**Department of Human Resources**

**OPSEU Job Description**

**Job Title:** Preventative Maintenance Team Leader

**Job Number:** SB-078

**NOC:** 7301

**Band:** 9

**Department:** Facilities Management

**Supervisor Title:** Manager, Mechanical & Electrical Services

**Last Reviewed:** August 25, 2020

**Job Purpose**

Reporting to the Manager, Mechanical & Electrical Services, this position will provide operational and technical support to the MEM dept. It will primarily lead and work alongside a team of assistant technicians in carrying out scheduled preventative maintenance procedures on a wide range of HVAC & related mechanical/electrical systems. All work will be assigned by and undertaken under the direct supervision of the Department Supervisor.

**Key Activities**

1. Establish preventative maintenance routines for all M&E systems and related equipment. Input base data into the web enabled preventative maintenance system (Webworks). For each system or item of equipment determine best practise routines for frequency of inspection/maintenance; task list; spare parts etc. Items of plant would include but not be limited to - Chillers; Boilers; AHU’s; Fan Coils; Exhaust/Intake Fans; Dampers; Compressors; Water treatment systems. Fire & life safety equipment, Uninterruptable Power Systems, etc.
2. Prepare PM monthly, quarterly and annual reports for review by manager and senior administration.
3. Set up design & briefing meetings with Architects; Engineers; Contractors and Suppliers for minor M&E projects.
4. Handle routine data requests from Federal, Provincial, Municipal authorities and utility suppliers as needed.
5. Carry out data and product research on potential equipment, services, systems or suppliers contemplated for use by MEM dept. Check references, operational history, suitability and best practises.
6. Work with Manager, Mechanical & Electrical Servicesand Sustainability Coordinator as required on the implementation and monitoring of energy saving initiatives.
7. Monitors, adjusts, reschedules, by central computer, building environmental and complex laboratory control systems (including BSL III laboratory) and field checks relating to heating, cooling, domestic hot water, ventilation, pumping and digital control panels to minimize the likelihood of comfort complaints and ensure the effective use of energy.
8. Reschedule, and resets heating, cooling, ventilation systems using room bookings information provided by staff outside the department.
9. Dispatched throughout the University to respond to both Emeregency, Planned and Routine fixit requests. May assess situation and resolve, assign to PMA’s or escalate to Technicians or Manager.
10. Carries out re-lamping in designated areas. May assist in 110v ballast Replacement. May support/assist in the area of electronic issues, which may include the preventive maintenance of electrical equipment and Variable Frequency Drives.
11. Responsible for carrying out testing and adjustment of chemical additives to HVAC Systems, this includes boilers, Reverse Osmosis Systems and adjustment to the chemical treatment and feed system computerized panel.
12. Completes scheduled and on demand pneumatic preventive maintenance to pneumatic systems. Including adjustments/testing/repairs and replacement of components. Maintenance and operation of generators.
13. Work with Risk Management Office on issues pertaining to Code Compliance within the MEM department for items such as, but not limited to, restricted space entry; hot work policies; fall arrest; lock out/tag out procedures.
14. Schedule & assign PM work orders to MEM Assistant technicians; monitor completion of work orders and ensure PM routines are carried out efficiently.
15. Ensure an adequate inventory of spare parts is maintained for all scheduled PM routines e.g. filters, drive belts, oils and lubricants, lamps/ballasts etc.
16. Assist with RFP’s and recommend potential savings to be had related to purchased maintenance supplies.
17. Participation in planning meetings in an advisory role.

**Analytical Reasoning**

*Indicate degree of complexity or difficulty of thinking and reasoning required by the job. Provide a relevant work example that is typical of roles and responsibilities of the job (i.e. not an occasional duty).*

* Position involves both in-field and an abstract reasoning. Situations must be assessed when working directly with equipment, and when planning work to be performed in the coordination role.
* Chemical concentration amounts are critical in systems. (Nitrate, glycol, steam boilers, water softeners etc.)
* Trouble-shooting in ‘runner’ role. Reporting back on malfunctioning equipment.
* Determining whether a piece of equipment is running properly.

**Decision Making**

*Indicate the degree of freedom to exercise initiative or act independently in making day- to-day decisions. Provide a relevant work example that is typical of roles and responsibilities of the job (i.e. not an occasional duty).*

* First response (runner) role requires many field decisions are made independently.
* Chemical additive concentrations, organizing sequence of work orders to optimize efficiency, purchase of proper parts (lamps, size, colour, wattage). Determine safest way to perform work. Ensure equipment appears to be serviced at appropriate intervals and report back to Supervisor.
* Analyzing, prioritizing and delegating preventive maintenance work.

