GENERAL DESCRIPTION

Performs highly advanced (senior-level) health physics or health physics oversight work. Work involves managing, planning, and coordinating major health physics assignments, including inspections, investigations, radioactive material and radiation machine permit and license application reviews, radiological emergency response planning, and radiological surveys. May supervise the work of others. Works under minimal direction, with extensive latitude for the use of initiative and independent professional judgment.

EXAMPLES OF WORK PERFORMED

Oversees emergency response planning and implementation activities for radiological emergency events or for radiological emergencies involving transportation or terrorist activities.

Oversees the processing of radiation control permits and licenses, sealed radioactive source and device approvals, and financial security estimates for decommissioning.

Coordinates, manages, and/or provides oversight for highly advanced and comprehensive scientific and technical reviews of radiation safety plans, operations, and facilities.

Coordinates and evaluates risk assessments based on quantitative relationships between radiation exposure and biological damage.

Coordinates and evaluates inspections and investigations of installed x-ray equipment, non-ionizing radiation devices, and facilities where radioactive materials are used or stored.

Coordinates and evaluates health physics activities, and conducts research and development.

Approves authorizations, permits, and licenses based on regulatory standards for uses of radiation and radiation exposure to the public and the environment.

Approves and reviews correspondence, technical reports, environmental assessments, impact statements, or programmatic assessments.

Ensures compliance with applicable radiation control laws and regulations for protection of the public and the environment against harmful effects of radiation.

Evaluates emissions from different types of radiation and radioactive materials; determines and predicts the movement of radioactivity through the environment; and evaluates plans and facilities for radiological safety of equipment, processes, and the environment.

Develops and provides technical oversight on guidelines, rules, policies, and procedures based on health physics knowledge, radiation control functions, and statutory authority.
Develops, recommends, and evaluates radiation safety and emergency response policies, procedures, and guidelines.

Develops emergency response procedures for radiological emergencies and radiation control rules and guidelines.

May perform quality assurance reviews of inspection reports and permitting and licensing actions to ensure compliance with radiation control, public health and safety, and environmental laws and regulations.

May consult and coordinate with representatives of other state and federal radiation control, security, and emergency agencies; special interest groups; the public; or department personnel on radiation and environmental issues.

May participate in emergency drills in cooperation with other state and federal agencies.

May supervise the work of others.

Performs related work as assigned.

GENERAL QUALIFICATION GUIDELINES

EXPERIENCE AND EDUCATION

Experience in health physics, radiation sciences, or nuclear engineering work is preferred. Graduation from an accredited four-year college or university with major coursework in health physics, nuclear or environmental engineering, environmental or natural sciences, chemistry, or a related field. Experience and education may be substituted for one another.

KNOWLEDGE, SKILLS, AND ABILITIES

Knowledge of radiation control functions and health physics, and related environmental policies, laws, regulations, procedures, and practices; and of the function, design, and operation of equipment used in radiation detection, measurement, and environmental monitoring.

Skill in the use of radiation detection, monitoring, and measuring instruments and techniques; in comprehending technical material; and in radiological computer applications.

Ability to interpret and use radiation shielding designs and radiological and statistical data; to detect and evaluate radiation and public hazards; to evaluate radiation safety equipment, processes, and environments; to plan, design, oversee, and coordinate radiation control projects; to communicate effectively; and to supervise the work of others.