



Board for Professional, Engineers, Land
Surveyors, and Geologists

Understanding Professional Geologist License Requirements: California 2019

May 15, 2019





Objectives for Today

California Professional Geologist License Qualification Requirements

- Types of Licenses (PG, PGp, CEG, CHG)
- Qualification Requirements
- Overview of the Application Process

Understanding Key Concepts in California Geology License Laws and Regulations

- Brief history of licensure in California
- Common Myths and Misconceptions
- Important Concepts





Board for Professional Engineers, Land Surveyors, and Geologists

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May 15, 2019





Always remember.....

- Laws and Regulations CHANGE through time
- The Board is continually updating and improving our business processes
- Check the website for the latest most accurate information (or contact the Board)
- It is your responsibility to stay up to date





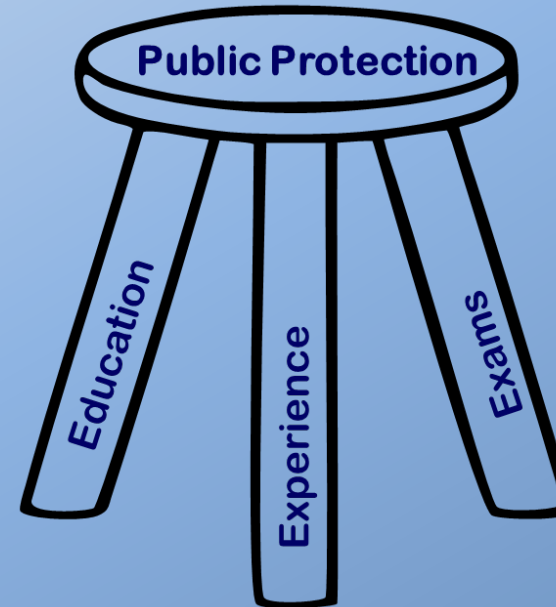
License Qualification Requirements

Administrative requirements include:



- Background check (fingerprints)
- Submitting application & documentation
- Fees

Valid TECHNICAL criteria to achieve professional licensure includes equal parts





Lifecycle of an Application





Tips to Ensure a Smooth Application Process:

- Don't procrastinate!
- Keep copies of your application and documentation
- Use a delivery method that provides a tracking number to confirm receipt by the Board





Tips to Ensure Smooth Application Process



Common reasons why applications are delayed:

- Handwritten
- No fees included
- Wrong form
- Missing signature(s)
- No education transcripts
- No fingerprints/LiveScan
- Sending in documentation separately from application





Tips to Ensure Smooth Application Process

Tips for References



Tech Review/Registrar

- ✓ Describe the applicant's role
- ✓ Must be geology, engineering geology, hydrogeology, geophysics **AS DEFINED IN THE LAW and/or REGULATIONS**
- X **DO NOT** be generic, explain in detail
- X You **CANNOT** vouch for work done under someone else's responsible charge
- ✓ This is a technical reference not an employment reference or a character reference
- ✓ Reference must sign and seal
- ✓ Wet signature is required





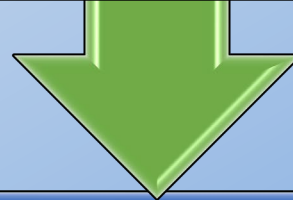
Laws & Regulations

Business & Professions Code

Professional
Engineers Act
§§ 6700-6799

Professional Land
Surveyors Act
§§ 8700-8805

Geologist and
Geophysicist Act
§§ 7800 - 7887



California Code of Regulations

Practices of Professional Engineers
and Professional Land Surveying
§§ 400-476

Practices of Geology and Geophysics
§§ 3000-3067

Full text of laws and regulations <https://www.bpelsg.ca.gov/laws/index.shtml>





Types of Licenses

| Practice Act | Title Authority |
|---|--|
| <p>Regulates:</p> <ul style="list-style-type: none">• Practice of the profession• Use of the Title | <p>Regulates:</p> <ul style="list-style-type: none">• Only regulates the use of the Title• <u>Does NOT</u> restrict practice |
| <p>Available CA Licenses:</p> <ul style="list-style-type: none">• Professional Geologist (PG)• Professional Geophysicist (PGP) | <p>Available CA Licenses:</p> <ul style="list-style-type: none">• Certified Engineering Geologist (CEG)• Certified Hydrogeologist (CHG) |





