

Engineer II

FLSA Classification Non-Exempt

Pay Grade National Conference of Fireman and Oilers, Local 956, Pay Group 15

Reports to Supervisor of Operations/Facilities Manager

Accountable for (Job Titles)

Second Shift Engineer I, Custodian I/II/III

Summary

The Engineer II is responsible for the general operation, heating, cooling, ventilation, preventive maintenance, and custodial care of assigned buildings and grounds. The Engineer I is responsible for maintaining a facility/building of square footage of 70,001 – 180,000. Employees in this classification are expected to perform minor carpentry, plumbing, HVAC, or other repair work, along with providing trouble shooting assessments in these areas as related to property damage control, as long as the employee is properly trained to complete such duties and the duties so not legally require completion by a licensed individual. The Engineer II is responsible for scheduling of work assignments, determining work priorities, and staff evaluations of a small staff, including a Second Shift Engineer I and Custodians I/II/III. The Engineer II does not have the supervisory authority to initiate other personnel actions.

Essential functions

- Operates and maintains boilers, heating and cooling along with buildings ventilation systems in accordance with Facilities Management directives, state laws and regulations. Examples of types of tasks in this category are:
 - Fires, operates, and maintains boilers.
 - Adjusts and make minor repairs on thermostats and other HVAC related equipment.
 - Lubricates equipment.
 - Checks belts and replaces if needed.
 - Monitors the system to ensure efficiency.
 - Operates the energy management computer system to maintain and track the preventive maintenance program.
- Responsible for the maintenance and security of school facilities and property. Performs and directs others in performing custodial duties and operating snow removal equipment. Inspects playground equipment, roof and other areas of the building to assess needs and maintenance requirements. Operates and ensures proper operations of current and future building security and technological systems (such as door controls,

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bells, lighting, alarm panels, etc.) Reports needs beyond the capabilities od building personnel.

- Responsible for performing, directing, and monitoring staff activities, schedules and priorities in the cleaning, care, and maintenance of building facilities and grounds in accordance with the standard procedures and guidelines established by Facilities Management and directions of the building principal. Develops staff schedules, makes assignments, adjusts work to meet priorities and deadlines, monitors work performed, provides direction to other operations staff, and evaluates the performance of assigned operation staff excluding initiating personnel actions.
- Conducts preventive scheduled maintenance activities on equipment, motors, fixtures, appliances or system equipment (i.e. boiler, supply fans, exhaust fans, pumps, heating and cooling equipment) within the building. Detects and makes routine repairs and monitors the repairs made by vendors or other District staff.
- Works closely with Facilities Management personnel, the building principal, and school staff on issues pertaining to building safety, security, scheduling issues, building code regulations, capital projects, maintenance projects, custodial or set up needs.
- Submits requests to order and purchase supplies, cleaning materials and equipment necessary to maintain facilities and grounds properly. Monitors and submits purchase requests in accordance with the established building maintenance budget.
- Documents, records or prepares fuel reports, work orders, staff timesheets, inspection sheets, safety procedures or other documentation/reports required or as directed.
- Performs other duties of a comparable level or type.

Minimum Qualifications

- Requires a minimum of a high school diploma or GED
- Two years previous experience as an Engineer I or previously related custodial, facility maintenance and/or boiler operation experience
- Or an equivalent combination of education, training and/or experience necessary to successfully perform the essential functions of the work.

Certification or Licensing Requirements

• First Class C Boilers License in the State of Minnesota

Knowledge Requirements

- Basic fundamentals and operational principles involving combustion, mechanical, electrical and HVAC equipment and systems.
- Operational fundamentals of the equipment and supplies used in custodial and ground maintenance.
- General District administrative procedures, rules and guidelines pertaining to such areas as personnel, purchasing, contract services, safety and risk management.
- State laws and requirements governing licensing and operation of HVAC equipment and systems.
- Basic understanding of supervisory practices and fundamentals.

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Skill Requirements

- Directing, assisting, scheduling, planning, monitoring and evaluating the work of assigned facilities management staff.
- Operating and maintaining heating, cooling and ventilation equipment.
- Detecting, troubleshooting, servicing and performing scheduled preventive maintenance on heating, cooling and ventilation equipment Use of energy management, word processing and electronic spreadsheet software applications.
- Use of hand and power tools.
- Performing custodial and ground maintenance functions.
- Maintaining administrative records and implementing administrative directives (i.e. purchasing, department records, and so forth) in accordance with District and departmental requirements.
- Communicating and collaborating with other District personnel, building administrator(s), building staff, students and teachers in the care, security and maintenance of the facility.

Work environment

Work is typically performed indoors but the job does require some outdoor work in all types of weather conditions. Duties may involve work with chemicals, working with or around mechanical parts, and some exposure to disagreeable fumes or airborne particles.

Physical demands

Medium Work: Exerting up to 50 pounds of force occasionally, and/or up to 20 pounds of force frequently, and/or up to 10 pounds of force constantly to move objects.

