



GENERAL SERVICES ADMINISTRATION
FEDERAL SUPPLY SERVICE
AUTHORIZED FEDERAL SUPPLY SCHEDULE CATALOG/PRICE LIST

On-line access to contract ordering information, terms and conditions, up-to-date pricing, and the option to create an electronic delivery order is available through **GSA Advantage!**, a menu-driven database system. The INTERNET address for **GSA Advantage!** is <http://www.gsaadvantage.gov>.

SCHEDULE TITLE: 03FAC – Facilities Maintenance and Management
Facilities Maintenance and Management
FSC Group: 03FAC

Contract No. GS-21F-0092Y

CONTRACT PERIOD: 25 April, 2012 through 24 April, 2021

For more information the Federal Supply Schedule for Facilities Maintenance and Management Services (03FAC) click on <http://www.gsa.gov/portal/content/104818>.

CONTRACTOR: Northstar Technology Corp.
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CONTRACTOR’S ADMINISTRATION SOURCE: Naren Mohan

BUSINESS SIZE: Small Disadvantaged, 8(a), Woman-Owned Business

CUSTOMER INFORMATION:

1a. TABLE OF AWARDED SPECIAL ITEM NUMBERS (SINs)

SIN	DESCRIPTION
811-002	Complete Facilities Maintenance
811-003	Complete Facilities Management

1b. LOWEST PRICED MODEL NUMBER AND PRICE FOR EACH SIN: N/A

1c. HOURLY RATES AND DESCRIPTION OF ALL CORRESPONDING COMMERCIAL JOB TITLES, EXPERIENCE, FUNCTIONAL RESPONSIBILITY AND

EDUCATION: All hourly rates shown are firm fixed price. See the following price list for hourly rates by location and labor category. See the Job Descriptions provided after the pricing information.

2. MAXIMUM ORDER*: \$1,000,000 per SIN

*If the best value selection places your order over the Maximum Order identified in this catalog/pricelist, you have an opportunity to obtain a better schedule contract price. Before placing your order, contact the aforementioned contractor for a better price. The contractor may (1) offer a new price for this requirement (2) offer the lowest price available under this contract or (3) decline the order. A delivery order that exceeds the maximum order may be placed under the schedule contract in accordance with FAR 8.404.

3. MINIMUM ORDER: \$100 unless the contractor agrees to accept a smaller order amount.

4. GEOGRAPHIC COVERAGE:

The preponderance of work location has been identified as: San Francisco County, California, Wage Determination No.: 2005-2059, Revised No.: 12, Dated 06/13/2011.

Northstar Technology Corporation may perform work at any of the locations listed in the SCA Wage Index Matrix. Service in an area with lower SCA rates than the stated preponderance of work location, resulting in lower wages being paid, will have the prices for that Task Order discounted accordingly.

5. POINT(S) OF PRODUCTION: N/A

6. DISCOUNT FROM LIST PRICES: 1%

7. QUANTITY DISCOUNT(S): 0.5%/\$300,000.00

8. PROMPT PAYMENT TERMS: Net 30.

9.a Government Purchase Cards are accepted at or below the micro-purchase threshold.

9.b Government Purchase Cards are accepted above the micro-purchase threshold.

10. FOREIGN ITEMS: None

11a. TIME OF DELIVERY: N/A

11b. EXPEDITED DELIVERY: N/A

11c. OVERNIGHT AND 2-DAY DELIVERY: N/A

- 11d. **URGENT REQUIRMENTS:** Agencies can contact the Contractor's representative to effect a faster delivery. Customers are encouraged to contact the contractor for the purpose of requesting accelerated delivery.
12. **FOB POINT:** N/A
- 13a. **ORDERING ADDRESS:** Same as contractor address. Customer should contact contractor for additional addresses.
14. **PAYMENT ADDRESS:** Same as contractor address.
15. **WARRANTY PROVISION:** Standard Commercial Warranty. Customer should contact contractor for a copy of the warranty.
16. **EXPORT PACKING CHARGES:** Not applicable
17. **TERMS AND CONDITIONS OF GOVERNMENT PURCHASE CARD ACCEPTANCE:** None.
18. **TERMS AND CONDITIONS OF RENTAL, MAINTENANCE, AND REPAIR (IF APPLICABLE):** N/A
19. **TERMS AND CONDITIONS OF INSTALLATION (IF APPLICABLE):** N/A
20. **TERMS AND CONDITIONS OF REPAIR PARTS INDICATING DATE OF PARTS PRICE LISTS AND ANY DISCOUNTS FROM LIST PRICES (IF AVAILABLE):** N/A
- 20a. **TERMS AND CONDITIONS FOR ANY OTHER SERVICES (IF APPLICABLE):** N/A
21. **LIST OF SERVICE AND DISTRIBUTION POINTS (IF APPLICABLE):** N/A
22. **LIST OF PARTICIPATING DEALERS (IF APPLICABLE):** N/A
23. **PREVENTIVE MAINTENANCE (IF APPLICABLE):** N/A
- 24a. **SPECIAL ATTRIBUTES SUCH AS ENVIRONMENTAL ATTRIBUTES (e.g. recycled content, energy efficiency, and/or reduced pollutants):** N/A
- 24b. **Section 508 Compliance for EIT:** N/A
25. **DUNS NUMBER:** 145090796

26. NOTIFICATION REGARDING REGISTRATION IN CENTRAL CONTRACTOR REGISTRATION (CCR) DATABASE: Contractor has an Active Registration in the CCR database.

Northstar Technology Corp.

Schedule 03FAC – Facilities Maintenance and Management

Preponderance of Work Location: San Francisco County, California, Wage Determination No.: 2005-2059, Revised No.: 12, Dated 06/13/2011

Rates supplied are based on Wage Determination region above. Northstar will quote using local Wage Determination as required.

