

ST. MARY'S COUNTY PUBLIC SCHOOLS  
EDUCATION SUPPORT PROFESSIONAL POSITION DESCRIPTION

**ENGINEERING TRADES SPECIALIST – ALARM SPECIALIST**

**POSITION:** Engineering Trades Specialist - Alarm Specialist

**REPORTS TO:** Director of Maintenance

**LOCATION:** Division of Supporting Services

**NATURE OF WORK:**

Assumes responsibility for all alarming devices and security systems within St. Mary's County Public Schools. Work involves scheduling, establishing necessary priorities, performing preventive maintenance tasks, and responding to malfunctioning devices. Position requires the ability to install, troubleshoot, service and repair multiple types of fire and burglar systems. Must possess and implement knowledge based on Life Safety requirements. Must possess the ability to estimate project requirements and recommend desirable modifications and enhancements to system. Analyzes on a daily basis all incoming alarm records providing responsive action, and in addition, provides monthly reporting to immediate supervisor.

**ESSENTIAL FUNCTIONS:**

- Ability to professionally relate to and collaborate with co-workers, students and community members
- Ability to understand and maintain confidentiality
- Ability to use technology effectively to complete tasks
- Ability to report to work daily and on time
- Ability to organize, supervise, coordinate and establish priorities of tasks to be completed
- Ability to work independently in the absence of detailed instructions and to follow complex oral and/or written instructions
- Ability to communicate courteously and tactfully with staff, students, parents and the community in a timely manner
- Ability to work under pressure
- Ability to perform manual and physical labor
- Possess knowledge of fire protection systems (wet, dry and chemical), fire and burglar alarm systems, life safety codes, and AC/DC systems
- Possess excellent time management skills and ability to take initiative and make decisions within assigned responsibility in a challenging, fast-paced professional environment and be flexible in work responsibilities and hours
- Possess knowledge of the programs, policies, and procedures of the St. Mary's County Public School System

**DUTIES AND RESPONSIBILITIES:**

- Uses computerized work management system to coordinate, organize, schedule, monitor all fire and burglar alarm service requests and needs
- Coordinates inspections, troubleshooting, repairs and programming of fire, burglar-alarming systems
- Services, repairs, adjusts and monitors fire and burglar alarm systems, electric scoreboards, and electronic clock systems for automatic control of bells and clocks within all school facilities
- Reads and interprets wiring diagrams, tests circuits using a variety of standard and specialized test equipment
- Responds to school sites and/or facilities when equipment failure or troubles are indicated
- Performs preventive maintenance on relative equipment
- Estimates labor and material for all alarm system projects

- Coordinates and inspects, through interaction, work performed by contractors in relationship to alarm systems
- Assists in review of blueprints and schematics for new school construction, as well as, preparing and monitoring punch lists for contractor compliance
- Provides input to Foreman on annual budget requirements
- Works daily with Foreman to assess and prioritize work requests for major/minor repairs or renovations
- Maintains and submits work requests
- Prepares requests for material purchases
- Reports on computers and statistical surveys of alarming input
- Follows written and verbal instructions to pursue execution of assigned responsibilities
- Responds to after hour emergency alarms
- Analyzes daily all alarm records and requests to set up corrective service calls and establish work priorities
- Maintains and repairs the following systems: Airtech/Moose, Edwards, Radionics, ADEMCO, DSC, Silent Knight, Kidde, Notifier, Simplex or Similar alarming systems. This will include telephone and/or cable equipment with which designated systems will interface
- Troubleshoots and diagnoses related problems, and makes minor repairs; repairing and/or replacing units as required
- Meets and coordinates with school administrators and staff for system repairs
- Ensures that assigned work is executed and accomplished in accordance with Life Safety, building, health and safety regulations
- Provides written and verbal input to immediate supervisor on fire and burglar repairs and service
- Maintains daily inventory, as well as, ordering of parts required to complete required tasks.
- Provides input to immediate supervisor on required vendors needed for support
- Performs other related and non-related job duties as assigned

**QUALIFICATIONS:**

Required:

- High School Diploma/GED
- Two (2) years experience in electronic maintenance and repair of fire and burglar alarm systems
- Valid driver's license with no more than four (4) Maryland current points (out of state points will be converted). The applicant must not be 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 Board-owned vehicle.(Board Policy EEBA)

Preferred:

- High school courses preferably supplemented by completion of a recognized apprenticeship program in the trade

**TERM OF EMPLOYMENT:**

Full-time twelve-month position.

