

New York State Department of Civil Service
DIVISION OF CLASSIFICATION & COMPENSATION

Classification Standard

Occ. Code 6127100

Food Laboratory Specialist 1, Grade 18	6127100
Food Laboratory Specialist 1 (Seed), Grade 18	6127110
Food Laboratory Specialist 2 (Microbiology), Grade 23	6127210
Food Laboratory Specialist 2 (Chemistry), Grade 23	6127220
Food Laboratory Scientist, Grade 25	6126600
Food Laboratory Scientist (Seed), Grade 25	6126610
Assistant Director Food Laboratory, Grade 27	6126850
Director Food Laboratory. M-3	6126900

Brief Description of Class Series

Positions in this series use knowledge of chemistry, microbiology and other sciences to conduct analytical testing in support of food safety and security, agricultural and consumer interests in New York State. These positions use a variety of laboratory techniques to study, test and analyze specific health hazards or accuracy of labeling of foods, beverages, livestock feed, pet food and agricultural commodities. These positions are located in the Department of Agriculture and Markets.

Distinguishing Characteristics

Food Laboratory Specialist 1: full performance level; under general supervision of a Food Laboratory Specialist 2 (Microbiology), or Food Laboratory Specialist 2 (Chemistry), conducts laboratory testing and analysis of foods and agricultural commodities and submits written reports of analysis in an assigned unit.

Food Laboratory Specialist 1 (Seed): full performance level; under general supervision of the Food Laboratory Scientist (Seed), conducts germination and purity testing on seed samples and prepares summaries and reports of analysis.

Food Laboratory Specialist 2 (Microbiology): first supervisory level; plans, conducts and oversees the microbiological testing and analysis of samples for food-borne pathogens and other microbiological parameters; and/or plans or conducts experiments to advance research.

Food Laboratory Specialist 2 (Chemistry): first supervisory level; plans, conducts and oversees the chemistry testing and analysis of samples for the presence of chemical hazards or other chemistry parameters; and/or plans or conducts experiments to advance research.

Food Laboratory Scientist: non-competitive; one-position class; performs independent research and coordinates Food Laboratory research efforts to improve methods of chemical and microbiological analysis of food and agriculture commodities and explore the ecology and epidemiology of food-borne diseases.

Food Laboratory Scientist (Seed): non-competitive; one-position class; conducts regulatory tests on samples for seed purity and quality, and to ensure accuracy of labeling; applies research methods in seed physiology, pathology and biology that may relate to seed quality, development, maturation, germination, dormancy deteriorations and other attributes.

Assistant Director Food Laboratory: non-competitive, one-position class; functions as the overall second-in-command to the Director of the New York State Food Laboratory.

Director Food Laboratory: non-competitive, one position class; under the general direction of the Commissioner of Agriculture and Markets, functions as the Director of the New York State Food Laboratory.

Illustrative Duties

Food Laboratory Specialist 1

- Receives and prepares samples for testing and analysis, following proper laboratory protocols related to handling, labeling and storage.
- Performs various laboratory testing methods using chemistry or microbiology sciences to identify health hazards, quality parameters or inaccuracy in labeling.
- Calibrates instrumentation to establish and demonstrate appropriate conditions for a particular analysis.
- Operates complex laboratory equipment, instrumentation and electronic data processing and computer equipment.
- Analyzes test results and prepares summaries and reports of analyses to document findings, observations and results.
- Reads and interprets Agriculture and Markets Law, United States Department of Agriculture, and Food and Drug Administration regulations and determines whether a sample is in violation or compliance.
- Performs duties in compliance with standard operating procedures and regulatory requirements.

- Seeks clarification and guidance on regulatory standards, testing techniques and processes by discussing issues with Food Laboratory Specialist 2 or higher level staff.
- Contributes towards research assignments, proposals or agency reports.