CODE	OCCUPATION TITLE	Total GSA Price (including IFF)	
EXEMPT POSITIONS			
	Project Manager	\$ 96.59	
	Asstistant Project Manager	\$ 91.74	
	Chief Engineer/Facilities Manager	\$ 81.01	
	Maintenance Supervisor	\$ 63.71	
	Janitorial Supervisor	\$ 54.88	
	Civil Engineer	\$ 74.70	
	Computer Systems Analyst	\$ 61.80	
	Electrical Engineer	\$ 77.45	
SCA POSITIONS			
01020	Administrative Assistant	\$ 49.54	**
01111	General Clerk I	\$ 27.44	**
01112	General Clerk II	\$ 29.57	**
01113	General Clerk III	\$ 32.94	**
01280	Receptionist	\$ 29.42	**
01300	Scheduler - Maintenance	\$ 38.09	**
01311	Secretary I	\$ 38.12	**
01312	Secretary II	\$ 42.16	**
01313	Secretary III	\$ 46.54	**
01410	Supply Technician	\$ 49.54	**
11150	Janitor	\$ 26.00	**
11210	Laborer - Grounds Maintenance	\$ 31.01	**
14041	Computer Operator I	\$ 33.24	**
14042	Computer Operator II	\$ 36.74	**
14043	Computer Operator III	\$ 40.44	**
14044	Computer Operator IV	\$ 44.93	**
14045	Computer Operator V	\$ 48.83	**

CODE	OCCUPATION TITLE	Total GSA Price (including IFF)	
21020	Forklift Operator	\$ 32.88	**
21030	Material Coordinator	\$ 45.39	**
21050	Material Handling Laborer	\$ 28.65	**
21130	Shipping/Receiving Clerk	\$ 30.28	**
21150	Stock Clerk	\$ 33.54	**
21410	Warehouse Specialist	\$ 32.88	**
23130	Carpenter - Maintenance	\$ 42.49	**
23160	Electrician - Maintenance	\$ 58.90	**
23181	Electronics Technician I - Maintenance	\$ 49.06	**
23182	Electronics Technician II - Maintenance	\$ 51.60	**
23183	Electronics Technician III - Maintenance	\$ 54.18	**
23370	General Maintenance Worker	\$ 37.22	**
23410	HVAC Mechanic	\$ 45.79	**
23411	HVAC Mechanic (Research Facility)	\$ 49.22	**
23470	Laborer	\$ 27.64	**
23530	Machinery Maintenance Mechanic	\$ 45.73	**
23580	Maintenance Trades Helper	\$ 29.10	**
23760	Painter - Maintenance	\$ 41.27	**
23810	Plumber - Maintenance	\$ 50.19	**
25010	Boiler Tender	\$ 52.37	**
25070	Stationary Engineer	\$ 60.31	**
30081	Engineering Technician I	\$ 31.91	**
30082	Engineering Technician II	\$ 35.32	**
30083	Engineering Technician III	\$ 39.02	**
30084	Engineering Technician IV	\$ 47.38	**
30085	Engineering Technician V	\$ 57.07	**
30086	Engineering Technician VI	\$ 68.17	**
30090	Environmental Technician	\$ 44.59	**
**	The Service Contract Act (SCA) is applicable to this contract and it includes SCA applicable labor categories. The prices for the indicated (**) SCA labor categories are based on the U.S. Department of Labor Wage Determination Number(s) identified in the SCA matrix. The prices offered are based on the preponderance of where work is performed and should the contractor perform in an area with lower SCA rates, resulting in lower wages being paid, the task order prices will be discounted		

Skill Descriptions/Job Descriptions

Exempt Positions

Project Manager

Serves as On-site Project Manager between normal working hours, but available during non-duty hours for emergencies. Provides overall management coordination and day-to-day project supervision. Responsible for project correspondence and project deliverables. Serves as a central point of contact with the Government for all work. Manages and commits resources. Hires, fires, and disciplines project employees. Assesses employee incentive awards. Responsible for support staff coordination and ensuring required supervision of contractor personnel is present during normal and other-than-normal duty hours. Attends all meetings that involve interests or support as related to the scope of work when representation is requested by another base activity. Conducts all internal and external training duties as assigned. Ensures that all employees are properly trained and licensed, if required, prior to their appointment to a position or prior to operating equipment associated with a position; that supervisors and managers schedule and provide training as specified in the scope of work. Ensures that all personnel assigned in each function secure and account for all Government property issued, that proper maintenance is performed, and that all applicable Security Control Plans are followed. Responds to Government requirements which occur throughout the life of the contract, including contract requirements for data accumulation and submission. Reports directly to the corporate office and performs other duties as assigned.

Assistant Project Manager

Serves as On-site Assistant Manager between normal working hours, but available during non-duty hours for emergencies. Is acting Project Manager during any PM absence. Provides managerial oversight, direction, and coordination for all functions and tasking identified within the scope of work to ensure effective, efficient, and economical operation of all activities. Provides overall management coordination and day-to-day project supervision. Responsible for project correspondence and project deliverables. Assesses employee incentive awards. Responsible for support staff coordination and ensuring required supervision of contractor personnel is present during normal and other-than-normal duty hours. Attends all meetings that involve interests or support as related to the scope of work when representation is requested by another base activity. Conducts all internal and external training duties as assigned. Ensures that all employees are properly trained and licensed, if required, prior to their appointment to a position or prior to operating equipment associated with a position; that supervisors and managers schedule and provide training as specified in the scope of work. Ensures that all personnel assigned in each function secure and account for all Government property issued, that proper maintenance is performed, and that all applicable Security Control Plans are followed. Responds to customer requirements which occur throughout the life of the contract, including contract requirements for data

accumulation and submission. Reports directly to the onsite Project Manager and performs other duties as assigned.

Chief Engineer/Facilities Manager

Manages, plans, and coordinates, through staff of skilled, semiskilled, and unskilled trade personnel, activities concerned with the operation, repair, maintenance, and construction of facilities, equipment, buildings, and grounds to minimize interruption and improve efficiency. Plans and oversees such matters as design and development of plant facilities, formulation of operating rules, regulations, and procedures. Develops procedures for use in event of accidents, fires, or other emergencies. Inspects plant facilities or reviews inspection reports, to determine repairs, replacement, or improvements required. Hires, trains, and supervises building service personnel. Assigns workers to duties such as maintenance, repair, or renovation and may obtain bids for additional work from outside contractors. Plans and administers building department budget. Compiles records of labor and material cost for operating building and issues cost reports to owners or management. Reviews reports of expenditures for previous fiscal year and proposed improvements to facilities in order to prepare budget estimates for upcoming fiscal year. Purchases building and maintenance supplies, machinery, equipment, and furniture. May direct contracted projects to ensure adherence to specifications. May be responsible for procurement of utilities or operations of utility systems. May negotiate for acquisition of property for development or lease of buildings and facilities. May prepare construction specifications or plans, obtaining advice from engineering consultants, assemble and analyze contract bids, and submit bids and recommendations to superiors for action.

