**DEPARTMENT OF NATURAL RESOURCES**

**POSITION DESCRIPTION**

**Working Title:** Water Quality Standards Specialist  
**Classification:** Environmental Toxicologist – Advanced  
**Pay Schedule/Range:** 15-03  
**Location:** Bureau of Water Quality, Central Office

**Purpose of the Position:** This position will serve as the primary staff responsible for the development of water quality criteria and secondary values for toxic pollutants that may affect the health of fish & aquatic life, wildlife, and humans. This position will also be responsible for working with staff within the Department to develop implementation plans to facilitate the use of new or revised criteria in the various management programs that rely on water quality criteria for achievement of management goals. This position will also play an advisory role to other DNR programs in need of counsel on the effects of pollutants on the health of fish & aquatic life, wildlife, and humans.

**Geographic Scope & Travel Requirements:** This position is located in the Water Evaluation Section of the Bureau of Water Quality in the Central Office in Madison. This position entails work of a statewide nature by addressing pollutants found in localized as well as broad geographic areas throughout the entire state. The position will require occasional statewide travel with periodic overnight stays. This position may require limited out-of-state travel.

**Scope of Authority:** This position reports to the Water Evaluation Section Chief in the Bureau of Water Quality. This position is non-supervisory. This position will work with general supervision while utilizing sound and contemporary scientific principles to complete assigned tasks. This position does not have final approval authority for plans, specifications, or legal decisions related to the water quality standards program.

**Position Summary:** This position requires significant expertise in environmental toxicology, environmental policy, water chemistry, aquatic ecosystem monitoring, and data interpretation. Using sound and contemporary principles of environmental toxicology, this position will be responsible for evaluating information available to determine the concentrations of toxic pollutants in surface waters that will prevent adverse impacts to fish & aquatic life, wildlife, and humans in support of the Department's water pollution control program. This position may be assigned a supporting and/or lead role in the revision of existing administrative rules and procedures and/or development of new water quality standards rules to provide consistency with state and federal statutes. In addition, this position will be responsible for: a) development and dissemination of guidance and training to ensure consistent statewide implementation of water quality standards and secondary values as they relate to the effects of the discharge of pollutants on humans, wildlife, and fish & other aquatic life; b) providing expertise on the potential health effects of natural or anthropogenic pollutants in surface waters and/or sediments; and c) providing technical expertise to Department staff, U.S. EPA, other State agencies, representatives of the regulated community, and the public with respect to the Department's surface water quality standards and associated implementation procedures.

**TIME GOALS & WORKER ACTIVITIES**
50% A. Serve as technical expert on water quality criteria and related benchmarks for environmental pollutants to protect fish & aquatic life, wildlife, human health and recreation.


A2. Compile toxicological data on the effects of environmental pollutants on fish & aquatic life, wildlife, and human health from state and federal data banks and conduct appropriate statistical and interpretive analyses as needed. Interpret environmental monitoring results as they pertain to water quality standards and formulate recommendations for Department actions necessary to implement remedial activities. Perform environmental toxicity calculations, including determining standard aquatic profiles, concentrations of concern and potential exposure concentrations for a wide range of chemicals.

A3. Act as Department spokesperson and contact for municipalities, industry, private consultants, academia, public interest groups, and other state and federal regulatory agencies on issues related to environmental pollutants in surface waters and their affect on fish & other aquatic life, wildlife, and humans.

A4. Provide training to Department staff and representatives of the regulated community regarding the effects of environmental pollutants on surface water communities. Actively participate in efforts to implement water quality standards through the Water Resources and Wastewater Programs.

A5. Develop outreach materials to increase public understanding of the impacts of environmental pollutants in surface waters on humans, fish & aquatic life, and wildlife.

A6. Testify as an expert witness for the Department at public hearings, adjudicatory hearings, and/or other legal forums regarding environmental pollutants and associated surface water quality standards.

A7. Research primary scientific literature on new and emerging chemicals and assess their potential toxicity to aquatic organisms, wildlife and humans in conditions related to Wisconsin.

