

**STATE OF OHIO (DAS)**CLASSIFICATION  
SPECIFICATION**CLASSIFICATION SERIES:**

Industrial Safety Hygienist

**SERIES NO.:**

2447

**MAJOR AGENCIES:**Industrial Commission, Commerce, Bureau of Workers'  
Compensation**EFFECTIVE DATE:**

07/27/2014

**SERIES PURPOSE:**

The purpose of the industrial safety hygienist occupation is to conduct industrial hygiene & engineering surveys & occupational disease investigations of work sites for potential health hazards & recommend appropriate corrective action for compliance with state & federal regulations

At the lower levels, incumbents receive training to gain expertise to conduct surveys to increasing complexity & conduct routine industrial hygiene & engineering survey & occupational disease investigations.

At the middle levels, incumbents conduct complex surveys & investigations or serve as lead workers.

At the highest level, incumbents plan & direct statewide industrial hygiene, engineering &/or occupational health program & supervise lower-level industrial safety hygiene personnel.

Inspections or investigations performed by this occupational series pertain specifically to inspections of matter which must be chemically analyzed & assessed & is not visible to human eye. Matter analyzed will have some possible adverse effect on human body, both internally & externally.

Surveys conducted to identify work place conditions where improvements are necessary to prevent accidents & illness (i.e., machines or work processes that impair worker safety & health due to human/machine/process incompatibility) are performed by incumbents in the Ergonomist occupational series, 2451.

Inspections conducted to evaluate industrial & construction worksites for safety & health hazards not requiring chemical analysis are performed by incumbents in the Industrial Safety Consultant occupational series, 2448.

Incumbents in Industrial Safety Hygienist positions in Department Of Commerce issue citations or exemptions for safety violations as a result of survey or investigation.

**CLASS TITLE**

Industrial Safety Hygienist 1

**CLASS NUMBER**

24471

**PAY RANGE**

30

**EFFECTIVE**

03/26/1990

**CLASS CONCEPT:**

The entry level class works under immediate supervision & requires some knowledge of natural sciences or engineering in order to assist higher-level industrial safety hygienists & receive training in conducting industrial hygiene & engineering surveys to ensure compliance with state & federal regulations.

**CLASS TITLE**

Industrial Safety Hygienist 2

**CLASS NUMBER**

24472

**PAY RANGE**

31

**EFFECTIVE**

03/26/1990

**CLASS CONCEPT:**

The developmental level class works under general supervision & requires working knowledge of industrial hygiene safety practices, chemical exposure & toxicology & ventilation principles in order to conduct routine industrial hygiene & engineering surveys & occupational disease investigations & receive training in complex investigations & identification of health hazards at work sites.

**CLASS TITLE**

Industrial Safety Hygienist 3

**CLASS NUMBER**

24473

**PAY RANGE**

33

**EFFECTIVE**

03/26/1990

**CLASS CONCEPT:**

The full performance level class works under direction & requires considerable knowledge of state & federal industrial hygiene regulations & standards, industrial hygiene safety practices & physiological impact of chemical exposure in order to conduct complex industrial hygiene & engineering surveys & occupational disease investigations & assist in conducting most complex & comprehensive industrial hygiene investigations to receive training & gain expertise.

<u>CLASS TITLE</u>	<u>CLASS NUMBER</u>	<u>PAY RANGE</u>	<u>EFFECTIVE</u>
Industrial Safety Hygienist 4	24474	34	03/26/1990

**CLASS CONCEPT:**

The advanced level class works under direction & requires thorough knowledge of industrial hygiene safety practices, state & federal regulations pertaining to health hazards in work place & physiological impact of chemical exposure & industrial hygiene sampling & testing techniques in order to conduct most complex industrial hygiene, engineering & occupational disease investigations & lead teams of industrial safety hygienists when assigned responsibility to conduct large-scale & complex industrial hygiene investigations.

<u>CLASS TITLE</u>	<u>CLASS NUMBER</u>	<u>PAY RANGE</u>	<u>EFFECTIVE</u>
Industrial Safety Hygienist Administrator	24477	15	07/27/2014

**CLASS CONCEPT:**

The management level class works under general direction & requires extensive knowledge of industrial hygiene safety practices, work site health hazards investigative principles & techniques & applicable state & federal industrial safety & hygiene standards & regulations in order to plan, develop, direct & administer statewide industrial hygiene, engineering &/or occupational health program & supervise lower-level industrial safety hygienists.

