Health Physicist

CLASS TITLE	CLASS CODE	SALARY GROUP	SALARY RANGE
HEALTH PHYSICIST I	4390	B23	$61,184 - $99,658
HEALTH PHYSICIST II	4392	B25	$69,572 - $114,099
HEALTH PHYSICIST III	4394	B27	$84,182 - $142,374

GENERAL DESCRIPTION

Performs health physics and radiation control work, including oversight responsibilities, by coordinating and conducting inspections, investigations, or surveys to ensure compliance with health and safety and environmental laws; and by evaluating permit and license application requests for public health and safety and environmental impact.

EXAMPLES OF WORK PERFORMED

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

Processes radiation control permits and licenses, sealed radioactive source and device approvals, and financial security estimates for decommissioning.

Develops, recommends, and implements radiation safety policies, procedures, and guidelines.

Performs scientific and technical reviews of radiation safety plans, operations, and facilities.

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

Prepares correspondence, technical reports, environmental assessments, impact statements, or programmatic assessments.

Measures, monitors, and 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.

Evaluates design of sealed sources and devices containing radioactive materials, and evaluates radiation safety and operating manuals.

Analyzes shielding designs of radiation facilities.

Participates in the oversight of industrial radiography certification processes and in emergency drills in cooperation with other state and federal agencies.

Performs related work as assigned.

DESCRIPTION OF LEVELS

Examples of work and descriptions are meant to progress through the levels. For example, an employee at level III may also perform work listed within the previous levels.

***Note**: Factors that may distinguish between the journey and senior levels include the degree of independence in performing the work; the complexity of the work; the scope of responsibility; and the employee's related work experience, education, and certifications. Employees at the journey levels may independently perform the full range of work listed in the examples or may assist others in that work. Senior-level employees may perform the full range of work identified in the levels preceding their own, and/or may coordinate and/or oversee that work for others. Factors that may distinguish between senior levels include the scope of responsibility, oversight, and authority; and the nature, complexity, scope, and impact of the work performed.*

HEALTH PHYSICIST I: Performs complex (journey-level) health physics and radiation control work. Works under general supervision, with moderate latitude for the use of initiative and independent judgment.

HEALTH PHYSICIST II: Performs advanced (senior-level) health physics and radiation control work. Works under limited supervision, with considerable latitude for the use of initiative and independent judgment. Employees at this level may:

- Conduct research and development in relation to health physicist activities.
- Develop and provide technical guidance on guidelines, rules, policies, and procedures based on health physics knowledge, radiation control functions, and statutory authority.
- Ensure compliance with applicable radiation control laws and regulations for protection of the public and the environment against harmful effects of radiation.
- Perform risk assessments based on quantitative relationships between radiation exposure and biological damage.
- Review emergency response planning and implementation activities for radiological emergency events or for radiological emergencies involving transportation or terrorist activities.

HEALTH PHYSICIST III: Performs highly advanced (senior-level) health physics or health physics oversight work. Works under minimal direction, with extensive latitude for the use of initiative and independent professional judgment. Employees at this level may:

- Develop and evaluate statewide radiation safety control rules and guidelines, and radiological emergency response procedures.
- 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.
- 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.

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

For all levels

- Knowledge of radiation control, radiological health, environmental laws and regulations, and radiation safety practices and techniques.

- Skill in the use of radiation detection, monitoring, and measuring instruments; in the collection of environmental samples; in radiological computer applications; and in the use of research techniques.

- Ability to interpret and use radiation shielding designs and radiological and statistical data, to interpret laws and regulations, to apply health physics and other scientific principles, to detect and evaluate radiation and public health hazards, to communicate effectively, and to provide guidance to others.

Additional for Health Physicist II-III levels

- Ability to evaluate radiation safety equipment, processes, and environments; and to supervise the work of others.

Additional for Health Physicist III level

- Ability to plan, design, oversee, and coordinate radiation control projects.