License Requirements PG/PGP

Must be completed in sequence

| | GIT §7841.2 (Optional step, <u>not</u> a license) | PG (geologist) §7841 | PGP (geophysicist) §7841.1 |
|--|---|--|--|
| Education | Degree or 30 semester hours | Degree or 30 semester hours | Degree or 30 semester hours |
| Experience | NONE | 5-years | 7-years total <ul style="list-style-type: none"> • 3 under PGp OR • 5 years responsible charge |
| Education Credit | NA | <ul style="list-style-type: none"> • 24 months credit for undergrad • Up to 12 months for grad coursework, research, or teaching | <ul style="list-style-type: none"> • 24 months credit for undergrad • Up to 24 months for grad coursework, research, or teaching |
| Apply for GIT If approved, take FG exam | | Apply for PG/PGp license If approved, take exams | |
| Exams | ASBOG FG (paper) | ASBOG FG (paper) ASBOG PG (paper) California Specific (CBT) | California PGp (CBT) |
| Pass exam—get GIT (not a license) | | Pass exams—get License | |





License Requirements CHG/CEG

| §7842 | Certified Hydrogeologist §3042 | Certified Engineering Geologist §3041 |
|---|--|--|
| Education | <ul style="list-style-type: none"> • Evaluated at PG stage • Can submit additional education if desired | |
| Experience | <ul style="list-style-type: none"> • 7-years total geologic experience • Education credit granted in same manner as PG | |
| Experience in the Specialty | <p>7-years of total geologic experience must include <u>either</u> of the following:</p> <ul style="list-style-type: none"> • 3-years experience under the responsible charge of a CEG or CHG • 5-years experience under your own PG doing CEG or CHG work <p>NOTE: experience must match definitions in the regulations.</p> | |
| <p>Apply for specialty title authority license. If approved, take exams.</p> | | |
| Exams | California CHG Exam (CBT) | California CEG exam (CBT) |

- Can apply for specialty at same time as PG if you meet requirements
- May be required to submit reports to document work experience





