

**STATE OF OHIO (DAS)**CLASSIFICATION  
SPECIFICATION**CLASSIFICATION SERIES:**

Health Physics

**SERIES NO.:**

8464

**MAJOR AGENCIES:**

EPA, Health

**EFFECTIVE DATE:**

06/05/2011

**SERIES PURPOSE:**

The purpose of the health physics occupation is to evaluate the production, use, release, disposal &/or presence of radioactive material in the environment & ionizing radiation from any device or equipment that emits or is capable of producing radiation to safeguard public & environment from overexposure or to conduct investigations/inspections & research into nuclear power utility management & performance to ensure safe operations at nuclear facilities.

At the lower levels, incumbents engage in evaluation, research & investigation of machine-produced ionizing radiation or environmental radiation & production, use, release, disposal &/or presence of controlled radioactive materials &/or machines producing non-ionizing radiation, with the level assigned being dependant upon the level of involvement, or conduct investigations/inspections & research to monitor plans & programs of nuclear facilities holding companies to ensure compliance with federal & state radiation safety requirements & to mitigate the effects of a nuclear electric facility incident in areas surrounding a nuclear electric facility.

At the higher two levels, incumbents act as supervisors or statewide program administrator respectively.

**CLASS TITLE**

Health Physicist

**CLASS NUMBER**

84642

**PAY RANGE**

31

**EFFECTIVE**

03/14/2011

**CLASS CONCEPT:**

The full performance level class works under direction & requires considerable knowledge of radiological health & safety practices, state & federal laws & rules governing radiological health operations, biological affects of radiation & physics in order to independently conduct evaluations/investigations of production, use, release, disposal &/or presence of radioactive materials at nuclear facilities or in environment or ionizing radiation from any device or equipment emitting/producing radiation, determine potential danger to public from radiation exposure & compliance or non-compliance with state & federal requirements or standards governing radiation control & safety standards at nuclear facilities or any facility utilizing ionizing radiation.

**CLASS TITLE**

Senior Health Physicist

**CLASS NUMBER**

84643

**PAY RANGE**

33

**EFFECTIVE**

03/14/2011

**CLASS CONCEPT:**

The advanced level class works under direction & requires thorough knowledge of radiological health & safety practices, federal & state laws & rules governing radiological health operations, biological effects of radiation & physics in order to act as team leader over health physicists, peers & or projects, review inspection reports of less experienced health physicists to ensure adequacy of data collection & accurate assessments of compliance/non-compliance issues &/or perform complex & non-repetitive (e.g., special investigations; technical evaluations & inspections; radiation therapy, university & hospitals inspections: reports of hazardous situations & complaints; research projects) evaluations of production, use, release, disposal &/or presence of radioactive materials at nuclear facilities or in environment or ionizing radiation from any device or equipment emitting/ producing radiation to determine compliance/non-compliance with state & federal requirements & standards, or in EPA, to initiate, propose & conduct investigations/inspections & research to monitor plans & programs of nuclear electric utilities to ensure environmental program compliance & to mitigate effects of nuclear electric facility incident in areas surrounding nuclear electric facilities.

**CLASS TITLE**

Health Physics Supervisor

**CLASS NUMBER**

84645

**PAY RANGE**

14

**EFFECTIVE**

06/05/2011

**CLASS CONCEPT:**

Supervisory level class works under general direction & requires thorough knowledge of radiological health & safety practices, federal & state laws & rules governing radiological health operations, biological effects of radiation & physics in order to supervise health physics personnel engaged in radiological research, evaluations & investigations.

**CLASS TITLE**

Health Physics Administrator

**CLASS NUMBER**

84646

**PAY RANGE**

15

**EFFECTIVE**

06/05/2011

**CLASS CONCEPT:**

First managerial level class works under administrative direction & requires extensive knowledge of radiological health & safety practices, federal & state laws & rules governing radiological health operations, biological effects of radiation, physics & supervisory principles/techniques or management in order to administer assigned statewide radiological unit (i.e., nuclear safety unit; radioactive materials unit, X-ray control unit) & supervise health physicist supervisor.

