

 <p>STATE OF INDIANA CLASSIFICATION SPECIFICATION</p>	Class Title: Chemist 1		Class Code: 001IB1
	FLSA Status: Exempt	Salary Schedule: RDS	Effective Date: 7-12-13
	Summary: Incumbent utilizes broad scientific knowledge and a variety of sophisticated laboratory equipment to perform complex analyses and applied research in a specialized area such as food, drug or dairy products, air pollution, water pollution or industrial hygiene.		

Duties:

- Incumbent researches, interprets, develops new and improves existing guidance, policies, methods and rules for use by staff, facilities and their representatives;
- Interprets federal and state laws and rules to determine best method for implementing new technologies and methodologies in and across disciplines;
- Interprets federal guidelines and regulations and develops internal guidance on chemistry and related sciences to support program operation and development;
- Identifies new needs in agency or program operations and develops long-term strategies;
- Negotiates, establishes and maintains laboratory and program contracts and guidelines, including determining audit procedures and penalties, to implement and meet agency requirements;
- Serves as agency chemistry representative to cross-media, interagency, interstate and regional task forces, committees and work groups;
- Acts as liaison with federal agencies to interpret revisions in federal regulations and develops and implements appropriate changes in state rules and policies;
- Initiates and standardizes chemistry monitoring research and monitoring techniques;
- Implement and facilitate modifications to agency processes and procedures;
- Initiates and integrates chemistry discipline within and throughout agency processes;
- Performs related duties as required.

Job Requirements:

- Thorough knowledge of agency program processes as related to the discipline of chemistry;
- Thorough knowledge of all federal policies, guidance, goals and procedures of the relevant program area;
- Thorough knowledge of analytical chemistry related to environmental monitoring and its application to the relevant program areas;
- Extensive knowledge of, and the ability to interpret and apply, a wide range of regulations, statutes and guidelines;
- Specialized knowledge of biology, toxicology, biochemistry and geology as needed for the environmental regulations and program development;
- Extensive knowledge of environmental quality assurance/quality control as applicable to laboratory operating procedures, audit processes and contract requirements;
- Specialized knowledge of legal and court procedures for collection of evidence;
- Specialized knowledge of programming computer software;
- Broad knowledge of the Occupational Health and Safety Administration laboratory safety practices and procedures;
- Ability to write narrative reports and prepare effective presentations;
- Ability to use chemistry expertise in developing and proposing new policies, procedures and guidance to improve the section's and branch's programs;
- Ability to conduct intensive research for environmental monitoring advancements of the programs and to determine resolutions and new approaches to various problems, many of which are unprecedented;
- Ability to communicate, both orally and in writing, complex, technical chemistry concepts;
- Ability to determine critical project elements and establish and meet program objectives;
- Ability to assimilate and integrate knowledge and information related to chemistry, biology, toxicology, biochemistry, geology and the principles of environmental protection to specific situations.

Difficulty of Work:

Work requires extensive judgment and innovative thinking in interpreting and proposing major environmental program modifications. Incumbent develops procedures, policies, training plans, guidance documents and regulations for new state programs based upon federal guidelines. Incumbent must determine if new federal regulations and guidelines require changes in current operation. Guidelines are vague, non-existent or contradictory. The incumbent must interpret and apply new guidelines to develop, test and implement new technologies which have conflicting objectives on multi-faceted problems requiring a high-level of decision making, diplomacy and non-routine problem solving. Synthesizing all relevant state and federal laws, regulations and guidance, which may overlap or be in direct conflict, to formulate sound statewide technical policy may be extremely difficult.

Responsibility:

Incumbent receives broad, general direction from the supervisor as well as project priorities. Incumbent and supervisor discuss the needed changes and process improvements and the incumbent must then utilize their own technical abilities and resources to test and implement the modification. Work is reviewed for effectiveness and impact upon the agency's mission. Errors in judgment could go undetected and may result in major costs to the regulated community and have major impact on human health and the environment. Since the incumbent must develop and implement statewide policy, which would then be executed by lower-level chemists, errors on programmatic design and implementation of technological studies and research may not be detected by supervisory review. Established or modified technical programs and processes are the basis by which lower-level chemists make site-specific decisions. Technical recommendations are instrumental in shaping the direction and improving effectiveness of the agency's statewide chemistry programs.

Personal Work Relationships:

Incumbent works with a wide variety of individuals including the public, political activist groups, consultants, agency personnel, contract facilities, the regulated community and representatives of federal, state and local government. These contacts are for the purpose of interpreting, developing and gaining support of and compliance with rules, laws, regulations and contract agreements. Contacts made have a significant impact on the development and modification of chemistry processes in agency programs.