Draft Regulation, Statement of the Issue

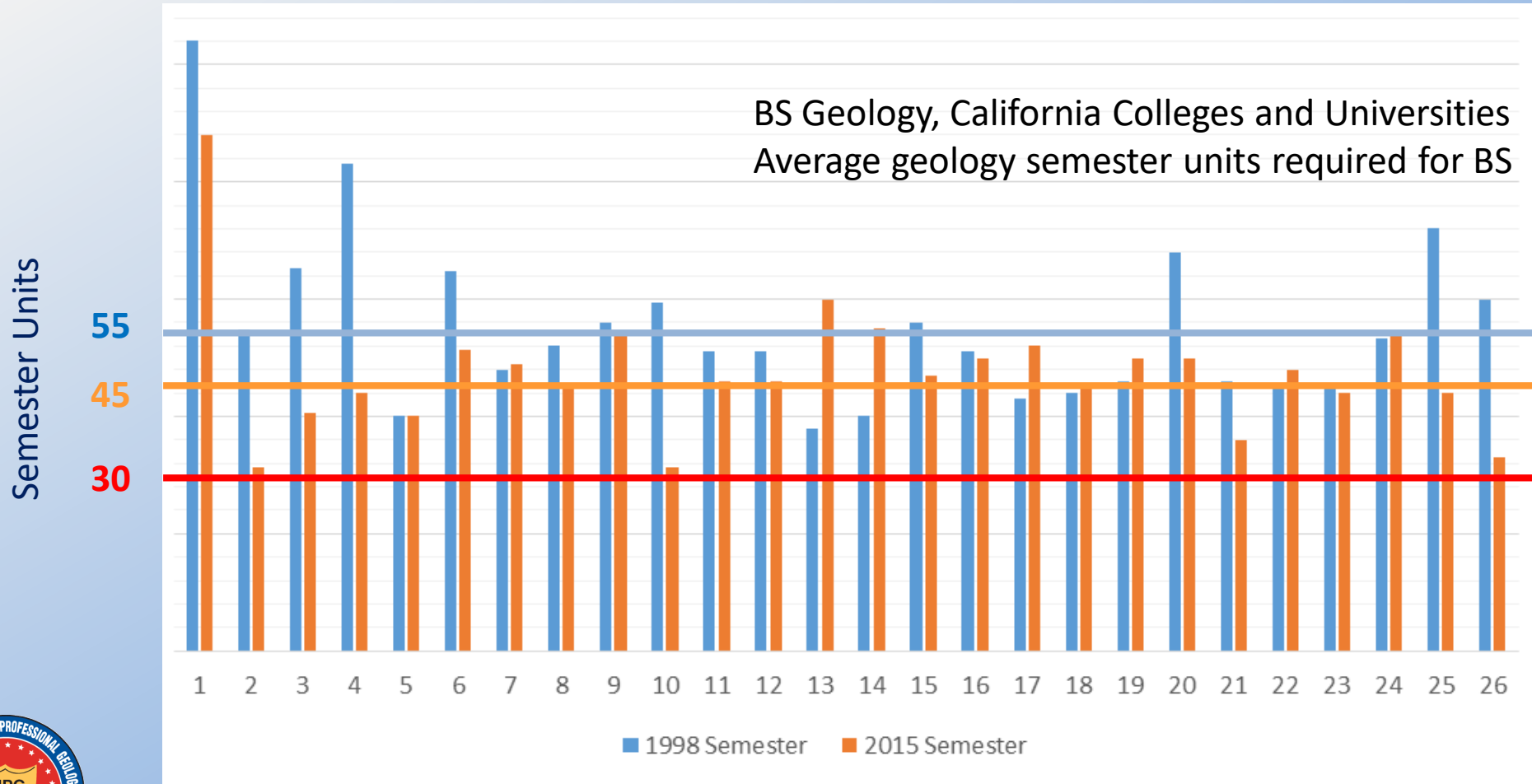
The Board has long recognized that there is confusion in CA regarding the geology education requirement for the PG license:

- Applicants misinterpreting “*major in geological sciences*”
- The flexibility and variety of geology curricula
- Limited national program level accreditation for geology programs
- The proliferation of interdisciplinary degrees
- Non-licensed professions seeking a pathway to licensure





BS Geology Semester Units Required: 1998 vs. 2015





DRAFT Regulation: PG/GIT Education Updates

Geologist & Geophysicist Act §7841(b)(1) and §7841.2(c)(1)

Proposed regulation §3022(a)(1) defines “degree” as ABET accredited geology or related geological sciences degree baccalaureate or higher.







Geologist & Geophysicist Act §7841(b)(2) and §7841.2(c)(2)

Proposed regulation §3022(a)(2) defines specific classes required as part of the 30 semester hours.

| Four (4) Required Core Classes | Two (2) Applied Upper Division Electives (From the list) combined total of 6S/9Q | |
|--|--|---|
| <ul style="list-style-type: none"> • Earth Materials (4S/6Q) • Structural Geology (3S/4.5Q) • Stratigraphy and Sedimentation (3S/4.5Q) • Upper Division Field Coursework (5S/7.5Q) | <ul style="list-style-type: none"> • Geomorphology • Engineering Geology • Hydrogeology • California Geology • Paleontology • Resources Geology • Environmental Geology | <ul style="list-style-type: none"> • Geophysics • Technology Applications in Geology • Applied Geoscience Courses From other Departments |



HOME / ACCREDITATION

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Accreditation

California State University, Sacramento is fully accredited by the Western Association of Schools and Colleges, and for teacher education by the California Commission on Teacher Credentialing; the University is also a member of the National Council of Graduate Schools and the Western Association of Graduate Schools, and is on the list of approved colleges by the American Association of University Women.