Maintenance Supervisor

Supervises and coordinates activities of skilled trades workers engaged in maintaining and repairing equipment, structures, utility systems, buildings, and grounds. Develops work schedules and gives work assignments to subordinates. Directs workers engaged in major painting projects; performing structural repairs to masonry, woodwork, and furnishings of buildings; and maintaining and repairing building utility systems, such as electrical wiring and controls, heating and ventilating systems. Oversees workers engaged in installing, servicing, and repairing mechanical equipment. Requisitions tools, equipment, and supplies. Inspects completed work for conformance to blueprints, specifications, and standards. Interprets company policy to employees and enforces company policy and practices. Analyzes and resolves work problems, or assists employees in solving work problems. Performs related work as required. May supervise security to protect employees and property. May direct workers engaged in ground maintenance activities, such as mowing lawns, trimming hedges, removing weeds, raking and disposing of leaves and refuse, and snow removal. May supervise custodial services. May recruit, hire, train staff, evaluate employee performance, and recommend or initiate promotions, transfers, and disciplinary action.

Janitorial Supervisor

Supervises and coordinates activities of unskilled and service employees engaged in cleaning and maintaining facilities and equipment of commercial, industrial, or other establishments. Supervises those who do minor and routine painting and maintenance activities and keep building and grounds in clean and orderly condition. Oversees those who may sweep and mop or scrub hallways and stairs, empty trash and garbage containers, clean bathrooms and replace supplies, and/or replace air conditioner filters. Assigns tasks to workers, and inspects completed work for conformance to standards. This position typically reports to a manager and is the first level of supervision in the organization.: Issues supplies and equipment. Notifies management concerning need for major repairs or additions to lighting, heating, and ventilating equipment. Trains new workers, recommends discharge of incompetent workers, and performs other personnel duties as required. May requisition or purchase supplies and equipment.

Civil Engineer

Plans, designs, and oversees civil engineering projects, such as airports, bridges, buildings, channels, dams, harbors, irrigation systems, pipelines, power plants, railroads, roads, sewage systems, tunnels, and water supply. Analyzes reports, maps, drawings, blueprints, tests, and aerial photographs on soil composition, terrain, hydrological characteristics, and other topographical and geologic data to plan and design project. Calculates cost and determines feasibility of project based on analysis of collected data, applying knowledge and techniques of engineering, and advanced mathematics. : Prepares or directs preparation and modification of reports, specifications, plans, construction schedules, environmental impact studies, and designs for project. Inspects construction site to monitor progress and ensure conformance to engineering plans, specifications, and construction and safety standards. May direct construction and maintenance activities at project site. May use computer-assisted engineering and design software and equipment to prepare engineering and design documents.

Computer Systems Analyst

Analyzes and solves computer problems and enables computer technology to meet the needs of the organization. Performs system studies to assist organization to realize maximum benefit from investments in equipment, personnel, and business processes. Plans and designs new computer systems or devises ways to apply existing systems resources to additional operations. Analyzes user requirements, procedures, and problems to automate processing or to improve existing computer system. : Confers with personnel of organizational units involved to analyze current operational procedures, identify problems, and learn specific input and output requirements, such as forms of data input, how data is to be summarized, and formats for reports. Writes detailed description of user needs, program functions, and steps required to develop or modify computer program. Reviews computer system capabilities, workflow, and scheduling limitations to determine if requested program or program change is possible within existing system. Studies existing information processing systems to evaluate effectiveness, and develops new systems to improve production or workflow as

required. Prepares workflow charts and diagrams to specify in detail operations to be performed by equipment and computer programs and operations to be performed by personnel in system. Conducts studies pertaining to development of new information systems to meet current and projected needs. Plans and prepares technical reports, memoranda, and instructional manuals as documentation of program development. Upgrades system and corrects errors to maintain system after implementation. May assist computer programmer in resolution of work problems related to flowcharts, project specifications, or programming. May prepare time and cost estimates for completing projects. May direct and coordinate work of others to develop, test, install, and modify programs. May design new systems, including both hardware and software, or add new software applications to harness more of computer's power.

Electrical Engineer

Researches, develops, designs, tests, and evaluates electrical components, equipment, and systems, applying principles and techniques of electrical engineering. Designs electrical equipment, facilities, components, products, and systems for commercial, industrial, and domestic purposes. Designs, and may direct engineering personnel in, fabrication of test control apparatus and equipment, and determines methods, procedures, and conditions for testing products. Requires a degree in electrical engineering. Excludes paraprofessionals. : Develops applications of controls, instruments, and systems for new commercial, domestic, and industrial uses. Directs activities to ensure that manufacturing, construction, installation, and operational testing conform to functional specifications and customer requirements. May direct and coordinate operation, maintenance, and repair of equipment and systems in field installations. May specialize in specific area of discipline, such as electrical energy generation, transmission, and distribution systems; products, such as appliances, generators, transformers, control devices, and relays; or area of work, such as manufacturing, applications, or installation. May use computer-assisted engineering and design software and equipment to perform engineering tasks.

Service Contract Act Positions

01020 – Administrative Assistant

In addition to secretarial duties (filing, taking phone calls, scheduling appointments, making travel arrangements), this position will provide administrative support to executive staff with office management responsibilities to include budgeting, personnel records and payroll. The Administrative Assistant may be required to work independently on projects requiring research and preparation of briefing charts and other presentation materials.

01111 – General Clerk I

This position follows clearly detailed specific procedures in completing several repetitive clerical steps performed in a prescribed or slightly varied sequence, such as coding and filing documents in an extensive alphabetical file; could involve simple posting to individual accounts, opening mail, calculating and posting charges to departmental accounts, operating basic office equipment, e.g., photocopier, facsimile, multi-line phone/voicemail systems, mailing machines, and minimal computer programs. Little or no subject-matter knowledge is required, but the clerk uses his or her own judgment in choosing the proper procedure for each task.

01112 – General Clerk II

This position requires familiarity with the terminology of the office unit. The General Clerk selects appropriate methods from a wide variety of procedures or makes simple adaptations and interpretations of a limited number of substantive guides and manuals. The clerical steps often vary in type or sequence, depending on the task. Recognized problems are referred to others.

