STATE OF OHIO (DAS) CLASSIFICATION SPECIFICATION

CLASSIFICATION SERIES:	SERIES NO.:
Boiler Inspection	2412
MAJOR AGENCIES:	EFFECTIVE DATE:
Commerce only	01/09/2005

### **SERIES PURPOSE**:

The purpose of the boiler inspection occupation is to inspect boilers for compliance with applicable regulations & laws.

At the first full performance level, incumbents perform field inspections of power & process boilers, low-pressure steam boilers & hot water supply boilers in public buildings for compliance as non-certified inspector. Use of this class level cannot exceed 180 days from employee's date of hire. Further, it may only be used for applicants who meet the minimum qualifications listed & are waiting to take and pass the certificate of competency examination to inspect boilers. The incumbents are accompanied by a certified boiler inspector when conducting inspections.

At the second full performance level, incumbents perform field inspections of power & process boilers, low-pressure steam boilers, hot water supply boilers in public buildings for compliance with state laws as certified inspectors.

At the advanced level, incumbents conduct inspections statewide of nuclear power facilities for compliance with applicable regulations & laws & inspect conventional power & process boilers & high pressure & high temperature boilers to determine compliance with safety regulations.

At the supervisory level, incumbents supervise assigned field inspection staff.

At the managerial level, the incumbent supervises boiler inspector supervisors & monitors all inspection operations in the boiler division.

CLASS TITLECLASS NUMBERPAY RANGEEFFECTIVEInterim Boiler Inspector241203003/22/1992

## **CLASS CONCEPT**:

The first full performance level class works under general supervision & requires considerable knowledge of applicable government rules & professional guidelines in order to insure safe maintenance, operation & construction of power & process boilers, low pressure steam boilers & hot water supply boilers in public buildings by conducting inspections, accompanied by certified boiler inspector, as non-certified inspector (i.e., employment in this classification shall not exceed 180 days from date of hire).

CLASS TITLECLASS NUMBER<br/>24121PAY RANGE<br/>31EFFECTIVE<br/>03/22/1992

## **CLASS CONCEPT**:

The second full performance level class works under direction & requires considerable knowledge of applicable government rules & professional guidelines in order to insure safe maintenance, operation & construction of power & process boilers, low pressure steam boilers & hot water supply boilers in public buildings by conducting inspections as certified inspector.

CLASS TITLECLASS NUMBERPAY RANGEEFFECTIVENuclear Boiler Inspector241233201/09/2005

# **CLASS CONCEPT:**

The advanced level class works under direction & requires thorough knowledge of government rules & guidelines in order to conduct inspections statewide of nuclear power facilities for compliance with applicable regulations & laws & inspect conventional power & process boilers & high pressure & high temperature boilers to determine compliance with safety regulations.

<u>CLASS TITLE</u> Boiler Inspector Supervisor **CLASS NUMBER** 

PAY RANGE

**EFFECTIVE** 

## **CLASS CONCEPT**:

The supervisory level class works under administrative direction & requires thorough knowledge of laws governing boiler/pressure vessels & conventional boiler inspection procedures in order to supervise assigned boiler inspection personnel & ensure completion of required field inspections for assigned area.

CLASS TITLECLASS NUMBERPAY RANGEEFFECTIVEBoiler Division Chief241261311/25/2001

# **CLASS CONCEPT**:

The managerial level class works under administrative direction & requires extensive knowledge of government rules & guidelines in order to supervise boiler inspector supervisors & monitor all inspection operations within boiler division.

CLASS TITLE	CLASS NUMBER	B. U.	EFFECTIVE	PAY RANGE
Interim Boiler Inspector	24120	07	03/22/1992	30

Accompanied by certified boiler inspector, performs field inspections of power & process boilers, low pressure steam boilers, hot water supply boilers, exterior parts of boilers (e.g., fittings, appurtenances, safety appliances) & interior parts of boilers, checks boiler apparatus, design, safety of construction, evidence of corrosion & proper temperature & pressure levels & reviews approved plans & specifications of boiler construction & installation according to standards of American Society of Mechanical Engineers Code, Revised Code & all applicable laws, rules & guidelines, monitors & witnesses boiler repairs & tests, verifies certification of boiler repair personnel & conducts field investigations of boiler accidents or explosions (e.g., interviews witnesses of accident & recommends corrective action) as non-certified inspector.

