. . . . . .

Class Specifications
for the Class:

AIR QUALITY ELECTRONICS TECHNICIAN I
(AIR QUALITY ELECTRONICS TECH I)

Duties Summary:

Sets up, calibrates, maintains, and repairs air quality control equipment in the laboratory and at sampling sites throughout the State; performs routine standard chemical and statistical tests to verify the accuracy of recording instruments and the findings of others; maintains quality assurance records; and performs other duties as required.

Distinguishing Characteristics:

The class is distinguished by the performance of technical work in the operation, maintenance, and repair of air quality monitoring equipment located both in the laboratory and at field sites through the State for a program of air pollution control. A position in this class is also responsible for carrying out routine standard chemical and statistical tests to calibrate and verify the accuracy of the equipment to meet governmental agencies' standards and also to validate the findings of others who conduct analysis of the air contaminants.

Examples of Duties:

Sets up air monitoring equipment including continuous analyzers, samplers, and flow measuring instruments, in the laboratory and at air sampling sites throughout the State to measure the concentration of gases as well as suspended particulate matter; trouble shoots and repairs continuous analyzers using electronic test equipment such as oscilloscopes, multimeters and signal generators; inspects equipment for wear or defects and cleans components such as timers, recorders, motors, pumps and sampling trains and makes repairs when breakdown occur; replaces malfunctioning electronic components; calibrates the equipment in accordance with procedures and schedules established by governmental agencies by putting known concentrations of gases through the equipment and checking to see that the equipment correctly measures the concentration of gas; chemically manufactures gases in the concentrations necessary for calibrating the equipment; performs routine standard chemical and statistical tests following established procedures in the validation and auditing of data obtained by chemists in the Air Quality Laboratory by repeating the tests or analytical processes or performing different tests to double-check the results of the

original analysis; reduces data from strip charts; maintains quality assurance records as required by governmental agencies; periodically visits monitoring sites to see that the equipment is operating correctly; instructs others in the operation and simple maintenance of field equipment; recommends equipment purchases and maintains an inventory of parts; and performs other duties as required.

Knowledge and Abilities Required:

Knowledge of: Electric and electronic principles related to the repair of electronic circuitry, motors, pumps, etc.; techniques used in calibrating air monitoring equipment or similar 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; basic laboratory practices and techniques; and basic chemical properties and processes.

Ability to: Repair and maintain air monitoring equipment; use electronic test equipment such as oscilloscopes, multimeters, signal generators, etc.; read electronic diagrams; operate standard laboratory instruments and equipment; apply statistical tests and measures in the validation of data; perform routine standard chemical tests; and understand and carry out oral and written instructions, maintain accurate records.

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

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

DATE APPROVED: 3/21/77

DONALD BOTELHO
Director of Personnel Services

Note: Change title from Air Quality Electronics Technician to Air Quality Electronics Technician I.