SOIL SCIENTIST 1

KIND OF WORK

Professional soil science work in the field of environmental protection.

NATURE AND PURPOSE

An employee in this class assists in the development and implementation of a comprehensive soil, vegetation and ground water protection program which includes the review of proposals for land application of wastes. The work involves field investigations, data collection and evaluation, and generation and review of technical information. The employee makes suggestions, develops recommendations, and provides technical assistance in the areas of soil evaluation and waste management in order to ensure that land treatment and disposal techniques do not diminish ground water, soil or vegetation quality. Assignments generally require the interpretation and application of established scientific and administrative criteria. Supervision is received from a higher level soil scientist, or similar classification. Work is reviewed by the supervisor through routine examination of reports and periodic conferences.

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

Reviews facility plans and specifications for land treatment, utilization, or disposal of effluents, sludges, solid waste and hazardous waste to ensure compliance with federal and state regulations and guidelines and acceptable engineering, geologic and soil science principles.

Conducts field investigations of proposed and existing land application sites in order to evaluate projects and collect data.

Provides technical assistance to industry and government jurisdictions utilizing land for waste treatment and disposal so that sound waste management practices are followed.

Assists in development of training and educational materials on land treatment and disposal techniques so that proper waste management practices and state rules are understood.

Prepares general and technical responses, comments and reports for staff and the general public so that they are aware of and understand the program and its goals.
KNOWLEDGE, SKILLS AND ABILITIES REQUIRED

Knowledge of:

Soil characteristics, and the inter-related principles of soil chemistry, soil microbiology and soil physics.

The properties of waste materials.

The principles and techniques used in conducting physical and chemical analyses of soils and wastes.

Ability to:

Analyze technical proposals and draft recommendations for action within agency guidelines.

Deal effectively with representatives of industry and government.

Communicate effectively verbally and in writing.