Consults with, answers inquiries from & provides information to building owners, institution officials & general public on boiler-related matters; recommends corrective measures to alleviate existing boiler problems; testifies in court as required; prepares variety of reports (e.g., code violations, correspondence pertaining to field work, safety orders, weekly remittance, itinerary, travel expense); maintains files on inspections & attends meetings & seminars.

#### **MAJOR WORKER CHARACTERISTICS:**

Knowledge of American Society of Mechanical Engineers Code & state laws, rules & guidelines applicable to safe maintenance, operation & construction of all types of boilers; public relations\*; boiler inspection procedures & techniques\*; interviewing\*. Skill in operation of high & low pressure boilers; operation of motor vehicle. Ability to read & interpret technical material in books, journals & manuals; prepare meaningful, precise & accurate reports; handle sensitive inquiries from & contacts with officials & general public; collect data, establish facts & draw valid conclusions; work alone on most tasks.

(\*) Developed after employment.

#### MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:

Graduate engineer, registered by State of Ohio as professional engineer; 1 yr. exp. in design, construction, operation or inspection of high pressure boilers & pressure vessels; valid driver's license.

- -Or associate degree in mechanical technology; 2 yrs. exp. in design, construction, operation or inspection of high pressure boilers & pressure vessels; valid driver's license.
- -Or high school education or its equivalent; 3 yrs. exp. in one of following: high pressure boilers & pressure vessels construction or repairs, or in charge of high pressure boilers & pressure vessels operation, or in inspection of high pressure boilers & pressure vessels; valid driver's license.
- -Or equivalent of Minimum Class Qualifications for Employment noted above.

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

Must successfully pass examination for certificate of competency to inspect boilers within 180 days from date of hire. Failure to successfully pass certificate of competency examination to inspect boilers within 180-day probationary period shall automatically result in removal. Employees who successfully pass certificate of competency examination to inspect boilers within 180-day probationary period shall automatically be reassigned to Boiler Inspector, 24121.

#### **UNUSUAL WORKING CONDITIONS:**

On call 24 hrs., 7 days per week; travels overnight & spends high percentage of time in auto; exposed to high heat temperatures.

CLASS TITLE	CLASS NUMBER	<u>B. U.</u>	<b>EFFECTIVE</b>	PAY RANGE
Boiler Inspector	24121	07	03/22/1992	31

Performs field inspections of power & process boilers, low pressure steam boilers, hot water supply boilers, exterior parts of boilers (e.g., fittings, appurtenances, safety appliances) & interior parts of boilers, checks boiler apparatus, design, safety of construction, evidence of corrosion & proper temperature & pressure levels & reviews approved plans & specifications of boiler construction & installation according to standards of American Society of Mechanical Engineers Code, Revised Code & all applicable laws, rules & guidelines, monitors & witnesses boiler repairs & tests, verifies certification of boiler repair personnel & conducts field investigations of boiler accidents or explosions (e.g., interviews witnesses of accident & recommends corrective action) as certified inspector.

Consults with, answers inquiries from & provides information to building owners, institution officials & general public on boiler-related matters; recommends corrective measures to alleviate existing boiler problems; testifies in court as required; prepares variety of reports (e.g., code violations, correspondence pertaining to field work, safety orders, weekly remittance, itinerary, travel expense); maintains files on inspections & attends meetings & seminars.

### **MAJOR WORKER CHARACTERISTICS:**

Knowledge of American Society of Mechanical Engineers Code & state laws, rules & guidelines applicable to safe maintenance, operation & construction of all types of boilers; public relations\*; boiler inspection procedures & techniques\*; interviewing\*. Skill in operation of high & low pressure boilers; operation of motor vehicle. Ability to read & interpret technical material in books, journals & manuals; prepare meaningful, precise & accurate reports; handle sensitive inquiries from & contacts with officials & general public; collect data, establish facts & draw valid conclusions; work alone on most tasks.

