



DEPARTMENT OF VETERANS AFFAIRS  
DEPUTY ASSISTANT SECRETARY FOR HUMAN RESOURCES MANAGEMENT  
WASHINGTON DC 20420

JUN 12 1997

HUMAN RESOURCES MANAGEMENT LETTER NO. 05-97-02

Review of Federal Wage System Positions

1. **Purpose:** To provide job grading guidance relative to the crediting of "operator-in-charge" responsibility in order to assist facilities in conducting an Office of Personnel Management (OPM) required review of selected Federal Wage System positions.
2. **Background:** The OPM Atlanta Oversight Division (then Region) in 1994 adjudicated a job grading appeal filed by a WG-10 Utility Systems Operator at a VA medical center, and found that the proper grade was WG-9. The principal basis for that decision was OPM's disagreement with the facility's (and VA Headquarters') crediting of the position with one additional grade in recognition of "operator-in-charge/shift responsibility". The Atlanta Office not only ordered the downgrading of the facility's positions to WG-9 but directed VA to review nationwide the grading of all Utility Systems Operator positions and jobs in related Federal Wage System (FWS) occupations in which "operator-in-charge/shift responsibility" is a grading element in the standard. VA Headquarters appealed the Atlanta decision to the OPM Classification Appeals Office, which found in favor of the Atlanta OPM's decision. Subsequently, the Philadelphia OPM Oversight Office rendered a similar decision in connection with an appeal filed by Boiler Plant Operators at another VA medical center. Consequently, OPM has confirmed its Atlanta Office's determination that VA should ensure consistency in the grading of all jobs in the following FWS occupations: Utility Systems Operator, 5406; Boiler Plant Operator, 5402; Air Conditioning Equipment Operator, 5415; and Utility Systems Repairer-Operator, 4742.
3. **Process:**
  - a. The Atlanta Oversight Division's appeal decision and subsequent reconsideration decision are contained in Attachment A. It should be noted that the initial decision provides guidance concerning the type of fuel burned in boiler equipment, as well as the evaluation of "operator-in-charge" responsibility. The reconsideration decision contains a greater level of detail on the criteria for crediting "operator-in-charge" duties. The Philadelphia Oversight Division's appeal decision, contained in Attachment B, also speaks to the issues of both fuel combustion and "operator-in-charge" duties.

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b. Positions which involve assignments similar to those discussed in these decisions and which needed to be reviewed should be identified locally. Those positions should be reviewed in light of the rationales reflected in the OPM decisions contained in Attachments A and B. It may be necessary to redescribe existing position descriptions to more specifically state delegated "operator-in-charge" functions before definitive determinations are made. It is recommended that identified positions be desk audited in order to ascertain the accuracy and/or adequacy of the position description and to ensure that sufficient information about the duties is obtained to complete the review. Also, appropriate position management alternatives (e.g., restructuring/redistribution of tasks) should be carefully considered, particularly in connection with positions determined to be adversely impacted. In those cases in which redescription/restructuring actions are determined not to be feasible, appropriate corrective job grading actions should be accomplished in accordance with MP-5, Part I, Chapter 511, paragraphs A13 and 14.

c. VAHQ will report the progress of review activities to OPM on the basis of data obtained from the PAID system. Each facility should certify locally, upon completion of the reviews, that all affected positions are graded consistent with the OPM decisions.

4. **Questions:** If additional information is needed concerning the OPM appeal decisions or the grading of individual jobs, the appropriate classification specialist in the OHRM Customer Advisory & Consulting Group (CACG) should be contacted, or, as an alternate, Jack Craig, CACG Team A2, at (202) 273-4970. Questions concerning utility systems/plant operations procedures and other related matters should be referred to Arnold Bierenbaum, VHA Plant Technology & Safety Management Service (138C) at (202) 565-5891.



Bernard E. Cowles  
Deputy Assistant Secretary  
for Human Resources Management

CONCURRED IN:



Jule D. Moravec, Ph.D.  
Network Officer (10N)

Attachments

Distribution: Per VAF 3-7225  
SS (051)



United States  
**Office of  
Personnel Management**

Regional Director  
Atlanta Region  
Richard B. Russell Federal Building and Courthouse  
75 Spring Street, S.W., Suite 904  
Atlanta, Georgia 30303-3109

MAR 31 1994

In Reply Refer To

Your Reference

PERSONAL

HUMAN RESOURCES MANAGEMENT LETTER NO. 05-97-02  
ATTACHMENT A JUN 12 1997

Dear

We have reconsidered our job grading appeal decision of February 15, 1994 in light of the additional information you provided to our central office on March 1, 1994. Your request for reconsideration was remanded to us by our central office because you provided new information. We also obtained from your agency copies of standard operating procedures applicable to your work.

Your request for reconsideration did not raise any questions regarding our determination that your operation of boiler and air conditioning equipment does not exceed the grade 9 level. Consequently, we have not reviewed that aspect of our decision. However, you did question our decision not to grant the additional grade credit allowed in the standards for functioning as the "operator-in-charge" on an assigned shift when the supervisor is not present.

The job grading standard for Utility Systems Operator, 5406, provides guidance for granting one additional grade to positions which clearly meet the conditions discussed in the standard. Those conditions require that:

1. The operator at the full performance level must be assigned shift responsibility on a regular and recurring basis. Only one operator on a shift can be assigned this responsibility.
2. The operator follows written instructions supplied by a supervisor or by the operator-in-charge on the previous shift.
3. The operator-in-charge typically performs duties which are more responsible and require a slightly higher level of skill and knowledge than the full performance-level operators who are on duty where a supervisor is available. This includes a thorough knowledge of the entire utility systems and the user requirements to locate problems and initiate immediate corrective action.

4. In the absence of written contingency procedures, the operator-in-charge has responsibility to decide whether to shut down the operation or attempt to bypass problems until corrective action has been completed if the equipment still in operation can handle the load.
5. Typically, the operator-in-charge has responsibility to determine what work must be done and has the authority to approve overtime or to call in necessary maintenance personnel. The operator is responsible for relaying instructions to the next shift operator including problems encountered and action taken.

The appeal record shows that your position meets some, but not all, of the conditions listed in the 5406 standard. The material your agency provided for your initial appeal shows that, in addition to five Utility Systems Operator positions, there are one Boiler Plant Operator and four Air Conditioning Equipment Operator positions. The current staffing is one operator in the boiler plant and one operator in the air conditioning plant. Each of the positions is granted an additional grade for shift responsibility. However, the criteria for granting additional grade credit stipulates that only one position per shift can be given the additional credit. Your position description states that you are responsible for both the boiler plant and air conditioning on an assigned shift. However, the appeal record shows that your air conditioning responsibility is actually for the computerized controls and air handling equipment installed throughout the medical center. The operator assigned to the air conditioning plant has responsibility for the operation of the equipment in the plant. If your position actually has full shift responsibility for both the boiler plant and the air conditioning plant, as implied in your position description, the other positions could not also be granted credit. Consequently, the first condition is not met. We had asked your agency to review the classification of other Boiler Plant Operator and Air Conditioning Equipment Operator positions in light of our decision on your position.