<u>CLASS TITLE</u>	<u>CLASS NUMBER</u>	<u>B. U.</u>	<u>EFFECTIVE</u>	<u>PAY RANGE</u>
Industrial Safety Hygienist 1	24471	07	03/26/1990	30

**JOB DUTIES IN ORDER OF IMPORTANCE: (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)**

Assists higher-level industrial safety hygienists in conducting routine industrial hygiene & engineering surveys & occupational disease investigations to receive training & gain expertise in identification of existing or potential health hazards &/or to ensure compliance with federal occupational safety & health administration &/or state agency safety regulations (i.e., employer has existing safety record, problems are easily identifiable or pose low-risk hazard, sampling & testing is performed with basic measuring & sampling equipment), assists in measurement & analysis of acoustical & noise exposure problems at employer work sites, reviews employer safety records to ensure compliance with safety codes & evaluates effectiveness of safety programs & learns operation, maintenance & calibration of field equipment under close supervision.

Assists higher-level industrial safety hygienist in evaluating comprehensive surveys of work environments to receive training & gain expertise in assessment of potential health hazards &/or in calculation of worker exposure to chemical hazards; assists engineering &/or ergonomics staff in evaluating work-site hazards under close supervision; makes general recommendations of appropriate corrective action; collects & prepares samples of contaminants for laboratory analysis; assists in reviewing & interpreting laboratory results to determine exposure levels.

Inspects work sites to determine adequacy of cleanliness, ventilation, heating & illumination; prepares inspection, travel & expense reports; assists in investigating employee complaints regarding safety or health violations.

Attends agency or other specialized training classes (e.g., hazard recognition, public speaking, equipment operation).

**MAJOR WORKER CHARACTERISTICS:**

Knowledge of industrial hygiene safety practices\*; chemistry; toxicology\*; physiological impact of chemical exposure\*; ventilation principles\*. Skill in operation of calculator; operation of direct reading instruments, sound level meters, calibrators, air velocity meters, high & low flow air sampling apparatus, combustible gas indicator, anotherms, velometers\*. Ability to deal with many variables & determine specific action; use algebra; prepare meaningful, concise & accurate reports.

(\*)Developed after employment.

**MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:**

Completion of undergraduate core program in environmental health, physical/natural science or engineering; valid driver's license.

-Or 24 mos. trg. or 24 mos. exp. in environmental health, physical/natural science or engineering; valid driver's license.

-Or equivalent of Minimum Class Qualifications For Employment noted above.

**TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:**

Not applicable.

**UNUSUAL WORKING CONDITIONS:**

Occasional overnight travel required; occasionally exposed to chemical hazards.

<u>CLASS TITLE</u>	<u>CLASS NUMBER</u>	<u>B. U.</u>	<u>EFFECTIVE</u>	<u>PAY RANGE</u>
Industrial Safety Hygienist 2	24472	07	03/26/1990	31

**JOB DUTIES IN ORDER OF IMPORTANCE: (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)**

Conducts routine industrial hygiene & engineering surveys & occupational disease investigations (i.e., employer has existing safety record, problems are easily identifiable & recurrent or pose low-risk hazard & sampling & testing is performed with basic measuring & sampling equipment) of industrial, commercial or public employer to identify existing or potential health hazards or to ensure compliance with federal & state safety regulations, inspects work sites for air pollution contaminants & toxic substances, measures & analyzes acoustical & noise exposure problems at work sites, operates, maintains & calibrates measuring & sampling equipment, reviews employer safety records to ensure compliance with safety codes & evaluates effectiveness of safety programs, confers with safety consultants, compliance officers &/or engineering/ergonomics staff to refer safety violations & to provide information or services & conducts follow-up investigations to ensure implementation of corrective measure by employers.

Assists higher-level industrial safety hygienists in conducting complex industrial hygiene & engineering surveys & occupational disease investigations (i.e., employer has no established safety record or performs variety of activities, problems are unknown, not easily identifiable or pose high-risk hazards & solutions involve multiple factors &/or problems not previously encountered) to receive training & gain expertise in identification of existing or potential health hazards & to ensure compliance with federal & state safety regulations.

