



Memorandum

To: Nicki Neal
Director

Thru: Keith Murry *[Signature]*
Class Studies Supervisor

From: Rob Weber *[Signature]*
Class Studies Analyst

Date: November 9, 2012

Subject: Radiological Health Specialist Class Study

Introduction:

This memorandum addresses the processes and results of the Radiological Health Specialist job class study. Early in February, 2012, the Department of Health & Social Services (DHSS)/ Division of Public Health (DPH) requested Classification examine the duties and salary alignment of the Radiological Health Specialist I and II job classes. The agency stated the duties and salaries of these classes are no longer in alignment with current practice, technology, and comparable job market positions. Other concerns cited regarding this study include extreme difficulty in recruiting for a position (PCN 061693) allocated to the Radiological Health Specialist I job class.

Study Contacts:

- Kerre Fisher (Deputy Director, DPH) administrative and management support.
- Dr. Bernard Jilly (Chief, Public Health Laboratory) administrative and management support.
- Clyde Pearce (Radiological Health Specialist II) subject matter expert.

History of Job Classes:

In December of 1978 the Radiological Physicist (SR 20) was established as a single position job class to plan and implement the statewide radiation protection program. This job class was placed in the Safety Inspection and Planning family.

In October of 1993 the class was expanded to a series including a journey and working supervisory level. The job class title was changed from Radiological Physicist to Radiological

Health Specialist. During this review, the body of work was moved from the Safety Inspection and Planning job family to the Special Health Services job family. Class specification historical files show that this action was based on the health focus of the series and that "Potential candidates for these job classes, as well as others seeking information on the series, would most likely first think of the health orientation."

Class Analysis:

The State's classification plan provides for the grouping of positions into job classes when they are sufficiently similar with respect to duties and responsibilities, degree of supervision exercised and received, and entrance requirements so that: 1) the same title can be used to clearly identify each position; 2) the same minimum qualifications for initial appointment can be established for all positions; 3) the same rate of basic pay can be fairly applied to all positions; and 4) employees in a particular class are considered an appropriate group for purposes of layoff and recall. Job classes should be constructed as broadly as is feasible as long as the tests of similarity are met.

Introduction:

This analysis examines the work of the position assigned to the Radiological Health Program. This program is under the umbrella of the State Public Health Laboratories and mandated to investigate radiation sources, protect the public from unnecessary exposure to radiation, and regulate radiation sources such as X-ray units, C-arm units, electron microscopes, baggage units, and other equipment used at medical, industrial, or educational facilities statewide.

"Medical" in this memorandum means related to a practice engaged in by a practitioner of the healing arts licensed by this State, 7 AAC 18.990. "Radiation sources" as used in this memorandum and the corresponding class specifications means both electronic product and nuclear radiation sources, AS 18.60.545.

Nature of the work:

The work observed in this study requires extensive travel throughout the State to perform a regulatory and occupational safety function in the area of public health, specifically the regulation of radiation sources in order to protect the public health of Alaska's citizens. A well trained incumbent performing this work applies sound reasoning, knowledge of the properties of radiation and radiation protection, and experience performing work in a radiological protection program in addition to an educational foundation in the health physics field, environmental health, or a natural science, e.g., physics, chemistry.

Incumbents conduct scheduled surveys and inspections of the regulated equipment and industries defined in regulation (7 AAC 18). Briefly, this may include the types of radiological equipment located in chiropractic offices, medical clinics, industrial facilities or labs as well as ad hoc investigations of radiological sources and radiological material reported on by Alaskan citizens. The positions assigned this body of work provide education and training to the equipment operators, the public, and the regulated community on topics such as reaching and maintaining compliance, radiation, and the safe use of radiation. The following is an examination of the work.

Journey Level:

This is the day-to-day programmatic work, primarily the inspections and surveys of facilities with radiation emitting equipment, currently 400 regulated facilities statewide are inspected on a rotating schedule. (Note: At the time of this study, a revision of 7 AAC 18 will be posted for public comment. Assuming that the revisions will be adopted it is likely the number of regulated facilities will double from 400 to 800 facilities statewide. This analyst was informed by the subject matter expert that the increase in facilities will add to the volume of work but not the complexity of work being performed.)