<u>CLASS TITLE</u>	<u>CLASS NUMBER</u>	<u>B. U.</u>	<u>EFFECTIVE</u>	<u>PAY RANGE</u>
Health Physicist	84642	13	03/14/2011	31

**JOB DUTIES IN ORDER OF IMPORTANCE: (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)**

In assigned radiological unit (i.e., nuclear safety, radioactive materials or X-ray control) independently evaluates production, use, release, disposal &/or presence of radioactive material in environment or nuclear facility or ionizing radiation from any device or equipment that emits or is capable of producing radiation (e.g., performs precise & accurate measurements of levels of radiation present; examines devices, equipment, materials, facilities, records &/or reports & verifies compliance with applicable rules &/or standards), collects &/or oversees collection of radiological health data relating to radiation protection from machine-produced or nuclear radiation sources of ionizing radiation, compiles & analyzes data, performs &/or oversees field measurements of radiation exposure & radioactivity levels & organizes, evaluates & analyzes results for accuracy, trends & consistency & maintains &/or assists in calibrations of radiological survey equipment.

Writes &/or edits reports with recommendations from radiological health data collected; performs in-depth research regarding compliance with state & federal regulations & adequacy of proposed rules & plans; conducts research of radiological health issues at nuclear facilities or other facilities utilizing ionizing radiation to determine adequacy of compliance with state & federal requirements.

Participates in radiological health emergency planning, emergency exercises & emergencies, coordinates field test results with state & federal agencies & private organizations & provides technical assistance to practitioners, scientists & officials of private & government organizations.

**MAJOR WORKER CHARACTERISTICS:**

Knowledge of algebra & basic calculus; radiological health & safety practices; public relations\*, federal & state laws, rules & regulations regarding radiological health operations\*; engineering, physics, biology or related field. Skill in operating radiation exposure &/or radioactivity measurement equipment &/or quality control tools\*; personal computer\*. Ability to deal with non-verbal symbols in formulas, equations or graphs, use proper research methods in gathering data; gather, collate & classify information about data, people or things; interact with wide range of individuals from professionals, scientists to non-professionals, general public regarding radiological health standards & practices; prepare meaningful, accurate & concise reports & records.

(\*)Developed after employment.

**MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:**

Completion of undergraduate core program in health physics, nuclear physics, nuclear engineering, radiation physics, radiation sciences, bionucleonics, radiologic technology, nuclear medicine technology, radiation therapy or physics; must be able to provide own transportation.

-Or NRRPT, CHP, NMTCB or ARRT certification; must be able to provide own transportation.

-Or Completion of Navy nuclear school: must be able to provide own transportation.

-Or 2 years of full-time experience working with one of following: radioactive materials, analysis of radioactive materials in environment, decommissioning of sites contaminated with radioactive materials, radiation- generating equipment, experience that deals with regulatory requirements that involves radiation surveys for dose assessment, radiation inspections, analysis of situations involving radioactive materials or radiologic health and safety; must be able to provide own transportation.

-Or equivalent of Minimum Class Qualifications For Employment noted above.

**TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:**

Requires certification if assigned to the radon program, radon tester certification.

**UNUSUAL WORKING CONDITIONS:**

Requires travel; exposed to low levels of radiation; may be exposed to hazardous levels of radiation.

<u>CLASS TITLE</u>	<u>CLASS NUMBER</u>	<u>B. U.</u>	<u>EFFECTIVE</u>	<u>PAY RANGE</u>
Senior Health Physicist	84643	13	03/14/2011	33

**JOB DUTIES IN ORDER OF IMPORTANCE: (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)**

In Department of Health, for assigned radiological unit (e.g., technical support, radioactive materials or X-ray control) acts as team leader over health physicists, peers & or projects in conduct of radiological evaluations, reviews inspection reports & compliance plans prepared by less experienced health physicists for adequacy of data collection & accurate assessment & corrective action for compliance/non-compliance issues &/or conducts complex & non-repetitive (e.g., special investigations; technical evaluations & inspections; radiation therapy, university and hospitals inspections; reports of hazardous situations & complaints; research projects) evaluations of production, use, release, disposal &/or presence of radioactive material in environment or nuclear facilities or ionizing radiation from any device or equipment that emits or is capable of producing radiation, oversees maintenance &/or maintains calibration of radiological survey equipment, writes summary reports of radiological evaluations &/or inspections & performs complex & technical research regarding federal & state rules & regulations concerning radiological health.

