Class Code: 04507

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

Health Physicist 1

Definition

Performs trainee- to journey-level professional work in radiological and environmental health protection; inspects licensed and registered radiological facilities; collects data and samples relating to radiological and environmental health; conducts studies and surveys independently and prepares reports; 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

Conducts inspections, surveys, and studies; prepares technical reports and recommendations of findings.

Serves as an advisor and consultant for selected radiological problems.

Prepares and distributes education material concerning the program assigned.

Collects and analyzes contaminants encountered in the environment.

Operates and maintains technical equipment and detection instruments.

Analyzes samples obtained during inspections for hazardous properties.

Gives radiological health and educational presentations.

Researches and reviews environmental documentation.

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.

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 physics, nuclear engineering, health physics, nuclear physics, healthcare administration, another health-related field, or another science.
2) Successful completion of the U.S. Navy Nuclear program.

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: 11/23 SA