The appeal record shows that you function on the basis of written and oral instructions from your supervisor and from the previous shift operator. Your position meets the second condition.

The third condition for granting additional grade credit includes a requirement that the employee perform above the full performance level and possess a thorough knowledge of the entire utility system. Your position description states that your position requires a level of skill and knowledge equivalent to the journeyman or full performance level, including knowledge of the function, purpose, and location of equipment. The third condition is not fully met, since there is no conclusive evidence that you perform above the full performance level.

The fourth condition for granting additional grade credit stipulates that shift responsibility includes responsibility for making independent decisions to shut down equipment or bypass problems in the absence of written contingency plans. The material your agency provided include procedures for such problems as a chiller going off-line, low water alarms, high water alarms, placing a cold boiler in service, and switching boilers in service. While we did not find procedures for every possible contingency, the preponderance of the evidence is that the available procedures limit the extent of judgment needed. Although the position description indicates that independent judgment is required, there is no evidence in the appeal record that the level of judgment exercised exceeds that normally expected of employees at the full performance level. For example, a boiler plant operator at the full performance level must make independent operational decisions and judgments, such as adjusting combustion controls to meet air quality requirements, troubleshooting problems, and in making repairs. Your position also calls for making independent judgments in shifting operating equipment to meet demand and in assuring the safe operation of equipment. We conclude that your position does not require the exercise of responsibilities greater than the full performance level. The fourth condition is not met.

The fifth condition requires that the operator-in-charge determine what work must be done, has the authority to approve overtime or to call in necessary maintenance personnel, and relays instructions to the next shift operator including problems encountered and actions taken. The material you provided indicates that your superiors expect you to make independent decisions in the event of an emergency and to call in maintenance personnel to make emergency repairs. The appeal record shows that you are expected to relay instructions and information to the next shift operator. The fifth condition is met.

In summary, our analysis shows that only two of the five conditions outlined in the 5406 standard for granting additional grade credit are fully met. Since the standard indicates that additional credit is appropriate only in those situations where all the conditions are clearly met, your position cannot be granted additional grade credit-for-shift responsibility.

Based on our analysis of the information you and your agency provided, we reaffirm our original decision that your position is properly classified as Utility Systems Operator, WG-5406-9.

Sincerely,



Conrad U. Johnson  
Chief, Personnel Systems and  
Oversight Division

### Background

On October 4, 1993, the Atlanta Region, Office of Personnel Management, accepted an appeal for the position of Utility Systems Operator, WG-5406-10, located in Maintenance and Operations. Engineering Service. Medical Center, Department of Veterans Affairs, The appellant is requesting that his position be changed to Utility Systems Operator, WG-5406-11. The agency determined on August 17, 1993, that the position was properly classified as Utility Systems Operator, WG-5406-10.

The appeal has been accepted and processed under section 5346(c) of title 5, United States Code. This is the final administrative decision on the classification of the position subject to discretionary review only under the limited conditions and time outlined in part 511, subpart F of title 5, Code of Federal Regulations.

### Sources of Information

This appeal decision is based on information from the following sources:

1. The appellant's letter of September 1, 1993, appealing the classification of his position.
2. The agency's letter of September 28, 1993, which transmitted the appellant's letter and provided additional position information.
3. A telephone interview with \_\_\_\_\_ the servicing classifier, on November 12, 1993.
4. A telephone interview with the appellant on November 15, 1993.
5. A telephone interview with \_\_\_\_\_ the appellant's supervisor, on November 15, 1993, and a clarifying conversation on November 16, 1993.

### Information on Position

The appellant is assigned to Position Number \_\_\_\_\_ The appellant, supervisor, and agency have certified to the accuracy of the position description.

The appellant operates boiler and air conditioning equipment on an assigned shift. The equipment includes three steam boilers rated at 150 pounds per square inch and capable of burning natural gas and fuel oil. The air conditioning equipment is in a separate building and includes four chillers with a total capacity of 2,587 tons, and three cooling towers with a combined capacity of 2,550 tons. Both plants operate year round. The boiler and air conditioning equipment are controlled through a computer-based energy management system and automatic controls. The energy management system monitors approximately 1,200 points

throughout the facility, and maintains temperatures within a one to two degree range. A few areas (e.g., operating suites) are maintained to closer temperature and humidity tolerances. The boiler plant also contains a pathological waste incinerator which the appellant operates to dispose of medical waste. The appellant works rotating shifts and rotates between the boiler and air conditioning plants every 28 days.

The appellant inspects, adjusts, and operates the equipment to produce steam or chilled air. He monitors gauges and other indicators and records pertinent information in operating logs. He troubleshoots equipment to diagnose malfunctions and makes minor repairs to achieve proper operation. He chemically analyzes boiler and chiller water and adds chemicals to control corrosion. On assigned shifts, he assumes full responsibility for the operation of the plant and makes decisions on emergency repairs or callback of employees. He responds to fire alarms and service calls throughout the facility after normal working hours.

The appellant receives direction from a utility system operator supervisor, who assigns work in general terms, advises on policies and procedures and reviews work for compliance with instructions and accepted practices.

The appellant contends that his work compares to the grade 10 level in the appropriate job grading standard, and that his shift responsibilities and the additional duties assigned to him warrant a higher grade, resulting in a grade 11 for his position.

#### Standards Referenced

Utility Systems Operator, 5406, July 1993.  
Boiler Plant Operator, 5402, March 1991.  
Air Conditioning Equipment Operator, 5415, July 1993.

#### Series and Title Determination

The appellant did not contest the occupational series or title of his position. The agency determined that the position was properly placed in the Utility Systems Operator, 5406, series, which covers nonsupervisory work concerned with operating two or more utility systems such as boiler plants, air conditioning, waste water treatment, water treatment, and natural gas distribution. We agree with the agency determination. The 5406 standard states that the proper title for the appellant's position is Utility Systems Operator.

### **Grade Determination**

The appellant operates boilers, air conditioning equipment, and a pathological waste incinerator. The WG-5406 standard requires that the proper grade level of work relating to each system be determined before an overall grade can be assigned. Job grading standards in the Federal Wage System use four factors for evaluation purposes: Skill and knowledge, Responsibility, Physical effort, and Working conditions. The position is evaluated as follows:

#### **Boiler plant operation:**

The 5402 standard illustrates two grade levels. Grade 8 work involves assisting in the operation of power boilers fueled by gas, refuse-derived fuel, wood, oil, or coal. The grade 10 involves the operation of single- or multiple-fuel power boilers, fired by coal, oil, refuse-derived fuel, wood, or a combination of fuels. The 5402 standard states on page 3 that the grade 10 level is based on specific types of boiler operations (i.e., fuels burned) and the corresponding levels of skill, knowledge, and responsibility necessary to operate boilers and associated pollution control equipment efficiently and to control the formation of pollutants.