Analyzes investigation data & formulates recommendations for corrective measures; collects & prepares samples of contaminants for laboratory analysis; reviews & interprets laboratory results to determine exposure levels; prepares written reports of investigation or survey findings; confers with industrial, commercial &/or public employer to discuss & explain investigation findings, to obtain or provide information, to advise on implementation of corrective/ control measures &/or to discuss violations.

Represents department at meetings with private &/or public employers, trade associations, unions or groups concerned with industrial safety & health; attends safety meetings & training seminars.

Assists in training lower-level industrial safety hygienists, safety consultants &/or compliance officers in conducting routine industrial hygiene & engineering surveys & occupational disease investigations by providing guidance on work related problems.

**MAJOR WORKER CHARACTERISTICS:**

Knowledge of industrial hygiene safety practices; chemistry, toxicology & physiological impact of chemical exposure; ventilation principles; state standards &/or federal occupational safety & health administration regulations & related procedures; public relations. Skill in operation of calculator, direct reading instruments, sound level meters, high & low flow air sampling apparatus, anotherms, velometers & other equipment needed to perform routine sampling & testing. Ability to deal with many variables & determine specific action; use algebra; handle routine & sensitive contacts with representatives of industrial, commercial or public employers.

(\*)Developed after employment.

**MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:**

12 mos. exp. as Industrial Safety Hygienist 1, 24471; valid drivers license.

-Or completion of undergraduate core program in environmental health, physical or natural science or engineering; 12 mos. exp. in private sector or other governmental agency performing same or comparable duties of Industrial Safety Hygienist 1, 24471; valid drivers license.

-Or equivalent of Minimum Class Qualifications For Employment noted above.

**TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:**

Not applicable.

**UNUSUAL WORKING CONDITIONS:**

Occasional overnight travel required; occasionally exposed to chemical hazards.

<u>CLASS TITLE</u>	<u>CLASS NUMBER</u>	<u>B. U.</u>	<u>EFFECTIVE</u>	<u>PAY RANGE</u>
Industrial Safety Hygienist 3	24473	07	03/26/1990	33

**JOB DUTIES IN ORDER OF IMPORTANCE: (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)**

Conducts complex industrial hygiene & engineering surveys & occupational disease investigations (i.e., employer has no established safety record or performs variety of activities, problems are unknown, not easily identifiable or pose high-risk hazards & solutions involve multiple factors or problems not previously encountered) or industrial, commercial &/or public employers to identify existing or potential health hazards & to ensure compliance with federal & state safety regulations, inspects work sites for air pollution contaminants &/or toxic substances, operates, maintains &/or calibrates measuring & sampling equipment to calculate workers' exposure to chemical & physical hazards, confers with safety consultants, compliance officers &/or engineering/ergonomics staff to refer safety violations & to provide information or services, conducts follow-up investigations to ensure implementation of corrective measures by employers & investigates employee complaints of health hazards.

Assists higher-level industrial safety hygienists in conducting most complex & comprehensive industrial hygiene engineering surveys & occupational disease investigations (i.e., situations involving multiplicity of insidious hazards involving carcinogens, mutagens, teratogens, tight building syndrome, heat/cold stress, circadian rhythm effects cumulative trauma disorder or toxicants with diverse potential for inducing physiological impairment) to receive training & gain expertise in identification of existing or potential health hazards to ensure compliance with federal & state safety regulations.

Analyzes investigation data & formulates recommendations for corrective measures; collects & prepares samples of contaminants for laboratory analysis; reviews & interprets laboratory results to determine exposure levels; prepares written reports of investigation or survey findings; confers with industrial, commercial & public employers to discuss & explain investigation findings, to obtain or provide information, to advise on implementation of corrective/control measures &/or to discuss violations; reads scientific & technical publications & documents concerning industrial safety & health; prepare additional reports (e.g., travel, expense, activity).

Provides on-job guidance concerning work-related issues for lower-level industrial safety hygienist, safety consultants &/or compliance officers.

Represents department at meetings with private &/or public employers, trade associations, unions or groups concerned with industrial safety & health; speaks before groups; attends & or conducts safety meetings or training seminars.

