

## **Engineer I**

### **FLSA Classification**

Non-Exempt

## **Pay Grade**

National Conference of Fireman and Oilers, Local 956, Pay Group 14

## Reports to

Supervisor of Operations/Facilities Manager

### **Accountable for (Job Titles)**

Second Shift Engineer I, Custodian I/II/III

### **Summary**

The Engineer I 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 70,000 or less. 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 I 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 I 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,
  bells, lighting, alarm panels, etc.). Reports needs beyond the capabilities of building



personnel. Oversee nightly operations of the building; coordinate with building principal and various faculty and staff regarding access, heating and ventilation needs for evening activities; assist in monitoring the conduct of students and adults in and around the building.

- 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
- One and one-half years as a Second Shift Engineer or previous 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.



## **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.

<u>Physical Requirements</u> : 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				$\sqrt{}$
Walk				$\sqrt{}$
Sit		√		
Use hands dexterously (use fingers to handle, feel)				V
Reach with hands and arms				$\sqrt{}$
Climb or balance		√		
Stoop/kneel/crouch or crawl				
Talk and hear				$\sqrt{}$
Taste and smell				
Lift & Carry: Up to 10 lbs.				$\sqrt{}$
Up to 25 lbs.				$\sqrt{}$
Up to 50 lbs.			$\sqrt{}$	
Up to 100 lbs.				
More than 100 lbs.				_



Vision Requirements: Check box if relevant	Yes	No
No special vision requirements		
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



TITLE: Engineer I

SCHOOLS		
Title of Immediate	<b>Department:</b>	FLSA Status:
Supervisor:	Building Operations	Non-Exempt
Primary - Supervisor of	Facilities Management	
Building Operation		
Secondary - Building Principal		
Accountable For (Job		Pay Grade Assignment:
Titles):		National Conference of
Custodian I, II and Fireperson I		Firemen and Oilers, Local No.
Custodian II and Maintenance		956, Pay Group 14
Custodian		

## **General Summary or Purpose Of Job:**

The Engineer I 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 (21-3) and for maintaining a smaller facility/building staffed with Custodian 12s, 112s and Fireperson I Maintenance

Custodians including the scheduling of work assignments, determining work priorities, coordinating special projects, staff evaluations but do not have the authority to initiate other personnel actions as a supervisor. The Engineer I classification is part of a classification series comprised of four levels. Positions assigned to the Engineer I differ from Engineer II in that the Engineer II is typically assigned facilities of larger smaller square footage (e.g. 75,000 – 200,000 – 70,000 sq. ft.) that typically requires a larger a lesser number of staff to maintain. the additional square footage or have the additional responsibility for a swimming pool care, operation and maintenance.

DUTY NO.	<b>ESSENTIAL DUTIES:</b> (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, Fires boilers Operates and maintains 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%

**Comment [LJK1]:** The department name is Facilities Management

**Comment [LJK2]:** Custodian I and Fireperson I are old titles. These positions are no longer used OR no longer assigned to the elementary schools.

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]:** One Engineer I level elementary school has one (1) staff. Change to reflect current staffing.

**Comment [LJK5]:** See above comments regarding position titles and current positions at the schools.

**Comment [LJK6]:** Edits to make language clearer and consistent with CBA. Square footage school sizes are per Article 28 of the CBA.

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

**Comment [LJK8]:** Boilers no longer need to be "fired". They are operated and maintained.

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

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



TITLE: Engineer I

DUTY NO.	<b>ESSENTIAL DUTIES:</b> (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	Daily 45%
	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.	
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 510%
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.	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 10%
6.	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%
7.	Documents, records or prepares fuel reports, work orders, staff timesheets, inspection sheets, safety procedures or other documentation/reports required.	Daily 10%
8.	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)

**Comment [LJK11]:** Security is and has been a duty for a long time, this line formalizes the work in the job description.



TITLE: Engineer I

Requires a minimum of a high school diploma and five years previous related custodial, facility maintenance and boiler operation experience and a minimum of one year lead experience over a custodial or maintenance crew/staff; 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

Class "C" Boiler License in the State of Minnesota (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.
- Use of hand and power tools.
- Performing custodial and ground maintenance functions.
- Maintaining administrative records and implementing administrative functions (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.

**Comment [LJK12]:** 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.



TITLE: Engineer I

<u>Physical Requirements</u> : Indicate according to the requirements of the essential duties/responsibilities				
Stand		√		√
Walk				V
Sit		<b>√</b>		
Use hands dexterously (use fingers to handle, feel)				V
Reach with hands and arms			7	V
Climb or balance		$\sqrt{}$		
Stoop/kneel/crouch or crawl				
Talk and hear				<b>√</b>
Taste and smell		√		
Lift & Carry: Up to 10 lbs.				$\sqrt{}$
Up to 25 lbs.				V
Up to 50 lbs.			1	
Up to 100 lbs.		V		
More than 100 lbs.		$\sqrt{}$		

### **General Environmental Conditions:**

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.

Vision Requirements: Check box if relevant			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.