Food Laboratory Specialist 1 (Seed)

- Receives and prepares regulatory and service seed samples for testing and analysis, following proper laboratory protocols related to handling, labeling and storage.
- Divides sees samples following AOSA procedures for testing.
- Performs purity and germination testing in accordance with AOSA Rules and standard operating procedures.
- Analyzes test results and prepares summaries and reports of analyses to document findings, observations and results.
- Communicates results of testing to management or stakeholders.
- Seeks clarification and guidance on regulatory standards, testing techniques and processes.
- Completes sample tracking/summary statistical logs.
- Cleans and maintains laboratory equipment.
- Calibrates seed laboratory instrumentation to establish and demonstrate appropriate conditions for a particular analysis.
- Operates complex laboratory equipment, instrumentation and electronic data processing and computer equipment.
- Follows internal laboratory pesticide/microbiological containment protocols.
- Contributes toward research assignments, proposals or agency reports.

Food Laboratory Specialist 2 (Microbiology) (Chemistry)
(General duties for both)

- Plans, assigns and supervises work assignments of lower level technical staff in performing research or regulatory testing.
- Reviews test results and reports of analysis.

- Oversees the proper receipt of samples into the laboratory to ensure proper handling, labeling and storage.
- Provides technical oversight of laboratory instruments and software for the interpretation and analysis of data.
- Reviews and maintains standard operating procedures to ensure they are in compliance with laboratory and regulatory requirements.
- Ensures proper procedures are performed and acceptable results are obtained on quality control samples.
- Interprets Agriculture and Markets Law, United States Department of Agriculture and Food and Drug Administration regulations for compliance.
- Advises the Assistant Director when results are in violation of regulations and the actions necessary to report the violation.
- Develops new, analytic methods to advance scientific knowledge by evaluating cost effectiveness of new methods, constructing a validation scheme, selecting proper quality controls and reviewing results of validation.
- Serves as technical consultant/liaison with Department inspection staff, State and federal agencies and other laboratories.
- Takes a lead role in the preparation of written reports, operating procedures or proposals of the unit or Division.
- Performs the full range of staff supervisory responsibilities including training staff, approving time cards, counseling employees, and writing performance evaluations.

Food Laboratory Specialist 2 (Microbiology)

- Plans, conducts and oversees a unit assigned to perform microbiological testing to analyze samples for food-borne pathogens and other microbiological parameters.
- Monitors and reviews the analysis of food samples to isolate and identify major food-borne pathogenic microorganisms and their toxins.
- Oversees technology transfer, method development and validation.

- In collaboration with the QA/AC unit, coordinates the participation in proficiency sample testing exercises and other activities necessary for maintaining certification/accreditation of the laboratory by various regulatory entities.
- Supervises the preparation of sampling materials and reagents used in the testing and analysis of samples.
- Oversees the development and/or implementation of new technologies and techniques that will address newly identified needs and/or requirements to keep the laboratory's capabilities current.

Food Laboratory Specialist 2 (Chemistry)

- Plans, conducts and oversees a unit assigned in testing and analyzing samples for a variety of chemistry standards. These include compliance with regulatory standards for nutritional labeling, adulteration, presence of undeclared and potentially harmful allergens, preservatives artificial colors, chemical residues, heavy metals, and other chemical parameters and hazards.
- Monitors and reviews the analysis of sample food and agricultural commodities to identify and quantify levels of chemical constituents.
- Oversees technology transfer, method development and validation.
- In collaboration with the QA/AC unit, coordinates the participation in proficiency sample testing exercises and other activities necessary for maintaining certification/accreditation of the laboratory by various regulatory entities.
- Supervises the preparation of sampling materials and reagents used in the testing and analysis of samples.
- Oversees the development and implementation of new technologies and techniques that will address newly identified needs and/or requirements to keep the laboratory's capabilities current.

Food Laboratory Scientist

- Develops collaborative relationships with food safety staff in academia, industry and State and federal agencies.
- Plans and conducts scientific research projects and studies, which result in the publication of professional papers or scientific reports authored singly or jointly.
- Performs research in a variety of food safety and security research projects and programs related to the ecology and epidemiology of food-borne pathogens and toxins, and specialized detection methods of biological and chemical hazards.

