

Here are some of the definitions of “Geology” and “The Practice of Geology” from various States and organizations:

American Institute of Professional Geologists

1. "Geology" is the science that treats the Earth and its origin and history, in general; the investigation, including collection of specimens, of the Earth's constituent rocks, minerals, fossils, solids, fluids including surface and underground waters, gases, and other material from the center of its core to the outer limits of its atmosphere; the study of the Earth; and the application and utilization of this knowledge of the Earth. The knowledge and principles of geology also are applied to extraterrestrial bodies.
2. "Professional geological work" is application of the principles, theories, laws, and body of knowledge encompassed in the science of geology at an advanced and skillful level requiring education, experience, and the capability of interpretation and evaluation.
3. "Geologist" is a person who, by reason of his or her knowledge of geology acquired by education and practical experience, is qualified to engage in the practice of geology.
4. A "Professional Geologist" is a geologist who has accumulated a minimum of eight (8) years post-baccalaureate experience in the practice of geology as a vocation, and who has a sustained record of adherence to exemplary standards of professional and ethical conduct.
5. "Practice of Geology" is the performance of geological service or work including but not limited to consultation, investigation, evaluation, planning, mapping, and inspection of geological work, and the responsible supervision thereof. A person shall be construed to practice or offer to practice geology, within the meaning and intent of this definition, who practices any branch of the profession of geology; or who by verbal claim, sign, advertisement, letterhead, card or in any other way represents himself or herself to be a geologist; or through the use of some other title implies that he or she is a geologist; himself or herself as able to perform or who does perform any geologic services or work recognized by the Executive Committee of the Institute as the practice of geology.

National Association of State Boards of Geology

"Geology" means the science that includes the study of the earth and its origin and history. Geology includes the investigation, research, and interpretation of the earth's constituent rocks, minerals, hydrocarbons, solids, and fluids, including surface and underground waters, gases and other materials and the study of the natural agents, forces, and processes which cause changes in both the subsurface and surface of the earth including any anthropogenic features or activities that may affect, or be affected by, but not limited to, these agents, forces, physical and chemical characteristics and processes.

"Public practice of geology" shall mean, and include within the intent of this Act, any professional service, work, or activity, including the responsible supervision and performance thereof, requiring formal geologic education, training, experience, and the understanding and application of special knowledge of the mathematical, physical, chemical, biological, earth, and geological sciences as may be related to those services including, but not limited to, consultation, investigation, evaluation, planning, geologic mapping, interpretation, remediation, expert technical testimony, planning the use of land and water and the protection of ground and surface waters and the evaluation of ground²⁴⁹ water resources; prevention and remediation of contamination of the earth, earth materials and water caused by improper disposal or accidental spills; determination of the suitability and risks in containment and disposal of wastes and hazardous materials, including, but not limited to, landfills, storage tanks, and injection wells; the evaluation of mining and petroleum properties¹; the professional supervision of exploration for and development of mineral/natural resources including, but not limited to, metallic and non-metallic minerals², petroleum³, ground-water and surface-water resources (See Addendum A); the geologic

phases of any engineering investigation or survey; siting of boreholes, determining depth of wells to be drilled, depth-of-casing and grouting requirements for the construction of monitoring wells or other borings into the earth that may affect one or more aquifers; the geologic suitability for construction projects, including excavations, building foundations, dams, highways, and other structures which may be affected by floods, landslides, earthquakes, sinkholes, erosion, expansive-contractive earth and earth materials, or other geoscientific phenomena or processes; geologic or geoscientific surveying and mapping, including making measurements and gathering data related to the physical features of the earth such as subsurface data and the formulation and depiction of such information into geologic or geoscientific graphics, data, maps, plans, reports, and descriptions, and including preparing, creating, and/or modifying computerized, electronic products using geographic information systems, use of global positioning systems and information derived therefrom, or other information and data related to the activities contained within this section; geotechnical work activities, including the practice of various aspects of related professions incidental to the practice of geology; inspection of, or the responsible supervision of, the foregoing, and including any other geologic or related work which includes or embraces any services, activities, or work, public or private, which may be adversely or otherwise affected or influenced by geological processes, including but not limited to, utilities, construction projects, communication systems, transportation systems, or any other anthropogenic features or impacts, insofar as it involves protecting and safeguarding the public's health, safety, and welfare and the environment, and including such other professional services as may be necessary in the planning, progression and completion of any such geologic services.