01113 – General Clerk III

This position uses some subject-matter knowledge and judgment to complete assignments consisting of numerous steps varying in nature and sequence. The General Clerk III selects from alternative methods and refers problems not solvable by adapting or interpreting substantive guides, manuals, or procedures. Typical duties include: assisting in a variety of administrative matters; maintaining a wide variety of financial or other records (stored both manually and electronically); verifying statistical reports for accuracy and completeness; compiling information; and handling and adjusting complaints. The General Clerk III may also direct lower level clerks.

01280 – Receptionist

This position greets visitors, determining the nature of visits and directing visitors to appropriate persons. The Receptionist may also have other duties such as recording and transmitting messages; keeping records of calls placed; providing information to callers and visitors; making appointments; keeping a log of visitors; and issuing visitor

passes. In this position, one may also work on a computer and perform other routine clerical work that may occupy the major portion of the worker's time.

01300 – Scheduler - Maintenance

This position schedules vehicle repairs and lubrication for vehicle-maintenance, schedules vehicles for lubrication or repairs based on date of last lubrication and mileage traveled or urgency of repairs. The Maintenance Scheduler contacts garage to verify availability of facilities, notifies parking garage workers to deliver specified vehicles, and maintains a file of requests for services.

01311 – Secretary I

Responds to routine telephone requests which have standard answers; refers calls and visitors to appropriate staff. Controls mail and assures timely staff response; may send form letters. As instructed, maintains supervisor's calendar, makes appointments, and arranges for meeting rooms. Reviews materials prepared for supervisor's approval for typographical accuracy and proper format. Maintains recurring internal reports, such as: time and leave records, office equipment listings, correspondence controls, training plans, etc. Requisitions supplies, printing, maintenance, or other services. Types, takes and transcribes dictation, and establishes and maintains office files. Primary job functions do not typically require exercising independent judgment. Typically reports to a supervisor or manager. Works under an organizational structure that is not complex and internal procedures and administrative controls are simple and informal; supervisor directs staff through face-to-face meetings.

01312 – Secretary II

Performs varied clerical and secretarial duties requiring knowledge of office routine and an understanding of the organization, programs, and procedures related to the work of the office. Maintains a close and highly responsive relationship to the day-to-day activities of the supervisor and staff. Schedules appointments, gives information to callers, takes dictation, and otherwise relieves officials of clerical work and minor administrative and business detail. Familiar with standard concepts, practices, and procedures within a particular field. Relies on experience and judgment to plan and accomplish goals. Performs a variety of tasks. Works under general supervision; typically reports to a supervisor or manager. A certain degree of creativity and latitude is required. Works under an organizational structure that is not complex and internal procedures and administrative controls are simple and informal; supervisor directs staff through face-to-face meetings.

01313 – Secretary III

Handles differing situations, problems, and deviations in the work of the office according to the supervisor's general instructions, priorities, duties, policies, and program goals. Supervisor may assist secretary with special assignments. Duties include or are comparable to the following: Screens telephone calls, visitors, and incoming

correspondence; personally responds to requests for information concerning office procedures; determines which requests should be handled by the supervisor, appropriate staff member, or other offices. May prepare and sign routine, non-technical correspondence in own or supervisor's name. Schedules tentative appointments without prior clearance. Makes arrangements for conferences and meetings and assembles established background materials, as directed. May attend meetings and record and report on the proceedings. Reviews outgoing materials and correspondence for internal consistency and conformance with supervisor's procedures; assures that proper clearances have been obtained, when needed. Collects information from the files or staff for routine inquiries on office program(s) or periodic reports. Refers nonroutine requests to supervisor or staff. Explains to subordinate staff supervisor's requirements concerning office procedures. Coordinates personnel and administrative forms for the office and forwards for processing. Familiar with a variety of the field's concepts, practices, and procedures. Relies on experience and judgment to plan and accomplish goals. Performs a variety of complicated tasks. May direct and lead the work of others. Typically reports to a manager or head of a unit/department. A wide degree of creativity and latitude is expected. Works under an organizational structure that is complex and is divided into subordinate groups that usually differ from each other as to subject-matter, and or function; supervisor usually directs staff through intermediate supervisors; and internal procedures and administrative controls are formal. (Typically, secretaries performing at the higher levels of responsibility also perform duties described at the lower levels.)

01410 – Supply Technician

This position performs limited aspects of technical supply management work (e.g., inventory management, storage management, cataloging, and property utilization) related to depot, local, or other supply activities. Work usually is segregated by commodity area or function, and controlled in terms of difficulty, complexity, or responsibility. Assignments usually relate to stable or standardized segments of technical supply management operations; or to functions or subjects that are narrow in scope or limited in difficulty. The work generally involves individual case problems or supply actions. This work may require consideration of program requirements together with specific variations in or from standardized guidelines. Assignments require: (a) a good working knowledge of the governing supply systems, programs, policies, nomenclature, work methods, manuals, or other established guidelines; (b) an understanding of the needs of the organization serviced; and (c) analytical ability to define or recognize the dimension of the problems involved, to collect the necessary data to establish the facts, and take or recommend action based upon application or interpretation of established guidelines.

11150 - Janitor

Cleans and keeps in an orderly condition factor working areas and washrooms, or premises of an office, apartment house, or commercial or other establishment. Duties involve a combination of the following: Sweeping, mopping or scrubbing, and polishing floors; removing chips, trash, and other refuse; dusting equipment, furniture, or fixtures;

polishing metal fixtures or trimmings; providing supplies and minor maintenance services; and cleaning lavatories, showers, and restrooms.

11210 - Laborer Grounds Maintenance

Maintains grounds of industrial, commercial or public property such as buildings, camp and picnic grounds, parks, playgrounds, greenhouses, and athletic fields, and repairs structures and equipment, performing one or more of the following tasks: Cuts grass, using walking-type or riding mowers (less than 2000 lbs.). Trims hedges and edges around walks, flower beds, and wells, using hedge trimmers, clippers and edging tools. Prunes shrubs and trees to shape and improve growth, using shears and other hand tools. Sprays lawn, shrubs, and trees with fertilizer or insecticide. Plants grass, flowers, trees, and shrubs. Waters lawn and shrubs during dry periods, using hose or activating sprinkler system. Picks up and burns or carts away leaves, paper or other litter. Removes snow from walks, driveways, roads, or parking lots, using shovel and snow blower. Spreads salt on walkways and other areas. Repairs and paints fences, gates, benches, tables, guardrails, and outbuildings. Assists in repair of roads, walks, buildings, and mechanical equipment. May clean comfort stations, office and workshop areas, and parking lots by sweeping, washing, mopping and polishing.