The surveys include examining and evaluating the radiological conditions and potential hazards to the production, use, transfer, release, disposal, or presence of radioactive material, devices, or other sources of radiation. The inspections are the examination of procedures, records, safety issues, correct use of equipment, review of authorized users and certifications, and a facility's radiological data and records. The inspections also include examining the equipment area for protective shielding and providing guidance to mitigate hazards based on a complete analysis of the inspection results. The work also ensures operators comply with protective clothing requirements; reviews records for personnel dosimeter readings and calculates exposure rates; and develops reports of findings as to the manner in which a facility does or does not comply with 7 AAC 18 and the appropriate federal regulations. Based on the inspection results, an incumbent provides guidance on how to meet regulatory standards. An incumbent performing this work is assigned the authority to close a facility until the infraction is brought into compliance.

The work also reviews applications for registering new equipment and examines construction plans for the proper installation of radiological equipment and shielding plans to ensure the construction of the facility and equipment meet regulatory standards and best business practices.

The contacts include a variety of individuals from State, federal, and private industries when consulting, inspecting, investigating, and regulating radiological sources and equipment that emits radiation.

Advanced/Supervisory Level:

This level is the program head/coordinator. It is distinguished by the responsibility for coordinating the program budget, reviewing and purchasing test equipment, scheduling inspections, developing contracts to conduct federally required inspections, updating program regulations (7 AAC 18), updating and developing program policy and procedure, and supervising subordinate staff. In addition to the supervisory duties, this level also performs all journey level programmatic investigations, inspections, and surveys, particularly those that display increased complexity in facility and equipment and a greater magnitude of public concern or criticism for a governmental response to a radiological event.

This body of work includes coordinating with state emergency response representatives from federal agencies such as Center for Disease Control (CDC), Nuclear Regulatory Commission (NRC), Environmental Protection Agency (EPA), Department of Energy (DOE), and International Atomic Energy Agency (IAEA) in developing a statewide response plan to nuclear incidents. This level is the authoritative voice of the program and the public health liaison with other allied State and federal agencies in the event of nuclear incidents effecting Alaska. When a

question or concern regarding a potentially hazardous radiological source is brought to the attention of DHSS, this position is tasked with conducting the investigation and providing a well articulated response based on an analysis of the source and a solid understanding of radiation and its effects on public health.

Conclusion:

This analysis identified two levels of work: journey and advanced/supervisory. In comparison to the class specifications for the Radiological Health Specialist I and II, which includes a journey and supervisory level, the recently examined work indicates that there is a journey level and advanced/supervisory level. The journey level is primarily responsible for the day-to-day programmatic work. The advanced/supervisory level is responsible for providing the program's authoritative voice and developing and/or revising program policy, procedure, and regulation.

Class Title:

When selecting a class title it should be the best descriptive title for the work. A class title is intended to concisely and accurately convey the kind and level of work performed and should be brief, easily recognized, gender neutral, and understood by potential applicants.

When this analyst considered a title for the work, a review of other state classification structures in California, Oregon, Washington, and Idaho was completed to compare other titling formats. The titles discovered include Radiation Physicist, Health Physicist, and Radiation Health Physicist.

Radiological Health Physicist is the new title for the work. This title is widely recognized in public and private industry, college degree programs, and professional associations.

Minimum Qualifications:

The minimum qualifications established for the Radiological Health Physicist I and II job classes relates to the knowledge, skills, and abilities needed to perform either journey level or supervisory level work in the field of radiation control and protection. These minimum qualifications have been designed not to create any artificial barriers to employment of individuals in protected classes.

The required training has been limited to the basic formal education that customarily prepares individuals for work in the field of health physics. This is typically a bachelor's degree or higher in a degree program that will give an individual foundational knowledge in the field of health physics or a natural science such as biology, chemistry, or physics.

