plats and reports issued by a licensee **shall** be sealed and signed by the preparing professional engineer.

The Professional Engineering statutes specifically exempt certain persons and activities from regulation. Under 26 V.S.A. §1163, certain activities constituting the practice of professional engineering may be performed by persons without a Professional Engineer license.

Even though the specifically exempted work is still the "practice of professional engineering," the sealing requirement is waived for a Professional Engineer performing such work in the execution of exempted duties. If the work is exempt from Board regulation and removed from the Board's jurisdiction, no public protection interest is served by requiring the seal because the licensee is not accountable to the Board for exempted actions. So long as the work does fall under a recognized exemption, signing and sealing it is not necessary, even when performed by a licensee.

However, if the licensed engineer chooses not to sign and seal his or her work, and the work does not fall under the exemption, failing to sign and seal the work would be a violation of Board statute and rules and could subject him or her to disciplinary action.

Adopted: 5/96
Revised: 12/99
Revised: 12/02

POLICY 4.0

USE OF THE TITLE "ENGINEER"

By statute, no person may use the titles "professional engineer", "licensed engineer", "registered engineer" or "certified engineer" unless they are duly licensed and permitted to practice by the Board. 26 V.S.A. §1161(4). Any person using these titles in a manner which falsely indicates he or she is licensed by the Board, is in violation of the laws of the Board of Professional Engineering and may be subject to criminal prosecution or other discipline.

Vermont professional engineers are certified by the Board to practice in their demonstrated specialty area. As such, each professional engineer is certified in a specialty (one or more) and is required to practice only in that (those) specialty area(s).

The Board realizes that the title "engineer", in general, is not limited to usage by professionals licensed by the Board. In the interest of preventing public confusion and misperception, the Board adopts the following guidelines:

1) No person may use a job title recognized as a specialty area by the Board that would falsely indicate to the public or others, that the person is licensed to practice and provide professional engineering services in that area.

2) No employer should employ a person with an engineering job title that conveys to the general public that the job holder possesses the qualifications of that title as regulated by the Board unless he or she does actually possess those qualifications.

3) The Board requests that employers and individuals restrict the use of the title "engineer" to those persons possessing sufficient training to perform the professional engineering functions. This in no way negates the necessity for individuals to obtain licensure prior to providing professional engineering services.

Adopted: 5/96
Revised: 12/99
Revised: 12/02

POLICY 5.0

CLARIFICATION re THE AGENCY OF NATURAL RESOURCES' RULE, SECTION 1-313, DESIGNER LICENSING

The Agency of Natural Resources, Department of Environmental Conservation promulgated **Wastewater System and Potable Water Supply Rules** effective August 16, 2002. Section 1-313 Designer Licensing has direct implications to professional engineers practicing in the State of Vermont. This section states:

ANR Rule: § 1-313 Designer Licensing

(a) ***License Required****: No person shall design a potable water supply or wastewater system that requires a permit under these Rules without first obtaining a designer license from the Secretary.*

(b) ***Conflicts of Interest****: No person shall review or act on permit applications for a potable water supply or wastewater system that he or she designed or installed.*

(c) ***Professional Engineers****: A professional Engineer shall be deemed to have a valid designer license under this section, without going through the licensing process, provided that:*

(1) the engineer is practicing within the scope of his or her engineering specialty: and

(2) if the engineer will be designing soil-based disposal systems, the engineer, by June 30, 2003, submits evidence to the Vermont Board of Professional Engineering that demonstrates that he or she:

(A) has satisfactorily completed a college level soils identification course with specific instruction in the areas of soils morphology, genesis, texture, permeability, color and redoximorphic features: or

(B) has passed a soils identification test administered by the Secretary: or

(C) will retain one or more licensed designers who have taken the course specified in this subsection or passed the soils identification test, whenever performing work regulated under these Rules.

Section 1-313 (continues) A complete copy of this ANR Rule may be found at their Web Site: http://www.anr.state.vt.us/dec/ww/rules/os/os.htm

Policy 5 continued

The Board was asked to clarify this section as it relates to professional engineers and professional engineering. While we understand Section 1-313 may be modified in the near future, the following guidelines were adopted by the Board:

1. Professional Engineers referenced in Section 1-313(c)(1) must be licensed in the discipline or specialty of Civil, Sanitary, Environmental or Agricultural Engineering to qualify for consideration under (ANR) Section 1-313(c)(2).

