

**State of Michigan
Civil Service Commission**

Capitol Commons Center, P.O. Box 30002
Lansing, MI 48909

Position Code

1. LABYTCHEA05R

POSITION DESCRIPTION

This position description serves as the official classification document of record for this position. Please complete the information as accurately as you can as the position description is used to determine the proper classification of the position.

2. Employee's Name (Last, First, M.I.)	8. Department/Agency MDHHS-COM HEALTH CENTRAL OFF
3. Employee Identification Number	9. Bureau (Institution, Board, or Commission) Laboratories
4. Civil Service Position Code Description LABORATORY TECHNICIAN-E	10. Division Chemistry and Toxicology
5. Working Title (What the agency calls the position) Laboratory Technician E	11. Section Environmental Chemistry
6. Name and Position Code Description of Direct Supervisor BOWMAN, MILICA; MEDICAL TECHNICIAN SPV-1	12. Unit Environmental Inorganic
7. Name and Position Code Description of Second Level Supervisor FREED, KELLEY; LABORATORY SCIENTIST MANAGER-3	13. Work Location (City and Address)/Hours of Work 3350 N. MLK Jr. Blvd., Lansing MI 48909 / 40 hours/week, various

14. General Summary of Function/Purpose of Position

Laboratory Technicians in the Environmental Chemistry Section participate in a variety of laboratory support activities associated with the analysis of environmental and biological samples of epidemiologic and environmental importance for polybrominated biphenyls (PBBs), polychlorinated biphenyls (PCBs), chlorinated pesticide residues, heavy metals and other industrial and environmental contaminants. Fish tissue is the primary biological matrix analyzed; however, other biological matrices include meat-based grocery items, deer liver and tissues, and wild game tissues. Environmental samples are primarily in the form of water and soils. Environmental contaminants measured within the laboratory are typically present at trace levels, usually at the low parts per billion (ppb) concentrations. The work is performed through the application of a body of knowledge related to standard laboratory methods, practices, procedures, policies and regulations that are highly complex in scope. This is an entry level position. The employee performs a full range of laboratory technician assignments according to established laboratory procedures, policies and practices. The employee uses independent judgment in making decisions related to specific work situations where established procedures, policies and practices apply. Duties include the log-in of laboratory samples, weighing, processing, chopping, grinding, digestion/extraction, clean-up of samples, preparation of samples for instrumental analysis, operation and maintenance of laboratory instruments and equipment, and the collection and maintenance of accurate laboratory test results.

15. Please describe the assigned duties, percent of time spent performing each duty, and what is done to complete each duty.

List the duties from most important to least important. The total percentage of all duties performed must equal 100 percent.

Duty 1

General Summary:

Percentage: 65

Following established procedures, employees in this classification perform a wide range of laboratory activities associated with the receipt of laboratory samples, handling, processing, storage, digestion/extraction, and fractionation of samples for trace levels of PBBs, PCBs, chlorinated pesticides, heavy metals and other environmental and industrial contaminants at the low parts per billion level. The ability to follow established laboratory procedures, quality control-quality assurance protocols, safety procedures and good laboratory practices is an essential requirement of this position. Maintenance of accurate and up-to-date records of all work performed is essential.

Individual tasks related to the duty:

- Sorts, organizes, and logs batches of samples into StarLIMS, the laboratory information system, according to the appropriate procedure.
- Determine adequacy of samples size and condition, recording comments on work sheets.
- Receive, and unwrap samples delivered to the laboratory for analysis.
- Chop, grind and homogenize fish tissue and other biological samples.
- Perform sample extraction using solid-liquid and liquid-liquid extraction protocols for pesticide and other environmental organic chemical contaminant analysis.
- Fractionate sample extracts using Florisil, silica gel, aluminum oxide and other column chromatography techniques prior to instrumental analysis.
- Perform sample digestion using block digester and microwave assisted acid digestion protocols for heavy metals analysis.
- Set-up samples for instrumental analysis.
- Maintain accurate and complete documentation of laboratory activities and sample date generated.
- Maintain competency at the appropriate frequency and according to the accreditation guidelines.
- Assure proper disposal of biological and chemical waste generated during the performance of this duty.
- Follow all laboratory procedures and practices pertaining to universal precautions, laboratory safety, laboratory infection control, laboratory chemical hygiene and the handling of hazardous materials.