The appellant operates multi-fuel steam boilers rated at 150 pounds per square inch, meeting the definition of a power boiler on page 3 of the 5402 standard. Natural gas is the primary fuel, and is supplied on an interruptible basis (i.e., during periods of excessive demand, the supplier can cut off the supply of natural gas with minimum notice). Fuel oil is the alternate fuel when natural gas is not available. The agency determined that fuel oil was used only in emergencies, and the boilers were not multi-fuel as defined in the 5402 standard. The supervisor indicated that fuel oil is burned once each week to maintain operator skill and to check equipment, and that the need to use fuel oil was likely to occur each winter, for periods ranging from several days to several weeks. Consequently, the use of fuel oil is a regular and recurring event (i.e., an event which recurs on a predictable basis), and can be considered in grading the positions.

#### **Skill and Knowledge**

The appellant's position exceeds the grade 8 level, where employees possess a working knowledge of the structure and operating characteristics of boilers and auxiliary equipment; the location and function of pumps, valves, regulators, gauges, recording instruments, controls, and other equipment; and fuel handling and distribution equipment, fuel firing mechanisms, feedwater treatment systems, and pollution control equipment. Grade 8 employees also have a basic knowledge of the chemical and physical characteristics of fuels and principles of combustion, steam generation, and heat transfer, and a working knowledge of the relationship between fuel quality and efficient combustion. The appellant is expected to possess more than the basic working knowledge described at the grade 8 level. He must possess sufficient knowledge to operate and maintain all the equipment in the boiler plant. The grade 8 is predicated on the presence of a supervisor or higher graded worker to provide technical direction, while the appellant is often the sole operator in the boiler plant. The grade 8 level is exceeded.

The grade 10 level is not fully met, where the employee must have a comprehensive knowledge of all phases of power boiler plant operation and their interrelationships for efficient and economical production of steam or high temperature hot water (HTHW). Grade 10 employees apply knowledge of the principles and theories of combustion, heat transfer, and steam or HTHW, and a thorough knowledge of the structural and operating characteristics of single and multiple fuel boilers and associated equipment. Employees also have a thorough knowledge of the chemical and physical aspects of sulphur-containing fuels, the chemical reactions involved in combustion, and a thorough knowledge of procedures or adjustments during combustion to control pollutants. While the level of knowledge required of the appellant is similar to that described at grade 10 in several respects, the operating conditions which he encounters are significantly less complex. The level of skill and knowledge described at grade 10 is predicated on the operation of boilers and associated pollution control equipment. The operation of a multiple-fuel boiler is not prima facie evidence that the grade 10 is met, absent the pollution control equipment described at that level in the standard. In the appellant's case, the boilers are normally operated on natural gas, which presents few pollution control problems. The boiler plant has no installed pollution control equipment, and pollutants are controlled by combustion control adjustments, such as adjusting the fuel-air mixture. The full intent of the grade 10 is not met.

Since the grade 8 level is exceeded but the grade 10 is not met, this factor is evaluated at grade 9.

### Responsibility

The grade 8 level is exceeded, where the employee receives oral or written work assignments from a supervisor or higher graded employee outlining the work to be done and the methods to be used. At this level, the employee monitors boiler operations and performs routine operator maintenance while remaining alert to potentially dangerous conditions. The supervisor observes work for compliance with procedures, and is available for advice and guidance. The appellant receives less definitive guidance than is described at grade 8, and is expected to operate the plant in accordance with accepted operating procedures. The supervisor is consulted on unusual situations and checks work by reviewing operator logs.

The grade 10 is not fully met. At this level, the employee receives assignments from a supervisor or higher graded employee in the form of oral or written instructions. The employee is familiar with the total plant layout, and make independent judgments on plant operations, such as combustion and pollution control adjustments, troubleshooting, and maintenance and repair procedures. They complete all maintenance and repair operations in accordance with specifications and following standard practices. They take action to avoid interruptions of plant operations and report emergencies or dangerous conditions. The supervisor provides technical guidance on difficult or unusual problems, and observes work for adherence to established operating techniques. The grade 10 level is based on the need to continually monitor and adjust boilers to achieve the necessary degree of operating efficiency while meeting pollution control

requirements. In contrast, the appellant's work primarily involves fuels which present few pollution control issues. The nature of the fuel burned, in conjunction with the automatic boiler controls and the lack of pollution control equipment, reduces the need for the degree of operator responsibility in adjusting and operating the heating systems. The intent of the grade 10 level is not fully met.

Since the grade 8 level is exceeded, but the intent of the grade 10 is not fully met, this factor is evaluated at grade 9.

#### Physical Effort

Physical effort is the same at both grade 8 and grade 10, and therefore has no impact on the grading of the appellant's position.

#### Working Conditions

Working conditions are the same at both grade 8 and grade 10, and therefore have no impact on the grading of the appellant's position.

The grade-determining factors are evaluated at grade 9, and that is the grade which best represents the difficulty and responsibility of the appellant's boiler operations work.

#### Special Additional Responsibilities

The 5402 standard describes special circumstances which warrant additional grade credit for functioning as the operator-in-charge on nights and weekends. For example, the operator-in-charge, in the absence of written contingency procedures, is responsible for deciding whether to shut down a boiler, whether to start another boiler, and whether to approve overtime or recall maintenance personnel to repair the problem. The appellant's position is currently given additional grade credit for functioning as an operator-in-charge, based on being the sole operator in the boiler plant during some shifts. The appellant's position description also includes a reference to responsibility for recalling maintenance personnel to handle emergencies arising outside normal duty hours.

The supervisor advised that there are written operating procedures governing plant operations and that operators are instructed to contact the supervisor on major problems. The appellant's decision-making responsibility is therefore circumscribed by the existence of the written procedures and the availability of the supervisor for consultation on major problems. Further, the responsibility for recalling maintenance personnel relates to facility problems outside the boiler plant and not related to the operation of the plant. The appellant receives trouble calls (e.g., electrical or plumbing) from various locations within the facility which would be directed

to another organization during normal duty hours. His responsibility is limited to inspecting the problem, fixing simple problems (e.g., a tripped circuit breaker or plugged up commode), and recalling maintenance personnel in emergency situations where repairs must be made before the next normal working day.

The conditions in the 5402 standard for granting additional grade credit are specific. The standard presumes that the operator-in-charge functions independently and without operating guidelines. The appellant's situation does not meet these conditions. He functions within the parameters of established operating procedures which specify the conditions and procedures for shutting down and starting up boilers, and supervisory assistance is available on major problems. He does not have the authority to call in maintenance personnel for problems within the boiler plant; that responsibility rests with the supervisor. Consequently, additional grade credit is not appropriate.