Furthermore, these geologic services also include those not specifically defined herein which include, but are not limited to, the commonly recognized geologic practices of archeogeology, coastal geology, construction geology, economic geology, engineering geology, environmental geology, geomorphology, historical geology, hydrogeology, geochemistry, geophysics, marine geology, medical geology, mineralogy, mining geology, paleontology, petroleum geology, petrography, petrology, physical geology, physiography, sedimentology, structural geology, stratigraphic geology, urban geology; vulcanology, etc., and to further stimulate the orderly development, and encourage the effective management and utilization of the [jurisdiction's] rock, mineral, fossil-fuel, and water resources, while protecting the public and the environment.

Minnesota

Subd. 3a. Practice of professional geoscience. A person is considered to be practicing professional geoscience within the meaning of sections 326.02 to 326.15 who holds out as being able to perform or who does perform any technical professional services, the adequate performance of which requires professional geoscience education, training, and experience in the application of special knowledge of the mathematical, physical, chemical, biological, and earth sciences to such services or creative work as consultation, investigation, evaluation, planning, mapping, and inspection of geoscientific work and its responsible supervision. A person is considered to practice or offer to practice professional geoscience, within the meaning and intent of sections 326.02 to 326.15 who practices any of the geoscience disciplines defined by the board; who by verbal claim, sign, advertisement, letterhead, card, or in any other way represents oneself to be a professional geoscientist; through the use of some other title implies that the person is a professional geoscientist; or who presents oneself as able to perform or who does perform any geoscience services or that constitutes the practice of a professional geoscience discipline as defined by the board. "Geoscience" means the science which includes treatment of the earth and its origin and history; the investigation, measurement or sampling, of the earth's constituent rocks, natural and induced fields of force, minerals, fossils, solids, soils, fluids including surface and underground waters, gases, and other materials; and the study, interpretation, and analysis of the natural agents, forces, and processes which cause changes in the earth. Nothing in this subdivision shall be

construed to prevent a professional engineer, as defined in sections 326.02 to 326.15, from acquiring engineering data involving soil, rock, groundwater, and other earth materials; evaluating physical and chemical properties of soil, rock, groundwater, and other earth materials for engineering; and from utilizing these data for analysis, design, and construction. Nothing in this subdivision shall be construed to permit a professional geoscientist to engage in the practice of professional engineering, architecture, landscape architecture, or land surveying or to use the title "certified interior design" as those terms are defined in this section. Nothing in this subdivision shall be construed to regulate persons who take soil samples for the purpose of providing recommendations on crop production.

Washington

(11) "Practice of geology" means performance of geological service or work including but not limited to collection of geological data, consultation, investigation, evaluation, interpreting, planning, geological mapping, or inspection relating to a service or work that applies to geology, and the responsible supervision thereof, the performance of which is related to public welfare or the safeguarding of life, health, property, and the environment, except as otherwise specifically provided by this chapter.

(7) "Geology" means the science that includes: Treatment of the earth and its origin and history, in general; the investigation of the earth's constituent rocks, minerals, solids, fluids, including surface and underground waters, gases, and other materials; and the study of the natural agents, forces, and processes that cause changes in the earth.

Kansas

"Practice of geology" means:

(1) The performing of professional services such as consultation, investigation, evaluation, planning or mapping, or inspection, or the responsible supervision thereof, in connection with the treatment of the earth and its origin and history, in general; the investigation of the earth's constituent rocks, minerals, solids, fluids including surface and underground waters, gases and other materials; and the study of the natural agents, forces and processes which cause changes in the earth;

Arizona

15. "Geological practice" means any professional service or work requiring geological education, training and experience, and the application of special knowledge of the earth sciences to such professional services as consultation, evaluation of mining properties, petroleum properties and groundwater resources, professional supervision of exploration for mineral natural resources including metallic and nonmetallic ores, petroleum and groundwater, and the geological phases of engineering investigations.