**SALARY GRADE RANGE:**

The salary for this position will be based on EASMC-ESP salary schedule for twelve-month eight-hour employees – Range 16.

**BARGAINING UNIT ELIGIBILITY:** EASMC-ESP

Updated 07.2024

ST. MARY'S COUNTY PUBLIC SCHOOLS  
EDUCATION SUPPORT PROFESSIONAL POSITION DESCRIPTION

**ENGINEERING TRADES SPECIALIST - HVAC**

**POSITION:**            **Engineering Trades Specialist - HVAC**

**REPORTS TO:**       **Director of Maintenance**

**LOCATION:**           **Department of Maintenance**

**NATURE OF WORK:**

This is a skilled trades person 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.).

**ESSENTIAL FUNCTIONS:**

- Ability to professionally relate to and collaborate with co-workers, students, and community members
- Ability to understand and maintain confidentiality
- Ability to use technology effectively to complete tasks
- Ability to report to work daily and on time
- Ability to organize, supervise, coordinate and establish priorities of tasks to be completed
- Ability to work independently in the absence of detailed instructions and to follow complex oral and/or written instructions
- Ability to communicate courteously and tactfully with staff, students, parents, and the community in a timely manner
- Ability to work under pressure
- Ability to lift and carrying heavy objects
- Ability to work at elevated heights
- Ability to comply with all safety rules and regulations in relation to the air conditioning trade
- Possess excellent time management skills and the ability to take initiative and make decisions within assigned responsibility in a challenging, fast-paced professional environment and be flexible in work responsibilities and hours
- Possess knowledge of the programs, policies, and procedures of the St. Mary's County Public School System

**DUTIES AND RESPONSIBILITIES:**

- Performs all work requests and preventive maintenance to HVAC systems, and heating hot water and steam boiler to task completion
- Performs basic fluid, heat, and lighting load calculations for the modification of distribution HVAC systems
- Possesses a working knowledge of tools, equipment, and materials utilized in HVAC systems and heating hot water and steam boiler maintenance and repair
- Possesses basic knowledge of fire and security systems, and knowledge the operations of facilities management systems
- Reads, understands, and interprets blueprints, schematics, technical specifications for distribution, electrical, cooling and heating systems
- Troubleshoots and repairs major cooling and heating equipment, i.e. water and air cooled chillers, water tube and fire tube boilers
- Provides 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
- Diagnoses problems and makes repairs of electronic and pneumatic control devices
- Ensures equipment, materials, and resources are available and in accordance with daily assignments
- Establishes and maintains 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
- Ensures that work is executed and accomplished in compliance with building, health and safety codes, standards, policies, regulations, and contract requirements
- Able 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
- Tests water samples for pH factor and lubrication
- 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 when required
- Performs other related and non-related job duties as assigned

**QUALIFICATIONS:**

Required:

- High school diploma or GED
- Five (5) years of experience in the repair and maintenance of a wide variety of air conditioning and refrigeration systems
- Must possess a valid driver’s license with no more than four (4) Maryland current points. The applicant must not be 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 Board-owned vehicle. (Board Policy EEBA)
- Core and Type I and II CFC certification

Preferred:

- Maryland State Stationary Engineering License Grade 1-3
- Universal CFC certificate

**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 16

**BARGAINING UNIT ELIGIBILITY:** EASMC-ESP

Updated 07.2024

ST. MARY'S COUNTY PUBLIC SCHOOLS  
EDUCATION SUPPORT PROFESSIONAL POSITION DESCRIPTION

**ENGINEERING TRADES SPECIALIST - PLUMBER**

**POSITION:**      **Engineering Trades Specialist – Plumber**

**REPORTS TO:** **Director of Maintenance**

**LOCATION:**      **Department of Maintenance**

**NATURE OF WORK:**

Under the general supervision of the Engineering Trades Foreman, 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:**

- Ability to professionally relate to and collaborate with co-workers, students and community members
- Ability to understand and maintain confidentiality
- Ability to use technology effectively to complete tasks
- Possess effective organizational skills
- Ability to work independently in the absence of detailed instructions and to follow complex oral and/or written instructions
- Possess effective written and oral communication skills
- Ability to follow both written and verbal instructions
- Ability to work under pressure
- Ability to report to work daily and on time
- Ability to lift 75 lbs. and carry heavy objects and to work at elevated heights
- Possess excellent time management skills and the ability to take initiative and make decisions within assigned responsibility in a challenging, fast-paced professional environment and be flexible in work responsibilities and hours
- Possess knowledge of the programs, policies, and procedures of the St. Mary's County Public Schools

