AGRICULTURAL MICROBIOLOGIST II

This is professional microbiology work in the food, feed or pesticide laboratory in the Department of Agriculture.
Under the general supervision of the Agricultural Chief Microbiologist and as the lead for either the food, feed or pesticide units, employees plan, direct and organize the daily and weekly evaluation of food, feed or pesticides that are produced, processed or marketed in the State to ensure that they are microbiologically safe and are of the quality claimed by the producers. As the lead microbiologists for a respective laboratory unit, employees exercise personnel functions in the areas of counseling and disciplining, training, recruitment and selection, work performance and work review. Employees are responsible for quality control and efficiency for their respective units. Although employees may perform tests of similar complexity as recognized in the Agricultural Microbiologist I class, the distinguishing criteria is the more in-depth knowledge required in problem solving, handling the more complex or controversial complaints and standardizing new procedures to the laboratory. Employees may rotate among the food, feed and pesticide laboratory units as volume or emergencies demand. Work may include other related duties as assigned.

I. DIFFICULTY OF WORK:

Variety - Employees perform a variety of routine and non-routine laboratory tests to evaluate the safety wholesomeness and label claims of products; plan, organize and direct the daily and weekly work of subordinate staff; ensure quality control and aseptic practices in their respective units; maintain records of laboratory procedures, and equipment and supplies; perform personnel functions; keep abreast of new laboratory techniques and methodologies and standardize new methodologies for introduction into the laboratory.

Intricacy - Employees perform similar procedures as recognized in the Agricultural Microbiologist I class as well as participating in special analytical problems in such areas as identification of uncommon organisms, performing procedures for sensitive or controversial complaints and reconducting questionable positive tests to assure that outcomes are correct. In the standardization and documentation of new procedures, employees, through trial and error, must analyze available information, make conclusions or assumptions on inadequate information and experiment with various outcomes in order to standardize and document the procedures for consistent and verifiable use by laboratory personnel. Due to the time constraints of procedures, employees must closely plan laboratory activities for expected samples and also ensure adequate supplies and media are available on unexpected or complaint samples received which may vary based on the sample type received. As lead microbiologists for a unit, employees also participate in projecting equipment and supply needs for budget purposes.

Subject Matter Complexity - Employees must have a complete understanding of the theoretical aspects of microbiological laboratory procedures with the ability to apply those procedures in the identification and isolation of microorganisms, to evaluate product claims to problem-solve procedures and results and/or to technically evaluate and review the techniques and work of subordinate microbiologists.

Guidelines - Employees reference appropriate state, federal, industry and relevant scientific journal laboratory procedures which may include troubleshooting procedures and/or adopting procedures to the laboratory.

II. RESPONSIBILITY:

Nature of Instructions - Employees independently manage the daily and weekly operations for their respective laboratory units, with technical direction and instructions provided by the Agricultural Chief

Microbiologist as needed. Instructions are usually in the form of general work objectives unless work requires specific direction such as those dealing with controversial samples and/or testing for specific organisms.

Review - Work is not typically reviewed for technical accuracy as it is for compliance to laboratory policies and procedures. Close technical review is most likely to occur in those cases where assistance is requested from the supervisor. The majority of work is reviewed after-the-fact for conclusions rendered.

Scope of Decisions - Results may affect the general public, livestock, health facilities and/or the food, feed and pesticide industries. Employees work may also affect the quality and efficiency of the laboratory.

Consequence of Decisions - Incorrect results may result in undue harm and illness to the general public or livestock and/or significant monetary penalties, embargo of products and costly stoppage of production levied by the compliance programs supported.

III. INTERPERSONAL COMMUNICATIONS:

Scope of Contacts - The majority of work completed is discussed with subordinates that perform similar work functions or responsibilities. Occasionally, employees discuss work with field staff or familiar representatives in industry.

Purpose of Contacts - Employees instruct, interpret, explain and relay information to subordinates and occasionally compliance staff regarding laboratory procedural problems and/or results.

IV. OTHER WORK DEMANDS:

Work Conditions - Work is performed in a laboratory setting that is generally agreeable, but requires constant safety precautions.

Hazards - Employees may be exposed to pathogenic organisms, irritant chemicals, and variety of equipment and glassware. The likelihood of severe or fatal injuries is relatively minor if safety precautions are followed.

V. RECRUITMENT STANDARDS:

Knowledges, Skills and Abilities - Considerable knowledge of the variety of laboratory procedures, concepts and theories applicable to the area of assignment. Considerable knowledge of laboratory methodologies and techniques and safety practices. Ability to standardize and document tests and procedures. Ability to analyze results, interpret methodology, solve procedural problems and to provide work direction and instructions to subordinates. Ability to perform multiple tests under stringent time restrictions.

Minimum Training and Experience - Bachelor's degree in microbiology, food science or a related curriculum from an appropriately accredited institution and two years of microbiological analytical experience; or an equivalent combination of education and experience.

Special Note - This is a generalized representation of positions in this class and is not intended to identify essential functions per ADA. Examples of work are primarily essential functions of the majority of positions in this class, but may not be applicable to all positions.