Physical Requirements: Indicate according to the requirements of the essential duties/responsibilities					
Employee is required to:	Never	1-33% Occasionally	34-66% Frequently	66-100% Continuously	
Stand					
Walk					
Sit					
Use hands dexterously (use fingers to handle, feel)					
Reach with hands and arms					
Climb or balance		\checkmark			
Stoop/kneel/crouch or crawl			\checkmark		
Talk and hear					
Taste and smell		\checkmark			
Lift & Carry: Up to 10 lbs.					
Up to 25 lbs.					
Up to 50 lbs.					
Up to 100 lbs.					
More than 100 lbs.					

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Vision Requirements: Check box if relevant	Yes	No
No special vision requirements	\checkmark	
Close Vision (20 in. of less)		
Distance Vision (20 ft. of more)		
Color Vision		
Depth Perception		
Peripheral Vision		

Job Classification History:

Description revised by BCC, 1/02. Updated by Facilities Management and HR 2/2021

DULUTH PUBLIC SCHOOLS	TITLE: Engineer II		_	
Title of Immediate	Department:	FLSA Status:		
Supervisor:	Building Operations	Non-Exempt		
Primary -Supervisor of	Facilities Management			Comment [LJK1]: The department name is
Building Operations				Facilities Management
Secondary -Building Principal				
Accountable For (Job		Pay Grade Assignment:		
Titles):		National Conference of		
Fireperson I, Pool Custodian &		Firemen and Oilers, Local No.		
Custodians Custodian II and		956, Pay Group 15		Comment [LJK2]: Old position titles. These
Maintenance Custodian				positions are no longer used OR no longer assigned to the elementary schools.

General Summary or Purpose Of Job:

The Engineer II assumes responsibility for and participates in the general operation; preventive maintenance; custodial care of assigned building and grounds; the heating, cooling and ventilation of the building. Positions assigned to this classification have responsibility for directing a small staff (2-5) comprised of Custodian II's, Pool Custodians and Firepersons I and Maintenance Custodians including the scheduling of work assignments, determining work priorities, coordinating special projects, staff evaluations but does not have the authority to initiate other personnel actions. The Engineer II classification is part of a classification series comprised of four levels. Positions assigned to the Engineer II differ from Engineer I in that the Engineer II is typically assigned facilities of larger square footage (e.g. $\frac{75,00070,001 - 180,000}{1000}$ sq. ft.) and typically require a larger number of staff to maintain the additional square footage or also have to perform maintenance for a swimming pool. The difference between positions assigned to Engineer II vs. Engineer III is primary related to the size of the facility and the greater diversity of staff required to properly maintain and service the needs of the assigned building.

DUTY NO.	ESSENTIAL DUTIES: (These duties are a representative sample; position assignments may vary.)	FRE- QUENCY
1.	Operates and maintains steam boiler heating systems and ventilation systems in accordance with state laws and regulations. • Fires, Operates and maintains Fires boilers • Punches flues • Adjusts thermostats • Greases and oils motors Lubricates equipment • Checks belts and replace if needed • Monitors the system to ensure efficiency • Operates the energy management computer system to maintain and track the preventive maintenance program.	Daily 15%

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Comment [LJK3]: Current job titles for maintenance positions at the Engineer II level elementary schools. Consistent with Collective Bargaining Agreement (CBA) and approved by CS Board.

Comment [LJK4]: See above comments regarding position titles and positions at the schools.

Comment [LJK5]: School size per Article 28 of the CBA

Comment [LJK6]: Elementary schools do not have pools.

Comment [LJK7]: Boilers are no longer steam boilers.

Comment [LJK8]: Boilers no longer need to be "fired". They are operated and maintained. 10-31-18 note: Agreed with union to leave Fires in this duty.

Comment [LJK9]: Old language, Engineers no longer punch flues.

Comment [LJK10]: Update term to lubricate equipment to bring in line with work done.

