CITY OF HOUSTON

JOB DESCRIPTION

Job Code: 766.3

Job Title: **CHEMIST III**

Pay Grade: 21

GENERAL SUMMARY:

Performs highly technical chemical analysis according to clearly prescribed procedures and laboratory techniques.

RESPONSIBILITIES:

- Performs highly technical chemical and bacteriological analyses of food, water, wastewater, industrial waste, pollution and/or other environmental samples.
- Conducts routine analyses and non-routine analyses of drinking water, food, sewage waste and industrial waste samples.
- Prepares standard solutions and reagents for use in chemical testing.
- Reviews and interprets test results; prepares and distributes required reports.
- Maintains inventory; orders laboratory chemicals, equipment and supplies.
- Handles instrument troubleshooting and maintenance; makes minor repairs; diagnoses and corrects instrument software problems.
- Performs sensitive or special technical assignments as required.
- Designs and implements quality assurance procedures.
- Develops new analytical procedures to expand laboratory capability.
- Directs and participates in applied research projects; writes and edits technical reports of results.
- Directs operations staff as to desired treatment protocol and troubleshoots treatment problems.

SPECIFICATIONS:

KNOWLEDGE:
Requires a Bachelor's degree in Chemistry or a closely related field.

When assigned to Public Works Department:
Requires a Bachelor's degree in Chemistry or a closely related field, along with a detailed knowledge of water and wastewater treatment practices as well as Federal and State regulations concerning environmental and potable water quality. Should be skilled in the use of personal computers, equipped with commercially available software, for data interpretation, manipulation and report preparation.

SPECIFICATIONS: (continued)

EXPERIENCE:
Two years of analytical experience, at least one of which involved use of sophisticated electronic instrumentation, in a laboratory or closely related facility are required.

SUBSTITUTION:
A Master's degree in Chemistry or a closely related field may be substituted for the experience requirement.

COMPLEXITY:
Work is substantially complex and varied, and requires the interpretation of technical and detailed guidelines, policies and procedures in combination. Analytic ability is needed to gather and interpret data where answers can be found only after careful analysis of several facts.

IMPACT OF ACTIONS:
Errors could lead to moderate expenses and inconveniences. Work is typically performed under moderate to limited supervision with standard operating procedures. The incumbent functions under general review and at times autonomously, with the supervisor available to answer more difficult questions.

SUPERVISION EXERCISED:

Direct Supervision:
No direct report employees.

Indirect Supervision:
No indirect reports.

CONTACTS:

Internal Contacts:
Level of internal contact is primarily with the clerical and technical staffs and occasionally with professionals and supervisors. Interaction involves routine information exchange and/or simple service activity requiring common courtesy; e.g., answering questions, giving directions in response to simple requests.

External Contacts:
Level of external contact is infrequent with occasional contacts with lower-level service representatives and/or vendors. Interaction involves routine information exchange and/or simple service activity which requires common courtesy; e.g., directing calls, and answering simple questions.

PHYSICAL EFFORT:
The position occasionally requires stooping or bending. Occasional very light lifting, such as three or four reams of papers or books (up to 20 pounds or an equivalent weight) may be required.

WORK ENVIRONMENT:
There are routine exposures to significant levels of heat, cold, moisture and air pollution. The position may involve periodic exposure to chemical substances and physical trauma of a minor nature such as cuts, bruises and minor burns.

PHYSICAL SKILL:
Requires the ability to make closely coordinated eye/hand movements within very fine tolerance and/or calibration demands; or the ability to make rapid closely coordinated eye/hand movements on a patterned response space within somewhat fine tolerance demands; or the ability to make coordinated eye/hand movements within fine tolerances with large equipment as an extension of the worker.

MISCELLANEOUS:
All duties and responsibilities may not be listed in the above job description.

JOB FAMILY:

Chemist I
Chemist II
Chemist III
Chemist IV
Laboratory Supervisor
Laboratory Manager

Effective: October 1990
Revised: March 2017
Revised: August 2023