SENIOR MAINTENANCE MECHANIC III (INSTRUMENTATION)

DISTINGUISHING FEATURES OF THE CLASS: Under general supervision, an incumbent of this foreman level position supervises a staff, including at least one journeyman, in performing maintenance and repair. The incumbent has immediate responsibility for the proper operation, maintenance and repair of more than 150 meters, transmitters, indicators and summators used on a wide variety of mechanical and electrical systems and machinery which control return sludge, waste sludge, thickener influent, digester effluent, primary tank sludge, process air, sludge gas, raw sewage, settled sewage, etc. The incumbent inspects facilities and recommends action. The incumbent plans and lays out work, estimates materials, costs and staffing requirements. Work is performed with considerable independence in accordance with departmental goals, procedures and trade standards. More complex jobs may require detailed instructions, blue prints or sketches from an engineer or technician. The incumbent is fully proficient in the skills and practice of the trade, with full knowledge of the principles, tools and techniques. The difference between this foreman level position and that of the journeyman is that the foreman supervises at least one journeyman, and may supervise a number of lower level full-time, seasonal and temporary personnel. Does related work as required.

EXAMPLES OF WORK: (Illustrative Only)

Supervises and performs the installation, maintenance and repair of instrumentation equipment used to monitor and control treatment plant operation;

Supervises and adjusts, calibrates and maintains automatic, electronic, pneumatic and mechanical control instruments to assure operation at specified rates;

Supervises and adjusts, calibrates and maintains electric and clock mechanism drive motors to assure that equipment operates safely and efficiently;

Supervises and adjusts, calibrates and maintains gear and cam operated mechanism on chart drives to assure operation at specified rates;

Supervises and cleans and services relays for pickup and drop-out, checking coil voltage and resistance;

Supervises and maintains and repairs flow meters, panel boards, relays, solid state and vacuum tube type transmitters and receivers so equipment will operate safety and efficiently;

Supervises and calibrates pressure gauges and diaphragms;

Supervises and calibrates bourdon type pressure gauges and air conditioning and heating thermostats;

Supervises and repairs and maintains thermocouple and radiation type pyrometers;

Supervises and repairs and maintains tachometers;

EXAMPLES OF WORK: (Illustrative Only) (Cont'd.)

Supervises and repairs and maintains liquid level gauges including static pressure, diaphragm, bubbler float and differential pressure types;

Supervises and repairs and maintains telemetering equipment;

Supervises and designs, purchases and installs new or upgraded instrumentation systems;

Coordinates the schedules with supervisors to insure the least possible "down-time" on any one piece of equipment which may need work;

Insures that work areas are kept in a clean, orderly and safe condition;

Estimates material costs and staffing requirements to allocate resources efficiently;

Assists in yearly budget formulation;

Requisitions materials and equipment;

Performs routine and emergency repairs and maintenance, both scheduled and in response to emergency situations, as required;

Prepares personnel time sheets, requisitions materials and supplies, and prepares other reports;

May use computer applications or other automated systems such as spreadsheets, word processing, calendar, e-mail and database software in performing work assignments;

May perform other incidental tasks, as needed.

REQUIRED KNOWLEDGE, SKILLS, ABILITIES AND ATTRIBUTES: Thorough knowledge of the tools, terminology and techniques associated with mechanical control instruments; thorough knowledge of the accident and safety precautions of the trade; ability to plan work and lay out a job in the most efficient manner; ability to coordinate work with other personnel; ability to supervise others effectively; ability to work effectively with supervisory and subordinate personnel in carrying out work and seeking improved work methods; ability to read, write, speak, understand, and communicate in English sufficiently to perform the essential duties of the position; ability to use computer applications such as spreadsheets, word processing, e-mail and database software; physical condition commensurate with the demands of the position.

MINIMUM ACCEPTABLE TRAINING AND EXPERIENCE: Either: (a) high school or equivalency diploma or graduation from a trade school and eight years of electrical or mechanical experience including at least two years in the operation and maintenance of various mechanical control instruments without close supervision; or (b) graduation from a two year post high school or trade school course* and six years of electrical or mechanical experience including the two years of specialized experience stated in (a) above; or

MINIMUM ACCEPTABLE TRAINING AND EXPERIENCE: (con't)
(c) twelve years of electrical or mechanical experience including the two years of specialized experience stated in (a) above; or (d) a satisfactory equivalent combination of the foregoing training and experience as defined by the limits of (a) (b) and (c).

*SPECIAL NOTE: Education beyond the secondary level must be from an institution recognized or accredited by the Board of Regents of the New York State Department of Education as a post-secondary, degree-granting institution.

SPECIAL REQUIREMENTS: 1) Possession of a valid license to operate a motor vehicle in New York State; 2) Depending on work assignment, must meet standards of OSHA regulation 1910.134 Respiratory Protection, and will be required to meet Federal, State and local standards with respect to health and safety.

NOTE: Apprenticeship training gained by the completion of technical courses in the field at a school or institute or branch of the Armed Services may be substituted for the above training and experience on a year-for-year basis.

NOTE: Unless otherwise noted, only experience gained after attaining the minimum education level indicated in the minimum qualifications will be considered in evaluating experience.