The experience requirements developed for these classes are intended to ensure new employees can successfully perform the work after a period of orientation and familiarization to the duties and responsibilities of the position and the Radiological Health Program. To meet this, the experience has been limited to professional experience in health physics or a closely related field for both levels and specific experience in an official radiological health or radiological control program for the advanced/supervisory level. In addition, the experience requirements have been developed to be directly related to the actual duties of positions in the class and are not equivalent to the work to be performed.

Class Code:

A Class Code is assigned to a job class based on the placement of that job class in the classification schematic of Occupational Groups and Job Families. Occupational groups are made up of related job families and encompass relatively broad occupations, professions, or activities. Job families are groups of job classes and class series that are related as to the nature of the work performed and typically have similar initial preparation for employment and career progression. In determining the appropriate placement for the Radiological Health Physicist, this analyst first examined its primary duty and characteristics and compared these characteristics with the occupational groupings to identify the job families that share the greatest number of comparable characteristics with the Radiological Health Physicist.

Analysis:

The primary duty and characteristics of the Radiological Health Physicist includes the inspection and regulation of facilities where radiological equipment is used and regulated by State and federal governments in order to minimize risks to human health and to maintain statewide compliance. This duty requires knowledge of the physical sciences gained through advanced education and experience typically gained by working in a radiological health or radiological control program.

Based on the primary duty of the study class three occupational groups and four job families were selected for review to determine class placement:

- Medical, Public Health, and Related (PG) occupational group: Special Health Services (PG06) and Health Laboratory and Related (PG07).
- Business Development and Regulation occupational group (PC): Safety Inspection (PC03).
- Physical Sciences and Engineering occupational group: Physical Science Specialists (PK01).

Job classes in PG 06 advise on, administer, supervise or perform professional, technical or sub professional work in health service specialties including those related to therapy, nutrition, speech, hearing, education, and others. The work of classes described in PG06 is focused on the therapeutic aspects of healthcare; they are absent the regulatory focus of the study class. The Radiological Health Physicist has a strong regulatory focus that is not present in PG06. This family does not display the enough similar characteristics for class placement.

Job classes in PG07 advise on, administer, supervise or perform medical laboratory, X-ray, microbiology, or other related work. While the program implemented by the Radiological Health Physicist is under the umbrella of the Public Health Laboratory, the class does not share those types of laboratory functions characteristic of the classes in this family to justify placing in PG07. The classes in this family perform laboratory work in a controlled setting; they are absent the regulatory function important to the study class. This is not the case with the Radiological Health Physicist; this class works in the field conducting inspections and surveys of facilities where radiological equipment is located. The work of this class examines and measures radiation to characterize, monitor, and regulate excessive and unnecessary exposure to protect human health. PG07 does not display enough similar characteristics for class placement.

Job classes in PK01 advise on, administer, supervise or perform professional or paraprofessional work related to geology, chemistry, physics, oceanography, or other physical science. The work of the Radiological Health Physicist requires knowledge of the physical sciences gained through advanced education. The work of the study class is also analytical and evaluative, similar to classes in PK01. While the Radiological Health Physicist shares similar educational characteristics with classes in PK01, the work of this class differs because of its strong regulatory focus. Classes in PK01 are not regulators as compared to the study class. The Radiological Health Physicist requires knowledge of the properties and effects of radiation in order to regulate facilities with radiological equipment. PK01 does not display enough similar characteristics for class placement.

Job classes in PC03 advise on, administer, supervise or perform work related to transportation and business safety inspection or weights and measures inspection. Classes in this family broadly display the regulatory characteristics of the Radiological Health Physicist. This includes the regulation of businesses; consultative type activities to assist businesses reach compliance, educational functions, and the overall enforcement of regulations to ensure health and safety. Classes in this family also display similar educational requirements in the physical sciences, such as physics, chemistry, or biology in addition to the experience in a regulatory program that monitors business practices, environment, and equipment to ensure health and safety. The classes in this family display similar levels of supervisory and program development characteristics as compared to the upper levels of the Radiological Health Physicist series. PC03 does display enough similar characteristics to appropriate place the study class.

Conclusion:

The Radiological Health Physicist series is placed in PC03, Safety Inspection.