16. "Geologist" means a person, not of necessity an engineer, who by reason of special knowledge of the earth sciences and the principles and methods of search for and appraisal of mineral or other natural resources acquired by professional education and practical experience is qualified to practice geology as attested by registration as a professional geologist. A person employed on a full time basis as a geologist by an employer engaged in the business of developing, mining, or treating ores and other minerals shall not be deemed to be engaged in geological practice for the purposes of this chapter if the person engages in geological practice exclusively for and as an employee of such employer and does not represent that the person is available and is not represented as being available to perform any geological services for persons other than the person's employer.

Wyoming

(vi) "Geology" means the science which treats of the earth in general, the earth's processes and its

history, investigation of the earth's crust and the rocks and other materials which compose it, and the applied science of utilizing knowledge of the earth's history, processes, constituent rocks, minerals, liquids, gases and other materials for the use of mankind;

(vii) "Practice of geology" means the performance of geological services or work such as consultation, investigation, evaluation, planning, preparation of geologic reports and maps and inspection of geological work;

(viii) "Practice of geology before the public" means the performance of geological services or work including consultation, investigation, evaluation, planning, preparation of geologic reports and maps, the inspection of geological work and the responsible supervision of geological services or work, the performance of which is relevant to public welfare or the safeguard of life, health, property and the environment, unless exempt under this act.

"Practice of geology before the public" does not include cutting descriptions for water wells, descriptive logs for drill holes for mineral exploration, lithologic descriptions and stratigraphic picks for oil and gas well logs, geologic information contained within notices and other routine forms required by state and federal agencies, geologic reports and other documents not available for dissemination outside of the entity preparing the reports or documents, nor any technical papers or reports prepared specifically for publication by the state or federal geological survey or by other geological, scientific or trade organizations;

Wisconsin

) "Geology" means a science that involves the study of the earth and the earth's origin, composition, structure and physical history, including the study of the natural agents, forces and processes that cause changes in the earth and the investigation and collection of data concerning the crust and the interior of the earth and the surface and underground gases, solids and fluids that make up the earth.

(2) "Practice of professional geology" means the performance of or offer to perform any geologic service or work in which the public welfare or the safeguarding of life, health, environment or property is concerned or involved. "Practice of professional geology" includes the collection of geological data, consultation, investigation, evaluation, interpretation, planning or inspection relating to a service or work that applies geology.

Virginia

"Geology" means the science dealing with (i) the earth and its history in general; (ii) the investigation, prediction, evaluation, and location of materials and structures which compose the earth; (iii) the natural processes that cause changes in the earth; and (iv) the application of knowledge of the earth, its processes, and its constituent rocks, minerals, liquids, gases, and other natural materials.

"Practice of geology" means the performance of any service or work for the general public wherein the principles and methods of geology are applied.

Texas

3) "Geoscience" means the science of the earth and its origin and history, the investigation of the earth's environment and its constituent soils, rocks, minerals, fossil fuels, solids, and fluids, and the study of the natural and introduced agents, forces, and processes that cause changes in and on the earth.

Oregon

6) "Geology" refers to:

- (a) That science that treats of the earth in general;
- (b) Investigation of the earth's crust and the rocks and other materials that compose it; and
- (c) The applied science of utilizing knowledge of the earth and its constituent rocks, minerals, liquids, gases and other materials for the benefit of humanity.

7) "Public practice of geology" means the performance for another of geological service or work, such as consultation, investigation, surveys, evaluation, planning, mapping and inspection of geological work, that is related to public welfare or safeguarding of life, health, property and the environment, except as specifically exempted by ORS 672.505 to 672.705.

North Carolina

"Geology" means the science dealing with the earth and its history; investigation, prediction and location of the materials and structures which compose it; the natural processes that cause change in the earth; and the applied science of utilizing knowledge of the earth and its constituent rocks, minerals, liquids, gases and other materials for the benefit of mankind. This definition shall not include any service or creative works, the adequate performance of which requires engineering education, training, and experience.

New Hampshire

"Practice of the profession of geology" or "practice of geology" means the performance of work defined as geology in this subdivision including, but not limited to researching, investigating, consulting, geological mapping, describing the natural processes that act upon the earth's materials, predicting the probable occurrence of natural resources, predicting and locating natural or man-induced phenomena which may be useful or hazardous to mankind recognizing, determining and evaluating geological factors, and the inspection and performance of geological work and the responsible supervision thereof in furtherance of the health, safety, and welfare of the public and the environment. The term shall not include the application of geologic information in the identification or determination of engineered solutions to protect the health, safety, and welfare of the public and the environment. The term shall not include the practice of engineering, land surveying, architecture, soil science or wetland science for which separate licensure or certification is required.