#### **Air conditioning equipment operation:**

The 5415 standard describes work at two grade levels. Grade 9 involves the operation of a conventional air conditioning plant serving a building or complex of buildings. Grade 10 involves the operation of more complex equipment with remote sensors and related control systems serving a variety of users with differing needs. The appellant does not contest the agency determination that his air conditioning operation responsibilities equate to grade 9. Our review showed that the agency determination is correct.

The appellant operates a conventional air conditioning plant with automatic controls and an energy management system capable of sensing up to 1200 separate locations within the facility. The supervisor indicated that the energy management system which is interconnected with the air conditioning plant regulates temperatures in most of the facility within a range of one or two degrees; a few areas (i.e., operating suites) are regulated to closer tolerances. The appellant monitors and adjusts equipment for optimum operation and isolates problems. The supervisor indicated that the appellant is instructed to contact the supervisor on unusual problems. This situation compares favorably to the levels of skill and responsibility described at the grade 9 level in the 5415 standard.

The 5415 standard also allows additional grade credit for positions serving as the operator-in-charge. For the same reasons discussed earlier under the boiler plant operations, additional grade credit is not warranted for the air conditioning equipment operation duties.

#### **Incinerator operation:**

The appellant operates a 150 pound-per-hour waste incinerator to burn medical waste. He loads the incinerator and controls combustion to meet air pollution standards while assuring complete destruction of the medical waste. The level of skill and knowledge and the level of responsibility involved in operation of the incinerator has normally been found not to exceed the grade 5 level, and therefore is not grade-impacting.

The appellant also performs miscellaneous duties such as responding to trouble calls outside normal duty hours, and monitoring the grounds on nights and weekends during the winter months for icing of sidewalks and roads. This work is incidental to the appellant's normal duties, performed only in the absence of others, and does not involve a higher level of skill. The appellant is authorized to call in others to fix problems. Therefore, this work does not impact on the grading of the appellant's position.

#### Summary

The appellant performs boiler operations work evaluated at grade 9, and air conditioning equipment work also evaluated at grade 9. The 5406 standard indicates on page 4 that such a combination of work equates to the grade 9 level. The 5406 standard also allows additional grade credit for functioning as operator-in-charge. As discussed earlier, the appellant's position does not warrant additional grade credit, and the final grade is grade 9.

#### Decision

This position is properly classified as Utility Systems Operator, WG-5406-9. This decision constitutes a job grading certificate issued under the authority of section 5346(c) of title 5, United States Code. This certificate is mandatory and binding on all administrative, certifying, payroll, disbursing, and accounting officials of the Government.

FEB 15 1994

**OFFICE OF PERSONNEL MANAGEMENT  
ATLANTA REGION  
PERSONNEL SYSTEMS AND OVERSIGHT DIVISION  
ATLANTA, GEORGIA**

**CLASSIFICATION APPEAL DECISION**

**Under section 5346(c) of title 5, United States Code**

**Appellant:**

**Position:** Utility Systems Operator, WG-5406-10

**Organization:** Maintenance and Operations  
Engineering Service  
Medical Center  
Department of Veterans Affairs

**Decision:** Utility Systems Operator, WG-5406-9

UTILITY SYSTEMS OPERATOR  
WG-10

1. PRINCIPAL DUTIES AND RESPONSIBILITIES

A. Works as a plant operator with shift responsibility for the operation and preventive maintenance of the air conditioning plant and the boiler plant. The plant operator will man the central control room, and be in control of all operations, air conditioning, refrigeration, heating, ventilation and all other functions that are incorporated and controlled through the controlling computer complex, requiring operator to monitor all systems and troubleshoot and reset through the computer system.

The plant includes two 906 ton Trane chillers, one 650 ton chiller, one 125 ton chiller, two 1200 ton cooling towers and one 150 ton cooling tower. In addition, the plant includes three Cleaver Brooks boilers which are gas and oil fired and rated 117 psi header pressure with a total steam output capacity of 112,386 pounds of steam per hour and all auxiliary components for each system and one 150 lbs. pathological waste incinerator.

B. Operates and controls thru the JC 85/40 and DSC Energy Management Systems the following components of the HVAC system:

All major airhandlers consisting of approximately 1200 physical and logical points, controlling such areas as operating suites, ICU, radiology, nuclear medicine areas, data processing, suction, and other critical areas to within 1/2 of 1 degree Fahrenheit and within 5% humidity. This is accomplished through direct control of the incumbent or through monitoring of the energy management system.

C. Inspects, adjusts, and maintains the air conditioning or boiler plant equipment complete with all associated equipment.

D. Responsible for monitoring and logging pertinent information from gauges and other technical measuring devices. This information is used to diagnose and troubleshoot operational problems and make necessary corrections or notify the supervisor, advising him of the needed repairs.

E. Makes independent decisions when operating, such as when to shift the operation of the chiller plant or boiler plant as conditions demand it, using the posted guidelines and technical information provided.

F. In addition to operating the plants, the incumbent will respond and assist in calls throughout the medical center, after normal working hours, such as plumbing, electrical or minor equipment repair.

2.  
UTILITY SYSTEMS OPERATOR - WG-10

G. Responsible for making chemical level tests of water systems for the boiler plant and air conditioning plant. He/she will keep a log of all chemical usage for evaluating overall system performance, practicing corrosion control techniques to assure the effective operation of the plants to the full expected life span of the equipment.

H. Makes independent decisions determining the need for emergency repairs and callback of the appropriate shops after normal working hours to accomplish these repairs. Acts for the Chief, Engineering Service after normal working hours, holidays, and weekends as noted in station policies.

I. Responds to all fire alarms and disaster signals, and is responsible for the building complex's electrical and mechanical systems during an emergency. In a fire situation the incumbent works under the direction of the senior fire official on the scene.

J. When assigned to the boiler plant operates a 150 lb. per hour waste incinerator and burns all pathological waste from the medical complex.

K. Work on rotating shifts and has complete shift responsibility on other than normal working hours. Incumbent must make decisions as to the safe and effective operation of the A. C., Boiler Plant, Incinerator, and Energy Management System and take necessary emergency corrective action to ensure the safe operation of equipment.

L. Operates the boilers in such a manner to maintain maximum efficiency, control the formation of pollutants and insure compliance with air pollution laws or regulations including local, state, or federal pollution control requirements.

2. SKILLS AND KNOWLEDGE

A. Is skilled at the full journeyman level in the operation of the chillers, boilers, incinerators, and all associated auxiliary equipment including emissions monitoring.

B. Must have journeyman-level knowledge of the function, purpose, and location of all equipment, knowledge of the theory and principles of refrigeration and air condition equipment, and component systems and of steam generating plants including a knowledge of the principles of electrical feeder distribution system and the ability to apply this knowledge and skills in operating and performing minor repairs as required.

ATTACHMENT A

3.