**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
- Performs all work requests and preventive maintenance to plumbing and heating systems
- Provides input in the development of technical specification, and preventive maintenance procedures related the systems maintenance, repair, and replacement
- Troubleshoots and repairs problems in various plumbing systems
- Reads, understands and interprets blueprints, schematics, technical specifications
- 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
- Performs other related and non-related job duties as assigned

**QUALIFICATIONS:**

Required

- Graduation from high school or GED
- Five (5) years of experience in the repair and maintenance of a wide variety of plumbing-related systems
- Backflow testing certification, or must be obtained within 12 months of employment
- Able to lift 75lbs
- Must possess a valid driver's license with no more than four (4) Maryland current points. The applicant must not be 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. (Board Policy EEBA)

**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 16

**BARGAINING UNIT ELIGIBILITY:** EASMC-ESP

Updated 7.2024

ST. MARY'S COUNTY PUBLIC SCHOOLS  
EDUCATION SUPPORT PROFESSIONAL POSITION DESCRIPTION

**ENGINEERING TRADES SPECIALIST -VEHICLE MECHANIC**

**POSITION:** Engineering Trades Specialist -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:**

- Ability to professionally relate to and collaborate with co-workers, students, and community members
- Ability to understand and maintain confidentiality
- Ability to use technology effectively to complete tasks
- Ability to report to work daily and on time
- Ability to organize, supervise, coordinate and establish priorities of tasks to be completed
- Ability to work independently in the absence of detailed instructions and to follow complex oral and/or written instructions
- Ability to communicate orally or in writing, courteously and tactfully, with staff, students, parents, and the community in a timely manner
- Ability to work under pressure
- Ability to lift, position, store and transport heavy parts and materials
- Ability to endure exposure to undesirable elements such as rain, snow, extremes in temperature, mud, dust, etc.
- Possess excellent time management skills and the ability to take initiative and make decisions within assigned responsibility in a challenging, fast-paced professional environment and be flexible in work responsibilities and hours
- Possess knowledge of the programs, policies, and procedures of the St. Mary's County Public Schools

**DUTIES AND RESPONSIBILITIES:**

- Plans and performs routine maintenance, repairs, and inspections of buses
- Performs basic preventative maintenance such as oil change, replacement of filters, belts, hoses, and lubrication on diesel and gasoline engines
- Prepares detailed material lists and general scope of work for bus repairs, and assists with bus inspection reports
- 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
- Replaces transmission using remanufactured or new assemblies
- Troubleshoots and repairs problems in various automotive systems such as air conditioning, brakes, and drive-train systems
- Reads, understands, and interprets blueprints, schematics, technical specifications for vehicles such as passenger vehicle, buses, etc.
- Diagnoses and repairs fuel system problems
- Maintains knowledge and use of basic electronics in repair of various components and systems
- Organizes automotive repair shop and maintains inventory of needed supplies
- Diagnoses and repairs major power-train failures
- Rebuilds engine using remanufactured or new components
- Diagnoses and repairs diesel engines
- Maintains 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
- Maintains shop inventory records, and orders parts as needed
- Responds to emergency duty assignments
- Performs other related and non-related job duties as assigned

**QUALIFICATIONS:**

- Graduation from high school or GED
- Four (4) 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.)
- Must possess a valid driver’s license with no more than four (4) Maryland current points. The applicant must not be 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. (Board Policy EEBA)
- Obtain and maintain a Maryland Class B CDL with a school bus endorsement within six months of employment
- 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 ELIGIBILITY: EASMC-ESP**

Update 07.2024

ST. MARY'S COUNTY PUBLIC SCHOOLS  
EDUCATION SUPPORT PROFESSIONAL POSITION DESCRIPTION

**ENGINEERING TRADES SPECIALIST - WASTEWATER TREATMENT  
BUILDING FMS AUTOMATION**

**POSITION:** Engineering Trades Specialist - Wastewater Treatment/Building FMS Automation

**REPORTS TO:** Director of Maintenance

**LOCATION:** Department of Maintenance

**NATURE OF WORK:**

Assumes responsibility for Wastewater Treatment Program and Facilities Management System. The position requires scheduling, establishing necessary priorities, meeting Federal and State compliances relevant to Safe Water Drinking Act. Position requires that the individual work with internal staff and contractors relative to troubleshooting, servicing, and repairing wastewater treatment plants and associated equipment. Position requires knowledge of troubleshooting techniques and knowledge of Building Automation Systems and mechanical systems. Additionally, the individual will be responsible for all associated reporting of public drinking water systems data and wastewater/discharge monitoring reports along with all associated paperwork for Facilities Management System.