**MAJOR WORKER CHARACTERISTICS:**

Knowledge of industrial hygiene safety practices; chemistry, toxicology & physiological impact of chemical exposure; ventilation principles; state standards &/or federal occupational safety & health administration regulations & related procedures; employee training & development\*; public relations. Skill in operation of calculator, direct reading instruments, air sampling apparatus, gas chromatography, infrared analyzer & other equipment needed to perform complex sampling & testing. Ability to deal with many variables & determine specific action; use algebra; handle routine & sensitive contacts with representatives of industrial, commercial &/or public employers; prepare & deliver speeches before specialized audiences.

(\*)Developed after employment.

**MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:**

12 mos. exp. as Industrial Safety Hygienist 2, 24472; valid driver's license.

-Or completion of undergraduate core program in environmental health, physical or natural science or engineering; 12 mos. exp. in private sector or other governmental agency performing same or comparable duties of Industrial Safety Hygienist 2, 24472; valid driver's license.

-Or equivalent of Minimum Class Qualifications For Employment noted above.

**TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:**

Not applicable.

**UNUSUAL WORKING CONDITIONS:**

Occasional overnight travel required; occasionally exposed to chemical hazards.

<u>CLASS TITLE</u>	<u>CLASS NUMBER</u>	<u>B. U.</u>	<u>EFFECTIVE</u>	<u>PAY RANGE</u>
Industrial Safety Hygienist 4	24474	07	03/26/1990	34

**JOB DUTIES IN ORDER OF IMPORTANCE: (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)**

Independently conducts most complex & comprehensive industrial hygiene & engineering surveys & occupational disease investigations (i.e., situations involving multiplicity of insidious hazards involving carcinogens, mutagens, teratogens, tight building syndrome, cumulative trauma disorders or toxicants with diverse potential for inducing physiological impairment) of industrial, commercial or public employers to identify existing or potential health hazards & to ensure compliance with federal & state safety regulations, develops safety programs for existing & nonexistent (i.e., under construction) employers, analyzes environmental hazards, investigates catastrophic health/disease events, operates, maintains &/or calibrates measuring & sampling equipment to calculate workers' exposure to chemical & physical hazards, inspects work sites to identify physical hazards, toxicants, secondary metal &/or contaminated atmospheres with diverse potential for inducing physiological impairments, inspects & analyzes matter having possible adverse effects upon human body & conducts follow-up investigations & leads team of industrial safety hygienists when assigned responsibility to conduct large-scale & complex industrial hygiene investigations (e.g., determines methodologies, assigns & reviews work, provides on-job training).

Conducts routine & complex industrial hygiene & engineering surveys & occupational disease investigations of industrial, commercial & public employers to identify existing or potential health hazards & to ensure compliance with state & federal safety regulations; measures & analyzes acoustical & noise exposure problems at work sites.

Consults with industrial, commercial, public employers & employees to discuss & explain investigation findings, state & federal regulations & related safety procedures/standards & to obtain or provide information; advises employers on implementation of corrective/control measures, engineering solutions &/or ergonomics consideration; discusses proper analytical & sampling procedures; presents cost & statistical studies related to five-year accident record.

Writes inspection, investigation & consultation reports; analyzes & interprets investigation data & laboratory results to determine exposure levels, adverse work environment conditions, maldesigned work flows or failures or safety programs/systems; collects & prepares samples of contaminants for laboratory analysis.

Attends &/or conducts industrial hygiene, ergonomics & engineering meetings; attends training seminars; writes article for publication.

**MAJOR WORKER CHARACTERISTICS:**

Knowledge of industrial hygiene safety practices; chemistry, toxicology & physiological impact of chemical exposure; ventilation principles; state standards & federal occupational safety & health administration regulations & related procedures; supervisory principles/techniques\*; employee training & development; public relations. Skill in operation of calculator, direct reading instruments, air sampling apparatus, gas chromatography, infrared analyzer & other equipment needed to perform most complex sampling & testing. Ability to deal with many variables & determine specific action; use algebra; handle routine & sensitive contacts with representatives of industrial, commercial \*/or public employers; review technical reports for accuracy.

(\*)Developed after employment.

**MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:**

12 mos. exp. as Industrial Safety Hygienist 3, 24473; valid driver's license.

-Or completion of undergraduate core program in environmental health, physical/natural science or engineering; 12 mos. exp. in private sector or other governmental agency performing same or comparable duties of Industrial Safety Hygienist 3, 24473; valid driver's license.

-Or equivalent of Minimum Class Qualifications For Employment noted above.

**TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:**

Not applicable.

**UNUSUAL WORKING CONDITIONS:**

Occasional overnight travel required; occasionally exposed to chemical hazards.

<u>CLASS TITLE</u>	<u>CLASS NUMBER</u>	<u>B. U.</u>	<u>EFFECTIVE</u>	<u>PAY RANGE</u>
Industrial Safety Hygienist Administrator	24477	EX	07/27/2014	15

**JOB DUTIES IN ORDER OF IMPORTANCE: (These duties are illustrative only. Incumbents may perform some or all of these duties or other job-related duties as assigned.)**

Plans, develops, directs & administers statewide industrial hygiene, engineering &/or occupational health program (i.e., program involves routine, complex & comprehensive industrial hygiene & engineering surveys & occupational disease investigations to identify existing & potential hazards in public, industrial & commercial work sites & assists employers in implementation of corrective measures & safety programs & procedures as specified in federal & state safety & health regulations), recommends & develops policies & procedures (e.g., standard operating procedures for conducting industrial safety & hygiene surveys & investigations; procedures for testing collected samples of potentially hazardous matter; procedures for controlling hazardous conditions based on latest technology; staff performance standards; laboratory procedures for testing samples collected during surveys & investigations; procedures for calibrating sampling equipment; quality control procedures to ensure technical accuracy), analyzes agency's injury/illness data to identify high risk industries & occupations, plans agency's goals & objectives to eliminate or reduce risk & hazards; supervises lower-level industrial safety hygienists & support personnel, monitors staff activities to insure overall accuracy & validity of safety & hygiene & engineering hygienists & appropriate staffing requirements & schedules staff as required to achieve agency's program goals & objectives in timely & effective manner, evaluates employee performance, provides professional guidance & technical industrial safety & hygiene assistance to staff & directs staff recruitment & training (e.g., identify training needs, develops & administers initial & on-going training & educational programs, recommends formal education & training.

Plans, directs & coordinates fiscal activities of industrial hygiene & engineering section; independently selects & purchases complex industrial safety & hygiene monitoring & testing equipment.

Reviews highly technical publications to maintain awareness of latest technological testing, sampling & control methods & evaluates sampling methods for use in agency's sampling program; acts as liaison with federal, state & local organizations & health & research groups; responds to correspondence & telephone inquiries; writes technical articles & reports for publication in periodicals & professional journals; represents agency before public, private & professional groups; speaks at seminars & other meetings.

**MAJOR WORKER CHARACTERISTICS:**

Knowledge of management\*; manpower planning\*; industrial safety practices; public relations; federal occupational safety & health administration & state industrial safety & hygiene codes & related procedures; chemistry, toxicology & physiological impact of chemical exposure; ventilation principles; budgeting\*; employee training & development; supervisory principles/techniques. Skill in use of industrial safety & hygiene monitoring & sampling equipment (e.g., micrometer, sound level calibrator, mass respirable dust monitor, flame ionization organic vapor analyzers, gas chromatography, anatherms, velometers, atmospheric sampling pump, impact noise meter). Ability to deal with many variables & determine specific action; use calculus; write instructions & specifications concerning proper use of machinery; gather, collate & classify information about data, people or things; handle sensitive inquiries from & contacts with officials & general public; write technical articles for publication; prepare & deliver speeches before specialized audiences & general public.

(\*)Developed after employment.

**MINIMUM CLASS QUALIFICATIONS FOR EMPLOYMENT:**

12 mos. exp. as Industrial Safety Hygienist 4, 24474; valid driver's license.

-Or 24 mos. exp. as Industrial Safety Hygienist 3, 24473; valid driver's license.

-Or 24 mos. exp. in private sector or other government agency performing same or comparable duties of Industrial Safety Hygienist 3, 24473; valid driver's license.

-Or 12 mos. exp. in private sector or other government agency performing same or comparable duties of Industrial Safety Hygienist 4, 24474; valid driver's license.

-Or equivalent of Minimum Class Qualifications For Employment noted above.

**TRAINING AND DEVELOPMENT REQUIRED TO REMAIN IN THE CLASSIFICATION AFTER EMPLOYMENT:**

Not applicable.

**UNUSUAL WORKING CONDITIONS:**

May require overnight travel; may be exposed to chemically & physically hazardous conditions.