Class Code: 04508

Iowa Department of Administrative Services – Human Resources Enterprise
Job Classification Description

Health Physicist 2

Definition

Formulates and carries out health protection plans for the safe handling and use of radiation machines, radioactive materials, or related education, licensure, and certification; plans and oversees investigations and inspections; acts as an advisor and consultant for staff in all phases of large or multi-faced investigations in the radiological environmental programs; performs related work as required.

The work examples and competencies listed below are for illustrative purposes only and not intended to be the primary basis for position classification decisions.

Work Examples

Plans and conducts inspections, surveys and studies; detects, analyzes and evaluates the elimination or control of radiological, biological, chemical and physical health hazards; inspects and licenses all facilities using radioactive materials (except broad scope licensees).

Performs studies and instructs environmental quality specialists, on field studies of environmental hazards, radiological health and health physics.

Measures and evaluates conditions affecting workers or the public.

Collects and analyzes chemical, toxic dust, or contaminants in the working or public environment, and makes evaluations of the degree of hazards resulting from such contamination; demonstrates/instructs in these techniques.

Researches and reviews radiological and environmental documentation.

Prepares technical papers relating to environmental work.

Makes presentations to radiological and environmental health groups.

Provides technical assistance to the public or plant management; advises the public, plant management, and others on federal laws and regulations.

Files legal actions and testifies in legal proceedings as required.

Competencies Required

Knowledge:

- Physics – Physical principles, laws, their interrelationships, and applications to understanding fluid, material, and atmospheric dynamics, and mechanical, electrical, atomic, and sub-atomic structures and processes.
- Public Safety and Security – Relevant equipment, policies, procedures, and strategies to promote effective local, state, or national security operations for the protection of people, data, property, and institutions.

- English Language – The structure and content of the English language, including the meaning and spelling of words, rules of composition, and grammar.
- Mathematics – Arithmetic, algebra, geometry, calculus, statistics, and their applications.
- Engineering and Technology – The practical application of engineering science and technology. This includes applying principles, techniques, procedures, and equipment to the design and production of various goods and services.
- Chemistry – The chemical composition, structure, and properties of substances and of the chemical processes and transformations that they undergo. This includes uses of chemicals and their interactions, danger signs, production techniques, and disposal methods.
- Law and Government – Laws, legal codes, court procedures, precedents, government regulations, executive orders, agency rules, and the democratic political process.
- Computers and Electronics – Circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming.
- Administration and Management – Business and management principles involved in strategic planning, resource allocation, human resources modeling, leadership technique, production methods, and coordination of people and resources.

Abilities:

- Oral Comprehension – Listen to and understand information and ideas presented through spoken words and sentences.
- Written Comprehension – Read and understand information and ideas presented in writing.
- Law and Government – Understand and adhere to applicable laws, legal codes, administrative rules, and regulations.
- Written Expression – Communicate information and ideas in writing so others will understand.
- Oral Expression – Communicate information and ideas in speaking so others will understand.
- Deductive Reasoning – Apply general rules to specific problems to produce answers that make sense.
- Inductive Reasoning – Combine pieces of information to form general rules or conclusions.

Skills:

- Active Listening – Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.
- Critical Thinking – Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions, or approaches to problems.
- Reading Comprehension – Understanding written sentences and paragraphs in work related documents.
- Science – Using scientific rules and methods to solve problems.
- Speaking – Talking to others to convey information effectively.
- Active Learning – Understanding the implications of new information for both current and future problem-solving and decision-making.

- Judgment and Decision Making – Considering the relative costs and benefits of potential actions to choose the most appropriate one.
- Complex Problem Solving – Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.

Minimum Qualification Requirements

Applicants must meet at least one of the following minimum requirements to qualify for positions in this job classification:

1) Graduation from an accredited four-year college or university with a degree in health physics, nuclear physics, or nuclear engineering, and experience equal to three years of full-time work in radiological health or a radiological services program.
2) Graduation from an accredited four-year college or university with a degree in physics, and experience equal to five years of full-time work in radiological health or a radiological services program.
3) Graduation from an accredited four-year college or university with a degree in science, healthcare administration, or another health-related field, and experience equal to seven years of full-time work in radiological health or a radiological services program.
4) Successful completion of the U.S. Navy Nuclear program, and experience equal to three years of full-time work in a radiological health program, radiological services program, nuclear reactor program, or nuclear engineering.

Notes

Must satisfactorily complete government-sponsored core course in health physics or other specialized training programs as required by federal agencies within the time frame specified by management.

Travel is required for positions in this class. Employees must be willing to travel for extended periods of time and must arrange transportation to and from assigned work areas. Work may involve exposure to excessive heat, cold, hazardous substances, construction sites, and unfavorable conditions. May be required to respond to emergencies. May be on 24-hour call.

Effective date: 12/22 SA