14041 - Computer Operator I

Works under close personal supervision and is provided detailed written or oral guidance before and during assignments. As instructed, resolves common operating problems. May serve as an assistant operator working under close supervision or performing a portion of a more senior operator's work.

14042 - Computer Operator II

Processes scheduled routines which present few difficult operating problems (e.g., infrequent or easily resolved error conditions). In response to computer output instructions or error conditions, applies standard operating or corrective procedure. Refers problems which do not respond to preplanned procedure. May serve as an assistant operator, working under general supervision.

14043 - Computer Operator III

Processes a range of scheduled routines. In addition to operating the system and resolving common error conditions, diagnoses and acts on machine stoppage and error conditions not fully covered by existing procedures and guidelines (e.g., resetting switches and other controls or making mechanical adjustments to maintain or restore equipment operations). In response to computer output instructions or error conditions, may deviate from standard procedures if standard procedures do not provide a solution. Refers problems which do not respond to corrective procedures.

14044 - Computer Operator IV

Adapts to a variety of nonstandard problems which require extensive operator intervention (e.g., frequent introduction of new programs, applications, or procedures). In response to computer output instructions or error conditions, chooses or devises a course of action from among several alternatives and alters or deviates from standard procedures if standard procedures do not provide a solution (e.g., reassigning equipment in order to work around faulty equipment or transfer channels); then refers problems. Typically, completed work is submitted to users without supervisory review.

14045 - Computer Operator V

Resolves a variety of difficult operating problems (e.g., making unusual equipment connections and rarely used equipment and channel configurations to direct processing through or around problems in equipment, circuits, or channels or reviewing test run requirements and developing unusual system configurations that will allow test programs to process without interfering with ongoing job requirements). In response to computer output instructions and error conditions or to avoid loss of information or to conserve computer time, operator deviates from standard procedures. Such actions may materially alter the computer unit's production plans. May spend considerable time away from the control station providing technical assistance to lower level operators and assisting programmers, systems analysts, and subject matter specialists in resolving problems.

21020 - Forklift Operator

Operates a manually controlled gasoline, electric or liquid propane gas powered forklift to transport goods and materials of all kinds about a warehouse, manufacturing plant, or other establishment.

21030 - Material Coordinator

Coordinates and expedites flow of material, parts, and assemblies within or between departments in accordance with production and shipping schedules or department supervisors' priorities. Reviews production schedules and confers with department supervisors to determine material required or overdue and to locate material. Requisitions material and establishes delivery sequences to departments according to job order priorities and anticipated availability of material. Arranges for in-plant transfer of materials to meet production schedules. Arranges with department supervisors for repair and assembly of material and its transportation to various departments. Examines material delivered to production departments to verify if type specified. May monitor and control movement of material and parts along conveyor system, using remote control panel board. May compute amount of material needed for specific job orders, applying knowledge of product and manufacturing processes and using adding machine. May compile report of quantity and type of material on hand. May move or transport material from one department to another, using hand truck or industrial truck. May compile perpetual production records in order to locate material in process of production, using manual or computerized system. May maintain employee records.

21050 - Material Handling Laborer

Ships, receives, stores, or moves material within a warehouse, loading dock, factory, yard, or storage area. Above levels 1, the work requires familiarity with the layout of the storage area, skill in storing and retrieving materials, or knowledge of the establishment's record-keeping requirements. Included are workers who primarily transport materials to, from, or between manufacturing production lines, or primarily pack finished products for shipment or storage as part of a manufacturing production process.

21130 - Shipping / Receiving Clerk

Performs clerical and physical tasks in connection with shipping goods of the establishment in which employed and receiving incoming shipments. In performing day-to-day, routine tasks, follows established guidelines. In handling unusual non-routine problems, receives specific guidance from supervisor or other officials. May direct and coordinate the activities of other workers engaged in handling goods to be shipped or being received. Shipping duties typically involve the following: Verifying that orders are accurately filled by comparing items and quantities of goods gathered for shipment against documents; insuring that shipments are properly packaged, identified with shipping information, and loaded into transporting vehicles; and preparing and keeping records of goods shipped, e.g., manifests, bills of lading. Receiving duties typically involve the following: Verifying the correctness of incoming shipments by comparing items and quantities unloaded against bills of lading, invoices, manifests, storage receipts, or other records; checking for damaged goods; insuring that goods are appropriately identified for routing to departments within the establishment; preparing and keeping records of goods received.

21150 - Stock Clerk

Receives, stores, and issues equipment, materials, supplies, merchandise, foodstuffs, or tools, and compiles stock records of items in stockroom, warehouse or storage yard. Counts, sorts, or weighs incoming articles to verify receipt of items on requisition or invoice. Examines stock to verify conformance to specifications. Stores articles in bins, on floor or on shelves, according to identifying information, such as style, size or type of material. Fills orders or issues supplies from stock. Prepares periodic, special or perpetual inventory of stock. Requisitions articles to fill incoming orders. Compiles reports on use of stock handling equipment, adjustments of inventory counts and stock records, spoilage of or damage to stock, location changes, and refusal of shipments. May mark identifying codes, figures, or letters on articles. May distribute stock among production workers, keeping records of material issued. May make adjustments or repairs to articles carried in stock. May cut stock to site to fill order.

21410 - Warehouse Specialist

As directed, performs a variety of warehousing duties which require an understanding of the establishment's storage plan. Work involves most of the following: Verifying

materials (or merchandise) against receiving documents, noting and reporting discrepancies and obvious damages; routing materials to prescribed storage locations; storing, stacking, or palletizing materials in accordance with prescribed storage methods; rearranging and taking inventory of stored materials; examining stored materials and reporting deterioration and damage; removing material from storage and preparing it for shipment. May operate hand or power trucks in performing warehousing duties.

23130 - Carpenter - Maintenance

Performs the carpentry duties necessary to maintain in good repair building woodwork and equipment such as bins, cribs, counters, benches, partitions, doors, floors, stairs, casings, and trim made of wood. Work involves most of the following: Planning and laying out of work from blueprints, drawings, models, or verbal instructions, using a variety of carpenter's hand tools, portable power tools and standard measuring instruments; making standard shop computations relating to dimensions of work; and selecting materials necessary for the work. In general, the work of the maintenance carpenter requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience.

