

ENVIRONMENTAL TOXICOLOGIST**Nature of Work**

Under limited supervision, serves as a department specialist on comparative environmental hazards of toxic substances. Will be responsible for preparing, critically reviewing, and using risk assessments of human health or environment for all agency programs. Compares treatment residues from major new sources to determine the most environmentally sound methods. Performs related duties as required.

Examples of Work

Gathers and compiles existing scientific literature on the toxicity of chemical and biological compounds and substances from a variety of sources such as universities and colleges, other states, federal and local agencies, private industry and computerized subscription sources.

Consults with other professionals in the field regarding the environmental effects of chemicals and discusses interpretations of data.

Recommends and participates in field investigations to gather, compile and document new information on the presence, concentration, persistence or effect of a toxic substance in the environment.

Analyzes and interprets data collected and makes recommendations for public policy or rulemaking actions.

Uses statistical principles and techniques to validate data.

Provides information and interprets results of studies for staff in terms of toxicological properties of substances and associated hazards.

Assists in the development of agency program goals, objectives, policies and guidelines related to toxic discharges.

Prepares, or critically reviews, cross-media risk assessments for the potential human health or environmental effects of toxic substances entering the environment from waste sites, waste water effluents, air emissions or other means.

Develops cross-media risk assessment guidelines for agency use in conducting specific risk assessments.

Writes technical and non-technical reports describing methodology and findings of studies. Uses tables, charts and pictures to graphically represent or summarize data and conclusions.

Orally presents findings and interpretations to agency staff or other local, state, or federal agencies, or advisory committees.

Independently evaluates field data and/or interpretative reports prepared by agency staff for accuracy, completeness, methodology and validity of conclusions; prepares written critiques and recommendations.

ENVIRONMENTAL TOXICOLOGIST (CONT'D)**Examples of Work (cont'd)**

Represents agency during administrative hearings and court proceedings.

Assists agency in development of risk management process to set cross-media risk based environmental priorities.

Performs ecological risk assessment and assessment of exposure routes.

Knowledge, Skills and Abilities

Knowledge of toxicologic, environmental, biological and ecological sciences and issues.

Knowledge of principles and practices to assess environmental contamination.

Knowledge of state and federal laws, regulations, and programs pertaining to environmental control and toxicology.

Skill in utilization of technical research and evaluation techniques in conducting policy analysis.

Skill in performance of quantitative risk assessments.

Ability to establish and maintain effective working relationships with federal, state and local officials, the general public, co-workers and staff.

Ability to exercise independent judgement, delegate authority and evaluate the results of work performed.

Ability to keep accurate records; write reports in a clean, concise form; and present factual material and ideas effectively.

Minimum Qualifications

Training: A Master's Degree from an accredited college or university in Toxicology or a closely related field such as Chemistry, Biology, Physiology, Anatomy, Pharmacy, Pharmacology, Public Health, Nursing, Medical Technology or other medical field.

Substitution: A bachelor's degree in one of the above listed areas and six years of full-time or equivalent part-time paid work experience as a toxicologist in an environmental program can substitute for the master's degree.

Experience: Three years of full-time or equivalent part-time paid experience as a toxicologist in an environmental program, two years of which must have included full responsibility for: 1) Performing toxicological and risk assessment studies; OR, 2) Writing technical investigative and narrative reports which included recommendations; OR, 3) Analyzing and writing policies and regulations; OR, 4) Applying scientific and statistical methodologies; OR, 5) Applying federal environmental program rules and regulations; OR, 6) Reviewing material and data prepared by others for adequacy, accuracy and relevancy.

ENVIRONMENTAL TOXICOLOGIST (CONT'D)

Minimum Qualifications(cont'd)

Special Requirement: Must maintain the continuing education and professional certification requirements associated with toxicology.

Established: 10/17/96
Revised: 04/10/02,03/30/2003
Effective: 03/30/2003