

MICHIGAN CIVIL SERVICE COMMISSION
JOB SPECIFICATION
INDUSTRIAL HYGIENIST

JOB DESCRIPTION

Employees in this job function complete or oversee a variety of investigative, inspection, and consultative professional assignments to prevent occupational diseases and protect and improve the industrial health and work environment of the state labor force.

There are four classifications in this job.

Position Code Title - Industrial Hygienist-E

Industrial Hygienist 9

This is the entry level. As a trainee, the employee carries out a range of professional industrial hygienist assignments while learning the methods of the work.

Industrial Hygienist 10

This is the intermediate level. The employee performs an expanding range of professional industrial hygienist assignments in a developing capacity.

Industrial Hygienist P11

This is the experienced level. The employee performs a full range of professional industrial hygienist assignments in a full-functioning capacity. Considerable independent judgment is used to make decisions in carrying out assignments that have significant impact on services or programs. Guidelines may be available but require adaptation or interpretation to determine appropriate courses of action.

Position Code Title - Industrial Hygienist-A

Industrial Hygienist 12

This is the advanced level. The employee may function as a lead worker or senior worker. At this level, employees are responsible for overseeing the work assignments of other professionals or have regular assignments that have been recognized by Civil Service as having significantly greater complexity than those assigned at the experienced level.

NOTE: Employees generally progress through this series to the experienced level based on satisfactory performance and possession of the required experience.

JOB DUTIES

NOTE: Listed job duties are typical examples of work of positions in this classification. Not all duties assigned to every position are included, nor will all positions be assigned every duty. The general description of job duties does not authorize performance contrary to any state or federal licensing or certification requirements.

Inspects and evaluates work operations, production methods, and engineering controls to determine potential contaminant emission sources or related health hazards associated with work place conditions.

Conducts investigations of working conditions in places of employment for the prevention of occupational disease and industrial health hazards, with specific reference to toxic substances, noise, and harmful physical agents.

Measures airborne concentrations of dust, gases and mists; uses air sampling instruments and collection devices.

Collects samples of work materials to detect and evaluate employee exposure to toxic substances.

Determines effectiveness of engineering control methods and makes recommendations regarding location, design, structure, operations, and maintenance of contaminant and physical agent control systems.

Uses ventilation testing equipment and special measuring devices for the determination of airflow rates, noise, lasers, and other physical factors in the work place.

Reviews plans for health hazard control procedures.

Interprets rules and regulations to officials of industry and others.

Evaluates investigation findings, proposed corrective measures, and compliance with health rules and standards.

Consults with management, industrial engineers, employee representatives, and other agencies regarding industrial health problems and solutions.

Cites violators and appears in court as a witness, as required.

Participates in follow-up investigations to ensure corrective measures are carried out where required.

Examines, for approval, plans and specifications of proposed contaminant and physical agent control.

Participates in special studies and monitoring programs to determine environmental conditions.

Keeps abreast of technology and current issues through seminars and training.

May participate in the training of new staff members.

Maintains records and prepares reports and correspondence related to the work.

Performs related work as assigned.

Additional Job Duties

Industrial Hygienist 12 (Lead Worker)

Oversees the work of professional staff by making and reviewing work assignments, establishing priorities, coordinating activities, and resolving related work problems.

Industrial Hygienist 12 (Senior Worker)

Performs on a regular basis professional industrial hygienist assignments that are recognized by Civil Service as more complex than those assigned at the experienced level.

JOB QUALIFICATIONS

Knowledge, Skills, and Abilities

NOTE: Some knowledge in the area listed is required at the entry level, developing knowledge is required at the intermediate level, considerable knowledge is required at the experienced level, and thorough knowledge is required at the advanced level.

Knowledge of the fundamentals of chemistry, mathematics, physics, and engineering.

Knowledge of industrial processes, equipment, and materials used in the work place.

Knowledge of the principles of industrial hygiene and work place hazards.

Knowledge of scientific methods used in health hazard control.

Knowledge of the relationship between working conditions and health.

Knowledge of the techniques utilized in conducting industrial hygiene investigations.

Knowledge of the state's industrial hygiene program.

Knowledge of air sampling instruments, ventilation testing equipment and measuring devices for noise, lasers, and other physical agents.

Knowledge of state and federal statutes and rules concerning industrial hygiene, radiation, and air pollution.

Ability to organize and interpret field data and identify necessary corrections.

Ability to prepare clear, concise, and accurate investigative and narrative reports.

Ability to use testing and measuring equipment for noise, toxic substances, and harmful physical agents.

Ability to conduct studies and collect data to detect sources of industrial health hazards.

Ability to prepare legal notices of violations.

Ability to prepare cases for prosecution and appear in court as an expert witness.

Ability to communicate effectively with others.

Ability to maintain records, and prepare reports and correspondence related to the work.

Ability to maintain favorable public relations.

Additional Knowledge, Skills, and Abilities

Industrial Hygienist 12 (Lead Worker)

Ability to organize and coordinate the work of others.

Ability to set priorities and assign work to other professionals.

Working Conditions

Some jobs require an employee to work in some proximity to caustic chemicals in darkened and confined areas.

Some jobs require an employee to some risk of sustaining illness and injury from the use of chemicals, high-pressure laboratory systems, biological materials, and exposure to disease, radiation, and toxic chemicals.

Some jobs require an employee to work in an environment that involves exposure to unpleasant and noxious fumes and odors.

Some jobs require an employee to be exposed to hazardous work environments.

Some jobs require an employee to be exposed to inclement weather conditions.

Physical Requirements

The job duties may require an employee to bend, reach, walk, or stand for extended periods; stoop in small or cramped spaces; climb ladders and scaffolds; walk on uneven terrain; access high structures; and carry up to 40 pounds.

Education

Possession of a bachelor's degree in the physical sciences, biological sciences, public health, occupational safety or health, or engineering with a minimum of 20 semester (30 term) credits in one or a combination of the following: biology, biostatistics, chemistry, critical incident analysis, engineering, environmental health, epidemiology, ergonomics, health physics, industrial hygiene, physics, physiology, public health, sampling and laboratory analysis, hazardous materials, hazardous materials management, or toxicology.

Experience

Industrial Hygienist 9

No specific type or amount is required.

Industrial Hygienist 10

One year of professional experience in the prevention of occupational diseases and the protection and improvement of the industrial health environment equivalent to an Industrial Hygienist 9.

Industrial Hygienist P11

Two years of professional experience in the prevention of occupational diseases and the protection and improvement of the industrial health environment equivalent to an Industrial Hygienist, including one year equivalent to an Industrial Hygienist 10.

Industrial Hygienist 12

Three years of professional experience in the prevention of occupational diseases and the protection and improvement of the industrial health environment equivalent to an Industrial Hygienist, including one year equivalent to an Industrial Hygienist P11.

NOTE: Civil Service can individually evaluate equivalent combinations of education and experience providing required knowledge, skills, and abilities to qualify.

Special Requirements, Licenses, and Certifications

Some positions require an annual audiometric test and the mandatory use of a respirator, which requires an annual physical to ensure the ability to perform the duties of this position. In addition, some positions may require candidates to pass a hyperbaric tunnel physical as a portion of the hiring/interview process to ensure the ability to perform investigations in a pressurized tunnel.

JOB CODE, POSITION TITLES AND CODES, AND COMPENSATION INFORMATION

Job Code

INDHYGNST

Job Code Description

INDUSTRIAL HYGIENIST

Position Title

Industrial Hygienist-E

Industrial Hygienist-A

Position Code

INHGNSTE

INHGNSTA

Pay Schedule

H21-051

H21-052

KH

10/01/2025