- Provides input for changes in sanctioned methodologies to be adopted by State and federal food regulatory agencies and associations.
- Participates as a member of professional organizations devoted to the development, validation and publication of physical, chemical and microbiological laboratory methods for use by federal and State analytical laboratories.
- Serves as an expert source of information related to topics researched.
- Develop new methods to improve target detection sensitivity, speed of assay, and/or numbers of samples analyzed.
- Modifies methods to respond to changing needs, analytical problems, poor performance, or other issues. Validates new methods internally and in conjunction with multi-lab collaborative studies.
- Provides recommendations to transfer new technologies and laboratory programs and methods.
- Direct research studies using assigned staff in a laboratory or regulatory unit.
- Performs independent research related to the development of new testing methodologies.
- Prepares, submits and manages grants to support existing and new laboratory programs.

Food Laboratory Scientist (Seed)

- Tests and analyzes samples of seeds for purity and seed quality in accordance with regulatory standards and compliance with Article 9 to identify labeling, adulteration, germination potential and the presence of undeclared matter.
- Conducts various testing and analysis of seed samples for multiple purposes including but not limited to: identify seed quality; verify label claims; germination and or vigor.
- Ensures testing protocols, methods, evaluations, interpretations and reporting meet quality standards, and assure that these standards are in compliance with the Association of Official Seed Analysts, International Seed Testing Association, Canadian Seed Law, Federal Seed Act, Society of Commercial Seed Technologies, Article 9 of Agriculture and Markets Law and other state, federal, or international seed regulatory agency as applicable.

- Plan work assignments for seed samples to be tested and analyzed in a timely manner to optimize capacity of the laboratory and ensure that seizure and rush samples are given priority.
- Provides guidance to program staff and Food Laboratory Specialists in interpretation of standards regulatory tests on samples for seed purity and quality.
- Communicates sample test results and maintains accurate records. Advises the Plant Industry program staff, industry or others when results are in violation of regulations and the actions necessary to confirm such result.
- Assists program staff in the decision-making process relating to the disposition of nonconforming seed, identifies at the point of origin and determines disposition.
- Issues Reports of Seed Analysis/Certificates for movement of seed both domestic and internationally.
- Plans and conducts scientific research projects and studies including problem definition, planning, execution, analysis, interpretation and reporting of findings which result in the development of testing and analysis protocols, publication of professional papers or scientific reports authored singly or jointly in all areas of seed science and technology.
- Applies research methods in seed physiology, pathology and biology that may relate to seed quality, development, maturation, germination, dormancy deterioration and other attributes.
- Conducts studies related to seed production, sampling, testing, conditioning, distribution and storage.
- Provides recommendations to transfer research into laboratory program testing and analysis methods, protocols to monitor quality results, and to support continuous improvement.
- Develops new techniques, standardization of laboratory tests and documentation of anatomical and pathological observations of seed and seedling development.
- Directs research studies using assigned staff in the Food Laboratory or regulatory unit.
- May prepare and/or submit for publication articles in all areas of seed technology that may relate directly to the seed industry.
- Provides training to staff, industry and other stakeholders pertaining to seed analysis and testing.

- Participates in Federal Seed Laboratory trueness to variety testing and provides input for changes in sanctioned methodologies to be adopted by State and Federal regulatory agencies and associations.
- Participates as a member of professional organizations devoted to the seed analysis methods for use by Federal and State laboratories.
- Serves as an expert source of information related to seed analysis in New York State.

Assistant Director Food Laboratory

- Assists the Director in the operation of the Food Laboratory and provides direction, leadership and technical guidance to food laboratory staff in dairy, food chemistry, pesticide residue analysis and food microbiology.
- Assists the Director in the review and evaluation of existing and proposed laboratory techniques, use of personnel and acquisition or modification of equipment to ensure effective and efficient lab operations.
- Reviews sample analytical reports from the laboratory programs; evaluates results for thoroughness, accuracy and proper interpretation of analytical findings.
- Evaluates new testing equipment to be purchased, supervises the operations and maintenance of analytical and computer equipment; and recommends needed parts, service and supplies for uninterrupted, continuous operation.
- Organizes and coordinates sample testing in the laboratory for outside agencies.
- Trains Department and industry personnel on analytical methodology and proper sampling techniques.
- Organizes, sets priorities, schedules and advises on work performed in the laboratories.
- Maintains quality assurance testing programs to ensure precision and accuracy of laboratory results.
- Confers with the Director on program activities, and provides reports and recommendations.

