MAINTENANCE TRADES IV (HVAC)

POSITION: Maintenance Trades IV (HVAC)

REPORTS TO: Director of Maintenance

LOCATION: Department of Maintenance
Division of Supporting Services

NATURE OF WORK:
The purpose of this position is to perform maintenance, repair, renovation and replacement of HVAC systems to include water chillers, and associated equipment, fan coil units, unit ventilators, variable refrigerant systems, self-contained air conditioning / heating units from .5 to 45 tons, heat pumps, water based cooling towers, Siemens, Johnson Controls Control Incorporate control systems and heating hot water and steam boilers (under 15 p.s.i.), special events preparation for the school system.

ESSENTIAL FUNCTIONS:
▪ Perform all work requests and preventive maintenance to HVAC systems, and heating hot water and steam boiler to task completion;
▪ Exercise a working knowledge of tools, equipment, and materials utilized in HVAC systems and heating hot water and steam boiler maintenance and repair;
▪ Ability to assess tasks to determine equipment, supplies, materials and resources needed to perform duties affecting HVAC systems and heating hot water and steam boiler maintenance and repair;
▪ Provide input in the development of technical specification, and preventive maintenance procedures related the systems maintenance, repair and replacement;
▪ Disassembles and assembles boilers for repairs, inspections, and annual cleaning;
▪ Diagnose problems and make repairs of electronic and pneumatic control devices;
▪ Maintain and repair, hot water, steam and chilled water distribution systems and components;
▪ Lifting and carrying heavy objects. Works at elevated heights;
▪ Able to follow verbal and written instructions;
▪ Consistent and reliable attendance;
▪ Troubleshoot and repair problems in various H.V.A.C. systems such as air conditioning, boilers, hydraulic systems;
▪ Performs basic fluid, heat, and lighting load calculations for the modification of distribution HVAC systems;
▪ Read, understand, and interpret blueprints, schematics, technical specifications for distribution, electrical, cooling and heating systems; and
▪ Troubleshoot and repair major cooling and heating equipment, i.e. water and air cooled chillers, water tube and fire tube boilers.

DUTIES AND RESPONSIBILITIES:
▪ Effective oral and written communication skills to effectively express and document issues, daily assignment, and required reports;
▪ Ensures equipment, materials, and resources are available and in accordance with daily assignments;
▪ Establish and maintain basic services and supplies to accomplish daily assigned tasks;
▪ Manages the completion of work orders, preventive maintenance and repair/replacement/ renovation projects in specified time frames;
Completes all required records, reports and documentation for tasks assigned;
Must have a broad knowledge of several trades to responsibility, expeditiously and effectively complete maintenance work orders and projects;
Ensures that work is executed and accomplished in compliance with building, health and safety codes, standards, policies, regulations, and contract requirements;
Ability to use a computerized work order system and other basic office computer and software to coordinate, organize, schedule, monitor and direct the work of the tradesmen;
Troubleshoots, diagnoses, and repairs all light commercial HVAC systems. To include support, controls, electrical and hydraulic, mechanical systems;
Troubleshoots, diagnoses, and repairs school heating systems, including boilers, pumps, air handlers, unit ventilators, and piping;
Performs scheduled preventive maintenance;
Leads or instructs employees as delegated;
Prepares daily log of work completed and inspections made; maintains shop inventory records; orders parts, as needed;
Responds to emergency duty assignments; and
Perform other duties as assigned.

QUALIFICATIONS:
Graduation from high school (or GED) is desirable;
Minimum of five (5) years of experience in the repair and maintenance of a wide variety of HVAC systems; or any combination of experience and training that would provide the following knowledge, abilities, and skills:
➢ Considerable knowledge of the methods, practices, and techniques used in replacing, repairing, and maintaining air conditioning, heating and refrigeration units;
➢ Considerable knowledge of the use and care of equipment and tools required for the repair, installation, and maintenance of water, heating and refrigeration units;
➢ Considerable knowledge of the properties and safety standards of various refrigerants and pressure vessels;
➢ Ability to troubleshoot and diagnose cooling plant problems and to make effective repairs;
➢ Ability to read, write, and to follow instructions;
➢ Ability to comply with all safety rules and regulations in relation to the air conditioning trade;
➢ Skill in the use of tools and equipment associated with air conditioning and refrigeration repairs;
➢ Experience in troubleshooting pneumatic and electronic controls;
➢ Basic knowledge of fire and security systems; and
➢ Knowledge of the operations of facilities management systems.
Possess and maintain a valid driver’s license in accordance with Board of Education Policy and Regulation;
Universal CFC certificate preferred, CFC Type I and II required; and
Maryland State Stationary Engineering License Grade 1-3, preferred.