UTILITY SYSTEMS OPERATOR - WG-10

C. Is skilled in a wide variety of tools and test equipment including, but not limited to, power tools, chemical reagents, electrical multimeters, refrigeration gauge sets, and other specialty tools of various modes.

D. Must know and practice all safety rules and regulations applicable to this trade and to medical center employees. He must provide for the care and safe use of all utility systems tools and equipment used within the various plants.

E. Has a thorough knowledge of the environmental laws on incinerators and operate the incinerator in such a manner to control pollutants in the flue emissions and maintain correct temperatures during all operations.

F. The incumbent must have the skills and knowledge in the operation and adjustments of the boiler and associated auxiliary and pollution control equipment. Monitoring emissions and maintaining constant control of pollutants.

3. PHYSICAL EFFORT

Requires infrequent lifting of up to 80 pounds. Also requires frequent walking, stooping, climbing, and bending.

4. WORKING CONDITIONS

There are constant exposure to caustic or acid chemicals, hot metal surfaces, heights, and enclosed spaces. In addition, the incumbent will be required to work with extreme noise; will occasionally work in contaminated areas, and in extremely dirty areas.

5. OTHER SIGNIFICANT FACTS

Mental application - The incumbent must exercise a high degree of competent judgement on his/her own initiative to cope with unexpected conditions or emergencies which arise during tour of duty to prevent a catastrophic failure of plant operation. A plant failure would immediately cause serious disruption and inconvenience to the entire hospital.



United States  
Office of  
Personnel Management

Philadelphia Oversight Division  
William J. Green, Jr. Federal Building  
600 Arch Street  
Philadelphia, Pennsylvania 19106-1596

In Reply Refer To:

Your Reference:

PH:OD:95-31

MAY 10 1996

PERSONAL

HUMAN RESOURCES MANAGEMENT LETTER no. 05-97-02  
ATTACHMENT B

JUN 12 1997

Dear

This is our decision on the classification appeal filed with our office, which we accepted under the authority contained in section 5346(c) of title 5, U.S. Code.

This appellate decision constitutes a certificate that is mandatory and binding on administrative, certifying, payroll, disbursing, and accounting officials of the Government. It is the final administrative decision on the classification of this position, and is not subject to further appeal. It is subject to review only at the discretion of the Classification Appeals Office in Washington, DC, and only under the limited conditions specified in 5 Code of Federal Regulations (CFR) 532.705 and in the Introduction to the Position Classification Standards, Appendix 4. It must be implemented in accordance with the provisions contained in 5 CFR 511.612 for executing the requirements stipulated in 5 USC 5346.

Position Information

Appellants :

Current Classification : Boiler Plant Operator,  
WG-5402-10

Position Description No. :

Requested Classification : Appealing for a higher grade  
OPM Decision : Boiler Plant Operator,  
WG-5402-9  
Organizational : Department of Veterans Affairs  
Information : (DVA) Medical Center  
Engineering Service  
Operations Section

Analysis and Decision

In considering your appeal, we carefully reviewed all the information which you submitted on behalf of you and your co-appellants; information obtained during a telephone audit with you and a telephone interview with your supervisor, Mr. Louis Schwalbendorf, Operations Foreman, on January 10, 1996; and, other pertinent information provided by you and your employing activity at our request.

It is our decision that your position is classified properly as Boiler Plant Operator, WG-5402-9. Accordingly, your appeal is denied and your position downgraded, the reasons for which follow.

The classification appeal record forwarded to this office for adjudication indicates that: (1) you believe that you are operating multiple fuel power boilers which is work classifiable to the WG-10 grade level in the Boiler Plant Operator, WG-5402 Job Grading Standard (JGS); and, (2) you and your co-appellants' positions (hereinafter referred to as position) warrant an additional grade level based on each of you functioning as operator in charge of the boiler plant as provided in the WG-5402 JGS. Information submitted by your immediate supervisor on your behalf stresses that you operate "dual fueled boilers," and that:

the Boiler Plant Operator on duty has the responsibility and authority to do whatever it takes to maintain the Medical Center environment so that our patients and staff are safe and comfortable.

In an August 3, 1994, memorandum to your servicing personnel office, stated:

With my 20 plus years of operation, maintenance, and engineering experience in the power boiler field, I

3.

can say that firing any power boiler is a complex task, regardless of the fuel used. Firing a boiler on natural gas is no less complicated than any other fuel.

He further stressed that you "work alone and unsupervised at various times," and that you "have shift responsibility at various times."

Section 5346 of title 5, United States Code, requires that agencies classify their Federal Wage System (FWS) positions in conformance with the JGS's published by the Office of Personnel Management or, if there are no directly applicable JGS's, consistently with published JGS's for related kinds of work. The classification appeal process (also known as the job grading appeal process for positions in the FWS) is a de novo review which includes a determination as to the actual duties and responsibilities assigned by management and performed by the appellant, and the proper classification of those duties and responsibilities by application of the appropriate OPM JGS's.

Our telephone audit with you revealed that your position description (PD) of record contains the major duties and responsibilities that you perform and is hereby incorporated by reference into this decision. You operate a power boiler system consisting of three power boilers with a combined capacity of about 26,000 pounds per hour and an operating pressure of 110 psi. Auxiliary equipment consists of three centrifugal main feedwater pumps, piston-type chemical injector pumps, two screw-type fuel oil pumps, two condensate transfer pumps, one 10 horsepower and one 3 horsepower air compressor with air dryers, one deaerating feed tank which also serves as a feedwater pre-heater, and one condensate/make up tank which is supplied by two water softeners and an emergency generator. The controls are electronic/pneumatic/pulse in design with associated recording devices. The boilers operate on natural gas and #2 fuel oil. During the summer months, one boiler is in use and a second is kept hot in a back-up capacity. During the heating season, two boilers are in use and the third is kept hot in a back-up capacity. The steam produced is used for heating, the laundry plant, food preparation (which requires the use of FDA-approved chemicals), making hot water, and in HVAC systems and auxiliary absorption chillers and for humidity control.

A Johnson Control's DSC 8500 Graphic Control Center controls heating zones throughout the Center and allows for isolating areas from steam. Although your PD indicates that you operate

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an incinerator, which you stated was used to burn medical waste, the incinerator has been non-operational for about one year. You are responsible for monitoring the Simplex Fire Alarm System and the Liquid Oxygen Alarm System, alerting appropriate personnel of malfunctions. Our fact-finding revealed that the Center has no single central air conditioning system. Central air conditioning systems, however, are in place in several parts of the Center, and the Johnson Control Center is used to monitor these systems. You provide support to employees in the Maintenance and Repair Section who have primary responsibility for the operation and maintenance of the central air conditioning systems, including operational maintenance and repair, testing water and adding chemicals, and related operating functions. The boiler plant operates on a 24-hour basis. Your supervisor works an 8 AM to 4 PM shift while you rotate through varying tours of duty (8 AM to 4 PM, 4 PM to 12 PM and 12 PM to 8 AM). Your work is performed independently, and is subject to review for quality and completeness.