23160 - Electrician Maintenance

Performs a variety of electrical trade functions such as the installation, maintenance, or repair of equipment for the generation, distribution, or utilization of electric energy. Work involves most of the following: Installing or repairing any of a variety of electrical equipment such as generators, transformers, switchboards, controllers, circuit breakers, motors, heating units, conduit systems, or other transmission equipment; working from blueprints, drawings, layouts, or other specifications; locating and diagnosing trouble in the electrical system or equipment; working standard computations relating to load requirements of wiring or electrical equipment; and using a variety of electrician's hand tools and measuring and testing instruments. In general, the work of the maintenance electrician requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience.

23181 - Electronics Technician I – Maintenance

Applies technical knowledge to perform simple or routine tasks following detailed instructions. Performs such tasks as replacing components and wiring circuits; repairing simple electronic equipment; and taking test readings using common instruments such as digital multimeters, signal generators, semiconductor testers, curve tracers, and oscilloscopes. Receives technical guidance, as required, from supervisor or higher level technician. Work is spot-checked for accuracy.

23182 - Electronics Technician II - Maintenance

Applies comprehensive technical knowledge to solve complex problems by interpreting manufacturers' manuals or similar documents. Work requires familiarity with the

interrelationships of circuits and judgment in planning work sequence and in selecting tools and testing instruments. Receives technical guidance, as required, from supervisor or higher level technician, and work is reviewed for compliance with accepted practices. May provide technical guidance to lower level technicians.

23183 - Electronics Technician III - Maintenance

Applies advanced technical knowledge to solve complex problems that typically cannot be solved solely by referencing manufacturers' manuals or similar documents.

Examples of such problems include determining the location and density of circuitry, evaluating electromagnetic radiation, isolating malfunctions, and incorporating engineering changes. Work typically requires an understanding of the interrelationships of circuits, exercising independent judgment in performing such tasks as making circuit analyses, calculating wave forms, and tracing relationships in signal flow, using complex test instruments such as high frequency pulse generators, frequency synthesizers, distortion analyzers, and complex computer control equipment. Work may be reviewed by supervisor for general compliance with accepted practices. This position may provide technical guidance to lower level technicians.

23370 - General Maintenance Worker

Performs general maintenance and repair of equipment and buildings requiring practical skill and knowledge (but not proficiency) in such trades as painting, carpentry, plumbing, masonry, and electrical work. Work involves a variety of the following duties: Replacing electrical receptacles, wires, switches, fixtures, and motors; using plaster or compound to patch minor holes and cracks in walls and ceilings; repairing or replacing sinks, water coolers, and toilets; painting structures and equipment; repairing or replacing concrete floors, steps, and sidewalks; replacing damaged paneling and floor tiles; hanging doors and installing door locks; replacing broken window panes; and performing general maintenance on equipment and machinery.

23410 - HVAC Mechanic

Installs, services and repairs environmental-control systems in residences, department stores, office buildings and other commercial establishments, utilizing knowledge of refrigeration theory, pipefitting and structural layout. Mounts compressor and condenser units on platform or floor, using hand tools, following blueprints or engineering specifications. Fabricates, assembles and installs ductwork and chassis parts, using portable metalworking tools and welding equipment. Installs evaporator unit in chassis or in air-duct system, using hand tools. Cuts and bends tubing to correct length and shape, using cutting and bending equipment and tools. Cuts and threads pipe, using machine-threading or hand-threading equipment. Joins tubing or pipes to various refrigerating units by means of sleeves, couplings or unions, and solders joints, using torch, forming complete circuit for refrigerant. Installs expansion and discharge valves in circuit. Connects motors, compressors, temperature controls, humidity controls and circulating ventilation fans to control panels and connects control panels to power source. Installs air and water filters in completed installation. Injects small amount of

refrigerant into compressor to test systems and adds Freon gas to build up prescribed operating pressure. Observes pressure and vacuum gauges and adjusts controls to insure proper operation. Tests joints and connections for gas leaks, using gauges or soap and water solution. Wraps pipes in insulation batting and secures them in place with cement or wire bands. Replaces defective breaker controls, thermostats, switches, fuses and electrical wiring to repair installed units, using electrician's hand tools and test equipment. May install, repair and service air conditioners, ranging from fifteen to twenty tons cooling capacity, in warehouses and small factory buildings.

23411 - HVAC Mechanic (Research Facility)

Installs, services and repairs environmental-control systems in research facilities, office buildings and other commercial establishments, utilizing knowledge of refrigeration theory, pipefitting and structural layout. Mounts compressor and condenser units on platform or floor, using hand tools, following blueprints or engineering specifications. Fabricates, assembles and installs ductwork and chassis parts, using portable metalworking tools and welding equipment. Installs evaporator unit in chassis or in air-duct system, using hand tools. Cuts and bends tubing to correct length and shape, using cutting and bending equipment and tools. Cuts and threads pipe, using machine-threading or hand-threading equipment. Joins tubing or pipes to various refrigerating units by means of sleeves, couplings or unions, and solders joints, using torch, forming complete circuit for refrigerant. Installs expansion and discharge valves in circuit. Connects motors, compressors, temperature controls, humidity controls and circulating ventilation fans to control panels and connects control panels to power source. Installs air and water filters in completed installation. Injects small amount of refrigerant into compressor to test systems and adds Freon gas to build up prescribed operating pressure. Observes pressure and vacuum gauges and adjusts controls to insure proper operation. Tests joints and connections for gas leaks, using gauges or soap and water solution. Wraps pipes in insulation batting and secures them in place with cement or wire bands. Replaces defective breaker controls, thermostats, switches, fuses and electrical wiring to repair installed units, using electrician's hand tools and test equipment. May install, repair and service air conditioners, ranging from fifteen to twenty tons cooling capacity, in warehouses and small factory buildings.

23470 – Laborer

The Laborer performs tasks that require mainly physical abilities and effort involving little or no specialized skill or prior work experience. The following tasks are typical of this occupation: The Laborer loads and unloads trucks, and other conveyances, moves supplies and materials to proper location by wheelbarrow or hand truck; stacks materials for storage or binning, collects refuse and salvageable materials, and digs, fills, and tamps earth excavations, The Laborer levels ground using pick, shovel, tamper and rake, shovels concrete and snow; cleans culverts and ditches, cuts tree and brush; operates power lawnmowers, moves and arranges heavy pieces of office and household furniture, equipment, and appliance, moves heavy pieces of automotive, medical engineering, and other types of machinery and equipment, spreads sand and salt on icy roads and walkways, and picks up leaves and trash.