TERM OF EMPLOYMENT:
Full-time twelve-month position.

SALARY GRADE RANGE:
The salary for this position will be based on the EASMC-ESP salary schedule for twelve-month eight hours employees – Range 15.

BARGAINING UNIT: EASMC-ESP
MAINTENANCE TRADES IV (ENGINEERING TRADES) -Plumber

POSITION: Maintenance Trades IV (Engineering Trades) - Plumber

REPORTS TO: Director of Maintenance

LOCATION: Department of Maintenance

NATURE OF WORK:
Under the general supervision of the Engineering Trades Foreman, supervises and performs skilled work as a Plumber in the maintenance and repair of plumbing, heating, and cooling systems in school buildings and facilities. This is highly skilled work involving responsibility for the performance of difficult and specialized plumbing maintenance, installation, and repair operations. General assignments are received from the Foreman and Team Leader, but the incumbent is expected to plan details of each job and carry it to completion without immediate supervision. Work involves independent judgment in assigning duties and selecting plumbing methods to meet job requirements. Supervision is often exercised over the work of other Department of Maintenance staff.

ESSENTIAL FUNCTIONS:
● Perform all work requests and preventive maintenance to plumbing and heating systems;
● Exercise a working knowledge of tools, equipment, and materials utilized in plumbing systems, heating hot water and steam boiler maintenance and repair;
● Ability to assess tasks to determine equipment, supplies, materials, and resources needed to perform duties affecting plumbing systems and heating hot water and steam boiler maintenance and repair;
● Provide input in the development of technical specification, and preventive maintenance procedures related the systems maintenance, repair, and replacement;
● Lifting and carrying heavy objects. Works at elevated heights;
● Able to follow verbal and written instructions;
● Consistent and reliable attendance;
● Troubleshoot and repair problems in various plumbing systems
● Read, understand and interpret blueprints, schematics, technical specifications

DUTIES AND RESPONSIBILITIES:
● Participates in laying out, planning, servicing, and scheduling the maintenance program for water and sewer systems;
● Installs and repairs hot and cold water, oil, steam, or gas pipes and makes all necessary connections per code;
● Installs and repairs water supply piping and sewer mains;
● Installs and repairs fixtures such as lavatory facilities, backflow preventers, pumps, drinking fountains, sprinkler systems, kitchen equipment, and boilers;
● Repairs, cuts, and threads pipes and valve traps in heating and plumbing systems;
● Intermittently assists skilled workmen or related trades in general construction and maintenance work;
● Instructs, supervises, and documents the work of other Plumbers, Trades Helpers, and
Apprentices in maintenance and repair of systems;
- Enters materials, labor hours, status, and details of work done into online work order management system;
- Fully implements the evaluation system for all Plumbers, Trades Helpers, and Apprentices; and
- Performs other duties as assigned.

QUALIFICATIONS:
- Graduation from high school (or GED) is desirable;
- Minimum of five (5) years of experience in the repair and maintenance of a wide variety of plumbing-related systems;
- Requires the ability to follow oral and written instructions;
- Backflow testing certification preferred (must obtain within 1st year of employment);
- Must be able to lift 75lbs;
- Possession of a valid Maryland driver’s license;
- Meet the following Board of Education requirements in order to operate a Board of Education – Owned Vehicle (Board of Education Policy EEEA):
  - The applicant must have no more than four current points. (Out of State points will be converted to equivalent points under Maryland Law.)
  - The applicant must not have been convicted, pleaded guilty or nolo contendere, or received a probation before judgment or stet docket entry for any alcohol or controlled substances offense under federal or state law for a minimum of five (5) years prior to the use of a Board-owned vehicle.

TERM OF EMPLOYMENT:
Full-time twelve-month position.