Fair Labor Standards Act:

The positions in this study are covered by the minimum wage and maximum hour provisions of the Fair Labor Standards Act of 1938, as Amended (FLSA). While exemption from the provisions of the Act are determined based on the specific circumstances of an individual employee on a work-week basis, there are general aspects of the classes and their influence on the exemptions for employees in bona fide executive, professional, or administrative positions that can be addressed in general.

An incumbent assigned to either the Radiological Health Physicist I or II job class performs assignments that require knowledge of an advanced type in a field of science that is customarily acquired by a prolonged course of specialized intellectual instruction in health physics or closely related field. An incumbent also meets the compensation threshold for exemption. An incumbent in either of these classes meets the Professional Employee exemption.

An incumbent assigned to the Radiological Health Physicist II job class does not meet the supervisory requirements described for the Executive Employee exemption. If the Radiological Health Program expands in the future and additional subordinate staff are added, an incumbent in this class may meet this exemption.

Internal Alignment – method and analysis:

Method:

The salary range of a job class is determined based on internal consistency within the State’s pay plans, in accordance with merit principles, with the goal of providing fair and reasonable compensation for services rendered and maintaining the principle of like pay for like work (AS 39.25.010(b)(2)).

In evaluating internal consistency, the difficulty, responsibility, knowledge, skills, and other characteristics of a job are compared with job classes of a similar nature, kind, and level in the same occupational group and job family or related job families. Comparisons with classes in other job families may be made when similarities are sufficient to provide valid relationships, the comparisons within the occupational group are few, and/or when the study class displays characteristics that justify comparisons with another job family. The greater the similarity with the study class, the more weight should be given to the comparable class. Comparisons within the job family are typically given greater weight than comparisons to classes located in other job families.

This analysis examines classes from the Safety Inspection job family, Business Development and Regulation occupational group. These classes were selected based on the variety of common characteristics they share with the study classes in regards to the variety of similar activities in regards to business regulation, safety inspections, occupational health and public safety, background education and experience in occupational safety and public health regulatory programs, supervision of subordinate personnel, and the responsibility for programmatic administrative activities such as the effective use of program funding, scheduling work, purchasing resources, negotiating contacts, and other areas. The tables below provide side-by-side comparisons of the characteristics that are common among job classes and salary ranges in relation to the eight classification factors; an analysis of this information follows.

Table 1 describes the job classes selected for alignment comparison and their class characteristics.

Range	Job Class (Family Code)	Description	Range Characteristics
18	Safety Officer (PC0323)	This class administers the agency’s Regional Health and Safety Program and the Regional Hazardous and Toxic Waste Program. Incumbents assigned to this class are responsible for a department’s awareness and prevention health and safety programs within an assigned region. The duties include planning, organizing, coordinating, and maintaining the programs in order to comply with federal and State safety and health regulations and codes.	<ul style="list-style-type: none"> • Professional level work • Requires independence in implementing programs • Work is investigative, regulatory, and requires through knowledge of laws, rules, and policies • Primary contacts are within the agency • Requires professional experience in an occupational safety and health program and/or a bachelors degree

	<p>State Metrologist II (PC0370)</p>	<p>Positions assigned to this class ensure that the State's primary, secondary, and field standards conform with standards established by the U.S. Department of Commerce National Institute of Standards and Technology (NIST) for continuing certification as a State weights and measures standards laboratory. This class tests, corrects, and certifies all agency field standards of mass, length, and volume in order to provide traceability to the calibrated standards of the NIST necessary to guarantee the accuracy of all test equipment used.</p> <p>State Metrologist II maintains the State Standards and control data in order to continue recognition as a qualified State standards laboratory.</p>	
<p>19</p>	<p>Industrial Hygienist (PC0321)</p>	<p>Incumbents working in this class conduct independent inspections of plants and worksites throughout the State to determine compliance with occupational safety and health standards to protect the health of workers and the public.</p> <p>Incumbents consult with employers to assist them in assuring that their workplaces comply with State health standards; prepares comprehensive written reports of findings; and prepares and presents training materials to industrial, labor, and government groups. This class also collects test samples from sites when necessary, performs limited laboratory work, and calibrates testing equipment.</p>	<ul style="list-style-type: none"> • Requires independence in implementing programs • Professional level work, reports to a unit supervisor • Primary contacts are the regulated industry • Requires a solid understanding of the laws, rules, and policies and procedures of the program area • Requires knowledge of the field and professional experience • Requires bachelor's degree in the field of Industrial Hygiene, engineering, or a related natural or physical science • Decisions relate to inspections
<p>Boiler & Pressure Vessel Inspector I (PC0338)</p>	<p>This class conducts field and factory inspections of boilers and unfired pressure vessels for compliance with State statutes and regulations.</p> <p>Boiler and Pressure Vessel Inspector I is the full working level of this job class series. Positions in this class are commissioned by the National Board of Boiler and Pressure Vessel Inspectors to conduct inspections, issue citations, and make recommendations on repair or installation.</p>		