OR

In Environmental Protection Agency, initiates, proposes & conducts inspections/investigations & research to monitor plans & programs of nuclear electric utilities to ensure environmental program compliance & to mitigate effects of nuclear electric facility incident in areas surrounding nuclear electric facilities (e.g., develops & conducts management accountability audits to include review of monthly operating reports for air, drinking water, wastewater & hazardous waste storage & disposal practices; monitors & evaluates compliance with applicable state & federal standards; monitors & reviews planning for & decommissioning of nuclear electric facilities regarding release of radiation into environment) & reports findings, reviews all appropriate state plans & annexes for consistency with state goals & objectives & develops plans & procedures for emergency response areas within fifty mile radius of nuclear facility for EPA sampling teams & training to ensure agency emergency response team members are capable of taking necessary environmental samples for radioactive isotopes & can locate sampling points.

Evaluates & reviews radiation protection plans & specifications for compliance with environmental protection requirements, reports findings & recommends approval/disapproval or modifications as required; develops specific resource proposals; analyzes professional literature for related technical data & concepts.

Provides technical guidance, consultation & assistance to state & local officials & private industry (e.g., practitioners, hospitals, educational facilities, industries, engineers, architects); participates in radiological health emergency planning, emergency exercises & emergencies & assists in performing radiological dose assessments; informs public of health risks associated with exposure to ionizing radiation; arranges, participates in & coordinates educational programs concerning nuclear emergency planning & protective action; conducts training in radiological issues for general public & state agency personnel; develops & maintains manuals & computer programs for accident assessment & response & management performance tracking.

**MAJOR WORKER CHARACTERISTICS:**

Knowledge of calculus; employee training & development\*; supervisory principles/techniques\*; radiological health & safety practices; public relations\*; federal & state laws, rules & regulations regarding radiological health operations\*; physics, biology or related field. Skill in operating radiation exposure &/or radioactivity measurement equipment &/or quality control tools; dose assessment computer\*. Ability to deal with large number of variables & determine specific course of action; use proper research methods in gathering data; gather, collate & classify information about data, people or things; interact with wide range of individuals from professionals scientists to non-professionals & general public regarding radiological health standards & practices; prepare meaningful, accurate & concise reports & records & complex position papers.

(\*)Developed after employment.

**MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:**

24 mos. exp. as Health Physicist , 84642, must be able to provide own transportation.

-Or Completion of undergraduate core program in health physics, nuclear physics, nuclear engineering, radiation physics, radiation sciences, bionucleonics, radiologic technology, nuclear medicine technology, radiation therapy or physics;

-And 24 mos. of full-time experience working with one of following: radioactive materials which must include engineering principles relative to effects of radiation on metals, & other components of radioactive material sources or devices, analysis of radioactive materials in environment, decommissioning of sites contaminated with radioactive materials,

radiation- generating equipment, experience that deals with regulatory requirements that involves radiation surveys for dose assessment, radiation inspections, analysis of situations involving radioactive materials or radiologic health & safety; must be able to provide own transportation.

Or NRRPT, CHP, NMTCB or ARRT certification; And 24 mos. of full-time experience working with one of following: radioactive materials which must include engineering principles relative to effects of radiation on metals, & other components of radioactive material sources or devices, analysis of radioactive materials in environment, decommissioning of sites contaminated with radioactive materials, radiation- generating equipment, experience that deals with regulatory requirements that involves radiation surveys for dose assessment, radiation inspections, analysis of situations involving radioactive materials or radiologic health & safety; must be able to provide own transportation.  
must be able to provide own transportation.

Or Completion of Navy nuclear school; And 24 mos. of full-time experience working with one of following: radioactive materials which must include engineering principles relative to effects of radiation on metals, & other components of radioactive material sources or devices, analysis of radioactive materials in environment, decommissioning of sites contaminated with radioactive materials, radiation- generating equipment, experience that deals with regulatory requirements that involves radiation surveys for dose assessment, radiation inspections, analysis of situations involving radioactive materials or radiologic health & safety; must be able to provide own transportation.  
must be able to provide own transportation

-Or 4 years of full-time experience working with one of following: radioactive materials, analysis of radioactive materials in environment, decommissioning of sites contaminated with radioactive materials, radiation- generating equipment for x-ray program, experience that deals with regulatory requirements that involves radiation surveys for dose assessment, radiation inspects, analysis of situations involving radioactive materials or radiologic health & safety; must be able to provide own transportation.

-Or equivalent of Minimum Class Qualifications For Employment noted above.

**TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:**

Requires certification if assigned to the radon program, radon tester certification.

**UNUSUAL WORKING CONDITIONS:**

Requires travel; exposed to low levels of radiation; may be exposed to hazardous levels of radiation.

<u>CLASS TITLE</u>	<u>CLASS NUMBER</u>	<u>B. U.</u>	<u>EFFECTIVE</u>	<u>PAY RANGE</u>
Health Physics Supervisor	84645	EX	06/05/2011	14

**JOB DUTIES IN ORDER OF IMPORTANCE: (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)**

Supervises health physicists (e.g., assigns work, reviews work, reviews & approves schedules, completes performance evaluations, approves expense reports & travel documents, reviews assignments for adequate documentation & technical accuracy), reviews inspection/evaluation reports for documentation/accuracy, assists/participates in developing policies, procedures, objectives & criteria (e.g., safety policy, inspection procedures, review guidelines, rule revisions), research, develop & coordinate unit rules & policies to include national radiation control standards for all radiation generating equipment, research & coordinate intra-unit policies regarding radiological health standards for occupational health workers, inspectors & general public, assists program administrator in budget preparation & develops & prepares proposals for contracts & grants.

Directs reviews of radiation problems; monitors expenditures of federal grants & contracts dealing with program/unit; coordinates radiation emergency response to radiation incidents; coordinates investigations of radiation exposure.

Interacts as directed with federal, local government, local organizations & general public (e.g., CRCPD, NRC, USEPA, FEMA, USDOE, Midwest Compact, FDA & other federal & state representatives) regarding regulations, guidelines & procedures related to radiation control in order to keep state in compliance with national standards; speaks to general public & technical groups on specific program area policies.

**MAJOR WORKER CHARACTERISTICS:**

Knowledge of calculus; employee training & development\*; supervisory principles/techniques\*; radiological health & safety practices; public relations\*; federal & state laws, rules & regulations regarding radiological health operations\*; health physics, radiological health or radiological technology. Skill in operating radiation exposure &/or radioactivity measurement equipment &/or quality control tools; dose assessment computer\*. Ability to deal with large number of variables & determine specific course of action; use proper research methods in gathering data; gather, collate & classify information about data, people or things; interact with wide range of individuals from professionals scientists, to non-professionals & general public regarding radiological health standards & practices; prepare meaningful, accurate & concise reports & records & complex position papers; establishes friendly atmosphere as supervisor.

(\*)Developed after employment.

**MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:**

36 mos. exp. as Senior Health Physicist, 84643, and 12 mos. exp. in either supervisory principles/techniques; must be able to provide own transportation.

-Or 5 years of full-time experience working with one of following: radioactive materials, analysis of radioactive materials in environment, decommissioning of sites contaminated with radioactive materials, radiation-generating equipment, experience that deals with regulatory requirements that involves radiation surveys for dose assessment, radiation inspections, analysis of situations involving radioactive materials or radiologic health & safety & 12 mos. exp. in either supervisory principles/techniques; must be able to provide own transportation.

-Or NRRPT, CHP, NMTCB or ARRT certification & 24 mos. of full-time experience working with one of the following: radioactive materials, analysis of radioactive materials in environment, decommissioning of sites contaminated with radioactive materials, radiation-generating equipment, experience that deals with regulatory requirements that involves radiation surveys for dose assessment, radiation inspections, analysis of situations involving radioactive materials or radiologic health & safety & 12 mos. exp. in either supervisory principles/techniques; must be able to provide own transportation.

-Or completion of Navy nuclear school & 24 mos. of full-time experience working with one of the following: radioactive materials, analysis of radioactive materials in environment, decommissioning of sites contaminated with radioactive materials, radiation-generating equipment, experience that deals with regulatory requirements that involves radiation surveys for dose assessment, radiation inspections, analysis of situations involving radioactive materials or radiologic health & safety & 12 mos. exp. in either supervisory principles/techniques; must be able to provide own transportation.

-Or equivalent of Minimum Class Qualifications For Employment noted above.

**TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:**

Not applicable.

**UNUSUAL WORKING CONDITIONS:**

Requires travel; exposed to low levels of radiation; may be exposed to hazardous levels of radiation.