#### Series and Title Determination

Your agency has determined that your position is allocated properly as Boiler Plant Operator, WG-5402, with which you did not disagree. Based on: (1) the lack of full responsibility in your position for air conditioning system operation; and, (2) the lower grade level worth of your incinerator operator duties (when they are performed), we find that the highest level of work that you perform on a regular and recurring basis which controls the classification of your position is allocated properly as Boiler Plant Operator, WG-5402.

#### Grade Level Determination

The WG-5402 JGS is for use in grading nonsupervisory positions concerned primarily with the operation and operational maintenance of single and multiple fuel water or fire tube boilers and associated auxiliary and pollution control equipment. These boilers operate at various pressures and temperatures in automatic or manual modes to produce steam or high temperature hot water to provide heat for buildings, to operate industrial and institutional facilities and equipment, and to generate electricity.

This JGS does not describe all possible levels at which positions in the WG-5402 series may be classified. If positions differ substantially from the skill, knowledge, or other work requirements of the grade levels described in this standard, they may warrant grading either above or below these grades based on the application of sound job grading methods.

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The JGS provides for grade level determination on the basis of four factors: Skill and Knowledge; Responsibility; Physical Effort; and, Working Conditions.

The intent of a JGS must be discerned in order to assure that it is applied correctly. The WG-5402 describes two grade levels. The WG-8 grade level entails assisting in the operation and operational maintenance of gas, refuse derived fuel (RDF), wood, oil, and coal fired power boilers and auxiliary equipment with manual or automatic controls to produce saturated or superheated steam or high temperature hot water. In contrast, the WG-5402 JGS stipulates on page 3 that the WG-10 level is:

based on specific types of boiler operations (i.e., fuels burned) and the corresponding levels of skill, knowledge, and responsibility necessary to operate boilers and associated pollution control equipment efficiently and control the formation of pollutants.

Therefore, by law our analysis of your position must be based on the specific criteria stipulated in the WG-5402 JGS, and may not rely upon your supervisor's opinions regarding the impact of fuel types on firing boilers. As stated above, it is not the firing of boilers that controls the grade level worth of boiler plant operator positions. Rather, is the full scope of all boiler plant operations, with particular regard to pollution controls, that must be considered in evaluating boiler plant operator positions properly.

#### Skill and Knowledge

WG-8 boiler plant workers require a working knowledge of the structure and operating characteristics of boilers and associated auxiliary equipment, including the location and function of numerous pumps, valves, regulators, gauges, recording instruments, controls, power operated dampers, conveyors, and other equipment associated with clean, safe, and efficient boiler operation. WG-8 work entails: (1) knowledge of fuel handling and distribution equipment and systems, fuel firing mechanisms, feedwater treatment systems, electrostatic precipitators, flue gas scrubbers, and lime slurry systems; (2) a basic knowledge of the chemical and physical characteristics of fuels and principles of combustion, steam generation, and heat transfer; (3) a working knowledge of the relationship between fuel quality and efficient combustion characteristics; (4) a working knowledge of water tending, analysis, and basic chemical treatments; (5) a general understanding of the individual and combined effects of chemical additives; and, (6) knowledge

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of basic operations necessary on start-up, shutdown, and re-start procedures and in casualty control. WG-8 workers have skill in: (1) adjusting various conditions such as air temperature, draft, and other furnace conditions; (2) interpreting meter and gauge readings; (3) using handtools, electric and pneumatic power tools, and specialized tools of the trade; and, (4) applying preventive maintenance procedures and performing limited operational repairs such as cleaning equipment, greasing and oiling moving parts of machinery, repainting equipment, tightening packing bonnets and glands on valves and pumps, repacking valves, replacing pumps, and assisting higher grade workers in more difficult repairs and replacements. They are able to recognize malfunctioning equipment and systems and potentially dangerous operating conditions. Your position entails a greater level of knowledge and skill than the WG-8 grade level in that you must possess sufficient skill and knowledge to operate and maintain all the equipment, and respond to and deal with malfunctioning equipment and potentially dangerous operating conditions, without the technical assistance of a higher graded employee since you are often the sole worker in the boiler plant.

We find, however, that your work does not fully meet the WG-10 grade level at which boiler plant operators apply a comprehensive knowledge of all operational phases of power boiler plant operations (e.g., water treatment, fuel systems, steam generation, and pollution control) and their interrelationships for efficient and economical generation of steam or high temperature hot water (HTHW). They apply knowledge of the principles and theories pertaining to combustion, heat transfer, and steam or HTHW generation in the operation of power boiler plants. WG-10 employees also apply a thorough knowledge of the structural and operating characteristics of single and multiple fuel power boilers and associated auxiliary and pollution control equipment or systems (e.g., computerized or microprocessor control systems, fuel handling and distribution equipment and systems, fuel firing mechanisms, feedwater and boiler water treatment systems, steam and electrical pumps, pressurization systems, compressors, electrostatic precipitators, and flue-gas desulfurization systems) to properly operate, adjust, troubleshoot, and maintain the equipment and systems. They apply a thorough knowledge of water treatment procedures and water analysis, using standard chemical tests. They have a thorough knowledge of water treatment equipment and systems (e.g., cation/anion exchange units for demineralization of feedwater). WG-10 operators have a thorough knowledge of chemical and physical aspects of sulfur-containing fuels (e.g., oil, coal, and lignite), the chemical reactions involved in combustion, and the relationship between fuel quality and

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combustion efficiency. They have: (1) a practical knowledge of environmental law and a thorough knowledge of procedures or adjustments during combustion to control pollutants in flue emissions (e.g., control combustion time, stack temperature, and excess air flow); and, (2) a thorough knowledge of the steam or HTHW distribution systems, user requirements, casualty control procedures, and how to bypass a section of the system to maintain service. They are knowledgeable of maintenance requirements (e.g., cleaning fuel guns, lubricating equipment, and power cleaning water tubes) and procedures necessary to perform operational repairs of limited to moderate complexity (e.g., repair or replace valves, gauges, water pipes, and refractory linings). In some work situations, operators at this level may have basic knowledge of electricity to test and replace wires, switches, and other basic electrical components.