20	Boiler & Pressure Vessel Inspector II (PC0339)	<p>This class conducts field and factory inspections of boilers and unfired pressure vessels for compliance with State statutes and regulations; and reviews the work of Boiler and Pressure Vessel Inspectors I to ensure their inspections conform to statutory requirements.</p> <p>The Boiler and Pressure Vessel Inspector II supervises commissioned boiler and pressure vessel inspectors and verifies that their work meets statutory and regulatory requirements.</p>	<ul style="list-style-type: none"> • Professional level work • Requires independence in performing duties • Primary contacts are the regulated industry, staff, and management • Supervise staff, prioritize, assign, review, and direct work activities performed by subordinate staff • Decisions implement regulations and provide guidance • Requires progressive professional experience in the occupational area
	Occupational Health & Safety Analyst (PC0324)	<p>Incumbents working in this class serve as supervisory, specialized workplace safety and health consultants or enforcement officers who direct and perform the most complex and sensitive of workplace safety consultations and investigations.</p> <p>This class ensures that workplace safety consultation, inspection, and investigation activities conducted by Alaska Occupational Safety and Health (AKOSH) staff comply with State laws and regulations and applicable federal Occupational Safety and Health Administration (OSHA) standards.</p>	
22	Mechanical Inspection Manager (PC0345)	<p>Mechanical Inspection Manager is a single-position job class responsible for managing the day-to day activities of the State's electrical, plumbing, boiler, and pressure vessel, and elevator inspection programs.</p> <p>This is a supervisory job class with substantial responsibility for the exercise of independent judgment in employing, disciplining, or adjudicating grievances of subordinates.</p>	<ul style="list-style-type: none"> • Requires independence in performing duties • Manage multiple programs or a major section of a division and technical and professional staff subordinate staff • Develops and implements strategic plans and goals for the programs, fiscal management
	Chief, Weights, Measures & Permits (PC0360)	<p>This class administers and supervises a major section of the division. This may be either the Permits and Weigh Stations Section or the Weights and Measures Section.</p> <p>This class plans, organizes, and directs the work of subordinates and exercises substantial supervisory responsibility in the appointment, promotion, transfer and discipline of program personnel.</p>	<ul style="list-style-type: none"> • Primary contacts are subordinate supervisors and staff, management, and federal, State, and local government officials • Requires progressive professional experience in the field of occupational health and safety

	Department of Labor Safety Liaison (PC0370)	This class has principal responsibility for the implementation of Department of Labor (DOL) Occupational Safety and Health, and Mechanical Inspection policies pertaining to common carrier pipelines in Alaska. Serves at the pleasure of the Bureau of Land Management, the Federal Authorizing Officer [Joint Pipeline Office Coordinator], Commissioner DOL, and the Director of the Division of Labor Standards and Safety.	
	Program Manager, Occupational Safety & Health (PC0325)	<p>Incumbents in this class manage and supervise either the AKOSH Consultation and Training Program or the AKOSH Enforcement Program.</p> <p>Incumbents manage program operations including budget and personnel, developing and implementing strategic plans and goals; interpreting statutes, regulations, policies, and programs; and developing strategies that maximize worker safety and health.</p>	

Table 2 provides a description and characteristic summary of each study class.