2. The Board will accept as evidence of compliance with 1-313(c) a letter from the Professional Engineer specifying that he/she satisfactorily completed a college level course meeting the description listed in Section 1-313 (c)(2)(A), or a certificate issued by the Secretary under (ANR) Section 1-313 (c)(2)(B), or a letter from that Professional Engineer listing the *licensed designer* retained by that Engineer under Section 1-313 (c)(2)(C).

3. Professional Engineers licensed in a discipline or specialty other then those listed in 1. above, must meet ANR's requirements (see Section 1-313) to design soil-based wastewater disposal systems.

4. Professional Engineers not licensed in the disciplines or specialties listed in 1. above who practice the design of potable water supply systems and/or wastewater disposal systems may be in violation of Vermont Board of Professional Engineering Rule 1.7, Professional Engineering Specialties.

5. The Board interprets (ANR) Section 1-313 (c)(2) "designing soil-based disposal systems" to mean "identifying and /or analyzing soils for subsurface wastewater disposal." The Board would not consider it to be unlicensed practice for a professional engineer without a "Designer License" to design the pumps, piping, tanks, specify stone media, etc. for a wastewater disposal system.

6. The Board will accept as evidence of compliance with the rule information supplied by a professional engineer qualified under 1. above, at any time before or after June 30, 2003.

7. The Board accepts that Professional Engineers without a "designer license" under (ANR) § 1-313 (c)(2) may design a soil-based wastewater system, if the design is based on soils analysis by qualified individuals including those with designer licenses, hydrogeologists, or other such persons with a soil science background acceptable to the Division.

8. Upon acceptance of satisfactory evidence supplied to the Board under (ANR) § 1-313(c) (1) and (2), the Board will add an endorsement to your Professional Engineers license indicating compliance with this Rule. This endorsement will appear on our web site.

Adopted: 11/02; Revised: 12/02

POLICY 6.0

USE OF THE SEAL

Each licensee shall obtain a seal of a design authorized or approved by the Board. The seal shall bear the licensee's name, number, and title "Licensed Professional Engineer."

Below you will find a sample impression of a seal that meets these requirements:

Your Discipline must appear on the Seal

Please use Licensed (not Registered) Professional Engineer

a) Plans, specifications, plats and reports issued by a licensee shall be sealed and shall also be signed by the licensee.

b) The use of an electronic seal (complying with the format shown above) is permitted. Each Professional Engineer is responsible for controlling the use of his or her seal. Original signatures must be used over electronic seals.

c) A person who affixes the seal of another person to a plan or other document constitutes unprofessional conduct (26 V.S.A. § 1191, 3 V.S.A. § 129a.) and, shall be fined not more than $1000 and imprisoned not more than 30 days, or both.

d) A licensee who obtained his or her seal prior to the requirement of the discipline or specialty to be included on the seal, does not need to obtain a new seal. (The Board considers those licensees grandfathered; should a replacement seal be necessary, the current requirement applies.)

Two points of clarification:

1) When are plans and/or specifications "issued?" Is a preliminary submittal to a regulatory agency for review considered "issued?"

It is the Board's opinion that plans/specifications are not considered "issued" until they are approved by the appropriate reviewing agency and released for public use. Any plans submitted to a reviewing authority for concurrence, approval or comment normally should be marked or stamped such as preliminary or for review only. Until such time as all necessary reviewing approvals have been obtained, the documents will be considered in a design/discussion phase, and will not be considered **FINAL.**

2) Does every sheet of plans and specifications have to be sealed and signed by the issuing engineer?

The Board does not mandate that every page of every set of plans and/or specifications issued by an engineer bear a seal and signature. although this is preferred.