Licensure and Credentialing Disclosure

Admission into programs leading to licensure and credentialing does not guarantee that students will obtain a license or credential. Licensure and credentialing requirements are set by agencies that are not controlled by or affiliated with the CSU and requirements can change at any time. For example, licensure or credentialing requirements can include evidence of the right to work in the United States (e.g., social security number or tax payer identification number) or successfully passing a criminal background check. Students are responsible for determining whether they can meet licensure or credentialing requirements. The CSU will not refund tuition, fees, or any associated costs, to students who determine subsequent to admission that they cannot meet licensure or credentialing requirements. Information concerning licensure and credentialing requirements are available from the Dean of Undergraduate Studies, Sacramento Hall 234, (916) 278-5344.

The following is a list of individually accredited programs:

| Program | Degree | Accreditation |
|---|--|---|
| College of Arts and Letters | | |
| Graphic Design | Bachelor of Science | National Association of Schools of Art and Design |
| Interior Design | Bachelor of Arts | Council for Interior Design Accreditation (CIDA) |
| Music | Bachelor of Arts, Bachelor of Music, Master of Music | National Association of Schools of Music |
| Theatre Arts | Bachelor of Arts | National Association of Schools of Theatre Arts |
| College of Business Administration | | |





DRAFT Regulation: PG/GIT Education Updates



- The Regulations require that you satisfy the education requirements **BEFORE** your work experience counts.
- If you apply after the draft regulation goes into effect, you must meet the updated education requirements.
- There will be a transition plan provided when the regulation goes into effect.





Draft Regulation: Clarifications



- ✓ National or Regional Accreditation for College/University
- ✓ Who can be a reference
- ✓ No family references
- ✓ 3 references required
- ✓ What should be in a reference



Questions?



BOARD FOR PROFESSIONAL ENGINEERS, LAND SURVEYORS, AND GEOLOGISTS

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Understanding Key Concepts in California Geology License Laws and Regulations