Duty 2

General Summary:

Percentage: 15

Maintain laboratory inventory of reagents and supplies. Clean and maintain laboratory inventory of glassware and equipment according to established laboratory procedures. Perform preventative maintenance tasks on laboratory equipment and devices.

Individual tasks related to the duty:

- Review and maintain laboratory inventory of reagents and supplies.
- Manage inventory of all lab materials and monitor status of outstanding purchase requisitions for reagents and supplies.
- Ensure proper labelling of all laboratory supplies and reagents, as well as expired materials and waste.
- Clean and maintain laboratory glassware for use in sample preparation procedures.
- Perform preventative maintenance tasks on laboratory equipment including; cleaning, disinfecting, calibrating, and replacing consumable components of equipment as needed.
- Follow all laboratory procedures and practices pertaining to universal precautions, laboratory safety, laboratory infection control, laboratory chemical hygiene and the handling of hazardous materials.
- Maintain accurate and up-to-date records of all work performed.
- Prepare collection bottles with appropriate preservatives and send them to submitters according to the established schedule.

Duty 3**General Summary:****Percentage: 10**

Prepare and maintain laboratory inventory of stock solutions, standards, calibrators, and quality control materials. Assumes responsibility for accuracy in the preparation and standardization of solutions. Remove and dispose of outdated laboratory reagents, supplies and stock solutions in accordance with laboratory procedures and policies pertaining to the safe handling of hazardous materials. Always follow established laboratory safety procedures and practices.

Individual tasks related to the duty:

- Review and maintain inventory of laboratory stock solutions, standards, calibrators and quality control materials.
- Prepare new lots of laboratory stock solutions as needed.
- Ensure all laboratory standards and reagents have proper labeling and monitor threshold quantities and expiration of materials.
- Dispose of outdated laboratory reagents, supplies and stock solutions in accordance with established procedures and policies pertaining to the handling of hazardous materials and related safety practices.
- Maintain accurate and complete records of all work performed.

Duty 4**General Summary:****Percentage: 5**

Perform duties as required by the workload of the testing unit, and related to the policies, standards and professionalism of the Bureau of Laboratories.

Individual tasks related to the duty:

- Oversee daily incoming samples and related test request paperwork.
- Aid in determining priority status of sample requests.
- Collect all sample tubes and autosampler vials associated with laboratory samples, pool the contents of these tubes, condense and store according to laboratory protocols.
- Dispose of samples no longer required by the laboratory.
- Rinse used glassware and set-up for cleaning.
- Dispose of any glassware not normally recycled within the laboratory.
- Participate in method development, validation evaluation, documentation and implementation of laboratory procedures and policies.
- Assume responsibility, when assigned, for training and orientation of new hires according to established procedures, practices, and policies of the section.
- Follow all laboratory procedures and practices pertaining to universal precautions, laboratory safety, laboratory infection control, laboratory chemical hygiene and the handling of hazardous materials.
- Attend annual safety training.
- Maintains order and cleanliness of the laboratory to ensure a safe work environment.

Duty 5**General Summary:****Percentage: 5**

This position will function as a member of the Michigan Bioterrorism and Chemical Terrorism Public Health response teams as needed.

Individual tasks related to the duty:

- Conduct activities to prepare health care professionals and other partners for possible bioterrorism or chemical terrorism incident or event.
- Respond, as necessary, to a possible bioterrorism or chemical terrorism incident or event, to provide stat assistance to health care professionals in investigation and control efforts.
- Understand that possible occupational exposure to smallpox virus or other bio-terror agents could occur.

16. Describe the types of decisions made independently in this position and tell who or what is affected by those decisions.

This is an entry level position. The employee performs a full range of laboratory technician assignments according to established laboratory procedures, policies and practices. The employee uses independent judgment in making decisions related to specific work situations where established procedures, policies and practices apply.

17. Describe the types of decisions that require the supervisor's review.

The employee must consult with the supervisor when established laboratory procedures, policies and practices do not apply to specific work activities.

18. What kind of physical effort is used to perform this job? What environmental conditions in this position physically exposed to on the job? Indicate the amount of time and intensity of each activity and condition. Refer to instructions.

Any person working with specimens of human origin from patients suspected of having communicable diseases is at increased risk of acquiring bacterial, viral or other infections and is required to use careful aseptic techniques and proper precautions in their work.