"Geology" means the science dealing with the study of the earth, its origin, history, physical features and content; the investigation and interpretation of the earth's constituents including, but not limited to, its rocks, unconsolidated materials, minerals, solids, fluids, and gases, and of the natural and induced processes and forces acting on the earth; the geologic mapping of the earth's constituents and features, and the results of various processes and forces that have acted on the earth; and the geological application of the information derived from such study in the furtherance of the health, safety and welfare of the public and the environment.

Nebraska

Geology means the science which includes treatment of the earth and its origin and history, in general; investigation of the earth's solids, including rocks, soils, minerals, fluids, including underground waters, gases, and other materials; and the study of the natural agents, forces, and processes which cause changes in the earth or on its surface; and the application of this knowledge.

002.01L Geology specialty means a branch of geology which has been recognized for the purposes of licensure, including, but not limited to, environmental geology, engineering geology, geophysics,

hydrogeology, petroleum geology, mining geology, and structural geology.

Missouri

"Geology", that profession based on the investigation and interpretation of the earth, including bedrock, overburden, groundwater and other liquids, minerals, gases, and the history of the earth and its life;

(7) "Practice of geology", the practice of or the offer to practice geology for others, such practice including, but not limited to, geological investigations to describe and interpret the natural processes acting on earth materials, including gases and fluids; predicting and interpreting mineral distribution, value, and production; predicting and interpreting geologic factors affecting planning, design, construction, and maintenance of engineered facilities such as waste disposal sites or dams; and the teaching of the science of geology;

(8) "Public health, safety and welfare" shall include the following: protection of groundwater; buildings and other construction projects including dams, highways and foundations; waste disposal or causes of waste pollution including human, animal, and other wastes including radionuclides; stability of the earth's surface such as could be affected by earthquakes, landslides, or collapse; the depth, casing, grouting, and other recommendations for the construction of wells or other borings into earth that intersect one or more aquifers; and excavation into the earth's materials where stability or other factors are at risk. "Public health, safety, and welfare" does not refer to geologic work conducted to determine mineral resources or other resources as could be available for various uses, teaching, or basic geologic work including making geologic maps, cross sections, stratigraphic determinations, and associated reports or other presentations.

Mississippi

"Geology" means the science which includes the study of the earth and its origin and history. Geology includes the investigation of the earth's constituent rocks, minerals, solids, and fluids, including surface and underground waters, gases and other materials and the study of the natural agents, forces, and processes which cause changes in the earth.

Maine

"Geology" means that science which treats of the earth as a whole; the investigation of its composition, its size, shape and relationships between consolidated and unconsolidated rock units in the regolith and bedrock; and the applied aspects of utilizing knowledge of the earth and its constituents; including its consolidated and unconsolidated rock units, its minerals, liquids, gases and other materials for the benefit of mankind.

Indiana

"Geology" means a science that has the following characteristics:

(1) Treats the earth as a whole.

(2) Includes the:

(A) investigation;

(B) analysis;

(C) classification; and

(D) location;

of the rocks and other materials that compose the earth's crust as they relate to geologic processes.

(3) Involves the study of:

(A) minerals, gases, and liquids composing and contained within the earth's crust; and

(B) geologic materials and processes.

Illinois

"Geology" means the science that includes the treatment of the earth and its origin and history including, but not limited to, (i) the investigation of the earth's crust and interior and the solids and fluids, including all surface and underground waters, gases, and other materials that compose the earth as they may relate to geologic processes; (ii) the study of the natural agents, forces, and processes that cause changes in the earth; and (iii) the utilization of this knowledge of the earth and its solids, fluids, and gases, and their collective properties and processes, for the benefit of humankind.

"Practice of professional geology" means the performance of, or the offer to perform, the services of a geologist, including consultation, investigation, evaluation, planning, mapping, inspection of geologic work, and other services that require extensive knowledge of geologic laws, formulas, principles, practice, and methods of data interpretation.