WG-10 operators have skill: (1) in procedures and adjustments necessary to start, operate, and maintain a power boiler facility (i.e., power boilers and auxiliary and pollution control equipment) to meet load demands and maintain efficient levels of combustion and compliance with pollution laws; (2) in operating power boilers from cold starts through normal operation and hot or emergency shutdowns; (3) in operating and adjusting associated auxiliary and pollution control equipment; (4) in reading and analyzing information from gauges, meters, recorders, analog displays, and computer generated data to determine the operational status of the facility and necessary adjustments; (5) in specialized combustion techniques and adjustments to firebox variables such as fuel flow or feed, fuel/air ratio, temperature, combustion time, and over air or under air feeds to control chemical pollutants in flue gas emissions and maintain combustion efficiency; (6) in setting and adjusting flame patterns in power boilers with single or multiple burners to ensure safe and efficient combustion; and, (7) in adjusting various combustion settings to compensate for varying qualities or conditions of fuels. They can: (1) stabilize boilers in a closed system when one boiler starts to go down while maintaining safe levels and efficient combustion; and, (2) make individual and sequential adjustments to a variety of controls and equipment to achieve and maintain maximum efficiency of equipment and systems being operated.

The WG-10 grade level is predicated on operating boilers and associated pollution equipment. Our fact-finding revealed that both fuels that you use; i.e., natural gas and #2 fuel oil, do not entail operating the complex pollution control equipment described at the WG-10 grade level in the JGS. In order to deal with smoke or other pollutants, the actions available are adjusting the fuel micro-ratio valves or dampers to add more or

less air to the combustion process. As a result, the full range of skill and knowledge to deal with demanding pollution control requirements found at the WG-10 grade level are not present at the Center. Therefore, because this factor does not fully meet the WG-10 grade level, but substantially exceeds the WG-8 grade level, it is credited properly at the WG-9 grade level.

### Responsibility

WG-8 boiler plant workers receive work assignments from a supervisor or a higher grade worker in the form of written or oral instructions. Instructions outline the work to be performed and the methods and materials to be used. WG-8 workers are responsible for: (1) observing meters and gauges to insure proper combustion and prescribed temperatures, pressures, and emissions and for performing routine operator maintenance and equipment; (2) understanding and responding to a variety of conditions indicated by meters and gauges; and, (3) performing work in accordance with local, State, and Federal pollution control requirements. They are alert and recognize dangerous conditions in boilers, controls, valves, piping, and other equipment inherent to boiler operations to prevent equipment damage or explosion, and report problems to a higher grade worker or supervisor. Work is checked through observation of work methods and procedures. A higher grade worker or supervisor is available for advice and assistance on any work problem encountered and checks to see that assignments are completed according to instructions and established practices. You work with substantially greater responsibility in that you regularly operate the full boiler plant in accordance with accepted operating procedures on shifts where your supervisor is not present.

Your work approaches the WG-10 grade level where boiler plant operators receive work assignments from a supervisor or a higher grade operator who is in charge of the facility or work shift. They provide written or oral instructions which may be accompanied by diagrams, drawings, operating manuals, or special facility procedures to be followed during an emergencies, equipment failure, or system malfunction. WG-10 operators are familiar with the total plant layout including drawings and circuit diagrams of the boilers and auxiliary and pollution control equipment, in order to locate problems and determine appropriate action necessary to maintain adequate steam or high temperature hot water production. As compared to the pre-determined methods and procedures at the WG-8 grade level, WG-10 boiler plant operators make more independent decisions and judgments regarding boiler plant operations

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(e.g., combustion and pollution control adjustments, troubleshooting techniques, and equipment maintenance and repair procedures). In maintenance and repair operations, they complete all work in accordance with required specifications and use a variety of standard mechanical and basic electrical processes. They typically have primary responsibility for checking boilers and auxiliary and pollution control equipment to insure the operational efficiency of equipment and safety of personnel. They take immediate action to prevent interruptions to plant operations and report all emergencies or dangerous conditions. The supervisor or a higher grade operator with shift level responsibility is usually available to provide technical assistance on difficult or unusual problems. Work is checked through occasional observation of operational efficiency, production reports, and adherence to established operating techniques and procedures. While you are responsible for monitoring and dealing with complete boiler plant operations as at the WG-10 level, the system which you operate does not have the pollution control equipment and the attendant decision making requirements intended at the WG-10 grade level. Therefore, since your position substantially exceeds the WG-8 grade level, but does not fully meet the WG-10 grade level, this factor is credited properly at the WG-9 grade level.

#### Physical Effort

Physical effort is the same at both the WG-8 and WG-10 grade levels and, therefore, has no significant impact on the overall grade level worth of your position.

#### Working Conditions

Working conditions are the same at both the WG-8 and WG-10 grade levels and, therefore, have no significant impact on the overall grade level worth of your position.

#### Special Additional Responsibilities

The WG-5402 JGS describes special circumstances which warrant additional grade credit for functioning as the "operator in charge" on second and third shifts and on weekends. These conditions must be clearly met to warrant the crediting of an additional grade. The "operator in charge": (1) is responsible for following written instructions from a supervisor or the "operator in charge" on the previous shift; (2) performs additional duties that are more responsible and require a slightly higher level of skill and knowledge than full performance level operators with a supervisor available to provide specific guidance and assistance, and must have a thorough

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knowledge of the entire steam or hot water system and user requirements in order to locate problems and initiate immediate corrective action to maintain adequate steam or hot water production; (3) in the absence of written contingency procedures, has the responsibility to decide whether to shut down a boiler and, if so, whether equipment in operation can still handle the load or whether to fire up another boiler and attempt to bypass the trouble until corrective action has been completed; (4) determines what work must be done and has the authority to call in "off-duty" maintenance personnel; and, (5) relays instructions to the next shift operator, including problems encountered and action taken. "Operator in charge" shift responsibility must be assigned on a regular and recurring basis; only one operator on a shift can be assigned this responsibility.

The appeal record indicates that your position meets some, but not all, of the conditions listed in the WG-5402 JGS. You and your co-appellants all are assigned, on a regular and recurring basis, full shift responsibility. In this capacity, you function on the basis of instructions from your supervisor and the previous shift operator (#1), and provide instruction to the next shift operator, including problems encountered and action taken (#5). The record indicates that you possess a thorough knowledge of the entire system, but there is no evidence that you regularly perform above the full performance level which includes, as stated in your PD and discussed at the highest grade level described in the JGS, the skill necessary to stabilize boilers in a closed system when one boiler starts to go down, and to operate power boilers from cold starts through normal operation and hot or emergency shutdown. Therefore, condition #2 is not fully met.

Written material provided at our request indicates that there are contingency plans and procedures in place for steam failure, and operating procedures for boiler start-up/shutdown, boiler burner operation, boiler plant emergency generator operation, boiler plant piston pump operation, deaerator unit operation, and boiler plant gear pump operation. There are oral procedures in force for shifting/conserving steam load, e.g., surgical support has priority, as does food service at meal time and the laundry plant when it is in operation. While we did not find procedures for every possible contingency, the record indicates that both oral and written procedures in place limit the extent of judgment needed. Procedures are in place to contact your supervisor or, if he is not available, the Assistant Chief Engineer, to inform them of major problems such as damage to equipment, which provides them the opportunity to take or direct action dealing with the emergency. Therefore, we conclude that condition #3 is not met.