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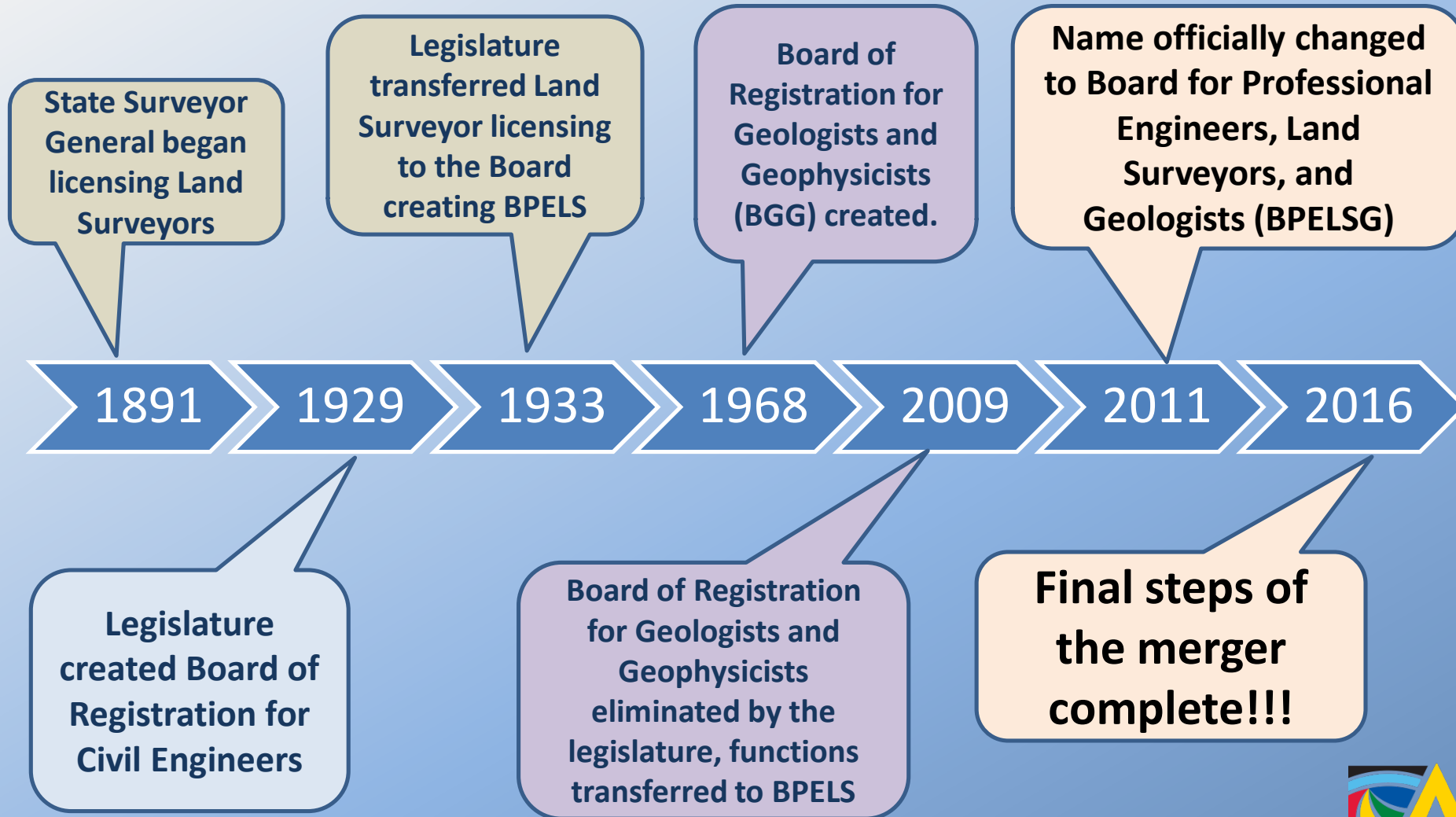
AB 600, The Geologist Act Signed into Law, August 1, 1968

This chapter is enacted in order to introduce qualifying criteria in a presently unregulated professional field. Such action recommends itself **through benefits to the safety, health, and property of the people of California and to the promotion of the public welfare.**





A Brief History of BPELSG





Where We Are Today

Active Licenses (FY 2017/2018)

- Total BPELSG licenses = 108,411
- Professional Geologists = 5,147 (about 5% of total)
 - Certified Engineering Geologists = 1,489
 - Certified Hydrogeologists = 931
- Professional Geophysicists = 154 (about 3% of geology)
- Professional Land Surveyors = 4,173
- Professional Engineers (Civil) = 57,513





When is a license required?

Whenever a person practices or offers to practice engineering/land surveying/geology or geophysics (except as specifically exempted in the statute).

| Practice Act Definitions | |
|--------------------------|------------------------|
| §6731 | Civil Engineering |
| §6731.5 | Electrical Engineering |
| §6731.6 | Mechanical Engineering |
| §8726 | Land Surveying |
| §7802 | Geology |
| §7802.1 | Geophysics |





What does “practice” mean?

Dictionary Definitions

- The application or use of an idea as opposed to theories.
- Customary or expected way of doing something.
- To pursue a profession.

BPC and CCR

- BPC §6734: Any person practices civil engineering when he professes to be a civil engineer or is in responsible charge of civil engineering work.
- CCR §3003(f)(1):preparation of geologic or geophysical reports, documents, or exhibits.....
- CCR §3003(f)(2):performance of geological or geophysical services.....





