MECHANICAL SYSTEMS ENGINEER

GENERAL RESPONSIBILITIES
Under the leadership of the Director of School Plant, the position is responsible for overseeing the mechanical systems and energy management initiatives for the school division in support of department and division goals.

ESSENTIAL TASKS
(These are intended only as illustrations of the various types of work performed. The omission of specific duties does not exclude them from the position if the work is similar, related, or a logical assignment to the position.)

- Work closely with contracted engineering firms to review and evaluate design work.
- Measure the performance of mechanical systems by analyzing and interpreting data.
- Analyze the infrastructure of the school division’s facilities including electrical, mechanical, HVAC, control, water, wastewater, envelope, solid waste, irrigation and lighting systems; recommend field improvement measures to equipment and components to minimize utility costs.
- Plan, organize and implement the school division’s utilities management program.
- Review specifications and drawings for construction and renovation projects.
- Coordinate the mechanical/electrical design, and evaluate major equipment changes in buildings.
- Advise the mechanical, electrical, and HVAC trades staff on the proper operation of energy control systems, energy conservation methods/procedures, and field improvement measures.
- Participate in final on-site inspections to ensure consistency with the division’s energy management program and efficient operation of systems.
- Conduct building audits and studies; provide recommendations for improvement and savings opportunities.
- Coordinate with the Office of Facilities Planning & Construction in the management of the Division’s Energy Performance Contract work.
- Work collaboratively with the Office of Facilities Planning on the commissioning and recommissioning of buildings.
- Establish utility usage benchmarks and outline cost savings targets and objectives.
- Supervise and evaluate assigned staff, to include HVAC Specialists.
- Evaluate historic and present energy consumption data; compile regular and periodic energy reports/updates on the division’s utility costs and consumption.
- Coordinate the energy awareness program and training of school division personnel as appropriate.
- Manage the Energy Star program and work towards recognition for the division in this and similar programs.
- Act as an instructional resource with energy sustainability and applicable Science, Technology, Engineering, and Math (STEM) educational outreach.
- Research new and innovative technologies/methodologies within the energy industry, monitor state/national energy policy trends, and make appropriate recommendations.
- Keep abreast of changing trends and information regarding local, state, and federal regulations that may affect utility prices and availability.
- Perform other duties as assigned.

KNOWLEDGE, SKILLS AND ABILITIES
Must have a thorough knowledge of mechanical engineering fundamentals and mathematics in order to perform various job functions (e.g., design, construction support, design review, etc.). Must have a knowledge of terminology, various codes, safety orders, rules, laws, regulations, departmental policies and procedures, governing the design and installation of mechanical equipment. Must have the ability to use logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems. Ability to apply forecasting and analytical techniques to calculate and project future energy costs for budgeting purposes. Ability to communicate both orally and in written form, as well as, present information clearly. Must be skilled in systems evaluations to determine measures or indicators of how it should work and how changes in conditions, operations, and the environment will affect outcomes. Skilled in the use of Computer Maintenance Management Systems (CMMS), utility management software and Microsoft Office.
EDUCATION AND EXPERIENCE

Bachelor’s degree in mechanical engineering required. Five (5) years field experience preferred in the operation and understanding of mechanical systems. Must have or be able to obtain the Certified Energy Manager (C.E.M.) certification within 18 months of hire date and Professional Engineering License within 3 years of hire date. A comparable amount of training and experience maybe substituted for the minimum qualifications.

PHYSICAL REQUIREMENTS

Some standing, walking, moving, climbing, carrying, bending, kneeling, crawling, reaching, handling, pushing, and pulling. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential tasks.

SPECIAL REQUIREMENTS
Possession of a valid driver’s license