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Class Specifications
for the Class:

AIR QUALITY ELECTRONICS TECHNICIAN II
(AIR QUAL ELECTRONICS TECH II)

Duties Summary:

Supervises and operates, calibrates, maintains and repairs air quality monitoring electronic equipment; and performs other related duties as assigned.

Distinguishing Characteristics:

This class reflects responsibility for supervising and performing the operation, calibration, repair and maintenance of air quality electronic monitoring equipment (except computers) in a laboratory and at field stations throughout the State for a program of air pollution monitoring and control. Operation and calibration of equipment include the reduction of graphic data from strip charts to numerics utilizing standard statistical formulas to assure accurate functioning of equipment and to prepare reports.

The position in this class is under the general supervision of a Chemist who heads the State's air pollution monitoring, chemical analysis and reporting laboratory. Responsibilities include reviewing technical specifications established by the supervisor or Federal agencies and recommending to the supervisor the types of monitoring equipment which will fulfill these requirements, keeping abreast of manufacturer's instructions for equipment improvement and supervising and making changes, drafting block diagrams to modify and change the circuits according to needs and requirements set by the supervisor or Federal agencies. The position in the class supervises a few journeyworker Air Quality Electronics Technicians, prepares estimates of time, labor, materials and supplies required for planning and budget purposes and works with computer and equipment manufacturers and communications line staff to resolve problems and/or to coordinate major equipment system changes or repairs.

Examples of Duties:

Plans, assigns and evaluates the work of Air Quality Electronics Technicians engaged in the repair and maintenance of air quality sampling electronic equipment (except computers) and their operation and calibration to ensure accurate functioning; repairs, maintains, operates and calibrates air quality monitoring equipment (except computers); determines the priority of maintenance and support activities in assigning work; reviews technical specifications and recommends appropriate ambient air monitoring and support equipment which will meet requirements and/or be compatible with the present system; maintains an inventory of spare parts; develops block diagrams for equipment and electrical circuits to accommodate changes in requirements determined by the supervisor or Federal agencies; supervises and participates in the set-up, test and setting into operation of new or reconfigured equipment; supervises and updates the equipment per manufacturers' instructions; reduces and/or audits the reductions done by others of data from continuous strip charts to numerics using standard statistical formulas and procedures and supervises and compares results with known factors to assure accurate functioning of the system and equipment; prepares daily reports as required by the Environmental Protection Agency (EPA); instructs others in the operation and routine maintenance of portable air sampling equipment; trains subordinates and evaluates work performance; resolves informal grievances and handles discipline; recommends personnel actions as appropriate; may participate in the interview and selection of new employees; meets with manufacturers' representatives or others; coordinates major system repairs or changes with communication lines staff and, as appropriate, computer equipment representatives; submits work sheets for budget preparation purposes; maintains work records; and keeps abreast of new developments in equipment.

Knowledge and Abilities Required:

Knowledge of: Electronic principles related to the repair of electronic circuitry, motors, pumps, timers; techniques used in calibrating air monitoring equipment or comparable instruments; the operation, maintenance and repair of laboratory and field equipment used to measure concentrations of gases and suspended particulate matter; safe handling of gases used in calibrating measuring instruments; and trigonometry.

Ability to: Supervise the troubleshooting, repair and maintenance of air monitoring electronic and mechanical equipment (except computers); understand the functional relationships of circuits, assemblies and equipment serviced; use electronic test equipment such as oscilloscopes, multimeters, signal generators, etc.; read drawings, prints, schematics, circuit and wiring diagrams, technical directives, troubleshooting guides and equipment specifications and apply them to repair, troubleshooting, alignment and calibration; apply statistical tests and measures in the validation of data and reduction of graph charts; work effectively with equipment/communications representatives; operate air quality on-site microcomputers to check on sampling equipment functioning.

This is the first specification for the new class AIR QUALITY ELECTRONICS TECHNICIAN II.

Effective Date: May 14, 1985

DATE APPROVED: May 1, 1985

JAMES H. TAKUSHI
Director of Personnel Services