1. Conducts surveys and observations of employee work environments for chemical and physical health hazards such as sodium hypochlorite, noise, high temperature in order to measure levels of exposure, record information, and analyze data.

2. Determines the appropriate methods for sampling of worksite hazards such as noise, dust, heat, and gases in order to obtain preliminary exposure samples.

3. Calibrates and uses direct reading instruments such as sound-level meters, multi-gas meters, and photoionization detectors in order to determine levels of exposure at workplaces.

4. Compares measured exposure levels to appropriate standards such as Cal-OSHA Title 8: Permissible Exposure Levels (PEL) and consults pertinent reference materials such as Safety Data Sheets (SDS), and toxicology references in order to determine compliance and identify appropriate controls.

5. Plans, organizes and writes documents such as reports, bulletins, and guidelines (i.e. control measures, employee education, training, and certification, work procedures, choice of materials used, protective equipment, and engineering design) in order to inform management of the results of studies and make appropriate recommendations.

6. Conducts emergency and priority investigations/assessments in response to critical incidents such as when an employee medical evaluation reveals high exposure levels, a particularly dangerous situation exists, an industrial accident has recently occurred, or employees identify possible health hazards, etc. in order to provide appropriate, comprehensive, and timely solutions to the situations and prevent reoccurrences.

7. Oversees and makes recommendations on work practices and procedures such as the proper handling, storage, and transportation of hazardous material/waste in order to ensure the safety of City employees and the public.

8. Provides expertise to advisory groups such as departmental safety committees and joint labor-management committees in order to improve compliance with state and federal guidelines.

9. Collaborates with job experts such as regulators and consultants in order to ensure that the industrial hygiene programs utilized by the department are current and appropriate.

10. Operates and makes minor repairs to scientific instruments and equipment used to measure and/or detect health hazards such as:
A. Air sampling pumps (high flow and low flow) and calibration equipment;
B. Noise measuring devices and calibration equipment (e.g. sound level meters and noise dosimeters);
C. Air flow measuring devices (e.g. velometer and thermal anemometer);
D. Gas Tech (measures concentrations of specific gases);
E. Drager pumps and detector tubes (measures air concentrations of specific substances);
F. Infrared spectrophotometer (measures airborne concentrations of various gases and vapors)

in order to ensure that the instruments and equipment are in proper working order.

11. Works closely with City personnel from various fields or sections such as medical, safety, or Worker’s Compensation in order to share data and improve workplace safety.

12. Directs personnel such as support staff (i.e. other Industrial Hygienists, Environmental Engineering Associates, etc.) In taking routine measurements and collecting reference materials, and evaluates their work in order to maintain high productivity of industrial hygiene groups/sections.

13. Conducts training programs, and may oversee consultants providing industrial hygiene/occupational health services, such as respiratory protection or heat-illness prevention training for employees in order to ensure workplace safety.

14. Uses basic computer software such as Microsoft Word, Excel, PowerPoint, and Outlook in order to send emails, write reports, access and/or maintain databases, and create/implement training programs.

15. Responds to emergency situations such as employee injuries or accidental releases of hazardous material in order to identify causes of the accident and recommend corrective actions.

16. Conducts ergonomic investigations or assessments such as evaluations in office and industrial workplaces in order to reduce injuries and improve worker health.