What is Responsible Charge?



HARRY S. TRUMAN (1884 — 1973)
33RD PRESIDENT OF THE UNITED STATES (1945 — 1953)





What is Responsible Charge?

| Responsible Charge | <u>NOT</u> Responsible Charge |
|--|---|
| <ul style="list-style-type: none">• You are making the technical decisions<ul style="list-style-type: none">• Performing the work• Reviewing and approving what was done by someone else• Directing someone how to perform the work• Agency review that involves independent judgement or analysis (i.e. non-ministerial) | <ul style="list-style-type: none">• Does not include the concept of financial liability• Does not include management control or hierarchy• Does not include administrative and management functions |





Competence

§415—Board Rules

A professional engineer or land surveyor licensed under the Code shall practice and perform engineering or land surveying work only in the field or fields in which he/she is by education and/or experience fully competent and proficient.

§3065 (b) (1) – Regulations Relating to the Practices of Geology & Geophysics

Licensed geologists or licensed geophysicists (together with those whom the licensee may engage as consultants) shall perform, or offer to perform, only those professional services for which they are qualified by education, training, experience, and licensure as required by law, in the specific technical and scientific areas involved.





Professional Standards and Code of Professional Conduct

Disciplinary Proceedings/Offenses Against the Chapter

The Board may.....publicly reprove, suspend for a period not to exceed two years, or revoke the certificate of.....

| | | |
|---------------------------------------|----------------------------|--|
| Engineers | BPC §6775 (g) CCR §475 | <i>A violation in the course of the practice of professional engineering of a rule or regulation of unprofessional conduct adopted by the Board.</i> |
| Land Surveyors | BPC §8780 (h) CCR §476 | <i>A violation in the course of professional practice of land surveying of a rule or regulation of unprofessional conduct adopted by the Board.</i> |
| Geologists & Geophysicists | BPC §7860 (c) CCR §3065 | <i>Unprofessional conduct includes...Conduct in the course of practice as a geologist or geophysicist that violates professional standards adopted by the Board.</i> |





Exemptions in the Geologist and Geophysicist Act

Federal Exemption [BPC §7836]

- *Officers and employees of the United States of America practicing solely as such officers or employees are exempt from registration under the provisions of this chapter.*

Exemption for subordinates[BPC §7837]

- *Must be working under the responsible charge of the appropriate licensee.*

Limited Exemption from the G&G Act for civil and petroleum engineers [§7838]

- *A civil engineer **empowered to practice civil engineering** in this state, and a **petroleum engineer registered in this state**, under provisions of Chapter 7 (commencing with Section 6700) of Division 3 of this code **insofar as they practice** civil engineering in its various branches or petroleum engineering, respectively, **are exempt** from registration under the provisions of this chapter.*





Professional Engineers Act

Geologist and Geophysicist Act



Civil (PE)

Geology (PG)

Geotechnical Engineering

Engineering Geology

PE + PG
Working
Together
or Dual
License

Civil Engineers have a LIMITED exemption to the G&G Act. Must be incidental and directly related to civil engineering as defined in §6731.

Geologists are prohibited from practicing civil engineering (§7839) unless they are licensed as a civil PE.





Licensing and Public Service

§3003 (f)– Practice of Geology or Geophysics

....includesby any commission, board, department, district or division of the state or any political subdivision thereof or of any county, city or other public body or by the employees or staff members of such

There are similar requirements in

- §6730-6730.2 Professional Engineers Act
- §8725.1 Professional Land Surveyors Act





What about Agency Reviews?

Professional level work requires a license.

- Professional level work requires individual skill, interpretation and judgement.
- Example: Determining whether a consultant adequately defined groundwater direction is a professional geologic decision requiring a license.

Ministerial work does not require a license.