Job Class (Family Code)	Description	Class Characteristics
Radiological Health Physicist I (PC0310)	Incumbents in this class perform facility inspections, radiological surveys, and ad hoc investigations of ionizing and/or non-ionizing radiological sources to minimize risks to human health and to maintain statewide compliance with State and federal regulations on radiation exposure limits. This class also collects test samples from sites when necessary, performs limited laboratory work, and calibrates testing equipment.	<ul style="list-style-type: none"> • Requires independence in performing duties • Professional level work, reports to the Radiological Health Program supervisor • Primary contacts are the regulated industry • Requires bachelor's degree in the field of health physics, environmental health, or a related natural science and professional experience in the health physics field

Radiological Health Physicist II (PC0311)	<p>An incumbent in this class coordinates, develops, and implements the statewide Radiological Health Program.</p> <p>An incumbent in this class provides budgetary input for the program, reviews and drafts program policy and regulations, develops and signs contracts for professional services, and schedules facility inspections and radiological surveys of ionizing and/or non-ionizing radiological sources to minimize public exposure to excessive levels of radiation and to maintain regulatory compliance. This class also collects test samples from sites when necessary, performs limited laboratory work, and calibrates testing equipment.</p>	<ul style="list-style-type: none"> • Requires independence in performing duties • Professional level work, reports to the Chief, Alaska State Public Health Laboratories • Primary contacts include management, subordinate staff, the regulated industry, the public, and federal, State, and local government officials • Requires bachelor's degree in the field of health physics, environmental health, or a related natural science and progressive professional level experience in the health
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Analysis:

The following analyses compare the Radiological Health Physicist class characteristics described in table 2 with the salary characteristics in table 1.

The Radiological Health Physicist I (RHP I) displays independence in performing professional level surveys and inspections of radiological sources on a statewide basis. When examining the salary characteristics described in table 1, the scope of contacts, statewide programmatic scope, and the specific education and experience characteristics of the RHP I exceed those common characteristics described for salary range 18. In comparison with salary range 20, the RHP I does not display similarities for supervision of subordinate staff. The RHP I displays the professional level assignments, scope of contacts, statewide programmatic responsibility, and education and experience that fit the range characteristics for salary range 19.

The Radiological Health Physicist II (RHP II) develops and coordinates the State's Radiological Health program, supervises subordinate staff, and implements the program at the professional level. The RHP II is responsible for providing budgetary input for the program, reviewing and drafting program policy and regulations, and developing and signing contracts for professional services. When examining the salary ranges, the closest comparable salary ranges are 20 and 22. The salary characteristics of range 20 shows that it is absent of any programmatic responsibilities similar to those typical of the RHP II job class. The salary characteristics of range 22 shows that the RHP II does not display the characteristics for managing multiple programs or a major section of a division that includes the personnel responsibilities for multiple levels of supervisors and professional and technical level staff. The analysis of the salary characteristics indicates aligning the Radiological Health Physicist II job class to salary range 21.

Conclusions:

This study identified journey and advanced/supervisory levels. These classes coordinate and develop, supervise, and implement the Radiological Health Program, DHSS.

The results of this study include:

- Revised class specifications that accurately describe the current duties, responsibilities, and technologies.
- Revised minimum qualifications that relate to the knowledge, skills, and abilities needed to perform the work and that do not create artificial barriers to the employment of individuals in protected classes.
- Class title changed from Radiological Health Specialist I and II to Radiological Health Physicist I and II.
- Salary ranges changed from SR 18 to SR 19 for the RHP I and from SR 20 to SR 21 for the RHP II.
- New job family and class codes changed from PG06 Special Health Services to PC03 Safety Inspection.
- Both levels of this series meet the professional employee criteria for overtime exemption.

The effective date for these changes is November 16, 2012. Correspondence on the allocation of study positions is being distributed through the OPD system.

Attachments:

Final class specifications
Allocation Spreadsheet

Cc:

Sarah E B Woods
Deputy Director
Finance Management Services
Department of Health & Social Services

Kerre Fisher
Deputy Director
Division of Public Health
Department of Health & Social Services

Dallas Hargrave
Human Resource Manager
Department of Health & Social Services