(\*)Developed after employment.

#### MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:

Certificate of competency to inspect boilers as required in Section 4104.07, of Revised Code; valid driver's license.

# TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT: Not applicable.

#### **UNUSUAL WORKING CONDITIONS:**

On call 24 hrs., 7 days per week; travels overnight & spends high percentage of time in auto; exposed to high heat temperatures.

CLASS TITLE	CLASS NUMBER	B. U.	EFFECTIVE	PAY RANGE
Nuclear Boiler Inspector	24123	07	01/09/2005	32

Travels statewide & conducts three-part inspection of all nuclear power facilities to ensure compliance with nuclear code regulations & Ohio law (i.e., inspects all parts, materials & components to be used in manufacturing nuclear apparatus in manufacturing plants & ensures manufacturers have authorization to build parts; performs worksite inspections during all phases of construction of nuclear power plant to ensure construction is proceeding in compliance; conducts periodic inspections of nuclear facilities after construction is completed to ensure maintenance of safe operating conditions).

Conducts initial & renewal inspections of conventional power & process boilers, high pressure & high temperature boilers & their appurtenances to determine compliance with nuclear society of mechanical engineers, Boiler & Pressure Vessel Code & Ohio code & rules (e.g., checks exterior, interior & component parts; examines boiler apparatus; checks for proper design safety of construction, evidence of corrosion, stress & other deteriorating conditions; ensures proper pressure level is maintained; checks dependability of safety valve & feed water supply piping).

Participates as part of team in reviewing manufacturers' request for initial or renewal of authorization to manufacture nuclear vessels & components (e.g., studies blueprints & specifications & other data to determine if manufacturer has qualifications to produce requested vessels & components); researches, interprets, makes calculations & draws conclusions concerning applicable laws & codes as they relate to installation of nuclear vessels & components; provides information on updated procedures & methods & makes recommendations for new & necessary safety measures.

Prepares written reports on all inspections conducted; itemizes all violations of code standards; prepares other necessary paperwork (e.g., correspondence, itineraries, travel expense reports, notices of inspections).

#### **MAJOR WORKER CHARACTERISTICS:**

Knowledge of government laws regulating operation of boilers at nuclear power plants; nuclear power plant safety practices & procedures\*; boiler inspection procedures & techniques. Skill in operation of motor vehicle; operation of nuclear & conventional boilers. Ability to write specifications on inspection, construction & operational procedures of boilers; read & interpret technical material, blueprints, specifications & manuals; use algebra & statistical analyses; handle sensitive contacts with public & government officials; collect data, establish facts & draw technical conclusions; prepare technical inspection reports & routine forms & correspondence.

(\*)Developed after employment.

### MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:

Licensed by National Board of Boiler & Pressure Vessel Inspectors with "N" stamp; Certificate of Competency to inspect boilers as required per Section 4104.07 of Revised Code; 3 mos. trg. or 3 mos. exp. in boiler inspection procedures & techniques; 3 mos. trg. or 3 mos. exp. in government laws regulating operation of boilers at nuclear power plants; valid driver's license.

-Or equivalent of Minimum Class Qualifications for Employment noted above may substitute for experience, but not for licensure & certificate of competency.

# TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT: Not applicable.

#### **UNUSUAL WORKING CONDITIONS:**

Exposed to dangerous equipment & machinery; travels overnight; on call 24 hrs., 7 days per week; subject to possible dose of radiation.

CLASS TITLE	CLASS NUMBER	B. U.	EFFECTIVE	PAY RANGE
Boiler Inspector Supervisor	24125	EX	11/25/2001	12

Supervises assigned boiler inspection personnel (e.g., assigns work; reviews itineraries of boiler inspectors; reviews inspection reports to ensure completeness, accuracy & compliance with applicable state laws & timely submits them to boiler division chief; acts as liaison between staff & boiler division chief to convey verbal & written policies, procedures, decisions & directions & to maintain open lines of communication; recommends boiler inspectors for hire & other personnel transactions affecting their employment status; trains & ensures proficiency of inspectors; provides technical assistance & updates staff on applicable statutes) & ensures completion of required field inspections for assigned area.