- Ministerial work tends to be “pre-defined” and does not include professional level decisions.
- Example: The permit requires a \$400 fee. Checking the box to note that a payment for \$400 was included with the permit application is ministerial.





Which License?

Sources of confusion include:

- Laws or regulations listing several different license types in one sentence as “qualified professionals”
 - Example: “Professional Geologist, Licensed Civil Engineer, Landscape Architect, or Professional Forester”
 - Tendency to interpret this as “these licenses are interchangeable” — **WRONG!**
- Misunderstanding the definitions
 - Example: “The certification shall be signed by the owner or operator and by an independent qualified professional engineer, registered in California.”
 - The “Professional Engineer” title can be used by any licensed engineer (§6701 and §6704), *so what did this agency intend this to mean?*
- Misunderstanding the exemptions





Other Agency Laws and Regulations

Other agency laws and regulations do not define the practice of licensed professions.

Stormwater: the QSD/QSP certifications do not allow the holder to practice engineering, land surveying, or geology.

CEQA: Environmental assessment tasks conducted under CEQA are not exempt from the licensing laws.

BPC §460: Local agencies can't restrict practice of licensed professions.





Businesses

Businesses offering engineering, land surveying, or geology/geophysics:

- Offering to practice (BPC §7832)
- Ownership requirements (BPC §7833)
- Responsible charge requirements





Things to Remember

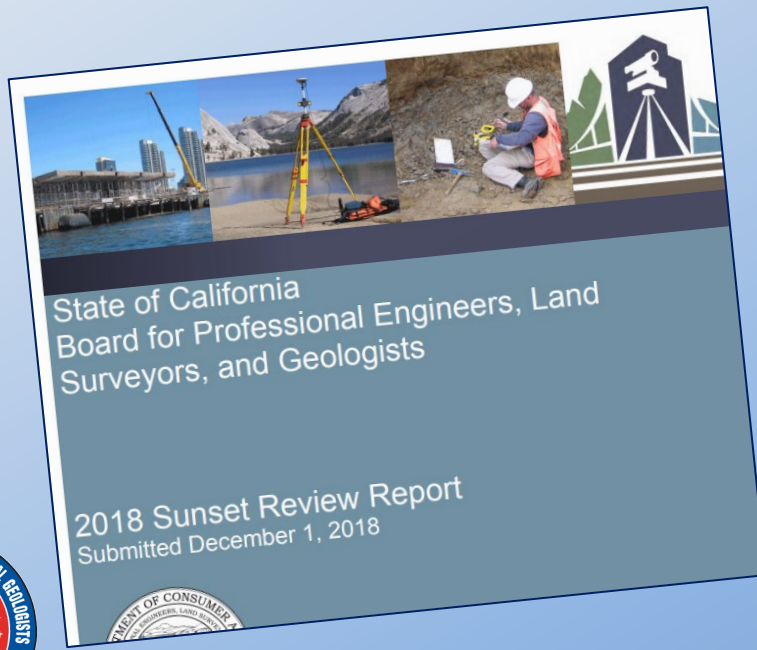
- The Board licenses INDIVIDUALS, not companies (or agencies).
- The license laws apply to state and local governmental employees.
- Businesses offering engineering, land surveying or geology/geophysics must meet certain requirements.
- Many projects are multidisciplinary and each situation must be evaluated based on the specifics.
- The Board exists to protect the public.





Keeping Current

- Upcoming Proposals:
Fee Update Regulation
- Sunset Review





Contact Us



**Board for Professional Engineers,
Land Surveyors, and Geologists**

BPELSG Geologist – Laurie Racca, PG

(916) 263-2406 or Laurie.Racca@dca.ca.gov

Questions about the Laws and Regulations

(916) 263-2284 or BPELSG.Enforcement.Information@dca.ca.gov

Questions about Filing a Complaint:

(916) 263-2284 or BPELSG.Enforcement.Information@dca.ca.gov