**ESSENTIAL FUNCTIONS:**

- Ability to professionally relate to and collaborate with co-workers, students, and community members
- Ability to understand and maintain confidentiality
- Ability to use technology effectively to complete tasks
- Ability to report to work daily and on time
- Ability to organize, supervise, coordinate and establish priorities of tasks to be completed
- Ability to work independently in the absence of detailed instructions and to follow complex oral and/or written instructions
- Ability to communicate courteously and tactfully with staff, students, parents and the community in a timely manner
- Ability to work under pressure
- Possess knowledge of local, state, and federal rules, regulations, and compliances associated with water treatment/public drinking water, and plumbing
- Possess knowledge of chemical testing/sampling of water and wastewater for lab submittals based on industry standards
- Possess excellent time management skills and ability to take initiative and make decisions within assigned responsibility in a challenging, fast-paced professional environment and be flexible in work responsibilities and hours
- Possess knowledge of the programs, policies, and procedures of the St. Mary's County Public School System

**DUTIES AND RESPONSIBILITIES:**

- Assists in the coordination of troubleshooting, repair, and programming of Building Automation Systems and wastewater treatment plants
- Diagnoses/troubleshoots and services all functions of Facility Management System relevant to HVAC
- Assists HVAC departmental personnel with field-related concerns/issues

- Reads and interprets wiring diagrams, cabling diagrams, HVAC/mechanical blueprints with the capability of using a variety of standard and specialized test equipment
- Meets compliance issues relevant to wastewater treatment plants and public drinking water systems, to include all necessary/required paperwork
- Assists with after hour corrections of Building Automation related problems
- Maintains and prepares daily management/system deficiency reports of Building Automation System/HVAC for Supervisors use
- Ensures that Building Automation System's contractors perform specified software and hardware maintenance including all necessary reporting
- Maintains all records in respect to software parameters and installed hardware.
- Assists in the review of blueprints and schematics for new school construction as well as monitoring of punch lists for contractor's compliance
- Assists in after-hour responses in respect to Building Automation/HVAC and Wastewater Treatment Plant issues
- Analyzes incoming alarm on Building Automation Systems (FMS) to include diagnosis, corrective actions, and assist in determining priority of service calls
- Troubleshoots, diagnoses related system problems, and makes minor/major repair on Building Automation System as well as wastewater plant repairs
- Maintains all documentation for chemical feed systems associated with St. Mary's County Public Schools' mechanical systems
- Reads, interprets, and understands manuals respective to software and the operation of Building Automation/HVAC Systems
- Attends annual training classes for wastewater/drinking water compliances as well as Building Automation System technology
- Skilled in the application of methods, techniques, compliances, and tools used in reporting, inspection, maintenance, and testing of Building Automation/HVAC, Wastewater Treatment Systems, and Public Water Drinking Systems
- Provides written as well as verbal input to immediate supervisor, state, and federal agencies relevant to wastewater and public drinking water systems
- Works collaboratively with Health Department and State/Federal Officials in diagnosing water and/or sanitation deficiencies. Relevant to this participation: possess the ability and knowledge to provide the Director of Maintenance with all required reporting
- Provides and schedules all facility and after-hour HVAC equipment usage requirements
- Provides the Director of Maintenance with a weekly report of all system deficiencies with corrective actions that have occurred
- Performs other related and non-related job duties as assigned

**QUALIFICATIONS:**

Required:

- High School Diploma or GED
- Two (2) years experience in Building Automation/HVAC testing, Wastewater Treatment and Public Water Drinking Systems

**TERM OF EMPLOYMENT:**

Full-time twelve-month position.

**SALARY GRADE RANGE:**

The salary for this position will be based on EASMC-ESP salary schedule for twelve-month eight-hour employees – Range 16.

**BARGAINING UNIT ELIGIBILITY:** EASMC-ESP

Updated 07.2024