Director Food Laboratory

- Exercises overall direction and supervision of the programs and activities of the Food Laboratory Division including the oversight of the testing and analysis of foods, additives, and pesticides to ensure the viability of the State's food supply.
- Directs all laboratory activities to ensure compliance with recognized standards and protocols.
- Develops policies and directs microbiological and analytical chemistry programs of the laboratory.
- Sets policy and oversees administrative management of the Division, including office organization, personnel, employee discipline and counseling, and budgeting.
- Directs and oversees the development of new methods of testing via research, pilot operation and evaluation of results.
- Makes recommendations to industry and Department personnel on techniques to control misbranding, adulteration and poisonous contamination of food.
- Maintains liaison with federal and other state laboratories with similar regulatory functions to exchange information, reference sources and direction.
- Participates in national professional organizations to review and evaluate physical, chemical and microbiological methods for adoption by the national testing laboratories.
- Advises and assists the Commissioner and executive staff in all issues involving the Food Laboratory.

Minimum Qualifications

Food Laboratory Specialist 1

Open Competitive: a bachelor's degree in or supplemented by 24 semester credit hours in: chemistry, biochemistry, biology, microbiology, food science, or related fields, and any one of the following:

Completion of the two-year traineeship, or
 One year of professional experience*, and completion of one year of the traineeship, or
 Two years of professional experience*.

*Experience conducting microbiological, immunological or chemical testing and analysis in a commercial, academic, or governmental laboratory.

Food Laboratory Specialist 1 (Seed)

Open Competitive: bachelor's degree or higher in: microbiology, biology, molecular biology, chemistry, biochemistry, chemical engineering, public health, veterinary science, animal science, medical science, genetics, natural resources, environmental sciences, zoology, agriculture, food science, crop science, plant science, botany, seed science, seed technology and horticulture and any one of the following:

Completion of the two-year traineeship, or
One year of professional experience in a seed laboratory, and completion of one year of the traineeship, or
Two years of professional experience* in a seed laboratory.

*Substitution: A Registered Seed Technologist, Certified Seed Analyst in Purity and Germination, Certified Viability Technologist, Certified Purity Technologist, or Certified Seed Analyst in Germination or Purity credential may substitute for two years of experience.

Additional Requirement: Employees must obtain and or maintain AOSA certification over the course of employment. Valid AOSA certification is a requirement for continuing appointment.

Food Laboratory Specialist 2 (Microbiology)

Promotion: one year of service as a Food Laboratory Specialist 1.

Food Laboratory Specialist 2 (Chemistry)

Promotion: one year of service as a Food Laboratory Specialist 1.

Food Laboratory Scientist

Non-Competitive: bachelor's degree in the biological, chemical, or physical sciences, food science or a related field; and four years of professional research experience** in an analytical laboratory, academic research laboratory or a public health laboratory, which includes research design and validation analytical methods or published research.

Food Laboratory Scientist (Seed)

Non-Competitive: Current Certification as AOSA Seed Analyst and possession of a Bachelor's degree in the biological, chemical, physical or natural sciences or food science or related field and four years of experience** in regulatory testing and analysis of seed in an analytical laboratory, which includes research design and validation of analytical methods or published research.

Assistant Director Food Laboratory

Promotion: one year of permanent service as a Food Laboratory Specialist 2 (Microbiology) or Food Laboratory Specialist 2 (Chemistry).

Director Food Laboratory

Non-Competitive: bachelor's degree in chemistry, biology, microbiology or food science or a related field, and six years of experience** in the management and supervision of a large analytical laboratory. One year of which should include published research and the design of analytical methods.

**Substitutions: a master's degree may be substituted for one year of experience; a Ph.D. may be substituted for two years of experience.

Note: Classification Standards illustrate the nature, extent and scope of duties and responsibilities of the classes they describe. Standards cannot and do not include all of the work that might be appropriately performed by a class. The minimum qualifications above are those which were required for appointment at the time the Classification Standard was written. Please contact the Division of Staffing Services for current information on minimum qualification requirements for appointment or examination.

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