<u>CLASS TITLE</u>	<u>CLASS NUMBER</u>	<u>B. U.</u>	<u>EFFECTIVE</u>	<u>PAY RANGE</u>
Health Physics Administrator	84646	EX	06/05/2011	15

**JOB DUTIES IN ORDER OF IMPORTANCE: (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)**

Administers assigned statewide radiological unit (i.e., nuclear safety unit; radioactive materials unit or X-ray control unit) & supervises health physics supervisors, interprets, initiates & explains policies & procedures to provide for application & enforcement of radiation protection laws & rules, identifies program objectives & estimates staff & budget requirements, develops & applies methods for evaluating program effectiveness & establishes program priorities based on studies & evaluations; advises bureau chief in all matters pertaining to unit.

Participates in radiological emergency planning, exercises & emergencies; plans & directs special studies & investigations of radiation exposure from radioactive sources & evaluates public health; participates in radiological emergency planning, exercises & emergency response; plans & directs special studies & investigations of radiation exposure & evaluates public health consequences.

Acts as liaison with federal, local government, local organizations & general public (e.g., CRCPD, NRC, USEPA, FEMA, USDOE, Midwest Compact, FDA & other federal & state representatives) regarding regulations, guidelines, policy & procedures related to radiation control in order to keep state in compliance with national standards; speaks to general public & technical groups on specific program area goals & policies.

**MAJOR WORKER CHARACTERISTICS:**

Knowledge of calculus; employee training & development; supervisory principles/techniques; radiological health & safety practices; public relations\*; federal & state laws, rules & regulations regarding radiological health operations\*; health physics, radiological health or radiological technology. Skill in operating radiation detection & measurement equipment. Ability to deal with large number of variables & determine specific course of action; use proper research methods in gathering data; gather, collate & classify information about data, people or things; interact with wide range of individuals from professionals, scientists to non-professionals, general public regarding radiological health standards & practices; prepare meaningful, accurate & concise reports & records & complex position papers; establish friendly atmosphere as manager.

(\*)Developed after employment.

**MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:**

24 mos. exp. as Health Physics Supervisor, 84645; must be able to provide own transportation.

-Or completion of undergraduate core program in health physics, nuclear physics, nuclear engineering, radiation physics, radiation sciences, bionucleonics, radiologic technology, nuclear medicine technology, radiation therapy or physics; & 24 mos. of full-time experience working with one of the following: radioactive materials which must include engineering principles relative to effects of radiation on metals, & other components of radioactive material sources or devices, analysis of radioactive materials in the environment, decommissioning of sites contaminated with radioactive materials, radiation-generating equipment, experience that deals with regulatory requirements that involves radiation surveys for dose assessment, radiation inspections, analysis of situations involving radioactive materials or radiologic health & safety & 24 mos. exp. in either supervisory principles/techniques; must be able to provide own transportation.

-Or 5 years of full-time experience working with one of following: radioactive materials, analysis of radioactive materials in environment, decommissioning of sites contaminated with radioactive materials, radiation-generating equipment for the x-ray program, experience that deals with regulatory requirements that involves radiation surveys for dose assessment, radiation inspections, analysis of situations involving radioactive materials or radiologic health and 24 mos. exp. in either supervisory principles/techniques; must be able to provide own transportation.

-Or NRRPT, CHP, NMTCB or ARRT certification and 36 mos. full-time experience working with one of following: radioactive materials, analysis of radioactive materials in environment, decommissioning of sites contaminated with radioactive materials, radiation-generating equipment for the x-ray program, experience that deals with regulatory requirements that involves radiation surveys for dose assessment, radiation inspections, analysis of situations involving radioactive materials or radiologic health and 24 mos. exp. in either supervisory principles/techniques; must be able to provide own transportation.

-Or completion of Navy nuclear school and 36 mos. full-time experience working with one of following: radioactive materials, analysis of radioactive materials in environment, decommissioning of sites contaminated with radioactive

materials, radiation-generating equipment for the x-ray program, experience that deals with regulatory requirements that involves radiation surveys for dose assessment, radiation inspections, analysis of situations involving radioactive materials or radiologic health and 24 mos. exp. in either supervisory principles/techniques; must be able to provide own transportation.

-Or equivalent of Minimum Class Qualifications For Employment noted above.

**TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:**

Not applicable.

**UNUSUAL WORKING CONDITIONS:**

Requires travel; exposed to low levels of radiation; may be exposed to hazardous levels of radiation.