SALARY GRADE RANGE:
The salary for this position will be based on the EASMC-ESP salary schedule for twelve-month eight hours employees – Range 15

BARGAINING UNIT: EASMC-ESP

Updated 01.2023
MAINTENANCE TRADES IV (VEHICLE MECHANIC)

POSITION: Maintenance Trades IV (Vehicle Mechanic)

REPORTS TO: Director of Maintenance

LOCATION: Division of Supporting Services

NATURE OF WORK:
Assumes responsibility for the expeditious and effective completion of all assigned transportation projects. Position requires the ability to determine stock levels of materials and supplies, capability to assess and maintain adequate supplies for scheduled projects and keeping abreast of the newest materials and techniques. Must possess the ability to maintain daily, weekly, and monthly documentation within this area, ability to estimate project requirements, and ability to recommend and execute desirable vehicle corrections. Assures daily that work meets federal, state, and local requirements. Provides daily input to Director of Maintenance or designee.

ESSENTIAL FUNCTIONS:
• Plans and performs routine maintenance, repairs, and inspections of buses;
• Must be able to work flexible hours;
• Lifts and carries heavy objects and works above normal heights;
• Assist with bus inspection reports;
• Prepares detailed material lists and general scope of work for bus repairs;
• Communicates verbally and in writing with school staff and supervisors concerning bus repairs, inspections, and maintenance;
• Ability to follow verbal and written instructions;
• Consistent and reliable attendance;
• Troubleshoot and repair problems in various automotive systems such as air conditioning, brakes, and drive-train systems;
• Read, understand, and interpret blueprints, schematics, technical specifications for vehicles such as passenger vehicle, buses, etc.

DUTIES AND RESPONSIBILITIES:
▪ Performs basic preventative maintenance such as oil change, replacement of filters, belts, hoses, and lubrication on diesel and gasoline engines;
▪ Replace components as needed or prescribed;
▪ Cleans, inspects, replaces all drive lines and suspension components;
▪ Performs minor engine tune-up;
▪ Mounts and balances tires;
▪ Repairs minor electrical problems involving charging systems, lights, and fuses;
▪ Repairs and maintains small two and four stroke engines;
▪ Inspects and repair components of brake system, including replacement of pads, rotors, drums, and power units;
▪ Replace transmission using remanufactured or new assemblies;
▪ Diagnose and repair fuel system problems;
▪ Able to use troubleshooting procedures in shop manuals and computer assisted;
▪ Knowledge and use of basic electronics in repair of various components and systems;
- Organize automotive repair shop and maintain inventory of needed supplies;
- Diagnose and repair major power-train failures;
- Rebuild engine using remanufactured or new components;
- Able to diagnose and repair diesel engines;
- ASE equivalent competency in the following areas:
  < Electrical systems
  < Engine repair
  < Brake systems
  < Suspension and steering
  < Heating and air conditioning for vehicles
  < Emission controls
  < Fuel systems
- Performs scheduled preventative maintenance;
- Prepares daily log of work completed and inspections made;
- Maintain shop inventory records, orders parts as needed;
- Responds to emergency duty assignments;
- Ability to use shop mathematics, read drawings, computer, and specifications;
- Capable of expending considerable physical effort to lift, position, store and transport heavy parts and materials;
- Capable of enduring exposure to undesirable elements such as rain, snow, extremes in temperature, mud, dust, etc.;
- Performs other duties as assigned.

QUALIFICATIONS:
- Graduation from high school or GED
- Five years of auto repair and maintenance experience in the installation, repair and maintenance of gas and diesel vehicles; or any combination and training that would provide the knowledge, abilities, and skills. (If so, your work experience on the application must reflect this experience.)
- Ability to use shop mathematics, read drawings, computer, and specifications;
- Capable of expending considerable physical effort to lift, position, store and transport heavy parts and materials;
- Capable of enduring exposure to undesirable elements such as rain, snow, extremes in temperature, mud, dust, etc.;
- Have not more than two current points on the individual's driving record and satisfactory past driving record" (COMAR 13A.06.07.06 A (2)
- Have no criminal history which would be a disqualifying condition under COMAR 13A.06.07.07C or an action under COMAR 13A.06.07.07D. (COMAR 13A.06.07.06 A. (4)
- Obtain and maintain a Maryland Class B CDL with a school bus endorsement within six months of employment; and
- Ability to obtain a Class B CDL with passenger, school bus, and air brake endorsements and ASE S1-S7 (School Bus Certification) within 6 months of employment.

TERM OF EMPLOYMENT:
Full-time twelve-month position.

SALARY GRADE RANGE:
The salary for this position will be based on the EASMC-ESP salary schedule for twelve-month eight-hour employees – Range 15.

BARGAINING UNIT:
EASMC-ESP