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DUTY NO.	ESSENTIAL DUTIES: (These duties are a representative sample; position assignments may vary.)	FRE- QUENCY	
2.	Assists in the maintenance of school facilities and property. Assists in performing custodial duties and operating snow removal equipment. Inspects playground equipment, roof and other areas of the building to assess needs and maintenance requirements. Operates door controls and ensure building security system proper operation. Operates bells system, building lighting, master clocks program, work order system, fire and smoke alarm panels, and other building systems (and/or other related current and future technology changes). Reports needs beyond the capabilities of building personnel.	Daily 3045 %	Comment [LJK11]: Security is and has been a duty for a long time, this line formalizes the work in the job description.
3.	Directs and monitors staff activities, schedules and priorities in the cleaning, care, and maintenance of building facilities and grounds in accordance with the standard procedures and guidelines established by Building Operations and directions of the Building Principal. Develops staff schedules, makes assignments, adjusts work to meet priorities and deadlines, monitors work performed and evaluates the performance of staff. Performs other lead responsibilities that do not involve initiating personnel actions.	Daily 10 10%	
4.	Conducts preventive scheduled maintenance activities on equipment, motors, fixtures, appliances or system equipment (i.e. boiler, supply fans, exhaust fans, pumps, heating and cooling equipment) within the building. Detects and makes routine repairs and/or schedules and monitors the repairs make by vendors or other District staff.	Monthly 10%	
5.	Monitors and ensures the swimming pool and related facilities are properly maintained and serviced. Tests and conducts required water tests to ensure proper chemical balances in accordance with Health Department regulations and standards and makes adjustments as needed.	Daily 10%	Comment [LJK12]: Elementary schools no
6.	Works closely with Building Operations personnel, the building principal, and school staff on issues pertaining to building safety, security, scheduling issues, building code regulations capital projects, maintenance projects, custodial or set up needs.	Daily 1015 %	longer have pools. Duty not performed.
7.	Orders and purchases supplies, cleaning materials and equipment necessary to maintain building properly. Monitors and purchases needs in accordance with the established building maintenance budget.	Weekly 5%	
8.	Documents, records or prepares fuel reports, work orders, staff timesheets, inspection sheets, safety procedures or other documentation/reports required.	Daily 10%	





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Performs other duties of a comparable level or type.

As required

Minimum Qualifications: (necessary qualifications to gain entry into the job not preferred or desirable qualifications)

Requires a minimum of a high school diploma and two years previous experience as an Engineer I or related experience directing the custodial and maintenance activities of a large facility; or an equivalent combination of education, training and/or experience necessary to successfully perform the essential functions of the work.

Certification or Licensing Requirements (prior to job entry):

First Class C Boilers License (required)

Class "C" Boiler License in the State of Minnesota (Required) Certified Pool Operators License (Required)

Knowledge Requirements:

Requires knowledge of:

- Basic fundamentals and operational principles involving combustion, mechanical, electrical and HVAC equipment and systems.
- Operational fundamentals of the equipment and supplies used in custodial and ground maintenance.
- General District administrative procedures, rules and guidelines pertaining to such areas as personnel, purchasing, contract services, safety and risk management.
- State laws and requirements governing licensing and operation of HVAC equipment and systems.
- State laws and health guidelines pertaining to the operation and maintenance of swimming pools.
- Basic understanding of supervisory practices and fundamentals.

Skill Requirements:

Skilled in:

- Leading, scheduling, planning, monitoring and evaluating the work of custodial and facility maintenance personnel.
- Operating and maintaining heating, cooling and ventilation equipment.
- Detecting, troubleshooting, servicing and performing scheduled preventive maintenance on heating, cooling and ventilation equipment.
- Maintaining, monitoring and servicing swimming pools in accordance with regulations and standards.
- Use of hand and power tools.
- Performing custodial and ground maintenance functions.
- Maintaining administrative records and implementing administrative functions (i.e. purchasing, department records, etc.) in accordance with District and departmental requirements.
- Communicating and collaborating with other district personnel, building administrator(s), building staff, students and teachers in the care, security and maintenance of the facility.

Comment [LJK13]: Chief C license is not required for the size boilers at the elementary schools. The District is requiring the First Class C Boiler license for the Engineer II position which meets or exceeds the state guidelines. Elementary schools do not have pools, therefore no need for a pool license.

Comment [LJK14]: Elementary schools do not have pools.

Comment [LJK15]: Elementary schools do not have pools.



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duties/responsibilities					
Employee is required to:	Never	1-33%	34-66%	66-100%	
		Occasionally	Frequently	Continuously	
Stan	d	\checkmark		\checkmark	
Wall	k				
Si	it	\checkmark			
Use hands dexterously (use fingers to handle feel				λ	
Reach with hands and arm	s				
Climb or balance	e	\checkmark			
Stoop/kneel/crouch or craw	1				
Talk and hea	r				
Taste and smel	1				
Lift & Carry: Up to 10 lbs.					
Up to 25 lbs					
Up to 50 lbs					
Up to 100 lbs					
More than 100 lbs					

Work is typically performed indoors but the job does require some outdoor work in all types of weather conditions. Duties may involve work with chemicals, working with or around mechanical parts, and some exposure to disagreeable fumes or airborne particles.

General Physical Conditions:

Work can be generally characterized as:

Medium Work: Exerting up to 50 pounds of force occasionally, and/or up to 20 pounds of force frequently, and/or up to 10 pounds of force constantly to move objects.

<u>Vision Requirements</u> : Check box if relevant	Yes	No
No special vision requirements	\checkmark	
Close Vision (20 in. of less)		
Distance Vision (20 ft. of more)		
Color Vision		
Depth Perception		
Peripheral Vision		

Job Classification History:

Description revised by BCC, 1/02. Updated by Facilities and HR 10-04-18, Updated by HR on 10/22/18. Updated by HR on 11/01/18