40% B. Coordinate revisions to administrative rules, policies and procedures related to water quality criteria and secondary values for toxic and conventional pollutants and other water quality standards identified as priorities by the Department.

B1. Lead the development and codification of administrative rules for water quality criteria for toxic pollutants and other water quality standards as needed. Tasks may include developing scope statements, drafting rule language, leading external advisory groups, conducting economic impact analyses, and holding public hearings. Communicate status of efforts to staff, management, EPA, and stakeholder groups.
B2. Lead efforts of Department staff to develop scientifically sound approaches to develop and implement water quality standards. Ensure that surface water quality criteria for environmental pollutants are consistent with Federal regulations, State statutes, and other applicable surface water quality standard rules.

B3. Prepare policy documents to ensure consistent statewide application of surface water quality standards for intra- and inter-Bureau programs including (e.g., WPDES permitting, contaminated sediments, waterways and wetlands).

B4. Provide support for additives reviews. Including working with internal workgroups to provide guidance and training to internal and external partners, and reviewing products used in aquatic herbicides and in wastewater, CAFO, and stormwater settings. Maintain the previously reviewed additives and approved test methods spreadsheets.

B4. Participate in teams led by other staff related to the development/revision of water quality standards.

5% C. Lead the Department’s Triennial Standards Review (TSR) every three years.

C1. Lead the Triennial Standards Review of the Department’s policies and procedures related water quality standards (i.e., designated uses, water quality criteria, antidegradation). Tasks include soliciting topics from internal staff, external partners, and the public, developing and distributing surveys to rank the topics by feasibility and priority; working with management to establish priorities; writing a final report; and sharing the final report with internal staff, external partners, and the public.

5% D. Professional Development & Organizational Responsiveness.

D1. Review and keep abreast of changes in knowledge and practices of position-related activities in project management, state and federal water quality standards, and water pollution control technologies.

D2. Participate in job-related training and organizational meetings as assigned by supervisor.

D3. Prepare forms and reports as necessary for personnel and budget accounting purposes in a timely manner.

D4. Perform other position-related duties as assigned.

KNOWLEDGE, SKILLS, AND ABILITIES

1. Skill with Microsoft Office Suite (i.e., MS-Word, MS-Excel, MS-PowerPoint).

2. Skill in oral and written communication including live and web-based presentations to explain complex information to a non-technical audience.
3. Knowledge of federal Clean Water Act requirements for the development and implementation of surface water quality standards.

4. Knowledge of the principles and practices of environmental toxicology as it relates to environmental pollutants in surface waters and their effects on fish and other aquatic life, wildlife and humans.

5. Ability to interpret toxicity tests with fish, invertebrates, or plant species.

6. Ability to establish and maintain effective team working relationships with co-workers, supervisors, public officials, advisory committees and members of the general public.


9. Knowledge of data entry, retrieval, and management in the SWIMS and WATERS Databases.

10. Ability to reach objectives and attain results through participation on teams.

11. Ability to conduct technical workshops and training sessions.

**PHYSICAL REQUIREMENTS AND ENVIRONMENTAL FACTORS:**

**Strength Requirements**
Sedentary work (occasional lifting of up to 15 pounds) about 95% over a year's time. Light work (infrequent lifting of up to 50 pounds) about 5% over a year's time.

**Physical**
This position will spend a majority of time in an office setting or in meetings. Regular activities include talking, hearing, seeing, handling paper, sitting, and walking. The position will also occasionally spend time standing, carrying, lifting, reaching, climbing, bending at the waist, kneeling, and crouching.

**Environmental Factors**
The majority of the activities of this position occur primarily inside and not out of doors. Occasionally, this position may require field work including carry equipment from storage to a vehicle, carrying equipment from a vehicle to sample sites, wading in a stream or river, working in a boat, or collecting samples through the ice. There may be situations involving sufficient noise to cause the employee to shout in order to be heard. There may be exposure to hazards such as unstable surfaces (i.e., rocks, silt, mud) in stream or lake beds, shorelines, and other access points to sample sites.

**Equipment Used:** Office equipment, GPS/navigation equipment, monitoring and sampling devices, electronic equipment/radios, and motorized vehicles.