HUMAN RESOURCES MANAGEMENT LETTER NO. 05-97-02  
ATTACHMENT B

11.

Medical Center Memorandum No. 138-15, Request For Engineering Work, states that for emergency work during other than normal work hours:

Requests for this period of time will be made to the MAA [Medical Administrative Assistant who is responsible for all administrative (non-clinical) matters during that time frame] on duty at the switchboard who will notify the Boiler Plant Operator (BPO) to recall appropriate staff. The BPO will advise the MAA regarding the action taken. The requester will enter the request on the computer.

Our fact-finding revealed that if staff is not available, discretion is given to you to call for contractor emergency services for which the MAA has approval authority. The record, therefore, indicates that while you participate in the emergency recall and authorization of overtime process discussed in the JGS, you are not delegated the full scope of authority intended in condition #4.

In summary, we find that because all the conditions are not clearly met, your position cannot be granted additional grade credit for shift responsibility.

Summary

In summary, we find that your position is classified properly as Boiler Plant Operator, WG-5402-9.

This decision constitutes a classification certificate under the authority of sections 5103 and 5346(c) of title 5, U.S. Code. This certificate is mandatory and binding on all administrative, certifying, payroll, disbursing, and accounting officials of the Government. It must be implemented no later than the beginning of the sixth pay period following the date of the decision. By copy of this letter, the servicing personnel office must submit a compliance report containing a copy of the action taken with respect to you, e.g., SF-50. The compliance report must be submitted no later than 20 days after the compliance action directed in this decision is taken.

Under the provision of Public Law 93-392, OPM has the responsibility to determine whether jobs are placed properly in classes and grades in conformance with and consistent with published JGS's. When misclassifications are found, we have no choice

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but to direct corrective action. Please be assured that this decision is not intended to reflect on your ability, qualifications, or the quality of your performance. Rather, the decision reflects our evaluation of your duties and responsibilities assigned to your position in terms of a comparison with the appropriate job grading standards.

Please inform your co-appellants of our decision.

Sincerely,



Robert D. Hendler  
Classification Appeals Officer

cc:  
Chief, Human Resources  
Management Service  
Department of Veterans Affairs  
Medical Center

Director, Position Management  
and Classification Service (057)  
Department of Veterans Affairs  
Washington, DC 20420

Chief, CAO  
Washington, DC 20415

BOILER PLANT OPERATOR  
WG 4742-110

I. Principal Duties and Responsibilities:

The Boiler Plant Operator (BPO) is assigned to the plant operations section of the Engineering Service. The BPO is under the supervision of the Operations Foreman and is responsible to him for assignments and execution of duties with work subject to review for quality, completeness and timeliness. The BPO must promote a spirit of cooperation and understanding. The plant operations section is responsible for the maintenance, repair, and safe operation of the boiler plant, incinerator, Johnson Control's DSC 8500 Graphic Control Center, the Simplex Fire Alarm System, the Liquid Oxygen Alarm System, the emergency diesel generator and the efficient dispatch of motor vehicles used for patient and employee travel. The BPO is subject to twenty-four (24) hour call and can be scheduled for any of the four (4) shifts required to meet the needs of boiler plant operations. When the Operations Foreman is not available or when on duty at other than normal business hours, the BPO has full responsibility for the safe and efficient operation of the boiler plant and is responsible for assigned duties/tasks of the shift and any minor emergency repairs that are needed. The BPO is required to perform all safety checks necessary to start up a cold plant and those required on a hot plant. In addition, the BPO must be able to test and analyze the boiler water, boiler feedwater and condensate return water, determine and make the proper corrections to the chemical treatment systems; inspect all operating machinery, recognize potential problems and take corrective action. The BPO must be knowledgeable in pollution control monitoring devices, manual/automatic, microprocessor and computerized controls related to power boilers within the boiler plant and those same types of controls used in operating the emergency diesel generators. The BPO must have the ability to operate, maintain, and make minor repairs to the incinerator and to the emergency diesel generator located in the boiler plant. The BPO shall be responsible for the cleanliness of the power boiler plant and all areas assigned. The BPO may be assigned to other duties on a temporary basis as the workload and resources dictate.

II. Skill and Knowledge:

The Boiler Plant Operator (BPO) must possess the skill and comprehensive knowledge of all operational phases of power boiler plant operations. This shall include but not be limited to: fuel systems, water treatment, steam generation and pollution controls and how they interact for the safe, economical and efficient generation of high pressure steam. The BPO must have knowledge of the principles and theories pertaining to combustion, heat transfer and steam generation in a power boiler plant. They must also apply a thorough knowledge of the structural and operating traits of single fuel and multiple fuel power boilers and related auxiliary pollution control equipment and systems that may include but not be limited to: computerized or microprocessor control systems, fuel handling and distribution equipment and systems, fuel firing mechanisms,

boilerwater, boiler feedwater and condensate return water chemical treatment systems. The BPO must have a thorough knowledge of the steam distribution system, user requirements, casualty control procedures and how to bypass a section of the system to maintain service. The BPO must be knowledgeable in proper maintenance procedures and requirements and able to effect necessary repairs of limited to moderate complexity. The Boiler Plant Operator (BPO) must be skilled in procedures and adjustments necessary to start, operate and maintain a power boiler plant and emergency diesels to meet load demands and maintain efficient levels of combustion and compliance with pollution laws. The BPO must be skilled in the start-up of a cold power boiler plant through normal operation and hot or emergency shutdowns, the operation and adjustment of auxiliary equipment and pollution control equipment. The BPO must be able to read and analyze information from gauges, meters, recorders, analog displays and computer generated data to determine the operational status of the facility and make/recommend adjustments..

The BPO must be able to monitor and make adjustments on a Johnson Control's DSC 8500 Series Computerized Graphic Control Center used for controlling building heat, ventilation, and air conditioning. The BPO must be able to properly monitor a Simplex Fire Alarm System that provides fire protection for the entire facility and the liquid oxygen storage alarm system, responding to any problems as required by current VA policy.

### III. Physical Effort:

The Boiler Plant Operator (BPO) frequently works in confined areas in and around boilers and support equipment (i.e. auxiliary and pollution control equipment). The work requires moderate to strenuous effort and long periods of walking, standing, climbing, bending, and crouching. Workers frequently lift and carry boiler parts and chemical supplies weighing up to 40 pounds unassisted and occasionally items weighing over 40 pounds with the assistance of other workers or weight handling equipment.

### IV. Working Conditions

The BPO works indoors and occasionally outside for short periods where they are subject to prevailing weather conditions. The BPO is subject to high temperatures, constant noise, rotating machinery, soot, dirt, grease, chemicals, oil, and fumes in the work area. The BPO at this level are subject to cuts and abrasions from the use of tools and equipment and burns from acids, caustics, hot water, steam, and contact with piping and boilers. In addition, they work on catwalks, ladders, and scaffolding.

