

ENGINEER PRINCIPAL

KIND OF WORK

Advanced professional engineering work in a specialized field, including supervisory responsibility.

NATURE AND PURPOSE

An employee in this class is responsible for directing a significant phase of an agency's overall engineering program. Duties include developing specific policies and procedures necessary to execute a program and coordinating the engineering activities of professional engineers, graduate engineers and technical support staff in the field or office. Work requires the independent selection of courses of action and the resolution of problems within the framework of broad engineering and administrative guidelines. Work is reviewed by an administrative supervisor for overall effectiveness and satisfactory completion of assigned projects.

EXAMPLES OF WORK (A position may not include all the work examples given, nor does the list include all that may be assigned.)

Serves as a subject matter expert in scientific areas pertaining to construction, pollution, water/sewage/waste treatment, pipeline safety, etc. requiring a prolonged course of intellectual instruction to:

- confer with regulators, safety organizations, municipal officials, industry representatives, management, labor and/or other interested groups
- serve as a technical advisor;
- prepare and revise regulations, statutes, rules, standards, manuals, and other instructional materials related to area of expertise;
- provide engineering and technical advice on methods, policy and regulation;
- act as chief inspector of operations in which the state has an interest, and give technical advice to the district inspectors; OR
- provide other advise on the requirements for specific engineering standards.

Plans and directs complex engineering studies, surveys and/or investigations such as: pipeline safety incidents and hazards or industrial health hazards by collecting and compiling data and preparing reports on investigations surveys with recommendations for proper action; or water pollution and solid waste control studies, surveys and investigations.

Applies engineering practices and principles to:

- assist in the development of a comprehensive statewide plan for the control and abatement of air pollution or solid waste control;
- review final engineering plans and proposals;
- evaluate mineral properties to provide a basis for determining royalty values and for lease administration; OR
- approve development plans, specifications and estimates for all contract and force account construction.

Supervises and directs the work of:

- all highway construction projects within an assigned resident area;
- an engineering services unit such as design, right of way or materials in a district office, a specific facet of one of these specialties in the central office; or other sections such as survey, field services or programming;.
- division's mineral research program; OR
- serve as chief assistant to district maintenance engineer.

Assists in mineral lease sales and lease negotiations.

KNOWLEDGE, SKILLS AND ABILITIES REQUIRED

Knowledge of:

The principles and practices of a specialized field of engineering.

Departmental programs, policies and applicable state and federal regulations.

The principles of effective supervision.

Ability to:

Establish and maintain effective working relationships with representatives of industry and citizen groups.

Coordinate and direct the activities related to several large engineering projects or programs of considerable complexity.

Express ideas clearly and concisely, orally and in writing, and to speak effectively in explaining an agency's program.

Prepare or direct the preparation of technical reports.

LEGAL OR LICENSURE REQUIREMENTS

Licensure with the Minnesota Board of Architecture, Engineering, Land Surveying, Landscape Architecture, Geoscience and Interior Design (AELSLAGID) under the provisions of M.S. 326.02 – 326.15.

Est.: 4/1/70
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T.C.:
Former Title(s):