**Impact**

*Indicate the impact or consequence to the department or University of typical actions or decisions taken by the job incumbent. Provide a relevant work example that is typical of roles and responsibilities of the job (i.e. not an occasional duty).*

* Impact of incorrectly maintained, non-operational HVAC Systems
* Incorrect chemical concentrations can lead to severe/costly damage that may result in discomfort and/or business interruption.
* Work performed must be completed safely at all times given risks associated with pressure, electrical, moving equipment.
* It is critical to maintain systems correctly to avoid serious premature failures. Failures are expensive and, at times, dangerous. Poor maintenance can result in major incidents being uninsurable.

**Education**

Trade certificate in a Mechanical, Electrical or other trade discipline related to HVAC & building systems,

**Experience Required**

* Four to six years of directly related experience
* Must have and maintain at all times an Ontario Drivers Licence.
* Proficient in Word, Excel and Facilities Preventative Maintenance Software systems (Maximo, Webworks, etc.)

**Responsibility for the Work of Others**

*Indicate whether the incumbent is directly or indirectly responsible for the work of others. Provide the title of the position(s) as well as an example of how the incumbent is responsible for the work of others on a daily basis. Specifically, indicate whether the position has responsibility for hiring and supervision of student workers.*

Indirect Responsibility for the Work of Others

Lead Hand to: Preventative Maintenance Assistants

Students (if applicable) would include hiring and direct supervision

**Communication**

*Indicate the title(s) of individuals internal and external to the University that the incumbent communicates with on a regular basis. Provide a brief description of the purpose for communicating with these individuals.*

Internal

* First-response may require immediate communications with impacted students, staff, employees.
* Emergency response
* Ensuring that any shut-down/start-up of equipment through the Building Automation System is thoroughly communicated to avoid injury or damage.
* Frequent dispatch from fixit desk throughout the day.
* Security - matters pertaining to security
* Physical Resources scheduler
* Custodial Coordinator - supplies
* Physical Resources Staff
* Assist staff and students with concerns, directions, etc.
* External contractors – provide guidance and assistance

External

* Students/General Public - guided tours and general information
* External parts & safety equipment suppliers
* Gaining access to building spaces while employees/students/faculty are on-site

**Motor/ Sensory Skills**

*Indicate the level of proficiency or precision in motor or sensory skills required by the job. Examples include but are not limited to: small/large movement to operate machinery; coordinated movement; equilibrium to maintain balance; dexterity to grasp, move, assemble objects or operate equipment; hearing, sight, touch, smell, taste. Provide a brief description of tasks performed that require motor/sensory skills.*

* Computer for extended periods
* Fine motor skills – operate hand & power tools
* Gross motor skills – driving Trent vehicles, carry tools and equipment to work site
* Equilibrium – dexterity to climb ladders
* Hearing - To detect unusual sounds under normal operating conditions, use telephone to consult with internal and external contacts
* Smell - Detect overheating of equipment
* Touch - Part of inspection demands feeling bearing for overheating & unusual mechanical vibrations
* Visual assessment of equipment.

**Effort**

*Indicate the physical and/or mental demands of the position in the ordinary course of performing the role. Examples include but are not limited to: lifting, moving, carrying, pushing/pulling, reaching, kneeling, remaining motionless, sustained concentration or focus. Provide a brief description of the tasks performed that are physically and/or mentally demanding.*

Mental

* Sustained Attention - Must be constantly aware of sound, smell, etc., to detect trouble, reviewing and assignment of Work Orders to PMA’s
* Stress - Working with aging equipment that may or may not work as it is supposed to
* Listening - Process information on a particular job
* Developing procedures, while on-site, to ensure work is performed safely.

Physical

* Heavy Lifting - Removing ice and debris, shoveling snow from roofs, paths and driveway, etc., when performing maintenance on equipment, carrying oil, repairing belts, changing filters
* Extended reaching - Awkward positioning to check bearings and grease fittings and cleaning racks
* Walking/Stairs - Accessing individual job sites
* Lifting - Electric motors, pipes, shop tools, chemical pails & drums
* Fall protection equipment - Being tied off working close to ledges
* Risk of electrocution (Arc Flash)
* Climbing Ladders – fixed and portable

**Working Conditions**

*Indicate any physical and psychological conditions of the position that make the job unpleasant, disagreeable and/or hazardous to health and well-being. Describe the nature, frequency and duration of exposure.*

Physical

* Danger - Working on the roof to clear snow in the winter and on the catwalk exposed to slippery and dangerous conditions. Working around operating machinery, including rotating equipment. Potential consequences are personal injury or death.
* HVAC & associated machinery - Dirty, dusty, greasy and loud environment
* Weather - Exposure to severe winter weather conditions and extreme heat in summer
* Confined space - Working in underground tunnels, mechanical rooms, inside air handlers
* Noise - Working in close proximity to loud machinery and tools
* Danger - Working around and testing high pressure steam boilers, handling of toxic chemicals
* Insect & animal exposure - Bees, wasps, hornets, spiders & snakes
* Potential Arc-Flash

Psychological

* Supplies - Lack of tools
* Deadlines, time pressure - Taking responsibility to ensure deadlines are met
* Quick decision making required when first responding.
* Emergency response – stress, upset staff