23530 - Machinery Maintenance Mechanic

Repairs machinery or mechanical equipment. Work involves most of the following: Examining machines and mechanical equipment to diagnose source of trouble; dismantling or partly dismantling machines and performing repairs that mainly involve the use of hand tools in scraping and fitting parts; replacing broken or defective parts with items obtained from stock; ordering the production of a replacement part by a machine shop or sending the machine to a machine shop for major repairs; preparing written specifications for major repairs or for the production of parts ordered from machine shops; reassembling machines and making all necessary adjustments for operation. In general, the work of a Machinery Maintenance Mechanic requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience. Excluded from this classification are workers whose primary duties involve setting up or adjusting machines.

23580 – Maintenance Trades Helper

Assists maintenance repairer, industrial in repairing and maintaining machinery, equipment, physical structures, and plumbing and electrical systems of industrial establishment, using handtools and power tools: dismantles machines or equipment, replaces defective parts and motors, and adjusts feed mechanisms. Cleans and lubricates machine parts, such as shafts, pulleys, gears, and bearings, using rags, brushes, grease gun, and oilcan. Replaces or repairs machine belts. Removes dust, dirt, grease, and waste material from machines. Paints machines or equipment to prevent corrosion. Bends and cuts conduit and wire, and drills holes in walls, floors, and ceilings for electrical connections. Connects wire to motors, fixtures, and other electrical equipment, replaces switches and fuses, and splices wire and insulates wire with friction tape. Bends, cuts, and threads pipe, cuts openings in walls, ceilings, and floors for pipes, and seals pipe joints with sealing compound. Cuts out and joins parts for worktables, benches, shelves and other furnishings, using power tools and handtools. Patches or replaces plaster or plaster board and paints walls, ceilings, and trim of building. Clears clogged drains, and replaces plumbing fixtures. Performs other duties as described under helper. May operate welding machine to repair or join metal parts.

23760 - Painter Maintenance

Paints and redecorates walls, woodwork and fixtures. Work involves the following: Knowledge of surface peculiarities and types of paint required for different applications; preparing surface for painting by removing old finish or by placing putty or filler in nail holes and interstices; and applying paint with spray gun or brush. May mix colors, oils, white lead and other paint ingredients to obtain proper color or consistency. In general, the work of the maintenance painter requires rounded training and experience usually acquired through a formal apprenticeship or equivalent training and experience.

23810 - Plumber Maintenance

Assembles, installs and repairs pipes, fittings and fixtures of heating, water, and drainage systems, according to specifications and plumbing codes. Studies building plans and working drawings to determine work aids required and sequence of installations. Inspects structure to ascertain obstructions to be avoided to prevent weakening of structure resulting from installation of pipe. Locates and marks position of pipe and pipe connections and passage holes for pipes in walls and floors, using ruler, spirit level and plumb bob. Cuts openings in walls and floors to accommodate pipe and pipe fittings, using hand tools and power tools. Cuts and threads pipe, using pipe cutters, cutting torch, and pipe-threading machine. Bends pipe to required angle by use of pipe bending machine or by placing pipe over block and bending it by hand. Assembles and installs valves, pipe fittings, and pipes composed of metals, such as iron, steel, brass and lead, and nonmetals, such as glass, vitrified clay, and plastic, using hand tools and power tools. Joins pipe by use of screws, bolts, fittings, solder, plastic solvent, and calks joints. Fills pipe system with water or air and reads pressure gauges to determine whether system is leaking. Installs and repairs plumbing fixtures, such as sinks, commodes, bathtubs, water heaters, hot water tanks, garbage disposal units, dishwashers, and water softeners. Repairs and maintains plumbing by replacing washers in leaky faucets, mending burst pipes, and opening clogged drains. May weld holding fixtures to steel structural members.

25010 - Boiler Tender

Tends one or more boilers to produce steam or high-temperature water for use in an establishment. Fires boiler. Observes and interprets readings on gauges, meters, and charts which register various aspects of boiler operation. Adjusts controls to insure safe and efficient boiler operation and to meet demands for steam or high-temperature water. May also do one or more of the following: Maintain a log in which various aspects of boiler operation are recorded; clean, oil, make minor repairs or assist in repair to boiler room equipment; and following prescribed methods, treat boiler water with chemicals and analyze boiler water for such things as acidity, causticity, and alkalinity.

25070 - Stationary Engineer

Operates and maintains one or more systems which provide an establishment with such services as heat, air-conditioning (cool, humidify, dehumidify, filter, and circulate air), refrigeration, steam or high-temperature water or electricity. Duties involve: Observing and interpreting readings on gauges, meters and charts which register various aspects of the system's operation, adjusting controls to insure safe and efficient operation of the system and to meet demands for the service provided; recording in logs various aspects of the system's operation; keeping the engines, machinery and equipment of the system in good working order. May direct and coordinate activities of other workers (not stationary engineers) in performing tasks directly related to operating and maintaining the system or systems.

30081 - Engineering Technician I

Performs simple routine tasks under close supervision or from detailed procedures. Work is checked in progress or on completion. Performs one or a combination of such typical duties as: - Assembles or installs equipment or parts requiring simple wiring, soldering, or connecting. Performs simple or routine tasks or tests such as tensile or hardness tests; operates and adjusts simple test equipment; records test data. - Gathers and maintains specified records of engineering data such as tests, drawings, etc.; performs computations by substituting numbers in specified formulas; plots data and draws simple curves and graphs.

30082 - Engineering Technician II

Performs standardized or prescribed assignments involving a sequence of related operations. Follows standard work methods on recurring assignments but receives explicit instructions on unfamiliar assignments; technical adequacy of routine work is reviewed on completion; non-routine work may also be reviewed in progress. Performs at this level one or a combination of such typical duties as: - Following specific instructions, assembles or constructs simple or standard equipment or parts; may service or repair simple instruments or equipment. Conducts a variety of tests using established methods. Prepares test specimens, adjusts and operates equipment, and records test data, pointing out deviations resulting from equipment malfunction or observational errors. Extracts engineering data from various prescribed but non-standardized sources; processes the data following well-defined methods including elementary algebra and geometry; presents the data in prescribed form.