Physical Activities: standing, sitting, lifting and carrying heavy (20-40 lbs) objects, chopping and grinding of frozen tissue, using a computer.

Conditions/Hazards: odors, hazardous chemicals, fumes, noise, etiological agents, high electrical voltage, high electrical current, high and low temperatures.

19. List the names and position code descriptions of each classified employee whom this position immediately supervises or oversees on a full-time, on-going basis.

Additional Subordinates

20. This position's responsibilities for the above-listed employees includes the following (check as many as apply):

☐ N	Complete and sign service ratings.	☐ N	Assign work.
☐ N	Provide formal written counseling.	☐ N	Approve work.
☐ N	Approve leave requests.	☐ N	Review work.
☐ N	Approve time and attendance.	☐ N	Provide guidance on work methods.
☐ N	Orally reprimand.	☐ N	Train employees in the work.

22. Do you agree with the responses for items 1 through 20? If not, which items do you disagree with and why?

Yes

23. What are the essential functions of this position?

Duties 1-5

24. Indicate specifically how the position's duties and responsibilities have changed since the position was last reviewed.

PD update. References to the Analytical Chemistry Section have been replaced with Environmental Chemistry Section to reflect changes in the organizational structure. Additional procedures specific to work performed in the Inorganic Unit have been added.

25. What is the function of the work area and how does this position fit into that function?

The Environmental Chemistry Section performs a wide range of laboratory analysis of environmental and biological samples for evidence of environmental contaminants such as persistent organic pollutants, non-persistent organic pollutants, and heavy metals. The section provides laboratory analysis of environmental and biological samples as part of federal and state supported programs important to the public health activities of the State of Michigan. This position provides essential laboratory technician activities in support of these programs.

26. What are the minimum education and experience qualifications needed to perform the essential functions of this position.

EDUCATION:

Possession of an associate's degree in engineering technology, the physical or biological sciences, or a related field.

EXPERIENCE:

Laboratory Technician 8

No specific type or amount is required.

Laboratory Technician 9

One year of experience equivalent to a Laboratory Technician 8.

Laboratory Technician E10

Two years of experience equivalent to a Laboratory Technician, including one year equivalent to a Laboratory Technician 9.

Alternate Education and Experience**Laboratory Technician E10**

Possession of a bachelor's degree or higher with 16 semester (24 term) credits in job-specific or related course work may be substituted for the education and experience requirements.

KNOWLEDGE, SKILLS, AND ABILITIES:

As listed on the Civil Service job specification, in addition to:

- Meticulous work habits, good attendance, ability to get along with others.
- Knowledge of the methods of analyzing biological samples for environmental contaminants at the low parts per billion level.
- Knowledge of Quality Assurance Procedures.
- Ability to handle samples and laboratory equipment.
- Ability to stand for long periods of time.
- Ability to make mathematical computations.
- Ability to keep records.
- Ability to communicate effectively.
- Ability to maintain favorable public relations.
- Ability to stoop, lift, and carry large, awkward, or heavy boxes often in excess of 20 pounds in weight
- Ability to enter data using a computer keyboard.
- Ability to follow written and oral instructions.
- Ability to demonstrate competency to meet various accreditation requirements.

The MDHHS mission is to provide opportunities, services, and programs that promote a healthy, safe, and stable environment for residents to be self-sufficient. We are committed to ensuring a diverse workforce and a work environment whereby all employees are treated with dignity, respect and fairness.

CERTIFICATES, LICENSES, REGISTRATIONS:

Must meet the requirements of the Clinical Laboratory Improvement Amendment of 1988 (CLIA '88).

NOTE: Civil Service approval does not constitute agreement with or acceptance of the desired qualifications of this position.

I certify that the information presented in this position description provides a complete and accurate depiction of the duties and responsibilities assigned to this position.

5/23/2023

Supervisor

Date

TO BE FILLED OUT BY APPOINTING AUTHORITY

Indicate any exceptions or additions to the statements of employee or supervisors.

None.

I certify that the entries on these pages are accurate and complete.

LIBERTY IRWIN

6/9/2023

Appointing Authority

Date

I certify that the information presented in this position description provides a complete and accurate depiction of the duties and responsibilities assigned to this position.

Employee

Date