A person shall be construed to practice or offer to practice professional geology, within the meaning and intent of this Act, if that person (i) by verbal claim, sign, advertisement, letterhead, card, or any other means, represents himself or herself to be a Licensed Professional Geologist or through the use of some title implies that he or she is a Licensed Professional Geologist or is licensed under this Act or (ii) holds himself or herself out as able to perform or does perform services or work defined in this Act as the practice of professional geology. Examples of the practice of professional geology include, but are not limited to, the conduct of, or responsible charge for, the following types of activities:

(i) mapping, sampling, and analysis of earth materials, interpretation of data, and the preparation of oral or written testimony regarding the probable geological causes of events; (ii) planning, review, and supervision of data gathering activities, interpretation of geological data gathered by direct and indirect means, preparation and interpretation of geological maps, cross-sections, interpretive maps and reports for the purpose of determining regional or site specific geological conditions; (iii) the planning, review, and supervision of data gathering activities and interpretation of data on regional or site specific geological characteristics affecting groundwater; (iv) the interpretation of geological conditions on the surface of the Earth and at depth in the Earth for the purpose of determining whether those conditions correspond to a geologic map of the site or a legally specified geological requirement for the site; and (v) the conducting of environmental property audits.

Idaho

Within the intent of this chapter, it is recognized that

"geology" is a fundamental science dealing with the physical earth, the organisms, materials and structures composing the earth, the physical forces affecting the earth, and the utilization of the knowledge of the earth and its constituent rocks, minerals, liquids, gases and other materials insofar as these factors may influence the safety and public welfare.

The terms, "geology and professional geology," within the intent of this chapter, shall include any professional service such as consultation, investigation, evaluation, planning, and mapping, or responsible supervision of such activities in connection with any public or private project, as governed by the principles of geology, wherein the public welfare or the safeguarding of life, health, or property is concerned or involved, when such service is rendered in a professional capacity and requires the application of geologic principles and data.

A person shall be construed to practice or offer to practice geology, within the meaning and intent of this chapter, who practices any branch of the profession of geology; or who by verbal claim, sign, advertisement, letterhead, card, or in any other way represents himself to be a geologist, or through the use of some other title implies that he is a geologist or that he is registered under this chapter; or who

holds himself out as able to perform, or who does perform any geological services or work recognized as geology. Further, within the intent of this chapter, it is recognized that the information derived from geological studies may be utilized in various associated fields or sciences concerned with the safety and public welfare.

Georgia

“Geology” means that science which treats of the earth in general; investigation of the earth’s crust and the rocks and other materials which compose it; and the applied science of utilizing knowledge of the earth and its constituent rocks, minerals, liquids, gases, and other materials for the benefit of mankind.

(4) “Public practice of geology” means the performance of geological service or work such as consultation, investigation, surveys, evaluation, planning, mapping, and inspection of geological work in which the performance is related to public welfare or safeguarding of life, health, property, and the environment, except as specifically exempted by this chapter. A person shall be construed to practice publicly or offer to practice publicly geology, within the meaning and intent of this chapter, who practices any branch of the profession of geology; or who by verbal claim, sign, advertisement, letterhead, card, or in any other way represents himself to be a geologist; or through the use of some other title implies that he is a geologist; or that he is registered under this chapter; or who holds himself out as able to perform or who does perform any geological services or work recognized as geology.

California

"Professional geological work" is work performed at a professional level rather than at a subprofessional or apprentice level and requires the application of scientific knowledge, principles and methods to geological problems through the exercise of individual initiative and judgment in investigating, measuring, interpreting and reporting on the physical phenomena of the earth. Implicit in this definition is the recognition of professional responsibility and integrity and the acknowledgment of minimal supervision. "Professional geological work" specifically does not include such routine activities as drafting, sampling, sample preparation, routine laboratory work, etc., where the elements of initiative, scientific judgment and decision making are lacking, nor does it include activities which do not use scientific methods to process and interpret geologic data. Further, it specifically does not include soils engineering, soils sampling, soils testing or other activities in or related to the agricultural application of soils sciences. It also does not include mining, mining engineering or other engineering disciplines and/or other physical sciences wherein geological investigation, analysis and interpretation are minimal or lacking.