30083 - Engineering Technician III

Performs assignments that are not completely standardized or prescribed. Selects or adapts standard procedures or equipment, using fully applicable precedents. Receives initial instructions, equipment requirements, and advice from supervisor or engineer as needed; performs recurring work independently; work is reviewed for technical adequacy or conformity with instructions. Performs at this level one or a combination of such typical duties as: - Constructs components, subunits, or simple models or adapts standard equipment. May troubleshoot and correct malfunctions. Follows specific layout and scientific diagrams to construct and package simple devices and subunits of equipment. Conducts various tests or experiments which may require minor modifications in test setups or procedures as well as subjective judgments in measurement; selects, sets up, and operates standard test equipment and records test data. Extracts and compiles a variety of engineering data from field notes, manuals, lab reports, etc.; processes data, identifying errors or inconsistencies; selects methods of data presentation. Assists in design modification by compiling data related to design, specifications, and materials which are pertinent to specific items of equipment or component parts. Develops information concerning previous operational failures and modifications. Uses judgment and initiative to recognize inconsistencies or gaps in data and seek sources to clarify information.

30084 - Engineering Technician IV

Performs non-routine assignments of substantial variety and complexity, using operational precedents which are not fully applicable. Such assignments, which are typically parts of broader assignments, are screened to eliminate unusual design problems. May also plan such assignments. Receives technical advice from supervisor or engineer; work is reviewed for technical adequacy (or conformity with instructions). May be assisted by lower level technicians and have frequent contact with professionals and others within the establishment. Performs at this level one or a combination of such typical duties as:-Develops or reviews designs by extracting and analyzing a variety of engineering data. Applies conventional engineering practices to develop, prepare, or recommend schematics, designs, specifications, electrical drawings and parts lists. Examples of designs include: detailed circuit diagrams; hardware fittings or test equipment involving a variety of mechanisms; conventional piping systems; and building site layouts. - Conducts tests or experiments requiring selection and adaptation or modification of a wide variety of critical test equipment and test procedures; sets up and operates equipment; records data, measures and records problems of significant complexity that sometimes require resolution at a higher level; and analyzes data and prepares test reports. - Applies methods outlined by others to limited segments of research and development projects; constructs experimental or prototype models to meet engineering requirements; conducts tests or experiments and redesigns as necessary; and records and evaluates data and reports findings.

30084 - Engineering Technician IV

Technician performs non-routine and complex assignments involving responsibility for planning and conducting a complete project of relatively limited scope or a portion of a larger and more diverse project, selects and adapts plans, techniques, designs, or layouts, contacts personnel in related activities to resolve problems and coordinate the work, reviews, analyzes, and integrates the technical work of others. Supervisor or professional engineer outlines objectives, requirements, and design approaches. Completed work is reviewed for technical adequacy and satisfaction of requirements. This incumbent may train and be assisted by lower level technicians, and performs one or a combination of the following:

- a. Designs, develops, and constructs major units, devices, or equipment; conducts tests or experiments; analyzes results and redesigns or modifies equipment to improve performance; and reports results.
- b. From general guidelines and specifications (e.g., size or weight requirements), develops designs for equipment without critical performance requirements that are difficult to satisfy such as engine parts, research instruments, or special purpose circuitry. Analyzes technical data to determine applicability to design problems; selects from several possible design layouts; calculates design data; and prepares layouts, detailed specifications, parts lists, estimates, procedures, etc. May check and analyze drawings or equipment to determine adequacy of drawings and design.
- c. Plans or assists in planning tests to evaluate equipment performance. Determines test requirements, equipment modification, and test procedures; conducts tests using all types of instruments; analyzes and evaluates test results, and prepares reports on findings and recommendations.

30085 - Engineering Technician VI

Technician independently plans and accomplishes complete projects or studies of broad scope and complexity, or serves as an expert in a narrow aspect of a particular field of engineering, e.g., environmental factors affecting electronic engineering. Complexity of assignments typically requires considerable creativity and judgment to devise approaches to accomplish work, resolve design and operational problems, and make decisions in situations where standard engineering methods, procedures, and techniques may not be applicable. Supervisor or professional engineer provides advice on unusual or controversial problems or policy matters. Completed work is reviewed for compliance with overall project objectives. This worker may supervise or train and be assisted by lower level technicians, and performs, one or a combination of the following:

- a. Prepares designs and specifications for various complex equipment or systems (e.g., a heating system in an office building, or new electronic components such as solid state devices for instrumentation equipment).
- b. Plans approach to solve design problems; conceives and recommends new design techniques; resolves design problems with contract personnel, and assures compatibility of design with other parts of the system.
- c. Designs and coordinates test set-ups and experiments to prove or disprove the feasibility of preliminary design; uses untried and untested measurement techniques; and improves the performance of the equipment. May advise equipment users on redesign to solve unique operational deficiencies.
- d. Plans approach and conducts various experiments to develop equipment or systems characterized by (a) difficult performance requirements because of conflicting attributes such as versatility, size, and ease of operation; or (b) unusual combination of techniques or components. Arranges for fabrication of pilot models and determines test procedures and design of special test equipment.

30090 - Environmental Technician

Conducts tests and field investigations to obtain data for use by environmental, engineering and scientific personnel in determining sources and methods of controlling pollutants in air, water, and soil, utilizing knowledge of agriculture, chemistry, meteorology, and engineering principles and applied technologies. Conducts chemical and physical laboratory and field tests according to prescribed standards to determine characteristics or composition of solid, liquid, or gaseous materials and substances, using pH meter, chemicals, autoclaves, centrifuge spectrophotometer, microscope, analytical instrumentation, and chemical laboratory equipment. Collects samples of gases from smokestacks, and collects other air samples and meteorological data to assist in evaluation of atmospheric pollutants. Collects water samples from streams and lakes, or raw, semi-processed or processed water, industrial waste water, or water from other sources to assess pollution problem. Collects soil, silt, or mud to determine chemical composition and nature of pollutants. Prepares sample for testing, records data, and prepares summaries and charts for review. Sets monitoring equipment to provide flow of information. Installs, operates, and performs routine maintenance on gas and fluid flow systems, chemical reaction systems, mechanical equipment, and other test instrumentation. May operate fixed or mobile monitoring or data collection station. May conduct bacteriological or other tests related to research in environmental or

pollution control activity. May collect and analyze engine exhaust emissions to determine type and amount of pollutants. May specialize in one phase or type of environmental pollution or protection and be identified according to specialty.