Upon issuing a set of plans and specifications, the seal and signature of the design engineer should be clearly and prominently displayed. The method and procedure for accomplishing this can vary according to preference and policy of the designing engineer or firm. **The Board requires that each design specialty be sealed and signed by the engineer who produced the design, or by the engineer who reviewed the design and satisfied him or herself as to its completeness and accuracy.** The Professional Engineer responsible shall certify each sheet or alternately by a title sheet specialty block showing his or her seal and signature. Prints of the seal/signature will be acceptable (meaning the "original" was sealed and signed) if clearly legible.

Signing or sealing work with which the engineer is not familiar, or allowing the use of his or her seal on such design or plan is considered unprofessional conduct. The Board considers the use of an engineer's seal on work with which the Professional Engineer is unfamiliar or outside that engineer's licensed specialty to be conduct subject to disciplinary action.

A Professional Engineer may seal/sign another engineer's (or technician's) work providing he or she has reviewed the work and is satisfied as to its thoroughness and accuracy. Upon sealing/signing, the Professional Engineer is accepting full responsibility for the work.

Revised: 2001
Revised: 12/02

State of Vermont
Board of Professional Engineering
Policy # 7
Use of Stamp/Seals: Familiarity with Designs or Plans
Adopted September 4, 2003

Vermont statutes and Board rules create an obligation for professional engineers to use their stamps/seals only on plans and designs with which they are familiar. A professional engineer is permitted to stamp/seal documents not entirely prepared by him or her so long as those documents are ones with which the professional engineer is familiar.

The Board recognizes that questions arise about the degree of familiarity an engineer may have with a design or plan. This issue may arise in the context of unprofessional conduct complaints.

In order to provide guidance to licensees, the Board adopts the following policy for use in determining whether a licensee has sufficient familiarity to permit use of his or her stamp/seal.

When deciding if an engineer is sufficiently familiar with a design or plan so that he or she may affix a stamp/seal to it, the Board ***may consider, but is not limited to***, the following questions or criteria:

1. Did the licensee exercise unambiguous decision-making authority with respect to the preparation of the design or plan he or she is stamping/sealing and signing, without interference or undue influence from any other individual or entity?

2. Were unlicensed persons assisting in the preparation of the design or plan service direct subordinates of the licensee (or another licensee in his/her direct charge) as opposed to answering even indirectly to some other person or an entity capable of subverting the licensee's wishes. I.e., could the licensee reasonably have compelled the assisting person to carry out his or her directions with regard to those activities and practices regulated by the licensing laws and rules?

3. Did the licensee (or another licensee in his/her direct charge) have the freedom and authority to assign persons of his/her choosing to assist in the preparation of designs or plans to be stamped/sealed?

4. Did the licensee exercise due care in assigning tasks to persons assisting in the preparation of designs or plans to be stamped/sealed based upon the licensee's knowledge of each person's expertise, knowledge, and skill levels.

5. Does the licensee have a verifiable record that work product produced by those assisting him/her were subject to regular and continuing review and supervision throughout the

development process, from the time of contract to the time of delivery.

6. Did those assisting the licensee in the preparation of designs or plans to be stamped/sealed have continuous access to and the guidance from the licensee throughout the development process.

7. Is the design or plan within the specialty ISSUED BY THE BOARD of the engineer who is affixing his or her seal?

Appendix:

26 V.S.A. § 1188. Seal

(a) Each licensee shall obtain a seal of a design authorized or approved by the board. The seal shall bear the licensee's name and the title "professional engineer."

(b) Plans, specifications, plats and reports issued by a licensee shall be stamped with his seal and shall also be signed by the licensee.

(c) A person who affixes to a plan or other document the seal of another person shall be fined not more than $1,000.00 and imprisoned not more than 30 days, or both. (Added 1983, No. 188 (Adj. Sess.), § 2.)

* * * * * * * * * * * *

26 V.S.A. § 1191(c) Unprofessional conduct includes any of the following actions by a licensee:

(1) failing to make available, upon request of a person using engineering services, copies of documents in the possession or under the control of the licensee, when those documents have been prepared for and purchased by the user of services;

(2) signing or stamping a design or plan with which the engineer is not familiar, or negligently allowing use of the engineer's professional stamp on such a design or plan;

Adopted: 4 September 2003

Colin B. Taylor, P.E.
Board of Professional Engineering