Assists general boiler inspectors in performing difficult boiler & accident investigations; routinely accompanies inspectors on field inspections to ensure consistent application of inspections.

Performs administrative tasks (e.g., prepares & submits technical & section reports; analyzes, compiles & prepares statistical & operational reports using computer files & other information as needed); confers with architects, engineers, builders. & building owners on regulations; responds to technical inquiries of interested parties.

#### **MAJOR WORKER CHARACTERISTICS:**

Knowledge of states laws & rules & National Board Inspection Code governing boiler/pressure vessels; conventional boiler inspection procedures & techniques; supervisory principles/techniques\*; public relations\*. Skill in operation of personal computer\*. Ability to define problems, collect data, establish facts & draw complex/technical conclusions; read, interpret & edit inspection reports for accuracy, completeness & compliance with applicable laws, rules & procedures; handle routine & sensitive inquiries from & contacts with architects, engineers, builders, building owners, & other interested parties; establish friendly atmosphere as unit supervisor.

(\*) Developed after employment.

### MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:

Licensed by National Board of Boiler & Pressure Vessel Inspectors; possess Certificate of Competency to inspect boilers per Sections 4104.06 & 4104.07 of Revised Code; 6 mos. exp. as boiler inspector possessing Certificate of Competency; must be able to provide own transportation.

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

Must obtain Supervisory "B" endorsement within one year from date of hire.

#### **UNUSUAL WORKING CONDITIONS:**

Requires travel.

CLASS TITLE	CLASS NUMBER	<u>B. U.</u>	<b>EFFECTIVE</b>	PAY RANGE
Boiler Division Chief	24126	ΕX	11/25/2001	13

Supervises boiler inspector supervisors & clerical support staff assigned to division, oversees implementation of rules & regulations, conducts spot checks on field operations & staff, tests for & issues Certificate of Competency as Boiler Inspector to applicants who pass test, & prepares division budget.

Reviews all initial & renewal inspections & investigations; reviews boiler manufacturers data sheets for all new boilers; issues state boiler numbers; determines if boilers meet code specifications; ensures compliance with state & federal boiler codes & regulations; reviews appeals resulting from inspections.

Works with Board of Building Standards to formulate rules & regulations concerning boiler division; prescribes tests & works with legal section of department concerning legislation affecting state boiler laws.

Answers all correspondence pertaining to construction, installation & operation of boilers & unfired pressure vessels; interprets boiler codes for general public; presents speeches before general public, manufacturers, legislators & media concerning boilers.

### **MAJOR WORKER CHARACTERISTICS**:

Knowledge of government laws regulating operation of nuclear & conventional boiler inspection procedures & techniques; supervisory principles/techniques\*; public relations\*; budgeting\*. Skill in operation of motor vehicle. Ability to define problems, collect data, establish facts & draw complex conclusions; read & interpret administrative & technical material in divisional budgets, legislation & inspection reports; prepare & deliver speeches before legislators, media & general public.

(\*) Developed after employment.

#### MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:

Certificate of Competency to inspect boilers per Sections 4104.06 & 4104.07 of Revised Code; licensed by National Board of Boiler & Pressure Vessel Inspectors with "B", "I", "S", "N" & "IS" stamp; 6 mos. trg. or 6 mos. exp. in boiler inspection procedures & techniques; 6 mos. trg. or 6 mos. exp. in government laws regulating operation of nuclear & conventional boilers; valid driver's license.

-Or equivalent of the Minimum Class Qualifications For Employment noted above may substitute for experience, but not for certificate of competency & driver's licensure.

# TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT: Not applicable.

## **UNUSUAL WORKING CONDITIONS:**

Not applicable.